

**Selected Excerpts from the**  
**Vancouver Natural History Society**  
**“Bulletin”**  
**(With Notes and an Index)**

**(Number 1, September, 1943 to Number 153, December 1971)**

**Compiled by Bill Merilees**  
**Vancouver Natural History Society**  
**2005**

## **Dedication**

I would like to dedicate this contribution to our understanding of Greater Vancouver's natural heritage to the members, past, present and future, of the Vancouver Natural History Society. To those past, for putting on record the observations and information contained within these pages, and to present and future members, in the hope that they will continue the 'tradition' as well as gain an appreciation of the Society's roots and accomplishments.

Along my personal path of life, three individuals have played very important roles in shaping my appreciation of the natural world. First is my father, Welborne Lawrence Merilees, whose love of the out doors, its vegetation and wildlife, first introduced me to Vancouver's living heritage. Second is William Marsden Hughes, war veteran, bird-bander and V.N.H.S. Ornithology (Birding) Section leader during the late 1950's and early 1960's. Bill took me 'under his wing' and honed my skills in the techniques of field observation and data collection. Finally to Dr. Ian McTaggart-Cowan, Head of the Zoology Department and later Dean, Faculty of Graduate Studies at U.B.C., who further inspired and stimulated me to build on my curiosity from a more academic perspective.

Along my path, an incredible number of individuals have 'assisted the process' in countless ways. Many, are mentioned within these pages.

## **Introduction to the V.N.H.S. Newsletter Project**

Although the Vancouver Natural History Society had its origin in 1918 it was not until 1943 that the Society began producing a newsletter. Although titled *V.N.H.S. News* it was simply referred to as 'The Bulletin' and began as a way of informing members of the Society's activities. Under the direction of Allan Wooton, accounts of field trips began to appear, primarily those led by our first President, Professor John "Botany John" Davidson. Up to the time that the first edition *Discovery* appeared (March, 1972), 153 editions of 'The Bulletin' had been produced.

While an Index to the first ten years of *Discovery* (1972 -1982) appeared in 1994, the content of 'The Bulletins' has largely remained 'hidden' in the Special Collections (U.B.C.), the Vancouver City or VNHS Archives. Without easy access to these newsletters, some fascinating aspects of Greater Vancouver's early natural history, and our Society's accomplishments have somewhat been overlooked. A great many dedicated members recorded their observations or are mentioned in the *V.N.H.S. News*. The purpose of this project has been to bring this record forward into the present and to recognize the contribution our Society and its members have made to the understanding of Greater Vancouver's natural heritage.

Through these pages it is possible to witness the evolution of our Society. The improving quality of our documentation, the contributions of members and our accomplishments can be noted. The formation of the B.C. Nature Council and the Federation of B.C. Naturalists is documented, as well as the earlier 'junior and intermediate' naturalists programs.

Over the years, a number of knowledgeable, energetic leaders strongly influenced our Society's program. Some, who made substantial contributions to our understanding include:

- William M. (Bill) Hughes and R. W. (Wayne) Campbell (birds);
- Foote and Mary Alice Waugh (mushrooms, toadstools and fungi)
- Charlie Ney and Dr. Jack Armstrong (geology)
- Ruth Brink and Louise Elliott-McLuckie (marine life)
- Roy Edgell (photography)
- Katherine Beamish, Nancy Anderson and Emmy Fisher (botany)
- Bert Brink and Norm Pursell. (conservation and habitat protection)

These people were supported and encouraged by a considerable cast of appreciative members who not only participated in these activities, but also prepared accounts which were published in 'The Bulletin'. Sadly many of these writers are anonymous, or only identified by their initials.

The arrival of 'new' species to the Vancouver area, for example European

starling, house finch and Anna's hummingbird are recorded. Often new and/or unusual species receive considerable attention while more common 'everyday' species receive little 'press'. For example Harris's and white-throated sparrow received more citations than house sparrow!

Changes in status (numbers), for some species, are also suggested from the 1940's and 50's to the present. Are lesser scaup, lesser yellowlegs, surf scoters, California and ring-billed gulls more common today?

Subjects such as 'fashion' (Ken Kennedy's tam), great food (Roy Phillip's Yule Log dessert) and wonderful camp culinary offerings and courageous adventures on English Bay (to add bird species to bird lists) are also presented. Conservation efforts to establish parks and protected areas; suggestions to encourage the wise use of resources; the promotion and fostering of education programs add variety to our accomplishments.

The establishment of the George C. Reifel Migratory Bird Sanctuary and the construction of causeways to Iona Island and the Tsawwassen Ferry Terminal have provided easy access to natural history areas not easily visited in the 1940's and 50's.

This compilation provides a rich 'pot pourri' of VNHS early history, that all members surely will enjoy.

### **About this project:**

For this compilation of material, each edition of the Bulletin was reviewed. The articles and material considered to have natural history or historic information of interest to the V.N.H.S. were extracted. This material was then entered into a word processing document; animal, plant and geographic names were upgraded to 'year 2000' understanding, and an index was developed to include the names of all people, places and natural history subject matter. More than 2,600 entries are included.

Errors and omissions undoubtedly have occurred during this process and for these I take full responsibility. Serious researchers and writers should check carefully species identifications. While I have 'done my best', common and scientific names are constantly being revised and subject to change so the 'opportunity' for ambiguity and/or confusion requires careful checking.

I am greatly indebted to the assistance of the following: Elthea Dale, (typing and indexing), Judy Wise (typing), Dr. Bert Brink and Marilyn Dutton (biographical and editorial assistance), and Marian and John Coope (editing). Without their assistance this Index would still be a 'long way off'. Expenses incurred during this work have largely been covered from the V.N.H.S. Special Projects Fund.

I am greatly indebted to all those wonderful 'old timers', most sadly no longer present, who made the contributions presented on these pages. Working on this project

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has been a wonderful 'education'. I trust the reader will find this record as fascinating as have I.

Bill Merilees  
March, 2005.

### #2 November 1943

#### **Caulfeild Trip:**

Twenty-four members of the Society and botany class, under the leadership of Prof. John Davidson studied the rocky bluff flora. It was pointed out that the flora on the south side of English Bay is different from that on the north side because of the geological formation. On rocky bluffs the soil is too shallow to support the plant species found around Vancouver, hence many different plants peculiar to exposed rocky bluffs are found to be common at Caulfeild but not on the southern side of the Bay. Plants of the area are particularly suited and thrive in this environment.

The party studied individual plants to see how they overcame the long, hot, dry summer when for a long time they seemed dried and dead. Plants included blue-eyed Mary (*Collinsia*), sea blush, bulbous plants such as [meadow] death camas, dogtooth lily [white fawn lily], tiger lily, and the thick leaved stonecrop (*Sedum*) and the small leaved springbeauty [small-leaved montia] spring beauty (*Claytonia*). The floral structure was studied of dogwood [Pacific], Scotch broom, bearberry [kinnikinnick], falsebox and mimulus [monkey flower]. Some practice was done in classifying flowers to their families. Last winter's cold spell was rather hard on the plants especially those on exposed slopes. Many *Collinsia* and *Valerianella* [seablush] were killed, and arbutus trees also suffered severely. Dogwoods with their showy blooms were abundant.

### #3 December 1943

#### **Botany**

Mrs. McGinn reported that in August of this year the coral root orchid grew on Hollyburn Trail in unusually large patches and with extra thick tall spikes. Among those found was a solitary pure white one that Prof. Davidson identified as *Corallorhiza innata* an albino form of *Corallorhiza maculata*, the spotted coralroot not commonly found on the Coast.

Some years ago near Cultus Lake she found a rare white orchid identified by Prof. Davidson as a *Platanthera* [the phantom orchid, *Cephalanthera austini*] not listed in "Henry". [J. K. Henry, 1915, *Flora of British Columbia and Vancouver Island*]. It grows in tall spikes without any green and is parasitic [saprophytic].

*Mrs. McGinn, a Kitsilano resident, was a staunch supporter of Prof. John Davidson. She attended camps, served in an executive capacity, helped to organize banquets and other social events. She*

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*was an amateur botanist and a good general naturalist. Her husband, Frank McGinn was a prominent Vancouver businessman not greatly interested in the V.N.H.S. Their son Wentworth McGinn, however, accompanied his mother on camps and trips including the Garibaldi camps of the 1920s. Mrs. McGinn continued to backpack into the mountain camps in her later years.*

### **Mammalogy**

Dr. [Ian]McTaggart Cowan reported that during the past year, increased field activity in the University forest and adjacent areas [U.B.C. Endowment Lands] had led to several important additions to our knowledge of local mammal fauna. An adult male weasel [ermine *Mustela erminea*] found dead near the Botanical Garden. by E. A. Schwantje constitutes the only known record of this species since 1923. It has been pronounced locally extinct.

*After the war Prof. Davidson was able to replace the gardener (Mr. Hornby) for the UBC Botanical Garden with Ernie Schwantje– a Dutch-trained gardener-botanist. Ernie supported the V.N.H.S. well beyond his duties as gardener. On camping trips he gave informed instruction on botanical matters. When Prof. Davidson retired, Ernie moved to Victoria and became a well-known gardener there.*

On October 8<sup>th</sup> and 10<sup>th</sup> Dean Fisher and James Hatter found the freshly amputated tails of two [Northern] flying squirrels on one of the forest trails. These two, with another tail found by G. P. Holland in 1936, are the only evidence of this elusive nocturnal squirrel at Point Grey. Owls probably killed the creatures. At about the same time Allan C. Brooks, Jr., encountered a lone chipmunk near the junction of Imperial and 29<sup>th</sup> Avenues. It disappeared before its characteristics could be clearly observed. There has been no record of chipmunks in the Point Grey area in the last sixteen years and it is possible that this was an escaped pet.

*Dr. Ian McTaggart Cowan was head of UBC's Zoology Department and later became Dean of Graduate Studies, then Chancellor of the University of Victoria. Dean Fisher became professor of the Zoology Department at UBC. James Hatter became Head of the B.C. Wildlife Branch in Victoria. George Holland became Dominion Entomologist in Ottawa; and Allan Brooks Jr. became a wildlife biologist and high school teacher.*

**Black Widow Spiders** are found on the lower end of Vancouver Island. During October our [V.N.H.S.] secretary found two specimens while on a ramble up Cobble Hill. These spiders were discovered under rocks on a grassy south slope near the top. They were attending nests of fine white silken threads attached to the rocks. The spiders are jet black with a red "hour glass" marking on the underside of the abdomen.

#6 April 1944

### **Musqueam Reserve**

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Twenty-five members attended this outing to study woodland flora. Many interesting plants were discovered. Vine maple and Pacific dogwood were compared. Willow catkins were dissected and their pests, in the form of small worms, were brought to light. Spruce galls were cut open and examined. Mosses and ferns were studied with their relationship to each other. Mayflower, too often called wild lily-of-the-valley, [now called false lily-of-the-valley], covered the ground in patches, but few buds were showing. Other plants observed were cascara, [slender] toothwort, Dutchman's breeches [Pacific bleeding heart] and bitter cress [*Cardamine sp.*] as well as the different characteristics of spruce, fir and yew. P.L.T.

*Preston L. Tait (always called "PL") was a professional jeweler, photographer and an excellent mountaineer. A health food enthusiast, he believed very sincerely in the special curative properties of gooseberries and currants! He helped organize the V.N.H.S. camps and field trips and was also a long-time member of the B.C. Mountaineering Club and the Alpine Club of Canada.*

#7 May 1944

### **Fresh Water Biology at Still Creek**

The warm sunny afternoon of May 6<sup>th</sup> saw ten enthusiastic members of the Society, equipped with a variety of collecting material – dip nets, pails, jars, etc. - searching the depths of Still Creek and nearby ponds for the variety of creatures that frequent these waters. This stream meanders through bottom farmland west of Burnaby Lake and is the home of many species of aquatic plant and animal life. Dipping here and there along the Creek many species were brought to the surface and the findings explained by the leader, Mr. R. W. Pillsbury.

The bullfrog tadpoles swimming about were numerous, while startled adult bullfrogs plunged from the bank to safety. In the ponds along the railway track, green egg masses of salamanders [Northwestern salamander] were in an advanced stage of development and the young were easily observed within the eggs. Another amphibian observed was the small tree toad [Pacific tree frog]. Crayfish were also found. These lobster-like crustaceae have five pairs of legs, the front pair of which are armed with conspicuous nippers used for holding and tearing apart their prey such as fish and water insects. Catfish and stickleback were caught.

Among the water forget-me-nots, yellow water [pond] lily and other plants, several species of aquatic insects were found. These included the predacious diving beetles (*Dytiscidae*), one of which was seen attacking the larva of a damselfly, several species of water scavenger beetles (*Hydrophilidae*) and others such as the dragon fly, damselfly, mayfly and midge larvae, water scorpion (*Nepidae*), water-striders and water-boatmen. Snakes, snails, bloodworm and the bright red water-mites (*Hydrocarina*) were among other interesting life found. On the ponds large mats of the algae *Spirogyra* floated, a home for many lesser forms of life. Many specimens were taken to stock home and school aquariums for observation.

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*R. W. (Dick) Pillsbury was a biologist with a special interest in invertebrates. A graduate in Science from UBC and a M.Sc. in biology from the University of Washington, he taught biology at King Edward High School. From time to time he was an instructor at UBC's summer school. His enthusiasm for biology was contagious and he carried it into the V.N.H.S. He spent years "biologizing" Still Creek, Burnaby Lake, Beaver Lake and the Alouette River. His wife Tracey was also professionally trained. She and Dick were knowledgeable and eloquent people. They eventually retired to Saturna Island.*

### **Ornithology Observations**

Mr. C. Gough an enthusiastic ornithological member contributed the following notes from his recent observations of bird life in the Lower Mainland: "A very rare but unique experience a few weeks ago when a pair of bushtits were found building their nest. Seldom is a nest found and fortunate indeed is the one who has the privilege of seeing one built. These birds build a pendant nest of moss about 8 inches long and 2 inches in diameter with an entrance hole on one side near the top. This pair took about two weeks to build their nest.

Violet-green swallows arrived back at Little Mountain on April 1<sup>st</sup>, two days earlier than last year, and barn swallows arrived on May 5<sup>th</sup>, exactly the same day as last year. In Stanley Park many species of birds are returning, among them abundant Audubon [yellow-rumped] warblers. A pair of chickadees has started housekeeping in an old tree near the Second Beach bathhouse; while on the golf course a pair of red-shafted [northern] flickers has rented the same suite in a tree. Red-breasted and American [common] mergansers are abundant along the Fraser River and on Lulu Island. [Western] meadowlarks are back in large numbers. The shy hermit thrush was seen at UBC on April 26<sup>th</sup>. Four water ouzels, commonly known as dippers [American] were observed at Lynn Valley March 25<sup>th</sup>."

To these interesting notes we add that the first brood of 12 young mallards appeared on Lost Lagoon May 10<sup>th</sup>. Prior to this, pairs of mallards were observed deep in the woods of the Park during the nesting season. A flock of ruby-crowned kinglets were observed during April in the Park. These insectivorous birds spend their time searching the twigs and boughs of trees and bushes for young insect life. They are often accompanied by chickadees.

*Carl Gough and his wife were long-time members of the V.N.H.S. After Carl's death, Mrs. Gough continued to help organize banquets and other social events. The Goughs were good birders and led many trips. They were quiet people who were always kind and helpful and kept the members living on the North Shore coming to meetings*

#8 June 1944

### **Grouse Mountain**

Climbing the slopes of Grouse Mountain on May 27<sup>th</sup>, 38 members observed a wide variety of natural life while noting the geological formations of the area that Mr. J.J.Plommer



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pointed out: "In the Cascade Range, American geologists have established the levels of two peneplains, the continuance of which Dr. Burwash has endeavoured to identify in our Coast Range. In this area he placed the lower of these levels at about Grouse Plateau and further concluded that the general character of the area, except for an elevation of 2000 feet had not changed since Pliocene times. Since then, only variations caused by glaciation have taken place.

The Capilano Valley of that time was V-shaped with its bottom in the sea and its sides coming up to 1500 feet. (The present altitude of the Grouse plateau is 3500 feet.)

Glaciation produced a U-shaped valley cut into the side of the V. Today the slope of the old V-shaped valley comes down some 600 feet from the Grouse plateau, and another 800 feet has been worn off by post-glacial erosion. Several rockslides are now in operation. The foot of this section is noted at the level of the B.C. Mountaineering Club cabin, in front of which the side of the U drops abruptly down to the valley floor. This valley floor is filled with glacial till and strewn with water-borne gravels.

As the old valley was along the line of the northwest trend of the mountains, this debris piled up on the present North Vancouver town site. The new Capilano River then sought the easiest outlet and found it on the west side of the terminal moraine, resulting in the cutting of the Capilano Canyon. On the west side of the valley, the U wall rises close to the Canyon. From there to Hollyburn Plateau the post glacial grading is not steep, although the same conditions as we noted on the east side are apparent further up the valley."

Birds observed on this trip included band-tailed pigeon, owls, Townsend's warbler, pileated and hairy woodpeckers, olive-backed [Swainson's] thrush, winter wren and pine siskins. A jaeger was noted while crossing the Inlet. A [rufous] hummingbird's nest was found on a hemlock bough and a small shrew created interest. Several insects were also noted, especially great numbers of large black flying ants. A white [crab] spider blended perfectly with the white scales of a [Pacific] dogwood blossom on which it was found. Twinflower vine, rattlesnake plantain orchid's leafy rosette and yellow wood [stream] violet were among plants seen. The party assembled for tea at the B.C.M.C. cabin where Mrs. Dodds welcomed us.

J.J.P

*J.J. Plommer was British born. He and his wife, a Chartered Accountant, came to Canada and their two daughters were born here. Mrs. Plommer was only marginally interested in the V.N.H.S., but "JJ" was an ardent supporter and both daughters became good naturalists. JJ developed a deep interest in geology and headed the section at UBC until Dr. John Armstrong of the Geological Survey of Canada took over. John Armstrong had great respect for JJ's amateur knowledge. With his pipe, his blackened billypot for tea kept in an old haversack, JJ was a striking, tall, craggy man who led many strenuous geology and other natural history field trips. He was a good bushwhacker often going where there were no trails. He led camps, including two to Forbidden Plateau. Even in his advanced years he continued to come to camps. He published articles on summer camp areas (e.g. Tenquille Lake) in the Canadian Geographic Journal. JJ was a great gentleman - and a mighty snorer! In camp he usually had a tent to himself.*

*Mr. and Mrs. "Mickey" Dodds were both active in the V.N.H.S. and the B.C.M.C. They were amateurs with lots of curiosity. On demonstration nights you could count on them to bring in*

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something of interest. One of their exhibits was wood from the dead trees exposed as the Helm and Warren Glaciers retreated in Garibaldi Park. This wood originated from forests present before the "little ice age" which started retreating about 1850.

### **Burnaby Lake**

Few areas in the vicinity produce such a wealth of bog flora as that visited on May 13<sup>th</sup> by twenty-seven members with Prof. Davidson. Bogs are built of layers of succeeding vegetation commencing with aquatic plants, rushes, cattails etc. followed by layers of sphagnum moss forming a floating mass upon which grow plants of the heath family such as Labrador tea (*Ledum*) and bog-laurel (*Kalmia*). This peat bog has a depth of 22 feet. Of the 22 species of sphagnum found in B.C., six have found use in First Aid dressings. It is of interest to know that one ounce of dry sphagnum absorbs 15 ounces of water. In the plant scale, it is intermediate between liverworts and true mosses.

Here between the *Ledum* and pink-flowered *Kalmia* were found the Canadian [velvet-leaved] blueberry in flower, the small, white-flowered cloudberry and true [bog] cranberry trailing over the surface. In moist spots grew *Marchantia*, sundew (*Drosera*) that catches and devours insects, hair moss, cotton grass, rushes and sedges.

The ovulate and staminate parts of the lodge pole pine were studied. Cascara, western birch, Juneberry [Saskatoon], involucred bush honeysuckle or [black] twinberry were all noted. Other plants included *Nepeta* [*Glechoma*] or ground ivy, wild lettuce the whitish fluid of which contains rubber, and the field thistle often called Canada thistle, which it is not. This plant is the host of a rust. At the Lake's edge manna grass and duckweed were found, the latter a small floating plant that is a degenerate, having become aquatic from the land.

A [ring-necked] pheasant's nest containing 8 eggs, a killdeer and American coots were also observed.

#9 August 1944

### **Hollyburn Ridge**

A most successful trip was that taken by twelve members and three Air Force guests to Hollyburn Ridge during the weekend of June 24<sup>th</sup> – 25<sup>th</sup> led by Mr. Farley. Taking the West Lake trail in the cool of the evening, the party observed stages of plant development at various elevations. Saxifrage, coralroot orchid, bunchberry, [broad-leaved] starflower and twinflower were among those seen on the up-trail. Reaching the lodge about 9 p.m. arrangements were made for the night and a social evening enjoyed before turning in.

Sunday morning the party set out along the trail to First and Fourth Lakes. A wealth of flowers greeted the eye as we rambled along the trail: fairybell, green orchid, rattlesnake-[plantain] orchid, queen's cup, marsh violet, oak fern, false [Indian] hellebore, two species

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of starflower [broad-leaved and northern], copper bush, pink and white [mountain] heather, [false] azalea, [white-flowered] rhododendron, bog-laurel, gentian, saxifrage, pyrolas, [white] marsh-marigold, [sitka] mountain ash, bogbean [buckbean], [subalpine] spirea, fringe cup, single delight, water [yellow pond] lily and aster were among the plants noted.

Grouse and hermit thrush were seen. A bat caught by the local ranger was brought back for identification.

At First Lake several water insects were obtained. These included two species of diving beetle (*Dytiscidae*), whirligig beetle (*Gyrinidae*), ground (*Carabidae*), tiger (*Cicindelidae*), [click beetle] (*Elateridae*), burying [carrion] (*Silphidae*), and longhorn [long-horned] beetles (*Cerambycidae*), water-striders, water-boatmen, mayflies, sawflies, crickets and flying ants. Small paper nests of wasps in the course of construction were found on heather. The party returned via 22<sup>nd</sup> trail completing the weekend outing. Owing to water reserve restrictions the party were confined to the trail between the 1<sup>st</sup> and 4<sup>th</sup> Lakes, beyond which they were unable to proceed. The best areas on Hollyburn for nature observation are now within the restricted area.

*Mr. and Mrs. Frank Farley were strong supporters of John Davidson's evening courses in botany, which were part of the courses taken by those hoping to become registered pharmacists. At the time there was no Faculty of Pharmacy at UBC. Both Mr. and Mrs. Farley were good hikers, attended many of the summer camps, and led field trips. They were hospitable people and many committee meetings were held in their home on Laburnam Street. They came from England. Frank was a World War I veteran. The Vancouver School Board employed him for many years as a skilled carpenter. Their three children were all involved in one way or another with the V.N.H.S. and all graduated from UBC with interests in biological sciences.*

### #10 August 1944

Dr. Ian McTaggart Cowan informs us that the specimen of bat found on Hollyburn Ridge was the Miller brown bat – *Myotis yumanensis saturatus* – [Yuma myotis], a fairly common species in these parts.

### Mount Seymour

Our geology section has not yet recovered from the publicity that the press gave us in connection with the Seymour Mountain trip in August. It was reported that our party 'encountered' a lava flow that suggested the presence of an active volcano on the middle peak of Seymour centuries ago, and that 'the rush of lava down the slope' had picked up many stones and a great deal of rubble still visible 'in the agglomeration'.

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No doubt an enthusiastic reporter wanted to give us a good write up but the fact is there is no evidence of a volcano on Seymour Mountain. There are three lava flows and the middle one is an agglomerate. An agglomerate does suggest a volcanic flow that picked up loose stones in its path. However, these lava flows are older than the mountain in its *present* form, and there is nothing to suggest from whence the lava came; it is a remnant of a time when the area probably bore no resemblance to the present topography.

One of the most interesting things on that excursion was the saxifrage studied on the main peak of [Mount] Seymour.

#11 December 1944

### **The V.N.H.S. Camp**

*At the time of this camp, very few people in British Columbia had ever visited Pavilion Lake. The Trans Canada Highway was rough, to put it mildly, and the side road into Pavilion was not fully graveled. Often there were places difficult to negotiate or use during periods of heavy rain or snow.*

The Society's 1944 Camp at Pavilion Lake in Marble Canyon, under the leadership of Mr. Bain, proved to be most interesting and profitable for naturalists, for here we found dry belt, coastal and alpine flora and fauna in close relationship. Marble Canyon lies between the Cariboo highway to the east and the Fraser River to the west. Leaving the main highway at Hat Creek the Canyon road winds through a colourful valley where limestone cliffs of the carboniferous period rise 1000 feet and in all hues of the spectrum – reds, blues, grays and whites being predominant. The valley floor and lakes of emerald and azure, nestle at the foot of the tree-clad mountain slopes. The road follows the lakeshore and along the valley to Pavilion Lake where it connects with the Fraser River Highway.

Our campsite, the Sky Blue Water Resort, was on a point of land that sloped from the road to the shore of the Lake. Here comfortable cabins were surrounded by mountain [Douglas] maple, cottonwood, [trembling] aspen, birch, pine, willows and several shrubs such as soapberry [common snowberry], mock-orange, Juneberry [Saskatoon], and others. An oasis in an otherwise semi-dry region.

The woodland was frequented by several species of birds, the most interesting being the red-eyed vireo, its pendant silvery nest hung from a branch of an aspen. The young birds were hidden amid the foliage, camouflaged by their white breasts against the upturned silvery leaves rustling in the sunny breeze. The parents darted about with incessant twitters and angry shrieks at some catbirds annoying their young. American robins, cedar waxwings, wrens, western tanager, ruby-crowned kinglets, Audubon [yellow-rumped] warbler, yellow, and MacGillivray's warblers, mountain chickadees, hummingbirds and blue birds were also observed. A family of grebes, and loons drifted on the Lake.

Behind the Lodge a sparsely wooded slope rises steeply to the walls of limestone above. A number of drybelt plants grow on this slope with their accompanying insect visitors. Plants

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found in the Canyon included gaillardia [brown-eyed Susan], erigeron, wild geranium, anemone, bedstraw, nodding onion, [arrowleaf] balsamroot, [prickly pear] cactus sage brush, flax, rose of sharon [St. John's-wort], saxifrage, fairybell, pyrola, mitrewort, twinflower, penstemon, salsify, goldenrod and many others.

An outstanding trip was to Pictograph Hill where we followed an old Indian trail up through a draw in the Canyon wall. Here we viewed ancient Indian signs painted on the rock face. The top and slopes of the hill were open pine grassland where there were Indian paintbrush, columbine, grass-of-Parnassus, pedicularis [lousewort], hellebore, valerian, arnica, fleabane, and *Ceanothus velutinus* [snowbrush]. A lake and a sphagnum bog found on this ridge also

contained many interesting plants: clumps of white [mountain] lady's-slippers, *parviflorum* [yellow] lady's-slipper, butterwort, pyrolas, *P. picta* [white-veined] wintergreen and *P. bracteata* [pink wintergreen] and [round-leaved] orchid – a lovely mauve and white flower with dark purple spots – as well as columbine, pedicularis and tiger lily. Here we also found the fossil fusilina, about the size of a wheat grain and typical of the district's limestone formation.

**Note by Bert Brink:** *This fossil is characteristic of, and found only in, rocks of the Carboniferous Age wherever they occur on Earth. It was the finding of this fossil near Cache Creek that enabled Dr. George Mercer Dawson, later Director of the Geological Survey of Canada, to get a start on ageing and sequencing the rock formations of British Columbia in the 1870s and 1880s.*

The surrounding hills abound in a wide variety of insect life; no matter where we wandered some fresh species always presented itself, sometimes in large numbers. On the south shore of the Lake we found a shelf covered with a white lime deposit; it extended out from a few feet to several yards underwater, then dropped steeply into the depths. Little vegetation grew on it but jelly-like masses were seen on the bottom with a few species of aquatic insect life. Caddisfly larvae, dragonfly and damselfly nymphs frequented the Lake. One evening a dragonfly was observed shedding its nymphal skin. A trip across the Lake at dusk revealed myriads of caddisflies rising to the surface over the southern shelf, casting off their pupal skins and flying off across the water, while bats darted here and there searching the night air for prey.

Mud dauber wasps were seen along the road on sunny days gathering mud for their cells. Numbers of cicada emerged from the ground, where they had spent many years as nymphs, and shed their nymphal skins to fly off to nearby trees or warm rocks, then, joining in with the insect orchestra, they filled the air with their shrill note. The sound is made by the male vibrating membranes stretched over a pair of sound chambers on each side of the abdomen.

Butterflies were also numerous and consisted of whites, sulphurs, fritillaries, wood-nymph, alpines, blues, commas, tiger swallowtails, hairstreaks, crescent spots, ringlets, checkerspot, arctics and white admirals. Colourful beetles were seen on flower heads belonging to the *Cerambycidae*, *Meloidae*, *Cleridae*, *Scarabaeidae*, *Buprestidae*, and the *Elateridae* families.

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Milkweed plants provided food for many red milkweed beetles, genus *Tetraopes*, feeding on the nectar. Several flies and *hymenoptera* were collected. Chipmunks, squirrels and deer were seen. Wolves are also known to frequent the area in winter.

#13 January 1945

### Medicinal Plants of B.C.

Members were treated to an informative lecture by Prof. J. Davidson on January 24<sup>th</sup> when he spoke about the cascara tree and other medicinal plants of B.C. and their relationship to drug farming. Highlights from his address covered the following points:

About 40 or 50 native plants of B.C. have medicinal properties but most have little commercial value if shipped east.

The cascara tree is the most valuable; its bark has been in demand for over 60 years.

Stripping the bark off a standing tree always results in its death.

Between 1,000 and 2,000 tons of bark are required annually to supply the world's needs for cascara products. The average yield is 10 pounds of bark per tree, which has meant the death of 300,000 trees every year for the past 60+ years.

It is estimated that 90% of this Province's original stand of cascara has been wastefully depleted.

Cascara trees, when cut down before stripping the bark, send up shoots from their stumps. In four or five years' time the flower, fruit and birds disperse the seeds and thereby increase the cascara crop.

Experiments and tests carried out at U.B.C. have proven that the medicinal property is also present in the wood of the cascara. On average, two pounds of wood supplies the same amount of drug as one pound of bark. Some trees have more in their wood, pound for pound, than in their bark.

For every pound of bark taken from the forest, more than ten pounds of wood has been left to rot; about five-sixths of our cascara resources have been wasted.

By cutting down the trees and using the whole log, wood and bark, our annual requirements could be supplied from 60,000 trees, without killing them.

Finely ground wood and bark give a greater yield than coarsely ground. Machines are being made which will grind logs to suitable fineness for extraction of the drug by percolation equipment.

A manufacturing druggist in the B.C. coastal area would permit the use of cascara logs purchased by the cord instead of by weight. The establishment of such a firm would encourage many farmers to cultivate medicinal plants, and drug farming would increase employment in many trades, as well as increase the revenue of the Province.

The use of some of our native plants of medicinal value, and the cultivation of introduced plants such as belladonna, digitalis, hydrastis, hyoscyamus, datura and a number of essential oil-yielding plants, could be carried out profitably. Prof. Davidson provided an account of successful tests made at the university's Botanical Gardens, indicating promising possibilities. He illustrated his lecture with herbarium specimens

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of both native and introduced plants, with data on their uses and commercial value. He concluded by explaining the omission of ginseng [wild sarsaparilla] and devil's-club from his list, as neither possesses medicinal properties.

*Note: Professor Davidson along with members of the very small UBC Chemistry Department, published papers on B.C.'s medicinal plants. So intense and destructive were the harvesting methods for gathering Cascara bark that trees became hard to find. Professor Davidson's method of cutting trees near their base instead of outright bark stripping, promoted sprouting. This made a huge difference in tree survival.*

### **Bird Observations – Little Mountain and Stanley Park**

Mr. Carl Gough, submitted a list of birds seen near Little Mountain and Stanley Park on January 1<sup>st</sup>, 1945: Surf and white-winged scoters, mallard, horned grebe, scaup, red-breasted merganser, oldsquaw, Barrow's goldeneye, [northern] shoveler, (spoonbill), American coot, bufflehead, herring and glaucous-winged gulls, spotted towhee, Oregon and Shufeldt's juncos [both dark-eyed], pine siskin, Bewick's and winter wrens, killdeer, varied thrush, house and song sparrows, Oregon [black-capped] chickadee and [northwestern] crow

#14 March 1945

### **Nature's Inventions and Their Counterpart in the Field of Natural Life**

Nature has supplied man with many ideas for his inventions. Mr. W.S. Maguire made numerous comparisons when he recently addressed the Society:

Suspension bridges were compared with the spider's web, which probably is the strongest material, by weight or thickness known to man.

Helicopters and Hummingbirds. From recent high-speed camera observations it has become known that the hummingbird reverses the leading edge of its wing when it wishes to go backwards

Thermometer. Temperatures can be told fairly accurately by the peeping of different types of frogs in springtime. They respond to varying degrees of temperature and as soon as a particular degree is reached their croaking starts. Snakes react similarly.

Diving Bell. The water spider carries down a globule of air with it when it dives.

Buildings and Apartment Blocks. By comparing man's size to that of the termite, some nests would require a human counterpart in a building 1,500 stories high.

Electric Eye. The larva of certain sphinx bees when put in a light-proof lead box, will turn inevitably to where the light is in the room, even to a low-powered light.

Oxygen Tent. Sperm whale have a large vein in their throat that they supercharge with oxygen to sustain them on long dives of 20 to 30 minutes.

Vault Doors. The trap-door spider builds a door stronger by comparison than those of the largest bank and is so well balanced a grain of sand will swing it open.

Cold Storage. Certain ants have become nothing else but a large pouch. These hang from a suitable beam and others fill them with food for winter use. Squirrels and bees display similar instincts.

Anesthesia. Wasps and hornets paralyze prey for young to feed on later.

Surgical clips. Diver ants were used by African natives to clamp wounds together.

Twilight sleep. Bears hibernate during the birth of their cubs.

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Incubator. Marsupials (kangaroos and opossum) are born only partly developed and must be nursed in a pouch until fully developed.

Birth control. Wasps and bees produce males or females as required.

Jet plane/Fog screen. The squid ejects an inky fluid by a process that resembles a jet plane propulsion system in either a forward or backward motion.

Glider. The condor of South America was studied for designs of effortless flight.

Knee action. The jaws of a snake react independently to allow for difficulties in swallowing a large animal.

Radar Direction Finder. Little brown cranes traveling in large groups at high speed through fog, and other migratory birds, have a built-in sense of direction in flight.

Mr. Macguire has a collection of 10,000 birds eggs and anyone interested in seeing them is invited to his home in New Westminster.

*W.S. Maguire was a high school teacher in Chilliwack who taught summer school at UBC in biology. An excellent naturalist, he was an occasional participant in VNHS activities. He later obtained his Ph.D. and moved to a university in Texas.*

.....

Now that spring and summer are approaching let us pass on this thought when rambling in the out-of-doors:

“Let no man say, and say it to your shame,  
That there was beauty here, until you came.”

#16 May 1945

### **Brockton Point**

Between 40 and 50 members of the Society met at Brockton Point for the first trip of the season on April 7<sup>th</sup>, 1945 to study the bird life in Stanley Park. The following birds were observed in the sea along the north shore of the Park:

Ducks – American [black], surf, and white-winged scoters, greater and lesser scaups, red-breasted merganser, mallard, bufflehead, American [common] goldeneye and Barrow's goldeneye, [American] widgeon or baldpate;

Gulls – Glaucous-winged, herring, and Bonaparte's;

Grebes – western grebe, Holboell's [red-necked] and horned.

Cormorants – Baird's [pelagic] and Brandt's

The party then proceeded to Beaver Lake where more ducks were seen: - [Northern] shoveller, ring-neck, pintail and green-winged teal. Among the land birds were [American] robin, spotted towhee, golden-crowned kinglet, Oregon [dark-eyed] junco, Oregon [black-capped] chickadee, red-shafted [northern] flicker, and the [northwestern] crow.

The party finished up at Lost Lagoon.

### **Musqueam Reserve:**



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**Note:** The Musqueam area of the 1940's is now (2003) part of Southlands/Blenheim, a small remnant of which retains the name as Musqueam Park. The wetland has been diked and a number of plant species once present have vanished.

Fifty members of the Society turned out to study the woodland flora under the leadership of Prof. Davidson. He introduced the subject with a short resume of the three main groups of plants according to habitat: the *Hydrophytes*, or water-growing plants, the *Mesophytes*, or ordinary dry land plants, and the *Xerophytes*, or desert plants.

The locale was a typical spring state of a *Mesophytic* forest. The shrubs and small plants produce flowers early while they can get plenty of light and food, then the trees produce their flowers, then their leaves, thus forming a shade over the small plants while they [the latter] are producing fruit. It was noted that the small plants have large leaves well spread out, in order to get rid of as much moisture as possible, and to obtain plenty of sunlight. The deciduous trees are characteristic of this type of forest, with a small admixture of conifers. Those observed were [red] alder, maple, [Pacific] dogwood, cascara, birch, willow, [grand] fir, Douglas-fir, [western] hemlock, spruce and cedar [western redcedar].

Special *Mesophytic* undergrowth includes salmonberry and ocean spray, both of the *rosaceae* family; thimbleberry, which is commonly attacked by insects building nests in the stems and producing galls; cleavers (*Rubiaceae*), climbing and fly honeysuckle [both orange honeysuckle], red huckleberry, Indian-plum, [common] snowberry, mayflower [wild false lily-of-the-valley], Dutchman's breaches [Pacific bleeding heart], fringe cup, avens or geum, true [sic] geranium, and horsetail. A number of fungi were also seen, including the bird's nest fungus and *Mitrula* [sic] – one of the very poisonous species in B.C. [Possibly *Amanita*?]. There were also several types of moss, including hair moss and *Mnium*.

In cleavers the apparent ring of six leaves is actually a pair of leaves, each having two stipules. In the alder for example, the stipules form the cover to the leaf bud during the winter resting season. In the maple the bud is covered with specialized leaves that gradually become more like the ordinary leaves as they progress up the stem. The transition was demonstrated by observing the bud scales from a number of buds at different stages of advancement.

On the salt marshes along the shores of the Fraser River, lyme [wildrye] grass grew in the sand. It is used to fix shifting sands. Common cattails, rushes and whitlow grass [common draba] were also noted.

#17 June 1945

### **Marine Biology at Brockton Point**

A small group braved a stormy Saturday afternoon on May 12<sup>th</sup> to study marine life at the Point with Miss Elliot. Here the rocky shores furnish an abundance of plant and animal life, organic associations comprising millions of individuals inseparably connected, and many of

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them interdependent. The seaweeds find places for attachment. The rock pools harbour species whose habitat is below the low water mark and which could not otherwise bear the alternation of tides. On the sandy shore the greater part of the inhabitants live under the surface, their presence in evidence by the open mouths of their burrows. The swift moving currents and tide eddies around Brockton Point support many forms of life. Some of the species that the group observed were:

### Plants:

Green algae – *Ulva*, sea lettuce with its plate-like double layer of cells. *Enteromorpha*, a hollow or tubular form.

Brown algae - *Fucus*, rockweeds, very gelatinous to protect the cells from the effects of extreme conditions of entire submergence followed by exposure to sun and air. *Laminaria*, a brown fluted seaweed 'sea furbelows' growing to great length. *Nereocystis*, a sea onion with holdfast and long whip-like extension to the bladder.

Red algae – *Gigartina*, leathery, gelatinous and covered with many protuberances. *Iridaea*, flat, thick, leathery, glittering in the water with blue and purple tints. *Polysiphonia*, many tubes. *Porphyra*, plate-like, delicate, edible and made into soap by the Chinese.

Animals. *Coelenterata* – one large sea anemone with tentacles drawn in and muscles contracted. *Annelida*, *Polychaeta* – *nereis*, or green sea worm examined for horny jaws of ejected pharynx to show predatory habits. *Sedentaria* – tube worms [*Eudistylia* sp.] very numerous. Protective case was dissected to see horny nature and comparison was made with free-living *Nereis*. *Bryozoan* colonial form examined with hand lens. *Echinodermata* – two species of starfish [sea stars] were numerous, feeding on both dead cod and live cockle clams. Commensal worms in ambulacral groove also noted. The tide was not low enough to observe brittle stars or sea cucumbers.

Crustacea. Purple shore crabs were examined to show habits of feeding and reproduction; female abdomens and swimmerets flexed around egg masses. *Cancer productus*, red [rock] crab with tooth-like margin on the anterior of carapace, and hermit crab with soft defenseless abdomen protected by whelk shells.

Mollusca. Univalves, whelks [*Nucella lamellosa*], and egg masses. Limpets attached to rocks by their stomach foot; bi-valves, cockle clams on the surface of sandy patches among the seaweed and mussels attached to rocks.

Vertebrates. Squirring, wriggling blennies found in rock pools.

L.E.

*Louise Elliot [Mrs. Louise McLuckie], an early UBC graduate in Science, was a popular teacher of high school biology in Vancouver. She was also a fine athlete and one of a small group of dedicated, intelligent, career women who supported the V.N.H.S. Among her students at Magee High School were Gary McTaggart-Cowan, Keith Wade and Bill Merilees.*

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### Caulfeild

Bulletin #2 (November 1943) contained a report on the Caulfeild trip of the previous spring and members are therefore referred to that report for a brief description of the flora of the rocky bluffs found there. Twenty-six members attended this year's trip on May 5<sup>th</sup>. Prof. Davidson gave some interesting descriptions of the flowers and plants and demonstrated the various methods of pollination. Comparison with the previous year showed growth about normal and there was no evidence of the winter destruction that had been noted in May of 1943 following a previous cold winter. A.H.B

*A.H.Bain came from Scotland. He was an ardent support of Prof. Davidson and the V.N.H.S. Mrs. Bain was very hospitable and their home was often open for committee meetings. Mr. Bain was President of the V.N.H.S. from 1943 until 1950.*

#18 October 1945

### Burnaby Lake

On the afternoon of May 19<sup>th</sup> thirty-two members visited the Lake to study with Prof. Davidson the specialized flora found in the bog area. The lake bed was formed by glacial deposits into which drained the run off from the surrounding land. It is a shallow basin, much of which is now bog, with floating vegetation. The various plants that form the bog are found by drilling through successive layers of decaying matter. In one part of the Lake there is 20 feet of peat – decayed sphagnum moss – and two feet of decaying cattails, before reaching water. The plants found on the fringe of the lake are different from those found nearer the center; they are usually found in the following order: water lilies, cattails, sphagnum moss, various members of the *Ericaceae* or heather family such as *Kalmia* or [western] bog-laurel, Labrador tea, and heather.

The decaying vegetation gives off carbon dioxide that, combined with the water of the Lake, forms carbonic acid. There is little drainage out of the Lake and evaporation is therefore the only means of keeping the level down – which in turn means an increasing concentration of acid in the water. The plants deriving their sustenance from the Lake must be specially adapted to this acid condition. The acid content makes it hard for plants to form root hairs necessary for the absorption of water; to offset this difficulty they must conserve what water they can obtain. Three main adaptations were noted: cuticle on the upper surface of the leaves prevents evaporation (*Kalmia*); the leaves roll under along their edges, parallel to the main vein, to reduce the surface of the underside (Labrador tea); and hairs on the underside of the leaves (Labrador tea). Most bog plants are characterized by their small leaves. S.B.

*Sheila Buchanan was a capable young woman who graduated from UBC with a specialty in Soils and Soil Microbiology. Her agricultural background was of service to her later when she spent much of her life as a missionary in the rural areas of Bolivia.*

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### **Kitsilano Beach**

On June 22<sup>nd</sup> forty members met under the leadership of Mr. J.J. Plommer to study rock formations along Kitsilano Beach. He pointed out that the spot at the foot of Alma Road where we started our observations, marked the western extremity of the area in which the tertiary sedimentary rocks underlying Vancouver are exposed. These no doubt continue an indefinite distance further west, below sea level, but the peninsula of Point Grey is composed entirely of glacial till and inter-glacial material brought from the mountain area to the north. It is a remnant of the cordillera glacier flood plain and has no relation to the alluvial lands at the mouth of the Fraser, which are, of course, of more recent deposits.

The mountains of the north shore, although far more recent than the hills of eastern North America, are old in comparison with the tertiary sedimentaries being assigned to the late Jurassic or early Cretaceous periods. Interrupted at times, the Coast and Cascade ranges exhibit a general upward movement for many ages. Coincident with this was local down folding, as in the lower Fraser basin. In this basin the tertiary sedimentaries were laid down. These are represented in the Vancouver area by a series of conglomerates, shales and sandstones, perhaps 4,000 feet in depth. These have been divided into the Burrard and Kitsilano formations. The base of the Burrard formation can be seen in the Capilano River near Keith Road and in Sumas Mountain. The base of the overlying Kitsilano formation can be seen at the entrance to False Creek and half way up Burnaby Mountain.

These formations have been assigned to the Eocene and are fresh water lake and stream deposits. This can best be understood by considering the 600 miles of continental shelf that extends west of Vancouver Island. Thus, when the coast was so much further west, it is not difficult to understand that sub-aerial deposits could be laid down in this area.

The shales show in places with streaks of lignite, but the amount is small, probably being only the remains of driftwood. Some of these ancient lakes dried and left muddy bottoms in which cracks developed and the surface was pitted by rain. The cracks and rain spots can be seen in the shale on the beach at Kitsilano. In Miocene times basaltic dikes that are now exposed on the beach invaded the Kitsilano formation. These appear to follow the general lines of weakness along the N.W. mountain trend. They can also be seen intruding the granodiorite on the West Vancouver shore. Many glacial boulders were noted on the beach, stranded remnants of the old flood plain. Their glacial origin is clearly evident as such boulders have one or more flat sides, this being in contrast to water-borne boulders that are rounded on all sides.

### **Mammal and Bird Life of Burnaby Lake**

An eager party of 32 members met at Burnaby Lake on June 16<sup>th</sup> to observe birds and small mammal life under the leadership of Dr. Cowan. He began by listing the birds and animals likely to be seen, and indicated that the fauna of the region was quite extensive with a variety of small mammals and a good number of birds. In order to see some of the mammals, Dr. Cowan set a trap line the day before and as the party proceeded along the

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lakeshore, various specimens were collected, including: - white-footed [deer] mouse], (most common) wandering [vagrant]shrew and dusky shrew. Other species observed in the marsh were muskrats, the Townsend's and creeping vole, the blue [Trowbridge's] shrew and the two shrews of which we saw [trapped] specimens.

A blue-winged teal, [American] widgeon, mallards and an [American] coot were seen on the Lake, and a coot's nest noticed in the grass at the edge of the Lake. Other birds seen, or heard, were the yellow warbler (and nest), orange-crowned warbler, cliff swallow, violet-green swallow, red-winged black-bird, russet-backed [Swainson's] thrush, [common] yellowthroat, warbling vireo and the red-eyed vireo, [American] robin, cedar waxwing, [northern] goshawk, song sparrow, downy woodpecker, western and Traill's [willow] flycatchers, [spotted] towhee, Oregon [black-capped] chickadee, California purple finch, bushtit (and nest), bald eagle, black-headed grosbeak, Tule [marsh] wren, Seattle [Bewick's] wren, Virginia rail, northwest coast heron [a sub-species of the great blue heron]. A hen [ring-necked] pheasant was disturbed and one of her chicks caught as they scattered. It was thought to be about a week old, but like all game birds the wing feathers were almost fully developed while the rest of the chick was still covered with down. This enables them to run from birth and to fly within a week. They are known as precocial.

A bullfrog was heard croaking and both a northern [western] toad and a tree toad [Pacific tree frog] were studied. Their breathing was noted; they have no diaphragm but pump air by lower jaw action that gives them a panting effect. The most common local snakes were seen: the Puget Sound [northwestern] garter snake and the striped [common] garter snake.

The former grows to about 18" long, has live young and eats insects. The latter will eat larger fare such as frogs etc. The place where a colony of mountain beaver lived was noted but none were seen. They are somewhat like a muskrat without a tail. The burrows of a shrew-mole and a creeping vole were uncovered under a log.

#20 December 1945

### **Manning Park**

**Note:***Until the Hope-Princeton Highway opened (November 4<sup>th</sup>, 1949), access to Manning Provincial Park was via Princeton, and a much longer road journey from Vancouver via Merritt, by train via the Kettle Valley Railway, or a long hike via the Dewdney Trail.*

The reconnaissance party to Manning Park last July consisted of J.J. Plommer, N. Carter, J. Fish, F. Timmis, R. Timmis and F. Sanford who gave an account of their rambles in the Hope-Princeton area to the Society's members at their November 14<sup>th</sup> meeting. Mr. Plommer opened the meeting with a few introductory remarks of thanks to the people who had helped make the trip possible, especially Mr. Chess Lyons of the Forestry Department and Mr. Gregory of Princeton.

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Mr. Carter provided the history of the area, and spoke of the fur traders of 1813 and traced the development of the region by settlers and Royal Engineers, placer miners and naturalists. Prof. J. Davidson had made the first comprehensive botanical exploration of the area for the provincial government in 1915. In 1940 the Society had held a camp at Skagit, 25 miles from Hope.

Mr. Timmis and Ronnie gave an account of trips made, while at camp, to Three Brothers Mountain, Lightning Lakes, Skyline Trail and Buckhorn Ridge Trail, and described the open park-like meadows in the upper levels to the snowline at 7,500 feet. Toward the end of camp, Mr. Fish and Mr. Carter traversed the trail to Hope, a distance of some 40 miles, by foot and survey car. Mr. Fish related some of the adventures on this journey. Mr. Sanford reported on the flora and fauna. "Here", he said, "can be seen typical drybelt and humid coast transitory stages of vegetation side by side." Poplars, Rocky Mt. [Douglas] maple, whitebark pine, Engelmann spruce, firs and [western] yew were some of the trees found. Tiger lily, violet, Indian paintbrush, alpine phlox, prince's pine, queen's cup and many other plants were noted.

Mule deer, hoary marmots and chipmunks – but no squirrels – were observed, while many birds were heard but not seen. In the vicinity of Princeton, bluebirds, Arkansas [western] kingbird, common [eastern] kingbird. [belted] kingfisher, swallows, [American] robins and western tanager were recorded.

In the Park a [spotted] sandpiper was observed and its nest in which four eggs, all standing on their pointed ends were tightly packed. Trout were plentiful in the lakes. There were many butterflies and other insects found. One evening mayflies were overhead in thousands on their mating flight. A threadworm about 6 inches long was found in the slack water of a creek, and woolly aphid infestations were noted on alder. (Continued in next issue).

#21 February 1946

### **Manning Park (Cont.)**

Mr. Plommer described the geology of the area as part of the Cascade system that embraces those mountains south and east of the Fraser River, merging into the interior plateau. The recognizable rock structures are composed of various plutonics and sedimentaries laid down from carboniferous to early tertiary times. The whole Park is in the Hozameen Range. To the west the Hozameen series are of the carboniferous age. On the northeast side is a belt of cretaceous age, about 6 ½ miles wide in which the party spent their time. This is not a mineralized area; conglomerate, black shale, sand rock, reddish rocky bluffs and fossils were observed. The future of the Park as viewed by the party was that it would be popular to tourists, but the problem would be to disperse people throughout the many charming features in valleys, lakes and ridges. Mr. Plommer suggested the area be developed to suit

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various types of visitors, but chiefly fishermen, trail riders and hikers. A complete copy of the party's report is filed in the Society's library.

A.R. Wooton.

*Allan R. Wooton was a Vancouver commercial artist. He and his brother Wilf were prominent in the Boy Scouts of Canada. Allan's main natural history interest was entomology; but he was also a good general naturalist. He led trips and was a summer camp mainstay; more importantly, he helped to found the Vancouver Public Aquarium. A native of Vancouver, Allen and his wife were early members of the V.N.H.S.*

#24 May 1946

### **Birds of Stanley Park**

Encouraged by a lovely sunny day, 45 members formed an eager party to study the birds in Stanley Park on the afternoon of April 13<sup>th</sup> under the leadership of Carl Gough. Assisting him were Messrs. Frank Beebe, John Holman and Wm. M. Hughes. Some of the water birds were sojourning here on their way north to the interior or to the prairies for nesting. Most notable were 11 species of duck: mallards, red-breasted merganser, scaup, bufflehead, baldpate [American wigeon], [northern] shoveler, Barrow's and American [common] goldeneye, surf, white-winged scoter and American [black] scoters. Many [American] coots were seen on Lost Lagoon.

A Canada goose was seen on Beaver Lake but it was too early in the season to see goslings or ducklings. Many mallards nest in the vicinity and do not migrate further inland. Other water birds observed were the three types of gulls frequenting the area – glaucous-winged, Bonaparte's and herring gulls, two species of cormorant – Baird's [pelagic] and Brandt's cormorant, and horned and western grebes. These were seen off Brockton Point.

In the open woodlands and along the shore of Lost Lagoon many perching and hopping birds were noted. The Oregon [dark-eyed] junco, [American] robin, song sparrow, kinglet, chickadee, [spotted] towhee, and red-winged blackbird filled the air with song, while a killdeer spent its time running along the shore. At Brockton Point a number of [great] blue herons perched on trees and some nests were in the early stages of construction. In the banks at Second Beach previous nesting sites of the belted kingfisher and rough-winged swallow were observed. Mr. Hughes was fortunate enough to find an Indian stone axe head during the afternoon ramble.

*Frank Beebe was Curator of the Stanley Park Zoo and very supportive of V.N.H.S. activities. He was also a colour-blind artist who later spent many years as the B.C. Provincial Museum's Chief Illustrator. Many of the Museum's handbooks feature his excellent black and white drawings. He*

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*also co-produced a book with Mr. Hardy, with colour illustrations of B.C. Wildflowers. Frank was a competent general naturalist with a deep interest in birds – particularly falcons.*

### **Birds of Pavilion Lake**

On a trip to Pavilion Lake in July of 1945, Carl Gough recorded a number of birds in the area: Yellow, MacGillivray's, Tennessee, and Audubon [yellow-rumped] warblers, red-eyed vireo, warbling vireo, sparrow hawk [American kestrel], Brewer's blackbird, pine siskin, cedar waxwing, [American] crow, [American] robin, song, vesper and chipping sparrows, mountain bluebird, belted kingfisher, red shafted [northern] flicker, russet backed [Swainson's] thrush, Townsend's solitaire, [black-billed] magpie, hairy, downy and pileated woodpeckers, killdeer, grouse, common loon, spotted sandpiper, [American] goldfinch, violet-green swallow, western kingbird, eastern kingbird, western tanager, [gray] catbird, western [pacific-slope] flycatcher, Traill's or Wright's [willow] flycatcher, Barrow's goldeneye (5 broods were noted with 6, 7, 8, 9, and 11 young), and Holboell's [red-necked] grebe.

Mr. John Ronayne of Pemberton Meadows reported a lone swan landing in his pasture on the morning of April 19<sup>th</sup>.

### **Musqueam Reserve**

The 35 members who attended on April 27<sup>th</sup> were fortunate to observe, besides the usual spring flowers of the woodland, clumps of fanny-bell [sic] in bloom; quite an unusual sight at this time of year. Among birds seen were [American] goldfinch, purple finch and white-crowned sparrow.

#25 June 1946

### **Bird Life on Iona Island**

A poor start doesn't always mean a failure and that certainly was proven on Saturday, May 4<sup>th</sup>. The afternoon started most inauspiciously – cold with a sprinkle of rain. The tide was so low that the boat which was to ferry us over to Iona Island was stuck fast in the mud. (While waiting at the dock we saw cliff, barn and violet-green swallows. The first were busy making their mud nests under the eaves of a barn so we saw them in all stages, from shallow rings against the wall to almost finished nests with a finger-sized opening protruding on the side opposite the wall or base of the nests.) But, undaunted, three of the ugliest and most inefficient rowboats were procured and three experienced oarsmen in the party crossed and recrossed the swift current to deposit 22 members on shore of the Island. We clambered with muddy hands and feet up the clay banks, some losing their footgear on the way. Eventually, all was in order again and as the sun later blazed forth we were rewarded by one of the pleasantest trips in several seasons.



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Leaders J.W. Farley and John Holman had reconnoitered the ground the previous week and had located a number of nests that the unpracticed eyes of most of us would have passed a dozen times unnoticed. We disturbed the mallard sitting on her well-formed nest tucked into the base of the rushes on the edge of the marsh, and were able to see ten pale green eggs.

Tule [marsh] wren's 'cheh-cheh' chattered to distract us from their nests in the rushes. The nests were built about 2 feet from the ground by drawing and twisting a bunch of growing rushes together. On the base so formed, the nest is built partly from the rushes and packed solid with the down from cattails which by the way, shed all over us as we pushed through them in the marsh. These nests appear solidly covered and it is often difficult to find the tiny entrance hole. A pair of these birds will make several nests but lay their eggs in only one – a means of protection from their enemies.

Many red-wing blackbirds were seen and their nests, some on the ground, some hung low in the rushes, were made chiefly of grass. In one we found three pale fawn green eggs with black and blue-gray splotches on the large end. Tragedy had stalked the nest of one song sparrow where three young lay dead, but in another we saw three blue eggs covered with brown spots. These nests are also found on the ground, hidden in the grass or rushes. As well as song sparrows we saw savannah, white-crowned and golden-crowned sparrows. The latter are here in migration only and do not nest in these parts.

The only nest seen in a tree was that of a [American] robin, and in it were three blue eggs. Yellow warblers, [western] meadowlarks, marsh-hawks [northern harrier], and a short-eared owl were seen or heard. An American bittern rose from the rushes with a guttural croak as we were walking along the dyke. A number of Alaskan [Lapland] longspurs were enjoying life on the Island for a short while on their way north to nest in the Arctic.

As the tide was low many of the shore birds were out on the flats and the curlews, black-bellied plovers, great blue herons and gulls (glaucous-winged, Bonaparte's) were identified only with the aid of field glasses, but the red-backed sandpiper [dunlin] were seen closer, and in flight, the distinctive quick flutter of their wings was noted.

During the afternoon many killdeer were seen flying and plaintively crying to attract us away from their nests, but with such a large party to disturb them, it was hard to locate the nests. On leaving the dyke and crossing a gravelly spit, the forward members of the party almost stepped in the middle of four amazingly camouflaged eggs laid in a shallow depression in the sand. No attempt had been made to form a nest; a few scratches in the sand had sufficed. A killdeer's eggs are so shaped that they will not roll away. The small end is almost pointed and the large end very wide and round. The almost triangular shape kept the four eggs, points in, close together, and after a slight disturbance, the eggs rolled back automatically to their correct position. Their colouring of yellowish fawn with black splotches blended perfectly with the surroundings.

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Returning up-river we saw American coots and [northern] shoveller on the opposite shore and on the wet sand under our feet were recent tracks of large and small webbed feet whose owners had afforded us such an interesting afternoon.

S.B. [*Sheila Buchanan*]

#26 June 1946

### Caulfeild

The Caulfeild trip was enjoyed by 41 members on May 11<sup>th</sup>. The usual large variety of plants was studied, including four species of saxifrage. The two species of camas were in flower. The blue flowered camas has an edible bulb and is popularly known as Indian camas from the Indian habit of including camas bulb in their diet. The white flowered [death] camas is poisonous and should never be eaten. When not in flower this species can be distinguished by the roughness of its leaves. A little mountaineering was added for good measure when the big bluff on the far side of the Bay was climbed for the first time in several years. A lovely day and the excellent leadership of Prof. Davidson combined to make it a very pleasant outing.

S.B.

### Marine Life – Shores of Stanley Park

The ordinary beach visitor has no idea of the wealth of animal life to be found a little above low-tide, and even to the 50 members who met on Saturday, May 18<sup>th</sup> near Brockton Point, it was enjoyable to have new examples pointed out by our able leader Miss Elliot. Seaweeds were studied, including members of three classes: *Chlorophyceae* (green), *Phaeophyceae* (brown) and *Rhodophyceae* (red). Among the animals studied were a number of examples in different groups: echinoderms – starfish, sea urchins and sea cucumber, the last of which being the highest form of life in the group; worms – flat worm, nemertean (red), nereis, tube worms, serpulids, mollusca – chitons, whelk and eggs, periwinkles, limpets; crabs – including many hermits; and fish – blenny and cling fish. A group of sea lemons [a nudibranch] were also seen. They are a snail-like animal without a shell.

Many species were collected. A 4% solution of formaldehyde was used for preserving the samples. The specimens were left in a bath of the solution for a week, and then put into a fresh solution for permanent keeping. The following books deal with the subject of marine biology and can be obtained by contacting our librarian, Mrs. Morgan: *Animals of the Seashore* (Guberlet); *Seashore Animals of the Pacific Coast* (Johnson & Snook); *West Coast Shells* (Josiah, Keep); and *Field Book of Ponds and Streams* (Ann Morgan). S.B.

### Crescent Beach

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Thirty-three members made the trip to Crescent Beach on May 24<sup>th</sup> under the leadership of Prof. Davidson. In the morning the flora and character of the salt marsh at the mouth of the Nicomekl River was studied. There is a high concentration of salt, acids and minerals, dissolved in the water. In many cases the concentration of solubles is almost as high as in the plants so that very little flow into the plant is required to equalize the concentration. Since little water can be absorbed, that little has to be hoarded, and the plants observed showed adaptation for storing water or keeping evaporation to a minimum.

Attention was drawn to the fact that many plants growing here were also found in alkaline areas in the drybelt of the interior [of B.C.]. The marsh was at its best and among a great variety of plants found were sea-milkwort (*Glaux*), seaside plantain (*Plantago*), [salt marsh] dodder (*Escuta*), glasswort (*Salicornia*), arrowgrass (*Triglochin*), lyme grass [wildrye], water-plantain (*Alisma*), and [Puget Sound] gumweed (*Grindelia*).

Following the track to Ocean Park after lunch, other plants the group found were lesser paint brush [owl-clover] (*Orthocarpus*), pea (*Lathyrus*), vetch (*Vicia*), ragweed (*Ambrosia*), wormwood (*Artemisia*), Indian consumption plant [barestem desert parsley] (*Lomatium nudicaule*), mock orange (*Philadelphus*), wooly leaf [woolly eriophyllum] (*Eriophyllum*), and [Nootka rose] (*Rosa nutkana*). The Indians used some of these plants for medicinal purposes.

Returning along the beach, several green seaweeds, one of them tubular [*Enteromorpha*], [green string lettuce] and some brown ones were noted. Two sea animals of interest were a green sea anemone and a colony of very small purple sponges. Twenty-seven different birds were noted and near an Indian midden, Mr. Hughes found a stone adze and two arrowheads. It was a most enjoyable and profitable excursion.

### Point Atkinson

Though scheduled for the study of geology, the trip to Pt. Atkinson on June 1<sup>st</sup> proved to be an opportunity to study a wider range of interests than geology alone. After a short survey of the particular aspect of geology to be covered during the afternoon, Mr. Plommer led a group to various points on the rock bluffs around the lighthouse and pointed out examples to illustrate his subject. Pt. Atkinson is the only place in this locality where mountaintop conditions can be studied at sea level. Our objective was to study the differentiation of granitic rocks and examples were abundant, from lightest granite to dark gabbro, in the crystalline forms. Intrusion of non-crystalline form was also seen. This is the first time a granite shoreline has been studied by the Society.

There was also a wide range of bird life to be seen, including such divergent species as a hummingbird and a bald-headed eagle. Mr. Hughes noted 24 varieties of birds.

Mrs. McGinn and some of the botany-minded members found the woods behind the bluff full of interesting plants, among which was a clump of candystick. First year staminate and ovulate cones were seen on the lodgepole [shore] pines, as well as some green second year

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and woody third year cones. It was a little late in the season to see arbutus trees at their best, as nearly all the flowers had fallen.

A variety of insects were observed and collected. A large black and white swallowtail butterfly flitted from flower to flower in the sunlight, pausing to sip nectar. Two interesting insects were caught, known as snakeflies, belonging to the order *Neuroptera*. By means of a prolongation of the back of the head and front of the thorax, this insect obtains a remarkable neck-like process resembling a snake ready to strike. Several longhorn, click and *Lampyridae* beetles were seen and collected. [Wood] ticks frequent the bluffs. A carpenter bee was observed carrying a piece of leaf to construct a nest, while solitary bees were seen entering and leaving holes in the ground that they were making and provisioning their young grubs.

A beautiful drive, lunch under the trees, relaxing on the grassy slopes in the western sun and watching the water traffic on the Gulf, all combined to make our first trip to Pt. Atkinson memorable.

Sheila Buchanan and Allan Wooton

### Sumas Mountain

Under the leadership of Mr. Farley, 41 members set out bright and early by bus on Sunday June 16<sup>th</sup>, for the 50-mile trip up the Fraser Valley to Sumas Mountain. From river level we walked a mile to the home of Mr. Kelleher, our guide for the day. From here on we could be divided into three groups: - those with Mrs. McGinn who set out to enjoy the many flowers to be seen on the lower slopes; those who set out for Lost Lake and the summit, and made it; and those who set out for Lost Lake, but fell by the wayside and were unhappily disappointed in achieving what was a lovely and worthwhile goal.

The hike was long and strenuous after an early breakfast and many of the beauties of the bush, bird and plant, were missed in the violent protests of the inner man, as we hurried to get to the Lake, lunch and hot tea. And hot tea there was, in less than ten minutes, thanks to our guide's fire-making skills. Mr. Kelleher has lived near Mission for over seventy years and put many of us 'youngsters' to shame by his energy and speed as he led the way through the woods.

The Lake is closely connected with the local tribe of River Indians whose medicine men used to go there for their mystic rites and potion-making each year, to scare away the river devil who made the Fraser flood each summer. Lost Lake is in a lovely secluded place, so it should not have been hard to coax the river devil to spend awhile there instead of playing havoc with the River.

After lunch 13 enthusiasts resumed their climb and after an hour's hard work arrived on a great rock summit that was covered with several varieties of rock plants and pentstemons were in bloom. The wonderful panorama convinced all they were well-rewarded for their effort as they looked down upon Dewdney, Hatzic, Nicomen Island, Deroche, Chilliwack,

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Hope and the patchwork patterns of the Sumas Lake farming district and the Vedder River leading into the Vedder Canal.

The summit, known as Signal Hill, is another key point for the River tribe, for from it can be seen Vancouver Island and, on clear days, south to Bellingham. As if to bear out the legends surrounding the mountain, Mr. Hughes picked up a polished jadeite chisel, lost on the trail by some native hiker and washed out by the rain. Trails of [coastal mule] deer, [black] bear, raccoon, porcupine and [Douglas'] squirrel were seen, as well as many birds. The ferns seen included oak fern, [southern] maidenhair and [maidenhair spleenwort]. Plants found in the higher altitudes included pyrolas, single delight, queen's cup, elkhorn [vanilla-leaf], penstemon and white trillium.

F.F. and S.B.

*There were two William Hughes in the V.N.H.S. The one referred to here was a self-trained naturalist who had been a trapper in northern Alberta and Athabasca delta. He was a fine birder and when retired, helped Bob Harris and Ernie Taylor at the Canadian Wildlife Service with the bird strike problem at the Vancouver International Airport. With Violet MacKay he initiated one of the more comprehensive studies of the crested myna. Bill led many of the Society's field trips and was a great help at summer camps. As readers of this report will know, he had a very keen eye for Indian artifacts and worked as a volunteer with Dr. Carl Borden at various archeological sites.*

*The other Bill Hughes was also a World War I veteran who attended summer camps and could recite all of Robert Service's poetry. He worked servicing C.P.R. Stations in Western Canada after trying to farm on Soldier Settlement Land at Louis Creek.*

#28 October 1946

### **Grouse Mountain – Goat Mountain**

On August 18<sup>th</sup> forty-six members made the ascent of Grouse Mountain in two chartered buses. The previous date of July 21<sup>st</sup> had been cancelled as the whole area was blanketed in deep snow. On this mid-August day we arrived to find spring in full progress. The majority of the party stayed on the lower reaches to explore the wonderful display of spring flowers under Mrs. McGinn's leadership and were richly rewarded. Copperbush, false azalea, [white-flowered] rhododendron, and blueberries were found in abundance and many fine banks of queen's cup, bunchberry, [clasping] twisted stalk, saxifrage, false Solomon's

seal and alpine [subalpine] spirea brightened the Grouse to Goat trail. Scattered specimens of mountain ash, fleabane, mountain [subalpine] spirea, and [white] marsh-marigold were found further along. Mr. Westall pointed out a large clump of crowberry on Goat Peak. It is not commonly found at this elevation. Willows were still showing their white wads of cotton and the salmonberries were just forming fruit. Truly spring in summer. For those who made the Peak, a marvelous panorama was laid out. To the north, Garibaldi, Black

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Tusk and Mt. Mamquam stood behind the Sawtooth Range. Mt. Baker with its satellite peaks loomed beautifully to the south, with the City and the Fraser Delta in the foreground. There was still much snow on Goat Ridge. In all a pleasant and profitable trip enjoyed by all.

F.J.S.

*Frank Sanford was a self-taught capable naturalist who joined the V.N.H.S. as a youth. He helped initiate Van Dusen Botanical Gardens and was a docent there for many years. He led field trips and camps and was President of the V.N.H.S. (1958-1960). He was also Treasurer for decades. Frank was a prominent, important and effective member.*

### #29 December 1946

Note: A [greater] white-fronted goose was observed by the secretary at Lost Lagoon on November 26<sup>th</sup>, which is a rare occurrence for this locality.

*We're not sure which Secretary this was. A.R. Wooton was the Correspondence Secretary, and Stella Boyce the Recording Secretary.*

### **Sumas Mountain Plants**

The following is a list of plants found on Sumas Mountain on June 16<sup>th</sup>, 1945 provided by Mrs. McGinn:

arnica; nightshade [European bittersweet], *Solanum dulcamara*; - wintergreen [one sided] *Pyrola* [*Orthilia*] *secunda*; *P. chlorantha*, [green] wintergreen; *P. asarifolia*, [pink] wintergreen; single delight, *Moneses uniflora*; prince's pine, *Chimaphila umbellata*; [shrubby] penstemon, *P. Menziesii*; paintbrush, *Castilleja* (2 shades); goatsbeard, *Aruncus sylvestris* [*dioicus*]; oceanspray, *Spiraea* [*Holodiscus*]; hardhack, *Spiraea*; mountain [subalpine] spirea, *Spiraea*; queen's cup, *Clintonia uniflora* – the common name given to it by Mrs. Henshaw of Vancouver. Devil's club, *Fatsia* [*Oplopanax*], a handsome shrub, with fruit in the green stage. Oak fern and maidenhair ferns in beautiful clumps, and [maidenhair] spleenwort. Spikenard, [star-flowered false Solomon's seal], *Smilacina stellata*; mock-orange, *Philadelphus*, saxifrage family, but without perfume as a result of local heat conditions. And not a syringa, which is a lilac. Mother of millions [youth-on-age], *Tolmiea menziesii*; elkhorn (sweet after death) [vanilla-leaf], *Achlys triphylla*, (barberry family); small flowered [baldhip] rose, [*Rosa*] *gymnocarpa*; [Pacific] ninebark, (*Physocarpus*).

### **Botanical Notes from Central B.C.**

Mr. J.W. Eastham contributed the following notes from his address to the Society, which was illustrated by many interesting specimens:

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On leaving Vancouver for Prince George by car, the first striking change in vegetation is the disappearance of the vine maple, *Acer circinatum* and its replacement by *Acer glabrum* –the mountain [Douglas] maple. *A. macrophyllum* [bigleaf maple] however, persists almost to the edge of the dry belt at Cisco. In from Clinton, at Green Lake, *Scirpus nevadensis* was found, which is a southern plant rare in B.C. and this is our most northern record at present. Here also we meet with *Astragalus serotinus* [miser] [timber milk-vetch], a plant that perhaps causes more losses among livestock than all other B.C. poisonous plants combined. It is habit forming, producing emaciation and nerve paralysis, or heart failure. While related to the locoweeds, the symptoms, according to our veterinarians, are different. At Soda Creek we see an abundance of *Crepis tectorum*, [annual hawksbeard], a species first reported in 1934 but now found right across the Chilcotin to Redstone and north to beyond Quesnel.

Lat. 54° - that of Prince George – marks an interesting change in flora. At this latitude not only do more Arctic plants appear, but our ecological divisions of the south become modified. *Angelica genuflexa* [kneeling angelica], a plant normally found only on the south coast is also found at Smithers, Ootsa Lake and Quesnel. It is also probable that many eastern plants such as *Calla palustris* [water arum] [and other] older floras thought to range only from Nova Scotia to Minnesota, in fact extend right across to B.C. *Anemone virginiana* [riverbank anemone] has been found at Prince George, and *A. cylindrica* [long-headed anemone] is fairly common at Quesnel. *Carex Sprengelii* [Sprengel's sedge] and *C. tenuiflora* [sparse-leaved sedge] not previously known west of the Rocky Mountains, have been found in the Prince George area. The latter, however does occur in Alaska. *Heuchera Richardsonii* [Richardson's alumroot] was found at McBride. The C.N.R. has made this latitude accessible, and a thorough botanical study of it will probably result in many interesting finds. At present, it represents the limit of any real knowledge we have of our B.C. flora.

J.W.E.

*J.W. Eastham was a British-trained World War I veteran and a gentleman. He was a Provincial plant pathologist and a fine botanist. He revised J. W. Henry's, Flora of B.C. and in retirement volunteered in the U.B.C. Herbarium. He and some other naturalists had differing views from those of Prof. John Davidson and left the V.N.H.S. to form the Burrard Field Naturalists. It was a small group that existed for a time as part of the B.C. Art, Science and Historical Society associated with the old Vancouver Museum. After Prof. Davidson retired, Mr. Eastham returned to occasionally help with V.N.H.S. activities.*

#33 May 1947

### Stanley Park

Our first outing of the season on April 12<sup>th</sup> was a great success. Thirty members turned out under the able leadership of John Holman and Frank Beebe, and the sun contributed its cheerful warmth, encouraging our feathered friends to be available for our inspection. The party met at Second Beach and proceeded along the northeast shore of Lost Lagoon, observing birds, both land and water dwellers; thence to Beaver Lake along the north shore of the Park to Lumberman's Arch, finishing up at the Zoo where several native species are to be seen in captivity.

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Song only heard: - red-winged blackbird, winter wren, golden-crowned kinglet, white-crowned sparrow. Seen: - Oregon [dark-eyed] junco, evening grosbeak, ruby-crowned kinglet, Audubon [yellow-rumped] warbler, orange-crowned warbler, American [Northwestern] crow, falcon, mallard, bufflehead, Bonaparte's gull, glaucous-winged gull, red-breasted merganser, horned grebe, [American] coot, song sparrow, violet-green swallow, chickadee, [American] robin, [spotted] towhee. Green-winged teal, baldpate or [American] widgeon, lesser Canada goose, American [common] goldeneye, scaup, Baird's [pelagic] cormorant, surf scoter, ruddy duck, pileated woodpecker, purple finch and [northern] flicker.

In captivity: Mandarin duck (not native), whistling swan, lesser Canada goose, cackling goose, spotted owl, Japanese starling [crested myna], American [black-billed] magpie, fox sparrow, [spotted] towhee, white-crowned sparrow and red-tailed hawk. Mammals in captivity: pine marten, skunk, raccoon, American badger.

Those interested in botany found carpets of mayflowers [false lily-of-the-valley], *Maianthemum*; salmonberry and wild currant were flowering in profusion, with the new leaves of the huckleberry making a lovely colour effect. Horsetails and yellow arum [skunk cabbage] were found in abundance around Beaver Lake. A garter snake was picked up in that vicinity, and a butterfly seen in the Japanese plum trees.

S.B.

### **Sea Island**

The bird lovers were fortunate to have had perfect weather for their second outing on April 26<sup>th</sup>. Thanks to Mr. Bain and other car owners, the party gathered at Ferguson Road. Before leading the way to a heronry, John Holman read a list of birds seen on a previous trip and suggested other species that might be present. Nesting conditions of the great blue heron were easily observed and several eggshells were found. A fox [song?] sparrow with young was disturbed, and they put on a fine show. (NB: Fox sparrows are not known to nest in south coastal B.C). The party then crossed the fields to the dyke and several shore birds were seen. Due to low tide there were few water birds.

Song heard only: horned lark, yellow warbler, tule [marsh] wren, and spotted towhee. Seen: killdeer, American goldfinch, red-wing blackbird, Brewer's blackbird, great blue heron, savannah, fox [?], white-crowned, tree and song sparrows; [American] robin, [western] meadowlark, [water] pipit, mallard, red-backed sandpiper [dunlin], greater yellowlegs, black-bellied plover, Wilson's [common] snipe, [ring-necked] pheasant (and egg) and the Maryland [common] yellowthroat.

Botanists saw wild geranium, red involucred or twin [black twinberry] honeysuckle, [Pacific] ninebark, and a four-leaf clover.

### **Musqueam Indian Reserve**



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About 37 members of the Society spent a pleasant sunny afternoon on May 3<sup>rd</sup>, studying botany with Prof. Davidson. The plants are flowering earlier than usual this year. A pretty mimulus was observed.

### **Caulfeild's west shore**

On May 10<sup>th</sup> 40 enthusiasts gathered with Prof. Davidson to tour the Caulfeild area and a wide variety of plants were found. Later the group gathered for tea on Mrs. Buck's verandah. Some members scrambled high on the rocks in search of bluff flora. There were a number of rufous hummingbirds to be seen.

#34 August 1947

### **Prospect Point, Stanley Park**

On June 7<sup>th</sup> about thirty geology enthusiasts gathered at the foot of Prospect Point while Mr. Plommer explained the rock formation of that region. The dark coloured ledges seen there are composed of igneous rock that is comparatively young, about 19 million years old, and much stronger than the surrounding sedimentary rock that belongs to the Burrard formation, age 30 million years.

The dark rock is part of the large dyke that forms the prominent cliff marking the entrance to the harbour. The dyke is about 50 feet wide and extends upwards above sea level for 200 feet. A vertical dyke 10 feet wide occurs a short distance south of Siwash Rock on the west side of Stanley Park and trends eastward, but is exposed only at low tide. The dyke spreads out in its upper part into a flow or sill, which then extends southwest along the top of the cliff nearly to Siwash Rock, and is recognized by the almost vertical joints. The contact of the lower part of the flow or sill with the underlying sedimentary rock is exposed high up in the face of the cliff south of Siwash Rock. The sandstones are considerably altered near the contact of the igneous rock. Siwash Rock is a marine erosion remnant (a stack). It consists mostly of sandstone that has been baked and altered by the action of the intrusive tongues of igneous rock, and has therefore resisted erosion. This whole region is rising and deeply bedded rocks are now being exposed.

As we walked along we saw occasional boulders that had been strewn over the land by glaciers in a very recent period, about one million years ago. The pleasing contours of the whole park area and the interesting southern shoreline results from gentle folds in the Burrard formation. This results in different parts of the formation being exposed to wave action, the more resistant rocks forming projections, the shales being eroded to form small bays at Second and Third Beaches.

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A young [harbour] seal was also seen that day, as well as paper wasps and their nests.

L.C.

#35 October 1947

### **Summer Trip to Grouse Mountain**

On July 20<sup>th</sup> nine hardy souls made the climb to Grouse plateau and beyond. Perfect weather with fleecy white clouds and cool breezes was our reward. The flowers were a month in advance of last year so we saw some we had missed previously and found others in seed. The Grouse road was a mass of copperbush and [white-flowered] rhododendron. Mountain [subalpine] spirea, heathers, [white] marsh-marigold, mountain ash, [clasping] twisted stalk, arnica and saxifrages brightened the way as we went over to Goat Ridge and back by Dam Mountain. A grouse with young was found above the ski village and Mr. Beebe pointed out Vaux's swifts, [dark-eyed] juncos and some unidentified thrushes.

#39 May 1948

### **Garibaldi Park and Hatzic**

On May 2<sup>nd</sup> eleven members of the bird section took a trip to Loon Lake and Hatzic Slough. The party proceeded by car, leaving town via Hastings Street. Just short of Port Moody a stop was made to observe a large flock of Steller's jays in the trees on each side of the road. From there the route was out the Dewdney Road, turning to a side road past Steelhead and then walking two miles to Loon Lake. This area is not a good one for observing birds as the trees are mainly coniferous and grow thickly with few clearings. Many wrens were heard as well as a black-throated gray warbler. At the Lake two ruby-crowned kinglets were seen and a flock of chestnut-backed chickadees.

After lunch we went on to Hatzic Slough. Soon after we reached the shore a number of ducks could be seen but could not at first be identified. Working quietly along the shore for a more favourable position we could see that they were wood ducks. Sixteen were counted and all members of our party had a good opportunity to see these rare and brilliantly coloured birds.

Hatzic Slough and the surrounding farms proved to be rich in bird life and many varieties were seen including a downy woodpecker, a Wilson's [common] snipe a great many Myrtle [yellow-rumped] warblers and Maryland [common] yellowthroats. Several nests of the red-winged blackbird were seen with eggs. Altogether the expedition was accounted most successful.

### **Stanley Park**

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About 30 members enjoyed the spring beauties of Stanley Park for the first bird trip of the season, April 17<sup>th</sup>, with John Holman as guide. Audubon [yellow-rumped] warblers provided the first excitement, great numbers being found south of the Lagoon and displaying themselves to our advantage. A few Myrtle warblers [white throated race of the yellow-rumped warbler] were among them. At the same location, watchers were rewarded by an olive-backed [Swainson's] thrush. Not far distant, in a clump of salmonberry, a rufous hummingbird and his mate hovered, settled, and remained long enough for all to admire their beauty. Also present were Hutton's vireos, kinglets, fox sparrows, evening grosbeaks, violet-green swallows and others. The party circled the Lagoon and followed the trail to Beaver Lake where they saw numerous ducks, a Canada goose, a great blue heron and a pied-billed grebe. In all, 32 species were seen. M.L.H.

### **Excursion to Musqueam Indian Reserve**

On May 1<sup>st</sup>, 1948 forty members and their friends met at the corner of 41<sup>st</sup> Ave., and Marine Drive where Mr. Bain extended a welcome to visitors and to those members of the evening botany class who were present. The party proceeded to the Reserve where Prof. Davidson outlined the object of the excursion, which was to study the flora of a Mesophytic woodland.

Though the season was late, the following plants were studied: Douglas-fir, grand fir, [western] hemlock, [sitka] spruce, cedar, [Pacific] dogwood, maples, Indian plum, [red] alder, cascara, elder and hawthorn. In the shade of the trees, thimbleberry, salmonberry, [common] snowberry, wild gooseberry, [red-] flowering currant, involucred fly-honeysuckle [black twinberry], mayflower [false lily-of-the-valley], Dutchmen's breeches, [Pacific bleeding heart], spring beauty, fringe cup, Bongard's [little] buttercup, fairybells and [mountain] sweet cicely.

Near the cemetery, dentaria [slender toothwort] was seen. Down on the flats near the Indian church we found geranium, whitlow grass [common draba], and lyme [wildrye] grass. A few fungi, mosses, horsetails and ferns were observed on the trip. On the nearby marshy ground [coast] silverweed and cattails were abundant. One person found last year's tule [marsh] wren's nest among the cattails. In spite of threatening weather in the morning the afternoon turned out clear and sunny. Before leaving the Reserve, Mr. Bain proposed a vote of thanks to the leader, Prof. Davidson. E.D.

*E.D. was probably Edna Davidson, devoted second wife to Prof. Davidson. She was the daughter of a Methodist Minister and shared Prof. Davidson's interest in his local (Baptist) church. She was a good gardener – which John Davidson was not!*

#40 June 1948

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### Caulfeild

A rainy May 15<sup>th</sup> morning did not hold good prospects for the trip, but 25 members met at Piccadilly Corner and the weather turned fine for the rest of the afternoon. Rock plants were found and discussed and Professor Davidson explained the differences in this environment from that encountered on our previous trips. It was noted that the vegetation was late this year but not so late as most people had expected in view of the long cool spring. Tea was served at the Harbour Park.

### Crescent Beach

*“Between the rhythmical, unfathomed sea,  
And the rich, warm fecundity of land  
There lies the sand....”*  
And the salt marsh at Crescent!

Under Prof. Davidson's leadership, 35 members made the trip to Crescent-Ocean Park on May 24<sup>th</sup> to make the acquaintance of saline-loving and hillside plants. The marsh claimed first attention where at every step salt water oozed up through the vegetation. Salt grass was compared with bunch grass of the dry belt in nutritive value. The low growing sea-green [American] glasswort was examined. On its fleshy short stems were yellow threads of parasitic [salt marsh] dodder whose seeds germinate about a month after the 'host' has started its growth.

Early Britons made glass by piling glasswort on sand and setting fire to it; the sodium in the plant fused with the silica [in the sand] producing a residue of crude glass. Then another member of the goosefoot family [was found- - *atriplex* [*orache*] allied to lamb's quarters, its leaves covered with waxy globules to prevent evaporation. Two plants of the lesser [sheep] sorrel, one staminate the other pistilate, were growing side by side.

Arrowgrass [seaside arrow-grass] (*Triglochin*) of the lily [rush] family, and the sea [seaside] plantain were compared. Although far removed from each other in the flower kingdom, they are alike in appearance as are the crowberry and heathers of our mountains. Sea-milkwort (*Glaux*), with fleshy leaves along a short stem, bears no resemblance to its relatives of the primrose family. [Puget Sound] gumweed (so called because of its sticky buds) and sand bur [silver bur-weed], with finely cut leaves, were abundant.

Stepping up from the marsh to the sea front, the efficient sand-binder, lyme [wildrye] grass was noted. Its method of conserving moisture and arrangement of the stomata was described. The lesser paint brush [owl-clover] (*Orthocarpus*), a partial parasite on grass roots [northern?] wormwood, two geraniums, Indian consumption plant [barestem desert-parsley] and the beach pea were seen. A few [Menzies's] larkspur have survived the encroaching cottage builders.

After refreshment at the hotel picnic tables, the party moved east along the railway track to Ocean Park. A few [sitka] columbine in perfect bloom, graced the hillside as did an

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abundance of [western trumpet] honeysuckle. Speedwell [veronica], fleabane, yellow mimulus [monkey-flower], butterbur and an edible thistle grew beside a surface water ditch near the railway. With leaves pressed close to its stem a branchless arabis [tower mustard] was conspicuous among its associates. This plant reaches a height of six feet.

On the gravel near the tracks the woolly leaf [woolly Eriophyllum] was admired. This does not transplant successfully; it seems happiest in its chosen arid, exposed location. The leaf of another small composite *Matricaria*, was pleasing. When crushed there is an aroma of pineapple – hence its name, pineapple weed.

Returning to Crescent along the shore at low tide, rocks were overturned to look for marine forms. Sea pastures of [common] eel-grass were soft under foot. The commercial importance of this flowering plant (*Zostera*) was stressed. After the salt is washed out it is dried and used extensively for upholstery.

### #41 and #42 September 1948

#### **Seagull Nests – Howe Sound**

On Sunday June 13<sup>th</sup> a small group took a powerboat from Horseshoe Bay to explore the possibilities of the rocks and islets [Christie Island] near Anvil Island. Their findings were all that could have been desired. These islets are used extensively as nesting sites by seagulls and the nesting season was well advanced. Most of the nests contained three eggs. A few young were hatched. Nests covered every available space and it was hard to walk without stepping on them. The gulls were all of the glaucous-winged species. The eggs varied considerably in colour from dark brown to light green, all with similar spots and markings.

It was found by a careful count that there were over two hundred nests on the small islet [Pam Rock] and estimated at over one thousand on Christie Island. The nests were fairly well made though rather loosely. The construction materials were grasses and pieces of stick, bits of seaweed and moss and small pieces of cedar bough. This last must have been carried from Anvil Island or the mainland. The gulls left their nests as soon as anyone came into view, and the din of several hundred birds flying overhead, reeling and diving, and screaming in protest was quite terrific. A number of harlequin ducks were seen near the rocks and a few western grebes were observed.

Of the larger islet (Christie Island), Baird's [pelagic] cormorants were nesting on ledges along the cliffs. Several nests with their chalky blue eggs were found. These cormorants are beautiful in the nesting season when in full plumage, with white flank patches and green and purple iridescence on their black feathers.

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The pigeon guillemots were just beginning to nest. Their eggs are rather hard to find as they do not make nests but lay eggs in cracks and crevices in the rocks. The eggs are large for the size of the bird. With their black and white plumage and bright red legs they made pleasing patterns as they grouped themselves on the rocks, waiting for an opportunity to dart into their chosen crevice.

Some [northwestern] crows were also nesting on the Island and apparently were constantly at war with the gulls judging from the two dead young crows in pinfeathers and the destroyed gull eggs.

The only small bird seen was a song sparrow. A marbled murrelet was seen on the way back. These islets are hardly more than bare rocks exposed to the wind and sea and the droppings of innumerable gulls. However, quite a number of plants were found in the more sheltered places. The sea [seaside] plantain, gooseberry [*Ribes sp.*], [common] snowberry, Saskatoon, *Aruncus* (goat's beard), wild onion [*Allium sp.*], [Puget Sound] gumweed, mimulus [yellow-monkey flower], [Nootka] rose, chickweed, beach pea, *Amsinckia* (fiddlehead) [fiddleneck] and [seaside] arrowgrass. H.K.S.

### **Mammals of U.B.C. area**

On Saturday, April 24<sup>th</sup>, Dr. Cowan, accompanied by his small son, conducted a party of five through part of the University area. The weather was wet but nevertheless those present had a most interesting day. Quite a number of small mammals were found in the traps that he had set the day before, in runways in the grass, along ditches, in brush piles etc. Using walnut meat for bait, the mammals caught were a creeping vole (female), a white-footed [deer] mouse, a Scheffer [coast] mole and three shrews – wandering [vagrant] dusky and Bendire's [Pacific water] shrew. Shrews are carnivorous and one will prey upon its own kind when found in a trap.

The following birds were also observed here: peregrine falcon, sparrow hawk [American kestrel], pigeon hawk [merlin], several savannah sparrows, [western] meadowlark and killdeer.

After inspecting all the traps, we proceeded through the woods to Wreck Beach where many water birds were seen including Bonaparte's gulls, red-breasted mergansers, greater scaup, Holboell's [red-necked] grebes, double-crested cormorants, [American] widgeons, western grebes, and white-winged scoters. Two bald eagles were seen flying and perching in a tall dead tree, the female much larger than the male. Two varieties of edible mushrooms were also found and a large cedar tree bore the marks of a raccoon's claws.

Stuart F. Bradley

### **Mushroom Trip**

On Saturday, October 2<sup>nd</sup> an enjoyable trip was taken to Stanley Park. The object was a mushroom hunt and the leader was Mr. F. Waugh. The season was propitious and a good

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number of specimens were found. Mr. Waugh had some useful advice for the amateur mushroom gatherer: -

Fungi are one of the simplest forms of plant life. They propagate by spores, the equivalent of seeds in green plants. The names toadstool and mushrooms are synonymous, but mycologists prefer the more romantic name of mushroom. There are hundreds of species of which some four hundred have been catalogued in and around Victoria for the Provincial Bulletin.

Rules for Eating. Never eat old or wormy specimens. Be sure that you know, and know well, the species you eat. Do not believe any 'old wives tales' in selecting 'edible' mushrooms. Start with the foolproof four: Morels, found mostly in the spring. *Sulphures polyporus* [*Laetiporus sulphureus*] found in late summer. *Coprinus comatus*, shaggy mane or horsetail mushroom, found in the spring and fall. Puffballs, found almost any time of the year. The following species, representing 22 genera, were gathered on the hunt.

In the White Spore Group: *Amanita*: the genus containing the most poison of all mushrooms, possessing a ring and volva. *Marasmius*: one species, the fairy-ring (*Marasmius oreades*) was picked up on the lawn, [while] other species were picked in the woods. *Tricholoma*: one specimen measured 10 inches across. *Russula*: often some shade of red, when wounded bleeds a milky juice – sometimes very peppery tasting. *Lepiota*, caps usually scaly - *Cantharellus*: the one we found was edible, *Cantharellus cibarius*. *Mycena*: small, fragile, found in a wide range of colours. *Laccaria-Hygrophorus*: glassy appearing, usually in bright colours. *Pleurotus*: meaning side, nearly all the species have lateral stems.

In the Brown Spore Group: *Pholiota*: *Cortinarius*.

In the Purple Spore Group: *Psalliota* [*Agaricus*]: the cultivated mushrooms are from this genus. *Stropharia*, *Hypholoma*, *Psilocybe*, mower's or hayfield mushroom found on lawns after rains.

Other Interesting Fungus – Puffballs found everywhere. *Helvella*, elf's saddle. *Clavaria*, Dryad's broom. *Tremella*, witch's butter. *Ganoderma* – two picked were commonly called Dryad's saddle, and varnished bracket fungus.

#44 November 1948

### Trip to Dam Mountain

A delightful day was spent on Dam and Goat Mountains on August 22<sup>nd</sup>. The drive from Granville and Georgia Streets to Grouse Mt. Chalet was enjoyable. Frank Sanford was the leader of the trip.

The season this year was very late but even so we had not expected to see such quantities of heather in full bloom. There were lovely large pink patches everywhere as we climbed

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higher and also a small quantity of the white. The [white-flowered] rhododendron and the copperbush were also flowering profusely. The stems of the former were swollen and pulpy, probably due to excess rain. In addition to these abundant blossoms we greeted other old friends along the way, such as false [Indian] hellebore, queen's cup, and bunchberry. Mrs. McGinn found a small mass of slime [mould] fungus. The description of its habit of moving in colonies to obtain food excited great interest.

The following plants were observed:

*Clintonia* Queen's cup, *Disporum* [Prosartes] [Hooker's] fairybells, *Streptopus* [Clasping] twisted stalk; *Veratrum*, false [Indian] hellebore; *Allium*, onion; *Habenaria*, (green) [bog orchid]; *Cornus Canadenses*, bunchberry; *Valeriana*, [sitka valerian], Copperbush, *Cladothamnus* [Elliottia] –

Copperbush; *Ledum*, Labrador tea; *Arctostaphylos*, bearberry [kinnikinnick]; *Cassiope*, [white mountain-heather] in fine patches; *Phyllodoce*, [pink mountain heather] some leaves infected giving appearance of odd flowers; *Menziesia*, false azalea; *Fatsia* [*Oplopanax*], devil's club; *Claytonia* [*Montia*?], miner's lettuce; *Erigeron*; mountain-ash; oak fern; *Rhododendron albiflorum*, [white-flowered rhododendron] and *Veronica*, speedwell.

During the day the following eleven species of birds were noted: Steller's jay, chestnut-backed chickadee, Oregon [dark-eyed] junco, blue grouse, varied thrush, Vaux's swift, hairy and pileated woodpeckers, red-shafted [northern] flicker, hermit thrush, and Canada [gray] jay.

Some of the party spent the day on Dam, while others went on to Goat. Several picked blueberries that were just starting to ripen on Grouse. After supper, eaten on the Grouse plateau, the party enjoyed their bus ride back to town. C.L.P.

*C.L.P. = Connie Plommer who often accompanied her father, J.J. Plommer. Their hikes and field trips tended to be the most strenuous of the programmed events. Connie became a seed specialist and botanist with Agriculture Canada*

### #47 (month unknown) 1948

#### **An Unusual [American] Robin**

Mr. Timmis reported that he made an observation of a very oddly marked robin at his home at 2896 West 38<sup>th</sup> Ave. It had the red breast of a robin, but it also had a spectacular black and white back. Starting at the top of the head and down the back of the neck and back of the wings to the tip of the tail, the distinctive black and white splotches were pronounced. The white was clear and the black was dense.



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#51 April 1949

### Bird Trip to Stanley Park

The first field trip of the season got away to a bad start. An unusually heavy rain came on just at the scheduled starting hour. The ten members who stuck it out and stayed with the trip were amply rewarded, however, as the rain cleared off and Mr. Hughes, leader of the trip, was able to find plenty of birds. White-crowned, fox and song sparrows, rufous hummingbird, [spotted] towhee, [northwestern] crow, [American] robin, Myrtle and Audubon [both yellow-rumped] warblers, violet-green and rough-winged swallows, varied thrush, Hutton's vireo, [dark-eyed] junco, red-winged blackbird, great blue heron, wood duck, bufflehead, mallard, Bonaparte's and glaucous-winged gull, [American] coot, horned and western grebes, green-winged teal, Canada geese, red-breasted merganser, American [common] goldeneye and scaup. A rail was heard at Beaver Lake, but not seen. A partial albino [American] robin was also seen.

H.S.

### Musqueam Reserve

On April 30<sup>th</sup> under the leadership of Professor John Davidson, 29 members of the Society made a trip to study the flora of a Mesophytic woodland. Because of the lateness of the season, some of the specimens were insufficiently developed for complete study. However the following plants were noted:

Giant and field [common] horsetail, [common] burdock, periwinkle, spring beauty, Dutchman's breeches [Pacific bleeding heart], *Mnium* moss, chickweed, wood rush, fringe-cup, Mayflower (true) [false lily-of-the-valley], *Dentaria* [*Cardamine*], [slender] toothwort, avin [large-leaved avens], yellow arum [skunk cabbage], fireweed, shepherd's crook [?], bracken, sword and lady ferns, salmonberry, thimbleberry, [common] snowberry, wild gooseberry, Indian plum, [red] elderberry, Juneberry (Saskatoon), wild strawberry, cascara, alder, cherry (garden escape), vine-maple, [Pacific flowering] dogwood, Elder [red elderberry], hawthorne, honeysuckle (climbing and bush), cleavers, (bed-straw), and forget-me-not (garden escape).

On the flats near the Indian church, we found true geranium [Robert's geranium], spring whitlow grass [common draba] and lyme grass [wildrye]. On the marshy ground were silverweed, cattails, sedge and sandwort. Bordering the path on the way back, ground-ivy, bracket fungi and some small mushrooms were also found.

D.M.B.

*Dorothy ("Dolly") M. Bradley was an ardent birder and good general naturalist. She met Col. Stewart Bradley overseas during World War I where she entertained the servicemen with her songs. An enthusiastic and licensed bird bander, great with the Junior Naturalists, hospitable and very helpful in the V.N.H.S. organizing committees.*

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#52 July 1949

### Caulfeild

The Caulfeild outing on May 14<sup>th</sup> under the leadership of Prof. Davidson, again proved to be one of the most popular trips of the season. Weather conditions being ideal about 30 members and the Evening Botany Class spent a happy afternoon in the area between Marine Drive and the beach. [This is] one of the few localities where settled homes and cultivated gardens blend with the natural landscape and native wild plants, that are still found, even if not in quite the abundance of former years.

Caulfeild provides a typical rocky bluff environment and comparisons were made between the flora of this area and that of the Mesophytic forest studied on the Musqueam trip. Soil conditions were noted with the resultant large proportion of winter annuals. From the rocks above the beach it was possible to visualize the development of primeval vegetation, beginning with algae and lichens and progressing to mosses, ferns and club mosses, and, as the soil was gradually formed and built up, into the more highly developed and specialized flowering plants and trees.

Methods of seed dispersal were observed in the 'explosive' action of the *Cardamine* (bitter cress), the hooked seeds of the yellow [large-leaved] avens found by the roadside, the 'trigger' action of herb Robert [Robert's] geranium (true geranium), and the 'sulphur spray' of the lodgepole pine and staminate juniper. Fossilised traces of this latter phenomenon have been found as far as twenty to thirty feet down in peat bogs. Typical plants found included various lilies, whose early blooming provides a long resting season for the bulb; fleshy-leaved sedums (stonecrop), hairy-leaved plants such as 'cat's ear', and several varieties of saxifrage.

Among the flowering specimens noted were white (death) camas, blue (Indian) camas, *Claytonia* (spring beauty), *Valerianella* (sea blush), *Collinsia* (blue-eyed Mary), and vetch and pea. Among rock crevices, *Heuchera* (alum root), small yellow [chickweed] monkey-flower *Mimulus* and *Nemophila* (grove lover) [great basin nemophila], also found were sword fern, oceanspray, (often miscalled '*spirea*'), wild lettuce with its rubbery sap, knapweed (blue bottle), an example of perfect flowers in one head, *Trientalis* (chickweed wintergreen) [broad-leaved starflower], and lesser sorrel.

In the more thickly wooded places were seen lovely [Pacific] dogwoods in flower, arbutus, false box (an evergreen shrub suitable for garden edging), Juneberry (western Saskatoon), sweet vernal grass, kinnikinnick or bearberry, and salal. Along the roadsides interspersed with many garden escapees were *Philadelphus* (mock orange), and [western trumpet] honeysuckle with its two forms of leaf and brilliant flame-coloured blossoms. E.M.B.

Possibly Eva M. Burrows

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### Sea Island Bird Trip

On Saturday, May 28<sup>th</sup> eighteen members visited Sea Island to study bird life with Mr. Hughes. The visit to the [great blue] heron colony is always of special interest. This year we had a close-up view of a nest that had fallen to the ground. The young were being fed in the nests but that not all survive was evidenced by two that were [also] found on the ground. Several other nests were found including barn, violet-green and cliff swallows, Chinese starling - [crested] (mynah), [American] robin, white-crowned and song sparrows, and tule [marsh] wren. Some of the nests had young and were close to the ground where members had a good opportunity to study them.

The party walked along the dyke during the afternoon where the following were seen: band-tailed pigeon, barn, violet-green and cliff swallows, Brewer's and red-winged blackbirds, [American] robin, song, white-crowned and savannah sparrows, yellow warbler,

Maryland [common] yellow-throat, [American] goldfinch, cedar waxwing, [western] meadow lark, Chinese starling [crested] (mynah), ring-necked pheasant, Wilson's [common] snipe, killdeer and tule[marsh] wren.

M.T.

*Possibly Miss Thyne or Ms. Trembath, a teacher*

### Crescent Beach

The annual trip to Crescent Beach on May 24<sup>th</sup> was successfully carried out. About 40 members turned up and the weather was everything that could have been hoped for. The salt marsh was visited in the morning and Prof. Davidson talked about the nature of the plants that grow in such an area and the methods by which they conserve their moisture. After lunch in the picnic grounds the party went along the railways tracks toward Ocean park for a discussion of the plants which grow on the dry, sunny banks of the railway cuttings and beside the track on arid rocky soil. Descending to the shore, Prof. Davidson talked about various forms of seaweed and then the party returned along the shore to Crescent [Beach] for tea.

H.S.

#53 September 1949

### Bird Trip – Howe Sound

In June Mr. Hughes again took a small group to view the seagulls' nests in Howe Sound. This is a fascinating trip for those who have never seen these sea birds nesting. As they are easily disturbed and the nests are so numerous as to be easily stepped on, it is inadvisable to take more than a small group once in the season. This year ten were taken who had not made the trip last year. Mr. Hughes asks that members [who are] truly interested, give him their names next spring so that he can make up another trip. Only members accustomed to small boats and not afraid of the water should go.

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### Marine Biology

A good turnout of members of the Society gathered at Lumberman's Arch on July 10<sup>th</sup> for a trip at low tide, conducted by Mr. R.W. Pillsbury. After a short introductory talk in which he explained that animals and plants live in their own tidal area, that due to harbour pollution none of the specimens should be taken home for the table, and that none of the stones overturned in our search should be left upturned to spoil the animal's habitat, the hike was on.

The following is a partial list of the plants and animals found: [common] eelgrass, *Zostera* – one of the grasses living in sheltered backwaters. Examination showed that its flowers had gone to seed; rock weed, *Fucus vesiculosus* [*gardneri*] – an upper tide level seaweed; the common black [blue] mussel, *Mytilus edulis* – the only mussel found in this area is also found on the Atlantic Coast; sandpaper [ochre], [*Pisaster*] *ochraceous* and gray [leather] stars were seen; sea urchins, the little animal with the big name, *Strongylocentrotus*, sea cucumbers and several kinds of crabs. Numerous rocks were coloured with encrusting red algae [*Corallina* sp.] giving them a pink cast. [Northern] clingfish and blennies that live in tide pools were found under overturned stones. At very low tide one of the older forms of life was observed, brachiopod lamp shells. Nudibranch, and sea lemon or sea hare were seen under similar conditions.

Japanese weed or sea millet, *Cystophyllum geminatum* [*Sargassum muticum*], grows attached to rocks, the top with its strands of singly attached air bladders breaks away from the perennial base to become a floating nuisance to fishermen. Bull kelp, *Nereocystis*, has a long stipe with a spherical hollow pneumatocyst at the upper end out of which the laminae are produced. The spores are borne on the leaf-like laminae in patches that drop out for dispersal. The long whip-like stipes were used by the Indians for fishing lines. *Alaria* [winged kelp] looks somewhat similar to a single lamina or blade of the bull kelp with a flat midrib. The sporangia of *Alaria* are borne on specialized sporophylls grouped about the lower portion of the stipe. *Laminaria*, devil's apron [tangle] was found in the same area. Five-rib kelp [*Costaria* sp.], weeksea [?], *Rhodomela* [*Neorhodomela*] [black larch], *Gracilaria* [red spaghetti], *Constantinea* or sea rose [cup and saucer], were also observed.

Several kinds of tube worms were collected, some fastened to rocks for the full length of the calcareous tube, some with sand tubes which stand singly on the beach, others that grow in clumps of membranaceous tubes, other worms with names such as bootlace and scale worm. Rock cockle [Pacific littleneck clam], *Venerupis* [*Protothaca staminea*], one of the clams sold on the local markets, as well as one of the lesser known clams – the rock boring clam or piddock, were found. The rock-boring clam enters the rock when very small, drills its hole as it grows and thus makes a prison for itself. Like other clams, plankton is taken through its siphons that can extend to the surface of the prison. As the party disbanded they were warned not to fall on the slippery filamentous diatoms that covered the rocks. F.W.

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#54 October 1949

### Lynn Valley Trip

Saturday, June 11<sup>th</sup> was a fine day and 42 members turned out for the trip to Lynn Valley. Before we set out on our walk, our leader, Mr. Plommer, gave an interesting talk on the district. Quoting from Dr. Burwash's book, *The Geology of Vancouver and Vicinity*, he said:

"Within the area studied in detail there are three principal mountain spurs, one subordinate spur, and the valleys of the Capilano, Lynn and Seymour Creeks, that separate them. These valleys are essentially the same in type as those of the fjords of Howe Sound and the North [Indian] Arm, that flank the area on the west and east, or as the valleys of Coquitlam, Stave or Harrison Lake farther east along the southern margin of the range. All of these, except that of Coquitlam Lake, have a considerable depth below sea level and all are deeper in their upper or middle reaches than near their mouths.

"In the time immediately following the recession of the ice the same thing was true of the valleys of the Capilano, Lynn and Seymour. At first they contained fjords, which gave place to lakes as uplift progressed and these were later drained by the cutting of post-glacial canyons through the rock and drift barriers that retained their waters. The existence of these barriers of rock near the mouths of the valleys seem to be connected with the shallowing and lateral spreading of the ice stream as it emerged from the confining valley walls near the margin of the range. The pressure of the glacier on its bed was in consequence less, and erosion was less powerful, than in the narrower and higher-walled parts of the valley. As the glacier receded from the lowland into the mountain valley its front probably rested for some time against the rocky obstruction, with the result that an unusual amount of morainic deposit was left there."

Mr. Plommer said: "There you have Burwash's explanation of these canyons. He estimates the extent of the post-glacial uplift to be 650 feet. The morainic deposit has been freshly exposed to view for us by the recent work of the Water Board that has obligingly dug into it with its steam shovels. Down in the basin between the canyons it is interesting to pick up stones brought down from the upper valley. Some of these are granitic, but many have been plucked from the Texadan rocks that comprise Palisade Range (the easterly extension of Crown Mountain), and Lynn Ridge and Goat Ridge. This area will be a fine place for geological study when North Vancouver gets its entire water supply from the Water Board, as it should then be thrown open to the public. It is a grand piece of country from which we have long been excluded. Down in the basin below is also the deposit of lignitic material which some of us observed with Dr. Williams several years ago. This deposit has been the object of Paleo-botanical study since then".

After following the trail by the creek down to a spot where the deposit of lignitic material could be examined, the party returned to the bus terminus and voted thanks to Mr. Plommer for a pleasant and interesting trip.

H.S.

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

#56 December 1949

### **Mushroom Trip**

On Saturday, October 29<sup>th</sup>, we had a pleasant and instructive afternoon. Meeting at the covered picnic tables at Lumberman's Arch, 34 of our members came prepared with bags and baskets for the collection of mushrooms. Our leader, Mr. F. Waugh, divided the party into three groups with instructions to go in diverse ways. After about an hour the three groups returned and laid out the "spoils" on the tables. Mr. Waugh sorted them and talked about the different kinds. There was such a variety that it is impossible to list them all. Moreover, your secretary is extremely ignorant on the subject and is afraid of making mistakes.

Some of the mushrooms found were clod fungi (*Boletus*), Russula, elf caps (*Mycenas*), *Armillaria*, *Lentinus*, *Coprinus* (ink caps), *Stropharia*, *Cantharellus*, *Helvella* (elf saddle), *Sparassis* (cauliflower fungus), *Pleurotus* (oyster fungus), *Cartinarius*, *Ganoderma* (bracket fungus), *Amanitopsis*, (false chantarelle), *Geaster*.

While Mr. Waugh was discoursing on mushrooms Mrs. Waugh was cooking a delicious pan full of *Armillaria mellea* (honey mushrooms) which she served to us on crackers with cups of tea. This was a practical demonstration of the value of knowing your mushrooms.

#58 March 1950

### **Nature's Outpost, Triangle Island**

Mr. C. Guiget, Provincial Museum biologist, spoke to the Society last November 9<sup>th</sup> on an expedition to Triangle Island, part of the Scott Island group off the northern tip of Vancouver Island and surrounded by one of the worst pieces of water in the world. On the way to the Island, black-footed albatross shearwaters, petrels and other pelagic birds were seen. Also two small whales attacked by killer whales. The Island is about one mile long by  $\frac{3}{4}$  mile wide and very rugged, rising abruptly to its peak about 600 feet. The vegetation is the thick kind of the coast forest without the trees. The dominant bush is the salmonberry, growing thickly and difficult to force a way through.

On the island, meadow [vole] and white-footed [deer] mice were found, as well as tufted puffins, Cassin's auklets, [European] rabbits (introduced), pigeon guillemots, pelagic cormorants and Peale's [peregrine] falcons. Small birds seen were winter wren, red crossbills, russetback [Swainson's] thrush, and song and fox sparrows. The California [common] murre were nesting in the coarse grass and using rock pinnacles as roosting

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spots. Eggs were laid around the end of June and those found varied from white to deep blue. One egg is laid and both birds sit. There were up to 10,000 murre on the Island.

Cassin's auklet is a nocturnal bird whose burrows perforate the hillsides. The noise caused by the numerous birds when leaving their burrows at night, woke the naturalists from their sleep. They would often fly into the tents' guy ropes and kill themselves, the speed of their flight carrying them on into the sea. Activity begins about midnight. [Tufted] Puffins are active all day but their activity increases at night beginning at dusk. The black oystercatcher lays three eggs on the gravel. There were glaucous-winged gulls but no crows or ravens. The winds are extremely strong and tear down the gullies with great fury making camping uncomfortable. The party returned with much valuable information. Mr. Beebe brought back a tufted puffin and pelagic cormorant for the zoo.

### **Bird Life in the East Kootenays**

This was the subject chosen by Mr. Dave Munro of the Canadian Wild Life Department at our meeting on February 8<sup>th</sup>. He was in the district to observe the Canada goose and

reported that a rough estimate would be 650 to 800 pair nesting there. Nests were primitive, mainly a hollow on top of muskrat lodges (which are numerous along the Columbia River and lined with sedge grass and other material. Some interesting Kodachrome slides of the nests were shown, one containing nine eggs in place of the usual clutch of six. The pictures also showed the young birds just hatching or just hatched, and the parent birds in various activities, singly and in groups.

Mr. Munro's pictures and comments also included the [American] bittern, and the [belted] kingfisher nesting in the cut banks, [American] coots, blue-winged teal and nest with eleven eggs, black tern, horned grebe and ruffed grouse etc. He also showed many fine panoramic views of the Columbia River Valley, Lake and headwaters and the Duck Lake area where reclamation has been so controversial. The pictures were taken from prominent vantage points, giving a lovely view of the area.

A.H.B.

#59 April 1950

### **Bird Hike – Lulu Island**

Four enthusiasts who turned out on March 26<sup>th</sup> in spite of the threatening weather were rewarded by the sight to several hundred magnificent lesser snow geese feeding on the sea flats of Terra Nova on Lulu Island. In among the geese were [American] coots, bufflehead, goldeneye, [northern] pintail, mallard, scaup, canvasback and merganser. A large jaeger sea hawk was seen among the birds. Before rain drove the watchers home, a flock of sandpipers

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was observed as well as several other birds including song sparrow, Brewer's blackbird, [northern] flicker, [American] robin, red-winged blackbird and [dark-eyed] junco. The [western] meadowlark was heard but not seen. E.B.

*E.B. is probably Esther Birney, wife of Earl Birney, UBC professor of English and a prominent Canadian poet. They loved the outdoors, attended trips and the Pavilion summer camp.*

#60 May 1950

### **Bird Hike – Stanley Park**

Because cold weather had retarded our spring, the bird population seemed smaller than is customary at this time of year. Nevertheless, the small group that turned out on April 15<sup>th</sup> enjoyed an interesting afternoon under the excellent leadership of Mr. Hughes. Bird seen included the rufous hummingbird, western grebe, Bonaparte's, glaucous-winged and herring gulls, red-winged blackbird, [northwestern] crow, Canada goose, [American] robin,

golden-crowned kinglet, [northern] flicker, red-breasted merganser, greater scaup, wood duck, mandarin duck, bald-pate duck [American wigeon], pigeon guillemot, double-crested cormorant, Baird's [pelagic] cormorant, canvasback, goldeneye, Audubon [yellow-rumped] warbler, black-capped chickadee, bufflehead, [American] coot, varied thrush, spotted towhee, white-crowned sparrow, Oregon [dark-eyed] junco, and fox and song sparrows. Before leaving the Park the group renewed its acquaintance with the South American screamer, whistling [tundra] swan, snow goose and other interesting birds in the enclosures. Coffee and doughnuts in a nearby café wound up a thoroughly satisfactory afternoon. E.B.

### **Bird Hike – Crescent Beach**

In spite of threatening skies, about 15 enthusiasts started out from Kingsway and Broadway at 8:45 a.m., on Saturday, April 22<sup>nd</sup>. The journey to Crescent Beach was made through rain, hail and snow and on arrival the downpour was so intense that the hardy few who started off along the beach, viewed birds through a veil of water. However, the weatherman relented and by noon it was warm and sunny, enabling all ramblers to enjoy a delightful walk around the oyster beds.

The trip had been planned by Mr. Hughes, who had been in touch with Canon Holdom a local bird-watching enthusiast. It was due to the kind efforts of these two gentlemen that the group was able to make the trip. Although many birds were seen, the star was a black turnstone that seemed to have stayed behind when its fellow birds migrated. The precise and delicate way this pretty bird carefully chose and turned over stones, provided interest and amusement. The bird allowed itself to be approached to within a few feet before taking flight, revealing the black and white pattern of its wings.



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Other birds were Bonaparte's, herring, glaucous-winged, short-billed [mew] and ring-billed gulls. Pigeon guillemot, bufflehead, western, horned and Holboell's [red-necked] grebes, Baird's [pelagic] cormorant, American [common] goldeneye, white-winged and American [black] scoters, lesser scaup, common loon, black brant, American [common] and hooded mergansers, old squaw, western and red-backed sandpipers [dunlin], yellowlegs, killdeer, Wilson's [common] snipe, great blue heron, red-tailed hawk, [northern] flicker, Brewer's and red-winged blackbirds, white-crowned, song and tree sparrows, barn and violet-green swallow, rufous hummingbird, [American] robin and spotted towhee. E.B.

#61 June 1950

### Musqueam Reserve

This trip served as a reminder to the 40 members participating that spring was once more on the wing although about the latest on record. Prof. Davidson explained that the area was a Mesophytic forest, that is the zone of vegetation, midway between the water plants on the

one hand, and the dry desert plants on the other. He pointed out how the deciduous trees increased in number and size providing protection for the slower growing young conifers. Eventually the latter reached a height sufficient to cut off the sunlight from the other plants and became the dominant species in the area. He dissected a bud to show how all the leaves were already formed inside in miniature, and said the plant would never increase the number of its leaves. However, the more moisture it obtained, the bigger the leaves would grow. As we followed the path through the woods, the usual trees, shrubs and flowers examined in previous years showed delayed growth as a result of our recent severe winter and spring. Prof. Davidson reminded us that the showy white parts of the [Pacific] dogwoods were bracts and that the inflorescence in the button contained many minute flowers. The difference between Dutchman's breeches [horticultural ?] and [Pacific] bleeding heart [our native species} was fittingly demonstrated.

A. H. Bain

### Crescent Beach

On May 24<sup>th</sup> under the leadership of Prof. John Davidson, we were able to study the saltmarsh flora, without getting muddy feet, from the dykes along the estuaries of the Nicomekl and Serpentine Rivers. Dominating the flora of the saline habitat were arrowgrass *Triglochin maritima*, seaside plantain *Plantago maritima*, and sea milkwort *Glaux maritima*. Common too was the [American] glasswort *Salicornia ambigua* [virginica], a plant with very fleshy parts, salty to taste and often pickled for food by the 'savages of Scotia' – quoth our leader! Saltgrass *Distichlis spicata*, was just beginning to shoot through great mats of winter-cured leafage. Brilliant orange threads of the parasitic [saltmarsh] dodder *Cuscuta* sp., were developing here and there over the saltmarsh. On the dunes and sandy flats

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adjacent to the saltmarsh we saw remnants of a once extensive and colourful flora in the lyme [wildrye] grass *Elymus* sp., dwarf larkspur *Delphinium* sp., beach pea *Lathrus* sp., lesser paintbrush [owl-clover] *Orthocarpus* sp., blue-eyed Mary *Collinsia* sp., death camas *Zygadenus* sp., sea blush *Valerianella* [*Plectritis*] sp., and mouse-ear chickweed *Cerastium*. A close-up of a Hudsonian curlew [whimbrel], and a western tanager were seen.)

V.C.B.

*Dr. Bert (V.C.) Brink joined the V.N.H.S. from the Boy Scouts in the mid-1920s; graduated from UBC, worked privately and with the Dominion Department of Agriculture in the 1930s; did graduate work at the University of Wisconsin 1936-1939; taught in the faculty of Agriculture at UBC, led field trips and camps and held executive positions. He was V.N.H.S. President 1950-1952; a general naturalist with a special interest in botany. Bert has worked tirelessly and unselfishly for environment quality as a long-serving Board member of Nature Trust of British Columbia. Among his many honours are the Order of British Columbia and the Order of Canada.*

### #63 Fall 1950

#### **Mushroom Excursion – Stanley Park**

The sun shone on October 14<sup>th</sup> for the V.N.H.S. ‘fungus foray’ after four days of intermittent rain, producing ideal conditions for collecting mushrooms. About fifty members met at the sheltered picnic tables in Stanley Park for the outing. Armed with containers for their specimens and a few instructions from Mr. Foote Waugh, the party dispersed. An hour later three tables were needed to hold the spread out fungus display of about one species for every member present. The leader identified as many of them as possible. He described some of the methods of identifying mushrooms and warned of the dangers of eating unknown ones.

Special attention was given to one of the poisonous species, the *Amanita muscaria* or fly agaric. The name *Amanita* is derived from Mount Amanos in Asia Minor where the mushroom was first recorded. *Muscaria* comes from *musca* (fly), the name given to this species because in some parts of Europe it was used as a fly poison.

Four specimens of *Amanita muscaria* in different stages of development were displayed. First the small ball or button stage with sheath or volva unbroken; then the specimen with the volva ruptured into scales allowing the red of the cap to show through; next the veil protecting the gills broken away from the edge of the cap; and finally, the mature mushroom with the fragments of the volva about the base of the stem, the veil hanging like a skirt two-thirds of the way up the stem, and the orange-red cap flattened out to carry the apparently regular remains of the volva. It is a mushroom that no one could fail to recognize after the first meeting, and is abundant in Stanley Park. In eastern Asia some people took it as a drug. The effect is similar to marijuana. There were not many deaths attributed directly to eating this fungus, but frequently the person who ate it did so to get the courage to kill one of his enemies.

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After the specimens were examined and gathered to take home and eat, the leader warned that he would not be responsible for any headlines in the local papers such as "Mass Murder in Stanley Park". Several helpful books from the Vancouver Public Library were available to members. Three of them can be purchased: *Some Mushrooms and other Fungi*, by Geo. A. Hardy from the Provincial Museum; *The Mushroom Book*, by L.C.C. Kreiger, and *Field Book of Common Mushrooms*, by W.S. Thomas, from Vancouver bookstores.

A partial list of the mushrooms gathered that October 14<sup>th</sup> includes the following:

Note: (--) indicates that the species is not known. Where common names are not entered, they are not known.

|  |   |
|--|---|
| <i>Amanita muscaria</i> , fly agaric                               | <i>Amanita flavorubescens</i>                       |
| <i>Armillaria mellea</i> , honey mushroom                          | <i>Cantharellus cibarius</i> , chanterelle          |
| <i>Cantharellus aurantiacus</i>                                    | <i>Collbia [flammulina] velutipes</i> , velvet stem |
| <i>Clitocybe [lyophyllum] multiceps</i> , many headed              | <i>Clitocybe ectypoides [pseudoarmillariella]</i>   |
| <i>Laccaria laccata</i>  | <i>Laccaria amethystina</i>                         |
| <i>Lentinus</i> --   | <i>Lepiota</i> --                                   |
| <i>Mycena haematopus</i> , bleeding stem                           | <i>Omphalia [Xerophalina] campenella</i> , bell     |
| <i>Russula</i> --  | <i>Pleurotus porrigens</i>                          |
| <i>Pluteus cervinus</i> , fawn-coloured                            | <i>Entoloma</i> --                                  |
| <i>Clitopilus prunulus</i>   | <i>Leptonia</i> --                                  |
| <i>Psalliota</i> – [ <i>agaricus</i> ](similar to meadow mushroom) | <i>Hyphelema fasciculare</i> , clustered            |
| <i>Cortinarius</i> --  | <i>Paxillus involutus</i> , inrolled                |
| <i>Paxillus atrotomentosus</i> , black velvet stem                 | <i>Inocybe</i> --                                   |
| <i>Pholiota aggericola</i>   | <i>Stropharia ambigua</i> , Doubtful Stropharia     |
| <i>Stropharia aeruginosa</i> , green-stained                       | <i>Corprinus micaceus</i> , inky cap                |
| <i>Gomphidius glutinosus</i> , peg top                             | <i>Gomphidius tomentosus</i>                        |
| <i>Helvella lacunose</i> , elf saddle                              | <i>Geaster triplex</i> , earth star                 |
| <i>Xylaria</i> – candle wick                                       | <i>Clavaria</i> – Dryad's broom                     |
| <i>Lycoperdon</i> – puff ball                                      | <i>Bovista</i> – puff ball                          |
| <i>Cyathus</i> – bird's nest fungus                                |   |

F.W.

#64 January 1951

### **Bird Trip – U.B.C.**

There has been some talk among members of the Society regarding establishing a bird checklist for the Vancouver area. If enough members who note the birds they see in their day-to-day activities desire this, nothing would be more to their advantage than to come on our bird trips, under the guidance of Mr. Bill Hughes.

For our November 12<sup>th</sup> trip Mr. Hughes was kind enough to choose a beautiful, in fact, gorgeous day for us. I am told he is not always so obliging. Some ten members turned out at the bus stop at 2:00 p.m. for the excursion. We had barely assembled before Bill's keen eyes noted a sharp-shinned hawk flying into the trees. This hawk, although small, will strike

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and hold a full-grown grouse. Hardly had we stopped our discussion of the hawk than a flight of pine siskins swarmed past. These birds are similar in flight to the goldfinch and about the same size and habit. Should a person be able to notice one not in movement, it would be seen to be striped with olive-brown and to have a golden bar on the wings, as distinct from the [American] goldfinch's solid colouring. Walking down through the arboretum and through the woods we heard chickadees and later saw golden-crowned kinglets flitting about a large alder.

Descending to the beach considerable time was spent studying the birds flying and cavorting in the bright sunlight. Flocks of American [black] and surf scoters were seen on the water and in flight, and the distinguishing markings explained. Other sea birds noted were [northern] pintail, a female greater scaup or bluebill, a cormorant in flight, a western grebe, a female merganser, a goldeneye and a horned grebe. At one point in the afternoon the flight of an immature bald eagle roused considerable interest. Shortly afterwards an adult was also seen flying, whilst soon after this an exceedingly fine view of two adults was obtained, perched on an old snag against the blue sky, their white heads showing up admirably well. Whilst edging along the sea over many old logs strewn along the beach, we spotted a song sparrow scuttling to cover in the undergrowth. Flights of glaucous-winged gulls, and one Heermann's gull were noticed too, once we had completed our rather strenuous climb up from the beach to the height of land once more. Perched on a pile of brush a [spotted] towhee most obligingly waited until we had all seen it before disappearing into the woods. Final notes to a perfect day were added by Brewer's blackbirds in the late afternoon on the U.B.C. campus, just before we thanked our leader for a most pleasant

afternoon. Perhaps they were adding their own notes especially for our benefit to ensure a fitting end be given to our day. All told we noted 19 different kinds of birds on our short trip. Just before parting Bill Hughes told us that if we learned to tell two or three birds each trip, our outing was worthwhile. We feel therefore that our time was not only pleasantly spent but profitably as well since all of us undoubtedly learned more than our two or three quota. B.R.

*B.R. was probably Bernard Rogers who was V.N.H.S. Secretary for many years; always in poor health because of privations suffered in Japanese prisoner of war camps and forced labour in their coal mines. He was a graduate from the University of Alberta and took an M.S.A. at U.B.C. He worked in Malaysia and was in the local militia when the Japanese overran the country during World War II. He was an Agriculture Canada seed analyst.*

#65 February 1951

### **Bird Trip – Burnaby Lake**

Evidently we can't always expect perfect weather for our bird hikes. The Burnaby Lake trip was damp, to say the least. Our leader, Bill Hughes, did manage to stop the worst of it just

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before our outing started, but allowed a misty rain to continue. Nevertheless the excursion was interesting. A welcome addition to our group were members of Mr. DesBrisay's Junior Audubon Club. These boys were keenly interested in what our leaders had to point out on the trip and we certainly hope they will be able to come on future excursions. We extend to them a hearty welcome at all times.

During the afternoon some of the birds seen, but not observed on our November 12<sup>th</sup> trip were: red-breasted merganser and American [common] mergansers, great blue herons, herring gulls, evening grosbeak, [northern] flickers, [dark-eyed] juncos, chickadees and [American] coots. Although this was a bird trip, everyone was pleased when Mr. Foote Waugh had the patience and kindness to identify various mushrooms encountered on our tour.

B.R.

#66 March 1951

### **Bird Trip: Terra Nova, Lulu Island**

For those of the Society who took part, the afternoon will stand out as an exceedingly interesting one. After parking the cars, the party walked along the dike for some distance, all eyes and ears attuned to anything of interest. As usual when these trips begin, everyone is keyed up, trying to see and identify all the various birds in the vicinity. With the aid of many pairs of eyes and field glass, great blue herons, rusty song sparrows, red-winged blackbirds, [Northern] pintail, [American] wigeon and mallards were soon identified. Mr. Hughes told us that the latter three [species] flew in from offshore open waters to feed on land.

Progressing in a leisurely fashion our attention was suddenly arrested by a roaring clamour. Our leader called "snow geese! snow geese! Listen!". Slowly a white cloud appeared to rise and spiral off the sea in the misty distance. We needed no urging to get nearer to the birds, now settled and looking like a large ice flow on the sea. A short time later another roar of wings could be heard, followed by a loud cackling clamour as thousands of birds rose from the water, circled round and round and gradually dropped back, layer by layer, on to the sea again. Seen through field glasses they were a most impressive sight. Bill Hughes later estimated between 5,000 to 6,000 birds were in the flock.

Our thrills were not yet over. Bill's ringing voice soon had us all gazing towards a distant stump out in the tidal flats where a large snowy owl perched. The appearance of the bird was something of an event for our bird trips as they had not been seen in this area for some five years. This was one of their cycle years when, because of their over-abundance in the Arctic, they had to leave to foray far south in search of food. Event #2 was thus recorded for our afternoon's efforts.

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Other birds seen before dusk began to settle in were [dark-eyed] juncos, sandpipers, a [northern] flicker, greater scaup, red-winged blackbirds (all males by the way, the females having gone south), song sparrows and a short-eared owl. The latter, evidently not wishing to be outdone by his larger relative the snowy owl, appeared on the scene in person.

#68 May 1951

### **Bird Trip – Steveston**

Although the afternoon of January 7<sup>th</sup> was rather raw, some dozen or so members turned out. The general cloudiness of the day did not prevent our seeing a good many seabirds from the pier of the Steveston fish cannery, but they were not quite as abundant as in previous years. By being careful we did manage to get good views through our field glasses of western grebes, old squaw, glaucous-winged and Heermann's gulls, and red-breasted merganser and American [common] mergansers. A song sparrow was seen flitting from bush to bush as we walked along the path behind the buildings. Mr. Hughes pointed out the characteristic flight of a goldeneye as it swept past overhead.

Perhaps the most interesting part of the afternoon was our observation of a [peregrine] falcon perched on a distant telephone pole, a view of a canvasback seen behind an old ship's hull, and the sudden quick flashes of a flight of red-backed [dunlin] sandpipers. This was the first time we had seen these birds this winter. Also seen were a double-crested cormorant and a [northern] flicker.

B.R.

### **Bird Trip – Kitsilano Area**

This bird trip proved to be the coldest and wettest this year. As we assembled at the foot of Trafalgar Street on January 21<sup>st</sup>, a drizzle started; by the time we walked down to the sea the full force of the strong west wind came fully at us. Despite this discouraging beginning, the day eventually proved to be very beautiful. Excellent views of sea birds were obtained as we walked slowly east and north along the beach: surf scoters, American [common] goldeneye (with a white dot before each eye), Barrow's goldeneye, (with a white crescent before each eye), buffleheads, red-breasted mergansers, loon, short-billed [mew] gull, horned grebes, greater scaups (dark body and light wings), great blue heron, American [black] scoter, double-crested cormorants, western grebes and pigeon guillemots.

B.R.

#69 June 1951

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### **Bird Trip – Iona Island**

Despite dark skies and a drizzling rain 15 members turned up at Celtic cannery at 9:15 on the morning of March 25<sup>th</sup> to take the boat across to Iona Island. Two trips had to be made. Once on the Island, Mr. Hughes apologized for the few birds to be seen. Last year flocks of hundreds of birds had been seen flying about, but this year only a few score were at first noticed. Unfortunately the tide was a considerable distance out and the birds following it could be seen turning and twisting in flight, but too far off to be identified.

What was lacking in numbers was provided in interest. Violet-green swallows were returning from their annual migration almost to the day they were expected. Around March 21<sup>st</sup> every year one can expect to see these birds returning from the south. Another transient stopping briefly enroute north was the horned lark – an interesting bird seemingly unconcerned by our presence. Many sea birds seen this past winter were again observed: male and female mergansers, double-crested cormorant and Baird's [pelagic] cormorants, great blue heron, killdeer, mallards, buffleheads, red-winged blackbirds, snow geese, sandpipers, scaup, song sparrows, red-throated and common loon, canvasback, eared, horned and western grebes. Top honours for day went to Mr. Sanford and Miss Brimley for noting and identifying some male ruddy ducks.

#70 June 1951

### **Bird Trip – Stanley Park**

The new season started off in brilliant April (14<sup>th</sup>) sunshine with a large turnout. It was evident that everyone felt delighted to be a member of this group – friendly greetings across

the green lawns, a day especially favoured with bluest sky, unexpected warmth in the breeze, and the happy anticipation of another adventure in bird-watching with Bill Hughes. When everyone had assembled we gathered around Bill for he had something in a paper bag to show us. How thoughtful and diligent a leader to have taken such pleasure in trapping and carrying in a small cage, two very lively (and banded) purple finches for us to see! The rosy, almost magenta colour of the shoulders and head of the male intrigued us.

In the tall trees bordering the tennis grounds, the group halted to the song of a white-crowned sparrow. Here too we saw several Audubon [yellow-rumped] warblers. A [dark-eyed] junco rustled through the underbrush, a red-shafted [northern] flicker was seen jerking like a mechanical toy up the trunk of a cedar tree; a [spotted] towhee mewed, and a varied thrush skimmed like a gray shadow over the green salal. A few black-capped chickadees swung from the poplar branches, and a downy woodpecker clung in silence to the side of a tree.

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By the shores of lost lagoon a Seattle [Bewick's] wren flicked its perky tail at us, and we passed on to the edge of the water to watch the buffleheads bobbing through the waves. Here too we saw several scaup, a few [American] coot, the big white swans recently sent to the Parks Board from Victoria, and of course, the ubiquitous mallards suing for peanut favours and snapping at each other's tails in this season of high emotion. By the Lagoon Bridge we spotted a song sparrow and several lovely wood ducks, which were mingling amiable with a group of imported mandarin ducks.

Things appeared to be quiet at Beaver Lake, the Canada geese of course dominating the scene. [Northern] pintails, [American] widgeons, pied-billed grebes and some gadwall plied slowly between the lily pads. Mr. Hughes identified a green-winged teal as it made its way through the rushes far out in the Lake. A few rough-winged swallows skimmed the water. Then, standing on the sea wall overlooking the Inlet, we trained our glasses on little groups of red-breasted mergansers "riding along", as one member said, "like stern Castilians intent on their duty." American [common] goldeneye, white-winged scoters, horned grebe in full plumage, and a Baird's [pelagic] cormorant were also noted.

It was getting late by this time and the majority of members had to leave, but a small group went on to the heronry at Brockton Point. Here we found that nesting was underway and a number of these great birds were circling over the area, settling here and there in the tall trees. Returning in the sunset along Coal Harbour, we stopped to watch the mischief of a pileated woodpecker. The Parks Board had diligently operated with admirable surgery on the trunk of a large tree that had been gashed by a woodpecker. Directly below the operation sprawled a large new fresh hole equally as damaging as the mended one! On the quiet waters behind the Yacht Club sat a female red-throated loon, identified by her upturned bill that gave her a rather snobbish appearance. It was an afternoon pleasantly spent, although Mr. Hughes said that the following week would be better bird watching when more migrants should be present.

R.B.

*Ruth Fields Brink grew up on a Saskatchewan farm; droughts forced her family to move to Victoria. She graduated in Botany at UBC and did her postgraduate work in Zoology at Berkeley,*

*CA., then taught genetics at UBC. She led many marine biology field trips and attended a number of summer camps. She also worked with many of the junior naturalists and with Mrs. Alice Borden, taught natural history to teachers of elementary school children.*

### **Botany Field Trips**

Professor Davidson usually undertakes three botany trips in the spring so that he can compare the manner in which the flora changes due to the different types of habitat. This year only the Mesophytic, or plants with an ample supply of water, and the rocky bluff flora were studied [at Musqueam Reserve and Caulfeilds]. The planned trip to Crescent Beach to see the salt marsh flora had to be cancelled owing to the inclement weather.

Musqueam Reserve - Members participating in this May 5<sup>th</sup> trip were rewarded by the sunny spring weather and of course by the wealth of information passed on by Prof. Davidson.



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With spring not too far advanced it was possible to note the single bud scale that is characteristic of all willows in B.C. and the cascara bud that has no scales. The manner in which the stinging nettle stings was also demonstrated as well as the antidote that is supplied by dock. One of our members tried both but found the nettle more effective than the dock!

Caulfeilds – a sunny May 19<sup>th</sup> and the expectation of an afternoon well spent drew out a good crowd of members. The plants studied displayed some of the differences to be expected of plants that must survive for a considerable time without a supply of water, as compared with those plants having an ample supply. One plant observed was the death camas, similar to the Indian [common] camas that may be used as food, but decidedly not in that [edible] category. The leaf of the death camas is rough to the touch and we were assured that the plant would be very rough on anyone who ate it. At the conclusion of the trip Mr. Waugh expressed our thanks to Prof. Davidson for a very interesting afternoon.

N.P.

*When Norm Pursell finished service with the R.A.F. in World War II he and his wife Win came to Canada where he worked as an Engineer with B.C. Hydro. Norm served as V.N.H.S. President from 1972 to 1974 and was very active in the Alpine Club of Canada. He and Win led innumerable field trips and many summer camps. They are general naturalists, fine hikers, and valued V.N.H.S. members.*

#71 July 1951

### **Marine Biology Trip**

The proposed visit to the Marine [Pacific] Biological Station at Departure Bay on June 16<sup>th</sup> had to be postponed, but an alternative trip was taken to Crystal Water Beach near Point Roberts. Enough private cars were available to take everyone to the beach, and the day was warm and sunny, though a strong wind made wading in the sea seem a chilly prospect when we first arrived about 10 a.m. However, the sun slowly warmed up the sands and the visit proved enjoyable as well as educational.

We followed the tide as it receded, under the leadership of Mr. Waugh, who appears quite as much in his element among the sea cucumbers as he is among fungi. The water was clear and in consequence we found a wide variety of sea life, including a brittle starfish which is seldom found. Perhaps our most notable failure was an attempt to capture a horse [gaper]clam. These creatures reside too far under the sand to be easily located, but they indicate their presence by a stream of water, and this stream proved something of a challenge; in all cases the clam withdrew faster than our spades descended. Our thanks for a very pleasant morning must be extended to Mr. Waugh and the car owners who made space for those without means of transport.

N.P.

### **Summer Camp – Cathedral Lakes**

The Natural History Society's camp this year, under the leadership of Dr. Brink, was located on the edge of Quiniscoe Lake on a raised tongue of land at a height of 6,700 feet. It nestled

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among the trees a short distance below the timber line with a superb view from our tents of the neighbouring peaks, all about 8,000 feet high.

Attendance at the camp was 23 persons. The journey into the camp was completed first by automobile to the packer's cabin at the Ashnola Forks, and thence a walk or horseback ride of about eight hours to the campsite. Saturday was occupied by the drive into the Interior and that night was spent in a few tents at Herb Clark's cabin. After an early rise and hurried packing, the main party started up the trail by 9 a.m. The weather remained perfect all day with just enough cloud to keep the temperature down and enough sun to keep our spirits up. This was a very different condition to that experienced by the advance party of four who encountered almost continuous rain and snow on their journey to the campsite. However, from then on the weather remained perfect for the length of the camp, usually quite hot, and never raining.

Trips were taken to the surrounding points of interest and the alpine flowers were studied with keen interest. We were fortunate in having Dr. Taylor as well as Dr. Brink to remind us of the names of the plants. In general there was a good variety in flower, though not quite as wide a selection as might be found closer to the coast. The interesting Lyall's [subalpine] larch was growing in the campsite and the alpine [subalpine] fir (*Abies lasiocarpa*) as well as Engelmann spruce, lodgepole pine and whitebark pine on the nearby slopes.

Geological features were observed and the bird life studied though only a short list of birds was compiled. The Lake was too cold for comfortable swimming though a few members did brave it. However it teemed with fish and as a result two fish dinners were enjoyed by all campers.

The camp organization made possible a very smooth running machine. All members helped in the food preparation and our cook, Mrs. Rogers, supplies us with excellent meals, with enough to satisfy the heartiest appetites and with plenty of variety. Camp was struck at an early hour on Sunday morning and the rest of the day spent returning to Vancouver. It was a fine camp and will be long remembered by the participants.

**Note:** *The date and duration of this camp were not noted but it probably took place in July 1951. Cathedral Lakes did not become a Provincial Park until May 2<sup>nd</sup>, 1968.*

#72 September 1951

### **Bird Trip to Christie Island**

Few bird trips offer wider interest than the annual expedition to Christie Island in Howe Sound. This year a large turn out set forth on Sunday, June 17<sup>th</sup> from Horseshoe Bay under Bill Hughes' able direction. Our three sturdy inboard motorboats plied through a brisk June

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breeze and brilliant sunshine, arriving without incident at the small group of rocks of which Christie Island is the largest.

The protection afforded the nesting seabirds by the isolation of the rocks, holds a strange appeal. One feels that these wild creatures have used a deep wisdom in selecting this site for the delicate purpose of procreation. No sign of the teeming life – the hundreds of adults and nestlings – is evident even from a short distance. It is not until one climbs on the rocks and a general alarm is raised by the worried parents, that one discovers the fascinating multitudes, the stirring chorus of ringing bird notes, the beating of hundreds of pairs of wings, as flocks swirl overhead in agitated vigil.

Everywhere at one's feet lay the nests of glaucous-winged gulls. Midst a scattering of twigs, grasses and softer interlining nestle two or three greenish-brown mottled eggs. At the time of our visit one or two eggs in each nest had hatched. Soon after the chicks have dried from the shell they squirm from the center of the nest and snuggle down in the deep grass among which most of the nests are set. Here, camouflaged by the peculiar brownish-grey and yellow of their downy feathers, they are well protected. Appealing little creatures, they are soft, but large-boned and awkward with huge gaping mouths.

This writer was struck by the orderliness and cleanliness of these breeding grounds, the vague rhythm of a pattern of accomplishment working within the clear, fresh winds that sweep over grey-washed rock, the bright green of grass and rock plants. The gleaming white adult birds mingling with apparent planned amiability. The breeding gulls are but one species of interests on Christie Island, for here too are found the curious nests of Baird's [pelagic] cormorants, piles of matted debris with three or four long bluish eggs on top. Mr. Hughes pointed out that some nests are used year after year, growing into considerable structures on the rocky ledges. He also said that there was an increase in the number of cormorants' nests on the Island this year.

On one side of Christie Island grows a small bush land where several [northwestern] crows have taken up residence. We failed to find their nests, but three or four young that had just learned to fly, were fluttering through the thickets. Bill, sneaking up on one of them,

succeeded in grabbing it by the legs and securing it for everyone to see. One of the highlights of the day was the search for a pigeon guillemot's nest. They are known to breed there but it took the earnest attention of 30 members over an hour to finally seek out one nest. Deep in a dark crevice lay two small greyish eggs protected only by their rocky seclusion.

During our lunch on the Island, grouped around a huge kettle of tea, we trained our field glasses on the sea birds that plied the surrounding waters. A flock of scoters skimmed the surface; hair [harbour] seals played in the quiet bays, and gulls watched us as they settled back beside their nests. One pair on a log nearby flirted and skipped clumsily about one another, all the while glaring into each others eyes with great intensity. The Christie Island trip is a rare treat for every bird lover. New members are given precedence so that all may

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have an opportunity to make one visit there. To all who have not yet had this adventure we can say do make a mental reservation now to visit Christie Island next summer. R.B.

*Mr. Christie, after whom the Island was named, was a long time VNHS member. He bought the Island in Howe Sound because of the bird colony. His two sons became biologists, one with the Department of Agriculture and the other as a high school teacher. Mr. Christie Sr. had a small farm in what is now the Collingwood area of Vancouver.*

### **Trip to Table Mountain**

In view of the curtailment of mountain trips due to this year's dry weather, members were especially fortunate in being able to enjoy a most interesting trip. Over 40 people arrived at the scheduled starting place on Sunday July 22<sup>nd</sup> and it was only with the help of a few private cars that everyone was successfully transported to the Mount Baker Lodge. The journey was without incident and with a clear blue sky we could not fail to enjoy the unfolding panorama that culminated in the sight of magnificent Mount Shuksan. This granite mass [ Ed Note: not a 'true granite; this rock is known as "greenschist" a metamorphosed submarine basalt] overhung with snow and ice, dominates the Mount Baker Lodge area and its small lake. Mount Baker cannot be seen from the Lodge, but climbing a slope on the way to Table Mountain it can be seen in the distance, almost ghostlike with the sun behind it and its cover of snow nearly merging with the sky.

Lunch was eaten at the Lodge and the hike to Table Mountain started around 1:30 p.m. Table Mountain is roughly between Mount Shuksan and Mount Baker and is not hard to climb. However, the main party followed a trail more or less around the Mountain to some alpine meadows beyond. Patches of snow still remained, but much of it had been gone for some time and the ground dried, with the result that the alpine flowers were not plentiful. One feels in such areas that around the next bend the floral display will be better. However, time did not permit a lengthy hike so we returned to the car park for a meal and a cup of refreshing tea provided by the Gleggs. With a trip so interesting as this one was, it is hoped that future years will see the Society paying an increasing number of visits to neighbouring parts of Washington State.

N.P.

#73 October 1951

### **Point Roberts Geology Trip**

On Saturday August 25<sup>th</sup> we left Vancouver in the smoky haze that was still with us as we went through New Westminster and crossed Patullo Bridge. There we learned that we could not follow west along the Fraser River through Sunbury, so we traveled via Scott Road and

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saw the pall which hung over the Delta. However, when we met Dr. Armstrong at Boundary Bay customs, we were happily in clearer air. He took us out to Point Roberts where everything was bright and sunny. We descended to the shore to view the cliffs, remnants of the plain that once spread over the Fraser area, created by the material brought down by the Cordilleran Glacier and sand carried by the waters which flowed from the glacier as it receded. Afterwards, we were taken over to a drainage ditch at Tsawwassen and dug fossils of shells that seemed as fresh as if just removed from the sea. Altogether we had an enjoyable and instructive time and expressed our thanks to our leader who kindly furnished a resume [listed below] of what we saw: J.J.P.

### Pleistocene Section near South Beach, Boundary Bay, U.S.A.

Section 200 feet thick comprising:

Top 0 – 5 feet – boulder gravel (possibly beach)

25 feet – till (boulder clay – Vashon)

140 feet – sand, minor clay. Uniformity here, possibly outwash.

Bottom 30 feet – sand and clay – interglacial (Quadra)

The unusual features were –

1. A kind of intra-formational conglomerate, consisting of large angular blocks of clay in sand and gravel (not true conglomerate). The accumulation seems to have resulted from the burying of small talus on which the clay fragments fell as the sand was cut away beneath it. Later, there was a reworking and mixing by wave action.

2. Clay dikes, clay sills and boulders in sand clay “conglomerate”.

These features are all the result of pressure being exerted on highly plastic clay, causing it to intrude the surrounding sands. The intrusions apparently occurred after the sand was deposited, but while the clays still contained enough water to be highly mobile.

3. The unconformity near the base of the section appears to represent a considerable erosion interval with large slides prevalent.

4. Fossil wood, shell fragments and concretions in sand below unconformity.

### Pleistocene Fossil Shells seen near Tsawwassen Beach, Boundary Bay, B.C.

Shells in a drainage ditch at approx. 200 feet elevation.

Shells in sand and on till (boulder clay) underlying sand

Shells buried under 8 feet of sand.

Observed were – Fossil Clams - *Chlamys* (pecten), *Nuculana* (*Leda*), *Macoma*, *Clinocardium*, *Saxidomus*, *Serpula*, *Serripes*, *Mya* and others. All free living forms in depths up to 100 feet.

Perfectly preserved – show hinge lines and muscle scars. Represent water temperature similar to that now found at latitude 50 degrees, that is slightly colder than at present.

Probable age, 15,000+ years, believe it or not.

J.E.A.

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#74 November 1951

### Crystal Lake – Garibaldi Park

Many artists have tried to capture the wonders of Garibaldi Park. I believe the dozen or so members of the Vancouver Natural History Society who spent Labour Day weekend (Sept. 1<sup>st</sup> – 3<sup>rd</sup>) camping near Diamond Head Lodge would agree with a chance remark made by one of the group. We had climbed from the Ring Creek snow bridge and were resting amid heath and heather on a high ridge, a panoramic view before us of Garibaldi, Pyramid, Spire and Mamquam mountains – all majestic in the purple splendour of late afternoon. “This can be seen only with the naked eye; it defies the artist,” said our friend dreamily.

Our delight in the beauty of the area and in the perfect autumn weather was enhanced by Dr. Brink’s concise and fascinating outline of the geology of the surrounding mountains said to be the most interesting on the Pacific Coast. He told us of the peculiar proximity of the area of vulcanism, encompassing Mount Garibaldi, with the much older granite dirate [sic] [granodiorite] massive of Mamquam directly across the valley. The ancient area was formed under thousands of feet of ice sheets and later volcanic action from the cinder cone on Mount Garibaldi that resulted in a lava flow now to be seen extending several miles from the mountain down Ring Creek to Squamish.

With the lateness of the season the floral life was at low ebb, although in the long stretches of moraine bordering the glacier we found colourful patches of alpine fireweed [broad-leaved willowherb], some saxifrage, *Tolmiei* [Tolmie’s saxifrage] and *Mimulus lewisii* [pink monkey-flower]. Apparently at no season, due to the acid volcanic soil around Mount Garibaldi, is the floral life as full as in areas of cretaceous rocks such as those found in the meadows of the Black Tusk with their masses of alpine blossom. The blueberries were a joy to behold. In fact many of us would no doubt have progressed further with our botanical observations had these tempting tidbits not beckoned at us around every bush. Bird life was quiet except for the ubiquitous Canada [gray] jays, although we did have the good fortune to come within a few feet of a water ouzel [American dipper], and spent ten minutes watching it dip and duck in search of larvae in the rushing cascade of Ring Creek.

Our visit to Diamond Head represented something of a milestone in the development of this area as most of our party and all our camping equipment arrived by jeep direct to the Lodge from Squamish. Although a caterpillar tractor has been used for some time to bring supplies to the Lodge, this was the first party to arrive by means of a four-wheeled vehicle. I think we were all impressed by the vision and perseverance shown by the Brandvold family in opening up this wonderland for public enjoyment. Diamond Head Lodge, conceived and built in all its rustic beauty by Ottar and Emil Brandvold, is in itself a monument to their love for this rich parkland.

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Members contemplating future trips into Garibaldi Park will be interested in several excellent papers now available on the geology of this area. One of the best is *Historic and Prehistoric Fluctuations of Alpine Glaciers in Mount Garibaldi Map Area* by Dr. W.H. Matthews, published in July of this year in Vol. 59 of the Journal of Geology. Another particularly interesting treatise, also by Dr. Matthews will be available shortly in the *Canadian Alpine Journal* and will deal with *Glacial Retreat in Garibaldi Park*. Dr. Brink particularly recommended the latter for its comprehensive treatment and excellent illustrations.

#75 January 1952

### **Mushroom Trip, Stanley Park**

Saturday, October 13<sup>th</sup> was the date of the annual Fungus Foray in Stanley Park. Fifty or more members met at the picnic grounds and after introductory remarks by our leader, Mr. Waugh, the group scouted around to see what could be found. Some had keen eyes and brought in fine collections. Owing to the late season the findings were somewhat different from previous years. Thirty-six specimens collected, not all traced to their species, but the genus was settled. Thanks to Mr. Waugh for the following details:

*Coprinus comatus* – shaggy mane mushroom, one of the foolproof four - was collected in fair quantity. *Lycoperdon* – puffballs, and *Marasmius oreades* – fairy ring, were collected in large enough quantities to be eaten and at least one family enjoyed a meal of them. No *Amanita* appeared in the collection, but orange *Chanterelle* was more common than usual. This [orange variety] is not an edible species. After an interesting and instructive talk by Mr. Waugh, we enjoyed a cup of tea provided by Mrs. Waugh with her usual hospitality.  
M.T.

### **The Vancouver Natural History Society Display**

One of the highlights of our year's activities was the Society's display held last December 1<sup>st</sup> at U.B.C. This exhibit was planned in order to bring into the light of day many excellent collections made by our members for their own interest, but which few others have had a chance to see.

Participation and interest were both demonstrated before the day drew to a close. Not only did many members contribute their time and energy, but many more and their friends arrived to congest the rooms and corridors in their desire to see everything. Tables were covered with geological, entomological, mammalian, marine and botanical specimens (comprising pathological, mycological and taxonomic specimens). The display of photography and handicrafts as well as the books and magazines from our library also around considerable interest.

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#76 February 1952

### **Bird Feeder Sighting**

A rare visitor to Vancouver was recently seen at the Bradleys' bird feeding station. Four Hepburn's [common] rosy finches arrived at the feeding tray and stayed long enough for a number of our members to see them. An event such as this is one of the highlights for making available a supply of food for birds during the winter months.

### **Bird Emblem of B.C.**

The Victoria Natural History Society desires to choose a bird emblem for B.C. They suggest that all the schools of the Province be contacted to have the students choose the species by popular vote. They have written to our Society asking us to choose not more than eight suitable species. The plan is then to have the Victoria Natural History Society collect ours and other similar lists. The favourite species will then be submitted to Dr. Carl, Director of the Provincial Museum, for approval by the Museum staff [prior to being distributed to the schools.] V.N.H.S. members interested in submitted the name of bird they would like to see chosen, please send in its name within ten days, to the Secretary. A committee of Mr. Sanford and Mr. Rogers, appointed at a recent executive meeting, will then select our eight most popular species and send them to Victoria

*Note: Thirty-five years later, in 1987, the Steller's jay was finally chosen as B.C.'s Provincial Bird!.*

### **Trumpeter Swans**

At our meeting on Wednesday, November 14<sup>th</sup>, Mr. Ron McKay [Canadian Wildlife Service] gave a brief survey of the history of the Dominion Wildlife Officers and their work preliminary to his talk on trumpeter swans. The Service came into being in 1917 with the passing of the Wild Life Act by parliament. Mr. Dave Munro became the first Wildlife Officer for B.C. and also for a time, for an area considerably to the east of B.C. On his retirement, Mr. McKay took over the position and it was in connection with his work that he was able to give us a very interesting lecture on the trumpeter swan.

Acting on instructions to ascertain the numbers in B.C. and to check their movements, Mr. McKay undertook a number of journeys, including counting from the air, and trips into the most rugged parts of the Province. Small groups of birds were located at various places, one of the largest being at Lonesome Lake near Bella Coola, but it was noted that they do not always group together and counting them was difficult since they are to be found in the most inaccessible parts of the Coast Range. A rough [preliminary] estimate was that 700 trumpeter swans were in B.C.

The swans normally winter as far north as open water in the lakes can be found, but will remain near a frozen lake if food is available. The whistling [tundra] swan winters in California and nests in the Arctic. Trumpeter swans are a larger bird, 20 to 30 lbs, compared



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to the whistling [tundra] swans of only 18 lbs., but it is often difficult to detect the differences. The lecture was illustrated with colour photographs and concluded with an illustrated talk showing a visit to a [American white] pelican colony for the banding of the young birds.

#79 May 1952

### **End Note # 1: Botanical Notice (see pages 261-262)**

#### **Iona Island Bird Trip**

Our trip to Iona Island this year on Sunday, March 30<sup>th</sup>, began with unpromising weather. The skies were dull and cloudy, a strong, cold wind was blowing, and every indication was that we would soon have a heavy rainstorm as big black clouds rolled up from the south. Nevertheless about 20 members turned out for the trip. The party split into two for the boat trip across. Once the complete group had assembled we began our tramp along the sandy, wind-blown Island. A strong gale continued to blow from the south and got colder and stronger the farther we went. Fortunately the rain kept off and as the group was well clad no great hardship was felt by anyone. The weather at least kept us on the move.

Because of the strong wind and low temperatures, bird life was not as abundant as we would have wished. One interesting view was obtained of a flock of several hundred snow geese perhaps only two hundred yards off shore. Whether the wind was responsible for their quietness we did not know. At any rate, they made no effort to leave and everyone had an excellent view; so different from a year ago when we could not get within a quarter of a mile of them.

The little horned lark did not disappoint us this time either. A pair was observed. We also saw a [northern] flicker, killdeer, song sparrows, red-winged blackbirds, a flock of unidentified sandpipers, an owl, perhaps a short-eared, but no close view was obtained, and [northwestern] crows and [great blue] herons. Of the water birds we saw western grebes, short-billed [mew] gulls, [northern] pintails, baldpates [American wigeon], scaups, mallards, double-crested cormorants and white-winged scoters.

A big roaring fire at noon built behind the shelter of a log provided a warm and cheery atmosphere for our lunch. The smoke from the fire was more than offset by the heat from the flames. To make sure that the trip was properly recorded Mr. Dave Martin lined up the 'hunters' and had them train their field glasses on some geese decoys set out on a sand bar while he busily photographed them from various angles. We could not conclude our record of the day's events without mentioning a bushtit nest on the road back to Marine Drive that Mrs. Bradley had found on a previous trip. It was about one foot long and suspended from the branch of a conifer. It seemed big enough to house a dozen bushtits instead of the two we saw darting about.

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### **Capilano Canyon**

Under the leadership of Dr. Armstrong the Society held one of its most successful trips on Saturday, April 26<sup>th</sup>. Although rain was falling early in the morning it did clear up in the afternoon. Unfortunately this early cloudy weather discouraged many people from turning out to what proved a most enjoyable and profitable afternoon. Dr. Armstrong chose the Capilano Canyon area to explain and illustrate some Pleistocene geology. Beginning on the road above the little park, he explained the formation of glacial tills and how deposits had formed one above the other blocking the Capilano River and diverting its flow, so that it cut a new channel through solid rock 300 feet or more deep. The carving through rock was easier for the River to do than to wear through the glacial tills blocking its old bed. By the action of frost and water the rock split along joint fractures which the river then enlarged until a channel was formed. Carved slits with clearly divided winter and summer bands were apparent in the banks by the roadside. Formed only by silt and clay deposits in fresh water, they enable geologists to age past epochs much the same as botanists use the rings in trees.

Coming down in the canyon to the river we were able to see the construction underway on the new Capilano Dam. Some of the difficulties being encountered in the preliminary stages of this were explained. Walking downstream we were shown the joint fractures in the rock of the canyon walls and how these lines will split the rock in three directions. In the granitic bedrock along the river, dykes were seen. The boulders lining the shore, once thought to have been washed down by the river, were in fact brought down by glaciers and gradually settled into their present location by river erosion. Greenstone, volcanic boulders and even some true granite were seen. The true granite consisting of quartz, orange orthoclase, hornblende and chlorite, was of great interests as true granite is scarce here.

The afternoon was one of keen interest and enjoyment. The geological map of the area that Dr. Armstrong kindly supplied to each member, aided in illustrating the region in which we were working. We all learned some of the geological history of the Canyon and were grateful to Dr. Armstrong for the time and effort he took to explain the area to us.

#80 September 1952

### **Skagit Valley (May 31 – June 1)**

Twenty-one people set out from Vancouver around midday. A meeting place was arranged near Hope and the party had a good meal before leaving the main highway for the night's camp. The Silver Creek logging road proved excellent and the 30-mile drive south was a pleasure, although the weather seemed a little unsettled with the peaks covered by cloud.

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Near our destination a few members obtained accommodation at the Whitworth Ranch, and the rest carried on to an abandoned logging camp. Here arrangements were made for an

early rise, 5 a.m., and all turned in to sleep in the huts either on the floor or on bed springs left by the previous occupants.

The following morning was so dull that the pre-breakfast bird trip had to be cancelled.

Nevertheless, nearby a number of birds were seen and two nests found, one of a winter wren, and the other that of a [dark-eyed] junco. After breakfast, cooked individually by members on the cabin stove, the main hike of the day commenced. This followed an old trail built many years ago during a minor gold rush. Logging operations had obliterated part of the trail but the rest was in quite good shape. Many plants were observed but probably the most interesting was wild ginger and California [Pacific] rhododendron, both in flower.

To complete the day the party drove across the U.S. border to the end of the road to see the desolation brought on by the valley having been flooded for power purposes in the United States. At this time of year the lake was just beginning to fill having been progressively emptied during the late summer and winter. It gave everyone an idea of how much care must be taken to ensure that such flooding is a necessity before it is undertaken. Here in B.C. the Natural History Society had given support to the conservationists who were trying to prevent the flooding of Buttle Lake until it could be proven that such a step was indeed the only possible one.

At this point the party broke up, meeting briefly at the main highway. A hearty thanks by everyone was accorded to Dr. Brink who so ably led and organized the trip. The following is a list of the birds seen on this trip: red crossbill, pine grosbeak, olive-sided flycatcher, bald eagle, pine siskin, cedar waxwing, blue [Steller's] jay, [dark-eyed] junco, winter wren [spotted] towhee, russet backed [Swainson's] thrush, [American] robin and red-breasted sapsucker

### **Limnology Hike – Stanley Park**

Our members are aware that Stanley Park is a beautiful place and most know in a general way about Beaver Lake's water lilies and wild ducks. Some have learned to appreciate its quiet beauty and peaceful tranquility. Those who turned out for the hike and limnology lecture last Saturday, August 16<sup>th</sup>, learned something of the less obvious beauty and interest of that enchanting place.

Prof. R.W. Pilsbury conducted the hike. He explained that limnology was the study of the conditions that affect plant and animal life in a lake. Nature was always striving to fill in a lake with mossy growths that accumulate to form habitat for other plants, which upon growing and dying add substance upon which still higher forms can exist. As the process continues each form gives way to its successor until finally, the giant Douglas-fir standing firmly upon dry land, sends its roots down to where once trout had hunted dragon fly nymphs.

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Mrs. McGinn let us know that the "Limnology Hike" had mystified her. She had embarked upon a hunt for the meaning of the word. Her research had led her to the libraries of the area and an expenditure of sixty cents for bus fares thereto - all for what Professor Pillsbury could make clear in a sentence. We knew at once we were glad we had come.

Clear, sparkling, cool water from the Capilano [River] forms the intake for Beaver Lake, as well as the plumbing facilities of our homes. The quality, purity and suitability for our use, as well as for black [northwestern] salamander and fresh water sponges were discussed. It was agreed that little improvement could be made upon the water.

Prof. Pillsbury made the expedition interesting, entertaining and instructive. Among things noted were fresh water leeches, fingernail shells, [possibly the oval lake limpet], backswimmers, bladderwort, sundew and sphagnum moss. More than 30 members joined in enthusiastically scooping flora and fauna from the lake bottom with dip nets kindly provided by our leader, and the barrage of questions must have convinced him that everybody was interested. To make sure of that point, however, Mr. Neve voiced the opinion for all present when he thanked Prof. Pillsbury for his efforts and remarked that we had been expecting a hike but this had been far better than we had hoped for. G.R.B.

#81 October 1952

### **Ornithology**

The annual meeting of the Northwest Bird and Mammal Society will be held at U.B.C. on October 25<sup>th</sup> at 2 p.m. Rooms 100 and 200 of the Biology Building. Dr. Hatter has invited all members of the Natural History Society to attend this meeting. Those interested in bird banding should also visit Hut M34 at 2 p.m. on October 26<sup>th</sup>.

Bird Recognition Instructions Classes: Ron MacKay, Dominion Wildlife Officer [Canadian Wildlife Service] has offered to give a series of eight lectures starting in December. The lectures will be held in the U.B.C. Museum so that specimens can also be examined. Interested members should phone Mrs. S.F. Bradley at CE2127 so that the final details can be worked out.

Three rare visitors to Vancouver have been spotted recently and Mrs. Bradley would be interested to hear from anyone who had had the good fortune of seeing any of the following: house finch or linnet, orange-crowned warbler, and MacGillivray's warbler.

### **V.N.H.S. Summer Camp 1952**

After the decision had been taken to make marine biology the main study of this year's summer camp, Mr. and Mrs. Bradley sought out a suitable site on Denman Island. All things conspired to make a success of the venture, but the biggest single factor was the

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energy shown by the Bradleys and the rest of the camp council. They found the ideal site, organized the setting up of camp, saw to it that a good program was devised and carried out, supervised the catering, and waved us cheerily on our way when the week ended. The Bradleys, Mrs. Morgan and Dr. and Mrs. Brink were the advance party and the excellent results of their labours were apparent to all on arrival. The site had once been a farm whose fields and garden terminated in a fine beach and small bay. Opportunities for relaxation or study were continually present.

This year's camp will probably go down in the Society's history as the 'sissy camp'. Car owners were able to drive to the very entrance of their tents. The program taxed no one's strength with tough hikes or strenuous climbs. Long gentle strolls during which members sought agates or shells, or ambling walks to watch birds and collect flowers were the order of the day. Our longest trip, a day spent exploring Hornby Island, was accomplished by boat and car.

Camp was pitched on Saturday July 5<sup>th</sup> and lasted until July 13<sup>th</sup>. The number of campers varied between 21 and 26. Of this number, five were children. Mrs Rogers again took care of the 'inner man' [cooking] with her usual generosity and capability. Phyllis Budd did a fine job of assisting. Mrs. Waugh was responsible for campfire and to her must go a special vote of thanks for organizing such delightful and varied entertainment. None of us will forget the sunsets that vied in brilliance with Stewart Bradley's magnificent bonfires. The sound of our singing and laughter must surely have carried to remote corners of beautiful Denman Island

Abundant and varied marine life was found. Even the octopus that Earle Birney said he had come to find turned up, but it was in Fred Davis' pail and not Foote Waugh's as Dr. Birney had prophesied. Mrs. Brink, Foote Waugh and Earle Birney were able to identify practically every specimen collected, but it meant a good deal of research in the excellent library set up by Mrs. Bradley.

We were fortunate to have Dr. M.Y. Williams with us. His kindly patience with amateur followers was inexhaustible. He led us to a beach so thick with remarkable fossils that after a little practice with the geological hammer, even the children were discovering 'museum pieces'. Dr. Brink was, as ever, a tower of strength not only in identifying flowers, trees and grasses, but also in assisting whenever and wherever help was needed. Camp this year welcomed young Bruce Brink who proved to be an infant of outstanding charm and energy. We were happy to give hospitality again, if only for a short time, to Ron MacKay of the Dominion [Canadian] Wildlife Service. We regretted the absence of his bagpipes but enjoyed his handsome Labrador dog, *Tar*. On three evenings we welcomed Island dwellers to our campfire and appreciated hearing from them accounts of past and present life on Denman. This year's camp was blessed with perfect weather, congenial company, a rich field for natural study, and a camp council whose energy and thoughtfulness will be remembered by all who were fortunate enough to be present.

E.B.

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### **Nocturnal Moth Hunt**

The autumn of 1952 will be remembered as the year of warm evenings; except Friday, August 22<sup>nd</sup>, the night of the Nocturnal Moth Hunt. Instead of being warm and clear, just the kind of night to hunt moths, the evening was cold and foggy. However about 15 hardy souls gathered at Beaver Lake just as dusk was falling. Rachel Biggs did not promise us a fruitful hunt, but we went along the trail daubing a number of trees with a mixture of beer and brown sugar. While we were waiting for the moths to get slightly drunk on the mixture (and therefore easier to catch), Rachel presented some facts on the differences between moths and butterflies. We learned that any scaly-winged insect is either a moth or a butterfly and that butterflies are club-horned whereas moths have either feathered or hairy antennae.

Other popular, but not always accurate, means of distinguishing them are that butterflies usually fly by day and moths by night, and the former usually settle its wings flat open or closed upright over the body, while moths rest with wings drawn back, front wing over back wing.

A return trip along the trail where we had daubed the trees revealed an almost fruitless catch. Much to the enjoyment of the children present, however, three moths fell prey to the collectors' bottles. Rachel identified them as (1) *Apantosis quonsoti* – an attractive little tiger moth belong to the vast family *Arctidae* [tiger moths] of which there are over two thousand species; and (2) two specimens of *Microlepidoptera* of the family *Yponomeutidae* [ermine moths]. The larvae are common on cabbage in the early summer. Another find among the moist roots of an old tree was the weird cave cricket or camel cricket [*Gryllacrididae*]. It is not a true cricket and had antennae three inches long; legs over two inches long, and was cinnamon brown in colour. After Rachel was thanked for planning this most instructive outing, coffee and cookies prepared by Mary Alice Waugh concluded our enjoyable evening.

M.A.K.

#82 January 1953

### **Fungus Foray**

On October 12<sup>th</sup>, 1952 the Society's [annual] fungus foray [again] took place in Stanley Park. Following the practice of previous forays everyone spent about an hour collecting beautifully formed and delicately coloured fungi. Enough specimens were collected to cover three picnic tables. There were some that were good [to eat], some not so good, and some that were deadly poisonous. Mr. Waugh spent half an hour identifying some of the collection for us; several unusual specimens however he carried home for further investigation.

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Visual methods of placing the different mushroom into their genera were discussed. Stem and gill structure, gill and cap shapes as well as spore colour, presence or absence of a ring or skirt on the stem, each one plays a part in placing the fungus in one of the many genera of Basidiomycetes. One very poisonous *Amanita* collected was showing its various stages of development, from the button to the mature fruiting body.

The last specimen displayed was a table favourite of the Waugh family – the chanterelle. Mr. Waugh suggested that because it was so easily identified it would be a good mushroom for beginners to collect. Mrs. Waugh supplied a welcome cup of tea to wind up the afternoon. Teacups were eagerly set aside to join Mrs. Dave Martin in offering a vote of thanks to Mr. and Mrs. Waugh for a pleasant outing. S.F.B.

*Colonel Stewart Bradley, Canadian Armed Forces W.W.I., led camps and served as President of the Society (1952-1954). He helped to organize and chaired the Audubon illustrated lecture series sponsored by the V.N.H.S. that was usually held in well-attended high school auditoriums in the Lower Mainland and elsewhere in B.C. He had a general interest in natural history and was a great supporter of the V.N.H.S.*

### **UBC Forest at Haney**

The trip to the University forest at Haney was a great success for the 32 members who turned out. The ideal September day and a pleasant drive first to Haney, then along the winding road to the forestry camp, put everyone in high spirits. The camp itself is situated in a picturesque setting on a promontory extending into Loon Lake and provided an ideal spot for lunch.

After lunch Professor Knapp explained the objects and aims of the camp and described the difficulties they had overcome in the early days. He said that they had long desired a suitable place for outdoor study and research, and after careful examination of many areas, this was found to be the most suitable. The 10,000-acre tract of land was once part of Garibaldi Park and was leased by the Provincial Government in 1943 to the University. This Crown land was eventually granted to the University around December 1949, and \$120,000 was provided by the logging companies for the construction of camp buildings. The first camp was ready by 1948, and although the buildings were not complete, the first gallant band of students weathered, in tents, one of the wettest Augusts on record.

Mr. Ian Schiedel, the resident forester, gave us a lucid and interesting talk on forestry, its laws, its management, and the five steps through which the timber passes before finally reaching the consumer. The first step was the selection of areas suitable for growing timber. The next was the protection and development of the area; then the harvesting of logs, the cost of which, including road building, could be anything from \$500 to \$1,000 per acre. The fourth step was the manufacturing process which sorts the logs into the many products with which our daily lives are surrounded. Selling new products was the fifth stage. The new types of plywood, specialty boards, and treated wood had to be brought to the commercial market through the highly specialized field of selling. Mr. Schiedel went on to describe the methods of finding the best growths of timber. He illustrated his talk with maps and charts.

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Professor Knapp then led us on a tour of the camp pointing out the many excellent features such as the students' log cabins, the dining room, caretaker's house, and a very fine guesthouse that is nearing completion. We visited one of the several sample plots where the trees are tagged and their histories carefully recorded. Prof. Knapp gave us many points about the research being conducted in six or eight sample plots. Our journey through the area was over a skid road that brought us to Blaney Lake that lay mirror calm on this lovely September day. Returning to our transportation we heartily endorsed Mr. Wooton's vote of thanks to Prof. Knapp and Mr. Schiedel for their cordial hospitality and untiring effort to make our visit so enjoyable. J.T.G.

*Ian Schiedel graduated in Forestry from UBC. He was an occasional supporter of the VNHS.*

#85 September 1953

### **Bird Trip to Iona Island**

On Sunday April 12<sup>th</sup>, the bird trip to Iona Island was again organized, this time under the capable leadership of Mr. Ron MacKay. Some 35 members met at the river some distance west of the wharf and were ferried over in groups in a small launch. Once on the Island we went on to the south shore hoping to catch a glimpse of snow geese. We were disappointed to learn that they had apparently migrated two days before. Some of the other birds seen were song sparrow, scaup, bufflehead, mallard, western grebe, cormorant, great blue heron, red backed [dunlin] sandpiper, black-bellied plover, glaucous-winged and herring gulls, red-winged blackbird, marsh wren and short eared owl.

After spending a pleasant lunch seated on the many logs in the area, we began casting apprehensive glances at a black cloud rolling up from the west. Suddenly we saw flocks of snow geese flying in formation, white and clear against the dark cloud mass. It was quite a thrill. Suddenly a rain and sleet squall hit and everyone ran to find shelter. The storm lasted longer than our patience and we soon braved wind and rain to reach our point of embarkation, wet perhaps but happy. Our thanks go out to Ron for the time and trouble he took to organizing our trip and patiently answering our questions. B. Rogers

### **Vancouver's Geology**

April 18<sup>th</sup>, 1953: Whether it was a matter of arrangement or a happy coincidence, it was convenient that our visit to the cliffs of the University lands was made only two days after Dr. Armstrong's lecture entitled, *Do you know Vancouver geologically?* In his lecture he had shown the position of the formations in and around Vancouver in the geological time scale, and then referred to the formations in order of age, giving the location of each. On the field trip he showed the party the record of the last chapter of events – the story of the glacial and inter-glacial deposits. We left the cars on Marine Drive and followed the trail leading down to the booming grounds at the mouth of the Fraser River.

On this trail is a point where a till sheet is directly imposed on a bed of fairly well stratified clay, which in turn overlies another till sheet. The inference drawn from this is that the



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glacier had retreated long enough for this clay to be deposited, following which the glacier again advanced and deposited the till. The somewhat remarkable feature is the very definite line of division, indicating a clear change in events but no confusion. After coming up the trail, we crossed the road and entered the bush, where marine stony clay overlies the top till sheet. Here was evidence that the till and the stony clay were deposited in the sea, brought about either by subsidence of the land or encroachment of the sea, and both had been worked over by marine action, impressions of shells being left behind.

We proceeded to Wreck Beach and walked half a mile along the shore to see interglacial peat beds. We noted the large erratics on the shore and speculated as to the probable distance these had been carried. Afterwards we drove to Spanish Banks to see a large section of cliff. As evidence of the irregularity of these deposits it was noted that at this

point there is no till, the whole cliff being formed of successive layers of sand and clay with five small strata of peat, the top clay again containing shell impressions. No shells are actually found in any of these cliffs, the impressions remaining after the shells had been absorbed.

J.J.P.

### **Nature Outing to Keats Island**

On Saturday, May 23<sup>rd</sup>, thirty members were fortunate enough to register for the Keats Island trip and all enjoyed both the generous hospitality of Mr. and Mrs. Carl Gough and the bright sunshine that lasted all day. The sea was not quite as calm as some would have wished, but the trip gave us a complete circuit around Bowen Island and some wonderful views of the mountains in Garibaldi Park. We were taken to the highest point on the Island and to some rocky cliffs. Many common wild plants were seen. Of particular interest was the hairy manzanita that was growing in the same location as the arbutus trees. Two bald eagles were resting on distant trees and later in the afternoon a hair [harbour] seal swam and dived in the water below the cliffs. A [coastal mule] deer was seen briefly but vanished before everyone could enjoy the sight. The grand fir is a common tree on the Island.

#86 September 1953

### **Annual Camp – July, August**

After considerable discussion it was decided to hold the 1953 camp at Glacier National Park. The decision was a happy one and many factors, including the “weather man” contributed to its success. The area was developed extensively some years ago by the C.P.R. owing to its proximity to the spectacular Illecillewaet Glacier, the Nakimu Caves, the rich flora, gorgeous scenery and the challenge of the ancient Selkirks. Owing to the diversion of the railway through the Connaught Tunnel, all tourist development was abandoned leaving a wealth of clearly defined trails and bridges that have since been maintained by the Ranger

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Service. The administration of the camp was carried out according to the usual policy of the Society. We accepted the excellent facilities of the government campground that was in a central location for our activities. As there are no roads into the Park, there was no transportation available for personnel, but the Ranger was very cooperative in the handling of our baggage and supplies.

All trips taken were of a leisurely nature. The botanists botanized and gathered specimens, while the ornithologists with their "Petersons" in one hand and glasses in the other scanned the trees and bushes. The geologists read in the rocks the activities of a million years; and the area was a veritable paradise for photographers of which there were many.

First aid equipment and hands skilled in its use were always available. Owing to the employment of a cook and assistant, camp duties were at a minimum. Forty-six members attended camp at a cost of \$40.00 per person, including return railway fare to Glacier.

Highlights included hikes to Avalanche Crest, the Asulkan Valley and Lower Cougar Valleys, the Great Glacier Trail, a visit to the alpine meadows at Marion Lake on Mount Abbott, the examination of the Nakimu Caves, and the interesting ascent of the polished rock surface to the lip of the Illecillewaet Glacier. It is difficult to assess the value of the camp to the Society, but it is certain that members had an unparalleled opportunity to study the things of nature that brought them the greatest happiness.

S.B.

### **Stanley Park**

We paid no attention to the staring passers-by on that lovely September (20<sup>th</sup>) Sunday morning. All 45 of us were intent on Mr. Bill Hughes who was taking us on a bird trip – and we were curious about the black cloth box he carried under his arm. First he explained how to identify birds by their size and shape, markings, habits and habitat. "The proper procedure", he said, "is to make notes on the spot and verify your identification later." Then, to give us practice he produced a bird from his box and gently held it for us to observe. Those with bird books whipped them out and after flurries of page turning, everyone correctly identified it as a female golden-crowned sparrow. Out came another bird, this time a russet-backed [Swainson's] thrush.

We had been hoping to watch the migration of warblers on this trip for the town side of the Park is usually a very good place for this in both spring and fall. This year however the warblers were late in going south and we saw only two. Nevertheless, our walk through the Park was rewarding. We saw yellow-shafted [northern] flickers, feeding in a tall, half dead cedar. Loud and clear we could hear their cheerful call, "Pee-ee-eep" and "wake-up-Jacob". (Note from Mr. Hughes: When you see flickers, always look for the common hybrid of red or yellow-shafted varieties.) [American] robins were feasting in a wild cherry tree and of course hauling long worms from every lawn.

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On Lost Lagoon we saw a flock of bald-pate [American wigeon] with a few [American] coot, a pied-bill grebe, horned grebe, [northern] pintail, herring gull and short-billed [mew] gull. In the reeds and willows were song and white-crowned sparrows. Nearby was perhaps the prettiest sight of the day – a flock of tiny striped pine siskins feeding on the cones of a small cedar tree. On the north shore of the Lagoon we saw another cedar with several large holes in the trunk gouged out by pileated woodpeckers, the chips still lying below. “These birds”, said Mr. Hughes, “somehow know which trees are sick and insect-ridden; they never attack a healthy tree.”

At Beaver Lake we saw a Maryland [common] yellowthroat and a [spotted] towhee. Two great blue herons flapped across the Lake to perch in a tree, and then back again. They can be distinguished from cranes by their way of flying with necks crooked back. They nest in colonies and there is, or was, a nest of them behind the nine-o’clock gun. On the Inlet the cormorants failed us but we did see three types of gull – Bonaparte’s, glaucous-winged and short-billed [mew] as well as a pair of mergansers. Mr. Hughes made the trip doubly interesting by the many extra bits of information he gave us about birds and their habits. Two things particularly stressed was the importance of being quiet while watching the birds, and the proper thing to do if you ever catch a banded bird. You must never remove the band if the bird is alive and well; and you must send full information to the Canadian Wildlife Service people. Miss Enid Lemon moved a graceful vote of thanks to Mr. Hughes and the group dispersed at Lumberman’s Arch around two o’clock.

J.M.

#87 January 1954

### **The Ash-Throated Flycatcher**

On October 7<sup>th</sup>, 1952 I captured an ash-throated flycatcher (*Myiarchus cinerascens*) at Marpole in Vancouver, B.C. The bird, an adult male in delayed molt was taken in a mixed deciduous growth of maple, alder etc. This bird’s normal breeding range is the arid or semi-arid regions of southwest United States and Mexico, occasionally eastern Oregon and Washington. This is the first record of this bird in Canada. It is now specimen No. 38710 in the Kenneth Racey collection at 6542 Lime Street, Vancouver, B.C. Wm. Hughes

Newsletter Notes: - Mr. Hughes had other interesting banding news. He caught a [dark-eyed] junco in December that had previously been banded by him on November 20, 1948 and also a song sparrow with a band that he had placed on November 22<sup>nd</sup>, 1948. [Both birds would have been 5+ years old.]

### **Geology Trip to Pump Peak**

As usual, Dr. Armstrong was favoured with good weather on Sunday, September 13<sup>th</sup> to take his party up Seymour Mountain to Pump Peak. About 40 of us reported in, coming by bus

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and car. Some were probably more attracted by the outing than geological study and went no further than Mystery Lake, but about 25 made the Peak which was the point of the study.

At about the 3,000 ft. level, where transportation ceases, the granitic rock is left behind. Above that is a mass of old lava that lay across the top of the Mountain on a decided angle, and comes right down to tidewater on the northern [Indian] arm of the Inlet. On the summit is a conglomerate of more recent date. This was previously regarded as volcanic agglomerate but Dr. Armstrong pointed out that the contained stones are mostly rounded and the matrix evidently sedimentary material. The latter date of the conglomerate is evident by the fact that although the granitic rocks have invaded the old lava sheet, the conglomerate is free of intrusion. It was noted that the intrusions were mineralized but only to a slight extent.

NB: It was our intention to report also on the intended visit to Brunette Creek on October 17<sup>th</sup> but it was not made. Dr. Armstrong's luck had run out. The weather was impossible.

J.J.P.

### **Annual Mushroom Hike to Burnaby Lake**

On Saturday, October 31<sup>st</sup>, 32 embryo mycologists turned out to enjoy a full but warm fall afternoon. Our leader, Mr. Foote Waugh, called it a food gathering mushroom trip. Each member would be able to gather a few of the edible kinds to take home. One enthusiastic member brought a suitcase to fill, which he did, to the amusement of all. However, the edible *Armillaria mellea*, honey mushroom, was there in such abundance several suitcases could have been filled. This species of fungus causes untold damage to our forests and fruit trees with losses running into millions of dollars each year. There were about 20 other species found during the afternoon. After a short discourse by Mr. Waugh on the various specimens on display, and a piping hot cup of tea that Mrs. Waugh generously prepared for us, Mr. Foster proposed a hearty vote of thanks to our leader.

C.F.G.

*CFG is probably Mrs. Bruce Gleig. Mr. Gleig served in both World War I and II and was only active in the V.N.H.S. as his health permitted.*

#88 April 1954

### **Terra Nova**

On Sunday March 21<sup>st</sup>, 30 members visited Terra Nova in the Fraser River delta. Mr. Wm. Hughes intended that we should study the snow geese at reasonably close quarters at one of their winter feeding grounds. Several thousand had been seen in the area the previous Sunday. When we arrived, not a single snow goose was in sight. Mr. Hughes thought the birds had probably moved temporarily to another feeding area as it was too early for them to have started their long flight northward.

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We were rewarded by a good showing of [American] wigeon, [northern] pintail and mallards feeding and basking about 75 yards from where our cars were parked. Red-winged blackbirds and song sparrows were present in the bushes and reeds along the dyke. We moved on to Steveston where from the Government and cannery wharves we saw large numbers of red-breasted mergansers. Smaller numbers of oldsquaw, scaup, double-crested cormorant, western grebe and eared grebes, bufflehead, surf and white-winged scoters, red-throated loon, American [common] goldeneye and herring, short-billed[mew] and glaucous-winged gulls.

S.F.

### #89 Summer 1954

#### **Bird Walk – Sea Island**

On April 25<sup>th</sup> the weather was fine as 20 members turned out to look for black-bellied plovers on Sea Island. We did not find our quarry there, but we did find it to be common on the mud flats off the northwest corner of the Island. Five other species of migrating shore birds were also seen: Wilson's or "jack" [common] snipe, Hudsonian curlew [whimbrel], greater yellowlegs, red-backed sandpiper [dunlin], and the western sandpiper.

Mr. Hughes said that some of these species spend the winter here and others merely pass through being seen only for a few days each year.

Mr. Bradley discovered a bird out on the flats with only the head visible. Positive identification was made when the bird flew off proving it to be an American bittern. Five species of sparrow were seen – white-crowned, golden-crowned, fox, song and savannah – the latter being by far the most common.

Other species observed were the double-crested cormorant, great blue heron, mallard, baldpate or [American] wigeon, green-winged teal, [northern] shoveller, canvasback, greater scaup, surf scoter, sparrow hawk [American kestrel], killdeer, rufous hummingbird, violet-green, tree and barn swallows, [northwestern] crow, [American] robin, American [water] pipit, [western] meadowlark, red-winged blackbird, Brewer's blackbird, Oregon [dark-eyed] junco, [ring-necked] pheasant, and crested mynah or Japanese starling. Altogether 36 species were seen during the day.

I. McGinn

#### **Bird Study – Seymour Mountain to Bridgeman Park**

On Saturday, May 1<sup>st</sup> about 60 members turned out for a bird walk led by Dr. McTaggart Cowan. Watchers started on the slopes of Mt. Seymour and ended up in Bridgeman Park at the mouth of the Seymour River. First sighted was a blue grouse perched on a mountain spruce [hemlock]. Another was spotted in the Park where at least 20 other species of birds were seen and heard. There were warblers – the orange-crowned, myrtle,

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Audubon's [both yellow-rumped] and Townsend's warblers. Dr. Cowan explained that the warblers, especially the orange-crowned, come through with the first appearance of leaves.

Also seen were the western [Pacific slope] and Hammond, or Wright [dusky] flycatchers, and the ruby-crowned kinglet. A russet-backed [Swainson's] thrush and its nest were found. A chickadee sang a courting song to its wee mate and a ruffed grouse gave us a wonderful show as it ate buds from a tree. Both a male and female downy woodpecker appeared, and a varied thrush hopped about after food. Dr. Cowan said that had we been there earlier in the day the hermit thrush might have been in evidence, but they disappear by afternoon. The ruff (sic) [Northern rough-] winged swallow and [evening] grosbeak flew around us. It was a beautiful day and when the members parted they scattered along the riverbank for tea before going their various ways.

A.K.

### **Fraser Valley Geology**

Twenty members assembled at the Aldergrove Customs port on Sunday May 16<sup>th</sup> with Dr. Armstrong. He pointed out signs of a continental glacial period that was not observable further west. Then he conducted the party to a large conglomerate erratic that was left by the last glaciation. It is the largest erratic reported anywhere in Canada and is situated on an eminence in an open field. Without reckoning the portion of it that is below ground level, the dimensions of the mass above ground represents an estimated weight of 3,500 tons. The

composition of the rock indicates that it was carried from at least as far east as Hope since there is no formation of the kind nearer.

The next place we visited was a gravel pit at Peardonville. Here we were shown outwash gravels deposited by the late ice over-lying glaciomarine stony clay deposited by a more widespread earlier marine ice sheet. Advance outward gravels of the earlier marine ice are also found here.

After lunch at the Abbotsford Mill Lake the party motored to Clayburn, up Kelly Creek and through Sumas Mountain to Straiton where a stop was made at an open quarry of the Clayburn Company. Kelly Creek is roughly the dividing point between the granitic mass of Sumas Mountain to the northwest [northeast] and the Eocene deposits that contain the valuable clays and shales. These are among the most important of their kind in Canada, containing a variety of raw material for the ceramic industry, suitable for many colours of building material and also fire and china clays.

We drove across Sumas Prairie to Vedder Mountain. Here the formation is much older, believed to probably be Permian age. The particular feature at the spot visited was a quantity of serpentine (hydrous silicate of magnesium) occurring along a major northeast trending fault. This is very showy material; occurring along the line of a transverse movement. A polish is given to this material that produces an appearance justifying its popular name. The variety of information was much appreciated and the somewhat small

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size of the party was an advantage as it enabled us all to get the full benefit of Dr. Armstrong's observations.

### Saturna Island Botany Trip

A most enjoyable and informative weekend under the guidance of Dr. V.C. Brink, was the trip to Saturna Island on Saturday, May 22<sup>nd</sup> to Monday, May 24<sup>th</sup>. An excellent turn out of 34 members took a bus from Vancouver to Steveston, then boarded the coastal ferry *Lady Rose*. After everyone was on board, Mr. and Mrs. Bradley discovered they had left a hamper of food at home that included a cooked ham. Just as the boat was pulling out, their daughter Joyce [with the hamper] came dashing down to the pier only to find the boat wouldn't turn back! We were all thinking they would starve, but they had plenty of tinned food and each time a tin was unpacked Mrs. Bradley exclaimed, "This isn't cooked ham!"

We had a pleasant trip calling at Galiano, Mayne, North Pender and to Saturna Island. On arrival some of us walked about 3 miles to our destination, while others took the boat around with our baggage. A cup of tea was had at the teahouse before our hike.

Well now, to get down to what we found in the way of flowers. On Sunday we walked across the southern end of the Island, about 4 miles to Taylor Beach, and had lunch there. On our way back 17 of us walked over the rocky bluffs to the goat trail. We collected flora of this area. The vegetation was very dry and the tips of some of the evergreen trees were turning brown. The most outstanding flowers found were: godetia (*Godetia caurina*) [farewell-to-spring], lupine [small-flowered] (*Lupinus micranthus*), two species of sanicle, *Sanicula Menziesii* [Pacific sanicle], and *S. bipinnatifida* [purple sanicle], false lady's slipper

orchid [fairy-slipper] (*Calypso bulbosa*), (*Lonicera ciliosa*) [western trumpet honeysuckle], and (*L. hispidula*) [hairy honeysuckle], burnet (*Sanguisorba*), bedstraw or cleavers (*Galium aparine*), soopolallie (*Shepherdia canadensis*), native [sitka] columbine (*Aquilegia formosa*), [Menzies'] larkspur (*Delphinium menziesii*), stonecrop or rockcress (*Sedum spathulifolium* [broad-leaved stonecrop] and *S. stenopetalum*) [worm-leaved stonecrop]; yerba buena (*Clinopodium douglasii*), edible [common] camas (*Camassia quamash*), wild hyacinth [large-flowered triteleia] (*Brodiaea douglasii*), fringe cup [small flowered woodlandstar] (*Tellima parviflorum*), sea blush (*Valerianella congesta*), and [long-spurred plectritis] *V. macrocera*, [western] yew (*Taxus brevifolia*).

Also found were the following: common [wild] gooseberry (*Ribes divaricatum*), [mountain] sweet-cicely (*Osmorhiza divaricata*), western buttercup (*Ranunculus occidentalis*), [meadow] death-camas *Zygadenus venenosus*, woolly leaf [eriophyllum] (*Eriophyllum lanatum*), luzula or wood rush (*Luzula*), mouse ear chickweed or field chickweed (*Cerastium arvense*), [broad-leaved] starflower (*Trientalis*), peavine (*Lathyrus*), soap berry or buck brush [common snowberry] (*Symphoricarpos racemosa* [albus]), rattlesnake-[plantain] orchid (*Goodyera* or synonym), two species of cup clover (*Trifolium*), sweet vernalgrass (*Anthoxanthum odoratum*).

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The most common tree found was the Douglas-fir (*Pseudotsuga taxifolia* [*menziesii*]). Also present were [western] red cedar (*Thuja plicata*), grand fir (*Abies grandis*) arbutus (*A. menziesii*), common juniper (*Juniperus communis*), Rocky Mountain juniper (*Juniperus scopulorum*) and a fair amount of garry oak (*Quercus garryana*).

This outing was a notable one for birthdays and wedding anniversaries. It was Mrs. McGinn's birthday and wedding anniversary, Mrs. Bradley and Bob Houlden's birthdays and Mrs. Bruce Gleig's wedding anniversary. Mrs. McGinn brought a lovely iced cake for the occasion but unfortunately had to leave on Sunday so she wasn't able to be with us during the evening.

On our return trip, as the *Lady Rose* didn't call at Saturna, 12 of us went in a chartered boat to Hope Bay and walked across North Pender Island to Port Washington, arriving just in time to catch the boat, while the rest of the party took another boat around to Port Washington with our luggage. We called in at Ganges, Mayne and Galiano Islands. We were lucky with good weather, only a thunderstorm on Sunday night and light rain Monday morning. In Vancouver it had rained most of the day, which accounts for the light rainfall on Saturna. It gets about 25 inches of rain per year and is classed the same as the Interior of B.C. We all came back with good suntans and a little tired, but I am sure all of us appreciated the energy and interest Dr. Brink took, as well as arranging for our stay at Mr. Jim Campbell's cottages. All who went on this trip will have happy memories of lovely Saturna Island.  
H.L-G.

*Ms. Heather Leveson-Gower, amateur botanist, long-time member and supporter of the V.N.H.S.*

### #90 November 1954

#### **Short Notes on Birds Observed in the Vancouver Area**

Nashville Warbler – I wonder how many observed the migration of warblers during the first 10 days of September. Of interest were the unusual [numbers of] Nashville warblers. I banded 13 during this period. As far as I can ascertain, this is the first observation in Vancouver.

Calliope Hummingbird – Another bird banded by me on August 28<sup>th</sup> was a male calliope hummingbird. While not a record it is uncommon in Vancouver.

Black-Crowned Night-Heron – On Sunday, September 19<sup>th</sup>, a group of 29 went to Westham Island. Near the end of the trip Mrs. Bradley discovered a bird in coniferous trees at the edge of the swimming pool at the George Reifel Lodge. At first it was thought to be a bittern. By the time the entire group got there, the bird had taken flight and had come to rest in willows about 75 yards away on the opposite side of the pool. Closer observation proved it to be an adult black-crowned night-heron. The bird was under observation for over half an



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hour by all members of the group. This is the first published record for this area and the second one for B.C. An immature was taken at Summerland on September 18<sup>th</sup>, 1927.

Western Wood-Pewee - On September 7<sup>th</sup> I found a western wood-pewee trapped on the tip of a burdock plant [*Arctium sp.*]. The bird likely dashed out after an insect and its wing brushed against the burrs. It was caught by the right wing and likely would have died if not found. I carefully removed and banded it and it flew away unharmed. [American] goldfinches have been reported caught in this manner and in some cases have died while so trapped. This was my first observation of a bird being caught in this way.

Wm.

Hughes.

### **Annual Camp**

The annual camp was held July 3<sup>rd</sup> to 10<sup>th</sup> at Nine Mile Creek on Anarchist Mountain, about 15 miles east of Osoyoos. The area examined by the group was of a widely varied nature, from barren semi desert to the fertile valleys of the Okanagan and Kettle Rivers. The mammal population did not make itself particularly evident but birds were present in great profusion. Many botanical specimens were collected and recorded by Mr. Sanford. Our geological activities were mainly confined to an interesting examination of the workings of the old Phoenix Mine in which we were greatly assisted by Mayor McArthur of Greenwood, the present owner.

The local population was in every way cooperative, especially the Osoyoos Historical Society members who paid us several visits in camp. Through the kindness of Mr. Goertz, one of our members who resides in Osoyoos, we were entertained at a beach party and given speedboat rides on the Osoyoos Lake.

We were fortunate to have Dr. Hall in camp who supervised our first aid post. Except for the expert extraction of a few ticks, I am glad to say his duties were very light. I am not sure whether we were sorry or glad but we saw no [western] rattlesnakes.

We were also fortunate to have an excellent cook and assistant and I am sure our camp commissariat left nothing to be desired. Thirty-two members attended the camp. The cost to each was \$38.00 that included transportation from Vancouver and return. We were greatly assisted by Dr. McTaggart Cowan who outlined projected trips and furnished us with checklists for the area.

S. B.

*S.B. could be Stewart Bradley or Sheila Buchanan*

### **Westham Island Bird Walk**

Twenty members turned out for this trip to Mr. Reifel's property on Westham Island. To start the trip Mr. Hughes showed us five live sparrows he had brought with him: a song, fox, and three golden-crowned. These birds were banded and released by Mrs. Bradley. There were several notable records during the day. A black-crowned night-heron was

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carefully observed for some time. A black pigeon hawk [merlin] was chasing [water] pipits above the fields. Several marsh hawks [northern harriers] with their distinctive white rump patches were seen cruising back and forth in search of prey. Many short-eared owls were flushed from the evergreens along the dykes. One great-horned owl was scared out but did not go far. We all had ample opportunity to observe this large owl with its cat-like head. The fields were covered with American [water] pipits.

In the sloughs, on the fields and in the river, the following species were observed: pied-billed grebe, double-crested cormorant, great blue heron, mallard, baldpate or [American] wigeon, [northern] pintail, green-winged teal, [northern] shoveller, red-tailed hawk, [American] coot, killdeer, greater yellowlegs, herring gull, [northern] flicker, rough-winged and barn swallows, savannah, white-crowned, golden-crowned and song sparrows, black-capped chickadee, [American] robin, Maryland [common] yellowthroat, red-winged blackbird, Brewer's blackbird, [American] goldfinch, and [ring-necked] pheasant. The total for the day, including the birds that Mr. Hughes brought with him, was 34 species.

### **Geological Field Trip to Brunette Creek**

Saturday, September 25<sup>th</sup> was one of the few truly beautiful sunny days enjoyed by about 40 members of the V.N.H.S. who turned out to learn what Dr. Armstrong had to tell them about the appropriately named Brunette Creek. Incidentally it was named by Dr. Armstrong's great-great grandmother in the 1860s. The colour of Brunette Creek is due to the presence of a peat bog upstream and to the fact that there is organic matter nearly 23 feet thick on the bottom of Burnaby Lake (from which it flows) that is in a glacial till preventing drainage. The rocks of Brunette Creek are of tertiary origin, as are those along Burrard Inlet, belonging to the Eocene Age. Fossils sampled recently by government paleontologists along the Creek bed are predominantly leaf impressions, particularly walnut and magnolia. This Creek furnishes the only example in the area of a canyon cut in near horizontal strata.

#91 January 1955

### **Bird Observations, December 1954**

European Starling. I wonder if members are aware of the increase in European starlings this year. There have been observations over the past 4 or 5 years but in smaller numbers. From the Christmas Bird Count and field trips by members prior to and after the Count, it is evident that the winter population is increasing rapidly. A total of 2,741 have been counted at the Blenheim Flats, Sea Island and Lulu Island. As all of Lulu Island has not been covered, nor any of the Delta area, this is likely a conservative figure. The starling has been noted in nearly all flocks of Brewer's and red-winged blackbirds. There is a large mixed flock to be seen on Shannon Road just north of Miller Road on Sea Island. Large numbers have also been seen in the Brighthouse area of Lulu Island. Observers should check flocks of these two species of blackbirds for starlings.

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Northern Shrike. There have been many observations of northern shrikes on field trips in this area during the fall. I cannot recall when they have been seen in such numbers in the Blenheim Flats, Sea Island and Lulu Island areas.

House Finches. These birds are numerous in the Marpole area. Flocks of 50 to 80 birds have been seen coming to a baited feed area.

Purple Finches. For some reason the purple finch is not common in the Marpole area this year, nor has it been observed in numbers on field trips. Previously this was the commonest bird at the feeding area.

Slate coloured [dark-eyed] Junco. I observed this species twice in the past month, one on November 28<sup>th</sup> and two on December 27<sup>th</sup>.

Wm. M. Hughes

### **Bird Trip: English Bay to Burrard Bridge, December 12<sup>th</sup>, 1954**

The waters and the shore area of English Bay, from the foot of Alma Road to Burrard Bridge, was studied by a small but enthusiastic bird group. We met at the Bradley home where a red-breasted merganser was available for study and Mr. Hughes gave us an interesting explanation of its characteristics.

Although it rained during our walk and we were inconvenienced by water on the lenses of our binoculars, visibility was reasonably good and we were able to identify the following: white-winged, American [black] and surf scoters; American [common] goldeneye and Barrow's goldeneye; bufflehead, Pacific loon, scaup, eared grebe, double-crested and Baird's [pelagic] cormorants, mallard, [black] turnstone, red-shafted [northern] flicker, [northwestern] crow, chickadee, song and fox sparrows. Fortunately the tide was in and birds were feeding close to shore, which gave us an excellent opportunity to study their characteristics at short range.

S.B.

### **Christmas Bird Count**

The annual bird count undertaken on December 27<sup>th</sup>, 1954 was one of the best thanks to the leaders and members who took part. Seven areas were selected and leaders assigned to each. There were 81 species and a total of 18,280 birds counted. Glaucous-winged gulls head the list with 8,147. Of interest were northern shrikes, European starlings, [American] goldfinch, ruffed grouse and water ouzel [American dipper] that had not been in the count before. A complete list of the species and numbers will be published in the Canadian Field Naturalist. The areas covered, and the leaders and others who took part were:

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Lulu Island: - Dorothy Bradley, Stewart Bradley, Vera Newson, Sheila Buchanan and Billy Picket.

Sea Island: - Ian R. McGregor, Mr. and Mrs. J. Ross MacKay.

Blenheim Flats: - Frank Sanford and two observers.

Spanish Banks and part of the University area:- Frances Morgan, Heather Leveson-Gower and Enid Lemon.

Stanley Park: - Norman Precious and two observers.

Bridgeman Park, North Vancouver:- Mr. & Mrs. G. Stevens, R. Stevens, L. Stevens, B. Stevenson, Mr. and Mrs. Copping, R. Copping, Mrs. Foote Waugh and Mrs. Nola Waugh.

Wm. Hughes

#92 March 1955

### **Bird Trip Stanley Park**

On February 27<sup>th</sup> twenty hardy 'birders' met at the English Bay entrance to Stanley Park and were given an interesting tour by Mr. Hughes. The brilliant sunshine and clear air made colours stand out vividly and, in spite of the cold, all agreed it was one of our best trips. The outstanding experience [of the day] was identifying a ring-necked duck in a large flock of gulls off Brockton Point. This duck is quite rare in the area and it was the first time most of us had seen it. Other birds identified during the day were: varied thrush, song sparrow, Baird's [pelagic] cormorant and double-crested cormorant, American [common] goldeneye and Barrow's goldeneye, American [black], white-winged scoter and surf scoters, great blue heron, short-billed [mew] and glaucous-winged gulls, red-shafted [northern] flicker, Oregon [spotted] towhee, Oregon [dark-eyed] junco, [American] robin, chestnut-backed and black-capped chickadees, downy [woodpecker], golden-crowned and ruby-crowned kinglets, wood duck, [American] coot, mallard, bufflehead, American [common] and red-breasted mergansers, gadwall, [northern] pintail, greater scaup and old squaw.

After some of the group disbanded around 1:30 p.m. the remainder visited Beaver Lake and Mrs. Bradley pointed out an Audubon [yellow-rumped] warbler. This little bird stayed around for sometime thus enabling us to be sure of its identity. According to records that have since been examined, the bird is a rarity for this time of year. Miss Lemon took a couple of colour pictures and although the sun was not bright, we hope the results will be successful. We also saw a couple of [northern] shovelers and several green-winged teal at Beaver Lake.  
V.N.

*Vera Newson, a fine lady and long-time member; worked in the Registrar's Office at U.B.C. and was active at Brock House for seniors.*

#93 April 1955

### **More Bird Notes**

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Long-eared Owl: on February 17<sup>th</sup> several members on Westham Island saw this bird. The species is resident in the area but becoming scarce.

Ring-necked Duck: A male was observed feeding among gulls off Brockton Point on February 27<sup>th</sup>.

Audubon's [yellow-rumped] Warbler: A male was observed by Mr. and Mrs. S.F. Bradley, Miss Enid Lemon and several other members at Beaver Lake in Stanley Park on February 27<sup>th</sup>. The bird was photographed while it hopped around on the frozen lake. This is an early record for this species.

European Starling have been roosting all winter in large numbers in the 1900 block of West 19<sup>th</sup> Ave. It is estimated that the flock numbers about 6,000. On April 3<sup>rd</sup> the birds roosted as usual; April 4<sup>th</sup> there was a noticeable reduction and on April 5<sup>th</sup>, none were in the area. It will be of interest to note what day they return next fall and if their numbers have increased.

Miss E. Lemon reports than an immature was captured and positively identified in a garden in south Burnaby on April 4<sup>th</sup>, 1955. A rufous hummingbird was seen on April 7<sup>th</sup> at the same place. The Harris's sparrow is reported by several authorities as being a rare visitor in southern B.C.

Wm. Hughes

Miss E. Lemon reports that an immature Harris's sparrow was captured and positively identified in a garden in south Burnaby on April 4<sup>th</sup>, 1955. A rufous hummingbird was seen on April 7<sup>th</sup> At the same place. The Harris's sparrow is reported by several authorities as being a rare visitor in southern British Columbia.

### **Bird Walk – Kitsilano Park and Spanish Banks**

In spite of the sleet and cold wind on March 13<sup>th</sup>, 22 members of the Bird Watching group met at 10:30 a.m. at the home of Mr. and Mrs. Stewart Bradley. The walk was under the leadership of Mr. George Francis. Kitsilano Park was the starting point where the identification marks of various ducks, both male and female, were noted in detail. A number of stops were made on the way to Spanish Banks where we had lunch. The group went on to Wreck Beach and followed a bridle path through the University forest. By this time the rain and sleet had stopped and the walk was more pleasant in the shelter of the trees. Mr. Francis made the trip interesting by giving short talks at intervals along the way, telling of the mating pattern of ducks, the nesting habits of gulls, the importance and necessity of the various markings on all birds, the purpose of bird songs, some theories regarding migration, and the important contribution amateur groups can make to the store of knowledge about bird habits.

Some of the birds identified were horned grebe, mallard, great blue heron, greater scaup, Baird's [pelagic] cormorant, Barrow's and American [common] goldeneye, bufflehead, surf, American [black] and white-winged scoters, hooded merganser and red-breasted mergansers, sharp-shinned hawk, [American] coot, black turnstone, glaucous-winged and

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short-billed [mew] gulls, [northwestern] crow, black-capped chickadee, brown creeper, winter wren, golden- and ruby- crowned kinglets, [American] robin, Brewer's blackbird, pine siskin and Oregon [dark-eyed] junco. A couple of bald eagle nests were noted, one probably abandoned; unfortunately the eagles were not seen in the vicinity at the time. After this enjoyable trip the party disbanded, grateful to Mr. Francis for generously sharing his time and knowledge with us.

V.N.

### **Bird Walk – Iona Island**

Mr. William Hughes arranged a trip for March 27<sup>th</sup> to Iona Island that 30 adults and several children enjoyed. The boat left the wharf at the foot of Blenheim Street at 9:00 a.m. and, despite the weatherman's prediction of showers, the day was perfect for the outing.

Possibly the highlight of the trip was a really good view of a snow bunting. Also a large flock of snow geese and with the aid of a telescope the markings of these beautiful birds could be noted in detail. For the first time this season several bird songs, especially that of the [western] meadowlark, were enjoyed. The birds identified were: [American] robin, house finch, Oregon [spotted] towhee, song sparrow, long-billed marsh wren (tule wren), horned lark, [northwestern] crow, [American] bittern, red-winged blackbird, black-capped chickadee, violet-green swallow, killdeer, Oregon [dark-eyed] junco, great blue heron, red-backed sandpiper [dunlin], double-crested cormorant, western, horned and eared grebes, [American] coot, greater and lesser scaup, bufflehead, American [common] and red-breasted mergansers, snow goose, black-bellied plover, short-billed [mew] and glaucous-winged gulls, mallard, old squaw, canvasback, American [common] goldeneye, snow bunting, American [black] scoter, ruddy duck, baldpate [American] wigeon, and [northern] pintail.

V.N.

### **Bird Walk – Tsawwassen Beach**

On April 16<sup>th</sup> thirty members met at Marpole Theatre and proceeded to Tsawwassen Beach under the leadership of Mr. R. MacKay from the Canadian Wildlife Service. Our primary objective was to see the black brant, called 'barnacle goose' as [legend has it that] it grew out of barnacles attached to wood in the sea. This bird's breast is exactly the colour of charred wood and the surest identification mark that we saw to advantage. We viewed the birds through Mr. Moody's telescope and were also lucky to see a flock of red-backed sandpipers [dunlin] during their short spring stay with us. However, their hurried, startled flight gave us little chance for detailed study. A California gull sailed close by and during our lunch a California [common] murre was seen. Then we went to see the heronry at the old ranch at English Bluff but found that last year's nesting trees had been cut down for lumber. The blue herons were settling down for nesting in neighbouring trees. Mr. [Ron] Mackay's birdcalls were the admiration of us all. Forty-six species is a goodly list to collect on one perfect day.

D.B.

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#94 September 1955

### Bird Notes

[American] Avocets: On May 15<sup>th</sup>, a small group of members (Miss R. Ross and Messrs. John Sarles, Ed Moodie and Tom Tenner), observed a pair of [American] avocets on the dyke at the northwest corner of Sea Island. The following Saturday, May 21<sup>st</sup>, the same group and Mr. Frank Sanford, saw (presumably) the same pair in the same area as seen on May 15<sup>th</sup>. On May 23<sup>rd</sup>, I went out alone and was also able to find and observe them. The birds were there at least nine days and as far as I can ascertain, this is only the 4<sup>th</sup> record in B.C. and the second for the area. Wm. Hughes.

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Birds seen in the vicinity of 24<sup>th</sup> and 25<sup>th</sup> Avenue West and Crown Street by A.R. Wooton: Spring – white-crowned, golden-crowned and song sparrows, [spotted] towhee, chickadee, [dark-eyed] junco, varied thrush, red-shafted [northern] flicker, and a tree swallow that stayed all summer.

April – house finch or linnet, nested in the area.

May 5<sup>th</sup> – male and female [American] goldfinch, pine siskin, warbling vireo.

May 15<sup>th</sup> – yellow warbler, band-tailed pigeons, around most of the summer.

May 21<sup>st</sup> – Wilson's warblers.

July 3<sup>rd</sup> – chipping sparrow and young

July 27<sup>th</sup> – [common] nighthawk, killdeer, in vicinity since February, [ring-necked] pheasant (male and female).

July 30<sup>th</sup> – phoebe [?]

August – [western] wood-pewee

Other birds noted during the summer – cedar waxwing, purple finch and [American] robin.

A.R. Wooton

### Bird Walk – Stanley Park

On May 8<sup>th</sup> twenty-one members saw 39 bird species including hundreds of western grebes and Bonaparte's gulls gathering for their spring migration. Vaux's swift were seen for the first time this year and we also saw, at close quarters, barn and [Northern]rough-winged swallows perched on a branch by the Lagoon. A male and female mallard joined the bird walk for a considerable distance. A nesting mute swan broke the wing of a lesser Canada goose in the morning and Mr. Allan Best took care of the casualty. Various duck species swimming in the Lagoon performed mating displays. Mr. Bill Hughes was in his usual top form and we ended the walk by stalking a flock of savannah sparrows and sitting on the grass of the cricket grounds to watch them from a distance of about 20 yards.

D.B.

### Geology Walk – Barnet Road and Burnaby Mountain

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Dr. Armstrong had announced that the May 7<sup>th</sup> walk would be cancelled if rain were falling at noon. It did not fall then, but it commenced just as we (28 of us) met at 1:30 p.m. at the Kootenay Loop. It spoke well for our interest in Dr. Armstrong's geology excursions that so many would turn out in spite of threatening weather.

We first visited the neighbourhood of the new Standard Oil Refinery where much trouble had been experienced by the moving hillside. This occurred when the site was leveled for the Refinery and the road was cut into the hillside. This occurred when the site was leveled for the refinery and the road was cut into the hillside. The movement of the topsoil underlying gravel and till caused much anxiety as fault fractures developed across the face in which water collected and accelerated the movement. This water had to be drained off and the next question was whether the fractures possibly extended down into bedrock. The rock is the Eocene sandstone, the normal dip of which is to the south. If the dip should not be normal, then the source of the movement might be deep-seated and disaster could occur. Drilling was carried out and the dip was found to be normal so the problem was then only a matter of watching the sliding mass until it came to rest at a proper angle of repose.

We moved to the face of Burnaby Mountain to observe the considerable exposed mass of conglomerate. At first this looks like gravel left behind by the retreating ice. Closer inspection however reveals that it is not gravel, although the weathered surface may be loose material. The Conglomerate is fairly consolidated and is composed of water-worn stones, probably deposited by an Eocene river.

Proceeding further east to Barnet, much finer material was noted in the same formation – cross bedding of sand and shale in which many fossils were obtainable – leaf impressions similar to those in the Eocene rocks around Vancouver. A small inter bed of red volcanic tuff was also seen here. This exposure forms part of a large slide block that has broken away from the north face of Burnaby Mountain. Distorted bedding is prevalent in this exposure due to sliding. Slide topography is characteristic of the north side of Burnaby Mountain.

It had been Dr. Armstrong's intention to take us up the mountain to observe the contact of the Burrard and Kitsilano formations. This however would have involved bush whacking and as we were already wet enough it was decided to call it a day. We finished a pleasant afternoon with thanks to Dr. Armstrong for his courtesy and patience. J.J.P.

### **Weekend at Departure and Nanoose Bays**

To the dozen adults and three children who were brave enough to defy the unsettled weather, the weekend of May 21<sup>st</sup> - 23<sup>rd</sup> will long remain a happy memory. Under the leadership of Dr. Brink, assisted by Mrs. Brink, the group was guided from the meeting place at Nanaimo dock to the Marine Biological Station at Departure Bay. There Dr. Stephenson, the assistant director of the Station, led us through the various experimental units. He showed us several methods of tagging fish so their movement could be watched, as well as the tests being made to determine the effect of power dams on salmon and other fish. A huge chiton, [*Cryptochiton stelleri*] about 10" long was viewed with great interest. Many life-like pictures lined the walls of the corridors showing various studies of fish.



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After lunch on the Station grounds we visited the beautiful garden owned by Mr. and Mrs. Barclay. They are collectors of many species of begeris [berberis ?] and rhododendrons. A short drive through avenues of [Pacific] dogwoods brought us to the Sea Haven Cottages on Nanoose Bay.

Sunday morning two carloads of us drove to Powder Point, the former site of a large Naval station. The locked gate across the road indicated that the fire ban had already been imposed. However, we were allowed to proceed on foot. Our trail led across hillsides covered with blue [common] camas, low larkspur, yellow mimulus [monkey-flower], cranesbill [common stork's bill], [large-flowered] blue-eyed Mary, and native clovers. Several clusters of pink [pretty] shooting stars and two species of sea blush were found on the more mossy slopes. The soil in this area was too shallow to allow much forest growth, but Douglas-fir, arbutus, broad-leaf [bigleaf] maple and Garry oak were studied. On the exposed rocky cliffs overlooking the Bay large clusters of [brittle prickly pear] cactus were carefully avoided by those who wished to rest. Many interesting grasses were pointed out by Dr. Brink. Among them were rip-gut grass, crested dogtail and melica, a grass with a bulbous root.

In the afternoon, despite threatening rain showers, we drove to the Englishman River salt flats at Parksville. We were greeted by a choir of [western] meadowlarks who found the expanse of thick dry grass very much to their liking. This area used to be a feeding area for thousands of Brant. Despite the inroads of bulldozers, there were still many plants to be seen that are peculiar to this area: bind grass, lyme grass [wildrye], sand blue grass, poke [Vancouver ground cone], [meadow] death camas, burnet, and strawberry (from which our cultivated variety had its origin.) A shrieking killdeer led us to believe that we must be near its nest but no one was fortunate enough to see it. A short side trip into the woods on the south side of the River revealed rattlesnake [-plantain] orchid, [spotted] coral root orchid, purple pea vetch, blue violet and a variety of gooseberry seen only on Vancouver Island [gummy gooseberry, *Ribes lobbii*].

On Monday morning we made a hurried trip to Moorecroft to observe the rocky seashore flora. In the afternoon Mrs. Brink took us out over the sandy beach in front of the cottages for a rewarding marine biology excursion. Sea worms, flat worms, tubeworms, limpets and hermit crabs were examined. 'Goopy ducks' [most likely horse or gaper clams] were dug up for observation and a fine specimen of a 20-rayed starfish [sunflower star] was found just before we had to bid a reluctant farewell and race for the three o'clock ferry.

M.H.K.

*Miss Moore wanted her camp to remain a natural area but the United Church of Canada developed it into a summer camp known as "Moorecroft".*

### **Bird Trip to Musqueam Indian Reserve**

On May 22<sup>nd</sup>, 18 bird watchers met at the corner of 41<sup>st</sup> and Marine Drive for a bird trip to Musqueam Indian Reserve. Mr. Wm. Hughes, our leader, brought along four birds – a russet-backed [Swainson's] thrush, a MacGillivray's warbler, a Lincoln's sparrow and a pileated [Wilson's] warbler – that he had banded. He showed them one by one and we tried to identify them before he gave us their names and distinctive recognition features. Many of

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us found that a close up of a bird's colouration looked somewhat different from a more distant view, perhaps in colouration and certainly in size.

We walked south in the sunshine past the golf club to the Fraser River and lunched opposite the Iona Island wharf with its rickety ladder that some remembered from an earlier excursion. After lunch we walked along the shore. Although no uncommon birds were seen, most of us were amateurs and could still add a number of new species to our checklists by the end of the day. Bill Hughes with his usual contagious enthusiasm frequently gave us interesting bits of bird lore, such as how to recognize the call of the black-throated gray warbler, or how to distinguish between the house finch and purple finch.

A list of birds identified follows. Noticeably abundant were pileated [Wilson's] warblers and pine siskins: [great blue] heron, bald eagle, killdeer, glaucous-winged gull, violet-green, barn and cliff swallows, russet-backed (Swainson's) thrush, northwestern crow, black-capped chickadee, bushtits, [American] robin, orange-crowned and yellow warblers, western meadowlark, red-winged and Brewer's blackbird, house finch, pine siskin, willow [American] goldfinch, Oregon [spotted] towhee, savannah, white-crowned, song, and golden-crowned sparrows. One question of identification was raised by a little Indian boy when members intent on watching barn swallows, filed past him. Were *we* the Salvation Army?!

J.R.M.

*Dr. John Ross MacKay*

#95 November 1955

### **Cultus Lake**

Thirty members met at the Cultus Lake parking lot on Sunday, June 5<sup>th</sup> to study the mammals of this area under the leadership of Dr. Ian McTaggart-Cowan. He first showed us stuffed specimens of the mammals that can be found here: Coast mole, Bendire [Pacific water] shrew, dusky shrew, wandering shrew and Trowbridge's shrew. Townsend's vole and creeping voles, white footed [deer] mouse, and [Southern] red-backed mouse [vole], jumping mouse, short-tailed weasel, Douglas' squirrel, mink, and, not shown, mountain beaver. Foote Waugh [released] a Coast mole that he had captured in his garden.

We left the lot and after about ten minutes, we came to a trail up which we navigated, overturning logs in search of moles and mice. This was successful only to the point of finding several runways. We returned to the road and after another few hundred yards we

followed another trail to an old corduroy road, then down back along the trail above the Lake to the main road, a distance of about a mile and a half. The group was observant and interested and Dr. Cowan's knowledge was truly appreciated. The only wild mammal seen however was a two-point buck mule deer.

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The birds were varied and numerous. The prize was a bushtit's nest found in a willow about 8 feet above ground. It was a hanging, covered nest with an opening about 1 ½" across. The skull of a band-tailed pigeon was found, and one large old fir showed well the diagonal method of feeding peculiar to the pileated woodpecker. A group of Vaux's swifts and swallows were observed and Dr. Cowan pointed out the variation in flight of the two birds – the former giving the effect of flapping its wings alternately.

The plants observed in the area were not unusual, with the notable exception of the buck brush [snowbrush] *Ceanothus velutinus* or California laurel which was plentiful.

After returning to the parking lot we drove to Spring Bay about two miles along the Lake, passing the fish hatchery on the way. This time we were in search of salamanders and one red salamander [Ensatina]. The latter was a female found in a stump along with a cluster of nine brown eggs that will hatch this month. The young will take two to three years to reach maturity. They are now residing at UBC in Dr. Cowan's care.

### Observations

Mammals: - mule deer (male)

Birds: - black-capped [Wilson's], Townsend's, black-throated gray warbler and MacGillivray's warblers, [American] robin, Oregon [dark-eyed] junco, Vaux's swift, bushtit (also nest and young), pileated woodpecker, western tanager, violet-green [swallow] and song and white-crowned sparrows.

Plants: - Chief coverage of area – Douglas-fir, western [Douglas] maple and vine maples, red alder, California hazel [beaked hazelnut], [Pacific] ninebark, [Sitka] columbine, Saskatoon or service berry, mauve [marsh?] violet, yellow violet, oceanspray (*Spirea*), buckbrush [*Ceanothus velutinus*], pea vetch, [common] snowberry, fringe cup, saxifrage, red-flowering current, Heuchera [alumroot], mock-orange, [broad-leaved] star flower, black-capped [black] raspberry, geum, [large-leaved avens], honeysuckle, seablush, wild [Nootka] rose, spikenard [false Solomon's seal], creeping [trailing] blackberry.

V.S.

### **Garibaldi Camp, First Week (July 30 – August 6)**

From Saturday morning until late Monday we waited for the storm to cease. At last we were flying over the Fraser Delta, Point Atkinson and in half an hour, landed on Garibaldi Lake. A very cold and bedraggled advance party gave us no enthusiastic welcome; they had been driven out of their campsite. After a valiant attempt to set it up, the site had become a raging torrent. Their refuge was the little Q.C.A. [Queen Charlotte Airlines] cabin. A few of us climbed the steep ascent to the campsite and stayed there that night while the rest remained with the advance party. Tuesday morning brought warmth and sunshine that enabled us to establish a permanent camp on a higher level.

On Wednesday we climbed to Panorama Ridge and looked down on Garibaldi Lake and the far shore above which towered Garibaldi Mountain, the Glacier Pikes, the Sphinx and Table Mountain. Some climbed the Cinder Cone on Thursday, while others explored the meadows and Mimulus Lake. On Friday we took a trip to the Barrier, a most spectacular sight. Here

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we found pyrites imbedded in the rock – perfect cubes. Others stayed and fished in the beautiful Lesser Garibaldi Lake.

Although the flora was not as prolific as in other years, we were not to be disappointed. Every evening Dr. Brink laid out his specimens at the campfire. The Black Tusk meadows were carpeted with heather and true buttercups. We found lupines in profusion, avalanche [yellow glacier] lily, Indian potato [western spring beauty] the globeflower, false dandelion [*Agoseris* sp.], mountain sorrel and bearberry [kinnikinnick]. There were [broad-leaved] willow herb, hawkweed, fleabane and Indian paintbrush. The red mimulus [pink monkey-flower], Tolmie's saxifrage, rock cress, anemones and crowberry were among Dr. Brink's collections. The lovely [subalpine] fir was much in evidence as well as the white [bark] pine and mountain hemlock.

Few of our party climbed the Black Tusk on Saturday, the day most of us vacated camp. We found the walk out strenuous enough. After a night in Garibaldi Lodge we boarded the train for our homeward journey. We looked back at the heights from which we had come and made a resolution that we would return again to climb the Black Tusk. A.G.

*Arnold Greenius was President of the V.N.H.S. from 1969 to 1971. He was an Engineer with the B.C. Research Council. He and his wife Betty were general naturalists and long-time supporters of the V.N.H.S who participated in many trips, camps and banquets. They were the epitome of quiet, intelligent, helpful members.*

### **Garibaldi Camp, Second Week (August 6 – August 13)**

The second week campers were composed of two groups, namely (a) those who were at camp the first week and who had sufficient holiday time to remain an extra week, and (b) those crafty schemers who, reasoning that the first week of camp would be burdened with all the difficulties of establishing a mountain camp, decided it was easier to arrive after the camp was operating smoothly.

We began our first day in camp on Saturday, August 6<sup>th</sup>. Six campers, dubbed the 'softies' left Vancouver by air on Saturday morning and arrived in camp by noon, feeling quite sophisticated about their mode of travel. The remaining diehards left Vancouver the day before, stayed overnight at Garibaldi Station, and began their trek into the campsite on Saturday morning. As the journey progressed it was plainly evident that some were not as young as they used to be and, wearily hobbling on to Black Tusk meadows, they conceded that the Wright Brothers had something when they invented the flying machine. The first few hours in camp resembled troops in the process of occupying a stronghold vacated by the enemy. We dashed from tent to tent, claiming any loot that remained and commandeering the bed with the best set of springs (conifer boughs to the uninitiated). Discreet inquiries were made into the snoring habits of our fellow campers before choosing a stable mate. By Saturday evening, all was organized and we anticipated the coming week with great expectations.

With kind deference to those who hiked into camp and were nursing blistered feet, we decided to take a short hike on Sunday and settled for the Barrier. This spectacular cliff, approximately 800 feet high and half a mile long, impressed each of us with the superb beauty of Garibaldi Park. Our botanizing in this area was cut short by the onset of rain that

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fortunately proved to be the only rainfall of the week. Monday was a bright and cheerful day and we set out for Empetrum [Ridge]. This proved to be a most interesting foray. Some of the slopes along Mimulus Lake, Black Tusk Lake and Helm Lakes were bedecked with the gorgeous array of alpine flowers for which Garibaldi Park is famous.

On August 9<sup>th</sup> the main party spent the whole day botanizing on Panorama Ridge (approx. altitude 6000 feet). Perfect weather prevailed and several hundred feet of colour film was forthwith consumed. A smaller party set out to climb Sphinx Mountain (alt. 8000 feet) and in the process, to search Sphinx Glacier for the presence of ice worms. Both objectives were accomplished. The ice worms (Oligochactous annelids) [*Mesenchytraeus sp.*], were exceedingly abundant in the silt at the bottom of the pools of ice water on the glacial face. They were about  $\frac{3}{4}$ " in length, black, and resembled a horsehair in general appearance. The prevalence of snow fleas [an elongate-bodied springtail – not a flea] (*Achorutes ninicolus*) in glacial pools was also of interest.

Wednesday was a holiday in preparation for the ascent of Black Tusk the following day. The conquest of Black Tusk on August 11<sup>th</sup> was a sight to behold. There were eighteen in all, many of whom had never climbed higher than the tenth floor of the Marine Building, who attempted to navigate the chimney of the Tusk. We will never forget the calm serenity of John Booth as he guided his inexperienced flock to the summit without incident, proving that with skilled leadership, mountain climbing can be a fascinating undertaking.

Friday was reserved for the exploration of the Cinder Cone. In addition to botany, we took time to explore a tunnel some 385 feet long at the eastern side of Helm Glacier. Saturday was occupied in breaking camp and in doing so; we realized that we did not avoid all the drudgeries of camping by going the second week. In one sense, breaking camp was more difficult than establishing it because all the heartfelt memories of this "week of a lifetime" went with it.

Two activities that ran throughout the week are worthy of mention. First of these was the campfires. We were fortunate to have the Garibaldi Player's Club at our service and each evening they provided a round of high quality spontaneous entertainment. The hidden talents that turned up were beyond all expectation. Another activity, involving the whole camp, was the collection of beetles. Several individuals who didn't know how to differentiate a beetle from a bug became experienced collectors before the week was up. All specimens were preserved in alcohol, carefully labeled as to date, locality, habitat and altitude, and were later forwarded to a coleopterist for identification. The results were worthwhile; in all 250 individuals were taken and some proved to be rare additions to British Columbia's *Coleoptera* Fauna.

This report of the second week at camp would be incomplete without some mention of the camp organization. We had nothing but praise for our cook and his assistant who certainly made the best of the rather trying cooking facilities. Mrs. Neild and her committee of ladies became past masters at the art of making lunches, and Mr. Frank Sanford did an excellent job of keeping the camp running smoothly.

R.S.S.

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*Dr. Richard Stace-Smith and his wife Joan and their family of 2 boys and 2 girls were involved in V.N.H.S. field trips and led camps. Their special interests were fungi and astronomy on clear nights at camp. Dick was later President (1960-1962) and selflessly served in many ways over the years. He was and is a strong supporter of the conservation movement.*

#96 December 1955

### **Garibaldi Camp**

The list that follows gives high and low temperatures and general weather conditions recorded during part of the time that the Natural History Society was camping in Garibaldi Park. It will be of interest to members who know the area.

| Date                       | Weather      | Temp. Low             | Temp. High    |
|----------------------------|--------------|-----------------------|---------------|
| Wed. Aug. 3 <sup>rd</sup>  | BR wind SW   | 29.5 F.               | 58 F.         |
| Thu. Aug. 4 <sup>th</sup>  | CL wind W    | 32.5                  | 65            |
| Fri. Aug. 5 <sup>th</sup>  | CL wind W    | 37                    | 69            |
| Sat. Aug. 6 <sup>th</sup>  | CL wind W    | 43                    | 74            |
| Sun. Aug. 7 <sup>th</sup>  | Rain/wind SW | 44                    | 63            |
| Mon. Aug. 8 <sup>th</sup>  | BR wind SW   | 39.5                  | 58            |
| Tue. Aug 9 <sup>th</sup>   | CL wind W    | 34                    | 65            |
| Wed. Aug. 10 <sup>th</sup> | CL wind W    | 36                    | 66(85 in sun) |
| Thu. Aug. 11 <sup>th</sup> | SC wind SW   | 38                    | 64            |
| Fri. Aug. 12 <sup>th</sup> | _____        | 33                    | ----          |
| BR = Broken Clouds         |              | SC = Scattered Clouds | CL = Clear    |

### **Geology Field Excursion to Cultus Lake**

On a sunny Saturday, September 24<sup>th</sup> morning, Dr. J.E. Armstrong led a well-attended excursion of 25 people to Cultus Lake. The first stop was Maple Creek, several hundred yards upstream from the highway, to examine a fault and overturned fold in the Cultus shales. We were given the general background of the shales, their probable age, origin, extent and structure. On the way back we paused to examine a boulder of greenish volcanic breccia.

After a leisurely picnic lunch by the lakeshore we drove to Frost Creek to see a good section of glacial outwash sands and gravels. Then we ascended the flats of the Columbia Valley between Vedder Mountain and the Cascades and drove to and along the International Boundary. We had a good view of several terraces that stood out prominently in the valley.

Our next stop was on the south side of Vedder Crossing to look at the glacially smoothed surface of Vedder Greenstone. An unusual feature of the glaciated surface was miniature crag and tail topography. Quartz, because of its superior resistance to glacial abrasion,

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formed the 'craggs' whereas less resistant minerals formed streamlined 'tails' in the lee of local concentrations of quartz. On the north side of Vedder Crossing we looked at a zone of intensive shearing in the Vedder Greenstone, the sheer surfaces appearing dull metallic or bright according to their reflection in the sun.

About a mile west of Ryder Lake, on the Ryder Lake road, we saw the farthest eastern known exposure of an unusual Pleistocene marine till that was overlain by a younger and quite different till. In a nearby road Dr. Armstrong said there were fossil ammonites (cousins of the nautilus) and true to his word, he quickly found one for us. He explained that ammonites could be useful index fossils in geologic dating so everyone was doubly interested in the find.

Retracing part of our route, we crossed the Chilliwack River and stopped by a fresh road cut on the northeast end of Vedder Mountain where we were shown a piece of a garnetiferous mica schist. The location is unique for a record western occurrence of garnets. J.R.M.

#97 March 1956

### **Bird Notes**

Dr. Udvardy of the Zoology Department at UBC is anxious to continue his studies this year on the nesting behaviour of common garden birds. Cards [B.C. Nest Record Scheme] were sent out last year showing the information required and similar cards are available this year. As many members as possible are asked to co-operate in this work. If you would like to take part please write to the Secretary, Department of Zoology, U.B.C. and the Nest Record Cards will be sent to you. Information is desired right through until August.

A report has been received from the Department of Zoology that contains a summary of the Nest Record Cards received last year. The report, written by M.T. Myres, is too long to be printed in the Bulletin but will be circulated to interested members of the Society.

*Note: Tim Myres, with the encouragement of Dr. I. McT. Cowan and Dr. M.D.F. Udvardy, started the B.C. Nest Record Scheme in 1955. See Myres, M.T. (1957) "A Nest Record Scheme in British Columbia". Murrelet 38(3):30-31. Although Tim's effort formalized the collection of bird nesting information, many naturalists were already gathering similar data. For example: Violet Gibbard of Naramata, and R.A. Cummings of the V.N.H.S. The B.C. Nest Record Scheme, once known as the Pacific Nest Record Scheme, continues into the present.*

*Dr. M.D.F. Udvardy was Hungarian born. A professor of ornithology at U.B.C., he directed a number of graduate students. Much of their field work was done on Mandarte Island. He left U.B.C. for a university position in California as well as becoming editor of a number of Audubon Society field guides.*

### **Observations of our Less Common Birds**

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Clark's Nutcracker – During January 1956 while the weather was quite cold, a lone male Clark's nutcracker (crow) was seen by Mrs. Stevens in her garden in North Vancouver. The bird was later captured, positively identified and banded by Mrs. S.F. Bradley.

Black-Crowned Night-Heron– On September 18<sup>th</sup>, 1955 an immature black-crowned night-heron was seen at the south end of the dyke that runs along the west side of Lulu Island. A number of members were able to observe it. This is the second observation of this species in the Vancouver area by members of the Society. The first was on September 19, 1954 at Westham Island. Of interest is to note the dates of both observations – just one year apart.

Harris's Sparrow - On October 26<sup>th</sup>, 1955 a number of Harris's sparrows were observed in the Marpole area, six being seen at one time. October 28<sup>th</sup>, seven were captured and banded. October 29<sup>th</sup>, one was captured and banded. All were immature. On October 30<sup>th</sup>, Mrs. Bradley saw one at 1848 Mathers Avenue in West Vancouver. She had several observations and bandings of this species at later dates, the last being reported on November 27<sup>th</sup>. While this is not a new record they are by no means common, as there have been very few reports of this species in the area.

Mourning Dove – This species appears to be on the increase on Sea Island. Many observations had been reported [in 1955] from early spring, through the summer and late fall, and as many as 30 were reported in one day's observation. The last observation, made December 14<sup>th</sup>, 1955, was on Blenheim Flats. On November 13<sup>th</sup> a pair was seen by six members while on a field trip in that area. The day was quite cold and windy; the ground was frozen hard and the ice on the sloughs was strong enough to walk on.

European Starling – This species has been reported several times in this Bulletin. On November 17<sup>th</sup> they returned to their night roosts in the 1900 block on West 14<sup>th</sup> Avenue. Last year they only roosted there but this year they have increased in numbers and are now roosting in the 1900 blocks of West 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 17<sup>th</sup>, and 19<sup>th</sup> Avenues.

Wm. M. Hughes.

### Mycology Trip

On November 5<sup>th</sup>, twenty members met in the Lynn Canyon Park in North Vancouver and spent the first hour foraging for mushrooms. The heavy rains of the previous few days had produced a great variety of extra large mushrooms. Later we gathered around a picnic table where Mr. and Mrs. Waugh arranged and identified the specimens. The fungi were grouped according to spore colour. Characteristics and points of identification for each genus were noted. The following is a list of mushrooms collected, using the proper [scientific] names so as to enable reference in standard textbooks, common names often being misleading or non-existent.

#### White spored fungi:

- |                                    |   |
|------------------------------------|---|
| 1. <i>Cantharellus cibarius</i>    | 8. <i>Mycena</i> (Elfcap) (several species) |
| 2. <i>Cantharellus tubaeformis</i> | 9. <i>[Pleurotus] porrigens</i>             |
| 3. <i>Hygrophorus eburneus</i>     | 10 <i>Amanitopsis vaginata</i>              |



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4. *Armillaria mellea*
5. *Armillaria ponderosa*
6. *Laccaria laccata*
7. *Laccaria amethystina*

- 11 *Rusula* (several species)
- 12 *Lactarius deliciosus*
- 13 *Lactarius lignyotus*
- 14 *Lactarius* (2 species)

### Brown spored fungi

1. *Cortinarius* (several sp.)
2. *Hebeloma* (several sp.)
3. *Inocybe*
4. *Hypholoma* (Sulphur tuft)
5. *Sparassis* (Cauliflower fungus)

### Black spored fungi

1. *Gomphidius* [*Chroogomphus*] *tomentosus*
2. *Helvella lacunose*
3. *Boletus chrysenteron*

The species *Armillaria ponderosa* was thought at first to be a new find, but after correspondence with Dr. J. Walton Groves of the Dominion Herbarium, it was established that it is actually quite common in certain areas. It is edible and has been collected as a delicacy by the Chinese and Japanese. It was a very enjoyable and education afternoon.

R.P. Copping

**Note:** Foote and Alice Waugh matched and identified species with superb Kodachrome photos they had taken. Whatever became of these records?

### Stanley Park

On January 22<sup>nd</sup> twenty-four members met Mr. Bill Hughes at the English Bay entrance to Stanley Park. About 30 species of birds were identified, most of which were waterfowl, including the following: double-crested cormorants and Baird's [pelagic] cormorants, 3 species of merganser, 2 species of goldeneye, surf and American [black] scoters, about 50 green-winged teal, oldsquaw, ruddy duck, bufflehead, greater scaup, [northern] shoveler, [northern] pintail, canvasback, horned grebe and American coot. We were shown a water ouzel [American dipper] in the creek and in turn the bird showed what he could do in a display of 'hydrobatics'. We finished our round at Lumberman's Arch where in 1926, there was a well-established rookery of great blue heron, or blue egret, in the trees just above the culvert west of the Arch.

Dorothy Bradley

#98 May 1956

### Boundary Bay

Dr. Ron H. Mackay led a very select group of three ladies and three men to Boundary Bay to see the black brant in large numbers. High tide at 1400 hours was their feeding time on an abundance of *Zostera marina* (eel grass) along the shore. There were numerous hunters'

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blinds that enabled us to get close to a large flock. We did our best to call them closer with low guttural gr-r-r-r, gr-r-r-r, gr-r-r-rs, when a jet aeroplane came over and scattered every bird to the winds. Then it was a great sight to see battalions of them manoeuvring for miles low over the Bay in perfect line formations. In Washington State, 125,000 black brant were counted this winter so they appear to be holding their own at present. The total number of species seen that day was 32. We saw one female bufflehead being courted by no less than 8 males. The green-winged teal were there in large numbers. We also found 17 dead shore birds.

Dorothy Bradley

### **Little Mountain and False Creek Flats [Geology]**

The rock at Little Mountain was considered to be a volcanic plug or a dyke, but a vertical contact with the local sandstone was never found; the conclusion reached is that the basalt is a remnant of a flow that was originally of larger extent, other portions of it having disappeared as the supporting sandstone eroded.

The vertical columnar structure confirms this theory, as vertical columns are formed when the flow is relatively free, whereas horizontal columns form when the cooling mass is restricted. The columnar structure can still be studied in the old quarry that is now being beautified as part of the Queen Elizabeth Park Arboretum. Before the quarry was cleaned up, smaller specimens of the columns could be picked up, but these have disappeared in the new beautification [work].

We moved on to the False Creek Flats that originally extended to Grandview, but the Flats east of Main Street were filled in to provide for a railway terminus. The point we visited was at the end of Fraser and Burns Streets where a puzzling formation has been preserved. This is a dark coloured mass of volcanic tuff, or consolidated ash. There would not be anything remarkable about this if it did not contain stones. Dr. Armstrong told us that he took a party of 40 expert geologists there recently and each had a different theory. It would be simple if the stones were irregular in form, as they might then be considered to have been emitted with the ash from a volcanic vent. However, all the stones are smooth and have the appearance of being water worn. The only conclusion that fits the facts is that the ash was deposited on beaches or in lagoons, there to be mixed with the pebbles before consolidation.

The group was alarmed to notice that the hand of progress, evidently directed by the City or the railway company, was threatening this unique natural feature. Already bulldozers have covered some of the deposits and the brush has been slashed. Members of the group asked Dr. Armstrong to bring the matter to the attention of the Executive of the Society so that representations could be made to the proper authorities before it was too late. It was also suggested that a small park might be created in which these strange black mounds could be preserved.

J.J. Plommer

### **Victoria**

At ten o'clock Saturday, April 14<sup>th</sup>, the early arrivals from Vancouver and several local members, gathered at Thunderbird Park in Victoria where Miss Enid Lemon outlined the

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plans for the day. Six carloads of us drove to Clover Point for a look at water birds, among them the colourful harlequin ducks, scoters and scaup.

Next we went to the home of one of the Victoria members on the edge of the last tract of Hudson Bay land and thrilled at the sight of a rufous hummingbird darting in and out of a red-flowering current bush, showing its brilliant red breast. We walked through a beautiful stand of Garry Oak and saw large numbers of birds – California quail, [ring-necked] pheasant, chestnut-backed chickadee, white-crowned sparrow, russet backed [Swainson's] thrush, purple finch, hairy woodpecker, killdeer and a female Brewer's blackbird.

In the grassy field we saw and listened to the European [Eurasian] skylark as it rose to great heights, singing all the time, then faster than the eye could follow, it plummeted to earth. A sight we would long remember. Among the spring flowers were masses of dog-toothed violets [white fawn lily], buttercups, pink [Henderson's] shooting stars, [grassland] saxifrage and satin-flower.

The Victoria group served us a picnic lunch on the rocky cliffs of Ten Mile Point. As we looked across the blue water at the fish boats returning for the weekend, and watched a flock of brant feeding, the boat for Victoria carrying more members from Vancouver rounded the Point. Most of the afternoon was spent in the vicinity of Diamond [Gordon ?] Head. At the home of Mrs. M. Bowden, a long-time resident of the district, we saw a cardinal and several budgies in her aviary. Amidst a pastoral scene of feeding sheep and baby lambs, we wandered across fields bordered with expanses of wild daffodils and saw raccoon tracks, [Western] trillium, a downy woodpecker, and an [American] robin's nest containing two blue eggs.

At four o'clock we were met at the Museum and served a refreshing cup of tea by Mrs. Soulsby and other members of the Victoria group. In the evening 15 of us met at the Nutshell for a delicious dinner. We retired early so as to be on hand to greet the group arriving from Vancouver by plane Sunday morning. Thanks must be given to Enid Lemon for the planning, organize and carrying out of the day's activities. M.H.K.

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On Sunday April 15<sup>th</sup>, 1956, fourteen members from Vancouver arrived in Sydney via T.C.A. [Trans Canada Airlines]. We were met by members of the Victoria Natural History Society under the leadership of Mr. Clay and treated to a welcome cup of coffee. We were taken to a nearby field to see and hear European [Eurasian] skylarks. This area is the only place that skylarks have adapted themselves in North America.

We met other members of our group (who had driven from Victoria) at Patricia Bay and found that altogether there were 22 from Victoria and 34 from Vancouver present. We saw many water fowl, including black brant, American [black] and white-winged scoter, bufflehead, horned grebe, greater scaup, glaucous-winged, California, Bonaparte's and short-billed [mew] gulls and red-breasted mergansers. We also found orange-crowned warblers, brown creeper, horned lark and Belding's and savannah sparrows *[Note: Belding's*

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*is now regarded as a California race of the savannah sparrow.]* By the end of the day some 57 species of birds were seen.

We visited a private estate at Jackson's Point where we were treated to a box lunch by the Victoria group. After lunch, some of us went on to Robert Point and saw surf scoters, black turnstones, one [black] oystercatcher and an Aleutian [rock] sandpiper. After dinner at the Sydney Hotel we arrived at the airport and took 'wings' back to Vancouver. We were well taken care of by the Victoria Natural History Society, including our former member Miss Enid Lemon. We hope to be able to do the same for them some day.

H.L.G.

#99 October 1956

### Bird Notes

Turkey Vulture - observed on Keats Island on June 30<sup>th</sup> by Messrs. John [Jack] Sarles, and Alistair Muir, Mrs. Austin and Misses Ross, Roberts and Stocking.

Virginia Rail – Mr. Broadacres, a Park Board employee, phoned in this observation at Beaver Lake in Stanley Park. Several members of the Society observed it at later dates and when last seen there were only two young.

Tree Swallow – While leading a field trip on June 30<sup>th</sup> to Westham Island, I saw a great many tree swallows nesting in old pilings on the west side of the Island. There were over one hundred pairs. During my observations over the years I have found only a few in this area and believe that such a large concentration is worth noting.

Western Kingbird – On June 24<sup>th</sup> a group from the Society had lunch on Anvil Island where they saw one western kingbird. Kingbirds, either the eastern or western variety [species], are not common in this area.

Calliope Hummingbird - There have been several reports of this species seen in the area this summer. Mr. Wm. Merilees [a mere lad of 14] reported it from the Scout Camp [Camp Byng near Robert's Creek] at Gibson's Landing. Mr. and Mrs. B. H. Stevens also reported it being seen in North Vancouver. There were two reports also sent in by other people.

*Wm. (Bill) Merilees, with a B.Sc. in Zoology and MA in Communications, combined both fields in his career with the Ministry of Environment. From Junior Naturalist to President (1988-1990) he has supported the V.N.H.S. for decades and during those years received the Elton Anderson Award, organized the West Kootenay Field Naturalists, and was President of the Nanaimo Field Naturalists, twice. He is a nature photographer, author, and energetic tour leader for V.N.H.S. trips each year, (as well as commercial nature tours world-wide). Bill is known to be as interested in fauna (including aqua- and avi-) as he is in flora and fungi. Although he and his wife June live on Vancouver Island, Bill continues to actively support the V.N.H.S.*

Red-shafted [Northern] Flicker – On July 6<sup>th</sup> I was in the Cache Creek area and observed a red-shafted [northern] flicker nesting in a hole it had excavated in a vertical clay cliff. The cavity was about 8 feet from the top of the cliff and about 20 feet above the base. There were young in the nest. This is my first observation of such a nesting site for this species. A.C. Bent, in his *Life Histories of the Woodpeckers of North America*, notes that the flicker has been recorded nesting in such places.

Wm. M. Hughes

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### **Botany Trip**

On May 5<sup>th</sup>, Dr. Taylor took us on an interesting botany trip from 20<sup>th</sup> Avenue and Crown [Camosun bog]. He gave us a talk regarding the bog in this district that was probably caused by melting glacier, similar to Beaver Lake. The bottom gradually rose, submerged plants grew, then plants with roots in water. Sedges and grasses were next. As other forms of plant life emerged, the habitat became less favourable to themselves and thus prepared the way for blueberries, birch, Jack [lodgepole] pine and [western] hemlock.

Some of the many plants observed on our walk through the woods were: bog-laurel, Labrador tea, blueberries, bog myrtle [bog-rosemary?], skunk cabbage, fireweed, water-starwort, haircap moss, bracken [fern], cascara, spirea [hardhack], wild [Pacific] crab apple, salmonberry, wild [bitter] cherry, thimbleberry, [scotch] broom, woodrush, broad-leaved [big-leaf] maple, Dutchman's britches [Pacific bleeding heart], creeping charlie [ground-ivy], horsetail, pearly everlasting, morning glory, sitka alder and gilead poplar [black cottonwood].

Our group of 30 spent an enjoyable afternoon and later Mr. and Mrs. Wooton kindly invited us to tea at their nearby home. It ended the day in a lovely way. W.J. Pearson.

*Win Pearson and her sister were naturalists who, with Frank Sanford, "ran" the V.N.H.S. Junior Naturalist program. The Misses Pearson made their home in Kitsilano. It was the place for reviewing materials found on field trips and where many youngsters gained a primary interest in natural history from these gentle, knowledgeable ladies.*

### **Geology Trip to Ruskin-Silverdale Area**

On May 12<sup>th</sup>, twenty-four members joined Dr. J.E. Armstrong on an outing that was a follow-up to the Little Mountain/False Creek trip taken on April 21<sup>st</sup>. On that trip Dr. Armstrong had shown us tertiary volcanic rocks, including basalts, with vertical columnar jointing, which showed little evidence of weathering. Once again he took us to an exposure of tertiary basalt, this time at Grant Hill and Silverdale – both locations lying between Haney and Mission on the Lougheed Highway. The basalt in these areas is a hard coarse-grained rock that weathers easily, resulting in the flaking off of crusts in concentric slabs. He showed us various stages of weathering and the final product that consists of spheroid masses from a few inches to a few feet in diameter. The tertiary basalts were fascinating and the final exposure to be examined in Silverdale was a fine example of much weathered rock. The effect was of petrified cabbage that one could pick and peel.

We were also shown pre-tertiary coarse-grained diorites at the Lower and Upper Stave River dams. These, in contrast to the tertiary basalts, showed little weathering. At Upper Stave Falls a series of small faults in the diorites were indicated. Along Hairsine Creek we saw further exposures of diorite. We also saw numerous exposures of tertiary sediments along the Lower Stave River and in the vicinity of Silverdale and Hairsine Creek. At this latter locality, Dr. Armstrong told us about an old-timer who had driven a 60-foot tunnel along a few-inch seam of coal in the sandstone. Good fossil plants had been collected from the

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tertiary sandstones and shales and between here and Bellingham at least 50 different species of plants had been found, including such exotics as palms, magnolia, sequoia, oak and walnut. Dr. Armstrong explained that he had not identified these plants, but that GSC [Geological Survey of Canada] paleo-botanists working in the area during the last couple of summers had done so.

The whole area had been glaciated and the last ice sheet advanced across it about ten thousand years ago, advancing into the sea and depositing glacio-marine clays. Good examples of these clays were found and are now being used for the production of brick at Haney. They contain at least 60 species of salt water shells [molluscs], indicating temperatures much colder than those found nowadays. The clays do not occur above elevations of 500 feet. At higher elevations, hills are capped by glacial till. Along the Silverdale-Mission road a series of eskers were seen. With the exception of those north of Webster's Corner, no similar forms are found in the Lower Mainland.

Of particular interest was the distribution of glacial erratics. At Upper Stave Falls large boulders of tertiary shales, full of fossil plants were found. Similar bedrock is exposed five miles south of the area. In the glacial drift, large erratics of the highly weathered basalt found further south, are present. In addition, at Upper Stave Falls, big boulders are found with Jurassic and Lower Cretaceous *Aucella* (a clam-like form). The distribution of these erratics indicate the movement of the last ice sheet from the east.

A vote of thanks was moved by Mr. Wooton to Dr. Armstrong and heartily endorsed by us all – a very enjoyable day indeed.

E.C.

*Edna Copping and her husband were staunch supporters of the V.N.H.S., excellent birders and general naturalists. Long after Mr. Copping died, Mrs. Copping continued to organize trips, help out at banquets, and to organize transportation from the North Shore.*

### **Sooke Camp**

*"Sing of joy, sing of bliss, camp was never, never like this..."* Any way you look at it, it was a good camp. To begin with the weather, always an important factor, co-operated beautifully. Heavy clouds that had been hanging over Vancouver, obligingly moved to the northeast in time to allow us a delightful boat trip to Victoria.

Arriving on Saturday afternoon, the cavalcade of cars drove to the Grouse Nest at the head of Sooke Basin, where a large field had been placed at our disposal. In short time tents were erected, baggage sorted, and order established, whereupon the party adjourned to a nearby lodge for dinner – fried chicken, fresh vegetables, strawberries and ice cream. (Shades of Garibaldi: Was this a V.N.H.S. camp, or a B. of T. convention?) [Board of Trade?]

Sunday was seen as a day of rest, unpacking, church going, loafing, and swimming. There was a saltwater pool on the property and for those who preferred more conventional ablutions, a hot shower was available, if you didn't mind queuing up along the trail.

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We by no means spent our days in the pool or on the croquet lawn. Each morning bright and early, equipped with notebooks and specimen containers, we moved out of the base of operations and spent most days on the beach, along the trail or in the woods, following with keen interest the project of the day.

We were exceptionally fortunate in the assistance provided by Victoria's members upon whose experience and knowledge we leaned. At the breakwater with Mr. Hardy a lesson in marine biology was illustrated with specimens gathered by the more adventuresome campers, assisted by three local lads who helpfully tagged along. With Miss Melburn we studied on the rocks and in the woods the origin and development of plant life, some of us renewing acquaintances with wild botanical friends and finding a few new ones. Guided by Mr. Marrion we moved from beach to mountain and back to the shore to read as we went the story of our surroundings as interpreted by geology. Later we were shown by Daphne Stevens further evidence in potholes and fossils abundantly displayed.

The ornithologists were not idle. Led by Mr. Clay and Mrs. Bradley, they displayed an enthusiasm that caused the lodge guests to nickname them "the bird-watching people".

Closing night brought its own program and secret rites when strange sounds filled the air and stranger sights were witnessed. But these things are not for the record. Suffice it to repeat, this year's was both a different, and all-around good camp thanks to Mr. Stuart Bradley, the camp leader, and the committee who planned and saw it through.

E. M. B.

*George Hardy was a botanist at the B.C. Provincial Museum who, with his wife Winifred, wrote perhaps the first colour-illustrated books Wild Flowers in the Rockies (1949) and Wild Flowers in the Pacific Northwest (1964). The colour illustrations were by Frank Beebe. Like a number of the Museum staff, the Hardys were active members of the Victoria Natural History Society. These books sold for \$9.95 (cloth bound) – a very high price for the day!*

*Miss M.C. Melburn was a school teacher, a keen energetic botanist and long time 'chair' of the Botany Section of the Victoria Natural History Society.*

### #101 April 1957

**Bird Notes** – The V.N.H.S. Bird Census Group found a golden eagle at Brockton Point on December 26<sup>th</sup>. It was alive but in poor condition. It died later. There is no record of this species previously seen in this area.

*NB. There was nothing of note in Issues # 100 and #102*

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#103 September 1957

### **Geology – Caulfeilds**

When the geology group again visited Caulfeilds on June 22<sup>nd</sup>, it was suggested to Dr. Armstrong that the conditions there were too complicated for the amateur to describe and that he might consider writing a resume for the bulletin. Dr. Armstrong replied that he could do no better than point us to the references in his *Descriptive Notes for the North Vancouver Map*. Accordingly we take the liberty of quoting from these *Notes*.

“The pre-granitic rocks outcropping in the Lynn Creek, Hollyburn, Caulfeild and Horseshoe Bay areas have been correlated with the Bowen Island group, mainly on lithological evidence, although owing to extensive metamorphism and metasomatism, the correlation is at best only the most reasonable assumption, and possibly some of these rocks should be correlated with the Gambier group.

“Changes in the rocks exposed in the Lynn Creek area and in the area including the summits of mounts Strachan and Hollyburn, have resulted in the abundant development of fine-grained chlorite, epidote and albite. In many places the original textures have been obliterated, although major structures are preserved. On the other hand, the rocks exposed on the lower slopes of Mount Hollyburn and in Caulfeild and Horseshoe Bay have undergone further changes, resulting in somewhat coarser grained rocks, that in many places have a marked banded appearance, alternating layers consisting of feldspar – and hornblende – rich material. In places these latter rocks have been extensively replaced (granitized) producing granitic and dioritic gneisses.”

### **Geology Trip to Chuckanut Drive, Washington, U.S.A.**

The party gathered at Kingsway and 11<sup>th</sup> Avenue at 9:00 a.m. Saturday, September 14<sup>th</sup> with Dr. J.E. Armstrong of the B.C. Branch of the Geological Survey of Canada. From Bellingham they followed the Chuckanut Road to Larabee [State] Park and took advantage of the full camp facilities and fine shaded tables to eat a picnic lunch. The group, 30 in number, followed the beautiful Chuckanut Drive southwards in eight cars, stopping to examine selected rock outcrops along the road and the shore. The Chuckanut formation consists mainly of massive grey, coarse sandstone with minor shale beds and rare conglomerate lenses. The shale includes very thin coal seams and many fossil leaves of broad-leaved trees, metasequoia and palms. Over one hundred species have been recorded. The palm leaves are common in thin-bedded sandstone where they occur locally in profusion, representing specimens 2 feet wide and about 2 feet long.

The formation is older than the Burrard and Kitsilano ones of Middle Eocene age and is currently believed to be Palaeocene. The Chuckanut formation is highly disturbed. The altitudes of the beds vary from vertical to a dip of 65 to 80 degrees to the north by northeast. Near the south end of the Chuckanut Drive the underlying formation is well exposed and consists of sheared and metamorphosed phyllites and schists – probably of Mesozoic age.



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At 4 o'clock the group gathered at Larabee Park for tea before returning home. The weather was warm and sunny, a haze dimming the view of the San Juan Islands and Mount Baker.

Our hearty thanks to Dr. Armstrong for his fine management of the trip and explanations of the geology.  
M.Y. Williams.

*Dr. M.Y. Williams was a geologist and paleontologist at U.B.C. and a long-time supporter of the V.N.H.S. He was a very good general naturalist and taxidermist (birds and mammals). He was one of the first professors appointed to the faculty at U.B.C. specializing in sedimentary rocks of Ontario and the Canadian Plains. He worked on the geology of the Alaska Highway during World War II, and earlier, that of Hong Kong. Although absent in summer, while out in the field, he actively supported the Society in winter.*

#104 December 1957

### **Geology at Lynn Valley**

We always appreciate the definite character of Dr. Armstrong's notices: "Meet at 2 p.m. but if it rains at noon, the trip is cancelled." We accept the inference that if it does not rain at noon, the trip is on come what may! At noon on June 1<sup>st</sup> it was dull, but not raining. When we assembled at 2 p.m. the same conditions prevailed but happily the sun came out. Dr. Armstrong marched us down the canyon wall and up again. Then he did the same thing in another direction, so we had a good work out. At the conclusion, he acceded to our request that he summarize the day's observations.

He pointed out that we had studied the inter-glacial peat at a different place than formerly. On the other side of the creek the seam of peat is smaller and more consolidated and contains small fossil beetles. At the place visited on this occasion, the peat appears thicker and formed by driftwood. Its age is probably 40,000 years or more. There is evidence that at one time the creek was further east. Its present course is determined by a fault. Alternately the creek follows the fault and the jointing of the diorite. One of the features of the diorite in this area is the absorption of the older reef rocks. In many cases in the Vancouver area there are numerous inclusions, but at Lynn Valley absorption has been less thorough. When separate masses of the included rock are not observable, the presence of such rocks seems clear by variation in the composition of the diorite and stratification in the included material.  
J.J.P.

### **Geology Trip to Barnet-Coquitlam Area**

Our party of 30 gathered at the Hastings and Kootenay bus loop on Saturday afternoon, September 28<sup>th</sup>, and in nine cars drove in the direction of Barnet. We stopped several times on the highway and Dr. Armstrong showed us some poorly consolidated tertiary beds that are part of the Kitsilano formation. We saw a huge slide that had formerly fallen on the

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CPR tracks and we heard how the construction of the highway had met with several difficulties when parts of the road slumped as a result of the same slide. The sliding was in faulted sediments on the north face of Burnaby Mountain.

Then we moved west to Coquitlam and north on the pipeline road about 5 miles to where a large slide came down all of a sudden six years ago and dammed up the Coquitlam River. The slide material was at least 30 feet thick. At that time a whole forest was destroyed, the riverbed changed its course, and all flora was killed. Regeneration of plant life is beginning and we found about 30 different species. M.G.

*[Nothing of note in Issue #105, though it was apparently incorrectly numbered as #104]*

### #106 September 1958

#### **Bird Notes**

Mr. William Hughes, Chairman of the Ornithology Section, reports the following observations: On May 3<sup>rd</sup> about noontime, we saw an adult male yellow-headed blackbird near the southern border of the Vancouver International Airport. It sat for nearly one minute on top of a cattail stalk in the marshes and then flew off, giving forth some very unmusical sounds.

At 9 o'clock on May 10<sup>th</sup> we were bird watching on the dike enclosing the northwest corner of Sea Island, north of the Vancouver International Airport. On the mudflat towards the Strait of Georgia we observed, close to a flock of western sandpipers, a large shorebird that we identified as a [red] knot, after considerable study and comparison with Peterson's *Field Guide of Western Birds* as well as *Shorebirds of British Columbia*, by C.J. Guiguet. The bird was feeding for some time with the sandpipers, which later flew off and left it alone. We watched through a telescope for 25 minutes until it disappeared behind grass hummocks.

According to *A Review of the Bird Fauna of British Columbia* by J. A. Munro and I. McT. Cowan, the last records for the Lower Mainland were at Sumas, B.C. in June 1895 for the yellow-headed blackbird, and in August 1890 for the [red] knot. As far as we are able to determine, there were no subsequent records of these two species in this area. While a sight record can never be as satisfactory as one that is substantiated by a specimen or an acceptable photograph, the fact that we had such excellent views led us to report the observation of these unusual, unmistakable birds. Werner and Hildegard Hesse.

#### **Keats Island.**

Mr. Carl Gough accompanied by a party of twenty, took a route through the woods to Bridgeman's Bluff on Keats Island. A variety of plants and trees were seen with Mr. Gough pointing out many species and answering innumerable questions. The one notable discovery was a foxglove whose top blooms, instead of continuing up the stem, had joined together to

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form one circular compound flower. This is an uncommon variety and only one member of the party had ever seen a specimen before, and that only once. R.C.B.

Three members of the second party went off separately to give their whole time to bird watching. The song of a winter wren was heard but it remained hidden. Other birds observed were the MacGillivray's, black-throated gray, and yellow warblers, pileated and hairy woodpeckers, Swainson's thrush, olive-sided flycatcher, [American] goldfinch, Oregon [dark-eyed] junco, chestnut-backed chickadee and cedar waxwing. Bridgeman's Bluff provided a splendid panorama of other islands and the sea. It was a satisfactory afternoon's outing for everyone. E.G.

### **Botany Field Trip to U.B.C. Gardens**

An interesting fieldtrip was spent on the afternoon of May 10<sup>th</sup> with good company present and the weather co-operative. Mr. Eastham was our guide. The rock garden was visited first, most noticeable being a large clump of our coastal alpine penstemon in full bloom, *Penstemon menziesii* [Davidson's penstemon var. *menziesii*]. Although difficult to keep in cultivation it thrives here. The most colourful of the flowering plants were the Asiatic primulas, *Primula mutabilis* W.W. Smith, native of China, with pale blue bells, and *Primula chionantha* Balf. F. & Forest also native to China, with a pure white colour that is unusual in the primula family. The most striking group was the Berkeley strain of *Primula pulverulenta* Duthie, again a native to China, some plants being four feet tall bearing whorls of flowers of strong pink, one above the other, along the stem.

Another striking plant was the *Neconopsis*, *M. Sheldoni*, the blue poppy of the Tibetan Himalayas and West China. *Neconopsis betonicifolia* var. *Baileyi* Edwards, has been in the Gardens for many years. *M. Sheldoni* is a richer and more striking blue but dies after producing seed.

*Lilium giganteum* Wall that grows to a height of ten feet with a two-foot spike of flowers, was growing vigorously but was not yet in bloom.

Mr. Eastham described many lesser varieties of pinks, phlox, parsley fern, London pride with its dainty flowers, and *Polemonium* or Jacob's ladder, all of which could easily have been passed unnoticed.

Traces of mistletoe, its host being evergreens, were seen on the large hemlock. The woodland contained many ferns all identified by Mr. Eastham – two local ones were the ostrich and beech ferns; two eastern varieties were the royal and the sensitive ferns. The butcher's broom is a flat jointed stem plant without leaves.

In the old garden we saw the plume poppy, *Macleaya cordata* R. Br., a native of both China and Japan, and borage, *Borago officinalis* L., cultivated as a pot herb to the delight of the honeybees. Also seen were the cancer root on its host, a sedum, and the tall comfrey, a plant highly spoken of by Dr. Culpepper in *The Curing of Human Ills*. Thanks were expressed by Mr. Purssell to Mr. Eastham for an enjoyable afternoon. H.H.Luke.

### **The Flora of Spanish Banks**

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Mr. Eastham led a group of 17 members to the Spanish Banks on the afternoon of May 24<sup>th</sup>. Although I collected only 28 species, a good many more were described in detail to an eager audience whose questions however trivial were answered with patience by our leader. A species of yellow violet has disappeared since Mr. Eastham's previous visit to the area.

White [night- flowering catchfly] and red silene [red campion?] were found growing together. The former opens for fertilization at night and the latter during the day. This seems to be nature's way of avoiding cross fertilization.

We saw two species of willow, *Salix lasiandra* Benth [Pacific willow], on which the catkins appear after the leaves, and *Salix scouleriana* Hook [Scouler's willow], which is the earliest to flower long before its leaves appear. Aspirin is made from the willow for the treatment of rheumatism. The ancients thought that as dampness caused rheumatism, willow trees, growing in marshes, were sent to cure the disease. Indians roast the roots of bracken, and sometimes cook the young fronds [fiddleheads]. In favourable soil it grows to 8 feet in height. The roots form a network just below the soil surface. At its best was *Digitalis purpurea* L., the foxglove, that noble plant whose leaves have through the ages saved many a failing heart and remains our safest remedy for that complaint.

*Trientalis latifolia* Hook, the [broad-leaved] star flower or chickweed wintergreen, occurs in woods on the coast. *Trientalis* means 1/3 of a foot. It has large corms easily pulled up with the plant. We enjoyed Mr. Eastham's description of the interesting peculiarity of each plant as it so improved our knowledge of botany.

D. Bradley

### #107 January 1959

#### **Bird Notes (1958)**

European Starling – On a field trip to Pitt Meadows on May 18<sup>th</sup> fledglings were observed being fed by adults. On June 1<sup>st</sup> they were also seen during a trip to Chilliwack, and more fledglings were observed by Mr. and Mrs. Hesse on Barnston Island. Starlings were also reported nesting in the Point Grey Road area. It is evident that they are now breeding in some numbers on the Lower Mainland.

On November 30<sup>th</sup> while riding a bus, I observed these same birds flying over the area east of Granville and Balfour Streets. They appeared to be preparing to fly into roost. On December 7<sup>th</sup> I found them roosting in the 3700 block of Selkirk Street. It was snowing at the time and I wasn't able to ascertain how large the roost was. I revisited the area on December 15<sup>th</sup> but this time fog prevented my finding out the size, but I counted approximately 2,000 coming in to roost. This roost is over a mile from the large roost in the 1900 block of West 14<sup>th</sup> Avenue.

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Bullock's Oriole – On May 18<sup>th</sup>, 1958 a male was seen at Pitt River. At Sardis on June 1<sup>st</sup> a pair were observed. The nest was found and the female was on the nest.

[Northern] Goshawk – was observed at Pitt Meadows on May 18<sup>th</sup>.

Green Heron – On August 24<sup>th</sup> R.R. Anderson, E. Moodie and Allister Muir observed this bird in a ditch at the north end of MacDonald Road on Sea Island. Mr. Anderson knows

this species well as he has seen it often in Ontario. He and Mr. Moodie watched it for nearly an hour. This, I believe, is the first report for the area.

Ash-throated Flycatcher Mr. A.J. Erskine observed one of these birds at the Jericho Army Camp on August 24<sup>th</sup>. This is the third record for the area.

Palm Warbler – was seen at Point Roberts on October 26<sup>th</sup>. While this observation was made in the State of Washington, it should be recorded as there is only one other record of this species for the Lower Mainland.

Marbled Godwit – was observed between Boundary Bay and Beach Grove on October 26<sup>th</sup>, 1958.

Hepburn's [Gray-crowned] Rosy Finch – was seen at 8707 S.W. Marine Drive, Vancouver, B.C. on December 10<sup>th</sup>, 1958. It was feeding on weed seed on a patch of bare ground.

Mourning Dove. Mr. and Mrs. W. Hesse found a nest with one young on June 15<sup>th</sup> on Sea Island. The nesting of this species seems to be increasing in the Lower Mainland.

Wm. Hughes

### **Bird Notes**

Marbled Godwit (*Limosa fedoa*). While we were on the small spit at Crescent Beach last July 5<sup>th</sup>, 1958, we saw three shorebirds feeding on the mud flats at 10:30 in the morning. Two were Hudsonian curlews [whimbrel] and the other was a marbled godwit. The weather was clear and [as we were] within close proximity to it, the identity of this bird was unquestionable. Canon Marvin W. Holdom of Crescent Beach reports having known this bird well in Alberta, and said he had also “seen it, some years before, at the end of Blackie's Spit.”

Brian E. Baker and John G. Sarles

*“Jack” Sarles and his wife Rosemond were excellent ornithologists and general naturalists who met through the V.N.H.S. He was a businessman in Vancouver and she a nurse. They moved to White Rock and helped organize the White Rock and Surrey Field Naturalist Club*

Sandhill Crane (*Grus canadensis*) At about 11:30 a.m. on October 4<sup>th</sup> while on the “spit” at Beach Grove, B.C. this bird was seen flying south towards Point Roberts. In flight, cranes differ from great blue herons, that are sometimes called ‘cranes’, in that they carry their necks straight out instead of folded; wing strokes are shorter, and feathers more spread. One of the habits in migration or in flight is to call loudly. The cry can be heard for great distances.

Brian E. Baker.

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*Brian Baker became a member of the bird banding component of the V.N.H.S. Birding Group under the leadership of Bill Hughes.*

### **Field Trip to the Upper Levels Highway**

Old theories die slowly. This is demonstrated in geology by constant repetition of the onion-skin theory of the Earth's surface. We can understand how the idea was developed by early geologists whose studies were in limited areas where sedimentary rocks had very definite relationships to one another, and in turn were underlain by granitic rock. These granitic rocks were presumed to be a part of the original composition of the Earth.

Now, however, it appears that the Earth is much older than was supposed and this regularity of the formations is not world-wide. The ocean floors are largely composed of basaltic rocks, and the continental masses are composed of an enormous variety of materials that have been rearranged again and again as a result of sedimentation, vulcanism, earth movements and attrition. Consequently we often find ourselves studying rocks that are old, judged by the age of man, but rather recent when compared with the age of the Earth. These points need to be kept in mind in British Columbia, and especially in the coastal area where nearly everything is comparatively recent, but looks old.

One of the major problems in geology is still the origin of granitic rocks. In the past practically all geologists believed they originated by differentiation of a basaltic substratum or magma. However, at all times some geologists have believed that granitic rocks originated as a result of metasomatism, changes due to heat, pressure and solution, of sedimentary or volcanic rocks. Recently, more and more geologists have come to believe this and Dr. Armstrong is the chief exponent of such a belief here in B.C. On our field trip he pointed out facts supporting this belief. He asked us to draw our own conclusions from these facts, and then took the time to explain what he meant.

Dr. Armstrong believes that all granitic rock on the North Shore originated as a result of the reconstitution of older sedimentary and volcanic rocks. This reconstitution was brought about at great depths in eugeosynclinal basins. These basins are a series of island areas and intervening oceanic troughs. Sediments were deposited in the troughs as a result of erosion of the islands; volcanic materials were deposited as most of the islands were volcanic in nature. A present day example of a eugeosynclinal basin is the islands and oceanic depths comprising the East Indies.

Over many millions of years the composite section of volcanic and sedimentary rocks became tremendously thick, probably in tens of thousands of feet, and consequently near the base of the section, due to pressure, heat and solutions, mainly aqueous, the rocks were reconstituted to granitic rocks. At some later stage in their development this reconstituted mass of magma may have become mobile and forced its way into a higher place in the Earth's crust. However, Dr. Armstrong believes, very little of this intrusion took place and most of the rocks we saw are essentially where they were formed, thousands of feet below the Earth's surface, and have since been exposed by erosion. He showed us many inclusions that he thought represented stages in this process. He also showed us the rocks at Eagle

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Ridge where some of the pre-granitic rocks were to be found and all the stages of their conversion to granitic rocks were evident.

In addition to the above outline (written with Dr. Armstrong's approval), he commented on the jointing of the granitic rock (quartz diorite), the veins resulting from hydrothermal action, aplite dikes and a number of tertiary basaltic dikes similar in age to Little Mountain in Vancouver and Sentinel Hill in West Vancouver. One of the tertiary dikes was 15 feet wide and weathering in a spheroid fashion not previously noted in this locality.

May 5<sup>th</sup> was a grand afternoon and 22 of us gave a hearty vote of thanks to Dr. Armstrong, and then returned to our homes for tea. J.J.P.

### **Marine Biology**

Some 20 people braved the rain on June 1<sup>st</sup> to see and learn something about marine life under the capable leadership of Mrs. Brink. The miseries and discomforts of a dull, wet day were soon forgotten in the excitement of finding life at the edge of the tide. The purple starfish [sea star] *Pisaster ochraceous* was fairly common. There were also the slim-armed red star *Henricia leviuscula* and the leather star, *Dermasterias imbricata*.

As we moved along we came upon some fine specimens of tubeworm, *Eudistylia polymorpha*. The dark plumes of those undisturbed just below the surface of the water would snap out of sight at a touch. It was so quick as to leave one wondering if there had been anything there at all. Another type of tubeworm, *Serpula vermicularis*, was seen attached to a rock. Some good specimens of sea urchins were found and anemones, *Metridium*, were fascinating to observe. They have an amazing ability to contract as soon as touched. We were shown a small chiton and a little later a giant *Cryptochiton*. Several varieties of crab – cancer [Dungeness], shore and hermit – were examined and their sex, gills and structure explained.

Mussels, clams, whelks, barnacles and other crustaceans were observed and discussed. A large sea cucumber was of great interest. This would have been carried home by one member had he not been told that the creature was capable of disgorging its entire insides when alarmed. Among the algae were noted some good specimens of *Iridaea*, *Laminaria*, eelgrass and *Ulva* – sea lettuce. Mr. Foote Waugh thanked Mrs. Brink on behalf of the group for turning out on such a day to give us an interesting and informative study of marine natural history. J.T.G.

#108 July 1958

**V.N.H.S. Camp [Kalamalka Lake] July 4 – 14, 1958**

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The Okanagan is truly a bird watcher's paradise and great numbers were seen during our stay in this beautiful valley. The fact that it was nesting time for many species made us feel rewarded for the opportunity of seeing so many birds. Some of them had never been seen before. The total land and water birds observed were 156 species.

Six bird trips were organized. The first to Deep Lake was led by Mr. J. Grant, a member of the North Okanagan Naturalists' Club. The second, led by Mr. J.G. Fowler of the same Club, was to the Indian Reservation where we saw the long-tailed [yellow-breasted] chat. Two trips were made to Swan Lake where nine [red-necked] grebe nests were found; one with an egg just hatching.

Also seen were pied-billed grebes with young, [common] yellow-throats, long-billed marsh wrens, yellow-headed blackbirds, and western sandpipers. The nests of the western grebe consist of a floating matted structure of reeds and sedges with a depression in the center. Being fastened to living reeds they will not float away. Nests of the Holboell's, or red-necked grebe were found floating off shore anchored to aquatic vegetation. The pied-billed nests are made of a floating structure of partly decayed reeds bent and matted down with coarse sedges and grass, mostly below the surface of the water. Two other bird trips were made to the Grandview Lake area where a flock of 40 long-billed curlews were seen on the first trip and 50 on the second. Many western bluebirds and a lark sparrow's nest with four young were also seen.

Many birds around the camp seemed quite tame. Nests, nestlings and young were observed. Interest was aroused when a pair of red-naped sapsuckers was seen feeding their young at a nest hole 12 feet up in a poplar. A few days later the young left the nest. Twenty-five feet up a tall tree a European starling had taken over a woodpecker's hole for a nest. On the high slopes of the ridge overlooking the Lake, sparrow hawks' nests [American kestrels] were found high in a tall dead pine tree. As the young had left the nests, the parents were feeding and teaching them to fly. Families of ruffed grouse continually crossed and re-crossed the roadways and paths near camp, being indifferent to our presence.

The most unusual and outstanding birds observed numbered 48 species. A few may be mentioned: A black-chinned hummingbird seen at the Experimental Farm at Summerland and a Clark's nutcracker seen at lake level - a bird is usually found at higher altitudes. The burrowing owl, black tern, Bullock's oriole, sage thrasher, and the white-throated sparrow seen at Okanagan Landing and Cosen's Bay. The [common] poorwill was seen at Coldstream and Vernon; the northern [red-necked] phalarope at Otter and Swan Lakes; and four lesser yellowlegs were seen at O'Keefe's Pond ten miles from Vernon.

The California gull was observed at Okanagan Lake; a veery on the Deep Lake trip as well as Cosen's Bay; and the long-tailed [yellow-breasted] chat and the [gray] catbird were both seen on the Indian Reservation. The lazuli bunting was found at Cosen's Bay and on Silver Star Mountain, turkey vultures were observed enroute to Summerland, as well as long-billed curlews and a lark sparrow's nest with its four young. Many water birds, their nests and young were also constantly being observed.



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Not many mammals were seen, but note was made of the [Nuttall's] cottontail rabbit, pika or rock rabbit, northwestern [yellow-pine] chipmunk, yellow-bellied marmot, [northern] pocket gopher, marten, muskrat and the varying [snowshoe] hare. We were warned that rattlesnakes were in the area of Cosen's Bay and at Rattlesnake Point. As naturalists we were disappointed at not seeing any, but perhaps it was just as well that we did not.

D.M. Bradley

#109 March 1959

### **The Volcanoes of Garibaldi**

In his talk on 'The Volcanoes of Garibaldi' on January 28, Dr. W.H. Mathews dealt with three outstanding examples of volcanic action in the Park area; Clinker, Table and Garibaldi peaks. The evidence indicates that Clinker [part of Mt. Price] was an active volcano during the last ice age, about 10,000 years ago. It has the typical flat top of a volcanic cone with evidence of glaciation on its lower flanks, but not at the top so that the cone appears to have risen through the field of ice that was then spread over the whole area. A fine aerial photograph showed clearly the several streams of lava centering on the cone and flowing in separate courses down the mountainside, one great flow disappearing into Garibaldi Lake. The barrier in Garibaldi Park, about 1500 feet high, is a cross section of one of the main lava flows from this peak, indicating the great depth of the molten river that once made its way down the mountain.

The slopes of Garibaldi Mountain are covered with fine dust, boulders and other material similar to that on the flanks of Mt. Pelee in Martinique. The boulders have an outer crust and exhibit fractures that indicate they were still hot when they rolled down the mountain. There is evidence that part of the lava of an earlier eruption flowed out on to a glacier. As the ice melted large areas of the volcanic material were undermined and collapsed. At a later period another burst of activity formed what is now the highest point of Garibaldi, and from this eruption flowed an immense stream of lava that extends almost to Squamish.

The third peak, Table Mountain has a remarkably flat top and very steep sides. The theory is that volcanic action drove steam and lava up into the ice which then covered the area. The ice melted forming a basin in which the lava cooled in horizontal layers one above the other within the ice-bound basin. At one point where the ice gave way, a flow of lava ran down the almost perpendicular flank of the Mountain. Dr. Mathews said that Garibaldi Park is a treasure house of geological history, recording its past in a setting of great beauty, close to a major population center, and as such, has few rivals on the North American continent.

E.F.

### **The Rocky Mountain Trench**

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

Before Dr. Armstrong showed us some interesting coloured slides, on February 11<sup>th</sup>, that were taken from both the ground and the air of the Rocky Mountain Trench where he had worked, he provided a brief background of some of the important points known about the trench today.

Nowhere else in the world is a topographic feature of this size found. The rocks to the east of the trench are of a different kind from those to the west. The Rockies to the east are sedimentary, being 50,000 to 100,000 feet thick, while the mountains to the west are igneous, or volcanic. Thus the trench marks an abrupt change in the rock formation.

The origin of the trench has no simple explanation. Probably no one has studied the rocks on both sides of the trench, although several have worked on one side or the other. Last summer Dr. Leach of the Geological Survey of Canada studied the area to the south. In the north we find that the mountain ranges of the Monashee, Omineca, Purcell and Selkirk are truncated by it. The faulting theory for its origin seems to be the best one proposed so far. Although other physiographic features in the world are caused by faulting, no other like the trench is to be found. Because of its length, linearity and truncated structures flanking it, faulting is believed to have something to do with the trench. There is a great complexity of detail based on the trench's features, and it will mean much hard work for many years before a final answer to its origin is found.

### **End Note #2: The Rocky Mountain Trench (Cont.) (see page 262)**

#110 August 1959

#### **A Bird Note**

In a letter dated June 18<sup>th</sup>, 1959, Marie Houldon of Hope, B.C. wrote to Mr. Hughes, the Chairman of our Ornithology Section, describing what she and her husband thought was a green heron. From their description and the drawing she enclosed, Mr. Hughes felt sure that it was. Some of the comments she made might be of interest to the members:

The bird was first spotted by her husband, Bob Houldon on Sunday, May 24<sup>th</sup>, as they were sitting by the window having supper. Their home is east of Hope on the shores of Kawkawa Lake. The bird landed and perched for some time in a half dead cedar about 100 feet from their house. Their excitement seemed to have had no effect on the bird. While Bob and Marie frantically scurried around taking turns with binoculars and thumbing through reference books, the bird calmly surveyed the area, first in one direction then in the other, and appeared in no hurry to leave. They have been unable to locate a colour plate of the bird so Marie made a painting of it for Mr. Hughes.

It had a heron-like appearance with fairly long light-coloured legs, and sat with a hunched-up look with its neck pulled in. On first approaching to land, and again on taking flight, the neck was noticeably long and outstretched. In size it seemed somewhat smaller and more slender than a crow.

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The bird had a long dark bill and cap (above the eye) and the wings appeared dark with few, if any markings. The breast was noticeably red-brown with two distinct light-coloured stipes down its entire length, seemingly joined together at the neck. There was also a light streak running back from (or below) the lower mandible toward the cheek. The brown on the breast became grey on the lower underparts. In flight, the bird had a somewhat hesitant but graceful wing action.

The next day, May 25<sup>th</sup>, the bird came again at noon and landed on a log close to shore, about 50 feet away, but stayed just a few moments. It was seen again another evening later that week. Its call was a short two-toned effect, beginning on one note and dropping to a lower one. Mr. Hughes wondered if it might nest in the area, but Bob and Marie did not see it during the next few weeks. They are on the lookout, however and are quite thrilled that they were among the first to see the green heron in their district.

### **Birds at V.N.H.S. Camp, Manning Park, July 17<sup>th</sup> to 25<sup>th</sup>, 1959.**

On arrival at the campsite several birds greeted us. Altogether we saw 15 species around the vicinity of the camp, the most outstanding being the families of red-breasted nuthatch that were remarkably tame. They showed no fear of us as they flew from tree to tree, running up and down the trunks in their noisy search for food. We also found an Oregon [dark-eyed] junco's nest with four fledglings that interested the children in camp. Photographs were taken and fellow camper, George J. Kuthan painted a picture of the nest. The Canada [gray] jays were much in evidence, especially around the kitchen area.

July 18<sup>th</sup> – a truck trip was made on the new road to Spotted Nellie Ridge and the Blackwall Peak where 28 species of birds were seen. Again an Oregon [dark-eyed] junco's nest was found with four eggs, that several members photographed. A one-legged [common] raven amused us with its attempts to walk away, and ended by flying off the edge of the Ridge and coming back to land again as soon as he found we were harmless.

Another outstanding sight was the Swainson's [gray-crowned] rosy finches feeding at the edge of the receding snowdrifts. Lincoln's sparrows were seen feeding their young. A Swainson's hawk was seen hovering between the Black Wall and Spotted Nellie. One immature bald eagle hovered over the same area. The rufous and calliope hummingbirds thrilled us with their beauty as they visited the colourful alpine flowers covering the slopes.

Clark's nutcrackers and Canada [gray] jays showed a lot of interest in our truck full of campers as we made our way to and from the mountains. Our party divided when we reached the end of the road, some to make their way on foot to Three Brothers [Peak] Mountain. That day they saw four species: mountain bluebirds, white-tailed ptarmigan with

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young, cedar waxwings and blue grouse. The rest of the party wandered around Spotted Nellie and the Blackwall studying flowers, taking photographs and bird watching.

July 20<sup>th</sup> – a bird trip to Beaver Pond was organized. We started out at 6:30 a.m. led by Mr. Bill Munro who was on the [B.C. Parks'] staff of the Nature House at Manning Park. Beaver Pond is a wonderful habitat for birds, providing many nesting sites, with perfect perching places, flyways, dead trees – standing and fallen – and snags in the water where birds can land to drink, bathe and preen. We were fascinated with the sight of birds flitting everywhere, flying in from every direction, back and forth from evergreens and deciduous woods that bordered the Pond. Three species of swallows were seen feeding their young at the nest holes or on tree limbs.

*Bill Munro was a student at U.B.C. at this time and went on to a career with the Provincial Fish and Wildlife Branch.*

We watched as a female mallard and her three ducklings searched the pond for food; yellow-bellied [red-naped] and red-breasted sapsuckers perforating the bark of trees; the eastern and western kingbirds feeding their young at the nest; western [Pacific slope] and Traill's flycatcher [willow] flycatchers were seen, and spotted sandpipers were running on logs and other fallen debris in the water. Altogether 29 species were seen at this most attractive bird paradise.

After we returned to camp for breakfast we left again with Mr. Munro to visit the Cambie Pond. There we saw 15 species, six of which were warblers – Audubon's [yellow-rumped], Townsend's, yellow-throated [common yellowthroat], pileated [Wilson's], Macgillivray's and Myrtle [yellow-rumped], as well as a Townsend's solitaire. A party left by truck for Paddy Lake in Gibson's Pass. Only two species of birds were seen – a sparrow hawk [American kestrel], and a common loon.

July 21<sup>st</sup> – a car trip was made over the Skyline Trail and the cars left at the barrier for our hike the rest of the way. Three species were seen – Clark's nutcracker, the Arctic [black-backed] three-toed woodpecker, and a Franklin's [spruce] grouse with young.

July 22<sup>nd</sup> – two trips were made into the Lightning Lakes where 12 species were found, the most outstanding being the yellow-throated warbler [common yellowthroat].

July 23<sup>rd</sup> – Mr. Ted Underhill of the Nature House staff and Dr. V.C. Brink, conducted a tour of the nature trail where we saw a Townsend's solitaire, its nest and young. We also saw Swainson's thrush and many red-crossbills.

July 24<sup>th</sup> – Dr. Brink led a car trip to the fossil beds near Whipsaw Creek where we dug for fossils and visited a small coal mine. We saw many mourning doves and [western] meadowlarks and their young flying from the ground as we approached.

While at the lookout at Valley View we observed a brown-headed [boreal] chickadee, then at Muddy Creek a solitary [Cassin's] vireo was both heard and seen. At Copper Creek we saw only a killdeer plover. The party that climbed Windy Joe reported seeing a chestnut-

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backed chickadee. At Pinewoods Lodge we saw violet-green swallow and barn [swallows] and chipping sparrows as well as their nests and fledglings. Altogether 73 species of birds were seen during our 10-day camp in Manning Park. We had hoped to see more unusual birds but considering that it was nesting time for many we felt well rewarded.

D.M. Bradley

*Nothing of note in Issue #111*

### #112 October 1960

#### **Something Different in Bird Banding**

The following comments are from the *News from Bird Banders*, a quarterly publication by the Western Bird Banding Association in the U.S.A. (Business Manager: Mr. Leland Stallcup, 6227 Buena Ventura Ave., Oakland 5, California.) The article was written by [V.N.H.S. member] Mr. William M. Hughes and appeared in the Vol. 34, No. 4 Issue of October, 1959.

“On Nov. 2, 1958 Mr. R.F. Oldaker of Vancouver, B.C. met Mr. J.G. Sarles, Miss Betty Wise and Miss Gwen Wright in Stanley Park. Mr. Oldaker is not a bird bander but he does possess a telescope which he made himself. It was on this day that he started to read band numbers with this instrument. Since then he has been providing a great service to banders.

From Nov. 2, 1958 until Sept. 24, 1959 he read and reported to the U.S. Fish and Wildlife Service the band numbers of 428 glaucous-winged gulls, 37 California gulls and 1 red-winged blackbird. The California gulls were banded in Alberta, Saskatchewan, Montana, Wyoming and Idaho. Some of the glaucous-winged gulls were banded in Washington, Vancouver Island areas, and in Vancouver. A juvenile California gull, banded on June 30, 1959 at Snake River, Weiser, Idaho, was observed on the Vancouver City dump on July 23, 1959. Mr. Oldaker would be pleased to hear from anyone interested in bird banding. His address is 456 East Hastings, Vancouver, B.C.”

#### **Bird Trip to Pitt Lake**

At dawn on Sunday, May 29<sup>th</sup>, 1960, a robin woke me singing its station identification. In due course I proceeded on our bird trip at the south end of Pitt Lake. We met at the Mallard Hotel where Bill Hughes instructed the 18 bird watchers how to get to our destination. He also pointed out tactfully that loud talking would scare away all the birds and we should proceed cautiously, in single file, in our six cars, halting when birds were seen. This we did to the end of Pitt Polder road, where we could go no farther. Our objective was the nest of a sandhill crane. We identified thirty other species, among them a pair of Brewer's blackbirds having a battle on the ground with a crow. Watching them from a telegraph wire was an eastern kingbird. Overhead a [northern] goshawk soared away with a squealing pretty in its talons. In the distance, among the swollen, waterlogged dikes, a pair of osprey and a pair of [great blue] herons were looking for safe, wet nesting sites [sic]. Under the broad eaves of a square farm building the nests of 40 cliff swallows were counted on one side, and a similar number of 'cheek-by-jowl' nests were on the other three sides of the building. The

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mourning doves added to the gloom of the intermittent rainfall that increased as we neared our objective. *Water, water everywhere and not a drop to drink!* D. Bradley

### **Notes on the Observation of a Green Heron**

Mr. Hughes suggested that Miss Gwen Wright record for this bulletin the green heron she saw on June 5, 1960: "On Sunday, June 5<sup>th</sup> at about noon, I sighted a green heron on Barnston Island. About two miles east of the ferry landing, on the north side of the road, there is a marshy pond and boggy area; this is bounded on one side by a meadow and on the other by cultivated fields. At the end, opposite the marshy pond, is dense bush – willows, evergreens and underbrush. I saw the heron rise from the marshy pond and fly to a low stump in the boggy area on the edge of the meadow, about 200' to 500' from the road. It sat there preening and as the light was good I had a very fine view of his plumage."

.....  
Mr. Hughes suggested that Miss Doris Nye also write a report for this bulletin on the green heron she saw on September 2<sup>nd</sup>, 1960, at the beginning of the dyke road at the foot of Pitt Lake. The following is a quotation from her letter: "The heron flew up from the shallows on the north side of the dyke road, erecting a large dark crest and alighted on a branch in the water further along. To get the sun behind me, I crept along the far side of the road and was rewarded with a clear side view of the bird with its long neck stretched up. The colours

were vivid – orange bill, chestnut on head and neck, yellow stripe below eye, and yellow legs. Its crest was erect again as it flew off to the marsh on the north side.

"This sighting was substantiated on September 4<sup>th</sup> by Jack Sarles (leader of a field trip to the same area), Betty Wise and Norman Precious. On that trip we saw the bird several times, most frequently on the south side of the dyke road. Also, on the September 2<sup>nd</sup> trip, I was lucky enough to watch a horned lark feeding on the dyke road, for about 20 minutes, and two Lewis's woodpeckers near the main road leading to the Lake."

### **1960 V.N.H.S. Camp at Tenquille Lake**

The decision to hold the 1960 Society camp at Tenquille Lake [July 23-31] was a fortunate one as the area was entirely new to all but a few who had visited it with Prof. Davidson many years before. One of the notable features of the attendance was the large representation from widely scattered points throughout the Province: - Salt Spring and Cortez Islands, Lillooet, Hope, Pemberton, Kelowna and Mission. Over 60 in all took part in the expeditions and activities.

The Ronayne family helped us in so many ways. John was a tower of strength with his advice, guidance and information on field trips. Irene led the fossil trips; Rosemary helped the cook; Jack led the trip to the old mine with the pyrite deposits, and Mrs. Ronayne welcomed the tired hikers at the end of the long trail with delicious refreshments. The camp council were busy attending meetings and leading many of the field trips. The group was

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particularly fortunate in having the help of Dr. K.J. Beamish whose assistance was most generous and patient.

Tenquille Lake is one of the beauty spots of our Province which so few are able to enjoy, and yet one is well repaid for the effort of reaching it. During our week in camp the open green area became a carpet of glorious colour. The majestic mountains are reflected in the deep waters of the beautiful Lake. Considerable snow remained on the mountains, in fact there were patches quite close to our camp. A lot of geological work has been done in the area, claims staked, old mining trails, abandoned log cabins and drilled core holes. Wildlife was not abundant, but enough to make it interesting for our ornithologists and mammalogists. A number of fish were caught, but while small, they were of excellent quality.

With the exception of light rain on the last morning when we 'broke camp', the weather was perfect. The nights were cold and some learned the hard way how important it is to take plenty of warm bedding for a mountain camp. We had an abundant supply of excellent water. We all enjoyed good health and did justice to the generous meals. Campfires held their usual attraction with startling new talent discovered. Outward transportation of our baggage and equipment met with difficulty. Our chartered plane had been commandeered to fight forest fires. However, we did eventually get everything back to Vancouver, and all agreed the camp was a success. We returned with stiff and tired muscles but with the satisfaction that we had profited by our week's close association with the ways of Mother Nature.

Stewart Bradley.

#113 November 1960

### **End Note #3: Bird Notes (see page 262)**

#### **Birds and Mammals seen at V.N.H.S. Camp, Tenquille Lake – July 23–31, 1960**

Unfortunately wildlife was not abundant in the area. We had hoped to find some unusual birds and mammals. However, 43 species of birds were seen as well as a few mammal species. Three bird trips were organized. The first was on July 25<sup>th</sup> to the north end of the Lake. The second trip was the next day, from the south end of the Lake along the east side, then to the north end. On July 27<sup>th</sup>, the third trip took place through the Pass south of the camp to the sloping meadows.

The Clark's nutcracker and young were frequent visitors around the camp. They were tame but not as daring and bold as the Canada [gray] jays usually are, which to our surprise were scarce. On inquiring the reason, Mr. Ronayne told us they were such a pest around the camp he had taken means to drive them away. [!] Chipping and song sparrows were the most common birds seen. Others were: vesper and golden-crowned sparrows, Oregon [dark-eyed] junco, gray-crowned rosy finch, red crossbill, pine grosbeak, pine siskins and young, Townsend's solitaire, western tanager, American robin, varied thrush and young, cedar waxwing, hermit thrush, horned lark, warbling vireo, alpine [water] pipit, black-capped and Hudsonian [boreal] chickadees, Audubon [yellow-rumped warbler], MacGillivray's and

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black-capped [Wilson's] warblers, red-breasted nuthatch, ruby-crowned kinglet, rufous hummingbird, winter wren, olive-sided flycatcher, American crow, western wood-peewee, [black-billed] magpie, Franklin's [spruce] grouse and young, red-tailed hawk, ptarmigan (white tailed and young), osprey, spotted sandpiper, sparrow hawk [American kestrel], killdeer, loon (heard only), Canada [gray] jay.

We were puzzled by a strange bird call heard throughout the day. No one recognized it. The call was three notes repeated again and again, but the mystery bird wasn't near enough for anyone to identify. With the help of bird books and binoculars, we found the elusive little bird – it was none other than the golden-crowned sparrow twittering his three note call “do-re-me”. We conjectured that because the season was later at such a high altitude it could have been a mating call, or, because none had ever heard it before, it was the song of the golden-crowned sparrow!

Few mammals were seen which was disappointing as we had hoped to see more. However a few hoary marmots (*Marmota caligata*) were seen. While on the July 27<sup>th</sup> bird trip, we heard a loud shrill whistle, and on looking around, we saw a large one sitting at the opening of his burrow in the flower-strewn meadow below us. He must have weighed 25 or 30 pounds. We watched as he climbed upon a large boulder and sprawled on top to sun, oblivious to the group watching. Two of our party walked slowly towards the marmot with cameras focused and ready. Very slowly they approached and still he lay on the rock. When only six feet away, he sat up on hind legs and the girls got their pictures before he jumped off and scurried to the opening of his burrow. A female mountain goat and kids were seen on one of the hiking trips up the mountain. Deer and bear tracks were noted, but no signs of the animals themselves. Red squirrels and northwestern [yellow-pine]

chipmunks were observed. There was good fishing in the Lake and a number of rainbow trout were caught, cooked and eaten by the fishermen among the campers.

Dorothy M.

Bradley

### Point Roberts

We intended to watch the migration of waterfowl October 23<sup>rd</sup>, but possibly because of the mild weather only small numbers of loons, [northern] pintails, scaups, scoters, oldsquaw and red-breasted mergansers were seen. One interesting observation close to shore showed how hard life is for a merganser. It had caught a bullhead [sculpin] but was prevented from swallowing it by two glaucous-winged gulls that forced it to dive again and again. Finally, it was exhausted and one victorious gull flew away with the battered fish. Some time later we watched a large bird apparently standing still in mid-air. First one then a second rough-legged hawk hovered over the fields looking for food, every so often swooping down to the ground, but had no luck in their hunt. One perched nearby in a bush and everyone had a good view of it through the telescope.

### Point Roberts

This October 29<sup>th</sup> trip to Point Roberts brought us numerous flocks of migrating birds. Oldsquaw was the dominant species, but the highlight was a flock of 36 snow geese winging



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their way southward. A school of fish may have been passing the Point when many western grebes, red-breasted mergansers and gulls settled on the water to feed right in front of us. We also had good views of Heermann's gulls with their red bills, and of parasitic jaegers patrolling the area. Not only waterfowl were on the way to milder climates, but also flocks of [American] goldfinches, [American] robins and blackbirds were daring to cross the open waters. Their life in the south will not be without danger however, as sharp-shinned and Cooper's hawks followed in the same direction.

#114 January 1961

### Bird Notes

Spring is here and the birds will be with us again. When do they arrive? These are the dates the swallows, warblers and some other migrants were first seen and reported last year by our bird watchers:

|          |  |               |
|----------|--|---------------|
| March 13 | violet-green swallow                                   |               |
| March 20 | Audubon [yellow-rumped] warbler                        |               |
| March 27 | [rufous] hummingbird, tree swallow                     |               |
| April 3  | orange-crowned warbler, [American] goldfinch           |               |
| April 8  | rough-winged swallow                                   |               |
| April 9  | [common] yellowthroat                                  |               |
| April 18 | chipping sparrow                                       |               |
| April 23 | barn swallow   |               |
| April 27 | Myrtle [yellow-rumped] warbler                         |               |
| April 30 | Wilson's, Townsend's, and black-throated gray warblers |               |
| May 1    | cliff swallow  |               |
| May 8    | yellow warbler   | Wm. M. Hughes |

### Black-Billed Magpie (*Pica pica* Linnaeus)

A sighting of a pair of black-billed magpies was reported by Mr. Alec Adams at 3558 Price Street, South Vancouver, B.C. on Boxing Day, December 26<sup>th</sup>, 1960. The last reported winter records for Vancouver were by R.A. Cumming, February 1928, and December 23<sup>rd</sup>, 1934 (Munro-McT. Cowan, 1947). Mr. Adams said the birds had been in his district for about three weeks.

J. G. Sarles.

### Christmas Bird Counts

The Vancouver Bird census was held on Boxing Day, December 26<sup>th</sup>, 1960. Fifty participants split into 22 parties, spent from 6:30 a.m. to 5: p.m. to count 96,443 individual birds of 116 species. Of particular interest were the following: surfbird, rock sandpiper, glaucous gull, band-tailed pigeon, great-horned, long-eared and pygmy owls, black-billed magpie, bohemian waxwing, orange-crowned and Audubon [yellow-rumped] warblers. On

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January 2<sup>nd</sup>, 1961, 16 participants conducted a bird census in the Ladner area. They counted 62,445 birds of 103 species including the gray partridge, water pipit, Hutton's vireo, savannah sparrow and snow bunting.

### #115 September 1961

#### **1961 Camp - July 1<sup>st</sup> to 8<sup>th</sup>**

Birds seen at the UBC School of Geology property, White Lake Road, Oliver, B.C.:

Pied-billed grebe and 3 young, Canada geese (30 with young), mallard, American coot, gadwall, blue-winged teal with young, redhead, Barrow's goldeneye with young, ruddy duck with young and one nest with 6 eggs; American redstart, killdeer, Wilson's [common] snipe, long-billed curlew, spotted sandpiper with young, greater yellowlegs; [common] nighthawk, sharp-shinned, rough-legged and Cooper's hawks, bald eagle, turkey vulture; red-shafted [northern] flicker, pileated, Lewis's, hairy and arctic [black-backed] three-toed woodpeckers, yellow-bellied [red-naped] sapsucker; ruffed and sharp-tailed grouse with 6 young, California quail, American [water] pipit, eastern and western kingbirds, long-tailed [yellow-breasted] chats with 2 young, western meadowlark, Say's phoebe, Traill's (alder), western [Pacific-slope] and olive-sided flycatchers, western wood-pewee, Bullock's oriole, [brown-headed] cowbird, mourning dove, calliope and black-chinned hummingbirds, violet-green, tree, barn, bank, rough-winged and house [cliff] swallows, western tanager, lazuli bunting; purple finch, [gray-crowned] rosyfinch, pine siskin, American goldfinch, red crossbill; Clark's nutcracker, spotted towhee, black-capped chickadee;

[common] raven, [American] crow, [black-billed] magpie, yellow-headed, red-winged and Brewer's blackbirds; savannah, vesper, chipping, white-crowned, and song sparrows, white-breasted and pygmy nuthatches, slate-coloured and Oregon [both dark-eyed] juncos, house wren, long-billed marsh wren, [gray] catbird, American robin, western bluebird, European starling, veery (willow thrush), cedar waxwing, red-eyed and warbling vireos, orange-crowned and Audubon [yellow-rumped] warblers.

White-winged dove seen by G.S. but not checked, and doubtful according to the book!  
Submitted by Gladys Soulsby and Enid Lemon, Victoria Natural History Society.

### #116 October 1961

#### **NB: Annual Christmas Bird Census**

Anyone wishing to participate in the Vancouver Christmas Bird Census, please phone Mr. and Mrs. W.H. Hesse, LA6-0660 by December 1<sup>st</sup>. We hope that all parties who participated

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last year will do so again this Boxing Day. The Audubon Field Notes publishes the results of all counts in North America and to cover cost of publication, 50c per observer is required from those whose names are listed. However, any person who wishes to participate in the Census but does not desire to pay the 50c, is heartily welcome, only his or her name will not be published. In the 1960 Christmas Census Vancouver had the highest count of individual birds in North America for eight species: western grebe, Barrow's goldeneye, surfbirds, glaucous-winged gull, mew gull, crested myna, evening grosbeak and song sparrow; while the Ladner Count produced more dunlins than anywhere else. Vancouver and Victoria were tied with 115 species, producing the highest number of species for Canada. For the 1960 Count, a record-breaking 629 reports were published with a total of 506 species for the United States and Canada.

#117 January 1962

### **Advance Notice of Summer Camp**

The Camp Committee has tentatively decided that our Summer Camp will be held during the last week of July (July 21-29) at Lake O'Hara in the Rockies. Full details in the next bulletin.

### **Bird Notes**

I would like to report seeing a male Williamson's sapsucker, *Sphyrapicus thyroideus*, on July 24<sup>th</sup>, 1961 at Bridge Lake, B.C. 32 miles east of 100 Mile House. It was drilling holes in a live aspen in an area close to the provincial campsite. Attracted by the flowing sap

were an [American] redstart, an Audubon [yellow-rumped] warbler, yellow warbler, and rufous hummingbird, as well as butterflies and bumblebees. I would be interested in verification of this sighting by anyone in the district next summer. Doris Nye

#118 April 1962

### **Mrs. Constance McCrimmon Reaches the End of the Trail**

We are all traveling the trail of life from lower to higher realms. Mrs. McCrimmon was well known to the older members of our Society for her enthusiasm and regular attendance at all our meetings and summer camps. She joined our Society soon after its foundation and for many years was a member of the Executive until her health failed and she was no longer able to attend meetings. On Tuesday we saw the last of her physical remains but we know that her spirit lives on in many of our members with whom she came in contact.

As an enthusiastic nature student, she was instrumental in introducing many younger teachers into membership; her wisdom, integrity and quiet dignity aided greatly in

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maintaining the high standard of comradeship that prevailed at all our summer camps, most of which she attended as the women's representative on the commissariat. *"Well done good and faithful servant! Enter thou into the joy of thy Lord."* We extend our sympathy to her son Douglas and to other members of her family.

Editor's Note – The above article was kindly sent in by Prof. John Davidson. For the information of our newer members, Prof. Davidson was instrumental in organizing the Society in 1918 and was president for many years in those early days, and was responsible for successful camps before our modern highways and communications were established. His many friends will be pleased to know he and his wife are both keeping well and busy. After a successful eye operation and new glasses, Prof. Davidson is now able to read and write and get about easily, which for someone in his 84<sup>th</sup> year is a real accomplishment. Our continued best wishes remain with them.

#119 September 1962

### Some Noteworthy Records

|         |   |
|---------|---|
| May 17: | 2 Wilson's phalarope – Lulu Island                                  |
| May 19: | 2 Wilson's phalarope – Sea Island (male and female)                 |
|         | 3 [red] knot – Sea Island   |
| May 21: | 1 yellow-headed blackbird – Pitt Meadows                            |
| May 27: | [gray] catbird and 2 lazuli buntings (male and female) – Pitt River |
| June 3: | 1 yellow-breasted chat – Pitt Meadows                               |
|         | 8 Bullock's orioles – Stanley Park                                  |
| June 9: | 2 yellow-breasted chats – Pitt Meadows                              |
| Jun 17: | 1 yellow-headed blackbird – Pitt Lake                               |
| June 24 | 1 black-chinned hummingbird – Grouse Mountain                       |
| July 8  | 2 [gray] catbirds (together) – Pitt River                           |

Green herons have been seen regularly in the Coquitlam-Pitt River area during the period 28<sup>th</sup> April to 2<sup>nd</sup> September. Two were also seen together in a bog in North Vancouver during August.

Gwen Wright

*Gwen Wright was a fine birder, active in the Port Moody, Haney and Langley areas helping to organize naturalists there. She was a regular participant in the Society's 24<sup>th</sup> of May weekend field trips to the Okanagan Valley. She married Austin De Camp. In her later years she became a member of the White Rock Surrey Naturalists*

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#120 January 1963

### **Proposed Association of B.C. Natural History Societies**

During the past few months members of the Executive have participated in two meetings that were held to discuss the formation of an association of B.C. natural history societies [B.C. Nature Council forerunner to the Federation of B.C. Naturalists].. The subject has also been discussed in Executive meetings and the President has carried out correspondence with other clubs. Federation, or its equivalent has been under consideration for a good many years but has not come about largely due to the fact that no one individual has had the time to do sufficient work to get the job done. Our club and the other clubs involved finally decided that we did not want a Federation as it now exists in Ontario, but an Association of Natural History Clubs with a joint council.

In September Drs. M.Y. Williams, J. Bendell and J.E. Armstrong were in Kelowna to attend the B.C. Resources Conference and they took advantage of the opportunity to meet with representatives of the Kelowna and Vernon natural history clubs. At their meeting it was agreed that we should proceed with the formation of a Natural History Association. Mrs. E. Lamoureux, the secretary of the Kelowna club, summarized the meeting and supplied each present with a copy.

In October Mr. Yorke Edwards and Mr. D. Stirling sent a memorandum to all clubs suggesting a Nature Council be formed. Although both are active members of the Victoria club, they were acting as individuals and their main aim was to get some action on a Federation, and for this they are to be strongly commended. In their memorandum they suggested that one club might volunteer to host a meeting of interested delegates in order to get the show on the road. Both the Victoria and Vancouver clubs offered to do this. Victoria named Mrs. G. Soulsby and Dr. C. Carl as their representatives and the Vancouver club named Drs. V.C. Brink and J.E. Armstrong.

Letters started to cross one another in the mail; however at last an exploratory meeting was arranged in Vancouver on December 14<sup>th</sup>, [attended by] Mrs. E. Lamoureux representing the Kelowna and Vernon clubs, Dr. C. Carl, the Victoria club, and J. Y. Neild, V.C. Brink and J.E. Armstrong, the Vancouver club. As a result of this meeting it was decided to proceed with the formation of a B.C. Natural History Association. J.Y. Neild was appointed pro-tem secretary with the responsibility of arranging a meeting at which all interested groups would be represented and at which an Association would be formed and an executive appointed. An agenda, including the aims of the proposed Association is also to be drawn up.

The Victoria club volunteered to act as the host for such a meeting in late January or early February 1963. The Kelowna, Vernon, Penticton, , Vancouver and Victoria Natural History clubs will all send official delegates. At least three other groups concerned primarily with natural history will also be invited to attend. At this meeting it is hoped an executive will be chosen and that a constitution will be drawn up, subject to approval by all clubs that decide

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to participate. Particularly in matters dealing with conservation, we would like to see the naturalists act in unison, and we believe an Association will help bring about this aim; also to help foster numerous other joint activities. I for one hope that success in '63 is attained.

J.E. Armstrong

### Speaking of Conservation

The Royal Bank monthly letter [Vol. 38 No. 4] *Conserving Canada's Resources* warns: "It is easier to preach conservation than to achieve it. Education, research and official planning are not enough. These must be supplemented and made effective by action programmes. We cannot conserve our resources effectively if every man does it in his own way, on his own piece of ground, [and] within his own narrow interests. This is a national provincial and a community [problem], as well as a personal problem."

The Vancouver Natural History Society has formed a Conservation Committee to further some of its objectives. Two meetings have been held. One of the areas of concern was a review of what has already been done:

1. Resources Conference. Annual conferences have been held for 14 years in B.C. to investigate the best uses of our provincial resources.

2. Fish and Game Clubs. Mr. Ed. Meade, Secretary of the B.C. Federation of Fish and Game Clubs, attended a meeting and explained the activities of his organization which had a membership of 20,000.

3. Wildlife Federation. As a founding delegate, Mr. Meade recently attended a meeting of the newly formed Wildlife Federation in Ottawa which has received a \$20,000 grant from the National Fitness Council. It has representation from seven provinces, including B.C.,

and is expected to campaign for improved protection of Canada's dwindling fish and game populations and other renewable resources. Their programmes will give attention to water pollution, drainage of duck breeding grounds, careless use of pesticides and private hunting and fishing reserves.

*In a sense, this report is incomplete. The B.C. Mountaineering Club and the Alpine Club of Canada (Vancouver Section) were heavily involved in the relatively new efforts to establish conservation efforts at the national and provincial levels. Phyllis and Don Munday and Bert Brink represented the Mountain Clubs but were also members of the VNHS. Gradually disaffection with the rod and gun clubs led groups to pull away from the hunting "ethics". After years of discussion between the Federation of Ontario Naturalists and the Ottawa Field Naturalists, the groups mentioned came together in Winnipeg to form the Canadian Nature Federation.*

4. Vancouver Natural History Society. Following are some of the contributions that your Society has made during the past:

- sponsored Audubon Wildlife Tours;
- assisted in obtaining protective legislation for predatory birds;

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- supported efforts to preserve Mud Bay, Shaughnessy Golf Links, Brome Ridge as part of Garibaldi Park and to ban horses from the upper alpine meadow trails; Ambleside Park; China Creek – a volcanic tuft in the vicinity of False Creek; part of the University Endowment Lands at 25<sup>th</sup> and Crown; timber in the approach to Garibaldi in the upper Squamish Valley; Tenquille Lake; Buttle Lake – protest against flooding; Iona Island – protest against sewage disposal re migratory birds.
- Campaigned for protective legislation of the Cascara Tree and a stamp issue in aid of protection for the whooping crane.
- Commended the Provincial government for the Nature House projects and the then B.C. Electric Company on clearing Cheakamus Lake.
- Arranged for two speakers on Conservation topics, Dr. James Hatter, Assistant Director, and Mr. P.W. Martin, Biologist, of the Fish and Game Branch, Provincial Recreation and Conservation Department, Victoria

Land Acquisition. Six migratory bird sanctuaries, 19 provincial game reserves and 16 provincial parks have been established in British Columbia. As these areas need to be expanded there were discussions on the feasibility of land acquisition by private means, public subscription and government legislation.

Burns Bog was suggested as a possible area for sanctuary purposes. Located in the Delta district it is a primitive peat bog comprising an area of some 5,000 acres. Much of it is useless for commercial or domestic purposes and a Society field trip is planned in the spring to assess its possibilities.

If conservation programmes are to be effective, it is your Committee's [collective] opinion that they must be broadly planned and shares the interests of people in every walk of life. As a member of this Society do you feel that you have a responsibility in conservation programmes? If so, what action should be taken?

*Committee Members: Dr. J.E. Armstrong (ex-officio), Dr. V. Krajina, Mr. A. Muir, Miss R. Ross, Mr. F. Sanford, Mr. J. Van Tets, Miss G. Wright. Chairman – J.G. Sarles*

### **About Our Library**

Many of our newer members may not be aware that the Society has a very good library and that they are free to borrow books at any time. Our Librarian, Mrs. H. Pinder-Moss (RE3-6031), would be very pleased to answer any questions and to explain how members might make the best use of the excellent material we have. The library is located in the basement of the Biological Sciences Building on the U.B.C. campus, and any time that our meetings are held there Mrs. Pinder-Moss will be present one-half hour before the meeting to assist members.

We would like to mention a comprehensive work on ornithology that Audrey Martin recently completed and which is now available for loan. Miss Martin has compiled and indexed all bird records published by our Society since our bulletin started, and listed these in a very readable and interesting manner. This work consists of 30 pages and Miss Martin

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is certainly to be commended for the time and effort she has put into it. The executive hopes that the members will use it and that some further way may be found to make it more readily available.

### **Canada's National Collection of Nature Photographs**

[Photographs] in black and white or colour are wanted of Canada's flora and fauna. From submitted photographs, selections will be made for traveling exhibits and for permanent display in the National Museum of Canada and the planned Natural History Museum. The photographer's name will remain on the work and copyright remains with the photographer. Specially designed scrolls will be presented to exhibitors. The deadline for the next selection is January 30, 1963. Information brochures and entry forms are obtainable from The Secretary, National Collection of Nature Photographs, the National Museum of Canada, Ottawa. Photographers of our Society are urged to submit their work for possible selection for our national collection.

### **Birds: Their Friends and Foes**

Mr. Patrick Martin, one of the senior biologists of the Fish and Game Branch, in his address on October 17<sup>th</sup>, 1962, spoke of the adjustment of the forests following great fires. Periods of evolution have taken thousands of years. Animals and birds are fixed in their particular requirements and as their food supply increases, so do their numbers. When the white man came to the Prairies he took up land at random. In doing so his fields were small and the changes he brought about were not great.

It is necessary to encourage habitat needed to carry the capacity of bird populations. Where there is lots of land and sloughs on the Prairies the duck population increases. It decreased in the 1930s and "Ducks Unlimited" was formed by scientists and hunters to save these birds. Although there is a great deal of drainage going on in Canada, attempts are being made to preserve waterfowl habitat. Breeding areas where the largest population can winter are on the lower mainland of British Columbia, Boundary Bay being one of the best waterfowl habitats in Canada. The Canadian Wildlife Service and National Resources are putting large areas aside as refuges for nesting birds.

Increases in the use of pesticides in the farming industry have been absolutely phenomenal. Miss Rachel Carson in her book *The Silent Spring* has done a great service in bringing [over-use of pesticide] to the attention of the general public. Birds have forsaken orchards as they cannot live in an environment where DDT sprays are used to control insects. Young pheasants are highly insectivorous as are robins, bluebirds, orioles and vireos, all of which have been affected and made sterile. Wholesale profits in the sale of insecticides in the United States are close to \$50 million.

In Nova Scotia they work on the assumption that nature can be effective enough to get insect pests under control. Woodpeckers and chickadees are the main predators of insects which attack crops. On Vancouver Island where forests have been sprayed, there has been an extremely high kill of fish owing to the rain washing the spray down to the rivers where it



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remains toxic enough to destroy them. Entomologists are looking for ways to control insects without the current damage that is being done. With our modern technological knowledge, we must forego the concept of substituting nature. K.M.

#121 April 1963

### **President's Report for the Year 1962-63**

During the year just completed our Society carried out its usual very full program of activities. These included 30 weekend field trips, 10 lectures, (5 of which were held in conjunction with the Adult Education Department of the Vancouver School Board), 5 Audubon Screen Tours, the Annual Banquet, and a most successful Annual Field Camp.

Participation in these activities has been variable and I would like to comment on this, particularly in regard to the lectures sponsored jointly by our Society and the School Board. For these five lectures the Executive obtained outstanding speakers and, in some instances I believe the lectures were better and more educational than some of the Audubon screen tours. However, whereas the screen tours had an admission charge of \$1.00 and an attendance of 500 – 700, our free lectures had attendance varying from less than 100 to 250. I cannot explain this discrepancy especially as our Society has a membership of about 500 regular members, 100 junior members, and non-members were also invited.

However, I think the membership at large should make more effort to support the Executive who has gone to much effort to obtain lecturers. Small crowds are a discourtesy to the speakers who donate their time to prepare and deliver the lectures. Some involve many weeks of work. Let us be a Society of participants and not one of non-participants. In one

sense I feel our venture with the School Board has been a success in disseminating knowledge of the Society's work and in obtaining new members. I believe we should continue this joint effort next year and sincerely hope response from our own membership is much improved.

The other activities of the Society, except for the Annual Field Camp, have also received a varied reception. For example, the Annual Banquet with an outstanding speaker only attracted about 100 members. Attendance on field trips is varied depending largely on the weather. If the day is fine and the locality of the trip attractive, a big turnout is a certainty; however, if the weather is discouraging only a corporal's guard shows up. This of course shows who is really interested and who come along primarily for entertainment purposes. All are welcome of course, but a more consistent turnout would make planning such trips much easier and more rewarding for the leaders.

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During the year the Executive held seven meetings averaging 3 ½ hours each. A variety of subjects were dealt with and I will attempt to outline only a few of the major ones. A new simplified Constitution was drawn up by a small committee. This was started the year prior under the chairmanship of Dr. R. Stace-Smith and completed in the autumn of 1962. When the new Constitution was approved by the membership, it was filed in Victoria and we became a registered Society under the *Societies Act*. Copies of the new Constitution will be mailed to members in the near future. One major change was the setting up of a nominating committee in order to bring in a slate of directors. Under the old system our Society had difficulty getting new blood in to the Executive as most of those nominated were the existing office holders. As a result the 1962-63 Executive of eighteen had only two new members. This coming year we have five newly elected members and the possibility of appointing others.

The Executive has also spent time discussing the proposed British Columbia Nature Council which I will discuss independently of this report. The role of National Parks was discussed at several meetings in view of political pressures to commercialize the Parks. Letters were written to appropriate officials stating that our Society wished to see the Parks maintained as outlined in the *Act*. We believe our actions may have had a small part in deterring some proposals for further commercialization of the National Parks. The development of Garibaldi Provincial Park was discussed in detail at one meeting. I want to assure you that our Society will continue to watch [provincial] plans for Garibaldi with a vigilant eye.

The Vernon Naturalists Club has been campaigning against the indiscriminate use of "1080" poison by the Fish and Game Branch of the Department of Recreation and Conservation. This poison is used as a predator control, particularly on coyotes. The Vernon members feel that mass eradication of coyotes is unjustified and we have supported them in their stand. Some modification of the original 1080 program has resulted and we hope further changes will follow.

I think I have touched on the more interesting activities of the Executive. Good conservation practices and the education of the public, especially politicians, must always be a prime aim of our Society. I thank all members of the Executive for their cooperation and whole-hearted support throughout the years.

J.E. Armstrong

### **British Columbia Nature Council**

On February 23<sup>rd</sup> a meeting was held in Victoria with representatives of other Natural History Societies in B.C. in order to further the formation of a Nature Council.

Representatives of the Vancouver Society were J.E. Armstrong, J.Y. Neild, V.C. Brink and P.J. Croft. An interim constitution was proposed.

### **Please Note- Members of the Vancouver Natural History Society**

This fall I would like to make a nesting study of the [American] robin and the environmental conditions that help determine the selection of a nesting site. I believe that pairs which nest early, often choose the sites quite different environmentally from pairs which nest later. As the robin is our most common nesting species in the Greater Vancouver area, I feel everyone

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interested will have no trouble in recording a few nests. The more records made available, the more conclusive will be the results. Therefore I invite you all to participate. Information will be recorded on cards supplied by the B.C. Nest Record Scheme. The most crucial information required is:

1. Nest height above ground, and  
Nest position – against house, branch of tree, etc.

I hope all participants will receive a report of the results when tabulated.

For nest record cards and/or information, contact Bill Merilees, c/o Dept of Zoology, University of B.C. or phone AM 1-7459 evenings.

### **Bird Notes**

Early sightings of swallows and rufous hummingbirds have been reported as follows:

|          |                         |              |
|----------|-------------------------|--------------|
| March 3  | 1 violet-green swallow  | Burnaby Lake |
| March 10 | 3 violet-green swallows | Pitt Meadows |
| March 10 | 5 violet-green swallows | Burnaby Lake |
| March 17 | 1 tree swallow          | Pitt Meadows |
| April 3  | 1 rufous hummingbird    | Vancouver    |

Another noteworthy sighting on March 10<sup>th</sup> was a Say's phoebe at Pitt Lake. The green heron has been reported wintering at Pitt Meadows and one was seen by a party at Coquitlam Slough on March 16<sup>th</sup>. Two [black-billed] magpies are under observation in the Delta area. These two birds have been there summer and winter for four years. Originally there were six birds but four were shot last year!

### **Wood Duck Nest Boxes**

The wood duck nests in some numbers throughout the Lower Mainland. There is a large area that is suitable habitat for this species but is not used due to a lack of nest sites. This duck nests in holes in trees but the trees are being cut down at a rapid rate. It has been proposed by some members that by erecting suitable nest boxes this species might increase. The use of such nest boxes is not a new idea as they have been used in eastern Canada and the United States with good results. After some discussion it was decided to go ahead with this project.

Our Society made a grant of \$50 toward the purchase of materials; plans were drawn and several members volunteered to make the boxes. Some were also made by the Second Burnaby Centre Wolf Cub Pack. Wayne Campbell provided truck transportation and erected most of the boxes. As a result of these efforts, 57 boxes have been made and placed in the following areas: Beaver Lake, Stanley Park, Burnaby and Deer Lakes, Coquitlam Slough opposite Crease Clinic, DeBoville Slough and Dominion Road, on the west side of Pitt River, McNeill Road area on the east side, Nicomen Island in the Fraser River east of Mission, and MacGillivray Creek Game Reserve at the junction of the Vedder Canal and Sumas River.

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There will be field trips and members are urged to come out and see for themselves where the boxes are and how they are examined. There will be a report published on this project and if successful, it is planned to erect more next year. W. Hughes

### Wildflowers of B.C. – From Tidewater to Timberline

Mrs. Don [Phyllis] Munday, in her delightfully illustrated lecture on February 6<sup>th</sup>, 1963, referred to flowers as being different all along the way, and she left us in no doubt as we traveled with her over the Lower Mainland to the mountain meadows. Her love of flowers was evident as she described each one, pointing out its individuality, and bringing a fresh interest to those of us who have been in those parts. With her alpine experience she does not seem to be aware of the hardship of climbing, so keenly interested is she in the beauty of the alpine meadows. For those who do not have the time or the inclination to visit those areas, Mrs. Munday collected specimens that she grows in her garden and that she is pleased to show anyone interested. Trying to photograph a delicate flower in a windy area is just one of the frustrations that she is up against.

It is not easy to depict in words the beauty that the camera brings out of the most common flowers in full bloom, or in seed, but Mrs. Munday has brought this to a very fine art. In her travels she has found 32 different varieties of the Indian paintbrush *Castilleja septentrionalis*, from pale yellow to scarlet. On Seymour Mountain she found a double salmonberry, *Rubus spectabilis*, that now grows in her garden, the fruit of which is deformed in every instance. Some of the flowers she showed us were as follows:

*Dodecatheon pauciflorum* [ few-flowered shooting star]  
*Asarum caudatum* [wild ginger]  
*Spiranthes romanzoffiana* [hooded ladies' tresses]  
*Calochortus elegans* [elegant mariposa lily]  
*Valerianella*[*Plectritis*] *congesta* [sea blush]  
*Erythronium grandiflorum* [yellow glacier lily]  
*Saxifraga integrifolia* [grassland saxifrage]  
*Corallorhiza* [coral root]  
*Camassia quamash* [common camas]  
*Balsamorhiza sagittata* [arrow-leaved balsamroot]  
*Lonicera glaucescens* [glaucous-leaved honeysuckle]  
*Erythronium oregonum* [white fawn lily]  
*Trillium ovatum* [white trillium]  
*Lysichiton kamtshatcense* [*americanus*] [skunk cabbage]

*Calypso borealis*[*bulbosa*] [fairy slipper]  
*Epilobium alpinum* [broad-leaved willowherb]  
*Habenaria* [*Platanthera*] *dilatata* [white rein-orchid]  
*Arctostaphylos uva-ursi* [kinnikinnik]  
*Clintonia uniflora* [queen's cup]  
*Cornus canadensis* [bunchberry]  
*Pyrola asarifolia* [pink wintergreen]  
*Linnaea borealis* [twinflor]  
*Streptopus amplexifolius* [clasping twistedstalk]

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*Tragopogon major* [yellow salsify]

*Valarian origeron* [sic][?]

*Veratrum viride*, [Indian hellebore]

*Romanzoffia sitchensis* [sitka mistmaiden]

*Parnassia montanensis* [*palustris*] [northern grass-of-Parnassus]

*Anemone occidentalis* [western pasqueflower]

*Cypripedium pubescens* [*parviflorum*] [yellow lady's-slipper]

*Phacelia linearis* [thread-leaved phacelia]

*Vaccinium caespitosum* [dwarf blueberry]

Kay Milroy

*Kay Milroy was a dedicated V.N.H.S. member; a person with qualities beyond easy description. She should have been recognized as Citizen of Prominence by the City of Vancouver for her work with the arts and humanities and her support of the Vancouver Museum, the Aquarium, the Art Gallery and the V.N.H.S. She helped in so many ways on field trips and occasional camps, banquets etc. She was truly a jewel!*

### **Geological Mapping in the Mountains of B.C. and the Yukon**

Dr. John Wheeler has spent the past 17 years mapping B.C. and the Yukon. Geological mapping has been undertaken in the mountains of B.C. for over 100 years, beginning with James Hector in 1858. Since that time, maps appear to be two-thirds cordillera. In his illustrated lecture on February 20<sup>th</sup>, Dr. Wheeler explained how the geologist observes exposed rock and identifies what form they take, and giving some idea of the conditions prevailing with regard to travel, working and living conditions.

In the south central Yukon, where Dr Wheeler has done some work, broad valleys with rolling uplands were shown, where the outcrops is poor, making it difficult to get information on the [underlying] structure of the rocks. In contrast, Permian sedimentary rocks are revealed in the mountain passes. Here the mountain range is cut by a huge valley by the Plum River, the main feature being streams so powerful and swift [that] horse travel is limited. Aircraft is used to assist the geologist in such cases.

In the Pelly Mountains and Pelly Plateau region the rocks are 450 million years old and bedding is plainly seen, giving a precise idea of what sort of rocks are there. Rocks do weather and become rubble or are formed into small tarns. In June the snow is so deep that snowshoes have to be used. In such conditions work can only be attempted from 3 ½ to 4 months of the year. Transport is usually by truck, outboard canoes and packhorse. Although modern transport makes access easier, Dr. Wheeler's thoughts [he said] often go back to the days when after the day's work was completed, the horses were let loose in the pastures, the bell ringing to make their presence known, and they [the horses] were always

miles away when wanted. "Major" a favourite, used to clean up the pancakes after breakfast and spit out the prune stones! Under certain conditions it was necessary to live off the land and caribou and beans were a staple dish. The arrival of the floatplane with fresh supplies and mail was a welcome break.

In the southern part of the Yukon there are many lakes in the Pelly Mountains, making it easy for floatplanes to land. Helicopters are used to take the geologists to areas on the high mountains, returning for them once their work is completed. There is always a connection

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with base camp. Work is laborious when snow is deep in the canyons. Rocks being generally weak, streams can cut their way down 1,000 feet, making travel difficult – often with 100 lbs of specimens on one's back.

Dr. Wheeler has also done mapping in southeastern B.C. in the Rocky Mountains where there are well-bedded rocks of the Devonian period. Here one can get across the terrain safely and quickly. His grandfather [A.O. Wheeler] mapped the area sixty years earlier and in order to preserve the family tradition, Dr. Wheeler climbed Mt. Wheeler. In mapping, geologists climb to a certain height and according to the age displayed on a geological map, look for the rocks most likely to be in that area and their formation. He said there is a reward for those privileged to work in the mountains by the wonderful views of the snowy peaks in the very early morning and evening lights bringing out a beauty which is incomprehensible.

Kay Milroy

#122 September 1963

### **Wood Duck Nest Boxes**

|                                    |     |
|------------------------------------|-----|
| Total boxes erected                | 57  |
| Number destroyed by vandals        | 5   |
| Number occupied by wood ducks      | 29  |
| Number occupied by kestrel         | 1   |
| Number of eggs laid                | 393 |
| Number of young wood ducks fledged | 278 |
| Number of females banded           | 5   |

This project has proved to be such a success in its initial year that we propose to continue it next year.

### **Colour-banded Glaucous-winged Gulls**

The glaucous-winged gull, *Larus glaucescens*, is the only gull nesting in salt water localities in British Columbia. Colonies vary from 2,000 pairs down to several on nesting islets ranging from barren skerries (reefs) a few feet above high water, to islands a couple of miles long. (Drent & Guiguet, 1961).

On Christie Island, Howe Sound, B.C. 49° 30'N, 123° 18' W, banding of these gulls with regulation Fish and Wildlife Service metal bands was carried out by Mr. Wm. M. Hughes from 1949 to 1956 (excepting 1951 and 1955). None were banded in 1957. From 1958

consecutively to 1963 the work has been a co-operative project of the Pacific International Chapter of the Western Bird Banding Association. (Hughes, 1960)

On July 27<sup>th</sup>, 1963 seven Association members banded 644 young glaucous-winged gulls with U.S. F&W Service bands on the right leg; 636 of these birds each carry, in addition, two black poultry rings on the left leg. This colour-banding program was authorized by the Migratory Birds Administration of the Canadian Wildlife Service. The remarkable number

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of confirmed observations of banded glaucous-winged gulls in Vancouver, B.C. by Mr. R.F. Oldaker has now reached upwards of 1500 since he began reading their bands by telescope in 1958. (Oldaker, 1960).

It is expected that this colour-banding scheme, which covers a sample of the Christie Island gull population, will also help to make the birds' movements more obvious to observers in Vancouver as well as farther afield. If some success with observation is achieved as the birds disperse from their natal colony, the program may be extended to other nesting colonies in 1964. How you can help! Observers are invited to report sightings of the black-ringed gulls to: The Canadian Wildlife Service, 6660 N.W. Marine Drive, Vancouver, B.C. When reporting, it is essential that the following information be given: Date of observation; number of birds seen; place observed; and report submitted by (name) and (address).

J.G. Sarles, Sec.-Treas., Pacific International Chapter, Western Bird-Banding Association. Vancouver, B.C.

### **The Work of R.A. Cumming, Naturalist**

Dr. M.Y. Williams, our Honourary President, gave an illustrated talk on April 3<sup>rd</sup> on the life of Robert A. Cumming who was one of the earliest members of the Society. Mr. Cumming was born in Ayr, Scotland in 1888 and came to Canada in 1910. He proved himself to be a born naturalist, hunter, ornithologist, mammalogist and botanist. He was able to pursue these interests while acting as game warden. While out on field trips with the Society he started a collection of birds and mammals in the identification of which he was greatly helped by Mr. Kenneth Racey. The collection was highly prized at Victoria and later Mr. Cumming was desirous of donating it to a museum but since there was no demand, the collection eventually went to Berkeley, California. His Marpole Midden collection was purchased by the Society for the University of British Columbia.

Among his publications in *The Murrelet*, were "Birds Observed on Queen Charlotte Islands; "Birds of Vancouver"; "Collection of a Male Rock Ptarmigan at 4,000 ft. on Seymour Mountain"; and "Notes on Harris's Sparrow". Other contributions were "The Cariboo 1924"; "Marine Pleistocene, Manitoba Street at Marine Drive"; and "Marpole Middens".

The slides shown by Dr. Williams had been given to him by Mr. Cumming and are now to be donated to the Society. They cover the period from 1913 to 1930 and show Forbidden Plateau, the Queen Charlotte Islands, a Haida tribe, lyme [wildrye] grass on Langara Island, as well as birds and mammals. His study of birds took place on his spacious property and in the Fraser Delta where he noted many rare birds. His death on July 3<sup>rd</sup>, 1937 must indeed have been a loss to the Society.

Kay Milroy

*Where are Mr. Cummings' slides today?*

### **Wanton Weeds and Small Cattle**

The intriguing title that Mr. Croft gave to his talk on March 20, 1963, was taken from the "Essays of Elia" by Charles Lamb. Mr. Croft takes the view that most Natural History Societies consist of people from many walks of life who share a common interest in plants, small creatures and wildlife of every kind. The difference between the ordinary citizen and

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the naturalist is that the former looks on the world of plant life as an uncoordinated maze of green things, whereas the naturalist finds in it a fascination in which there is a lifetime of study.

Mr. Croft got an early start at the age of nine from his headmaster who was an expert botanist and from his mathematics teacher who made a study of dragonflies. His keenness for nature was sharpened by the fine photographs in *Wild Nature's Ways* by R. & J. Kerton. Later on, Mr. and Mrs. Croft had a summer cottage on a three-acre island in Georgian Bay, an ideal place for their family's interest in the out-of-doors. They found it a "Garden of Eden" where there were wildflowers, jack pines mingled with aspens, poplars, scrub oaks and sycamores to photograph. There were even six species of snakes that fed on white-throated [white-footed] deer mice. The skillful use of the camera made this illustrated part of his talk enchanting as we saw magnified flowers, insects and other wildlife in detail.

Kay Milroy

#123 January 1964

### **The Proposed Reclamation of Boundary Bay**

Members will be familiar with the proposed plans for reclamation of the Boundary Bay area and may wish to add their voices to the many now being raised in opposition to this development. The Executive is urging that you write to local MLA's to protest and ask that action be taken to stop any further work or plans in this regard. To assist in clarifying the picture and to explain what is happening in a letter that the Executive is sending to the Federal Minister of Northern Affairs and National Resources, the Provincial Minister of Recreation and Conservation, MLAs and certain community organizations is included below. To aid you in writing to your MLA, an outline of a letter is also printed which you may find helpful.

#### **Letter to Minister of Northern Affairs and National Resources, Provincial Minister of Recreation and Conservation, MLA's and Community Organizations:**

In the past many areas of recreational or wildlife value have been taken over or reclaimed for industrial or urban use. Examples of such areas are many but a few could be listed such as Annacis Island, the Industrial Park area on the Lougheed Highway, the river front development opposite New Westminster, and Lulu Island. These developments have not been challenged because, except for some of the urbanization on Lulu Island, the developments appeared logical, necessary and a natural outgrowth of a large metropolitan area. Further, no particularly important values were lost as a result of these developments.

Now, however, a development is proposed which is neither logical nor needed. Further, a series of other values of particular importance occur on the area and these values will be lost should the development occur. The area is the portion of Boundary Bay from Oliver Road pump-house in the east to the vicinity of Gaudy Road in the west of Delta Municipality.

The beach in this area is one of the finest recreational assets in the Province because of its extensive fine sand. It is doubly valuable because it is so close to a large segment of the population of British Columbia. To date it has not been extensively used and needs some



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development of convenient access. But it is the greatest recreational asset of the Fraser Valley for tomorrow. A new society called "Save Our Beaches" is being formed to work for this particular area. Another group is mulling over the possibility of making Boundary Bay part of a National Park.

In addition to the recreational function of the area as a beach, it is host to millions of birds. The Bay regularly winters one hundred thousand ducks and more than a million shorebirds. It serves as the major stopover for Pacific black brant in the spring when over thirty thousand of these unique geese use the area. In October almost fifteen thousand greater scaup stop in Boundary Bay on their way south, as do countless thousands of other waterfowl, including nine species of ducks, snow geese, three kinds of Canada geese, two species of swan, [American] coot, and at least a dozen species of shorebirds.

Boundary Bay has a high intrinsic value as a recreational area. On the other hand, there is no indication that it is needed as an industrial or an urban area. Presently developed industrial sites are unfilled and are falling short of the expected rate of occupancy. Other prime areas for eventual reclamation and industrialization exist that would be more suitable for industry in the foreseeable future. The Lulu Island foreshore, the bog on the southeast part of Lulu Island, the Fraser River east of New Westminster, and Pitt Meadows are all areas where reclamation is relatively cheap and where services, and rail and shipping facilities, are either already available or [can be] available with only slight modification or development.

It has been shown in Delta Municipality that urban areas cannot support themselves on just taxes alone unless the density is high and continuous. Farmlands would once again have to subsidize urban development. True, we need industry in the Lower Fraser Valley, but there is absolutely no indication that industry is staying away because Boundary Bay has not been reclaimed. It is also true that industry needs people and that people play as well as work. It is our feeling that recreational foresight now will make the Fraser Valley an even more attractive place because it will be easier for industry to get the best workers to come to a place where it is pleasant to live.

With these thoughts in mind we urge you to do all in your power to prevent the reclamation of Boundary Bay and to encourage the development and maintenance of Boundary Bay as a recreational and wildlife area.

### **Bird Notes**

Mr. and Mrs. Don R. Bruce made the following observations during 1963:

June 8<sup>th</sup> – a white-winged junco [race of the dark-eyed junco] at Banff, which, according to a letter from Mr. G.C. Stirett, Chief Parks Naturalist, will be added to the next Banff National Park [bird] checklist.

August 23<sup>rd</sup> – at a distance of only 20 feet, three long-tailed jaegers at Active Pass, B.C.

September 8<sup>th</sup> – in company with Mr. E. Moody, an albino [red] knot at Iona Island.

### **V.N.H.S. Newsletter Editor's Note**

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

We would like to take this opportunity to congratulate Miss Margaret Thyne on being made a life member of our Society. Miss Thyne is one of our oldest Charter Members and despite advancing years, has been a faithful and regular attendant at nearly every meeting. Our best wishes to you, Miss Thyne.

### **End Note #4: Charter Member C.F. Connor (see page 262)**

#### **Bird Sightings Requested**

A report is presently being prepared on the Avifauna of the Burnaby Lake – Deer Lake Area (a 2-mile radius with the centre at Deer Lake). To make this report as accurate and complete as possible, many sight records, nesting records etc. are needed. Any records from within this area will be greatly appreciated. Proper acknowledgement will be made on all records submitted. Please contact or call Mr. R.W. Campbell, 5536 Hardwick Street, Burnaby 2, B.C. Cypress 8-4561.

*Wayne Campbell, V.N.H.S. Junior Naturalist, became another of B.C.'s outstanding naturalists and ornithologists. A graduate of UBC (Zoology) his career was with the B.C. Provincial Museum and the B.C. Wildlife Branch of the Ministry of Environment.*

#124 April 1964

### **End Note #5: Society Representatives in other Organisations (see page263)**

#### **President's Report for the Year 1963-64**

During the year just completed, our Society carried out a full program of activities. These included 30 field trips, 10 public lectures held in conjunction with the Adult Education Department of the Vancouver School Board, five Audubon Screen Tours, the annual banquet and a most successful field camp. Although the public lectures were varied, the general theme was conservation and three of the speakers, the Hon. A. Laing, Minister of Northern Affairs and Natural Resources, Mr. Yorke Edwards of the B.C. Department of Recreation and Conservation and Mr. Arthur Benson of the Canadian Wildlife Service all spoke on the need for conservation and parks.

Participation in the above was variable and once again I would like to comment, particularly in regard to the evening lectures. We had an outstanding series of lectures, possibly the best in years, and although the average attendance was probably 100 to 200, I consider this poor in view of the fact that we have a membership of more than 500 and the lectures were also open to the public. As I stated last year, let us be a Society of participants, and not one of non-participants.

The evening meetings have been an excellent source of disseminating knowledge of the Society's work and in obtaining nearly 100 new members in the past year. The Executive discussed a variety of subjects at its 11 evening meetings. I will outline only a few of the major items of business.

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The new constitution was printed and distributed to all members. A major amendment was made to the annual dues, which were raised to \$3.00 a year for an individual and \$5.00 for a family.

The Society supported the Garibaldi Lake Alplands Committee in its plea to the Government of B.C. that part of Garibaldi Park be set aside as a Nature Conservancy, a special category of parkland in which the natural scene and wildlife would remain untrammelled, save for foot trails, campsites and shelter huts. In the recent session of the Provincial Legislature, the Government established a Nature Conservancy in part of Garibaldi Park and for this they merit thanks. Dr. V.C. Brink and Mr. A.R. Wootton, members of our Mountain Parks Committee, were active on the Garibaldi Lake Alplands Committee and the Society owes them thanks for all their work in helping to obtain a Nature Conservancy in part of Garibaldi.

**The B.C. Nature Council was established in May of 1963** at a meeting in Kelowna. Dr. T.M.C. Taylor of our Society was elected the first President. All Natural History Societies are represented on the Nature Council, and in future it should play an ever-increasing role in matters concerning conservation in British Columbia. Our Society made an initial grant of \$200 to it. At the present time, the Nature Council has the following subjects under study: 1. Predator control; 2. Chemical control of pests; 3. biological control of pests; 4. Junior Naturalists' camps; and 5. provincial parks. A committee under the chairmanship of Mr. A.R. Wootton has held a number of meetings to look into the matter of establishing a Nature House in Stanley Park in co-operation with the Vancouver Parks Board. Discussions are continuing and I feel certain that the Society will help establish a nature program for Stanley Park.

During the past year Vancouver City museums have been the subject of much controversy in the news media. On behalf of the Natural History Society a letter was sent to the Mayor and Aldermen strongly recommending that Council re-examine its attitude towards museums. We asked that our museums become education, tourist and cultural assets for the City. Four Aldermen replied. One was firmly opposed to our stand, two were partly opposed and partly supportive, and the fourth strongly supported us. The two most vehement critics of the museums on Council did not reply. Our letter was read in Council and reported in both newspapers.

The proposed reclamation of Boundary Bay was discussed at several meetings and in January a letter outlining the Society's stand on this issue was sent to all 52 MLA's and to the Hon. A. Laing of the federal government. Members of the Society were also urged to write to their MLAs and many did. I received a reply from the Hon. A. Laing and from 16 MLA's. The replies may be summarized as follows: Nine were completely sympathetic to our aim to keep major industry out of Boundary Bay (3 Social Credit, 4 NDP and 2 Lib) and seven were non-committal (all Social Credit). Two of these I have quoted below:

Hon. R.W. Bonner: "I am taking the liberty of drawing your point of view to the attention of the Department of Lands and Forests, but meantime must advise that the area in question

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is formally a part of the Delta Municipality, having been incorporated into that jurisdiction some years ago. Consequently, the disposition of such a proposal is within the jurisdiction of the Delta Municipal Council. It would be useful if you have not already done so, to make your point of view to the Municipal body.”

Hon. Ray Williston: “The stand of the Vancouver Natural History Society on the development of the Boundary Bay is acknowledged. If a definite scheme for a project is proposed, ample opportunity will be allowed to bring forth arguments and data either to support or oppose.”

During the past year a new society was formed called “Save Our Beaches” with the main purpose being to save Boundary Bay from industrial development. This is a most active society and has widespread support. I have been elected to its Board of Directors.

In January the Natural History Society wrote to the Hon. W.K. Kiernan Minister of Recreation and Conservation, pointing out the need for nature interpretation programs in the Lower Mainland Provincial Parks. Mr. Kiernan replied: “Early in 1963 the Parks Branch began to investigate this need. Through most of last summer an interpretation inventory was carried out in Garibaldi Park in the vicinity of Alouette Lake and it was tentatively concluded that a Nature House there would be successful. Additional and more detailed surveys will be carried out this summer.

“In addition, it was decided some months ago to look very carefully this summer at Mt. Seymour Park as a possible site for a Nature House with its associated park naturalists, nature trails, conducted walks and evening lectures. These studies will be made in July.

“We appreciate your concern and your high regard for our park interpretation efforts to date. Rest assured that the needs of the Lower Mainland are receiving detailed consideration and will receive those interpretation programs which are clearly needed and justified.”

In February Captain Barry Leach of the B.C. Waterfowl Society attended an Executive meeting of our Society at which he outlined the activities and aims of the B.C. Waterfowl Society. Part of Westham Island has been purchased and will be maintained as a Waterfowl Refuge and Study Area. He suggested that our Society might make a study of Burnaby Lake with a view to setting up another waterfowl refuge. A committee was established for this purpose and will report at a later date. We were asked to appoint a member of our Society to the Board of Directors of the B.C. Waterfowl Society and N.F. Pullen was duly appointed.

Commencing with the calendar year 1964-65 the Society will have a paid Secretary-Treasurer. As pointed out in support of the motion to raise fees, the Society has now grown to a size where it is no longer reasonable to expect all work to be done on a voluntary basis.

The American Association for the Advancement of Science is holding its annual western meeting at U.B.C. this June 22-24. Meeting with them will be the American Nature Study Society. We have been asked to participate and to provide part of the program. Dr. Chitty has arranged this. I think I have now touched on many of the more interesting activities of

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the Executive. As I stated last year, good conservation practices and the education of the public and especially our MLA's with regard to good conservation, must always be a prime aim of our Society. I would like to thank all the members of the Executive for their cooperation and whole-hearted support throughout the year. I have enjoyed the presidency for the past two years, however I feel that your incoming President, N.F. (Dick) Pullen, will do an outstanding job and is therefore it is without regret – and with considerable relief – that I turn the office over to him.

John E. Armstrong

### **Note Regarding B.C. Parks Policy**

1964-1965 will see the development of new Parks Legislation for British Columbia. The government has announced its intention to open certain areas within Parks to mining and possibly other exploitive interests. It also seems to recognize some areas within present Parks as inviolate, if the statements regarding the creation of a conservancy within Garibaldi Park can be taken as a gesture in this direction. It is important that the relatively less organized voice of the naturalist and conservationist be heard this year as effectively as that of organized commercial interests. Letters from individual members of the V.N.H.S. expressing alarm over the intention of government to allow exploitation inimical to proper Park use, should be forwarded to MLA's and to the Hon. Kenneth Kiernan, Minister of Recreation and Conservation, Victoria. By the middle of May your Society, the Nature Council and other groups should have ready for approval, proposals for constructive action which, it is hoped, may form briefs to the government.

### **British Columbia Nature Council**

An agenda is being prepared for the meeting of May 9 –10, 1964 and thus far topics include the following: 1. Predator Control (North Okanagan, N.C.), 2. Chemical control of pests (Victoria N.H.S.), 3. Biological control of pests (South Okanagan, N.C.), 4. Junior Naturalists (Freeman King) and under New Business: Provincial Parks.

### **Summer Camp – Cathedral Lakes**

Camp this year is to be in a high alpine environment at an altitude of about 6,600 feet, south of the Princeton Keremeos Highway. The area has great natural beauty with five large lakes and several small ones within easy reach of camp. Nearby peaks rise to over 8,000 feet and all have easy slopes to the summits and provide excellent walks and views. Flora, fauna and geology are most interesting and the area is notable for the presence of Lyall's [subalpine] larch and bighorn sheep.

The camp is reached by trail up Ashnola Creek which is about 12 miles long, although currently a forestry road is being extended and may improve access to the area. The hike should be a pleasant experience for all persons fit enough to indulge in regular walking.

Camp organization is being directed by a small committee and preliminary registration is invited. However a camp notice will be mailed to all members in May and a meeting of

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prospective campers will be convened. The camp committee is anxious to select a cook and any members who have suggestions for a camp cook are asked to contact the committee. Payment is to be made to the cook and to a helper or second cook. The camp committee at present consists of Camp Organizer Norman Purssell, together with Bert Brink, Dick Stace-Smith and Frank Sanford.

### **Bird Notes**

Yellow-billed Loon – Once again we are indebted to Mr. E. Moody for spotting another bird not normally found in the vicinity of Vancouver. He reported having seen the yellow-billed loon at Point Roberts in November 1963. Subsequently many birdwatchers observed the bird during the winter months. Mr. E. Eiche was able to obtain an excellent colour photograph of the bird. Mr. Moody also reported that he had seen another in the waters of English Bay near the entrance to Stanley Park.

*Eric Eiche was an amateur photographer who made his own telephoto lenses. He was a regular participant on birding trips of this period and obtained many excellent photos taken on these outings.*

Wandering Tattler – On the Christmas Bird Census on 16<sup>th</sup> December 1963, Dr. Boyce and Mrs. K. Smith observed a wandering tattler on the shore at the foot of Fell Ave in North Vancouver. Again, one was seen on February 2<sup>nd</sup>, 1964 on the rocky shore at the south end of Birch Bay in Washington, by Dr. Boyce. As far as can be determined, this is the first time the bird has been reported in this area during the winter.

*Dr. Ken Boyce was a Medical Doctor and pioneer specializing in arthritis. He was very supportive of VNHS activities for a few years; he also undertook the replanting of several GVRD park areas with trees and shrubs.*

Black-billed Magpie – The two magpies that have been resident for some years on a farm at the foot of Benson Road, Delta, were both killed by hunters last winter.

Black Tern and Yellow-headed Blackbird – Both these birds nested in the marsh at the south end of Pitt Lake during 1963. In June, Mr. E. Eiche and a companion found six nests of the blackbird and one nest of the tern, all with adult birds incubating eggs. Unfortunately the water level rose to such an extent at the crucial time when the young blackbirds were hatched and in the nest, that it destroyed the nest and drowned the young. The first yellow-headed blackbird reported this year was a male seen at Pitt Meadows on April 4<sup>th</sup>.

Wood Duck Nest Boxes – Thirty more boxes are being erected this year making nearly eighty under observation.

Mockingbird – It may be of interest to know that a mockingbird was trapped and banded by Mrs. Kline at Blaine, Washington in December 1963. Two of these birds were reported to have been in the Point Roberts area during the summer of 1963.

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**“Salmon on the High Seas”** was the title of the address by Dr. P.A. Larkin, Director of the [Pacific] Biological Research Station at Nanaimo, to the V.N.H.S. members at their annual banquet on October 2<sup>nd</sup>, 1963. During the past ten years much has been learned about salmon by Dr. Hudson, an authority on east coast salmon. In 1955 a study was carried out on Pacific salmon with regard to Japanese, American and Canadian interests on where best to fish for salmon. Much has been learned since 1955. By tagging salmon, then recovering them by seine, gill net and open line, scientists now know where the salmon go. Salmon from the B.C. coast move to the Gulf of Alaska. Those that go from Bristol Bay on the north side of the Aleutian Islands spend their time south of the Aleutians.

From the south coast of Japan and the Sea of Okhotsk, salmon stream to the mid-Pacific, and salmon from the east and west mix together throughout much of their lives. Movements north and south during winter may account for the mixing. B.C. salmon do not travel to the mid-ocean as it would take them 3,000 miles from their spawning grounds. Pink salmon are even less venturesome, going only 1,300 miles in their marine migration. Questions still unanswered will occupy scientists for many years, such as why salmon go to particular places, why they travel north and south during the various seasons, why those from Japan and Russia go further than those from B.C., and why those from tropical waters are found north of Hawaii.

Plans for a nebulous satellite in April will pick up information about cloud cover; infra red in the sea will be used to indicate what the salmon run will be like in 1964 and what route it is going to take. Instead of going through the Gulf of Alaska and south of Kodiak Island, another route taken by Pacific salmon is through the narrow channel of Cross Sound into Icy Strait and the Inside Passage to the Skeena River. Others go through the Strait of Georgia to the Juan de Fuca area. Using zoological techniques, measurements are taken of body proportions. Evidence supports a general picture that predicts the number of salmon to reach our rivers for spawning. The ideal time to catch salmon is just before they enter the river. The Japanese think the weight of the salmon is greatest when they are out in the deep ocean. Dr. Larkin said that enormous developments will happen in the next twenty years and new information will be put to practical use. In closing he invited the members of our Society to visit the Biological Research Station.

*A trip to the Pacific Biological Research Station in Nanaimo was later planned for Saturday, May 23<sup>rd</sup>, 1964.*

### **The Vancouver Natural History Society’s Junior Naturalists**

It was noted that the Junior Naturalists enjoyed interesting field trips in the spring of '64 to: the Arboretum at Queen Elizabeth Park; Miss Helliwell’s cabin on Hollyburn Mountain where they were warned to bring extra socks, mitts and boots as the snow would still be deep; the University Farm (UBC Biology Dept.); a nature trip to Alice Lake; a marine biology trip to Stanley Park, where they brought along bottles, cans and plastic bags for their

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collected specimens; and bird watching on Westham Island where they were reminded to bring a lunch and their binoculars.

### **Wildlife in the Lower Mainland**

Mr. A. Benson, a Research Biologist with the Canadian Wildlife Service, addressed the Society on November 27<sup>th</sup>, 1963. He spoke about the value of wildlife to city dwellers. Eighty percent of Canadians live in cities and suburbs he said, and their only contact with wildlife may be a long weekend to the Fraser Valley. Less than 50% spend holidays away from the cities.

Mr. Benson illustrated his talk with slides of a wide cross section of birds in our local marshes and other wildlife. He said that we must keep our parklands attractive as well as our beaches for recreational activities. In the face of city developments, much of children's leisure areas have gone and must be replaced. Farmlands are disappearing where formerly ducks and pheasants had their feeding grounds. Boundary Bay, Aldergrove and Beach Grove should be preserved for waterfowl and other birds which frequent those areas. Marshlands should be restored and made productive for the benefit of the wildlife.

### **Role of National Parks**

The Hon. Arthur Laing, Minister of Northern Affairs and National Resources spoke to Society members on February 5<sup>th</sup>, 1964. He said that the concept of national parkland on this continent was initiated with the establishment of "a great national area", the first of which was Yellowstone Park in 1872. The Canadian program arose out of that and in 1885 ten square miles at Banff was taken over by the federal government and preserved as a national park for public use. After 1895 other parks were established at Yoho, Kootenay, Jasper, Glacier and Waterton Lakes. The government of the day established those parks in the west, but parks were not evenly distributed throughout Canada. For example, there are now four National Parks on the Atlantic seaboard, but none on the Pacific Coast. Mr. Laing said that wherever there is an increase in population, parks should be established as they are the lungs of the city. Automobiles have made it possible for people to use the parks, especially for camping. Outdoor education and enjoyment coupled with an appreciation for nature, has become a necessity for the general well being of everyone. Mr. Laing's slides showed the magnificent beauty of the flora and fauna of the National Parks throughout Canada.

*Note: Pacific Rim National Park Reserve was established in the 1970s but its boundaries were not finalized until 1987.*

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### **Birding on Galiano Island**

During the Society's field trip to the southern end of Galiano Island on May 7<sup>th</sup> and 8<sup>th</sup>, the birding was excellent and many interesting sightings were reported, verified and recorded. The more noteworthy were: Arctic loon, oldsquaw, turkey vulture, bald eagle, Bonaparte's gull, pileated woodpecker, [common] raven, chestnut-backed chickadee, house wren and fox sparrow.

A total of 63 species were recorded and two bald eagle nests were located, each containing young. A check was made of the Ballingall Islets where a colony of double-crested cormorants were just in process of completing their nests – a total of 23 nests were under construction. A spring migration of Arctic loons was noted through Active Pass. No English [house] sparrows were sighted on the Islets. Residents informed us that to their knowledge no [none of these] birds have ever been recorded. The black-capped chickadee is not found on Galiano, but there is ample evidence of the chestnut-backed chickadee.

R. Wayne Campbell

### **Mr. R.F. Oldaker**

It is with regret that we announce the death of our member, Mr. R.F. Oldaker who passed away in August, after being ill for a long time. Mr. Oldaker won international recognition among ornithologists for his work in reading the bands on birds, by using a telescope instead of following the customary practice of capturing the birds for band-reading purposes. The telescope he used was one he made for himself. Because the complete information on a band was not always visible in any single sighting, it was necessary for him to either move his telescope or to wait until the bird had moved sufficiently to uncover the remainder of the inscription. It has been said that he developed considerable skill in inducing birds to change their position without actually flying off. Much of the work Mr. Oldaker did was the [recording of] gulls. He recorded them from the Canadian prairies and the American mid-west, and the data he supplied was instrumental in altering some long-held views regarding migration routes followed by certain gulls [to Greater Vancouver]. Last year he read the band of a gull banded at Cambridge Bay in the Arctic.

Mr. Oldaker carried a notebook on field trips that contained all of the band numbers he had read. After reading a band he would check his notebook to see if he had read the band before. He averaged one new reading per day for five years. Mr. Oldaker left his records to Mr. W. Hughes, a veteran ornithologist and Society member, who visited Mr. Oldaker every week during the last several years of his life.

### **Aquarium Docents Welcomed**

The Vancouver Public Aquarium is presenting a 4-week course in marine biology for volunteer guides of its winter school program. V.N.H.S. members, *including men*, are especially welcome. Please phone the Aquarium Secretary before September 8<sup>th</sup>

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

#126 January 1965

### **Natural History Survey of West Vancouver**

The Executive has for sometime been considering a series of natural history surveys as a means of providing interesting and useful projects for our members. The first of such surveys was begun in West Vancouver on an experimental basis under the chairmanship of Mrs. W.J. (Kay) Smith. It has been decided to begin a survey of Stanley Park under the leadership of Mrs. D.R. Bruce.

Mrs. Smith has already made considerable progress with the West Vancouver survey. Lists of plants, birds, mammals, etc are being prepared, not just for the Municipality as a whole, but also for specific localities within it, such as parks and trails. Texts covering the various fields of natural history within the surveyed areas are under consideration. The general aim is to provide an overall picture of the area from a natural history standpoint.

*Mrs. W.J. (Kathleen) Smith was a general naturalist with considerable interest in birds. She was an excellent organizer of trips, camps, publication, etc., and one of the outstanding V.N.H.S. presidents. In her later years, nature photography became her main interest as she traveled abroad. Her husband Bill was a mining engineer who spent much of his career as a Research Forester at the UBC Forest Products Laboratory. He was a fine hiker and a stalwart at camps.*

### **End Note #6: Second Aquarium Docent Course (see page 263)**

#### **Dr. Beamish to give Night Course in Trees and Shrubs**

Dr. Katherine Beamish, Dept. of Biology and Botany at U.B.C., will give a night course on the identification of trees and shrubs of British Columbia, commencing January 21<sup>st</sup> at 8:00 p.m. The course will consist of 10 weekly sessions, in the Biological Sciences Building. Course fee is \$15.00, or husband and wife \$24.00.

#### **Bird Notes**

There have been observations of three birds during the past few months that are worthy of note. They have been reported only infrequently in the Vancouver area:

White-throated Sparrow – Miss Laura Glegarick reported having seen this bird in Stanley Park on May 26<sup>th</sup>.

Willet – On the evening of June 12<sup>th</sup> and morning of June 13<sup>th</sup>, Mr. and Mrs. J. [Jack and Eileen] Husted observed a willet along the shore of the causeway at Iona Island.

Black Tern – Last year we reported that a black tern had been found nesting in the marsh at the south end of Pitt Lake. This year two nests were seen and Mr. Kurt [Eric] Eiche was able to obtain pictures of the young and adult birds.

#### **Parks Brief Submitted**

The Conservation Committee, under the chairmanship of Dr. V.C. Brink, recently submitted a brief to the Minister of Recreation and Conservation making suggestions regarding a Parks Policy for British Columbia.

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### Leadership Camps to be held in B.C.

Junior and Senior Camps for leadership training in natural history and conservation will be held during the coming summer under the joint sponsorship of the B.C. Nature Council and

the Canadian Audubon Society. Plans are tentative, but as there will not be another issue of this Bulletin until spring, an outline of what is being considered is given here.

Efforts are being made to have both camps held at a well-known location in the Cariboo and the dates tentatively set for the Junior Camp are from June 16<sup>th</sup> to 27<sup>th</sup>, and for the Senior Camp, June 29<sup>th</sup> to July 10<sup>th</sup>. It is expected that the fee for juniors will be \$25 per person, with the sponsoring organization paying up to \$25 per person for transportation. It is hoped that the fee for seniors will not be more than \$75 and might even be less. The lower age limit for seniors will be 18 years. No previous knowledge of natural history is necessary. The capacity of the Senior Camp will be 25 people.

The Director of both camps, and in charge of instruction, will be Mr. Fred Gornall of the Department of Education, U.B.C. The Manageress of the Junior Camp will be Mrs. H. Lamoureux of Kelowna, while the Senior Camp will be managed by Mrs. W.J. (Kay) Smith of West Vancouver. Both are members of our Society.

While for this year's Senior Camp the emphasis will be on the training of leaders, it may also be possible to find room for earnest naturalists who have no leanings toward leadership. It is suggested that interested persons in this category also make application. Those in charge are anxious to know what demand there would be for a natural history camp of the instructional type, as this would assist in making plans for the future.

### Bird Notes

Palm Warbler (*Dendroica palmarum*) – On October 18, 1964 a palm warbler was seen on the new Iona sewage treatment jetty. It was the second sighting of an individual, the first having been observed on September 4<sup>th</sup> 1961 at the old cannery site at Point Roberts, Washington. Observers were Miss Rosamond Ross and J.G. Sarles. The first Vancouver specimen recorded was September 1949 by D.I. Law and the first sight record for Washington State was October 26, 1958 at Point Roberts, reported by Erskine (*Murrelet* 41.1). The same day the palm warbler was also seen by members of the Vancouver Natural History Society. It was reported seen on Vancouver Island on January 12, 1963 by Davidson and Davidson (*Canadian Field Naturalist* 1963 77.3)

Rock Sandpiper (*Erolia ptilocnemis*) – Although this bird is reported by Munro and Cowan (*Review of Bird Fauna, B.C.* 1947) to be an abundant winter visitor to the outer coast, it is not often recorded on the mainland because of the relative inaccessibility of the spots it favours. It was recorded on Iona Island on January 30, 1931 and was seen on the new Iona Island treatment jetty on October 18, 1964 by Miss Ross and J.G. Sarles. Undoubtedly there have been unpublished observations in the same area.

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Lewis's Woodpecker (*Aspyridermus* [*Melanerpes*] *lewis*) – It is mentioned in Munro and Cowan's *Review of Bird Fauna, B.C. 1947* that this species nested in North Vancouver, June 1, 1926 and Sumas Prairie on September 24, 1921 (fledglings). May 23, 1960 A. Muir and J.G. Sarles saw the species on Barnston Island. May 22, 1961 Miss R. Ross and J.G. Sarles

observed 4 adults and 2 fledglings at the same site and again on June 7, 1962 and May 18, 1963. The nest site was in a grove of decayed trees at the eastern extremity of the road on the south side of the Island. Miss Gwen Wright also reports that the species nested in dead snags in 1962 on the dyke of the North Alouette River, and in 1963 on the Robinson property of Sheridan Hill, Pitt Meadows. This species was also seen on Panorama Ridge in Whytecliff Park in West Vancouver by Allen Poynter on September 7, 1964. J.G. Sarles

### **Cooper Ornithological Society**

The Cooper Ornithological Society, one of the foremost organizations in its field in North America, will meet at U.B.C. this summer. Members of our Society will be welcome to attend the sessions where papers on various phases of ornithology will be given. The Society is participating in the arrangements for the meeting. The Western Bird Banding Association of California will also be meeting in Vancouver in conjunction with the Cooper meeting.

#127 May 1965

### **President's Report for year ended March 31, 1965**

The Society has had an active year of field trips, evening meetings and special projects. It has achieved a reasonable increase in membership and ended the year with a financial surplus. The number of single members rose to 314 and families to 268. On the basis that each family generates two members, the total number of members at the end of the fiscal year was 595. The financial report for the year showed a surplus of revenue over expenditures of \$276.65, bring the bank balance of the Society to nearly \$3,000. It should be pointed out that \$467.05 of the surplus [sic] came from the 1963 camp profits.

Ten evening meetings were held in the Kitsilano High School. They were sponsored jointly by the School Board and the Society and were open to the public. This arrangement with the Board is of financial advantage to the Society. Mr. P.J. Croft was in charge of the programme of evening meetings which covered a wide variety of interesting topics. The annual banquet was held at Hycroft.

Five Audubon Screen Tours were held at the John Oliver High School under the joint sponsorship of the School Board and the Society. Any net profits from the series are divided between the Board and the Society. In the past this has brought in a fair sum to our treasury,

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but rising costs have reduced the profits to the point where they are likely to be negligible in future. The sale of season tickets was below that of previous years.

There were 35 field trips including two-day outings to Gabriola and Galiano Islands. Miss Rosamond Ross acted as co-ordinator for the field trip programme. The Society is greatly indebted to chairmen of sections and others who devoted so much time to conducting this

excellent series of outings. A very successful camp was held in the Cathedral Lakes area under the leadership of Mr. Norman Purssell.

When it was learned that the Provincial Government would be bringing forward an Act for the regulation of Provincial Parks, Dr. V.C. Brink, Chairman of the Conservation Committee, sent a brief to the Minister of Recreation and Conservation with suggestions. After the Parks Act was brought before the Legislature, he again made recommendations to the Minister on the Society's behalf.

Last summer the American Association for the Advancement of Science held its annual western meeting at U.B.C. The American Nature Study Society met in conjunction with this gathering and our Society provided two field trips for members of this American group.

The B.C. Nature Council was active during the year under the presidency of our member Dr. J.F. Bendell. Our Society's representative on the Council is Dr. J.E. Armstrong. The Council held its fall meeting in Victoria on Thanksgiving weekend and about 20 of our members attended the business sessions, enjoyed the Saturday evening dinner, and participated in the field trip provided by the Victoria N.H. Society on Sunday.

One of the most interesting events of the year was the inauguration of a natural history survey of West Vancouver under the chairmanship of Mrs. Kay Smith. This project was launched on an experimental basis with the thought that if it was a success it might be tried elsewhere. Mrs. D. Bruce drew to the Executive's attention the fact that the botanical gardens and arboretum at UBC were suffering from a reduction in space and inadequate maintenance. She was authorized to ascertain what plans there were for the gardens and arboretum and to try to interest other organizations in the situation.

The Vancouver Parks Nature Programme Committee under the chairmanship of Mr. D.R. Bruce continued to deal with the Vancouver Parks Board concerning natural history matters relative to Stanley Park. An offer by the Provincial Parks Branch to have a naturalist report on the possibilities of a nature house and nature trails was gratefully accepted, and the project was carried out by Mr. J.E. (Ted) Underhill. His report to the Society was submitted to the City Parks administration. The Committee wrote to the Parks Board about the effect on bird life of the Board's policy of cutting underbrush in Stanley Park. The Board provided a written statement of its policy and followed up with a luncheon meeting with Society representatives to discuss the matter.

Members of our Society represent us in various other organizations having interests allied with our own. During the year we were invited to have two representatives sit on the

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Mountain Access Committee and Roy Edgell and Jack Husted were appointed. The Chairman of that Committee is Mr. Norman Purssell, one of our members, who also represents the Alpine Club of Canada.

This spring members of our Society were saddened by the death of Mr. Jack Neild, our Secretary-Treasurer, who had served the Society well in various capacities during his years of membership.  
N.F. (Dick) Pullen

### **Colour-Banding Glaucous-winged Gulls**

During the summers of 1963 and 1964 a total of 3,103 young [glaucous-winged] gulls were colour-banded in three locations on the B.C. coast. Four colours were used – white, black, pink and yellow. The banding was done by members of the Pacific International Chapter, Western Bird Banding Association. One of the main reasons for the project was to accumulate information about the movements of this species near airports. Large birds, particularly gulls, form a hazard to aircraft operations. We thank the observers who sent in reports last year and we again request that further sightings be forwarded to: The Canadian Wildlife Service, 6660 N.W. Marine Drive, Vancouver. The report should include the date of observations, number of birds, place seen, colour of band/s, right or left leg, and reported by (name) and (address).

### **Gyrfalcon (*Falcon rusticolus*)**

Sunday 31<sup>st</sup> January 1965 was a remarkably good day at Pitt Polder for observing hawks. In a matter of a few hours we saw ten red-tailed hawk, one rough-legged hawk, one immature golden eagle (which now appears to have been in that vicinity all winter and early spring), two bald eagles at the nest site on Sheridan Hill, six marsh hawks [northern harrier] and one [American] kestrel.

The climax of the day came when we saw a gyrfalcon swoop down from a snag atop a hill in the Polder to take possession of a mouse that a marsh hawk [Northern harrier] had just caught. The gyrfalcon flew off with it in its talons to a cottonwood tree about 300 yards from where we were. It began to devour the mouse and after about twenty minutes, flew down to a small mound in the meadow where it finished the meal, then returned to its perch in the tree. We watched all this through the telescope and then walked through the farmyard to within 100 yards of the bird. While we were observing it, another marsh hawk (gray) [northern harrier, (male)], caught a mouse in the meadow. The gyrfalcon again flew down and stole the victim and flew off to the same meadow as before and commenced to tear the mouse apart. This bird was gray and we had a good opportunity to compare its plumage and flight with that of the gray [male] marsh hawk [northern harrier].

Betty Wise and Gwen Wright

### **Spring Migrants**

One sandhill crane and a Lapland longspur were seen at Pitt Meadows on March 27<sup>th</sup>, and [common] yellowthroat, Audubon and Myrtle [both yellow-rumped] warblers on April 3<sup>rd</sup>. Savannah sparrows and a male and female cinnamon teal were in the same area on April

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18<sup>th</sup>. This is a very productive birding area. Two cliff swallows were seen in West Vancouver on April 17<sup>th</sup>. Water [American] pipits and early barn swallows were seen April 22<sup>nd</sup> on No. 3. Road. A small migration of sparrows was seen at Ambleside Park April 22<sup>nd</sup>, with white-crowned, golden-crowned, Savannah and Lincoln sparrows all together. Bonaparte's gulls were passing through the area on April 21<sup>st</sup> in full breeding plumage, and young killdeer were reported hatched from Point Roberts on April 15<sup>th</sup>. A pair of Townsend's solitaires was observed in West Vancouver on April 17<sup>th</sup>, while both blue and ruffed grouse could be heard hooting and drumming in Lighthouse Park on April 18<sup>th</sup>.

A Poynter

*Allen Poynter is a "top flight" ornithologist and long-time outstanding supporter of the V.N.H.S., particularly the ornithology section. He and his wife Helen live in Parksville and are members of the Arrowsmith Naturalists.*

### **ATTENTION**

Hundreds of thousands of far-traveling ocean birds of many kinds are being captured, marked and released on mid-Pacific islands in a widespread study of seabird migration, by the Smithsonian Institute, Washington, D.C. Although it is known that some birds perform remarkable annual migrations of 10,000 miles or more over the North and South Pacific Oceans, the regular travels of most species are unknown or poorly understood.

To learn more about the migration of seabirds, Smithsonian ornithologists have captured and marked over 300,000 birds of 28 different species in the Central Pacific with standard, numbered United States Fish and Wildlife Service aluminum leg bands. Of these, over 60,000 have been marked with 4-inch coloured plastic leg streamers. Anyone coming into possession of a banded dead bird in the Pacific Ocean area is asked to return the band together with time and place of recovery, as instructed on the band. For live birds, only the band number together with time and place of capture need be sent to the directed address, after which the bird should be liberated so that its further travel may be traced.

Anyone sighting a bird with a coloured leg streamer anywhere in the Pacific Ocean is asked to record the name or description of the bird and colour of streamer, as well as the date seen, latitude and longitude or approximate location of sighting. Information on birds with coloured leg streamers should be sent as soon as possible to: Division of Birds, Smithsonian Institute, Washington, D.C., or locally to Dr. M.D.F. Udvardy, Dept. of Zoology, U.B.C. Each "co-operator" will be advised where the banded or colour-marked bird was tagged. Your Help Is Needed.

#128 September 1965

**U.B.C. Arboretum**

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Members planning to attend the U.B.C. Arboretum tour on Saturday, September 18<sup>th</sup> will find the following letter received by the Editor particularly interesting. Thank you, Professor Davidson:

“In the Vancouver Natural History circular No. 127 this month, I noticed on page 3 the announcement of the trip to the U.B.C. Arboretum on September 18<sup>th</sup>. I would like to draw attention to one sentence: “Many of the trees exhibited can be found nowhere else in Canada.” Perhaps “Some of the trees...” would be a milder statement. Because of the equable climate in B.C. we are able to grow a greater variety of Canadian trees than any

other province and such trees as ginkgo and *Cunninghamia* (both from China), and *Araucaria* (from Chile), may be found in nurseries in western B.C. or in heated conservatories in Eastern Canada. We have had them in the Botanical Garden [at U.B.C.] for nearly 50 years.

“When I came to B.C. in 1911 there was no University of B.C. The site for the proposed university had to be surveyed and cleared before the architects could plan the location of the buildings. Bears broke into surveyors’ camps and played havoc with their provisions so I could not use the land at Point Grey for my proposed Botanical Garden. Dr. H.E. Young, the Minister of Education and Health, said I could have 2 acres of land at the Colony Farm at Essondale. I presumed he considered it a suitable location for such a crazy idea and he instructed the Superintendent there to supply the necessary garden help from his staff.

“In the meantime a commencement was made on the erection of the Library, Science and Arts buildings and an area of five acres was allotted for the Botanical Garden. To me this area of the University lands was sacred and hallowed ground. I accepted it as a challenge – not to see how much I could get out of it, but to see how much I could put into it for future generations.

“Surely when the University has so many hundreds of acres of land lying idle it should not be necessary to destroy fifty years growth of the Arboretum to erect buildings, then start another Arboretum probably less accessible to the visiting public.”

(Signed) John Davidson

*Prof. John Davidson was the founder of the First Botanical Garden in Canada and founder of the Vancouver Natural History Society.*

### **Park and Botanical Garden**

The University Endowment Lands in West Point Grey are soon to be incorporated as a Crown real estate development. Your Society is urging the provincial government to set aside 200 acres of this prime natural area as a park and botanical garden. We have been assured that letters from individual members to Premier Bennett could be of use. We therefore ask members to write to the Premier in support of this attractive project. For more information contact Mrs. Donald Bruce.

*Mr. and Mrs. Donald Bruce were prominent members of the V.N.H.S. He was an executive officer with the B.C. Automobile Association and helped publicize the Society.*



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### **Bird Observation**

On July 7<sup>th</sup> at 3:30 p.m. three adult Caspian terns with three immature were seen at Iona Island. They flew right overhead; offshore several more could be heard and seen chasing glaucous-winged gulls.

Betty Wise

### **Park Trips**

Potential parks are often lost or threatened because people do not know about the area or its fate. A series of hiking trips to several potential parks and existing but threatened park areas is scheduled for September and October. The leaders are drawn from several clubs in the hiking community. Members wishing to make more leisurely trips on their own to Alice Ridge, Culliton Creek and approaches to Garibaldi Park may obtain driving and hiking directions from Kay Smith, Arnold Greenius, Frank Sanford, Dr. Bert Brink or Dan Phelps.

#129 November 1965

### **International Associating for Quaternary Research Field Trip**

The INQUA field trip started in Portland and finished in Vancouver. Most of September 15<sup>th</sup> and all of September 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> were spent in Canada traveling from the International Boundary to Manning Park, Merritt, Kamloops, Cache Creek, Harrison Hot Springs and Vancouver, under the guidance of Dr. J.E. Armstrong. Some of the features observed were glacial geology, a big slide nine miles out of Hope, slides on the Thompson River, Hell's Gate fishway, Harrison Hot Springs and others. The group consisted of 32 people of whom 4 were Scandinavian, 2 New Zealanders, 4 Englishmen, 6 Canadians, 1 Japanese and the remaining 15 were American. All were professional scientists. A guide book was prepared and is available from Prof. S.C. Porter, Dept. of Geology, University of Washington, Seattle, at \$2.25 (US).

### **Possible Loop Trip**

Dr. Armstrong suggests that if sufficient interest is expressed, and with some slight revision, the Canadian part of the above trip could be scheduled in June or September for members of the Vancouver Natural History Society. It would be a three-day trip with overnight stops at Manning Park and Kamloops.

### **Canadian Audubon Magazine**

The activities of the Canadian Audubon Society are well known to members of the V.N.H.S. Subscriptions to its magazine *Canadian Audubon* give practical support and ready access to Canada's only national nature publication. Many of our members are subscribers but there

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may be others who would like to get pleasure and information from its pages. Subscriptions for 1966 are now being accepted. Three dollars is the subscription price for one year in which you will receive a copy every two months, omitting July and August. Society members can subscribe in the bulk order mailed directly to the Society at a cost of only \$2.25. The bulk subscriptions are distributed at regular meetings, or by other opportune means. For further information phone S.F. Bradley.

### **Lighthouse Park Survey**

As chairman of this survey I would like to thank all who have worked so hard during the past year: Dr. K. Beamish, Nancy Anderson, Joy Breyenton, Yvonne Clark, Kay Millroy, Christine Glegg, Mical Middaugh, Mary Alpen, Bob Wheeler, Joe Hancock, Allen Poynter and Charlie Sheard.

### **Honoured**

Dr. J.E. Armstrong has been elected Chairman of the Geology Section of the Royal Society of Canada for the coming year.

### **Vancouver Natural History Society – Summer Camp (1965)**

The annual camp was held in the Bridge River area during the last week of July in the Tyaughton Valley some 75 miles northwest of Lillooet. It was on the site of the “river” flats where the Relay and Mud Creeks rush along to join the Tyaughton on its journey to the Bridge River. Transportation to the camp was by safari wagon, a four-wheeled Rover, and by private car for the adventurous few who risked driving the 16 miles of mine road from the parking place at the Tyaughton turnoff. Others parked their cars for the week.

The advance party that had traveled to the area two days earlier had laid out the campsite in such a way as to take best advantage of sun and shadow, road and “river”, trees and trails. Initially the campsite seems so very close to the road – would traffic disturb the campers’ slumber? In fact, only three vehicles passed along the mine road during the whole week and each of the lonely drivers – a horse-wrangler, an economic geologist, and a prospector, was an honoured guest at our evening meal and campfire gathering.

The shakedown period was much too short. Bright and early Sunday morning, after an enormous breakfast, the first excursion scheduled as a “nice easy breaking-in walk”, turned out to be a tough hike straight up Mud Creek and the escarpment west of it. First we went to the newly re-opened Empire Mercury Mine, then to the remains of the Old Relay Mine camp established in the 1940s when a crew mined cinnabar needed for the war effort. During the climb, that left some breathless, one botanist colleague sprinted up the creek and across the

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

meadow collecting specimens, while another used his geologist's hammer to demonstrate the forms and structures of the rocks. On the return journey through forest trails, there was a happy encounter with a wrangler leading a packhorse, and a mounted forest ranger, accompanied by his two dogs. Both were big, soft-spoken men who sat comfortably on their horses and chatted in quiet amusement with this unusual 'crowd'.

Monday broke fair and hot and after another substantial meal – what an appetite one has in such circumstances! – the first of the important climbs got underway. Driven west to a location just above the Silverquick Mine at 5,800' elevation, the group began the long climb to the 7,545' summit of an unnamed mountain – a shoulder of the Eldorado. The creek bed soon led out into alpine meadow with a carpet of blue lupines interspersed with Indian paintbrush, fireweed, elephant head [elephant's-head lousewort], asters and other wildflowers too numerous to name. The track upward continued, the timberline was

breached and passed, and finally the group was on the bare ridge leading to the peak. Even here where the winds blew sharply and the ground was hard and dry, miniature flowers, moss campion, rockcress, stonecrop, mountain [subalpine] daisy and forget-me-not clung to the earth's surface in bright patches of colour. Magnificent scenery was revealed with each step nearer the summit.

Lunch was eaten perched on the summit crag while mountain peaks were identified in all directions. Then it was down, down, down again to the foot of the glacier, the turbulent creek that ran from it, and more flowers – aster, gentian, saxifrage, buttercup, hawksbeard, orchid, arabis, coltsfoot – you name it, we found it! Finally, wearily but happily, it was back to the transportation, "home", food and fun. At campfire that evening the group's mining expert spoke about the mining interests in the area and the search for the mother lode of mercury (quicksilver) believed to be there, the tungsten already mined out and gold not found. Campfire songs ended a most successful day.

The wise camp commandant and his group of advisers decided that after two such strenuous days, Tuesday and Wednesday would offer a change of pace. On each of these two days, half the group were driven by safari wagon to Gold Bridge, Bralorne and Pioneer Mines for sightseeing and any necessary shopping, while the remaining half took easier and more local trails up the high ridges surrounding the campsite. The "easy" hike undertaken on the alternate day was at a fast pace and some of the group chickened out half way and retired to a sunlit meadow to sleep.

On Tuesday evening the President of the Society spoke on the botany of the area with special references to the varieties of evergreen trees found as one moved from one elevation to another. On Wednesday a zoologist colleague expounded on mosquitoes and what makes them the way they are. Tuesday was further distinguished by the only rainfall experienced during the week. It was a four-hour tale of "thunder in the east" that laid the dust, stirred up the mud in Relay Creek, and drove some under canvas for an afternoon nap – but cleared in time for a beautiful sunset.

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Thursday was largely a “do it yourself” day. A group of the very active young people – we had 16 interested young explorers in camp ranging in age from “not quite seven” to “well, about eighteen” – took off with the intention of climbing *five* peaks! Several ardent photographers returned to previously explored creeks to catch the morning light on the mimulus and lupines lining the banks. Several men folk decided their fishing lines needed wetting and it was time to try their luck in nearby or distant creeks. Others took off to look for gold, or jade or cinnabar. And a few decided it was time to have an all-over bath around the curve of Tyaughton Creek, catch up with some laundry and rest aching limbs.

At the evening campfire the group’s own geologist (assisted by the previously-mentioned visiting economic geologist), spoke about the geological features of the area. The gathering was further enlivened by the rendition of a song, written by the company of teenagers, to the theme of “You can’t get to Heaven...” with an appropriately worked verse to illustrate an idiosyncrasy of each camper! This was received with much good humour and appreciation.

Friday, ah, Friday. This was the high spot of the week, literally and figuratively. The campers drove back along the Tyaughton Valley road to the head of Tyaughton Lake. Here began a trail that for 3 miles led straight up and for another three switch-backed the southern face of an unnamed mountain, for yet another view of Eldorado; its peak was over the 8,000 ft elevation! While half a dozen privileged people were driven the first three miles by Rover, the remaining stalwarts began the long trek to that distant peak. Two-thirds of the way up their spirits, and feet, were revived by the sight and feel of the most beautiful clear rushing creek yet encountered – oh how good that cold water was! Miniature waterfalls formed by rocks in a wide variety of shapes, sizes and colours were interspersed with small deep pools. The banks of this creek were a patchwork of colour – huge clumps of red-purple mimulus [pink monkey-flower] backed by masses of flame-coloured Indian paintbrush contrasted with massive white heads of cow-parsley [cow-parsnip], bunches of delicate lavender, asters and towhead babies [western pasqueflower] all highlighted by the yellow splendour of arnica and avens. This was a natural garden of incredible beauty. How one hopes that the cameras used with such abandon at this spot captured some of the beauty on film. With such earnest photographers who could doubt it?

And so, refreshed, the group toiled on, some to halt on a lower ridge to view the snow-topped peaks to the south, others to begin the long descent through the forest, and a small gallant band to climb out, at last, on the topmost peak and to sit in wonderment in the middle of a mountain scene that encompassed the full circumference of the horizon. This was a day to remember!

Alas, every good thing must come to an end. Saturday, and the process of breaking camp, begins. Sunday morning comes early at 6 a.m. and breakfast eaten standing because the rough benches and tables had been dismantled. By 8 o’clock the last of the loaded vehicles pulls away. Already the crushed grass has begun to rise again; already the limbs of the trees that served so well as laundry lines have sprung back into place; already the foot-imprinted sand is washed blemish free by the hurrying creek. Only a little while and the wilderness

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will have obliterated all signs that fifty humans lived, learned and adventured here for a full seven days.

Margaret Briault

*Margaret (Peg) Briault came to Canada from Britain after WWII. She was an energetic member who helped with publications. She was a nurse by profession and a truly fine and generous person.*

### **British Columbia Nature Council Meeting**

On October 16<sup>th</sup> and 17<sup>th</sup> the Vancouver Natural History Society hosted the bi-annual meeting of the B.C. Nature Council. This Council has now been in existence for almost three years and is made up of a President, Vice-President, Secretary, Treasurer, Committee chairmen and one delegate from each of the federated Natural History Societies – Victoria, Thetis Park, Cowichan, Vancouver, Central Okanagan, Northern Okanagan, Southern Okanagan and Kamloops. Dr. J.F. Bendell and Mrs. Kay Smith of our Society are President and Secretary. The Vice-President is Dr. J. Hocking of the Central Okanagan Society and the Treasurer is Eric Garman of the Thetis Park Society. Dr. J.E. Armstrong is the Delegate for the Vancouver Natural History Society. The aims of the Nature Council are to present a

unified voice with regard to natural history in dealing particularly with governments, and to bring about close co-operation of the federated Societies and to actively sponsor new Societies.

### #130 February 1966

#### **Christmas Bird Census – 1965**

|                    |  |                              |
|--------------------|--|------------------------------|
| Date:              | 26 <sup>th</sup> December 1965   | Time: 6:40 a.m. to 4:40 p.m. |
| Temp:              | 30° to 40° F   | Wind: East 11 m.p.h.         |
| W                  | Weather: Snowing or raining in all areas. Ground in most areas covered with snow.  | Observers: 36 in 11 parties  |
|                    | Visibility poor.   |                              |
| Total party hours: | 82 ¼ on foot: 63 ¾; by car: 18 ½   |                              |
| Total party miles  | 189 ½ on foot: 54; by car: 135 ½   |                              |
| Area covered:      | Vancouver, Stanley Park, U.B.C., shorelines of West and North Vancouver, West end of Burnaby Lake, Sea Island and Iona Island. |                              |

|                           |       |                               |       |
|---------------------------|-------|-------------------------------|-------|
| common loon               | 18    | sharp-shinned hawk            | 1     |
| red-throated loon         | 24    | red-tailed hawk               | 2     |
| red-necked grebe          | 3     | bald eagle                    | 1     |
| horned grebe              | 141   | marsh hawk [northern harrier] |       |
| 9                         |       |                               |       |
| eared grebe               | 36    | peregrine falcon              | 1     |
| western grebe             | 2,198 | merlin (pigeon hawk)          | 1     |
| pied-billed grebe         | 3     | [American] kestrel            | 4     |
| double.-crested cormorant | 80    | ruffed grouse                 | 1     |
| Brandt's cormorant        | 2     | ring-necked pheasant          | 2     |
| pelagic cormorant         | 84    | [American] coot               | 1,275 |

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|                            |         |                                  |         |
|----------------------------|---------|----------------------------------|---------|
| great blue heron           | 63      | killdeer                         | 48      |
| Canada goose               | 54      | black turnstone                  | 55      |
| cackling goose             | 3       | common snipe                     | 10      |
| white-fronted goose        | 1       | greater yellowlegs               | 1       |
| snow goose                 | 2       | dunlin                           | 5,000   |
| whistling [tundra]swan     | 2       | sanderling                       | 514     |
| mallard                    | 2,484   | glaucous-winged gull             | 31,841  |
| gadwall                    | 12      | herring gull                     | 1,604   |
| [northern] pintail         | 492     | mew gull                         | 2,309   |
| green-winged teal          | 182     | Bonaparte's gull                 | 34      |
| baldpate [American wigeon] | 3,121   | glaucous gull                    | 2       |
| [northern] shoveler        | 79      | western gull                     | 5       |
| wood duck                  | 5       | ring-billed gull                 | 5       |
| ring-necked duck           | 3       | common murre                     | 237     |
| canvasback                 | 23      | marbled murrelet                 | 46      |
| greater scaup              | 1,323   | rock dove                        | 1,606   |
| Barrow's goldeneye         | 822     | short-eared owl                  | 5       |
| bufflehead                 | 280     | great horned owl                 | 1       |
| oldsquaw                   | 111     | belted kingfisher                | 9       |
| harlequin duck             | 9       | [northern] flicker               | 51      |
| white-winged scoter        | 143     | red-breasted sapsucker           | 4       |
| surf scoter                | 2,008   | hairy woodpecker                 | 1       |
| common [black] scoter      | 445     | downy woodpecker                 | 5       |
| ruddy duck                 | 32      | horned lark                      | 12      |
| hooded merganser           | 93      | Steller's jay                    | 37      |
| common merganser           | 111     | [common] raven                   | 4       |
| red-breasted merganser     | 141     | northwestern crow                | 1,122   |
| chestnut-backed chickadee  | 49      | black-capped chickadee           | 164     |
| red-breasted nuthatch      | 2       | brown creeper                    | 12      |
| [American] dipper          | 1       | winter wren                      | 31      |
| Bewick's wren              | 5       | marsh wren                       | 4       |
| [American] robin           | 297     | varied thrush                    | 120     |
| hermit thrush              | 1       | golden-crowned kinglet           | 176     |
| ruby-crowned kinglet       | 35      | cedar waxwing                    | 4       |
| bohemian waxwing           | 1       | northern shrike                  | 3       |
| [European] starling        | 232,761 | crested mynah                    | 1,188   |
| Hutton's vireo             | 1       | Audubon [yellow-rumped] warbler  | 1       |
| house sparrow              | 225     | western meadowlark               | 7       |
| red-winged blackbird       | 7       | Brewer's blackbird               | 799     |
| evening grosbeak           | 74      | house finch                      | 655     |
| pine siskin                | 184     | American goldfinch               | 1       |
| [spotted] towhee           | 144     | slate-coloured [dark-eyed] junco |         |
| 1                          |         |                                  |         |
| Oregon [dark-eyed] junco   | 415     | white-crowned sparrow            | 4       |
| golden-crowned sparrow     | 8       | fox sparrow                      | 41      |
| song sparrow               | 460     | Harris's sparrow                 | 1       |
| snow bunting               | 5       |                                  |         |
| <b>Total species:</b> 115  |         | <b>Total individuals:</b>        | 300,409 |

The 1965 census proved to be more successful than that of previous years in the number of species recorded – 115 – although some we normally expect to see didn't turn up. The number of individuals was a considerable increase over other years due to the greater number of starlings counted at the roosts at the Alberta Wheat Pool, LaPointe Pier, Burrard

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Bridge, Cambie Bridge and Oak Street Bridge. We had some firsts for the count too. Late in September Mrs. Bradley had banded an immature Harris's sparrow which has since been a regular visitor to her feeding station. It turned up on Boxing Day, as did the three cackling geese and one [greater] white-fronted goose which are periodic visitors to another feeding station. Two glaucous gulls and five western gulls were sighted at the Vancouver City dump. During the Count period a flock of common redpoll was seen on three successive days in the Kerrisdale district. Also, 22 bald eagles flew in an easterly direction over West Vancouver. A very special thankyou to all 36 keen-eyed participants in the Count who did such a splendid job under poor weather conditions:

|                    |                 |                   |                |
|--------------------|-----------------|-------------------|----------------|
| W. Adams           | E. Anderson     | G. Arnold         | Dr. K.C. Boyce |
| Mr. & Mrs. Bradley | F.J. Brownsword | R.W. Campbell     | N. Copping     |
| E.N. Copping       | R. Dibb         | Mr. & Mrs. Dunham | Barry Edwards  |
| N. Helliwell       | N.I. Howe       | W.M. Hughes       | J. Husted      |
| L. Husted          | K. Kennedy      | D. Livingston     | N. MacIntosh   |
| V. Newson          | L. Orcutt       | R.W. Phillips     | W.S. Rae       |
| T. Robertson       | M.A. Schouten   | F.J. Sanford      | P. Sanford     |
| G.E. Smith         | W.J. Smith      | J. Tootchin       | C. Wade        |
| B. Wise            | G. Wright       |                   |                |

Miss Gwen Wright

### **End Note #7: What to do if you find a [Bird] Band (see pages 263-264)**

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### **President's Report – 1965-66**

Field Trips and Camps: In 1965-66 the Society held about 25 field trips, several of them on weekends, and most were well attended. In addition, the annual Christmas Bird Count was carried out as usual. Summer Camp on Tyaughton Creek in the Bridge River area was a successful venture led by Arnold Grenius. An unusually large number of campers were young people (teens and under). Several of our members attended the B.C. Nature Council camp at Peachland either as leaders or learners.

Evening meetings began with the annual banquet at Hycroft. Ten other meetings with a wide range of interests made up the winter lecture series held in cooperation with the Vancouver School Board. Also in cooperation with the School Board, the Society sponsored the Audubon Screen Tours series of five lectures. Attendance was disappointingly low. Unless more interest is shown in the coming season the series will have to be dropped.

B.C. Nature Council. The V.N.H.S. hosted the B.C. Nature Council semi-annual meeting in October. Saturday (Oct. 16<sup>th</sup>) was spent in business sessions, while Sunday began with a field trip to Lighthouse Park and ended with a smorgasbord supper and an enjoyable evening at the home of Mr. and Mrs. Bill Smith.

Committees: The Lighthouse Park nature survey begun in 1964-65 has gone ahead and will be reported elsewhere by its chairman, Mrs. Kay Smith.

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The Conservation Committee has worked on several projects and a separate report has been prepared by Dr. V.C. Brink.

Alan Wootton, Chairman of the Nature Education Committee reports that trails have been laid at Camp Byng (Boy Scouts) and Moorecroft Camp (United Church). The Society has also provided assistance in nature training for Point Grey-Dunbar Boy Scouts and given bird lectures to other local Scout groups. As in previous years the Society has provided a number of docents for the Public Aquarium.

Vancouver Parks Nature Programme A survey of Stanley Park for nature trails was done in 1964-65. The Committee in charge, chaired by Don Bruce, decided that while a Nature House is a necessary part of the nature programme for the Park, funds are not available at present and the project has therefore been laid aside.

Mr. and Mrs. Bruce have also worked against heavy odds to save the U.B.C. Arboretum. They have mustered support from other outdoor clubs and the combined efforts have succeeded at least to the extent that the trees are still standing.

Cooperation with Other Outdoor Organizations. In the fall some members turned out to help with the Mountain Access Committee's trail building programme. The efforts of the

seniors have, however, been outdone by the work of the Intermediates and Juniors at the bird sanctuary of the B.C. Waterfowl Society on Westham Island.

The Bulletin has been given a new look by Editor Don Newton.

Shortcomings in the year's work. Leadership training is an acute problem as the Society grows; liaison between Executive, Committees and Membership is inadequate; liaison between our Society and other outdoor groups is likewise insufficient. Often we could provide manpower or even moral support for other groups working on projects that benefit us, but we have no way of sending out a rallying call to those interested. In the near future steps will be taken to strengthen these weaknesses. Thank you to all who have served the Society in the past year. Their conscientious support has made the year a very pleasant experience.  
K.L. Beamish

### **Vancouver Junior Naturalists Annual Report**

The [71] Vancouver young naturalists were successfully divided into Junior and Intermediate sections. Mr. Frank Sanford took over as co-ordinator of the Intermediates.

The Juniors, with Eric Landon as President and Stephen Best as Vice-President, have 52 members. Nineteen field trips and 7 evening meetings held at the Dunbar Community Centre, took place during the year. So many of the senior members of the Society assisted in leading and teaching during the year that it is impossible to name them all. However, we ask them to accept our most sincere thanks for all their help. Special mention should be



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made to our Secretary Mrs. E. Landon, mother of our president. Without her unfailing help and attendance some of our meetings could not have been held.

The Intermediates, with Robin Best as President, has 19 members. Seventeen field trips were held and they shared evening meetings with the Junior section. The Intermediates have already made a name for themselves by volunteering to work at Westham Island [Reifel] Wildfowl Sanctuary. They have helped to clear the marshes, plant trees, put up guards for stop-locks, and build loafing bars. They also built and put up 12 wood duck nesting boxes as well as repairing and cleaning boxes already erected by the Seniors of the Society. We are proud of these boys and girls and feel they have made a real contribution to the furtherance of wildlife conservation.

W.I. Pearson

### **Annual Report of the V.N.H.S. Conservation Committee**

Although it was agreed that this year the activities of the committee would focus on conservation matters such as pollution, which had been neglected because of our preoccupation with Parks and Parks legislation, Parks issues were once again a major concern. Perhaps this is not too surprising for in our Province where the population and the economy are expanding, setting aside areas which can be conserved for the future must surely be an important concern.

The committee must by necessity work by indirection; that is by creating public and government awareness of conservation needs. Although the park in the Cathedral Lakes area in the southern Interior is not quite a reality, it very nearly is so and the committee continues to press for the early publication of the Park boundaries. Land alienation within the proposed Park area continues to create difficulty for the B.C. Department of Recreation and Conservation. Our committee, along with the B.C. Nature Council, has urged that a survey of park needs in the South Okanagan-Similkameen area be promptly undertaken by the Department. It is our hope that such a survey would include a study of an ecological conservancy in the Sonoran life zone of the South Okanagan, needs for parks in and around Mts. Kobau and Apex, needs in the new Cathedral Lakes Park area, and for the new Okanagan Lakeshore Park. Parks and conservation in the Lower Mainland were not overlooked and letters were sent regarding Garibaldi Park trails, mining in Strathcona Park and matters pertaining to nature areas in the Lower Fraser Valley. The committee will be obliged to place more effort on conservation publicity in the coming year. Our committee members are D.R. Bruce, Dr. J. Armstrong, P.J. Croft, A. Greenius and Allen Poynter.

Dr. V.C. Brink

### **Possible Trip for August**

The following account was received by your Editor several months ago and held for inclusion in this issue as a possible trip for members to make on their own this August.

### **Rainbow Meadows**

A trip to popular Rainbow Meadows near Alta Lake occurred on September 11, 1965 with about 50 people participating in a cavalcade of 15 cars. The trip was too late in the year for

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alpine flora to be fully appreciated, but its main purpose was to familiarize members with a very attractive alpine area that has only recently become accessible to the average hiker. Several members thought it might be suitable for a Summer Camp. In order that others can visit the area a general description of the route is as follows:

Drive though Squamish to beyond Brackendale and turn onto the Alice Lake road. The new highway to Pemberton is a fork to the left off this road and it should be followed past the concrete dam on Daisy Lake and past Brandywine Falls, until a crossroad is observed with the sign "Function Junction". The highway crosses the P.G.E. [railway] just before Brandywine and again just before Function Junction. At the crossroad, turn left and follow signs to Cypress Lodge which is on the west side of Alta Lake. About four miles beyond the crossroad, a left turn is made and further crossing of the P.G.E. After passing Cypress Lodge the road continues for a short distance and then turns up the hill and soon after enters the valley of 21 Mile Creek. The road is now a logging road and somewhat steep and rough near the top. All cars made it to the start of the trail, but cars could be left below the steep section and this would only add about one mile of walking.

After climbing steeply the logging road begins to descend and eventually comes to a point where it used to cross the Creek on a now washed out bridge. About 200 yards back from the crossing is a parking area and an impassable road heading up into the logged off area. Looking up at this point in the general direction of the Creek, it is possible to observe aluminum markers nailed to tree stumps and a rather rough trail can be found leading to the edge of the logged off area. At this point, a Forestry trail, which leads to Callaghan Lake,

starts and it is a well-graded trail marked by aluminum markers nailed to trees. The trail starts at the 3,000 ft. elevation, and open alpine country beside a small lake is found at the 4,800 ft. elevation. Walking up time is about 2 ½ hours; walking down takes about 1 ½ hours. Driving time each way is about 2 ½ hours. The distance from Park Royal in West Vancouver is about 80 miles.

Norm Purssell

**End Notes #8; Nature Walks Through Lighthouse Park, #9: Save the Beaches Association, #10 Lighthouse Park Survey, #11; Aquarium Docents, & #12; B.C. Waterfowl Society (see pages 264-265)**

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### **Ornithology for Beginners**

A 4-week series of lectures entitled "Introduction to Ornithology" will begin on October 27 from 8 to 9 p.m. each week. These lectures will be given to our members only without charge, through the kindness of Mr. W. [Bill] A. Morris, wildlife biologist with the Canadian Wildlife Service, Vancouver.

### **Band-Tailed Pigeon Survey**

The Canadian Wildlife Service would like the cooperation of V.N.H.S. members in gathering information on band-tailed pigeons' nesting records in B.C. during the spring and

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summer months. Will you please help with this effort and report your findings of nests, eggs, location, date, young, etc. to Mr. W. Morris of the Canadian Wildlife Service, 6660 N.W. Marine Drive, Vancouver, B.C.

### **Spring Expedition to Duck Lake**

Plans are being made with Mr. R. [Bob] Harris to visit a birdwatcher's paradise, Duck Lake. This well-known area of the Kootenays, also known as Creston Flats, with its fields, shallow lakes and marshes, provides a major refuge for waterfowl on the Pacific Flyway. Duck Lake was the location of the film, *The Valley of the Swan*. There is probably as high a nesting population of ospreys along the Kootenay River at Creston as anywhere else in North America. Deer, bear, coyote, muskrat, beaver and mink are all present. [White] Sturgeon, ling [burbot], bass, rainbow and cutthroat trout can be found with little effort. The streams are fast, clear and as yet unpolluted.

### **Report on the B.C. Nature Council Meeting, Duncan, B.C.**

Business sessions chaired by the President, Dr. J.F. Bendell, were held all day on May 7<sup>th</sup> and the morning of May 8<sup>th</sup>. Delegates from Vancouver, Victoria, Cowichan Valley, South Okanagan, Central Okanagan, North Okanagan and Thetis Lake were present as were other Council officers and observers for a total of 20 people. The main items of business discussed were as follows:

A final draft of the Council's Constitution was adopted and will now be referred to a lawyer for advice before being incorporated under the *Societies Act*. The Constitution, exclusive of its by-laws reads:

The name of the organization is the "British Columbia Nature Council". The objectives of the Council are:

- A. to provide the naturalists of B.C. with a unified voice in conservation matters.
- B. to initiate and promote cooperation and integration of the activities of natural history societies and groups of similar interest in B.C.
- C. to encourage and aid in the formation of natural history societies in the province.
- D. to promote other activities of interest to B.C. naturalists.

The funds of the Council shall be applied solely towards the promotion of the foregoing and no portion thereof shall be paid or made available for the personal benefit of any member of the Council; nothing contained in this Constitution shall prevent the payment in good faith of remuneration to any officer or delegate of the Council in return for services actually rendered to Council.

In the event that Council shall be liquidated or wound up, all of its property and assets then remaining, or future interests which, but for such liquidation, would vest in the Council, shall be transferred to some other associations or non-profit organizations having objectives entirely, or in part, similar to those of the B.C. Nature Council. Such other organizations shall be selected by the members of this Council at or before the time of liquidation or winding up. The operations of the Council are to be carried out in the Province of B.C. The provisions of Clause 3 and 4 of this constitution shall be unalterable.

Headway has been made on the preparation of a pamphlet outlining the aims and purposes of the Nature Council and the member societies. Yorke Edwards of Victoria has prepared a mock-up of a simple pamphlet which we approved and asked that he proceed to complete and print.

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The treasurer reported that the Council has assets of about \$800 which is not much, but sufficient to operate. The main sources of revenue are dues and the sale of Hasty Notes by Mrs. W.J. Smith, Council Secretary and Vice-President of our Society.

Dr. V.C. Brink, Chairman of Parks [Conservation] Committee, reported that the Cathedral Lakes area as a Provincial Park is now almost an accomplished fact. A wilderness park in the Stikine was suggested by Dr. J.G. Souther of the Geological Survey of Canada. Council asked for a brief from Dr. Souther before the next meeting. Banff did not win the next [1972] Winter Olympic Games and naturalist groups were held partly to blame, including the B.C. Nature Council which protested the use of a National Park as an Olympic site.

Mr. Elton Anderson presented a brief on "Clearing Reservoir Areas". A lot of work went into his brief and Elton deserves our thanks. The Council was not satisfied with the provincial government's policy or lack of policy, on the clearing of reservoir areas and asked Elton Anderson to carry on with his surveillance.

Summer camps at Peachland are well financed this year and should be successful, especially as they are being held in July and Dr. R. Stace-Smith is the Camp Director. Each club agreed last October to finance one candidate to the Camp.

Predator Control in B.C. was reported by Mr. Jim Grant of Vernon. Cougars, wolves and coyotes have been elevated to the status of game animals and licenses will be required to hunt them, except when protection of livestock is involved. Coyote poisoning has been greatly curtailed.

A kit has been compiled but not yet printed for the guidance of new clubs. A new club has been formed in the Comox-Courtenay area. The Kamloops club, which has been dormant, has now been partly reactivated and is affiliated with the Kamloops Museum Society. Some interest has been shown in the formation of a club in the Chilliwack area and the Vancouver club delegation will look into this. There is also some interest in natural history in the Prince George area and I have agreed to contact individuals while working in that area this summer.

Mrs. Smith reported for Mrs. J. [Nancy] Anderson on biocides and biological control who said that a lot of material has been gathered but there is much more work to do before presenting a brief.

Club affairs, publicity and the newsletter were discussed at length. It was agreed that most members of most clubs do not identify with the Nature Council and that club delegates should do more to change this. Vancouver apparently has done as much or more than other clubs to make the nature Council known to its members, but even here very little headway has been made. For example, only two members of the Vancouver Club turned up at the meeting in Duncan, even though the Cowichan Valley Club had arranged a luncheon, dinner, speaker and field trips for visiting members from other clubs.

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On behalf of Mr. Bennett of the Vancouver Natural History Society, the Nature Council was presented with his beautifully carved model of the Council's Raven emblem. The Council members expressed their thanks to Mr. Bennett. The Cowichan Valley Club entertained us with an excellent speaker Saturday evening and arranged a visit to the Forestry Museum and other field trips on the afternoon of May 8<sup>th</sup>.

*Nancy (Harris) Anderson, a graduate of UBC in Zoology is the third generation of a pioneer family in the Arrow Lakes region. After their careers, and working in several areas of the world, she and her husband John, a geological engineer, carried on with the family farm. Both John and Nancy have contributed to V.N.H.S. activities over the decades, especially in summer camps – Nancy often leading sing- a-longs and skits. Both are first-rate naturalists who have served as instructors, led field trips and served on the executive. They are leaders in Kootenay community affairs, Nancy as an historian and educator, John serving on several regional boards. Despite the distance, they have maintained their connection with the V.N.H.S. Nancy should be recognized as one of the top naturalists in B.C.*

### **Bird Sightings**

**Boreal Chickadee** On June 12<sup>th</sup> Madelon Schouten and I spotted a boreal chickadee's nest hole on the Nelson Creek logging road. It was in a dead snag about 40 feet from the ground at the 1500' altitude on the slopes of Black Mountain. The two adult birds displayed different behaviors in approaching the nest with food. One would fly to a small cedar tree behind the snag and gather more food there before making its way around to the hole. The other bird would fly either directly into the hole or first perch on a small twig just below and then enter. As I had not heard of any previous nest record for this species in the area, I had the sighting confirmed by Mr. and Mrs. J. Husted who were able to observe the adult birds before the young had left the nest.

**Caspian Tern** For the past three years occasional sightings of Caspian terns have been reported on Iona Island. This year I saw three of them on May 28<sup>th</sup>, resting and preening on a sandbar in the company of two Bonaparte's gulls.

**Snow Goose** An early arrival from the north was a lone snow goose at Iona Island on July 26<sup>th</sup>.

Gwen Wright

### **More Bird Sightings**

**Iona Island** – Lowell Orcutt and George Sirk observed the following birds nesting in the sewage pond between May 19<sup>th</sup> and July 27<sup>th</sup>: Ruddy duck with 9 young, pied-billed grebes with 6 young, gadwall, American coot and mallards all with young; 20 Wilson's phalarope and two yellow-headed blackbirds, both species nesting.

Six northern [red-necked] phalaropes, greater yellowlegs, 2 Caspian terns, one snow goose with no right wing tip, Bonaparte's gulls with young, ring-billed gulls, yellow-headed blackbird, an American goldfinch nest with two [brown-headed] cowbird eggs and one finch egg are being watched. These were observed by Ian Yule, George Sirk and myself on August 1<sup>st</sup>. G. Sirk saw a yellow-headed blackbird on Hollyburn Mountain July 3<sup>rd</sup>.

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Manning Park Beaver Pond is an interesting place in early June for birdwatchers. Mallard with young, eight male western tanagers, black-throated gray, Myrtle, Audubon's [both yellow-rumped] warblers, solitary sandpiper and spotted sandpipers, flycatchers, hairy woodpeckers, violet-green, tree and rough-winged swallows, belted kingfisher, Oregon [dark-eyed] junco, mountain chickadee, American crow, song sparrow and thrushes. At the Manning Park Look Out: Canada [gray] jay, blue grouse and mountain bluebird were observed.

The B.C. Nature Council Camp at Peachland had good birding with the Seniors observing 73 species and the Juniors 80 species. Everything from pygmy nuthatches, [gray] catbirds, lazuli buntings, yellow-breasted chats, lark sparrows, Lewis's woodpeckers, Bullock's oriole, Nashville warbler, red crossbills, white-throated swifts, to sage thrashers, plus the thrill of 76 Canada geese which had nested at Vaseaux Lake. K. Smith

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### **Birding in a Breeze**

On Saturday, October 29<sup>th</sup>, the Intermediates' field trip to clean wood duck nest boxes was cancelled; inclement weather made tree climbing too hazardous. Rather than lose a scheduled trip we decided to go birding. We met at Broadway and Fir at 9:00 a.m. and quickly set our trip objective. We would visit some of the local birding hot spots in an attempt to top a daily total of 70 species. (a previous high for the Intermediates.)

Where should we go? A brisk breeze prevailed so our choice of birding spots was narrowed down. The only logical place, we reasoned, would be near the foreshore. We hoped some pelagic birds would be forced inland or near shore by the wind, thus making detection easy. Our reasoning proved correct. We visited four popular birding spots and recorded a record 96 species. Another 7 species seen at Burnaby Lake that morning brought the daily total to 103 species. During our 6-½ hours in the field we averaged 15 species per hour, or a new species about every four minutes. Two species, not included in the list which follows, crested myna in Vancouver and a Cooper's hawk in Ladner, were seen from the car.

#### Burnaby Lake (15 mins. – 7 species):

|                         |                   |                  |
|-------------------------|-------------------|------------------|
| whistling [tundra] swan | belted kingfisher | [spotted] towhee |
| cackling [Canada]goose  | downy woodpecker  | gadwall          |
| red-winged blackbird    |                   |                  |

#### Ladner sewage pond (15 mins. – 19 species)

|                   |                 |                  |
|-------------------|-----------------|------------------|
| pied-billed grebe | red-tailed hawk | Bonaparte's gull |
| greater scaup     | American coot   | rock dove        |
| bufflehead        | killdeer plover | American robin   |

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|                  |                      |                    |
|------------------|----------------------|--------------------|
| ruddy duck       | glaucous-winged gull | European starling  |
| hooded merganser | California gull      | Brewer's blackbird |
| song sparrow     |                      |                    |

### George Reifel Waterfowl Refuge (2 hrs. – 38 species)

|                      |                                |                          |
|----------------------|--------------------------------|--------------------------|
| great blue heron     | marsh hawk [northern harrier]  | varied thrush            |
| American bittern     | peregrine falcon               | golden-crowned kinglet   |
| Canada goose         | ring-necked pheasant           | water pipit              |
| snow goose           | common snipe                   | northern shrike          |
| mallard              | greater yellowlegs             | house sparrow            |
| [northern] pintail   | dowitchers                     | western meadowlark       |
| green-winged teal    | herring gull                   | purple finch             |
| American wigeon      | red-shafted [northern] flicker | house finch              |
| [northern] shoveller | barn swallow                   | American goldfinch       |
| wood duck            | northwestern crow              | Oregon [dark-eyed] junco |
| lesser scaup         | black-capped chickadee         | white-crowned sparrow    |
| common goldeneye     | chestnut-backed chickadee      | golden-crowned sparrow   |
| rough-legged hawk    | long-billed marsh wren         |                          |

### Point Roberts (1 ½ hrs. – 26 species)

|                          |                       |                      |
|--------------------------|-----------------------|----------------------|
| common loon              | Barrow's goldeneye    | common murre         |
| Arctic loon              | oldsquaw              | pigeon guillemot     |
| red-throated loon        | harlequin duck        | marbled murrelet     |
| red-necked grebe         | white-winged scoter   | ancient murrelet     |
| western grebe            | surf scoter           | Steller's jay        |
| eared grebe              | common [black] scoter | winter wren          |
| double-crested cormorant | parasitic jaeger      | ruby-crowned kinglet |

|                    |                  |                  |
|--------------------|------------------|------------------|
| Brandt's cormorant | ring-billed gull | savannah sparrow |
| pelagic cormorant  | Heermann's gull  |                  |

### Iona Island (2 ½ hrs. – 11 species)

|                      |                    |               |
|----------------------|--------------------|---------------|
| canvasback           | dunlin             | cedar waxwing |
| black-bellied plover | common tern        | pine siskin   |
| rock sandpiper       | short-eared owl    | snow bunting  |
| pectoral sandpiper   | band-tailed pigeon |               |

Wayne

Campbell

**End Note # 13: Naturalist (Observers of above) Names (see page 265)**

### **Member's observation**

Dear Editor,

## Vancouver Natural History Society - Newsletter Notes -1943-1971

I thought you might like to print the following. I don't know if the power of nature had anything to do with it, but I have never seen a better-tempered group under stress (at camp) than the V.N.H.S!

Sincerely *Gladys Clawson*.

"These distant views have to my mind a decidedly moral and religious effect; and I cannot but believe that they are not less productive of emotions of value in this respect than they are of use in accustoming the mind to large conceptions, and thus giving it power and capacity. The mysterious power of nature to develop the whole man, including the mind, soul and body, is a subject which I think has not received the attention from philosophers which its importance demands." -

Capt. James Hervey Simpson, Topographical Engineer, U.S. Army, 1858.

*Gladys Clawson was an excellent artist. When painting birds it was difficult at times to persuade her not to use her artistic license in favour of accuracy. At one time just about all the aquarium identification labels at the Vancouver Public Aquarium were hand painted by Gladys.*

### Interesting Bird Sightings

Franklin's gull – On two occasions this year I have observed an immature Franklin's gull, one on August 6<sup>th</sup> in one of the settling pools on Iona Island, and the other on October 22<sup>nd</sup> at Brockton Point in Stanley Park. The latter was with a large flock of Bonaparte's, mew and glaucous-winged gulls.  
Gwen Wright

Snowy Owl – Eleven were seen at the Iona Island jetty on November 8<sup>th</sup> by Bill Hughes, Dr. J. Yak and Mr. E. Moodie. This is early for sighting snowy owls.

Pygmy Owl – One of our new members, Mr. Peter McAllister, reported seeing a pygmy owl at his home on Hycroft Road in West Vancouver.

Sharp-tailed Sandpiper – On September 25<sup>th</sup> two sharp-tailed sandpipers were seen at the [Reifel] Waterfowl Refuge on Westham Island. The birds were resting with other shorebirds in a wet meadow inside the dike. After observing the birds from the tower we entered the meadow to get as close as possible. The birds did not take to wing until Miss

Gwen Wright, Miss Lynn Husted and I approached within eight yards, then they only circled and landed in the same vicinity. The sharp-tailed sandpiper has also been sighted this fall at Comox and at the Vancouver International Airport. Barn Swallows – three were sighted at Westham Island on October 16<sup>th</sup>.

Other Observations: Errol Anderson, Lowell Orcutt, George Sirk, Ian Yule, Kay Smith and Nancy Anderson observed the following birds on Iona Island: pectoral, Baird's and semi-palmated sandpipers, Lapland longspur, parasitic jaeger, European [Eurasian] widgeon, snow bunting, ancient murrelet, white-fronted goose, Arctic loon, snow goose and Canada goose. The group also saw a buff-breasted sandpiper on Sea Island.

J.W.

Husted

**End Note #14: Pacific Nest Record Scheme (see pages 265-266)**



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#134 March 1967

### **Astronomy**

This year Venus is an “evening star” between January and August. It reaches greatest apparent brightness around July 21<sup>st</sup>. April should be a good month to observe Mars. This planet will be even closer to Earth in 1969. Plan to attend the evening of star gazing on March 25<sup>th</sup> at the U.B.C. campus. Meet at 8 p.m. at the Ponderosa Café in the west mall. There will be an illustrated lecture on the stars in a nearby hall if it is a cloudy or rainy night, or until it is dark enough for stargazing.

Leader: - Dr. R. Stace-Smith

### **End Note #15– Intermediate Naturalists are Busy Birders (see pages 266-267)**

#### **Birding on the North Shore**

A western gull was observed on two occasions in the Capilano River Estuary on December 4<sup>th</sup> and again on December 31<sup>st</sup>. The bird was with a flock of glaucous-winged, mew and herring gulls and of the latter, two were Thayer’s gulls. Gadwall could be observed at close range on January 21<sup>st</sup> at the national harbour project in North Vancouver. Sand is being dredged and deposited there and this attracts hundreds of gulls, scores of great blue heron and ducks.

January 29<sup>th</sup> was a red-letter day for Miss Gwen Wright and myself despite the ever-pouring rain. While birding under the Lions Gate Bridge (east of the Capilano River), we observed a flock of 50 black turnstones. Closer scrutiny revealed a ruddy turnstone and two rock sandpipers amongst them. The first, a long-awaited ‘lifer’ for Miss Wright and the latter a ‘lifer’ for me! This area under the bridge, east of the river, is good for birding, particularly in fall and spring. Part of it is a peninsula and one can sit on a log, sweep the telescope or binoculars full circle and observe at leisure all kinds of birds. Just to give an example of the variety, I saw my first parasitic jaeger and my first [American] dipper there. Entrance to this spot is at the bottom of Capilano Road. Take the road that leads to the golf course, turn right on to a gravel road, cross Matthias Road, turn right under the bridge, then left.

Madelon Schouten

*Madelon Schouten was resident of the Dutch Colonies in S.E. Asia. She became an ornithologist of fine repute when she moved to the Lower Mainland. She was a fine instructor and supporter of the V.N.H.S. She retired to Princeton where she helped form the Vermillion Forks Natural History Society. Madelon is one of the great sponsors of natural history in B.C.*

#### **Christmas Bird Census – 1966**

Sixty-six years ago the pioneer ornithologist, Dr. Frank M. Chapman, sponsored the first bird census in North America at Englewood, New Jersey. Twenty-seven naturalists turned out for the occasion. The count proved popular, but more importantly, it provided a start for what is considered today to be the largest cooperative wildlife survey in the world. This

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year about 15,000 amateur and professional birders throughout North America participated in the National Audubon Society's Christmas Bird Census.

The annual counts are taken on one day (24 hrs.) between December 21<sup>st</sup> and January 2<sup>nd</sup>. Each area willing to participate selects a 15-mile diameter circle inside of which parties of birders record numbers and species of birds sighted during the day. Once an area count has terminated local reports are compiled and then forwarded to the National Audubon Society for publication in Audubon Field Notes. Information from these counts is valuable in population studies, bird conservation, life cycle studies and knowing more about bird habits.

For over 20 years Vancouver naturalists have participated in the Census and this year was no exception. We had our best count ever: 128 species – 313,730 individual birds. Excellent weather conditions, 47 enthusiasts and the division of the 15-mile diameter circle into 23 areas helped make the Count the success it was. It is interesting to note that the participants spent over 156 hours in total in the field and [collectively] drove over 450 miles in search of feathered flyers.

With each Bird Census come reports of interesting and unusual sightings. This year we had many. Snowy owls and Lapland longspurs were seen in the lowlands around the airport by Mr. Hughes's group. Bohemian waxwings, rare winter visitors, were seen in many areas throughout our circle. Red and white-winged crossbills, common redpoll and Canada [gray] jays were seen on Hollyburn Mountain by George Sirk. A Harris's sparrow visited Mrs. Bradley's feeding station and western sandpipers were observed on the sand flats near Iona Island.

Originally this year's total species numbered 131 but three entries had to be deleted: rock doves (3,347) are not counted although many areas in North America {including ours} have feral populations; cackling geese (3) are considered a race of the Canada goose and are listed as such; and Thayer's gulls (2) are not yet considered a separate species, but rather are listed with the herring gulls.

### **Ornithology News**

Bird Course: - The Ornithology Section of the Society sponsored a bird course at U.B.C. last fall with 43 faithfully attending. Our sincere thanks to Dr. J.F. Bendell for getting such a wonderful instructor to teach us – Dr. Lars Von Harman of Finland. We will be sorry to see him and Mrs. Von Harman leave in May, but he must get back to his study area. This will be his 27<sup>th</sup> year of research in Finland. His latest book is *Birds of Finland*. We wish him every success and Good Birding!

Congratulations to the Victoria Natural History Society: - 129 species recorded! Record for Vancouver N.H.S. birders – 128 species. My sincere thanks to all who turned out to help with this very fine piece of work – the Intermediate birders were excellent. George Sirk walked around in the snow on Hollyburn to find Canada [gray] jays and white-winged crossbill and red crossbills. Fred Gornall helped me to map out the areas then along with Wayne Campbell and Elmer Barnes, to compile the results. Thanks too to Vera Newson for

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all the typing. How I wish the Society would take a real keen interest in this event and build up a strong team. The birds are there; we just have to find them. It is a lot of fun and very worthwhile.

Bird skins: If a bird hits your window, please phone me. Several boys are interested in taxidermy and need the birds for practise. They are also making a footboard for study purposes and many different types of bird feet are needed.

Pacific Nest Record Scheme: - Remember to record all nests with Mrs. L. Gibbard, 465 Ellis Street, Penticton, B.C.

K. Smith

#135 June 1967

### **Excerpts from President's Report – March 31, 1967**

Nature Education – Nature trails were laid out for the Boy Scouts' Camp Byng and help was provided for the boys' badge work. West Vancouver Centennial Committee had our cooperation in leading nature walks in Lighthouse Park. A group of visiting British naturalists was toured through Stanley Park. Members acted as docents at the Public Aquarium. The North Shore Hikers organized a Centennial Walk up Hollyburn and our Society members helped mark the plants along the trail. The adult groups provided trip leaders and evening speakers for the Junior and Intermediate naturalists' activities.

Lighthouse Park Survey – The Executive decided to finish the survey of Lighthouse Park [for the purpose of producing] a booklet for use by the public that explains the natural history of the area. As the survey had been done with the enthusiastic support of the West Vancouver Parks Board we hoped that the West Vancouver Council would cooperate by financing the booklet. To this end we prepared a dummy copy of what we had in mind and sent it to the Council, with carefully considered estimates of cost and a sample copy of a similar publication done in Tasmania. We have spent four months since its dispatch trying to get our material *acknowledged* and returned! We have written, phoned, pulled strings, and now we apparently must form a committee to go to the Municipal Hall to demand our material. This has been a great disappointment after the pleasure of doing the survey and in view of the excellent support given by the West Vancouver Parks Board. However, we are undaunted. We have done far too much work to bury it so we must find other means of publication.

P.S. April 18<sup>th</sup>, 1967: Our material [Nature West Coast] has finally been returned but the West Vancouver Council has advised that it is unable to support our project financially. We must now decide on what future action to take.

Conservation – The Conservation Committee has given its support to various projects, such as the long-delayed Cathedral Lakes Park which is still not finalized because of problems with the proposed boundaries. A great deal of the Committee's work has been done by its

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chairman, Dr. Brink, who believes that demanding conservation measures is a lost cause. The odds are too heavy and as responsible citizens we must admit that the Province's economy is important and that government has a responsibility for it. Dr. Brink has spent a good deal of time talking to representatives of commerce and government trying to bring them to realize that *besides* economics, conservation must also be considered a full partner.

### **End Note #16; Report on Intermediates; Annual Report Junior Naturalists; VNHS Intermediate Section (see pages 267-268)**

#### **On Picking Wildflowers**

It's spring again and the wildflowers are out in all their natural beauty and profusion. It makes us feel good to see them and it's a natural compulsion to want to pluck a bloom here and there and drink in their perfume, even though we know they may wilt and die before we get them home. Sometimes it's hard not to be carried away by their beauty and pick them by the armful as our grandmothers did fifty years ago on a leisurely Sunday afternoon stroll. This was at a time when there were fewer people and less danger of exterminating plants by over-picking.

Things have changed since grandmother's day. Perhaps the last people who need to be reminded of the dangers of over-picking flowers are our own Society's members. Since we are the ones who have to set an example and be concerned when we see thoughtless picking of wild flower plants, let us as naturalists and conservationists, review our position and see what we can do this year to minimize needless plant destruction.

First, dogwoods and [Pacific] rhododendrons are protected by law in B.C., so if you see anyone picking them on public property you have a right, as a citizen, indeed an obligation, to take action. Usually a word of warning is all that is necessary because the picking is most often done out of ignorance. Since our parks are protected areas, nothing should be picked in them. We should all be aware of this, particularly on field trips when there are often large numbers of us and we want to leave the areas visited the way we hope other would, as undisturbed as possible.

Secondly, if we can spread the use of common sense we are well on the way to protecting our flora. If you inform people that you see picking flowers such as calypso and related orchids, of the delicate balance these flowers have in the environment and that picking will disturb, or often kill them, then you will have done much to aid in their preservation, especially in areas where they are disappearing at an alarming rate.

Shrubs such as arbutus and [hairy] manzanita live in an equally delicate balance with their environment and this is why people who try to transplant them to their gardens find them very hard to grow. Similarly, picking trilliums kills them because it deprives the flower of its leaves, which are needed for photosynthesis (food production) thus causing the root to starve and the subsequent death of the plant. Any plant that loses too many leaves will die. Lilies or plants with bulbs often die when damage is done to the bulb by the flowers being pulled instead of cut.

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Thirdly, we must realize that there are times when picking flowers does no harm at all, and in fact may be beneficial to the plant. Some plants respond to picking by producing more and more blooms. Young people are often the worst offenders but let us not be too hard on them. Observing and handling flowers is the beginning of a deeper understanding. Can you remember the feeling of pride you had when taking a handful of dandelions or buttercups to your teacher? And girls, remember playing "he loves me, he loves me not" with the daisy? There are many such hardy flowers and picking them does no harm. They are beautiful if you look at them through unbiased eyes and forget about ridding your lawns and gardens of them.

Nancy Anderson

### **Vancouver Natural History Society Emblem**

A competition for our own emblem was announced recently. However the fact that preference would be given to those suggestions incorporating the B.C. Nature Council raven was omitted. Please send your entries in now! We are an active and well-established Society and we need an emblem worthy of our past, durable for years to come, and one that each of us would be proud to wear.

### **B.C. Waterfowl Society**

The B.C. Waterfowl Society is anxious to increase membership so as to allow it to expand its projects in the Reifel Refuge. At present it is difficult to hire a warden and manager due to a lack of funds. You may support the Society by taking out a membership, or by donating to it. Donations of North American waterfowl [species] would be gratefully accepted, particularly if the breeding stock is pure. Single membership is \$5.00 per year.

#136 September 1967

### **Conservation Committee Report for 1966-67**

This committee met three times in winter and spring. With the passage of the new *B.C. Parks Act*, there seems to be no point in pressing for better legislation and the conservation of natural features. Nonetheless, committee members are unanimous in their belief that the new legislation is shallow and that too much power rests with the Minister and the

Lt-Governor-in-Council. The situation regarding National Parks and Conservation is much better and the Society should show its approval in writing to the appropriate political authority. There is need to reappraise our attitude and strategy in the matter of parks and the conservation of natural features. Until now we have been able to make requests to the Provincial Government to set aside areas for parks or for conservancy without much research or negotiation, with a reasonable chance of having the request granted. The growth

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of extractive and renewable resource industries and the increasing complexity of society are rapidly affecting changes to the 'world of nature'.

Groups such as ours with nominal income and non-professional status are finding it more difficult to find the time, funds and personnel to undertake research and formulate requests to foundations and governments. Ill-founded support of issues augments criticism, often leveled at such groups as ours, as being 'woolly-minded', 'impractical', 'sentimental', and so forth. Non-professional groups can present sound recommendations by establishing close contact with those branches of the Civil Service, both federal and provincial, that are concerned with resource use and management. This is difficult to achieve as civil servants are often wary of close association with pressure groups. In any event, the importance of informing the resource-minded public should be impressed on our provincial and federal governments.

Appeals by letters to governments and industry and by public meetings should continue as a means of pressing conservation issues. It has been suggested that seminars of naturalist and industry moderates might find a basis for action for the common good. For example, the Committee meets with representatives of the mining community in spring or early summer and with cattlemen before autumn.

Conservation education is a never-ending task. What are the best ways of supporting it? Perhaps associating for strength with other groups. Co-operating with rod and gun clubs is warranted at times on certain issues. Even association with parks, hiking and camping groups must be with caution because too many people can destroy natural features apparently 'protected' within parks. A rationale for conservation is not always arrived at easily.

### **Liumchen Ridge Hike**

The Mountain Parks Committee is sponsoring a hike to Liumchen Ridge on Sunday, August 20<sup>th</sup>. Liumchen Ridge is located south of Chilliwack near the Canada-U.S. border. The trip will offer something for everyone. If you are looking for a short hike to alpine flowers and a spectacular view of the Lower Mainland, Mount Baker and the border peaks you will be able to find them in just an easy one-hour hike from your car. The more energetic might choose to continue up to a small trapper's cabin or along Liumchen Ridge to the peak at 6000 feet for a better view of the surrounding peaks. The Committee is studying the feasibility of having the Liumchen Ridge area included in the B.C. Parks system.

### **Operation Bird Nests**

Birdwatchers please remember to send in your 1967 nest record cards to the Pacific Nest Record Scheme secretary, Mrs. L. Gibbard, 465 Ellis St., Penticton, B.C., by September, so that she can compile the list before sending the cards to the Zoology Dept. at U.B.C. for

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scientific use. Thanks to all V.N.H.S. members who have contributed to this worthwhile scheme, many having been faithful since its inception by [Tim Myres and supported by] Dr. I. McTaggart-Cowan. It is not often realized but the professional biologist often has the need of help from members of natural history societies in his research. Here is where we as amateur birdwatchers can be of assistance to the professionals. We need more recruits from all points in B.C. for next year. Please help keep this information up to date. If you see a bird (any bird) nesting, RECORD IT!

Kathleen Smith

### **Banding and Birding in the Burnaby Lake Area**

On the field trip of March 11<sup>th</sup> participants had an opportunity to see how a bird is trapped, banded and data about the banded bird recorded. They were also able to hold the birds and examine them closely. Mr. Wayne Campbell showed the group one of the many ways to catch birds of prey and demonstrated the traps he uses to catch small passerines that frequent his backyard.

Later the group went down to Burnaby Lake. A number of ducks were there, mostly mallards, green-winged teal, [northern] shoveller and [American] coot. The [northern] pintails, baldpates [American wigeon] and buffleheads were not plentiful, however there was a large concentration of ruddy ducks. On another part of the Lake three Canada geese, one snow goose and a cackling [Canada] goose were seen. These larger waterfowl were probably attracted by the three pinioned whistling [tundra] swans placed there last year from Stanley Park. Ten or fifteen early spring arrivals were seen. The swallows' (tree or violet-green) identification was not definite.

At Deer Lake another early spring arrival was seen – a male wood duck. They have been seen at Stanley Park all winter so this one was probably the first migrant for the Burnaby Lake area. A pair of canvasback was seen as well as a few ruddy ducks. Most of the birds in the Lake were [American] coots and mallards.

Ken Kennedy

### **Aquarium Needs Helping Hands**

Since the opening of the Aquarium in 1956 members of the Natural History Society have assisted in the education program by acting as docents. This year an expanded program will require more volunteers. The Junior League and Aquarium members have already consented to provide some docents. Our Society has been asked to help again. Any member willing to spend one morning a week in this worthwhile activity is asked to phone the Aquarium before the end of August. Volunteers receive adequate training by Aquarium staff before leading children. The training will be given two mornings a week for the four weeks of September. This is an opportunity to learn about aquatic life and also help others to become interested.

### **Letter to the Editor**

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Dear Sir, in the morning of June 23<sup>rd</sup> my mother and I were at the Tsawwassen ferry terminal. The tide was quite far out and close to 100 great blue heron were feeding in the shallows. A truly wonderful sight!

*Sheila M. Weaver*

### Obituary

It is with sincere regret that we learned of the sudden death of Mr. William M. Hughes on June 5<sup>th</sup>. He was a life member of the Vancouver Natural History Society and leader of the ornithology section for many years. It has been said that 'he was always very generous in sharing his knowledge and enthusiasm.' This was indicated in his encouragement to young people to study natural history, many of whom have gone on to higher education in this field, and others to take up such a rewarding hobby as the study of birds. A deep sense of sadness and personal loss is felt by his many friends.

#137 December 1967

### End Note # 17: Attention Intermediates – Specimen Hunting for the Aquarium (see pages 268-269)

#### Summer and Fall Visitants to Vancouver

Black tern – June 3<sup>rd</sup>. This bird was seen by Ian Yule as well as by some seniors, at the Iona sewage pond; the only black tern in Vancouver recorded by the Intermediates this year.

[Greater] white-fronted goose – June 4<sup>th</sup>. Thirteen of these geese were on the Iona mudflats, 9 of which were immature. Lowell Orcutt, George Sirk, and Ian Yule.

Caspian tern – This species was seen again at Iona, 4 of them by the sewage ponds.  
Errol Anderson.

Boreal chickadee This species has been seen on several occasions this summer on both Hollyburn and Black Mountains.

[Northern] goshawk – Aug. 23<sup>rd</sup>. An adult was seen flying over Jericho Beach. In all probability it is the bird that wintered there last year. Jack McClintock, George Sirk.

[Red] knot sandpiper – Sept. 7<sup>th</sup>. This casual visitor was sighted by Ian Yule and J. Husted. It was in winter plumage and flocking with semi-palmated plover and lesser yellowlegs.

Wandering tattler – Sept. 16<sup>th</sup>. This bird visited the shores of Point Roberts on several occasions. The Intermediates saw it on a field trip. That day 112 species were observed – a record for the intermediates – and probably for the Society as well.

Franklin's gull – During September an immature stayed at Brockton Point for over three weeks.  
Errol Anderson and other Intermediates.

Rhinoceros auklet – Sept. 23<sup>rd</sup>. Rafts of these birds, along with ancient murrelets, were seen in Burrard Inlet.  
Errol Anderson, Barry Edwards.



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Mountain bluebird – Oct. 16<sup>th</sup>. While the Intermediates were working at the George C. Reifel Refuge, this beautiful bird visited them. It stayed in the area for more than 3 hours and posed for pictures by Barry Edwards.

Eurasian widgeon – Oct. 23<sup>rd</sup>. An individual was seen at Lost Lagoon along with ring-necked ducks. Errol Anderson.

Slate-coloured [dark-eyed] junco – October. A pair of these unmistakable juncos visited Errol Anderson's feeder. E. Anderson, George Sirk.

Virginia rail – Oct. 29<sup>th</sup> and Nov. 5<sup>th</sup>. An adult was seen wandering on the islands east of the wharves in Lost Lagoon. Since it is known to winter in Vancouver there is a chance it may stay in the Lagoon. (Oct. 29<sup>th</sup>) Errol Anderson, Barry Edwards, George Sirk. (Nov. 5<sup>th</sup> – 13<sup>th</sup>) Intermediates.

[Greater] white-fronted goose – Oct. 30<sup>th</sup>. One immature was seen with scoters. It had been shot in the wing, clipping some of the primaries. Jericho Beach. George Sirk.

*George Sirk was one of an enthusiastic group of teenagers who became the Intermediate Section of the Society in the mid-1960's. A B.C. Park's seasonal naturalist, a co-establisher of Swiftsure Tours which operated the very first whale watching tours from Tofino, a nature travel guide in Central America, carpenter and 'hippie' bird watcher on Cortes Island are aspects of his continuing career. In 2001 George was in his second term as the elected representative for Cortes Island, to the Comox-Strathcona Regional District, championing the cause of Garry Oaks.*

### **A Look at Western Canada by Thumb**

On June 25<sup>th</sup> Ian Yule, Lowell Orcutt and myself left on a six-week journey into the Interior of B.C. and Alberta. We hitchhiked over 4,000 miles throughout the period. During this time we traveled through the Okanagan, Cariboo, Peace River parklands, northern and southern Alberta, the Kootenays and southern B.C. We visited areas as different as the alpine meadows of Manning Park and the parched deserts of Alberta. The places we thought to be excellent for birding are listed below for future reference, along with the birds typical of each area.

#### **Southern B.C.**

##### **Manning Park**

gray-crowned rosy-finch  
golden eagle  
Cassin's finch  
spotted owl  
pine grosbeak

##### **Vaseaux Lake**

Say's phoebe  
rock wren  
dusky flycatcher  
lark sparrow  
chukar (partridge)

##### **Osoyoos**

turkey vulture  
poorwill  
Brewer's sparrow  
mountain chickadee  
Cassin's finch

#### **Peace River Parklands**

##### **Moberly Lake**

yellow-shafted [northern] flicker  
least flycatcher

##### **Fort Nelson**

rose-breasted grosbeak  
mourning warbler

##### **Tupper**

Philadelphia vireo  
eastern phoebe

##### **Bear Flat**

magnolia warbler

boreal chickadee  
ovenbird  
rusty blackbird

palm warbler  
yellow-bellied flycatcher  
spruce grouse

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American redstart  
woodpecker

tree sparrow  
magnolia warbler

three-toed [black-backed]

### Edmonton Region

#### Beaverhill Lake

loggerhead shrike  
Baltimore oriole  
willet  
marbled godwit  
[American] avocet  
black-and-white warbler  
long-billed dowitcher

#### Elk Island National Park

Le Conte's sparrow

#### Driedmeat Lake

Forster's tern  
eastern phoebe

### Southern Alberta

#### Wildhorse

Sprague's pipit  
McCowan's longspur  
Brewer's sparrow  
upland sandpiper  
gray partridge

lark bunting  
bobolink  
black-crowned night heron  
black-billed cuckoo

Connecticut warbler  
chestnut-collared longspur  
Baird's sparrow  
[greater] sage grouse

The following is a list of the common birds which were seen at every suitable habitat throughout the trip:

eared grebe  
ferruginous hawk  
white-throated sparrow  
slate-coloured [dark-eyed] junco  
great horned owl

loggerhead shrike  
Tennessee warbler  
sora rail  
redhead  
Wilson's phalarope

Swainson's hawk  
clay-coloured sparrow  
Franklin's gull  
black tern  
least flycatcher

The trip was a success by adding many birds to our life lists, seeing B.C. and Alberta, meeting many interesting people, and by obtaining 213 species. I hope this brief guide to B.C. and Alberta will give a preview of the birds to be found for anyone planning a trip to these areas.

George Sirk.

### More Bird Notes

On October 7<sup>th</sup>, Mr. Fred Gornall observed more than 100 bluebirds feeding on juniper berries at the Savona Microwave Station. He also saw 12 brown creepers working over a group of as many trees. The day was a mix of sun and cloud.

A new bird sanctuary has been created at Ambleside Park in West Vancouver, a centennial gift from the West Vancouver Garden Club and the West Vancouver Parks Board. This beautiful place should be visited to enjoy the lovely area and study the birds. It is an excellent place for photography. Observed among the many ducks there was a Canada and Snow goose. To the delight of Nancy Anderson, Kay Smith and Mr. and Mrs. Barnes, a [western] meadowlark was feeding on the grass.

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The marsh and tower pens at the George C. Reifel Refuge on Westham Island have been completed and you can see over 100 birds at close range.

### **Summer Camp**

Garibaldi Park has once again been chosen as the site for our summer camp in 1968. Camp will start on Saturday, August 3<sup>rd</sup> and end on Sunday, August 11<sup>th</sup>.

### **Excerpts from the B.C. Nature Council Semi-Annual Meeting (Oct. 21.22)**

Seven of the nine societies forming the Council were represented at the meeting. About 35 people attended the all-day business session. The newest Society at Comox-Strathcona had at least 5 guests at the meeting plus their delegate. The Kamloops Society seems to be hibernating. The delegate from Southern Okanagan (Penticton) became ill at the last minute. The Vancouver Society was not well represented numerically considering its size. We had 7 at the business meeting, but 5 of these had to attend because they hold office or had reports to make.

Naturalists' Guides to B.C. – About a year and a half ago the Council decided to sponsor the compilation and printing of Naturalists' Guides in B.C. Yorke Edwards of Victoria (now Ottawa) undertook to prepare one for the Victoria region as a pilot project. It has been completed at a cost of \$250 for 250 Guides. It is about 40 pages long with an attractive cover and several photographs and sketch maps. Additional copies should cost less than 50c each. The final price has not been established but copies were made available at \$1.00 each. Dr. Carl of the Provincial Museum believes he can sell 100 copies with no difficulty. The Council hopes that this pilot guide will be an inspiration to all member clubs to produce similar ones. Vancouver should be able to duplicate this effort.

Lecture Slide Kit – Another project started by the Council about 18 months ago under the chairmanship of Yorke Edwards has also been completed. This is a half-hour slide show with a taped lecture called *The Face of British Columbia*. The kit is available to all clubs. It is hoped similar kits will be prepared by other clubs. Vancouver has a set of bird slides. How about preparing a taped lecture and making it a kit? Your representative suggested he might prepare a kit on the geology of B.C.

Conservation: Parks etc. – Dick Stace-Smith reported on the meeting that he and Bert Brink had with the Hon. K. Keirnan, Minister of Recreation and Conservation. The brief aroused considerable discussion in Council, especially with regard to Mr. Keirnan's comments on conservancies and Class "A" Parks. "Why set up conservancies in Class "A" Parks?" and, "What was the difference?" were some of the questions raised. A member of the Provincial Parks Branch explained that a conservancy status means the area is inviolable within the terms of the *Park Act*; that is to say, no development is permitted in the area (such as roads, ski lodges etc.), whereas Class "A" Parks do permit such developments. The status of any area can be changed by Order-in-Council.

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Mr. Kiernan seemed sincere in his belief that this is not likely to happen. It is our belief that the understanding established with Mr. Kiernan has been a major step forward.

If an individual wishes to give land to the government for a conservancy this is best done by a “trust in perpetuity”. Only the courts, or the donor, can change the status. It cannot be done by an Order-in-Council or by the Legislative Assembly.

Paradise Meadows – is not in Strathcona Park, but adjoins it. The Comox-Strathcona Club believes the area should be included in the Park. If it is not, it will be logged by Crown Zellerbach within two years. That company apparently is willing to swap with the Provincial Government this area for timber elsewhere. So far government [officials] have the impression this is not the case. The Nature Council asked Comox-Strathcona to obtain a statement in writing from Crown Zellerbach that it will swap; then present the statement to Mr. Kiernan. Crown Zellerbach apparently has already agreed to stop logging within 400 feet of the Meadow, for at least another year.

Reservoir Clearing – Mica Dam – Elton Anderson of Vancouver prepared an extensive and knowledgeable brief on this problem. He made several trips to the area at his own expense and numerous trips to Victoria. To his knowledge B.C. Hydro and the Provincial Government have no intention of clearing timber in the 130-mile Lake to be created. His brief does not request a complete clearing, but mainly slashing down to low water mark – a job that could be done for \$5 – 10 million, compared to the total cost of Mica of several hundred million dollars. If the area is not cleared it will not be suitable for recreation for 100 years or more and will be an eyesore of major proportions. Over the years it will probably cost 5 to 10 times as much to clear out snags as the initial clearing would cost. Members should write to B.C. Hydro, to Mr. Williston, or to your MLA protesting the policy which is based on a false promise of saving money! Elton has done an outstanding job and the Vancouver Club should be proud of him.

*The Elton Anderson Award was named for this former President of the Federation of B.C. Naturalists who was dedicated to furthering the aims of the F.B.C.N. across the Province.*

The spring meeting of the Council (May 1968) will be held under the auspices of the Vancouver Natural History Society. Location to be decided.

J.E. Armstrong

### **Fishing Lures – a Hazard to Sea Birds**

Every year, especially during the busy summer months, many sea birds are accidentally caught or “hooked” by sports fishermen along the B.C. Coast. Glaucous-winged gulls and marbled murrelets are the two sea birds most consistently caught, though occasionally pigeon guillemots and common murre are involved. While working with the B.C. Parks Branch on Mitlenatch Island Nature Park (see *Blue Jay*, December 1965) during the summers of 1965, 1965 and 1966 I heard many disgruntled fishermen complain of their catches of “feathers” instead of “scales”. I questioned many of them and compiled the following notes from their reports.

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The glaucous-winged gull, B.C.'s most abundant resident gull, is usually caught on silver "flashers" which are trolled in a boat's wake just beneath the surface of the water.

Sometimes the flasher is baited with strips of [Pacific] herring. To the hungry gull, which is primarily a surface feeder, the darting, shiny flasher must closely resemble a fish. In one passing swoop the bird engulfs the "fish" and before it fully realizes its mistake, the fishhooks have become embedded in the lining of its esophagus. In its attempt to struggle free, the gull may snap the fish line and depart, with an embedded lure from which a lengthy piece of line dangles. In time the bird will die from starvation. If by some chance it is able to feed, it is likely that the fish line will become entangled in beach debris such as logs or small bushes. A combination of haemorrhaging and starvation soon accounts for the bird's death.

Occasionally fishermen reel in gulls that they accidentally catch only to become frustrated by the problem of releasing the bird. Many fishermen simply cut the line and let the gull fly off. Needless to say the bird's chance for surviving is greatly reduced. With a little patience and common sense, the embedded hooks can be removed with a pair of needle-nosed pliers. The gull can then be released relatively unharmed.

Sometimes gulls misjudge the flasher and become entangled in the transparent fish line. This of course is not as serious as being hooked, but the bird's flight is impaired and the fisherman can easily capture it and remove the entangled line. A note of caution: gulls can inflict painful cuts with their strong bills. *Captured birds can easily be calmed by covering their heads with a stocking or shirtsleeve.*

Marbled murrelets, small, dark-brown, chubby-bodied sea birds, feed primarily on fish which they pursue by diving, sometimes to considerable depths. This bird is frequently caught in deep water on small, brilliantly coloured plugs, such as a "lucky Louie" or "Rexfield". Usually the murrelet is only hooked by the bill and the plug therefore can be easily removed. Last summer one fisherman reported catching one at a depth of about 75 feet.

In years to come, sea birds will undoubtedly continue to be caught by sport fishermen. Mortalities resulting from these accidents can be reduced if fishermen make an effort to detach embedded lures and untangle fish lines from captured birds. Most sport fishermen do not realize that many sea birds are indirectly beneficial to man. If it weren't for the glaucous-winged gulls that keep commercial and public oyster beds free of predating starfish, there would be few oysters on the Pacific Coast. Our litter-free beaches and shorelines owe their cleanliness to an army of scavenging sea birds. Also, many sea birds signal good fishing spots by congregating to feed on schools of small fish, which in turn the salmon feed on. Sea birds are a valuable and exciting addition to British Columbia's avifauna and certainly deserve humane treatment. (Reprinted from *The Blue Jay* – Saskatchewan, by R. Wayne Campbell, Burnaby, B.C.)

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### #138 March 1968

#### Christmas Bird Count 1967

Date: December 30<sup>th</sup>, 1967

Temp: 35°F - 45°F

Weather: Light cloud/sunny periods

Observers: 71 in 20 parties

Total hours: 153 (foot – 114 hrs. (car – 39 hours.)

Party Miles: 569 (foot – 135.5 miles) (car - 433.5 miles)

Time: 5:30 a.m. to 9:00 p.m.

Wind: Light

Visibility: a.m.-good; p.m. – haze

Area covered: All points within a 15-mile diameter circle, centered at Broadway and Prince Edward Streets, including West Vancouver, North Vancouver, Vancouver, Burnaby, Sea Island, Lulu Island and Iona Island.

Total Species: 125

Total Individuals: 278,271

Two members in a boat covered English Bay and the North Arm jetty, adding rock sandpipers and surfbirds to the list. Other interesting species included the Harris's sparrow, Virginia rail and pygmy owl. Seen during the count period (Dec. 20 – Jan 1) were Hutton's vireo and red crossbill.

#### **Pacific Nest Record Scheme**

The Vancouver Natural History Society has played an important part in the reporting of bird nests since the inception of the scheme in 1955. Many thanks are due to our members who spend so much time looking for nests and recording the data. There were ten new species recorded for B.C., seven for the interior States, six for California and six for Washington-Oregon, all of which come under the Pacific scheme.

Orchids to our members: - Wayne Campbell for reporting a first for Brandt's cormorant, fork-tailed [storm-] petrel and Leach's [storm-] petrel; and to George Sirk for the white-throated swift and oven bird. Other firsts reported were white-headed woodpecker, loggerhead shrike, red crossbill, [northern] mockingbird and evening grosbeak.

Interesting Notes: gray jay – only the fourth nest to be recorded. This was by Jim Grant of Vernon. There have been no records of any nests on the mountains of the Lower Mainland or Manning Park. Yellow-shafted [northern] flicker and pine grosbeak – second recordings by J. Grant; golden-crowned sparrow (with 3 young), Mrs. Hart, North Vancouver. The nearest previous location was Garibaldi Park in 1959 by J.B. Foster. All other records are from northern B.C. Please keep up the good work and record all the nests you see. The record cards are kept in the Museum in the Department of Zoology at U.B.C. and any contributor may request information at any time.

**A Sight Record of the Emperor Goose at White Rock, B.C.**

On January 4, 1968, Kathleen Smith received a phone call from Paul Douglas who reported an emperor goose on the breakwater at White Rock. Local birders were notified and from January 4<sup>th</sup> to 16<sup>th</sup> many drove the 20 miles from Vancouver to observe it.

On January 7<sup>th</sup>, Ken Kennedy paddled one writer (R.W. Campbell) to within 30 feet of the goose for photographs. About 2:30 p.m. the bird flew from the breakwater and landed next to a nearby flock of surf scoters. The only other record of this species from the Vancouver vicinity is of an immature collected from the mouth of the Fraser River in November 1922. (Munro, J.A. and I. McT. Cowan, 1947. *A Review of the Bird Fauna of British Columbia*, Prov. Museum, Victoria, B.C.)

R. Wayne Campbell and Kathleen Smith, Jan. 21, 1968

**[Greater] Sage Grouse**

The sage grouse is the largest member of the grouse family in North America and the largest in the world, except for the European capercaillie, that far exceeds it in size. The sage grouse may weigh up to 8 lbs. In general appearance it is a large grey-brown bird identifiable by the contrasting black belly and spiky tail feathers. The fore neck is black and is separated from the black throat by a narrow necklace of white, which instead of continuing around the neck, extends upward to the corner of the eye. The stiff white feathers covering the breast conceal distensible air sacs. Females are smaller than males and lack the air sacs.

Like many of our grouse, they have an ancestral meeting ground where they gather each morning and evening during spring to perform with pomp and precision their unique courtship display. Several hours before the sun peeks above the hills, they arrive at their favourite locations. Fighting between the cocks is frequent when territorial borders are threatened. Usually challenging cocks place themselves sideways to each other, heads in opposite directions, and between many short grunts, they give each other a quick cuff with the bend of the wing. The peak of display is shortly before dawn and the reason for the flurry of strutting, displaying and fighting is evident when one sees the females gathered in a small group in the centre of the activity.

When the cocks start to strut, the long tail is raised vertically, the spiky feathers are extended and a rustle caused by the wing feathers being forcibly rubbed against the stiff breast feathers is heard. As the air sacs under the stiff white breast feathers are puffed out the bird assumes a dignified appearance, his whole front now adorned with erect white feathers extending like a bib below the abdomen and forming a handsome white ruff about the neck. The white ruff is further ornamented by several delicate black nuptial plumes that stand erect behind the head and add a further touch of grace to the general demeanor of this splendid bird. A few simple waltz steps follow to the right or left and this gentleman grouse enacts one of life's little dramas. The air sacs still concealed beneath the white feathers are expanded with great force and for two brief moments become visible, one on each side of the breast – yellowish and egg shaped – as two convulsive

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jerks reveal their presence. The force with which these air sacs are momentarily expanded and bared causes a plopping sound that has a liquid quality like a stone suddenly dropped into a deep pool. After this strenuous exercise the bird opens its beak and with a few soft grunts, appears to gulp air. This is the final act in the drama. Before dawn this performance is repeated every nine or ten seconds, and as there may be 50 birds displaying, the plopping sound is continuous. The concert can be heard as far as a half mile away.

The sage grouse nest is only a slight depression in the ground, scratched out by the bird. It is scantily lined and located beneath a sage bush. The 7 to 13 eggs are yellowish-olive or greenish-brown spotted with darker brown. The incubation period is 22 days and full care rests on the mother. For its livelihood the sage grouse is peculiarly adapted to the open sage bush country. Sage bush buds, leaves and flowers form the greater part of its food and without this herb it cannot exist. Its range therefore is restricted and should the sage bush entirely disappear, so will the sage grouse.

Because its digestive organ is a thin-walled sac and not a gizzard as is common in other chicken-like birds, the sage grouse does not consume hard seeds or gravel. Besides the sage bush, its food consists of soft vegetation such as buds, leaves and flowers of various plants and insects that require no special grinding organ. Flowers of the dandelion, thistle, aster, alfalfa and other grasses form much of its food during the summer months.

The sage grouse is *not* capable of withstanding any onslaught by man or the destruction of its food and environment, the sage bush – which must remain for its protection and continuance. Anyone interested in seeing these birds may contact Mr. Larry Wadkins, State Game Biologist, 615 S. Grandview, Wenatchee, Washington, U.S.A. Drive south of Wenatchee to Palisades, turn left up Moses Coulee for about 50 miles.

### **A Good Bird Trip**

On January 27<sup>th</sup> Rob Butler and I went on a field trip to the Delta marshlands. We first stopped at Iona Island and observed a number of birds: rough-legged hawk, short-eared owl, horned lark, water [American] pipit and a loggerhead shrike. The latter, a rare winter visitor, was on the fence surrounding the sewage ponds, then it flew to nearby shrubs, then to some stumps. There it attacked a winter wren but failed to make a meal of it. One would think that a bird made up of three basic colours would be drab, but the soft grey breast and black mask combined with a striking black and white wing pattern made it one of our more interesting sightings of the day.

Next destination was White Rock. We saw our second unusual bird, the emperor goose, at the end of the pier. It had been in the area since early January. On the way to Westham Island we stopped by a hawthorn bush growing in the marsh. It was covered with small red berries that were being eaten by four birds. Two of them were vermilion red and the other two, bright yellow. We saw that they had white wing bars and a crossed bill. These white-winged crossbills are alpine residents, but the quick cold snap must have forced them down to the lower elevation. The total number of birds we saw that day was 70. This included 7 raptors, 17 ducks and 6 shorebirds along with many other species.



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### Dogwood and Rhododendron Protection Act

*No person shall pick, cut down, dig or pull up, or knowingly injure or destroy, in part or in whole, in blossom or not, any dogwood or rhododendron.* The offense is punishable by a fine. The Act does not apply to free miners, land-surveyors, timber cruisers, foresters

and lumbermen in the lawful carrying-out of their occupations, or to persons engaged in the lawful carrying-out of any public work. Dogwood is defined as *Cornus Nuttallii*, and rhododendron as the evergreen or deciduous shrubs [in the genus] *Rhododendron*.

### Supplementary Bird Count

It is unfortunate that due to a confusion of dates my bird-watching activities were not eligible to be included in the results of the annual Christmas Bird Count, or “B” Day, as it is known among the *cognoscenti*. Possibly the remarkable success of my efforts was due to a relaxation on the part of the birds, “B” Day being past and over with for another year. Or possibly it might have been beginners luck. More likely, however, it was due to the trained perception and erudition of my companion.

I met Professor Egbert Peckham at the annual convention of the Vancouver Wildlife Federation that is always held on New Year’s Eve, because at that time, Vancouver’s wildlife is at its wildest. We studied wildlife mostly through our glasses until long after Auld Lang Syne (that famous Scotsman) had been honoured in song, and we finally found ourselves faced with the choice of finding a new subject for research or going to our separate homes and explaining to “guess who”.

At this moment of crisis, I remembered “B” Day and erroneously assumed it to be the day after New Year’s Eve instead of the day before. The professor jumped at the idea and after I had helped him back on to his feet, we set off. We covered a large area and for the sake of brevity I will omit the location of the sightings, except where pertinent. We saw the following: a Ginger Rail, an Orange Thrush, two Kippered Herons, a flock of Pot-headed Hippies, a Turtle-necked Singlet, a Seamless Stockingbird, several Chocolate Chippits, a Gagliardi’s Road-runner, a bird with a harsh, scratchy voice – probably a Sandpaper, an Exorbitant Lightbill, and Inflated Sterling – from the British Properties, a flock of Western Teenagers making a great clamour, (when alone, this bird utters a plaintive cry of “gimme, gimme”), that tiniest of birds the Halffinch, and nine imported Flycatchers in the baseball park. There was also a small bird that Prof. Peckham said was always the last one to arrive in the spring – the Also Wren.

The Professor had a great deal of detailed information about birds. For instance, when one small yellow bird approached swaying from side to side in a most irregular fashion, he immediately recognized it as a Wilson’s Wobbler. “How do you know that it’s a Wilson’s Wobbler?” I demanded. “Because it lives in Wilson’s backyard”, he replied. “Wilson is good to it, but his wife is bothered by what the neighbours might think when they see it wobbling around.” I am sure that very few of my readers knew that. At one time during the outing when the Professor identified a very ordinary-looking bird as a Red-wooded

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Headpecker, I ventured to question his qualifications, and he gave me a thumbnail sketch of his career. "Originally I was a marine biologist" said Professor Peckham, "but the Marines transferred me over to the Navy and I became a Navel surgeon. However, I objected to operating on an empty stomach and resigned my commission. It was only 5% anyway. I got a position at City Hall where I sold licences by the Pound. I soon became an expert clock-watcher and shortly after, I won a cuckoo

clock in the civic bowling league and by watching that, I became a bird-watching enthusiast."

Reassured by this frank recital I resumed my avian research and saw a Pigeon, a Nor Widgeon, a Canadian Legion, and a Short-winged Puffin. But time was moving on and upon spotting a Kellogg's Corncrake, we realized that the breakfast hour was at hand and called off the project. Before we parted, Peckham insisted on telling me about an experiment he had conducted wherein he had crossed a Bald Eagle with a Hairy Woodpecker. The experiment backfired and the result was a common Wigtail. The moment of truth could no longer be postponed and we proceeded reluctantly to our respective homes, composing explanations to offer to "guess who".

Author 'unknown' - ? P.J. Croft

#139 June 1968

### **Editorial – The First Fifty Years: 1918 – 1968**

As the "Bulletin" goes to press pleasant memories linger from the annual meeting and banquet held at Frank Baker's restaurant on May 19<sup>th</sup> in an atmosphere of Pomp and Circumstance befitting our Society's golden jubilee. Nearly two hundred people – 195 to be precise – gathered to enjoy a good dinner and the excellent arrangements made by Mrs. R.V. Kirkby and her hard-working committee, to whom great credit and sincere thanks are due. No detail seemed to have been forgotten. A sizeable group of our charter members were on hand to reminisce on the events of the past half-century, and Dr. Brink, that silver-tongued charmer, reminisced for us all in a delightful after-dinner address entitled *The Beginning of Wisdom* [see Bulletin #140]. A magnificently decorated 50<sup>th</sup> birthday cake was presented on behalf of our "mother-society" the B.C. Mountaineering Club, by its president, Mr. Woodfield, a head table guest.

The Intermediate members showed us what they can do with a collection of extremely fine colour slides, mostly birds and wildflowers by Errol Anderson and Barry Edwards, many taken during banding excursions to Long Beach and Mitlenatch Island. The showing was accompanied by a synchronized tape, made by the boys, giving interesting and informative commentary, laced with sallies of refreshing wit. We're proud of you, boys!

O yes, and we held an annual meeting! Our members trusted its Executive to the extent it permitted a "short form" of meeting with a brief state-of-the-nation speech by the President, Mrs. W.J. Smith, a short financial report by the Treasurer, Mr. E.G. Barnes, and

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a general waiver of all detailed committee reports and minutes. The President's Report, however, embodying the substance of the principal Committee Reports will be published in extension in the next issue of the Bulletin. The President announced the names of the elected officers and Executive Committee members for the ensuing year, together with the appointees to various working committees, each of whom rose to acknowledge the appointment.

P.J. Croft, Editor

*P.J. (Phil) Croft was a fine naturalist whose main interest was entomology, especially Lepidoptera, and he collected butterflies both locally and abroad. His interest in natural history was engendered as a boy in England. He was the author of the month-by-month "Nature Diary of a Quiet Pedestrian" (1986) with beautiful prose he illustrated himself in watercolour that focused on the natural history of West Vancouver. Phil was a truly fine, dedicated naturalist and an excellent member of the V.N.H.S. Executives. He had the distinction of being President of **both** the Vancouver and Victoria Natural History Societies.*

### **V.N.H.S. Emblem, Buttons, Pins etc.**

Our new emblem, in the form of lapel buttons and pins, is now available at \$1.25 each. Please send the correct amount to Mrs. H. Pinder-Moss, Chairman of the Emblem Committee, stating which you prefer, a lapel button or pin. Cuff links are \$4.75 a pair and key rings are \$1.50.

### **Volunteer Opportunities at the Centennial Museum And H.R. MacMillan Planetarium**

Members of the Vancouver Museums Association are eligible to act as volunteers in various categories. Of particular interest to the Natural History Society are the plans for the Education Department. Docents are required to lead school children through exhibits depicting the history of man with particular reference to British Columbia. Training will be by a short course of twelve sessions twice a week, starting mid-September, with a proposed extension course of possibly one term in conjunction with UBC. The former is required for all docents; the latter for those interested in guiding high school students. The Junior Museum will eventually train volunteers interested in a creative program derived from the exhibits. The Museum staff intends to use specially picked docents in an exploratory programme at Jericho Hill School for the Blind. The children will be encouraged to handle and discuss animal and bird specimens.

Besides these opportunities in the Education Department, there is a place for those interested in clerical work in the Association office, especially typists. There is a need for those interested in hospitality. The Association plans to put out a Newsletter...do you have experience along this line? Finally, the new Museum Gift Shop requires sales people. For all of these jobs, a volunteer orientation day is planned. Other categories requiring special skills such as geology and taxidermy have not even been touched upon. The Planetarium also plans to use docents in its exhibit galleries. Specialized knowledge though welcome is not required, simply a desire to learn and to teach. Please contact the Volunteer Chairman if you feel that one of these suggested activities suits you.

### **End Note #18: Docent Training – Vancouver Aquarium (see page 269)**

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### **Report on B.C. Nature Council Meeting, Vancouver, May 11, 1968**

Eight Clubs with a membership of 1,700 comprise the B.C. Nature Council. Seven had delegates at the May 11<sup>th</sup> meeting; the only club not represented was Cowichan Valley. In addition to the seven delegates, the President, Dr. R. Stace-Smith, the Vice-President,

Peter Legg of Vernon, and the Treasurer, Eric Garman of Victoria were present. The Secretary, Miss M. Briault of Vancouver was unavoidable absent so Mrs. Pinder-Moss acted for her. Two observers from Comox, three from Victoria and eight from Vancouver also attended, including the President Kay Smith and the new delegate, Arnold Greenius. I believe an observation is in order here. I have attended all the meetings of the Nature Council since it was founded in 1962 and the poorest attendance of local members is at the meetings held in Vancouver. Our members apparently do not identify themselves with the Nature Council. Undoubtedly I am partly to blame for not selling the idea, but I think the main trouble is that our club is too inwardly oriented, and much too busy with its own affairs.

The members of individual clubs are non-voting members, only the delegate votes for the club. Each club pays 25c per member each year to the Nature Council. This year Vancouver paid for 598 members the sum of \$149.50. Meetings of the Council are open to all members of federated clubs. Any member in good standing can speak on any subject under discussion at the Council meetings as well as raising new business. To repeat, you are all members of the Council!

The Council session lasted from 9:30 .am. to 5:30 p.m. with a break for lunch provided by the Vancouver Club. Conservation was a major topic. Dr. V.C. Brink expressed his concern about the lack of recognition waterfowl receive in the Roberts Bank development. He also expressed his concern about strip mining and whether controls will be put into effect to save grazing lands in the East Kootenay coal mining area. What can we do to see that in future major industrial developments are not planned without concern for the natural environment. Too often we don't hear of major developments until they are a *fait accompli*, then when naturalists complain we are told that jobs are more important than the natural environment. We believe we can have both without excessive cost. Somehow we must convince our governments to inform the public in advance of announcing major industrial developments that may wipe out flora and fauna, desecrate habitat and cause pollution, so that we can try to gain some support for environmental quality. Any pollution problems brought to the attention of the Nature Council will be referred to ENQUAL, a Victoria University group working on environmental quality.

The Hon. K. Kiernan announced last week that a new provincial park had been established in the Cathedral Lakes area of the Similkameen. The Park consists of about 16,000 acres [64 square kilometers]. Dr. Brink reports that to the best of his knowledge the Park boundaries will essentially be those requested by the Vancouver Natural History Society and the B.C. Nature Council. The Vancouver Society has had their summer camps in the area on several occasions.

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One of the Council's aims is to produce a Naturalists' Guide to B.C. The guide to the Victoria area was published last year. The Vancouver Club is preparing one [Nature West Coast] to Lighthouse Park. Eventually, it is hoped, Vancouver will publish a Nature Guide to the Lower Mainland. A new Council Committee has been set up to give directions to clubs on publication format, content etc. Each club is encouraged to put together a slide kit (35mm) with a taped story to accompany it.

Other topics discussed were the threatened species; hunting with skidoos; increased hunting of small fur-bearing animals; lack of clearing behind dams; west coast trails, grade school nature curriculum; litter along highways, and Paradise Valley. Some action is underway, or being contemplated on all of the above. It has been a pleasure to be the Vancouver Club's representative to the Nature Council. I have thoroughly enjoyed the work and prize the friendships I have made with members of other clubs.

J.E. Armstrong

### Flowers, Shrubs and Trees on Panorama Ridge and Whyte Lake (near Whytecliffe, West Vancouver)

(Field Trip, May 12<sup>th</sup>; Weather: high overcast. Leader: Dr. K.L. Beamish)

#### Panorama Ridge      In Bloom

|  |   |
|--|---|
| salal ( <i>Gaultheria shallon</i> )                        | orange [western trumpet]<br>( <i>Lonicera</i> )                           |
| honeysuckle<br><i>ciliosa</i> )                            |   |
| [sitka] mountain-ash ( <i>Sorbus sitchensis</i> )          | red elderberry, ( <i>Sambucus racemosa</i> )                              |
| Saskatoon ( <i>Amelanchier alnifolia</i> )                 | Pacific crab apple ( <i>Malus fusca</i> )                                 |
| bitter cherry ( <i>Prunus emarginata</i> )                 | arbutus ( <i>Arbutus Menziesii</i> )                                      |
| [Pacific] dogwood ( <i>Cornus nuttallii</i> )              | lodgepole pine ( <i>Pinus contorta</i> )                                  |
| [dull] Oregon-grape ( <i>Mahonia nervosa</i> )             | falsebox ( <i>Paxistima myrsinites</i> )                                  |
| thimbleberry ( <i>Rubus parviflorus</i> )                  | salmonberry ( <i>Rubus spectabilis</i> )                                  |
| [scotch] broom ( <i>Cytisus scoparius</i> )                | dwarf rose ( <i>Rosa gymnocarpa</i> )                                     |
| [trailing] blackberry ( <i>Rubus vitifolius, ursinus</i> ) | [pink] corydalis ( <i>Corydalis sempervirens</i> )                        |
| [Siberian] miner's-lettuce ( <i>Claytonia sibirica</i> )   | field chickweed ( <i>Cerastium arvense</i> )                              |
| small-leaved montia ( <i>Montia parvifolia</i> )           | yarrow ( <i>Achillea millefolium</i> )                                    |
| strawberry ( <i>Fragaria</i> )                             | [small-flowered] blue-eyed Mary ( <i>Collinsia</i><br><i>parviflora</i> ) |
| bedstraw ( <i>Galium</i> )                                 | [Pacific] bleeding heart ( <i>Dicentra formosa</i> )                      |
| sea blush ( <i>Plectritis congesta</i> )                   | yellow [chickweed] monkey flower ( <i>Mimulus</i><br><i>alsinoides</i> )  |
| Indian paintbrush ( <i>Castilleja</i> )                    |   |
| death camus ( <i>Zigadenus venenosus</i> )                 | [early] blue violet ( <i>Viola adunca</i> )                               |
| [small-flowered] alum root ( <i>Heuchera micrantha</i> )   | chocolate lily (rice root) <i>Fritillaria lanceolata</i>                  |
| [herb-Robert] geranium ( <i>Geranium robertianum</i> )     |   |

#### Panorama Ridge      Not in Bloom

|   |  |
|---|--|
| oceanspray ( <i>Holodiscus discolor</i> )             | hardhack ( <i>Spiraea douglasii</i> )  |
| twinflower ( <i>Linnaea borealis</i> )                | [hairy] manzanita ( <i>Arctostaphylos</i><br><i>[columbiana] tomentosa</i> ) |
| rattlesnake-plantain ( <i>Goodyera oblongifolia</i> ) | tiger lily ( <i>Lilium columbianum</i> )                                     |
| St. John's-wort ( <i>Hypericum</i> )                  | groundcone ( <i>Boschniakia [hookeri]</i><br><i>strobilacea</i> )            |
| yellow pea ( <i>Vicia</i> ) [?]                       | common wild [Nootka] rose ( <i>Rosa nutkana</i> )                            |

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### Panorma Ridge      Bloom Over

[red] huckleberry (*Vaccinium parvifolium*)      white [fawn lily] (*Erythronium oregonum*)  
 [sheep] sorrel (sour grass) (*Rumex acetosella*)  
 broadleaf [bigleaf] maple (*Acer macrophyllum*)  
 willows ( a number of different catkins were found on the ground)

### Panorama Ridge      Ferns

parsley fern (*Cryptogramma (crispa) [acrostichoides]*)      bracken (*Pteridium aquilinum*)  
 sword fern (*Polystichum munitum*)      licorice fern (*Polypodium glycyrrhiza*)

### Whyte Lake

#### Flowers seen blooming along the trail to the Lake

Red-flowering currant (*Ribes sanguineum*)  
 groundcone (*Boschniakia [hookeri] strobilacea*)  
 [trailing] yellow violet (*Viola sempervirens*)  
 large-leaved avens (*Geum macrophyllum*)  
 fringe cup (*Tellima grandiflora*)

#### Flowers not in bloom along the trail to the Lake

pipsissewa (*Chimaphila umbellata*) (Prince's Pine)  
 [creeping] buttercup (*Ranunculus repens*)  
 fireweed (*Epilobium angustifolium*)

### Whyte Lake      In Bloom

sweet gale (*Myrica gale*)  
 swamp laurel [bog-laurel] (*Kalmia (polifolia) microphylla*)

### Whyte Lake      Not in Bloom

|  |   |
|--|---|
| bog cranberry ( <i>Vaccinium [Oxycoccus] oxycoccus</i> ) | [Pacific] ninebark ( <i>Physocarpus capitatus</i> ) |
| Labrador tea ( <i>Ledum groenlandicum</i> )              | false azalea ( <i>Menziesia ferruginea</i> )        |
| [round-leaved] sundew ( <i>Drosera rotundifolia</i> )    | yellow [waterlily] pond lily ( <i>Nymphaea</i>      |
| cascara ( <i>Rhamnus purshiana</i> )                     | [ <i>Nuphar lutea</i> ] <i>polysepala</i> )         |

### Whyte Lake      Bloom Over

skunk cabbage (*Lysichiton americanus*) (Swamp Lantern)      Mrs. J.M. (Nancy)Anderson

### Plants: Finisterre Island, April 27<sup>th</sup> and May 4<sup>th</sup>

#### Trip #1 Enroute Snug Cove, Cates Bay April 27<sup>th</sup>. Weather dull, hazy

(Brackets ( ) indicate flowers not yet in bloom)

|                            |                 |                                |               |
|----------------------------|-----------------|--------------------------------|---------------|
| [Pacific] dogwood          | salmonberry     | elderberry                     | bitter cherry |
| [red] flowering currant    | salal           | blue-eyed Mary                 | seablush      |
| arbutus                    | Saskatoon berry | (thick saxifrage) [stonecrop?] |               |
| broadleaf [big leaf] maple |                 | Oregon grape                   | willow        |
|                            | grasses         |                                |               |
| [Pacific] bleeding heart   | skunk cabbage   | (honeysuckle)                  | mosses        |

#### On the Isthmus (vicinity of cairn/monument)

|                       |                             |                      |                |
|-----------------------|-----------------------------|----------------------|----------------|
| Yellow mimulus (med.) | (briar rose)                | shooting star        | [scotch] broom |
| Saskatoon berry       | bearberry                   | [Pacific] crab apple |                |
| Indian paintbrush     | Cerastium [field chickweed] |                      |                |

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### On Finisterre Island

|   |  |                     |                 |
|---|--|---------------------|-----------------|
| yellow mimulus (med & small)                  | chocolate lily                             | death camas         |                 |
| large strawberry                              | sea blush                                  | Oregon grape        | (Vetch)         |
| blue-eyed Mary                                | arbutus                                    | (nodding onion)     |                 |
| Indian paintbrush                             | <i>Cerastium arvense</i> [field chickweed] |                     | Saskatoon berry |
| [scotch] broom                                | (blackberry)                               | (spring beauty)     |                 |
| Douglas-fir                                   | (honeysuckle)                              | (sedum) [stonecrop] |                 |
| dogtooth violet [white fawn lily](bloom over) | (briar rose)                               | (saxifrage)         | (phlox- small)  |
| (Columbia [tiger] lily)                       | grasses                                    | mosses              |                 |

### Trip #2 Enroute, Snug Cove, Cates Bay May 4<sup>th</sup>. Weather – showers, some sun

|                 |                      |  |
|-----------------|----------------------|--|
| gooseberry      | thimbleberry         | (mock orange)                          |
| bedstraw        | starflower           | vetch                                  |
| valerian        | false Solomon's seal | <i>Tellima grandiflora</i> [fringecup] |
| miner's lettuce | (columbine)          | [Pacific] (ninebark)                   |
| glossy mustard  | (sorrel)             | [Pacific] crabapple                    |

### Pipeline Road, north end of Island -

sword ferns

### At Grafton Bay

|                 |                          |  |
|-----------------|--------------------------|--|
| (spring beauty) | chocolate lily           | (sedum) [stonecrop]                            |
|                 | [Pacific] bleeding heart | dogtooth violet [white fawn lily] (bloom over) |

### At Killarney Lake

(water lilies) [pond-lily]

Note: [rough-skinned] newts, salamanders and one small [garter] snake were also recorded during the second field trip.

Robert C. Harris

*Robert Harris (wife Rita) was another outstanding, accomplished member of the V.N.H.S. His natural history interests were broad but he had a special interest in botany and photography. Bob led many field trips and hikes and was a summer camp stalwart. He was a civil engineer specializing in bridge construction. This background was evident in his finely researched historical trail mapping and in trail and bridge construction and in his many published articles.*

### Ornithology Section

February 8<sup>th</sup>. An American bittern was flushed from a field near Cod Island. The bird flew into a fir tree, alighting on a limb 50 feet from the ground, thereupon striking the characteristic bittern "pose" with its bill pointing to the sky.

May 3<sup>rd</sup>. Two pileated woodpeckers engaged in a courtship ritual at a farm on the West Road, Point Roberts.

May 11<sup>th</sup>. A Virginia rail with chick at Riverview was seen by R. Lindstrom and D. Stonebridge at Coquitlam River.

May 12<sup>th</sup> On Iona Island during high tide at 6:45 a.m. I saw 35 Wilson's phalaropes, one whimbrel and 3 American avocets. The avocets were resting on No. 1 sewage pond. At

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intervals they took wing and circled, calling repeatedly, thereby attracting glaucous-winged gulls, which chased and harried them until they landed. This performance was repeated at intervals until the receding tide exposed enough beach for the avocets to begin feeding. When a Bonaparte's gull approached too closely, one of the avocets chased it away.

The snowy owls and northern shrikes departed about the end of March. If any members had April sightings of these species please report them to me. Members are reminded that the shorebirds migrate south through Vancouver starting in July. Later, in August, Point Roberts is an excellent site for the terns, jaegers and other species. J. Husted.

### Glaucous Gull at Iona Island

A large, nearly white gull was spotted at Iona Island sewage outlet on Dec. 2, 1967. Fred Bodsworth, Bill Morris and I watched the bird with mew and Bonaparte's gulls for several minutes. Fred Bodsworth, Canadian author and naturalist who is familiar with glaucous gull plumages, recorded the gull as a third year bird. It is an uncommon winter visitant to the Lower Mainland and southwestern B.C. R. Wayne Campbell

### End Note #19: Ornithology Comments (see page 269)

### Migratory Bird Arrivals – 1968

| <u>Species</u>                         | <u>Date</u> | <u>Where Observed</u>      |
|--|-------------|----------------------------|
| violet-green swallow (3)               | Feb 29      | Geo. C. Reifel Refuge      |
| Audubon [yellow-rumped] warbler (male) | Mar 20      | Iona Island                |
| mourning dove (3)                      | Mar 21      | Iona Island                |
| rufous hummingbird (male)              | Mar 24      | Pachena Bay, Vancouver Is. |
| cinnamon teal (male)                   | Apr 1       | Iona Island                |
| rough-winged swallow (8)               | Apr 8       | Deer Lake, North Burnaby   |
| greater yellowlegs (18)                | Apr 10      | Deer Lake, North Burnaby   |
| Swainson's thrush (1)                  | Apr 11      | North Burnaby              |
| Townsend's solitaire (1)               | Apr 12      | South Vancouver            |
| white-crowned sparrow (1)              | Apr 12      | North Burnaby              |
| water [American] pipit (25)            | Apr 16      | Iona Island                |
| barn swallow (3)                       | Apr 16      | Iona Island                |
| Hutton's vireo (1)                     | Apr 16      | Iona Island                |
| American goldfinch (2)                 | Apr 16      | Iona Island                |
| cliff swallow (6)                      | Apr 18      | Deer Lake, North Burnaby   |
| band-tailed pigeon (2)                 | Apr 18      | North Burnaby              |
| western sandpiper                      | Apr 20      | Iona Island                |
| dowitcher (6)                          | Apr 20      | Iona Island                |

R. Wayne Campbell

### Some Other Arrivals

| <u>Species</u>                    | <u>Date</u> | <u>Where Observed</u> |
|-----------------------------------|-------------|-----------------------|
| hermit thrush                     | Feb 17      | Point Roberts         |
| violet-green swallow              | Mar 2       | Point Roberts         |
| European [Eurasian] wigeon (2)    | Mar 2       | Westham Island        |
| Audubon's [yellow-rumped] warbler | Mar 2       | Point Roberts         |
| rufous hummingbird                | Mar 17      | Burns Bog             |
| green heron (2)                   | Mar 24      | Granville/Marine Dr.  |



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|                      |        |                |
|----------------------|--------|----------------|
| snowy owl            | Mar 17 | Delta          |
| redhead              | Mar 30 | Westham Island |
| Wilson's warbler     | Mar 30 | Point Roberts  |
| rough-winged swallow | Mar 31 | Stanley Park   |
| ring-necked duck     | Mar 31 | Stanley Park   |
| cinnamon teal        | Apr 6  | Westham Island |
| ring-necked duck     | Apr 12 | Westham Island |
| mourning dove        | Apr 12 | Ladner         |
| red-throated loon    | Apr 12 | Point Roberts  |
| band-tailed pigeon   | Apr 14 | Ambleside Park |
| California gull (1)  | Apr 30 | Stanley Park   |
| northern phalarope   | May 5  | Westham Island |

|   |       |                |
|---|-------|----------------|
| yellow-headed blackbirds (10 – 15 immature or female) | May 5 | Westham Island |
| oldsquaw (2 female)                                   | May 5 | Point Roberts  |
| common loon   | May 5 | Point Roberts  |
| chipping sparrow                                      | May 5 | Point Roberts  |

Richard Lindstrom

### **What Can We Do?**

On several birding trips to Iona Island and to the Ladner sewage ponds on the Lower Mainland my friends and I have found evidence of the activities of careless hunters. Within a distance of 200 feet along the shore we found six dead birds, unclaimed trophies of the hunter.

While it is legal to hunt in these areas, why can hunters not be required by law to remove the birds they have shot? We found the bodies of dead birds in both accessible and inaccessible areas, along the edges of ponds and in the undergrowth of fields and along fences.

Each year finds an increase in the number of hunters. Is there some way in which we can educate the hunter to the need of being a good sportsman? If this kind of program were possible perhaps the number of birds being slaughtered would decrease. The following is a list of the dead birds we found on Iona Island and at the Ladner sewage pond: horned and western grebes, [northern] shoveler, red-breasted merganser, western sandpiper, ruddy duck, greater scaup, bufflehead, American coot, great blue heron, Bonaparte's and mew gulls and a short-eared owl.

Wm. J. Anderson

### **Nature Note from White Rock**

For some months the Harrises have been receiving nightly visits from an opossum that comes to share the food put out for the raccoons.

Editor's Note:

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*Nightly, 'neath the silver moon  
I set out food for friend raccoon  
They do not get the snacks I toss 'em  
Hi-jacked by a playful 'possum!*

#140 September 1968

**Editorial** – Having inserted a note in our last issue setting a deadline of August 9<sup>th</sup> for receipt of material, together with concise specifications for the manner in which, from time immemorial, contributions have been required to be submitted, *Ye Editor* set forth

happily on a two-month's absence from Vancouver, confidently expecting that on his return on August 10<sup>th</sup> he would find everything ready to hand, typed, double-spaced, in duplicate, all ready for making up the "Editor's Dummy". Well....!! There's no harm in "expecting". Blessed is he that expecteth nothing, for he shall not be disappointed!!! So, with a deep and sweeping bow to those kind contributors who observed the deadline, and a waggle of an admonitory finger at those who ignored it, we express our regret that this issue is somewhat later in appearing than had been planned, and will give little warning, if any, of the first of the Senior Field Trips scheduled for September 7<sup>th</sup>. The Editor hopes that all members have had a pleasant and fruitful summer, and that many an interesting contribution to future issues of the Bulletin will be the result. P.J. Croft, Editor

### **President's Report 1967-68**

The Vancouver Natural History society has now completed half a century of active participation in the field of natural history. This past year, leaders of the various sections conducted the following:

Field Trips: - 35 day and 1 weekend trips. Christmas Bird Count. "Province" hike, and an 8-day summer camp in the Tulameen Valley

Evening Meetings: - 14 open lectures; annual meeting and 50<sup>th</sup> anniversary banquet; botany discussion group; 5 night lectures at "Open Air Theatre", Lighthouse Park, and Audubon film lectures.

Miscellaneous: - Badge work for Girl Guides and Boy Scouts; 12 lectures to various clubs; assisted North Vancouver Trails group; arranged work parties for the B.C. Waterfowl Society; volunteers (docents) at the Vancouver Public Aquarium; contributed to the Pacific Nest Record Scheme and worked on files at UBC. V.N.H.S. prize for botany awarded at UBC.

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

Crest: From many creditable and original entries a design by Miss Hillary Stewart was selected as most appropriate for a Society Crest. This design now appears on our letterhead, key rings, pins etc.

Lighthouse Park Booklet [*Nature West Coast*] At a general meeting held in February the Society approved the expenditure of up to \$3,000 of Society funds to complete and publish this booklet. A first draft has been prepared for editorial review and line drawings to illustrate the text are being prepared by members under the guidance of Miss Gladys Clawson.

Audubon: This year the Audubon Film Lectures held in conjunction with the Adult Education Department of the Vancouver School Board, was financially successful. The Society's share of the proceeds amounted to \$200.

Conservation: Dr. Brink and his committee were active in matters of major concern, including the Roberts Bank super port, strip-mining at Crowsnest, and the Burns Bog area. It should also be noted that efforts to establish a park in the Cathedral Lakes area were partially successful. Hon. W.K. Kiernan announced Park status for an area somewhat less than had been requested, but it did include the principal geographic features that the Vancouver Natural History Society had sought to preserve.

Vancouver Museum: - Vancouver is fortunate this year in the opening of the new Centennial Museum and H.R. MacMillan Planetarium. Since the V.N.H.S. has for many years advocated the establishment of such a museum it is particularly gratifying that the Society should be one of the three groups that have been invited to affiliate with the Museums Associations. Your Executive is reviewing all aspects of this proposal and will be prepared to make definite recommendations to the membership at an early date.

Canadian Orchid Survey: - Some members participated with the Ottawa Field Naturalists on a long-term project to accumulate records of occurrences of Canada's native orchids and to prepare easily usable consolidated listings of the sites. The aim of the project is to obtain detailed information on distribution, population changes and habitat characteristics, particularly at the limits of species' ranges. The project co-ordinator is Mrs. Fred Fisher.

*Mrs. 'Emmy' Fisher was the wife of Dr. Fred Fisher, M.D., and pursued an interest in orchids. She undertook graduate studies at U.B.C. and chose for her thesis the orchids of British Columbia. She studied under Dr. Kay Beamish. Emmy was also a keen birder. She and Fred led several trips for naturalists to Europe and the southern United States. They both also spoke and wrote the 'Chinese' languages, as well as several European languages.*

Junior and Intermediate Sections The Juniors and Intermediates held 24 field trips and 19 evening meetings during the year. It has been encouraging to note the enthusiasm of younger members of the Society and even more so as this enthusiasm has received a degree of tangible recognition in a year in which jobs for young people have been less plentiful. Quite a number of our young members have gained employment directly related to their activities and interests in the Natural History Society. These young people will

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

form the future leaders of our Society and we should make every effort to encourage their continued interest in the world around them.

In concluding this report I would like to express my appreciation for the support of the membership as a whole, and to express my particular thanks to the Executive who have worked so hard to make this year such a success.

Kathleen Smith

### **End Note #20: Chairmen of Sections; Orchids (see pages 269-270)**

#### **Flowers in Garibaldi Park**

At last I have seen the flowers of Garibaldi Park. For all the years I have lived in Vancouver I have heard of, read about, and dreamed of Garibaldi, but every trip I planned went awry. Now at last, with the V.N.H.S. 1968 Camp, I made it and I have proven to myself as, no doubt did 64 other campers, that every word said and written was true. Botanically or otherwise you just can't exaggerate Garibaldi.

The trail up the lower slopes is long and steep but well built; even here the plants lend interest – lowland [western] hemlock, [western] redcedar, Douglas-fir, wintergreens,

pipsissewa (prince's pine), and foam flower. Higher up appear queen's cup, trailing raspberry [dwarf red blackberry], and the higher elevation trees, such as yellow cedar, lovely [amabilis] fir and mountain hemlock. But the glory of Garibaldi (botanically), is the subalpine and alpine meadows. The former are openings large and small in the scattered clumps of alpine [subalpine] fir and mountain hemlock, (with a few white-barked pines intermixed), and the latter are on the steep slopes where lush vegetation stands knee to waist high (depending on who stands among the flowers.) Admittedly bloom was a little late this year so we missed the full display, but we saw beautiful colour in Desolation Valley and the promise of it everywhere. Also we saw most of the individual flowers somewhere but not quite in the masses that will be there by now.

Above the meadows the rocky tops have their own hardy clumps and cushions of vegetation, some of them bearing exquisite flowers, many of them clinging in rock niches as if they lived on little else than scenery. Here we found some of the most beautiful specimens (like mountain [silky] phacelia) making no great spread of colour, but individually quite charming. Here too, mosses, lichens and sedges abound.

We collected (official permit in hand) a specimen of each plant that we found in bloom, and these we named and put on display at camp. Below is a list of seed plants. Campers may notice that some names have been changed from those used in the display. Checking with books, binoculars and a little time, turned up some errors and some out-dated names, hence the changes. Also the list is by no means exhaustive. Sorry I can provide no descriptions. For those you must go to your books or come to "camp night" when you will see pictures of many of the flowers. If you bring your list and can see in the dark you will have a chance to associate names with flowers.

Honeysuckle family – Caprifoliaceae

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red twinberry [Utah honeysuckle]

*Lonicera utahensis*

### Carnation family – Caryophyllaceae

moss campion

*Silene acaulis*

campion [Parry's campion]

*Silene parryi*

### Sunflower family - Compositae

yarrow

*Achillea millefolium*

mountain dandelion [ orange Agoseris]

*Agoseris aurantiaca*

[short-beaked agoseris]

*Agoseris glauca* var. *dasycephala*

pearly everlasting

*Anaphalis margaritacea*

pink [rosy] pussy toes

*Antennaria rosea*

[hairy arnica]

*Arnica mollis*

[heart-leaved arnica]

*Arnica cordifolia*

sagebrush [mountain sagewort]

*Artemisia norvegica*

edible thistle

*Cirsium edule*

mountain hawkweed [dwarf hawksbeard]

*Crepis nana*

fleabane [Arctic daisy]

*Erigeron humilis*

[cut-leaved daisy]

*Erigeron compositus*

[subalpine daisy]

*Erigeron peregrinus*

[golden fleabane]

*Haplopappus brandegei* [*Erigeron aureus*]

[sweet] colt's foot

*Petasites frigidus* var. *navalis*

ragwort (groundsel) [dwarf mountain butterweed]

*Senecio fremontii*

[rayless alpine butterweed]

*Senecio pauciflorus*

[arrow-leaved groundsel]

*Senecio triangularis*

[northern] golden rod

*Solidago multiradiata*

[horned] dandelion

*Taraxacum (lyratum)* [*ceratophorum*]

### Stonecrop family - Crassulaceae

[spreading] stonecrop

*Sedum divergens*

### Mustard family – Cruciferae

[Lyll's rockcress]

*Arabis Lyallii*

### Crowberry family – Empetraceae

Crowberry

*Empetrum nigrum*

### Heath family - Ericaceae [incl. *Pyrolaceae* & *Monotropaceae*]

white [mountain-heather] false heather

*Cassiope mertensiana*

alpine-wintergreen

*Gaultheria humifusa*

pinetop

*Monotropa hypopithys*

bog-laurel

*Kalmia (polifolia)* [*microphylla*]

red (pink) mountain-heather

*Phyllodoce empetriflora*

yellow mountain-heather

*Phyllodoce glanduliflora*

hybrid between red/yellow [heather]

*Phyllodoce x intermedia*

one-sided wintergreen

[*Orthilia*] (*Pyrola*) *secunda*

lesser wintergreen

*Pyrola minor*

white [-flowered] rhododendron

*Rhododendron albiflorum*

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|   |  |
|---|--|
| [blue-leaved huckleberry] blueberry   | <i>Vaccinium deliciosum</i>                    |
| <u>Water-leaf family – Hydrophyllaceae</u>  |  |
| mountain [silky] phacelia   | <i>Phacelia sericea</i>                        |
| [Sitka mistmaiden]  | <i>Romanzoffia sitchensis</i>                  |
| <u>Pea family – Leguminosae</u>   |  |
| [Arctic] lupine   | <i>Lupinus arcticus</i>                        |
| <u>Lily family – Liliaceae</u>  |  |
| [yellow] glacier lily   | <i>Erythronium grandiflorum</i>                |
| Oregon fairy bells (twistedstalk) [sic]   | <i>Streptopus amplexifolius</i>                |
| [Note: Oregon [now Hooker's] fairybells would be <i>Prosartes</i> [formerly <i>Disporum</i> ] <i>hookerii</i> |  |
| Rosy twistedstalk   | <i>Streptopus roseus</i> [lanceolatus]         |
| [sticky] false asphodel   | [ <i>Triantha</i> ] <i>Tofieldia glutinosa</i> |
| false [Indian] hellebore  | <i>Veratrum (eschschoitzii) [viride]</i>       |
| <u>Evening Primrose family – Onagraceae</u>   |  |
| Fireweed  | <i>Epilobium angustifolium</i>                 |
| Broad-leaved willow herb  | <i>Epilobium latifolium</i>                    |
| <i>Epilobium alpinum</i> number of splits in the "Illustrated Flora of B.C." Vol. 3].                         |  |
| <u>Orchid family - Orchidaceae</u>  |  |
| white rein-orchid   | <i>Habenaria [Platanthera] dilatata</i>        |
| slender bog-orchid  | <i>Habenaria saccata [Platanthera strica]</i>  |
| <u>Phlox family – Polemoniaceae</u>   |  |
| mountain [spreading] phlox  | <i>Phlox diffusa</i>                           |
| <u>Buckwheat family – Polygonaceae</u>  |  |
| mountain sorrel   | <i>Oxyria digyna</i>                           |
| <u>Purslane family – Portulacaceae</u>  |  |
| Indian potato [western] (spring beauty)   | <i>Claytonia lanceolata</i>                    |
| <u>Buttercup family – Ranunculaceae</u>   |  |
| [red] columbine   | <i>Aquilegia formosa</i>                       |
| tow-headed baby [western pasque flower]   | <i>Anemone occidentalis</i>                    |
| wind flower [cut-leaved anemone]  | <i>Anemone multifida</i>                       |
| northern anemone  | <i>Anemone parviflora</i>                      |
| mountain marsh-marigold   | <i>Caltha leptosepala</i>                      |
| [subalpine] buttercup   | <i>Ranunculus eschscholtzii</i>                |
| globeflower   | <i>Trollius (laxus) [albiflorus]</i>           |
| <u>Rose family – Rosaceae</u>   |  |
| Partridge-foot  | <i>Leutkea pectinata</i>                       |
| [diverse-leaved] cinquefoil   | <i>Potentilla diversifolia</i>                 |
| [fan-leaved cinquefoil]   | <i>Potentilla flabellifolia</i>                |
| [villous cinquefoil]  | <i>Potentilla villosa</i>                      |

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creeping raspberry [five-leaved bramble]  
[sibbaldia]  
[sitka] mountain-ash

*Rubus pedatus*  
*Sibbaldia procumbens*  
*Sorbus sitchensis* var. *grayi*

### Saxifrage family – Saxifragaceae [includes *Grossulariaceae*]

[leatherleaf saxifrage] pear leaf  
[Brewer's] mitrewort  
[five-stamened mitrewort]  
[fringed] grass-of-Parnassus  
[maple-leaved] currant  
common [spotted] saxifrage  
Lyll's [red-stemmed] saxifrage  
[wood saxifrage]  
western saxifrage  
[dotted saxifrage]  
[Tolmie's saxifrage]  
[one-leaved] foam flower

*Leptarrhena pyrolifolia*  
*Mitella breweri*  
*Mitella pentandra*  
*Parnassia fimbriata*  
*Ribes acerifolium*  
*Saxifraga bronchialis*  
*Saxifraga lyallii*  
*Saxifraga mertensiana*  
*Saxifraga occidentalis*  
*Saxifraga punctata* [nelsoniana]  
*Saxifraga Tolmiei*  
*Tiarella unifoliata* [trifoliata var. *unifoliata*]

### Figwort family – Scrophulariaceae

sickle-top lousewort  
wood betony [bracted lousewort]  
[scarlet](Indian) paintbrush  
[small-flowered] paintbrush  
red [pink] monkey-flower  
yellow [mountain] monkey-flower

*Pedicularis racemosa*  
*Pedicularis bracteosa*  
*Castilleja miniata*  
*Castilleja parviflora* var. *albida*  
*Mimulus lewisii*  
*Mimulus tilingii*

[small-flowered penstemon] beardtongue  
[Davidson's] penstemon  
alpine speedwell

*Penstemon procerus*  
*Penstemon davidsonii* var. *menziesii*  
*Veronica wormskjoldii*

### Violet family – Violaceae

tall yellow [stream] violet  
round-leaved (yellow) violet  
marsh violet

*Viola glabella*  
*Viola orbiculata*  
*Viola palustris*

### Grass family – Gramineae [*Poaceae*]

silvery [silver] hairgrass  
mountain [alpine] timothy

*Aira caryophyllea*  
*Phleum alpinum*

### Willow & Birch Families – Salicaceae & Betulaceae

dwarf [snow] willow  
[under-green] willow  
[Barclay's] willow  
Shrubby [sitka] alder

*Salix nivalis*  
*Salix commutata*  
*Salix barclayi*  
*Alnus* [viridis] ssp. *sinuata*

### Conifers:

[common] juniper  
yellow-cedar  
lovely [amabilis] fir  
[sub-]alpine fir  
mountain hemlock

*Juniperus communis*  
*Chamaecyparis nootkatensis*  
*Abies amabilis*  
*Abies lasiocarpa*  
*Tsuga mertensiana*

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whitebark pine

one club moss [Pacific fir-moss]

oak fern

various rushes (*Juncus* sp.) and sedges (*Carex* sp.)

*Pinus albicaulis*

*Lycopodium* [*Huperzia chinensis*] *selago*

*Gymnocarpium dryopteris*

Kay Beamish

*Dr. Katherine I. Beamish was raised in Manitoba and moved to the Barkerville area where her father worked. After serving with the R.C.A.F. in W.W. II, she obtained an MSc at UBC and a PhD at Wisconsin University. She taught school in Burnaby and joined the V.N.H.S. just after the war. She served the V.N.H.S. on the executive, field trips and summer camps and helped to frame and establish the Ecological Reserves program in B.C.*

### **End Note #21 Some Interesting Plants from Crescent Beach (see page270)**

#### **Intermediate Trip to Widgeon Valley**

On May 25<sup>th</sup> the Intermediates gained access to, and hiked up Widgeon Valley north of Port Coquitlam. In the way of bird life we managed to glean the following species: [American] goldfinch, [northern] flicker, western tanager, cliff, rough-winged, and barn swallows, spotted towhee, [common] raven, black-headed grosbeak, Steller's jay, warbling vireo, orange-crowned, yellow, Wilson's, Townsend's and MacGillivray's warblers, rufous hummingbird, olive-sided flycatcher, [American] dipper, Oregon [dark-eyed] junco, varied thrush and blue grouse.

We also saw a few [coastal] mule deer and their tracks, numerous butterflies and a northwestern garter snake along the toadlet-studded [western toad] track.

Although the foregoing sighting would alone constitute a good field trip, the climax was the discovery of two rarely seen tailed toads [frogs] (*Ascaphus truei*) in a little rivulet by Widgeon Creek near the head of the Valley. The first was a rich chocolate brown with a café-au-lait triangle between its incredulous eyes and running down the nose. The second was slightly larger and coloured an opaque candied-fruit pink, like newborn. They were both males and the short grey "tail" is a device facilitating internal fertilization, a method unique in frogs. It is also interesting in that it has no voice, and its only relatives live in New Zealand! I left my first tailed toad [frog] in his little stream, hidden under a rock in the water.

D. Green

### **End Note #22: Interesting Bird Sightings (see pages 270-271)**

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#### **"The Beginnings of Wisdom"**

by V.C. Brink

*On the occasion of the 50<sup>th</sup> Anniversary of the founding of the  
Vancouver Natural History Society.*

I borrowed the title of this address from Stewart Udall's book, *The Quiet Crisis*. In it, Udall, the Secretary for the Interior, scans the natural scene and associated institutions in the United States from the time of the advent of the white man until the present; in like



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manner will you scan with me the fifty years of our Society from its conception on May 8<sup>th</sup>, 1918, to the present?

The Society was born at the infant University of B.C. as a union of the Natural History Section of the B.C. Mountaineering Club and the Arbor Day Association with Professor John Davidson as President. The story of the conception is concisely told by Professor Davidson in the B.C.M.C. Bulletin, *The Mountaineer*, published in 1957 on the 50<sup>th</sup> anniversary of the Mountaineering Club.

The Constitution of the Vancouver Natural History Society of the day gave as its aims: (a) to cultivate and disseminate knowledge of every branch of natural science; (b) to encourage nature study and arbor day exercises in schools; (c) to arouse interest in the value of our native trees and the flora and fauna of our woodlands; (d) to encourage the protection of useful plants and animals liable to extinction and (e) to endeavour to secure for Vancouver an adequate Natural History Museum.

In the first Constitution the influence of the careful Scots, the Davidsons, the McClatchys, the McQueens, the McIntoshs and the Bains shows through for one clause reads, “each member shall pay a prepaid subscription of ONE DOLLAR yearly.” Note that you *pay* and you *prepay*; furthermore the One Dollar was capitalized! A little further on there appears this statement: “The Society is made strong by the active co-operation of all members; members are held responsible for the annual subscription fee of

\$1.00 until they notify the Honourary Secretary in writing of their intention to resign from membership.” Thus was a tradition set – do you know of any other Society that demands so little and gives so much?

As I contemplated the nature and order of my comments I felt the necessity in some manner of placing the focus on the individual members who have made up, and make up today, the membership of our Society. In a world of three billion people, big industry and computers, it is easy to forget the importance of the individual. “It is always good,” someone said, “to read poetry but it is better to read that which has been made out of our own lives.” Believing this, I have chosen to speak at some length about individuals clearly recognizing the impossibility of speaking of all but a few, and the tragedy of dismissing rich and interesting lives without a word, or only a word or two. One astonishing fact that has emerged from reflections is that of the hundreds of members I have known, there are none I have not liked; a few have puzzled me, and some I did not understand, but it is easy to develop a real affection for naturalists and people in the out-of-doors.

My first tribute is to the wisdom of members past. Bruce Gleig was a veteran of two World Wars. At the first Crown Lake camp, Bruce could not overtax a sick heart and sat for hours on the sunny shore watching the many birds, listening to the music of the insects and tracing the zephyrs as they ruffled the lake surface. Some of us on the other hand scrambled up the slopes to see if the sheer faces of the Enchanted Maiden were climbable. In the evening I listened to Bruce speak quietly of the things he had seen and suddenly realized that he had done and seen more than we energetic ones had. Vividly to memory

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came Professor Davidson's admonition to me of years earlier when, as director of a camp on Black Tusk Meadows, I asked if I would be permitted to climb Castle Towers. He said, "This is not the Mountaineering Club." (He did okay my climb a little later.)

I was a Cub in the Boy Scouts movement when I first met and made the acquaintance of Mrs. McGinn, M. Turnbull, Mr. Racey and Mr. Muskett. They were not scientists, but were skilful, dedicated naturalists from very different walks of life. They were always courteous and informative to both the curious and interested; they appreciated the fact that curiosity and wonder often precedes interest, that *curiositas* precedes *studiatas*. Mr. Racey's rodent collection was certainly the product of a keen amateur, but it was a professional collection. Mr. Muskett taught us to appreciate the beauty of the individual flower as something richer than the appreciation of flowers en masse. What a shame it was that his native garden could not have been conserved! Skilful and knowledgeable as these members were, they appreciated the wisdom of the Constitution, which stressed the broad aims of the Society and not specialist aims.

Might it not be said that the inviability of Burrard Field Naturalists, an offshoot in many respects, of the V.N.H.S., can be attributed to their overriding concern with specialities? Impatience with the novice and the curious, who perhaps were just beginning to appreciate the immensity of the geological time scale, did not characterize J.J. Plommer or Mickey Dodds. Perhaps you will remember that Mr. Plommer always carried the big black billy for tea. Do you remember his comments on the agglomerate on Pump Peak or the Swain Copper Mine on the West Fork of Lynn Creek? Do you recall the humour of the occasion at Pavilion Lake when Bill Hughes insisted that some joker had swiped his false teeth and that the person turned out to be a pack rat? May we recall Bill Hughes' patience with the birdwatcher who could do little more than distinguish seagulls and sparrows? Patience with the novice naturalist has on the whole, characterized our Society. How could a Society such as ours survive in a specialty role in the face of the mighty organizations of science? These members who have passed, sensed the significance of this and expressed it in the Constitution and in their deeds.

May I take time now to say a random word about some of our charter members and older members here tonight? The charter, or very long time members, with us tonight are: Emeritus Professor John Davidson, C.F. Connor, Miss Thyne, Miss Bertrand, Maude Allen, Preston Tait, Eve Sutherland, Dr. and Mrs. M.Y. Williams, Allan Wootton, Mr. and Mrs. Frank Farley. Perhaps in the audience are Miss Gruchy, Mr. Phillip Timms and H.R. MacMillan – old timers to whom I have spoken in recent months.

Tom Fyles is a veteran of World War I, a postman and a mountaineer, whose feats are now part of the legends of our Province. He was the first, and only, man to scale without mechanical aid, the vertical sides of the sheer and crumbling Table in Garibaldi Park! But I remember his smile and his comment as we prepared to move up Rainy River Valley at 5:00 a.m. in the teeming rain: "Just a clearing shower", he said; and it did clear as we stood on top of Panther Peak some 6 hours later.

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Kate McQueen was a teacher at King Edward High School, secretary in 1917 of the Arbor Day Association, later to be a founding part of this Society, and the Society's first librarian. At this point I wish the TV program "Time Tunnel" was not fantasy and we could transport you back to the second and third decades of this century when our founding members rowed out to Point Atkinson and made their way to Black Tusk Meadows, to Botanie Valley when cars, bridges, roads and trails were few and when most of the Province was unmapped!

I remember C.F. Connor, strong, clean cut, shouldering enormous packs, setting up tents, eloquent in discourse, firm, judicial and kind, and a fine second President of our Society. Do you remember when a long-time member dropped her flashlight in the biffy and Professor Davidson, who knew his Bible better than most, quickly quipped from Matthew 5, "Let your light shine before men that they may see your good works."

Your Society has been served well by its officers. [Presidents] Professor J. Davidson, 19 years from 1918 - 1937; C.F. Connors – 4 years; Dr. McT. Cowan who regretted his absence tonight; A.H. Bain, deceased – 7 years; Stewart Bradley; Foote Waugh; Allan Wooton, artist and staunch supporter of our Society almost since its inception and who, many years ago, examined a young boy scout - Bert Brink by name; J.J. Plommer; Frank Sanford who served in an executive capacity since the early thirties; Dr. Dick Stace-Smith; Dr. John Armstrong; Dick (N.F.) Pullen; Dr. Katherine Beamish; and Mrs. Kay (Kathleen) Smith.

Officers, other than Presidents, who served ably in former times might be mentioned; some are here tonight. Mr. and Mrs. Copping; Wyn Pearson who did so much to make the Junior Section a reality; Virginia Holland; Mr. and Mrs. Johns; Bernard Rogers; Mr. and Mrs. Jack Neild; Mrs. Laura Anderson, an impressive person and a faithful member to her last days; Roger Wood, deceased; Kay Milroy; there are many others who organized trips and meetings, kept minutes, wrote letters, and made innumerable telephone calls. No Society has ever had more faithful and dedicated officers.

And some members taken at random. Some of you will remember Margot Grawacz in outsize mountain boots, stout, in white shorts and a polka dotted bandana bra, hot but singing, swinging along a dusty Okanagan road. In the days before mosquito repellents some of our members put on pine tar glazes over their faces and hands; after a week the whiskers grew through – what a sight! Remember Maude Allen and her unusual headgear over which she draped mosquito netting. Ernie Schwantje, big, cheerful, Dutch, laying out rope hand lines to the privies so men and women wouldn't get mixed up in the fog that shrouded the Diamond Head camp for days. Ernie you will remember could make you believe that a new specimen of *Rhododendron lapponicum* [Lapland rosebay] was more valuable than all the gold in Fort Knox. Mrs. Pinder-Moss who broke her leg the evening of our arrival on the Noaxe Lake, and for days lay cheerfully at her tent entrance without complaint, and rode sidesaddle 20 miles over rock and scree to the Elizabeth Mine on the way out. Gallantry we found is not confined to the battlefield. Dolly Bradley no longer young in years, on an advance party to Black Tusk Meadows arrived sodden, tired and cold to find supplies and personal gear dumped by the packers on the ground which, when

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rain started, proceeded to become a mire. Nevertheless she was still willing to try a World War I song.

With a deep sense of the inadequacy of my statement about our members, past and present, I would turn our scanner on our relations with sister clubs and cognate groups. As earlier stated, our Society grew as part of and in association with the B.C. Mountaineering Club and the Arbor Day Association. In 1957 Professor Davidson was able to write: "We are proud of the fine spirit of fellowship which has existed throughout the years between the B.C. Mountaineering Club and the Vancouver Natural History Society." Although most of our local mountain and outdoor clubs have natural history interests expressed in their constitutions, was it not a wise move to create a separate Society for natural history?

Our Society first grew in close association with the University of B.C. and continues in various ways to foster the association; for years we held our evening meetings in the old biology wing and the Honourary President was the President of the University. Wisely, I feel, our Society turned down a 'takeover' offer by the U.B.C. Department of Extension, but does continue to support certain evening classes arranged by that Department. Professor Davidson, it might be recalled, taught classes there for 40 years. For many years the Society supported the Vancouver Institute that initially acted as a senior cultural organization in Vancouver. Today the Institute functions largely as a sponsor of lectures and as a wing of the U.B.C. Department of Extension. It no longer calls on the V.N.H.S., the C.M., [City Museum] and the Art Gallery etc., to provide lectures.

Nonetheless our Society has maintained its broad cultural ties in the City and in the Province. When Mr. Lietze asked for support for a Vancouver Aquarium I believe it was given gladly, but our Society does not run the Aquarium. Similarly support was given to the B.C. Waterfowl Society and the Reifel Refuge and the Vancouver Museum Association. Again, it is not managing or owning properties. Closer association with the B.C. Wildlife Federation, the Audubon Society, the S.P.C.A. and the Anti-Vivisectionist League have all at one time or another been mooted. The Society, without enveloping or being enveloped by special concerns, has done much to encourage the use of humane traps, to conserve our native flora, fauna and historical sites. Throughout the years the Society has maintained its aims and its identity, and close association or union with other groups has been foresworn. Association with the B.C. Nature Council is the exception. Association with the Museum Association may be just around the corner. In communities such as we have today, where union often brings power, has the policy of a single identity been wise? I think it has been. But it may no longer be the case.

The first constitution states, "The aims of the Society shall be promoted by lectures, essays and demonstrations, lantern-nights, field excursions, camps, and any other means which the Society may decide upon." Have the means of promotion changed much in 50 years? Are slide nights so different from lantern nights? Perhaps few children today brought up on "Kodachrome" would be impressed with the beautifully tinted slides by John Davidson or by Preston Tait and others. I remember the excitement which greeted the showing of the first starch grain colour slides of garden flowers shown, I believe, by J.A. Johnson in the early thirties. Slides by Phillip Timms were tremendous – one in particular I

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remember he obtained of anemones (tow-headed babies), by stopping to a pin size aperture, with Mt. Baker sharp in the background. Comparable stills of course are seen today in the slides of fungi by the Waughs, the superb bird shots by our President Kay Smith, and shots by the Bains.

Of the popular trips of the past, many to such places as the Musqueam Reserve, Crescent Beach, hunting tertiary fossils on the beaches of Stanley Park, and the Marpole Middens would lack point today because of mass modification of the environment. (Fraser Arms beer parlour covers the Marpole Middens.) The Seven Lakes trail on Hollyburn, Caulfield and Point Atkinson remain not greatly modified. I think the evening lectures ranged more widely in the past than today when Kodachromes were part of most of the evening lectures. Bill Taylor, who knew the plants well, lectured in the early thirties on the "*Devil's Club*". Dr. R.H. Clark [U.B.C. Chemistry Dept.] lectured on "*Colour and Odour of Organic Compounds*". H.R. MacMillan, a member, lectured on "*Our Forests*". Professor Hill-Tout lectured on the "*Antiquity of Man*". Chief Mathias (Joe Capilano) lectured on "*The Coming of the White Man*". Professor H.T.J. Coleman, poet and philosopher of UBC, lectured on "*Nature From the Philosopher's Point of View*". Professor Daniel Buchanan lectured on the "*Making of Worlds*". J.W. Winson (Wildwood) lectured on "*Gulls of Bare Island*". J.W. Gibson lectured on "*Beauty and Utility in School Grounds*". J.M. Davidson on "*By These Fruits Ye Shall Know Them*"; and Dr. M.Y. Williams on the "*Plants of Bygone Days*". I personally will never forget the vivid lecture by Professor George Spencer entitled "*Big Fleas Have Little Fleas, and so ad infinitum*", or the Legerdemain with which Dr. Joseph Pearce presented "*Lunar Facts and Fancies*" with paper cut-out tricks. Lectures were well attended and the members came, by streetcar or an old World War I bus, to the dimly lit campus in distant Point Grey.

I have a list of 39 summer camps initiated by our Society. Most of the sites chosen have in the 50 years of our existence become Provincial Parks. To an extent hardly realized by the public and by our government, our Society and our sister societies have brought into prominence some of the most interesting and loveliest areas of the Province.

Thought of V.N.H.S. camps bring a flood of rich memories – packers like Alec Munro of Garibaldi, a product of the early Squamish Valley settlement but a young man of vision; and girthy "Tumbleweed" at Larch Valley, a teller of tall tales to tourists; cooks like "Flapjack" in Garibaldi who, when he struck for higher wages, was challenged by Professor Davidson to walk out alone. He stayed.

Music rich in the fine songs by John and Annette Gardener; skits, plays and puppet shows; flower meadows and mosquitoes; bitter wind and blistering sun; the sweet aroma of fir in a hot spot on a summer trail; hunger and the view from Mt. Eiffel; a new flower or bird sighting in the yellow [ponderosa] pine at Oliver; paintings by Arthur Ericson; an antlion in the sand; the awesome spire of Black Tusk from Empetrum Ridge; picture names like Mimulus Creek or Gentian Ridge; cutting wood and putting "Perfex" into the dishwasher; ornithologist Ron Mackay canoeing into camp across Crown Lake just at sunset with his big dog in the prow, stepping to the sand, and playing the pipes.

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Our Constitution states that the Society is to promote the enjoyment of nature despite wet snow on tents, bumpy ground to bed on, and biting insects. I believe it has promoted this objective wisely. Our Society has placed its signature on our land with a good hand.

Lastly I would like to comment on the wisdom of our Society as a pressure group. Despite the unusual system of electing officers, by a modified electoral college system, the Society is essentially democratic. It has to my knowledge received all manner of suggestions, usually debated freely, at least in council, and has maintained a positive approach to the relevant issues, from the protection of eagles and dogwoods, to humane traps and parks, it has actively sought, often successfully, legislative action. I have, and I believe the majority of our members have always been aware of the danger of the Society becoming little more than a pressure group. Urgent though many problems of conservation may seem, we were I think most sympathetic when Captain Fowler and other members of the Vernon Naturalists were reluctant to join the Nature Council for fear we would lose sight of the need for humans to enjoy our natural scene.

I have appreciated Robert Frost's poem *Birches* but for brevity's sake I'm going to shred it. To quote:

*When I see birches bend to left and right  
Across the lines of straight dark trees  
I like to think some boy's been swinging them  
But swinging them doesn't bend them down to stay. Ice storms do that!*

This morning's paper tells us that our present B.C. population of 1.8 million people in 15 years will rise to 3 million. The demographer Forester more than half seriously tells us

that 50 years from tonight, in 2018, humans will squeeze themselves to death. Our papers also write as though the Gross National Produce is the chief index of the state of the nation. To quote Udall:

"Only an ever-widening concept and higher ideal of conservation  
will enlist our finer impulses and move us to make the earth a  
better home, both for ourselves and for those yet unborn."

Almost inevitably this Society is going to be drawn as a pressure group in the next few years if it honours its Constitution. May the wisdom granted us by our members of the past 50 years stand us in good stead, and let us hope that in the year 2018, fifty years hence, there will be swingers of birch trees.

#141 December 1968

**Summer Camp 1969**

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

Camp will be held in the Yalakom area from July 26<sup>th</sup> to August 2<sup>nd</sup>. The site is near the Elizabeth Mine forty miles west of Clinton. Dr. V.C. Brink will be camp leader with Mr. R. Harris the assistant.

### **Taseko Lakes Project**

During the week following summer camp, N. Purssell is planning a mobile camp near the remote Taseko Lakes. The purpose is to enable a small group to make a study of the area. While the assistance of a packer will be used in the initial stages, the long distances involved will limit participation to the strongest hikers. Some backpacking is necessary and campers will do their own cooking.

### **Joyous Jottings from the '68 Camp [Garibaldi Park]**

Just prior to publication of the last (Autumn) issue of the Bulletin, your Editor received from Kay Milroy, a lengthy series of notes in Kay's breezy style, relating certain (to her) humorous and (to me) hair-raising incidents from the 1968 summer camp. It was too late to prepare these for publication in that issue, but at least a gist of their content, insofar as it is possible for a non-participant to capture and pass on the mood, is offered in the following paragraphs.

Things seem to have got away to a rather bad start when the helicopter taking gear in from the advance party dropped a net full of it into the wild, wild unknown and on to the hard, hard ground. One has a picture of our President, a passenger in the helicopter, having a heated argument with the pilot as to whether he had or had not lost the load, before letting the matter drop. (joke).

A further vignette of Doug May and Bob Houlden setting off to locate the maverick net-load, and then having to plunder it for a means of temporary shelter and subsistence, while the remainder of the advance party at the top were shivering on short commons until the supplies arrived.

Of Heather Leveson-Gower springing an "artesian well" in her tent when her hot water bottle let go. Surprising how pressure vessels react at high altitudes! (Or did you just sit on it, Heather?) Apparently spirits were high, however, for the 30<sup>th</sup> wedding anniversary of Kathleen and Bill Smith was suitably celebrated in camp. "Kathleen", reads the record "was attired in black nylon fringed with lace, mini-style!" Very chic! High jinks on the mountaintop – so frolicked the gods on ancient Olympus!

Next scene, Kay Smith, Kay Beamish and Nancy Anderson sloshing about in mud and melting snow on a botany hike, and our President unfortunately slipping and busting a tibia and being more or less in difficulty, though with spirits undampened, for the remainder of the camp and for some weeks afterwards. (It so happened that your Editor, about the same time and in a far-distant part of Canada, while trying to subdue an evil-tempered sailboat, slipped and injured the same bone, in the same leg...and it ain't funny, McGee!)

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In spite of all these vicissitudes one reads clearly through the record that a very successful camp indeed was held, full of activity, fun and valuable natural history lore proving that, as usual, our campers like the sundial, “count the bright hours only.”

There were a number of forays up the neighbouring mountain summits of Cinder-Cone, Empetrum and Black Tusk under the capable leadership of Norman Purssell and Bert Brink. Kay Milroy reports on the ascent of the Tusk (a little artlessly, I thought) that “all those who climbed the Black Tusk were uplifted by the climb” – the very first result your Editor expects to get out of a climb! And she speaks eloquently of hikes to Garibaldi Lake and “home through alpine meadows gay with flowers”; of interesting talks by Kay Beamish, Dr. Brink, Mrs. Phil Mundy and others in their several fields of expertise; of singing and jollity around the camp fire, and good hearty meals faithfully provided by the camp cooks; of Dr. Fisher patching up injured knees, ankles and miscellaneous other extremities and proposing the formation of a “knee club”; of Vernon Kirkby erecting the dining tent fly, using his own Wagnerian stature as a gauge, thus providing a cathedral-type ceiling for everyone else; and last but not least, of a long list of plants, birds and mammal observed (not one solitary insect seen, apparently, by anybody!), by the time a tired and happy crew returned home. Sounds like great fun - habitually at that time your Editor is away at the other end of Canada but one of these days he’ll make it to one of our Camps and will see for himself! In the meantime, thanks to Kay Milroy for the report.

P.J. Croft, Editor.

### Ornithology Section

A few weeks ago several birders met to discuss ways and means of stimulating more interest among active and prospective birdwatchers in the Society and ways in which the

Ornithology Section could contribute more to the Society as a whole. The following topics are some of the results of the meeting.

Bird Hot Line – To keep birdwatchers informed of unusual bird sightings in the Lower Mainland we decided to start a Bird Hot Line. Birders are invited to send or phone their names and addresses. Everyone will be arranged into groups, the size depending on the number interested. Each ‘flock’ will have a leader who will be notified of the bird’s presence and who in turn will phone in each of his ‘birds’. The leader can be rotated at will. Some of the birds seen in 1968 which you would have been notified of through the Hot Line are as follows:

|                          |                        |                         |
|--------------------------|------------------------|-------------------------|
| emperor goose            | common grackle         | rusty blackbird         |
| Say’s phoebe             | [northern] mockingbird | buff-breasted sandpiper |
| sharp-tailed sandpiper   | redhead                | stilt sandpiper         |
| Franklin’s gull          | Caspian tern           | gyrfalcon               |
| [American] white pelican | [American] avocet      | long-billed curlew      |

Bird Checklist – The Checklist of Vancouver Birds is presently being revised and should be available before long. About 20 new species have been added including 11 new breeders bringing the list to over 280 species. Speaking of checklists, there is a Checklist



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of Birds of British Columbia recently published by David Stirling. This attractive list can be obtained for 25c from Victoria. It will be handy for keeping life and annual B.C. lists.

Field Trips – Most birders agreed they wanted more field trips with greater variety, not only in trip subjects but also in areas visited. It was also suggested several bird trips for prospective birdwatchers should be included in each term program. On these trips novices will be introduced to field equipment, identification books, record keeping etc.

Of course veteran birders are welcome on these trips and hopefully some may offer to help new birders.

Bird Chatter – Under this heading birders will be kept informed of matters concerning their hobby, including recent publications, short notes on the status of birds nearing extinction, interesting bird notes from other Natural History Societies, and sources of free literature for birders, etc.

Theed Pearse, birder and bander from Comox has just published a book entitled *Birds of the Early Explorers in the North Pacific*. It is 275 pages long with black and white illustrations. This is quite an accomplishment for a man 97 years old! The book will be available soon in local bookstores. For birders with problems, a booklet entitled *Solving Your Bird Problems*, is available from the Nature Education Centre, Washington Crossing, Pennsylvania, for 35c. Birders visiting Point Roberts should contact George R. Dunbar before roaming the beaches. It is also a good idea to sign in at the Sewage Plant at Iona Island before you venture out on the jetty or walk around the inside sewage lagoons.

R. Wayne Campbell

### **Try Fry's Corner**

One of the most productive birding areas in the Fraser Valley is Fry's Corner, located a few miles west of Langley City. Each year in late fall and during the winter the fields flood, thus providing a suitable area for many thousands of waterfowl, including lesser scaup, ring-necked duck [northern] pintail, ruddy duck, mallard, blue-winged and green-winged teal and bufflehead. One January afternoon Glen Ryder and I estimated a total of between 5,000 and 6,000 birds, mostly pintails, concentrated there.

Waterfowl are not the only attraction for the birdwatcher. In the winter of 1966 there was an unusual influx of (American) rough-legged hawks and snowy owls. Often one can observe great blue heron and bald eagles in the large cottonwoods bordering the fields. The lucky observer may see the beautiful northern shrike perched on a fence post. There can be no doubt that a pleasant day can be spent studying the bird life of Fry's Corner, especially when the fields are subjected to flooding.

Al Grass

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*Al and Jude Grass are outstanding naturalists with broad interests and a major dedication to ornithology. Jude has served for decades on the V.N.H.S. executive and the FBCN executive, and as long-time editor of the B.C. Naturalist.*

### **End Note #61: Birds for the Record (see page 319)**

#### **Fall Migration Sightings at Iona Island**

Iona Island is a popular attraction for many birders during the fall migration. The varied habitat, quiet ponds, sandy dunes, cultivated fields, sea marshes and beaches attract a host of birds, many of which are restricted to this area. During September and October many members visited and kept notes. These were compiled and the following information extracted: During September 93 species were recorded on 20 visits, compared with 101 species on 17 visits in October. The maximum and minimum daily totals in September were 50 and 30, and in October 72 and 46 species. The visits usually lasted 2 to 4 hours.

#### **New Arrivals**

| <u>September</u>          | <u>Date</u>      | <u>October</u>         | <u>Date</u>      |
|---------------------------|------------------|------------------------|------------------|
| water pipit (6)           | 12 <sup>th</sup> | snow goose             | 3 <sup>rd</sup>  |
| canvasback (4)            | 13 <sup>th</sup> | red-throated loon      | 3 <sup>rd</sup>  |
| white-winged scoter (4)   | 15 <sup>th</sup> | red-breasted merganser | 7 <sup>th</sup>  |
| sanderling (3)            | 15 <sup>th</sup> | snow bunting           | 16 <sup>th</sup> |
| black bellied plover (21) | 20 <sup>th</sup> | northern shrike        | 18 <sup>th</sup> |
| common loon               | 20 <sup>th</sup> | varied thrush          | 18 <sup>th</sup> |
| horned grebe              | 20 <sup>th</sup> | hooded merganser       | 19 <sup>th</sup> |
| red-necked grebe          | 20 <sup>th</sup> | bufflehead (2)         | 23 <sup>rd</sup> |

#### **Transients**

|                      |   |                   |   |
|----------------------|---|-------------------|---|
| peregrine falcon     | 6 <sup>th</sup> , 12 <sup>th</sup> , 28 <sup>th</sup> | peregrine falcon  | 3 <sup>rd</sup> , 7 <sup>th</sup> , 23 <sup>rd</sup>  |
| parasitic jaeger     | 16 <sup>th</sup>                                      | redhead           | 3 <sup>rd</sup> , 18 <sup>th</sup>                    |
| Lincoln's sparrow    | 18 <sup>th</sup>                                      | Lincoln's sparrow | 9 <sup>th</sup>                                       |
| ring-necked duck     | 20 <sup>th</sup>                                      | Canada goose      | 7 <sup>th</sup>                                       |
| northern phalarope   | 25 <sup>th</sup>                                      | gadwall           | 9 <sup>th</sup>                                       |
| redhead              | 23 <sup>rd</sup> , 26 <sup>th</sup>                   | Franklin's gull   | 9 <sup>th</sup> , 23 <sup>rd</sup> , 26 <sup>th</sup> |
| pigeon hawk [merlin] | 18 <sup>th</sup> , 25 <sup>th</sup>                   | mourning dove     | 15 <sup>th</sup>                                      |

|                   |                  |
|-------------------|------------------|
| rough-legged hawk | 27 <sup>th</sup> |
|-------------------|------------------|

#### **Departures**

|                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|
| cliff swallow    | 23 <sup>rd</sup> | barn swallow (4) | 19 <sup>th</sup> |
| blue-winged teal | 30 <sup>th</sup> |                  |                  |

#### **Casual**

|                         |                                     |                        |                                   |
|-------------------------|-------------------------------------|------------------------|-----------------------------------|
| bank swallow            | 21 <sup>st</sup> , 25 <sup>th</sup> | sharp-tailed sandpiper | 3 <sup>rd</sup> , 4 <sup>th</sup> |
| white-throated sparrow  | 25 <sup>th</sup>                    | Say's phoebe           | 18 <sup>th</sup>                  |
| buff-breasted sandpiper | 28 <sup>th</sup>                    | willet                 | 26 <sup>th</sup>                  |

**Contributors:** W. Campbell, R. Footit, R. Lusher, G. Sirk, T. Stevens, W. Weber, I. Yule

### **End Note # 23: Pacific Nest Record Scheme; Botany Section (see pages 271 -272)**

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### Botany Section Coquihalla Field Trip (Saturday, May 25<sup>th</sup>)

strawberry, *Fragaria* sp.

purple vetch, *Vicia* sp.

[star-flowered false] Solomon's seal, *Smilacina* [*Maianthemum*] *sessilifolia* [*stellatum*]

false Solomon's seal, *Smilacina* [*Maianthemum*] *racemosa* youth-on-age, *Tolmiea mensiesii*

[pink] corydalis, *Corydalis sempervirens*

self-heal, *Prunella vulgaris*

(white) yarrow, *Achillea millefolium*

[sitka] valerian, *Valeriana sitchensis*

[three-leaved] foam flower, *Tiarella trifoliata*

orange agoseris, *Agoseris aurantiaca*

white [varileaf] phacelia, *Phacelia heterophylla*

[small-flowered] blue-eyed Mary, *Collinsia parviflora*

(pale) sea blush, *Plectritis congesta*

[small-flowered] alum [root] *Heuchera micrantha*

mustard [rockcress], *Arabis* sp.

[ribwort] plaintain, *Plantago lanceolata*

chocolate lily (rice root), *Fritillaria* [*lanceolata*]

creeping buttercup, *Ranunculus repens*

woods [little] buttercup, *Ranunculus* (*Bongardii*) [*uncinatus*]

orange [red] columbine, *Aquilegia formosa*

bedstraw, *Galium* sp.

large [-leaved] avens, *Geum macrophyllum*

cinquefoil, *Potentilla* sp.

penstemon – 2 sp., *Penstemon* sp.

false azalea, *Menziesia ferruginea*

black twinberry, *Lonicera involucrata*

common [Nootka] rose, *Rosa nutkana*

black raspberry, *Rubus leucodermis*

Oregon [Hooker's] fairy bells, *Disporum*

[*Prosartes*] *oreganum*

fringe cup, *Tellima grandiflora*

yellow [stream] violet, *Viola glabella*

[early] blue violet, *viola adunca*

[broad-leaved] starflower, *Trientalis latifolia*

pussytoes, *Antennaria* sp.

[sheep] sorrel (sour grass), *Rumex acetosella*

vanilla-leaf, *Achlys triphilla*

wild ginger, *Asarum caudatum*

small lupine, *Lupinus* sp.

queen's cup, *Clintonia uniflora*

Indian paint brush, *Castilleja* sp

[Pacific] bleeding heart, *Dicentra formosa*

[Siberian] miner's lettuce,

(*Montia*) [*Claytonia*] *sibirica*

thimbleberry, *Rubus parviflorus*

deciduous [redstem ceanothus] buck brush

*Ceanothus sanguineus*

[Pacific] dogwood, *Cornus nuttallii*

red-osier dogwood, *Cornus stolonifera*

cascara, *Rhamnus purshiana*

gooseberry, *Ribes* sp.

wood [baldhip] rose, *Rosa gymnocarpa*

[trailing] blackberry,

*Rubus* (*vitifolius*) [*ursinus*]

[western trumpet] honeysuckle,

*Lonicera ciliosa*

### Ferns and allies

small spleenwort, *Asplenium* [northern] maiden-hair, *Adiantum aleuticum*

rattlesnake fern[moonwort], *Botrychium* sp.

licorice fern, *Polypodium* (*vulgare*) [*glycyrrhiza*]

male fern, *Dryopteris* [*filix-mas*]

deer fern, *Blechnum spicum*

parsley fern, *Cryptogramma*(*crispa*)[*acrostichoides*]

[running] club-moss, *Lycopodium clavatum*

oak fern, *Gymnocarpium* sp.

bracken, *Pteridium aquilinum*

lady fern, *Athyrium filix-femina*

sword fern, *Polystichum munitum*

Nancy Anderson

**End Note #24: V.N.H.S. / B.C. Nature Council Joint Conservation Committee (see page 272)**

### Geology Section:

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Book Review: *Debate About the Earth – Approach to Geophysics Through the Analysis of Continental Drift*, by H. Takeuchi, S. Uyeda and H. Kanamori. Published by Freeman, Cooper & Co. Available at the Vancouver Public Library.

The 1960's will go down in science history as the decade in which it was proven that the continents drift about on the surface of the earth. The theory of Continental Drift has enjoyed a dramatic renaissance in the last few years from a point of near death in 1930, so that it is now close to being an established fact.

This book by three Japanese scientists will be welcomed by readers interested in the fundamentals behind the theory. It begins with an exposition of continental drift as it was originally propounded by the German meteorologist, Alfred Wegener in 1915. Biologists will be interested in the part played by fossil plants and animals, even earthworms, in giving evidence. Wegener was also interested in the evidence of ancient ice ages. Objections to the theory are then discussed. No one could offer a physical explanation of how drift could take place. A. Holmes of Edinburgh hit on the right idea but considered it too speculative for lack of independent evidence. Therefore, the second chapter ends in gloom with the theory apparently dead. It seemed that the problem of moving continents over the rigid rocks of the ocean floor was as impossible as driving a lead chisel into steel.

The next two chapters plunge into a fundamental discussion of magnetism. The magnetism of the earth as a whole – to which we are indebted whenever we use a compass; and the magnetism of ordinary rocks, that sometimes bugs our compasses. Studies in these fields have led to the conclusion that either the continents have wandered over the earth or the magnetic poles have. The Theory of Drift is then revived and expounded in convincing detail. Holmes' theory of an earth simmering deep down inside with currents of flowage in solid rock carrying the continents along is likewise revived and brought into accord with theories of the age and origin of the earth. New geological evidence from the floors of the ocean and from the volcanic islands, is shown to be in confirmation with the theory. Much of this evidence is the result of work by J.T. Wilson of Canada. Unfortunately, the book was written just a little too early to take in some very conclusive evidence just assembled in the last two years. This is reported in an article by Patrick Horely in *Scientific American*, April 1968.

The book is written in a clear logical style that conveys the atmosphere of restrained urgency that is characteristic of scientific investigations. It is abundantly illustrated by hand-drawn diagrams. The elucidation of Continental Drift has resulted from the work of many scientists in many countries over a span of many decades. Each in his own field has contributed to a physical scheme of earth development that is as exciting to an earth scientist as the structure of DNA must be to a life scientist.

C.S. Ney

*C.S. (Charlie) Ney was a geologist who developed excellent commentaries on the Lower Mainland geology for public curriculum but which mysteriously were never published. He was an outstanding supporter of the Society and led many camps and trips such as the Queen Charlotte Islands camp and to the southwestern U.S. (Arizona). He also served in executive capacities successfully despite his fieldwork which took him to far places. The V.N.H.S. Ney Award for outstanding service commemorates his service and that of his wife Kay to the Society.*

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### **End Note # 25: Editorial – The High Cost of Living (see pages 272-273)**

#### **Affiliation with the Museums Association and Participation in the B.C. Nature Council**

The members will be asked at the regular meeting on March 19<sup>th</sup>, 1969 to approve a recommendation that the Society renew for a further year its affiliation with the Vancouver Museums Association, at a cost (to the Society's treasury) of one dollar per individual, or two dollars per family membership; and that the Society continue for a further year as a member-society of the B.C. Nature Council, at a cost (to the treasury) of fifty cents per individual.

P.J. Croft

### **End Note #26: Night School Courses in Botany & Ornithology (see page 273)**

#### **The Shulaps Summer Camp**

The camp area is located near the Elizabeth Mines at the end of a moderately good, but narrow road, 56 miles northeast of Lillooet at an altitude of 6,700 feet. From it many hikes of varied nature, short or long, easy or difficult, may be readily made. The Shulaps Range in which the camp lies, is on the flank of the Coast Range overlooking the interior plateau on the north and east, and commanding striking views of the glacier-hung peaks of the Coast Range to the west. The famed Placer River of the Yalakom bounds the area on the east, and the Bridge River and its tributaries on the west. Lying as it does in the lee of the tall peaks on the west, the area receives little precipitation and the chances for blue sky and sun are good.

The flora offers unusual variety and occasionally, spectacular colour. The geology too is highly varied and is notable for its large areas of ultra basic greenstones and jade-like rocks; fossil bearing rocks of the Cretaceous and Tertiary ages, volcanic and unusual superficial features add interest to the area. Mineral claims on deposits of gold, mercury, magnesium, chromium and manganese are common and underground developments have been performed on deposits of gold and mercury. Native ungulates include sheep, goat, deer and moose; alpine birding and entomology are the best in B.C.; grizzly bears were virtually exterminated several years ago. Small lakes and groves of twisted timberline pine of great age would have interest for the photographer.

#### **Botany – Photographic Group**

An interesting meeting of this group was held during January under the chairmanship of Roy Edgell who explained the purpose of the project – that of producing sets of colour slides of scientific value depicting in detail the diacritical features and characteristics of plants in a number of selected families. Dr. Beamish explained, with the help of a number of slides from photographs and drawings, many of the structural details by which plant families could be identified and indicated the type of photographic treatment that would be of greatest scientific usefulness. Mr. Croft briefly discussed the type of photographic

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equipment needed in carrying out the project and demonstrated a simple optical bench for use with or without a microscope, the function of which being to maintain critical alignment of subject, camera – and microscope if used – when dealing with extreme close-up work. The attendees were divided into groups responsible for photographing the following: orchid, heather, saxifrage, dogwood, lily, honeysuckle rose, pine and Oregon grape plant families.

### **The Vanishing Valley**

The suggestions of the members are solicited toward the purchase or reservation by the Provincial Government of areas in the Lower Fraser Valley that there may be good reasons for setting aside as parks, or dedicated natural history areas. It is all too well known that it is becoming difficult to find even good dykes or woodlands in which to walk and study nature without encountering “No Trespassing” signs. Funds are being provided through the Vancouver-Fraser Parks Authority and the Provincial Government for the acquisition of land for parks and recreation in the Lower Fraser Valley. Where such land is already alienated into private hands, it would have to be purchased by the Authority, presumably making use of the funds provided. Territory still “in the Crown” could be reserved as parkland if suitable representations were made. The question arises as to what kind of representation should be made and by whom? Our Society should be prepared to advance suggestions regarding any tracts of land that are interesting to naturalists and the kind of protection such land might need. Members are requested to notify me of any area they are aware of, bearing in mind that such tracts should be of natural history significance.

V. C. Brink

### **Geology and the Apollo Flight**

The historic Christmas flight of Apollo 8, bringing views of the Moon from a height of 70 miles right into our parlours, probably meant something different to each viewer. All would no doubt agree that the flight was a fantastic achievement of physics, mathematics and human courage. To geologists it was also a milestone in their quest for an understanding of the early history of the Earth.

Geologists take an almost proprietary interest in the Moon. After all, they believe, the Moon is Earth’s little brother, a product of the same hierarchy of cosmic condensation. Because of its relatively puny size and consequent weak gravitation, the Moon is both airless and waterless. Without any weather or waves to wear away its surface, its physical features should be preserved for many hundreds of millions of years. Robert Jastrow, writing in *Scientific American* May 1960, speaks of the Moon as an “astronomical Rosetta Stone” holding in its structure a record of the early events that provide a key to the origin of the solar system. Such a record is completely lost to Earth-bound geologists.

One question about the Moon that has been argued for a hundred years and still not settled is the origin of its craters. Are they the result of activity within the Moon – that is, volcanic – or are they the consequence of explosive impacts of large meteors? Many geologists working with telescopes believe that most of the craters are volcanic. There

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was in 1958 a report of a flash or glow of gas that suggested active vulcanism in the region of the crater Alphonsus. It is not always easy to tell the origin of a crater even on Earth. For a long time the classic meteor crater in Arizona was thought to be volcanic. The trouble with lunar craters is that many of them are so large, far larger than those on Earth.

One investigator, Robert Dietz, was very strong on the meteor origin of the large lunar craters and reasoned that similar very large meteor craters must have been produced on Earth in the distant past. He looked for and found evidence of ancient geologic structures that were produced by impact and for them he coined the word "Astrobleme". In *Scientific American* August 1961, he described such a structure in South Africa whose effects extend over a diameter of more than 100 miles.

Highly significant advances in lunar geology were made in 1967 by the soft landings of Surveyor 5 and 6. These remarkable craft, on instructions from Earth, reached out and sampled the lunar surface, then made rough chemical analyses of the material. It turned out that the lunar soil is basic igneous rock with a composition like that of Hawaiian lava flows. Complete understanding of the Moon awaits the actual work of men on its surface, observing the relations of one rock unit to another, and bringing back specimens upon which determination of absolute age may be made. It is an exciting prospect for the next generation of geologists who aspire to become 'scientologists'. C.S. Ney

### **Ornithology**

**Bird Hot Line** – Thirty-two birders on the list of "hotliners" were rewarded in January. Madelon Schouten reported an emperor goose on the rock breakwater at White Rock and Tom Stevens a pure yellow-shafted [northern] flicker at his feeding station in South Burnaby, both sightings on January 12<sup>th</sup>.

### **End Note #27: Birds for the Record (see pages 273-274)**

**Bird Chatter** – For inexperienced and prospective birdwatchers the West Vancouver School Board is planning to sponsor an evening course in bird watching commencing mid-March for about eight weeks.

A.R. Davison, Ornithology Chairman of the Victoria Natural History Society, has just finished an excellent annotated List of Birds of Southern Vancouver Island. It is available through the Provincial Museum in Victoria.

Be sure to read *About Birds* by John Rodgers in the Vancouver Sun's Leisure section each Friday. Mr. Rodgers will list our scheduled bird trips as well as keep us informed weekly of bird happenings in the Lower Mainland.

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Do you want to help out-of-town birdwatchers? Our bird section is gathering names, addresses and phone numbers of local birders who are willing to share their talents and experience in guiding or directing out-of-town visitors to birding areas in the Lower Mainland. Already Werner and Hilde Hesse, Jack Husted, John Toochnin and [myself] are helping. If you want to help, phone the section chairman before April so that a list can be completed and sent to bird groups throughout North America before the summer season.

Al Grass

### Vancouver Christmas Bird Count

*Date:* December 28<sup>th</sup>, 1968

*Time:* 12:01 a.m. to 6:30 p.m.

*Temp:* 5°F to 15°F (Climatic 10-20°F) (NW); light in sheltered bays and inlets.

*Weather:* Some sunny periods; generally overcast; up to 6" of snow cover; standing waters frozen.

*Visibility:* Poor to fair; periodic low haze over water; low clouds over some areas.

*Observers:* 77 in 23 parties.

Total party hrs: 195

Total party miles: 655

After tallying the Count it seems almost unbelievable that a record 77 birders and their friends ventured into the field and endured inclement weather conditions to establish a Vancouver Count record (likely Canadian) of 132 species. Our previous high was 128 species in 1966. The total is surprising since most standing waters were frozen and in many places snow covered the ground.

In general our total individual birds was down. Perhaps this can be attributed to flocking rather than an even dispersal of the birds in the count area. Consequently many 'tight' flocks may have been overlooked. The water bird count was down but the winds and haze over the waters made detection and counting difficult. Interestingly, most wintering populations of waterfowl were up over previous totals. Starling counts were down considerably, about the same as reported in 1963.

Five new birds were recorded for the first time since 1954. These were green heron, common teal [the Eurasian race of the green-winged teal], redhead, pine grosbeak and white-throated sparrow. Five other species reported during the count period (December 20<sup>th</sup> to January 5<sup>th</sup>), but not on Count Day, were European [Eurasian] wigeon, western gull, spotted sandpiper, [American] dipper and common redpoll. Two additional subspecies or races are here included in the Count total: cackling geese (Canada goose sub sp.) and one blue goose (snow goose sub. sp.). The National Audubon Society considers the blue goose a full species and therefore is included. Rock doves numbering 716 are not included in the Count because the species is not acknowledged in published Counts.

Some interesting comparative results: tree sparrows, turkey vultures and long-eared owls were seen for the second time since 1954; lowest numbers ever of short-eared owls and

western meadowlarks; largest numbers reported this year for mallard, [northern] pintail, green-winged teal, wood duck, bald eagle, black turnstone, yellow-bellied [red-breasted] sapsucker, rufous-sided [spotted] towhee, Oregon [dark-eyed] junco and fox sparrow



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Appreciation is extended to area compilers and to Barry Edwards, Robert Footit, Al Grass, Jack Husted and Eileen McCammon who helped in various ways with this year's Count. On behalf of all participants special thanks to Mr. and Mrs. W.J. Smith for their hospitality and kindness during our post-count gathering in their West Vancouver home.

R. Wayne Campbell

#143 June 1969

### **Editorial –Linnaeus the Philosopher**

To most people, Linnaeus, or Carl von Linne, the Swedish savant of the 18<sup>th</sup> century, is remembered as a sort of Patron Saint of Naturalists, the teacher and inspiration of a remarkable group of eminent scientists who followed him. To the naturalists he is perhaps best known for his Linnaean “binomial” system of naming and classifying natural species that, in spite of the earnest endeavours of later taxonomists to cloud it with layers of confusion, remains the neat, handy method we all use and bless Carl von Linne for it.

John Barlett's *Dictionary of Familiar Quotations*, however, shows another facet of this great man's character, that of the gentle homespun philosopher. Of the five quotations from Linne's writings and utterances given in the edition of Bartlett that we possess, all are most pointedly applicable to this year of grace, 1969. For instance:

*If a tree dies, plant another in its place!*

The manner in which Sweden, his native land, has followed this precept has placed her in the position of an example of what a forestry nation should be.

*A Professor can never better distinguish himself in  
his work than by encouraging a clever pupil,*

*for the true discoverers are among them, as comets among the stars!*

Here speaks the truly great teacher, and here the worldly-wise counselor –

*Mingle your joys sometimes with your earnest occupation.*

Linnaeus, the simple God-fearing man, has inscribed over the door of his bedchamber:

*Live innocently – God is here!*

And finally, from a man who, in a rather gluttonous and bibulous century, believed strongly in simplicity and restraint in personal habits, this parting shot for the pill peddlers:

*To live by medicine is to live horribly!*

Too true!

P. J. Croft, Editor

### **The Junior Naturalists**

On April 19<sup>th</sup> 53 Junior Naturalists and their parents traveled to the Agassiz Bridge area for a geology hike led by Mrs. Barbara Johnson. Many agates and minerals were found

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along the riverbed. On April 27<sup>th</sup> Nancy Anderson met them at Lighthouse Park and showed them the botany of the area. The Juniors presented Miss Win Pearson with a gift to show their appreciation for the 13 years she had been their leader. Please note that we have not retired Win altogether. She has agreed to serve on the Junior Naturalist executive along with Mrs. Kathy Moir and Mrs. Kit Footit.

This summer 8 field trips [are being planned] throughout the Lower Mainland for our Junior Naturalists, covering most fields of natural history. Interested persons willing to lead or help lead, please contact me. The Juniors will be using the [Vancouver] Centennial Museum auditorium as a meeting place before and after field trips. In the fall and winter it will serve as a meeting room and workshop.

Ken Kennedy

### **End Note #28: Birds For the Record (see page 274)**

#### **The Bridge River Ash Deposit**

Travelers to summer camp in the Shulaps Range may notice, on the way up along Yalakom River, an exotic light gray material spread over the top soil layer, just beneath the organic debris. This is the Bridge River Ash deposit well known for many years to residents of the Bridge River Valley. Close inspection of the ash reveals that much of it is composed of small chunks of feather light pumice – a glassy rock that frothed up like well-cooked meringue by expanding gases when it was ejected as a liquid from the confines of a volcano.

An interesting article on this ash by Nasmith, Matthews and Rouse of U.B.C. appeared in the *Canadian Journal of Earth Sciences*, Vol. 4, 1967. The authors showed that the ash deposits become coarser and thicker to the west, culminating in a layer 50 feet thick and composed of blocks of pumice several feet in diameter, in Lillooet Valley about 35 miles northwest of Pemberton. Here an obscure source of the ash is indicated in the east flank of volcanic Mt. Plinth. By careful examination of soil layers, Matthews' group traced the ash deposit eastward across the entire province in a plume shaped area of about 15,000 square miles. Others have identified the ash as far east as Saskatchewan Crossing on the Banff-Jasper highway.

The age of the ash has been determined by the technique of radiocarbon dating from an occurrence in a peat bog near Jesmond, B.C. Here the ash forms a layer about 5 feet below the surface and the peat immediately below it was found to be 2,400 years old. It is concluded that the explosive eruption that gave rise to the ash took place around the year 500 B.C.

Many millions of tons of liquid rock were blown to a great height from the volcano, spontaneously being converted to a froth by the escape of steam and gas. Borne by westerly winds, the feathery material slowly deposited over the land, cold and silent, like a strange dark snowfall.

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Several other ash layers are known in B.C. and the Yukon. The most famous is the Mazama ash, about 6,600 years old, found throughout southern B.C. and into Alberta, as well as all through western United States. This originated in a much more spectacular volcanic event, involving the release of about five cubic miles of liquid rock and the subsequent collapse of an entire mountain structure about the size of Mt. Baker. This fiery convulsion was nature's way of producing one of the world's scenic wonders: Crater Lake in Oregon. The Yukon, or so-called White River ash, covers much of the southern Yukon and has been traced to a volcano in Alaska west of Kluane Lake. It is estimated to be a mere 1,400 years old; it involved the eruption of two cubic miles of rock. It is well described in the *Canadian Journal of Earth Sciences*, Feb. 1969. C.S. Ney

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### **End Note #29: Intermediate Section & Junior Section (see pages 274-275)**

#### **Why Hummingbirds Hum!**

(Excerpt from "Humming Bird Hall" featured in *The Houghton Line*, April 1969)

Hummingbirds have the most efficient power plants found in nature. Ranging in size from that of a muscular bumblebee, to a length of about 8 inches, hummingbirds can rise vertically, hover, move sideways, and even fly backwards. Meanwhile their wings are beating at a rate of up to 80 times per second and they are using fuel faster than any jet plane in relation to their weight.

When active, hummingbirds must load their fuel tanks every 10 to 15 minutes. A 170 lb. man might burn up 3,500 calories of energy in a day. But if a hummingbird weighed 170 lbs, it would use up about 155,000 calories a day. If a normal man's energy output were equal to that of a hummingbird, he would have to eat the equivalent of 285 lbs. of hamburger daily. And if he whipped around like a hummingbird does, he would either shed 100 lbs of perspiration an hour, or his body heat would rise to something like 750 degrees and he would glow like a furnace!

#### **Shulaps Camp**

Ninety-one members and cooking staff attended the camp at the old Elizabeth Mine site in the Shulap Mountains some 50 miles northwest of Lillooet, B.C. The site at the 6,500' elevation where timberline, scree and alpine meadow meet, was reached by a narrow, and in some places "indifferent" hinterland road; (mud holes and a slide or two). Its quality notwithstanding, the road placed the camp in comparative wilderness not at all well known to the residents of the Province.

Daily hikes took most of the campers to prominent physiographic features – meadow, lake and mountain summit. The scree-covered mountains, such as Big Dog at 9,300 feet, were easily ascended and only one unnamed summit presented a challenge to the mountaineers.

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Meadows in the several branches of Blue Creek, Noaxe and other lakes with no names were visited repeatedly. Bright weather by day and chilly evenings prevailed during the week. The advance party on their first morning woke to swirling snow and a whiteout. Chilly evenings however, did not diminish the fun and quality of Nancy Anderson's campfire programs. The contribution by the young people in song, skit and the "Burning of the Litterbug" will long be remembered. The comparative isolation precluded attendance of all but a few visitors; therefore the rich local talent for fun, art and natural history was richly exploited. Campfire discussions ranged from logging or lack of it behind B.C. Hydro dams, local geology, early climbs in the Coast Range, local history to natural history and upward to the stars.

Camp talent was well displayed on a special project day for demonstrations of natural, unnatural and artwork. Ingenuity and competition galore went into scree gardens, rock collections, tadpole and insect collections, tree dating and botany displays as well as "fufu birds" and "whiffenitches" constructed from mine rubbish.

To those interested in the broad features of natural history in B.C. the Shulaps camp offered unique ones. The flora and fauna reflected the damp position in the dry alpine lee of the Coast Range. Inasmuch as it was near a great fault system and in a location where the rocks of the great serpentine (ultra basic) massif contact limited granitic (acid) rocks, the campsite presented many colourful landscape features. Elsewhere in the world serpentine rocks and the soil derived from them, are noted for their sterility and endemism in flora and fauna; the time since glaciation hardly permits any measure of endemism in the Shulaps, but comparative sterility was manifest on long scree slopes almost devoid of vegetation. Without the contribution to the serpentine soils of large quantities of volcanic ash from the Bridge River area 2500 years B.C., the Shulaps might have been singularly uninteresting.

### **Tchaikazan Camp**

On Friday evening, one day before the Shulaps Camp ended, ten of its participants left to gather at the junction of the Bridge and Yalakom Rivers to prepare for the next day's flight. It has been planned that a Beaver float plane would fly from Vancouver to Fishem Lake with four members not at the Shulaps Camp; the plane would then return to Gun Lake to ferry in the party of ten in two loads to join those four already at Fishem. The excellent weather on Saturday enabled the fly-in operation to be completed by midday, everyone having enjoyed the magnificent scenery of the Coast Mountains and eager for further advances into the camp area. Thus the first night's camp was set up at the end of a mine exploration road about 5 miles from Fishem Lake, just inside the Tchaikazan Valley. For this stage all equipment was trucked in by the packer, but for all the remaining hiking in and out, a small pack was carried by each camper.

Sunday, after a six-hour walk of about ten miles, camp was set about two-thirds of the way up the Valley and two nights were spent at this point to allow some exploration of the area. Snow and rain on Tuesday spoiled plans somewhat, but did not stop botanizing and general exploration. It was raining again on Wednesday but as arrangements had been

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made to have the packer move equipment to the end of the Valley, we trudged, wet and bedraggled, for a further three hours to an alpine meadow within sight of several glaciers and many high peaks. Here two days of excellent weather was enjoyed. While some of the party walked the glacier and climbed to high vantage points to survey the beauty, others walked in the meadows collecting plants to press. Meals had been pre-packaged and arranged so that the party could be divided into groups of four or five and each group cooked their own food on wood fires that were remarkably efficient in the normally dry rain-shadow on the east of the Coast Range.

The long walk out was planned for Friday. Fortunately the day was fine and after rising early, at 5:30 a.m., the party was packed and on their way by 8:30 arriving back at Fishem Lake after a long but interesting walk down through the Valley, by 5:00 p.m. The schedule was interrupted slightly on Saturday when the plane, which was due at 11:00 a.m., did not arrive. The bad weather in the mountain passes finally cleared, after a five-hour wait, and the plane arrived to return everyone to his or her starting point.

The expedition had been planned to study the natural history of the Tchaikazan Valley and review the area for possible future recreational use. Much of this rather broad aim was achieved, but unfortunately bird life and geological interests were neglected since the camp had not attracted anyone with sufficient knowledge to deal adequately with these two areas of natural history.

### **End Note #30: Botany Section (see pages 275-276)**

#### **The Antiquity and Youth of Mountains**

Several decades ago I climbed a ridge of the Bendor Mountains in the Bridge River district surveying some veins of antimony, in the company of a prospector, Tom Turner, a denizen of the now inundated town of Minto. The technical details of the veins are lost to mind, but I well remember Turner's profound words as we attained a crest and peered into a deep valley headed by a cluster of cirques: "I'm sure glad I wasn't around when these mountains were being made."

Mountain ranges in general show internal structure of great complexity. Rocks are folded, upended, and thrust upon one another and it is this that excites the structural geologist. The external forms of the mountains, the crags, alps and declivities that delight the nature loving public, constitute a separate entity that, strangely enough, bears little direct relation to the internal structure. The internal structures are produced by imperceptibly slow lateral compression along vast elongated belts of the Earth. The essential uplift is a simple vertical phenomenon that may take place long after the compressive development has been completed. The external forms of mountains are produced by the forces of erosion acting on uplifted masses of rock. We know that the structures of mountains can be very old. The Laurentians are the worn down roots of mountain systems that were generated over a billion years ago. The complex structures in the Appalachians are some 300 million years old. The Cordillera of America evolved over a period of 30 to 200 million years. The Alps and the Himalayas had similar prolonged histories with climactic development 30 to 40 millions years ago.

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Working with fossil plant pollens and with lava flows, Rouse and Matthews of U.B.C. recently found that some 12 million years ago the climate of Hanceville, B.C. was quite damp. They concluded that there was no rain shadow in that area such as there is now and therefore there was no high Coast Range. The uplift of the Range, and its subsequent carving into the mountains we now love, is a relatively recent event. The same story comes from the Andes, Alps and the Himalayas where geologists have determined that dramatic uplift has occurred in the last few million years.

Toni Hagen, in a beautiful book on Nepal states that the Himalayas made their rise in the last 600,000 years, right before the eyes of early man. This may be an exaggeration, but the point remains that universally there has been a profound uplift of mountain belts in the near geologic past, and there is no reason to suspect that this uplift is completed. The sculpturing of the uplifts into mountains is likewise a youthful and continuing process. Tom Turner should not have been so concerned for actually he was there at the dreaded event. Rarely are there earthquakes and landslides, and neither is there sound or fury in the making of mountains; we hear only the soft pulsing murmur of a distant cataract, the occasional clatter of stone fall, and the impatient growling of ice wrestling with rock.

C. Ney

### **End Note #31: Birds for the Record (see page 276)**

#### **Bird Chatter**

The yellow-headed blackbird has, within the past ten years, become well established in suitable habitat in the Lower Mainland. The largest colony is centered around Sea Island and Iona Island. Bill Anderson, Jim Switzer and Ian McGregor (Seattle) have been studying this colony and banded 56 birds this summer, mostly young.

Ken Kennedy and Ian McGregor banded 500 nestling glaucous-winged gulls on the Christie Island sanctuary in Howe Sound late in July. Over 5,000 young glaucous-winged gulls will be banded this summer in this Province.

It appears to be a flycatcher summer at White Rock this year. Madelon Schouten reports having seen western [Pacific-slope], Traill's [willow] and olive-sided flycatchers, western wood-pewee and she suspects a least flycatcher. She has also consented to be the Vancouver co-ordinator for Audubon Field Notes. Interesting bird movements and sightings should be sent to her.

The New Westminster School Board has scheduled an evening course on bird watching at Vincent Massey School this fall. There will also be a birders' photo night – time and place to be announced. Jack Husted has suggested a couple of discussion evenings for birders, when we could pass along our identification tips, etc. Jack picked up a good tip from Ian McGregor who mentioned that ruby-crowned kinglets are more solitary in their habits than the gregarious golden-crowned kinglets.

**Burnaby Lake Wildlife – Habitat or Epitaph?**

**Part I**

When the white man first visited the climax-forested shores of Burnaby Lake water birds, especially ducks and geese, were abundant. George Green, a pioneer resident of Burnaby, wrote in his book *History of Burnaby*, “Waterfowl in myriads swam on the tranquil bosom of the Lake and slept peacefully in the covert of the reeds beside the shore. Blue grouse and willow [ruffed] grouse in goodly numbers rested at noonday amid the stately firs of the forest, and the whirr of their vibrant wings often awoke my silent solitude as they sped down the shaded and quiet aisles of the well carpeted woods.”

So attractive was Burnaby Lake with its mature green forests, crystal clear waters and carefree wildlife that in the summer of 1859 a “pleasure path” was cut from the newborn City of New Westminster to the lower end of the Lake. This woodland paradise wasn’t to last however, for with the white man came the pioneer tools of the lumber industry. Soon the land was altered for man’s use and as a result wildlife began to disappear from the Lake. Fortunately early conservationists noticed this disappearance and brought it to the attention of the then B.C. Game Commission. On September 12<sup>th</sup>, 1924 Burnaby Lake was formally designated a Game Reserve. Once again the Lake afforded sanctuary to its abundant waterfowl populations.

Gradually, during the next forty years, the area around Burnaby Lake became residential. For this reason the Lake was difficult to access, and because it was illegal to shoot in the Municipality, regular checks by Game [Commission] authorities were difficult and somewhat unnecessary; Burnaby Lake was declassified as a Game Reserve on August 10<sup>th</sup>, 1964. Today, Burnaby Municipal Council is responsible for determining a policy for the Lake.

Burnaby Lake has been receiving small amounts of pollutants, mainly from industrial wastes, for nearly a decade. The deplorable decrease in the Lake’s aquatic life bears witness to this. I have watched the Pacific terrapin, unique to Burnaby Lake; sun itself on the banks of Eagle Creek. The last terrapin I saw was in 1959. The industrious muskrat, once abundant, is now uncommon and forced to homestead along the banks of the Brunette River that drains the Lake. All fish but the hardy three-spine stickleback have disappeared. Even the giant bullfrog once caught on red cloth-baited hooks and sold to local Orientals for 25c, are now rare. Waterfowl, however, are still abundant and varied. Through the combined efforts of the Canadian Wildlife Service, B.C. Waterfowl Society and other interested parties, this excellent waterfowl habitat, on the verge of destruction, can possibly be saved.

During the past six years a comprehensive biological survey with emphasis on waterfowl, has been carried out on Burnaby Lake by the B.C. Waterfowl Society and members of the Vancouver Natural History Society. From field notes, it has been verified that 26 kinds of waterfowl are still attracted to the Lake. These species include the whistling [tundra]

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swan, [greater] white-fronted goose, gadwall, blue-winged and cinnamon teal, ring-necked duck, canvasback, ruddy duck, hooded and red-breasted merganser and many

others. This attraction is understandable because the Lake provides the five fundamental requirements for waterfowl. In importance these are:

1. An adequate food supply throughout the year. Ecologically, Burnaby Lake is referred to as an eutrophic lake. This type of lake is characterized by abundant shoreline vegetation, dense planktonic populations with seasonal 'blooms' and shallow water. Burnaby Lake is shallow, to eight feet in depth with abundant aquatic invertebrate life populations. Planktonic 'blooms' occur in late spring and fall and so abundant are the minute animals during these periods that one resident near the lake actually strains the animals from the water for use as fertilizer on his potted house plants. Bottom fauna which denotes animal life found in the muddy bottom of the Lake, such as chironomid larvae, worms [?], dragonfly nymphs and other species of insect life, is abundant and readily obtained by the sieves, especially that of the [northern] shoveler. Seeds of aquatic plant food like the duckweed, pondweed, coontail and pond [water] lilies are used by many waterfowl. During severe winters the Lake may be frozen but with the slightest thaw, the birds return to feed.

2 Adequate cover during migration and especially during the breeding season. The shores of Burnaby Lake are marked completely by a mixed band, varying in width, of cattail and bulrush. At each end of the Lake this band broadens out to form two large dense marshy areas. This vegetation provides protection and cover for the birds throughout the year. During the breeding season the Lake surface is almost entirely choked by aquatic plant growth, especially the yellow (native)[pond-lily] and white (introduced) water lily. Shelter, protection and food are thus provided for the eight species of waterfowl known to breed on the Lake. Any future development plans should include the opening up of large areas of the vegetation to form clear potholes for feeding and resting.

3 A stable water level, especially during the breeding season. This has been a problem in the past but thanks to talks between Mr. R.D. Harris, Canadian Wildlife Service and Mr. Bunnell of the Greater Vancouver and District Sewage Board, a relatively stable water level is now maintained throughout the year.

4.A number of resting and loafing bars for use during migration. These are not abundant and future management should include more of them. The bars could be formed by using lake sediment dredged to open the areas of water lilies.

5. Freedom from disturbance. This is not a major problem yet; however if motor boating of any description is permitted as has been suggested by various individuals, waterfowl will undoubtedly disappear. A classic local example of waterfowl habitat destruction by motor boating is Hatzic Lake near Mission.

Wayne Campbell

*(Part II will be printed in a later issue of the Bulletin)*



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### **Editorial – The Game of the Name**

It has been suggested for some considerable time that the Bulletin should have a name, growing as it has in size and content from a simple sheet for the announcement of coming events, to its present dimensions. It becomes necessary that our little quarterly organ should acquire a name by which it can be recognized so that official records of bird, animal and insect sightings and plant occurrences may be published in it and come promptly and in proper form to the notice of those who matter most in such pursuits.

Most of our Bulletin's sister publications across Canada have been endowed with the name of some bird, animal or plant characteristic of the area in which the publishing organization operates. No blinding flash of inspiration having fulminated among the members of your Executive, it has been decided to throw the matter open to competition among the membership. A sub-committee will judge the entries and a prize will be awarded to the author of the selected name.

The name should be short, pithy, preferably single-worded, and above all should be immediately suggestive of nature in our Vancouver environment. Not necessarily the name of a bird, animal or plant, though these often seem appropriate. It might be suggestive of stretches of our tidal water: "Trash" or perhaps "Oilslick". Or our prevailing climate might be immortalized in a name such as "Downpour". Your Editor doubts that any of the above names will be chosen and, in any event, the Editor is not eligible to compete.

Write your proposed name and a brief line saying why you feel your choice to be appropriate. Only one name suggestion per entry, but a member may make more than one entry. Contest closes January 31, 1970.

### **End Note #32: Birds for the Record (see page 277)**

#### **Ornithology**

**Bird Chatter** – The Checklist of Vancouver Birds (1969 Edition) has been published and is available through our Society at 10c per list or 12 for \$1.00. Lists can also be obtained from the Centennial Museum, the Vancouver Public Aquarium and the George C. Reifel Waterfowl Refuge. The list is useful for day trips and can be used to keep annual and life lists seen in the area.

Have you heard of Dab Chicks? Barbara Howie, while on vacation near Bamfield this summer, was told by a fisherman that the little brown seabirds offshore were called Dab Chicks. Barbara says they were marbled murrelets. Anyway, in Britain a Dab Chick is a Least Grebe!

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Philadelphia vireos, Kentucky warblers and northern waterthrush are showing up on the northern California coast this year. Ornithologists at Point Reyes Bird Observatory speculate that the “foreigners”, some thousands of miles from their [usual] migration

paths, could have suffered recent upsets in their hereditary mechanisms that control bird migration.

Look closely at gulls on lawns in the Lower Mainland. A bright white gull may turn out to be a snow goose. Several birders have reported seeing them feeding on lawns in Vancouver this fall.

“The golden-cheeked warbler” says *Time* magazine, “may be just a footnote in an ornithology textbook, another species that fails to adapt to man.” This warbler, native only to Texas, may lose one of its last nesting grounds in Meridian State Park to a proposed nine-hole golf course.

Kay Smith reports that an albino Steller’s jay was at the Barnes’ house in West Vancouver in late October.

Wayne Weber is 95 per cent certain he saw a Ross’s gull near the cannery at Point Roberts in early October. Birders [going] to Point Roberts keep your eyes open for a small, pink-breasted gull with a wedge-shaped tail.

### **End Note #33: Christmas Bird Count & Wing-tagged Gulls (see pages 277-278)**

#### **Crescent Beach – The Place of Birds**

*Let us look to the Earth to its wealth and beauty, and be proud  
that we are part of it. Let us respect it, and time and space,  
the forces of creation and life itself. As we hold the future in our hands,  
let us not destroy it.*

Helen Hoover. *The Long-shadowed Forest*

It could be said that bird study at Crescent Beach began some 145 years ago when on Monday, December 13<sup>th</sup>, 1824, a small party of explorers led by Chief Factor MacMillan of the Hudson Bay Company made their way down the Nicomekl River where they reported seeing “immense flocks of plover” at its estuary.

It is impossible to estimate the numbers of observers that have trekked the beaches, dykes, hills, fields and mud flats in search of avian adventures. There can be little doubt however that the Rev. Martin W. Holdom was the pioneer naturalist of the area. Some of his observations were published in 1952 under the titles *Glimpses of Surrey Bird Life* and *Random Bird Notes*

Many changes have occurred at Crescent Beach over the last hundred years in both the numbers and kinds of birds found there. Canon Holdom makes the following remarks

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concerning these changes: "With the clearing of the coniferous forest and the growth of deciduous trees there has been a great influx of small land birds. The introduced insect pests and weeds provide food for the sparrows and warblers. The American goldfinch is common during summer. It was probably unknown before the settlers introduced the dandelion." (*Glimpses of Surrey Bird Life*).

Large numbers of waterfowl winter at Crescent Beach and when the mud flats are exposed, countless numbers of baldpate [American wigeon], mallard, green-winged teal, and [northern] pintail can be seen feeding. Sometimes there are so many that it is a case of standing room only! These same mud flats are an attraction for a variety of shorebirds that have included on rare occasions, American golden plovers, sandhill cranes and long-billed curlews. Land birds are well represented and some bird students have been rewarded by the sight of a Lewis's woodpecker, Lapland longspur and snow bunting. The total number of all species stands at 167.

I have no doubt that the once beautiful Crescent Beach that Canon Holdom loved so well will be completely destroyed. One only has to witness the acres of trash left by ephemeral users such as weekend picnickers or the abandoned car bodies left to rot near the beach.  
Crescent Beach – *meum et tuum!* Al Grass

*Crescent Beach lies in the Municipality of Surry near the resort City of White Rock*

### **Botany Section**

"Arctic lupines bloom after 10,000 years" – Dr. Michael Black, *New Scientist*, October 19, 1967. Seeing the Arctic lupine, *Lupinus arcticus* in profusion in the Shulaps at our V.N.H.S. Camp last summer, reminded me of the above-noted article that I had read. Extracts of interest follow:

"During mining operations at Miller Creek, Yukon Territory, in July 1954, a mining engineer, Mr. Harold Schmidt, discovered a system of burrows made by rodents in the frozen silt. These burrows, 3 to 6 meters below the surface of the silt which itself was 8 to 12 metres thick, were excellently preserved. They contained skulls and skeletons of the rodents, later identified as the collared lemming, and a number of seeds, probably originally set down as a food store."

The seeds attracted little attention but were kept for 12 years, fortunately under dry conditions, before being handed over to a staff member at the National Museum of Canada on his visit to the area. On reaching the authors of the science article (Vol. 158. p.113), the two dozen seeds in the sample were readily identified as being those of the Arctic lupine. When tested, 6 of the seeds germinated after 48 hours on wet filter paper and have produced normal plants. One of the plants has even developed flowers.

Rodent burrows have previously been found in the frozen organic silt, laid down in the late Pleistocene age (10,000 – 200,000 years ago). By carbon-14 dating the animal remains were estimated to be around 15,000 years old. The collared lemming whose

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remains were found with the seeds is a species of the Arctic and high alpine tundra and so we must suppose that they left Miller Creek during the time when the area first experienced the post-glacial warming which occurred about 10,000 years ago. The seeds of the Arctic lupine, then, are at least 10,000 years old and survived against unlikely odds. That they were able to do so, and to produce healthy plants, is a striking example of the remarkable property of the cells of some plant organs to remain alive in a dry, seemingly dead state for so long. Stan C. Roberts Coordinator, Botany Section.

### Seed Plants, mainly from the Shulaps Camp

Camp 1969 was not in a park so we were free to collect samples of all the plants we saw. Display facilities at the Shulaps camp were good and the collection just grew and grew as the field trippers brought in new treasures. As usual, identification was an educated guessing game without benefit of equipment or the best reference books. However, most of the specimens came home so most of the doubtful names have been confirmed or corrected. Specimens from the Tchaikazan Valley are still not all identified.

Four of our plants were of particular interest, three from the Shulaps and the fourth from Tchaikazan. Most of the party had not before seen “dusty maidens” [hoary false yarrow] the beautiful small pink relative of a gray-white weedy plant that grows around Princeton. [Editor’s note: “dusty maiden” is but the alpine form of *Chaenactis douglasii*]. I have seen the pretty species only in the Elizabeth Mine vicinity but it grows further south and in the Rockies. The sword fern [Kruckberg’s holly fern] *Polystichum kruckebergii* is named for Dr. Kruckeberg of the University of Washington in Seattle. Until a few years ago it was called, doubtfully, a form of *Polystichum scopulinum*, but now it has been established as a separate species by Dr. Wagner, a fern specialist in Michigan. In his study Dr. Wagner used the U.B.C. specimens, among others, that were collected at Elizabeth Mine in 1961. (I might add that he still has those specimens and I’m beginning to fear, on permanent loan.)

*Cheilanthes siliquosa* [*Aspidotis densa*, slender lip fern], Indian’s dream (don’t ask me who came up with that common name but it has a pleasant sound) was in the crevices of an old rockslide. This is apparently a typical niche for it if the rock is calcareous, but I can find B.C. records of it only from the extreme south. I am sending pictures and notes to Dr. T.M.C. Taylor in Victoria for comment and confirmation of the identity. *Erigeron pallens* [purple daisy], a tiny fleabane, in size and hairiness rather like *E. humilis* [Arctic daisy] of the Shulaps area, was found at the head of the Tchaikazan Valley. It is known in the Rockies but is rare enough there that it is on the restricted list even for people granted a collecting permit for the parks. We saw it when we camped in Larch Valley.

The list from the Shulaps Camp follows. Unfortunately it is not complete even for what we saw, but it does show what can be found by close inspection even when the country looks at a distance to be exceedingly barren.

| <u>Common Name</u>       | <u>Botanical Name</u>                                  | <u>Comment</u>          |
|--------------------------|--|-------------------------|
| [scrub] birch            | <i>Betula glandulosa</i> [nana]                        | not <i>B. pumila</i>    |
| [Boreal] sandwort        | ( <i>Arenaria</i> )[ <i>Minuartia</i> ] <i>rubella</i> | small cushion           |
| [thread-leaved sandwort] | <i>Arenaria capillaris</i>                             | small <i>A. Formosa</i> |
| [Bering] chickweed       | <i>Cerastium beeringianum</i>                          | not <i>C. Alpinum</i>   |

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|  |   |                                    |
|--|---|------------------------------------|
| moss campion   | <i>Silene acaulis</i>                   |                                    |
| strawberry-blight                                      | <i>Chenopodium capitatum</i>            |                                    |
| yarrow   | <i>Achillea millefolium</i>             |                                    |
| false dandelion [orange agoseris]                      | <i>Agoseris aurantiaca</i>              |                                    |
| [short-beaked agoseris]                                | <i>Agoseris glauca</i>                  |                                    |
| [racemose] pussytoes                                   | <i>Antennaria racemosa</i>              | & other <i>Antennaria</i> . spp.   |
|  |   |                                    |
| heart-leaved arnica                                    | <i>Arnica cordifolia</i>                |                                    |
|  |   |                                    |
| sagebrush [mountain sagewort]                          | <i>Artemisia norvegica</i>              |                                    |
| [northern wormwood]                                    | <i>Artemisia campestris</i> var. [?]    | An alpine variety                  |
| [leafy] aster  | <i>Aster foliaceus</i>                  |                                    |
| [Arctic aster]   | <i>Aster sibiricus</i>                  |                                    |
| dusty maiden [hoary false yarrow]                      | <i>Chaenactis (alpina) douglasii</i>    |                                    |
| edible thistle   | <i>Cirsium edule</i>                    |                                    |
| fleabane [subalpine daisy]                             | <i>Erigeron peregrinus</i>              |                                    |
| [arctic daisy]   | <i>E. humilis</i>                       | very small & hairy                 |
| [Lyll's golden weed]                                   | <i>Haplopappus [Tonestus] lyallii</i>   | not <i>H. bradegei</i>             |
| [slender] hawkweed                                     | <i>Hieracium gracile</i>                |                                    |
| groundsel or ragwort [arrow-leaved butterweed]         | <i>Senecio triangularis</i>             |                                    |
| [dwarf mountain butterweed]                            | <i>Senecio fremontii</i>                |                                    |
| [western groundsel]                                    | <i>Senecio integerrimus</i>             |                                    |
| [woolly groundsel]                                     | <i>Senecio canus</i>                    |                                    |
| alpine [northern] goldenrod                            | <i>Solidago multiradiata</i>            |                                    |
| [horned] dandelion                                     | <i>Taraxacum [ceratophorum]</i>         | native, not weedy                  |
| [worm-leaved] stonecrop                                | <i>Sedum stenopetalum</i>               |                                    |
| silverberry [wolf-willow]                              | <i>Elaeagnus commutata</i>              |                                    |
| soopolallie  | <i>Shepherdia canadensis</i>            |                                    |
| crowberry  | <i>Empetrum nigrum</i>                  |                                    |
| false heather [pink mountain-heather]                  | <i>Phyllodoce empetriformis</i>         |                                    |
| [yellow mountain-heather]                              | <i>P. glanduliflora</i>                 |                                    |
| [hybrid mountain-heather]                              | <i>P.x intermedia</i>                   | hybrid of the two preceding        |
| [four-angled mountain-heather] <del>C. missillii</del> | <i>C. missillii</i>                     | No specimens                       |
|  |   | of <i>C. mertensiana</i>           |
| mountain misery or white [-flowered] rhododendron      | <i>Rhododendron albiflorum</i>          |                                    |
| bearberry or kinnikinnick                              | <i>Arctostaphylos uva-ursi</i>          |                                    |
| bog-laurel   | <i>Kalmia polifolia [microphylla]</i>   |                                    |
| [four]-parted gentian                                  | <i>Gentiana [Gentianella] propinqua</i> | closes at a touch                  |
| [northern gentian]                                     | <i>Gentiana [Gentianella] amarella</i>  |                                    |
| mountain [silky] phacelia                              | <i>Phacelia sericea</i>                 |                                    |
| [Arctic] lupine  | <i>Lupinus arcticus</i>                 |                                    |
| [dwarf mountain lupine]                                | <i>Lupinus lyallii</i>                  |                                    |
| [mountain] locoweed                                    | <i>Oxytropis gracilis [monticola]</i>   |                                    |
| alpine milk-vetch                                      | <i>Astragalus alpinus</i>               |                                    |
| [common] butterwort                                    | <i>Pinguicula vulgaris</i>              | sticky-slimy leaves digest insects |
| nodding onion  | <i>Allium cernuum</i>                   |                                    |
| false [Indian] hellebore                               | <i>Veratrum eschscholtzii [viride]</i>  |                                    |
| Columbia [tiger] lily                                  | <i>Lilium columbianum</i>               |                                    |

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|   |  |  |
|---|--|--|
| [common] false asphodel   | <i>Tofieldia pusilla</i>                       | not <i>T. glutinosa</i>                                      |
| broad-leaved willowherb   | <i>Epilobium latifolium</i>                    | fireweed relative  |
| [alpine willowherb]   | <i>Epilobium alpinum</i> vars.                 | tiny fireweeds   |
| [ <b>Note</b> – original <i>E. alpinum</i> has been split into a number of species. See “Flora of B.C.” Vol. 3, P.352 –366] |  |  |
| white rein-orchid   | <i>Habenaria [Platanthera] dilatata</i>        |  |
| [showy] Jacob’s ladder  | <i>Polemonium pulcherrimum</i>                 |  |
| knotweed or [alpine] bistort  | <i>Polygonum vivparum</i>                      | bulblets among flowers                                       |
| [sheep] sorrel  | <i>Rumex acetosella</i>                        | a naturalized weed   |
| mountain sorrel   | <i>Oxyria digyna</i>                           |  |
|   |  |  |
| [sulphur buckwheat]   | <i>Eriogonum umbellatum</i>                    | [sulphur buckwheat]  |
|   | relative of sorrels and knotweeds              |  |
|   | windflower [northern anemone]                  | <i>Anemone parviflora</i>                                    |
|   | Arctic raspberry [nagoonberry]                 | <i>Rubus arcticus</i>  |
|   | [villous] cinquefoil                           | <i>Potentilla villosa</i>                                    |
|   | [diverse-leaved] cinquefoil                    | <i>Potentilla diversifolia</i>                               |
|   | [snow cinquefoil]                              | <i>P. quinquefolia [nivea]</i>                               |
|   | [white] mountain avens                         | <i>Dryas octopetala</i> var.                                 |
| <i>hookeriana</i>   | sometimes classified as                        |  |
| <i>D.hookeriana</i>   |  |  |
|   | [five-stamened] mitrewort                      | <i>Mitella pentandra</i>                                     |
| [fringed] grass-of-parnassus  | <i>Parnassia umbriata</i>                      | fringed on petals, no leaf on flower stem                    |
|   |  |  |
| [Kotzebue’s grass-of-parnassus]   | <i>Parnassia kotzebuei</i>                     |  |
| [Lyll’s] saxifrage  | <i>Saxifraga lyallii</i>                       |  |
| [tufted saxifrage]  | <i>Saxifraga caespitosa</i>                    |  |
| [spotted saxifrage]   | <i>Saxifraga bronchialis</i>                   |  |
| [Langsdorf’s] lousewort   | <i>Pedicularis langsdorfii</i>                 |  |
| wood betony [bracted lousewort]   | <i>Pedicularis bracteosa</i>                   |  |
| beardtongue [small-flowered penstemon]  | <i>Penstemon procerus</i>                      |  |
| Indian [scarlet] paintbrush   | <i>Castilleja miniata</i>                      |  |
| veronica [Alpine speedwell]   | <i>Veronica wormskjoldii</i>                   |  |
| cow-parsnip   | <i>Heracleum lanatum</i>                       |  |
| sweet [sitka] valerian  | <i>Valeriana sitchensis</i>                    |  |
| dwarf [snow] willow   | <i>Salix nivalis</i>                           | and other species  |
| rush  | <i>Luzula sp.</i>                              | No one saved the names or plants from Dr. Brink’s collection |
| grasses (numerous species)  |  |  |
| sword fern [Kruckeberg’s holly fern]  | <i>Polystichum kruckebergii</i>                |  |
| Indian’s dream [slender lip fern]   | <i>Cheilanthes siliquosa [Aspidotis densa]</i> |  |
| rock brake or parsley fern  | <i>Cryptogramma crispa [acrostichoides]</i>    |  |
| [common] juniper  | <i>Juniperus communis</i>                      |  |
| [sub]alpine fir   | <i>Abies lasiocarpa</i>                        |  |
| Engelmann spruce  | <i>Picea engelmannii</i>                       |  |
| whitebark pine  | <i>Pinus albicaulis</i>                        |  |

### Geologic Time – Part I

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At the Portage Mountain Dam visitors' platform there is a plaque commemorating the ancient wanderings of dinosaurs. Their footprints, well preserved in the Dunlevy sandstone formation were discovered during powerhouse construction. The plaque first states that the prints are 100 million years old. Then it goes on to say that they were made in the Aptian age, Lower Cretaceous period, of the Mesozoic era. Thus the point of time when these great animals wandered around the sand at this locality is represented in two ways: (1) absolute age in years before the present, and (2) a position on the Geological Time Table. Why two methods of denoting past time? And, one might ask, do geologists really know how many years ago this happened?

Aristotle long ago observed that the Earth was being shaped by the normal action of natural forces acting slowly over long periods of time. Such wisdom was lost in the darkness of the Middle Ages and the understanding of geology was particularly constrained by a literal interpretation of the writings of Genesis. An all time low point of knowledge of geologic time was expressed by the pronouncement early in the 17<sup>th</sup> century by Bishop Usher that the Earth was created catastrophically in the year 4004 B.C.

In the 18<sup>th</sup> century it became apparent to geologists that the physical form and structure of the Earth's outer layer developed slowly by the very processes that they were observing, and not by catastrophic happenings. They found that shallow seas had once overlapped many land areas; that sediments worn by rivers from the lands were transported and deposited in the seas; that these sediments hardened into rock; and that they became elevated into new land masses. Erosion again reduced the land to sediments that were deposited in new seas, hardened into rock and elevated into new land. Dozens of such cycles were recognized, one upon the other, extending indefinitely back into time. In the words of James Hutton, "there was no evidence of a beginning, no prospect of an end."

In the background of this majestic cycling of sea and land there was a continuous process marking the passage of time. This was the evolving development of organic life, spreading world-wide through the seas, and leaving its imprint as fossil remains in the sedimentary rocks.

Fossils provided a means of relating in time and on a world basis, the sedimentary rocks and the processes that produced them. The degree of evolution of the fossils provided a basis for assigning relative ages to the rocks. Geologists were thus able to construct a detailed record of the events of Earth history, the familiar Geological Time Table, with its divisions into Eras, periods and Ages. Greatly unknown and unappreciated, the Table, with its record of organic evolution is truly one of man's great accomplishments.

The Table had several shortcomings. Many rock formations, recording some important events, are produced by heat and so they bear no fossil records. Much of geology took place long before life had evolved to the point where fossils were produced. Its most serious shortcoming was that it possessed no scale of absolute time. It was a story rich in detail with section and chapter headings all assigned, but laid out as on a galley proof, without page numbers. This was the way things stood at the end of the 19<sup>th</sup> century. The

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story of how the Table was time-calibrated in the 20<sup>th</sup> century we'll leave to another Bulletin issue.

C. S. Ney

### **What is a Barnacle?**

Barnacles: -*Phylum arthropoda*; Order: - *Cirripedia*. There are about 400 species of barnacles in the world. What is a barnacle? It is a crustacean, a relative of the crab, lobster, shrimp and sand flea, etc., that has attached itself permanently to some object larger than itself. A shell has developed in which it lives and its legs have become modified into most efficient sweeps for the capture of the small sea creatures and organic material on which it feeds. The opening of the shell is closed by four movable cover plates, hinged like folding doors. When these are opened the legs (*Cirri*) may be protruded and when they are closed the barnacle is protected from enemies and from drying when exposed to the air.

Some barnacles have chosen strange places in which to live. The acorn barnacles fasten directly to a rock or shell, a piece of wood or kelp or the carapace of a crab, and prefer to live in more sheltered waters. One species of barnacle is found only on the tongue of a certain turtle. Another bores holes in soft rocks. Several species are found only in deep water. Others are found only in inter-tidal areas. Goose barnacles like the strong wave action of our open ocean coastline. Certain *Sessile* barnacles are found on whales and these are known by the general term of "whale barnacle". Some species of *Cirripeds* are parasitic on other crustaceans. One that has this habit loses all trace of resemblance to its relatives and becomes a mere sac with a system of branching roots that reach throughout the body of the host.

There are two divisions of barnacles, the Acorn, or *Sessile* [barnacles], and the Goose, or *Pedunculate* [barnacles]. In both divisions the internal anatomy is much the same, but their outside appearance is very different. The *Sessile* have calcareous shells fixed directly to some support; the *Pedunculate* have the body chamber on the end of a flexible stem called the *Peduncle* which may be anchored to a fixed or floating object, or to a float produced by the cement gland. Most barnacles are hermaphroditic, that is both male and female reproductive organs are present in each individual. Ovaries are located below the mantle cavity. A pair of oviducts open into the mantle cavity on each side of the head. In all species the eggs are retained in two sacs in which they are held together in layers by a delicate transparent membrane.

The young barnacle leaves the mantle cavity of the parent as a free swimming *Nauplius*. This larva increases in size by a series of molts until it reaches the *Metanauplius* stage during which it changes in form and the single eye becomes two. By the end of the next molt a bivalve shell has developed, additional appendages appear, and the globules of fat form in the body to provide buoyancy. After a period of some days it settles on a solid object to which it becomes attached. The larval bivalve carapace is shed and the shell-like plates begin to form from the outer surface of the mantle. For the rest of its life the barnacle remains fixed in this position literally standing on its head and kicking food into its mouth with its feet.



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On the B.C. coast there are only two genera of *Sessile* barnacle – the *Balanus* and the *Thamalus*. At intervals throughout life a barnacle casts off its old shell and replaces it with a larger one to allow for growth. For some unknown reason, molting seems to take place simultaneously over a large area. For a few weeks many young periwinkles and mussels live on the empty shells of barnacles.

The attachment of barnacles to the bottom of ships is a serious matter and periodic removal from hulls and repainting is necessary. They are considered therefore to be a serious pest in marine circles. On the other hand, the young that are free swimming for some time after they are hatched, are eaten in large quantities by various commercially important fish.

C. Gough

**End note #34: V.N.H.S Membership Cards to Gain admittance to the Museum (see page 278)**

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**End Note #35: Lighthouse Park Handbook; Library News & Vancouver Junior Naturalists (see pages 278-279)**

**The Dynamic Spirals of Plants** (Excerpt from *This Green World* by Rutherford Platt)

Stand off and look at the crown of a tree. Although the leaves are beautifully massed, they may at first appear to be placed haphazardly. Look again. Stand under the arching limb of a beech or elm or the flat, angular branch of a dogwood. What do you see? A mosaic – one of the wonders of the plant kingdom. Note how this mosaic is placed together, detail-by-detail, throughout the entire pattern of the tree.

Think of branches as projecting from a circle made by the cross-section of the tree trunk. If the distance between two successive branches is one-third of the way around the circle, their angle is 120°. As the branches mount the tree they go round and round with equal spacing. One kind of tree may put forth its branches at an angle of 90°, 144° or 180°; whatever the angle of the species, *it is constant throughout the tree*. These angles made by the branches always divide the circle equally. In mature trees of course, all limbs will not be in place, but that is only because as twigs they were damaged or failed to develop. Their traces would however be there; not one is missed at its true angle.

This same angular succession is true of twigs that grow out of a limb. Look still closer and you will see that a leaf emerges from its twig at the same angle from its neighbour as the limbs make with the trunk. In place of twigs and leaves you may see unopened buds, and these two project from the bark in the same succession of angles. Limbs, twigs, leaves, all originate in buds, and these four structures are homologous. Throughout the tree, from the trunk to the tip of every twig, both leaves themselves and the skeleton on which they are hung, are dispersed at equal angles in every direction. At least that is their basic plan although their equal angles may become distorted by later conditions of wind or

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light. The leaf mosaic is further perfected by the variation of the lengths of branches and the lengths of the stems of individual leaves, so that each leaf may be held away from its neighbour. Often the twigs and the stems of leaves are bent around or twisted to achieve a position more in the clear. The net result is that thousands of leaves can grow together, above and below and around their tree without overlapping or getting in each other's light. This is functional beauty in one of its purest forms.

### **End Note #36: The Name Game (see page279)**

#### **Nest Records, Pesticides and You**

Many of you know that housed in UBC's Vertebrate Museum is a steadily growing collection of nest record cards. These cards provide standard forms on which naturalists throughout the Pacific Northwest record data on the bird nests they happened to find each year. In 1969 ninety observers sent in 3,510 cards for B.C. alone, bringing the total for the Province up to 26,000 for the 15 years the scheme has been in operation.

Across Canada there is growing concern about the effects pesticides may be having on wildlife and there has been an upsurge in interest for nest records that provide a huge sample of data suitable for monitoring clutch size and nesting success over wide areas. If managed properly nest records can function as a warning system. With this object in mind, analysis of common species has begun at UBC in cooperation with the Canadian Wildlife Service. To date barn swallow, song sparrow and starling records have been analysed and we have made a disappointing discovery: - fewer and fewer observers are checking the nests often enough to secure clutch size and nesting success, the very information we need. Ten years ago the record cards in our files were the best in Canada; today they are second worst. If you are concerned about the fate of wildlife in Canada, then become an active contributor to the scheme. Remember, the *common* species are especially important, yes, even the robin in your backyard! – and you must try to *follow through each nest*. Only about 6 visits are required.

### **End note #37: Birds for the Record (see pages 279-280)**

#### **Bird Chatter**

Important jobs! Scavengers help keep our beaches clean and on January 3<sup>rd</sup> Penny Haering saw them at work. She watched three northwestern crows and an adult glaucous-winged gull feed on the carcass of a dead female mallard washed ashore at Ambleside Park. Tom Stevens reported a high wire act at Centennial Park. On Jan 2<sup>nd</sup> he watched three short-eared owls *perch* with apparent steadiness on telephone wires! During the January snowfall Bill Wilson watched a Lapland longspur visit a backyard feeder at Point Roberts.

#### **Vancouver Christmas Bird Count 1969**

*Date:* December 21<sup>st</sup>, 1969

*Time:* 12:01 a.m. to 7:30 p.m.

*Temp:* Low 41° - High 48° F.

*Wind:* light, 5–10 Knots. SE

*Weather:* Cloudy with showers, clearing just before noon, then sunny.

*Visibility:* Fair a.m.; excellent p.m.

*Observers* 132 (25 grps) +5 feeder reports.

**Compiler's Comments:** - This year Vancouver established a Canadian record of 138 species. (Rock dove and blue goose are *not* included in the report to New York.) Vancouver is probably in the top 25 areas of North America. San Diego and Cocoa Florida usually

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report over 200 species and several southern states tally around 150. With our 132 participants this year we are in the top five on the continent. An area in southern Florida has recorded a high of 152 participants. The total individual birds we recorded are also a high for Canada. Although the total number of species is not the most important reason for the Count, it is fun to see what each area tallies after a single day in the field.

Generally the numbers of birds recorded for each species this year were up. Some birds like the varied thrush and the red-breasted sapsucker, which are forced down to lower elevations by cold weather, were scarce and among the lowest numbers ever recorded on a Vancouver Count. Some of our all time highs, like the pied-billed grebe and the ruffed grouse we can attribute to better coverage of areas. Other fluctuations will require closer study. The following are some of the highest or lowest numbers for species in our area. Comparative figures, that is, previous highs or lows, are in brackets.

All grebes, with the exception of the eared were highest ever totals: red-necked 107 (63), horned 417 (258), western grebe 14,450 (5,817) and pied-billed 20 (9); double-crested 263 (226) and Brandt's cormorant 59 (34) were also all time highs.

Puddle ducks, especially mallard, [northern] pintail and American wigeon were generally down with the exception of the green-winged teal 1,916 (1,496). Barrow's goldeneye 3,279 (2,335), harlequin 36 (25) and common merganser 590 (203) were highest counts ever for the diving ducks.

Raptors were fairly consistent in numbers except for the largest number of red-tailed hawks 21 (9) and marsh hawks [northern harrier] 27 (10).

Twelve species of shorebirds were recorded: black-bellied plover 111 (53) was an all time high, and lesser yellowlegs was a new species for our area. The spotted sandpiper seen on the log booms off the North Arm jetty, was a second count record.

Bonaparte's gull, 361, was the highest since 1956 (380). The northwestern crow 2,047 (1,452) was the highest ever. Other highs include black-capped chickadee 828 (684), chestnut-backed chickadee 311 (217), common bushtit 97 (42), brown creeper 24 (15), Bewick's wren 35 (27), northern shrike 18 (12), and white-crowned sparrow 210 (156).

Varied thrush 23 (53) was the lowest recorded in ten years, and the [European] starling count was down by about 40,000 over last year. Many of the birds are now roosting near the penitentiary in New Westminster.

Five species were new for the Vancouver Count bringing the total since 1954 to 173. The lesser yellowlegs has been mentioned. Madelon Schouten's group carefully observed a Franklin's gull in Area K, while they were counting starlings at the Alberta Wheat Pool. This sighting was confirmed by the compiler the following day. American bitterns and mountain chickadees were reported independently by two parties and have been included in the list. Allen Poynter gave his wife [Helen] a verbal field description of the immature loggerhead shrike during the Count and has sent the description to the compiler. As a

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result it is included in the Count – the description will be sent to New York with the record.

Our birders could expect anything on Count day – a free flying mute swan (Stanley Park), or an African shelduck (North Vancouver). Five species reported during the Count period (Dec. 20 – Jan. 4) but not on Count day were gyrfalcon, pine grosbeak, tree, Harris's and Lincoln's sparrows.

Some birds have been deleted from the area lists and in some cases total numbers of individuals recorded have been reduced. For example, many of the very large flocks of starling reported on Lulu Island would also be counted at the evening roosts. To avoid duplication it was necessary to 'balance' the estimates. Also some birds of prey may have passed from one area to another. After these movements were closely examined, some counts were slightly reduced. The peregrine falcon that was report in Stanley Park was deleted from the list because it may have been the same bird seen earlier flying over the water toward the Park. The compiler feels that birds that are difficult to identify or are easily confused with other species, as well as rarities or new birds for the Count area, should be confirmed if possible, by a back-up party the following day, or a written description should be included with the day's report before they can be accepted. It is better to have fewer species but have good ones. Next year we will have to try to get more watchers in the field, than species seen!

R. Wayne Campbell

### **Burnaby Lake Wildlife – Habitat or Epitaph?**

#### **Part II**

Interest in the waterfowl at Burnaby Lake and their preservation has increased during the past few years. Many conservation projects have been started by various individuals and organizations. The most successful project, sponsored in part by the Canadian Wildlife Service, the Vancouver Natural History Society, the Second Burnaby Centre Scout & Cub group and individual naturalists, such as the late Mr. W. (Bill) Hughes and Miss Gwen Wright was aptly called *Operation Wood Duck*.

Prior to 1960 an occasional pair of wood ducks could be seen feeding on fresh water snails among the pond lilies or resting on floating debris in the Lake. In the fall and winter of 1960 *Operation Wood Duck* was started. Several nest boxes were built and erected in trees along the shores of the Lake. To date, fifteen nest boxes have been built to meet the demand. As a matter of interest *Operation Wood Duck* has been projected throughout the Lower Mainland. Over 100 nest boxes have been placed in trees from Beaver Lake in Stanley Park to McGillvray Creek Game Reserve in Chilliwack. Occupancy and nesting success has been phenomenal and when finances are available more nest boxes will be built and erected in new locations.

Another project on the Lake was the successful introduction of a family of 8 western Canada geese in the spring of 1965 and four tundra swans in the spring of 1966. There were plans to start a breeding nucleus with these birds. The geese nested this past spring

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but unfortunately the nest was destroyed by human vandals. In future, if the swans breed on the Lake it will be the first recorded nest of the species in captivity.

In 1965 it was announced that Burnaby would have about \$300,000 available for its Centennial Project. Almost immediately the B.C. Waterfowl Society prepared a proposal for a Nature Park at Burnaby Lake as Burnaby's Centennial Project and submitted it to the Centennial Committee. Other proposals for the Lake received by the Committee included a botanical garden, a rowing course, and a circuit for hydroplane racing. With local interest once again shown in the Lake, Burnaby Council decided to spend \$38,000 on a preliminary engineering survey. As far as I know the survey showed the Lake's vast potential for park development but initial costs for any development far exceed monies that could be raised locally.

The B.C. Waterfowl Society [members] feel that a Nature Park would require minimum expense and work and yield maximum public value and use. Indirectly, all wildlife including waterfowl would benefit. Motor boating of any description is not compatible with the objectives of a Nature Park. As a Nature Park the Lake would soon become

invaluable as a living and working laboratory for limited, local field studies by botany, zoology and ecology students at Simon Fraser University.

Somehow the public does not immediately realize the value of marshes, too often thinking of them as places appropriate for the dumping of rubbish and draining for other uses, but marshes are among the most productive in wildlife of all types of habitat, both land and water. It is interesting to note that the residential portion of the City of Copenhagen, Denmark – with a population of a million people – is situated near a 300-acre marsh that is a wildlife [refuge] and a portion of the city's park system. This is an area whose value for building purposes and development would undoubtedly run high into the millions of dollars, yet it has been kept in its natural state for the wildlife that is produced therein and for the enjoyment of the residents who observe this wildlife.

Burnaby Lake is undoubtedly a valuable marsh lake. More important than its monetary value as real estate, is its recreational, educational and scientific value as a nature park. Today, the Burnaby Lake issue remains temporarily dormant despite conservation projects still being carried out. Sometime in the future municipal authorities will be confronted with [the need for] a final decision for the Lake. Meanwhile, conservation groups should ensure that the Council fully understands the need to save this veritable wildlife paradise.

Wayne R. Campbell.

### **Geologic Time – Part 2**

In the last Bulletin we talked about the Geological Time Table. By 1900 it had been developed to the point of providing a detailed record of Earth's history, but it had the deficiency of lacking a scale of absolute time. Estimates of the duration of geologic time ranged from a few million years to nearly infinity. Many geologists, notably Charles

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Darwin, had reasoned that several hundred million years were represented by the Time Table, but they were chastened by the authoritarian statements of the great physicist, Lord Kelvin.

Kelvin assumed that the Earth had cooled from a liquid mass and from available data on the rate at which temperature increased as one went down a deep mine, he calculated that the Earth could have a total age of no more than 80 million years. But he was cagey enough to add some fine print to this statement: "...unless some unforeseen source of energy is discovered."

This unforeseen source of energy was revealed in the discovery of radioactivity by Henri Becquerel in 1896. The same discovery heralded a means of determining the absolute age of rocks. It was soon to be shown by the Curies and others, that the element uranium transformed into lead at a rate that was readily measurable and unvarying. A lump of uranium ore could therefore be considered a clock, ticking away ever since it was formed and keeping a record of its age by the amount of lead it produced. By 1906 measurements had been made of the amounts of lead associated with various uranium ores. They showed that half a billion years had elapsed since abundant fossils began to appear in

rocks, and that several billion years had elapsed since the Earth was formed. These early measurements were subject to errors and they were restricted in their field of application.

It was discovered about 1906 that the elements potassium and rubidium were also radioactive. Now potassium is widely abundant in granitic rocks, so here was the prospect of determining the absolute age of such common rocks. However, it was not until the late 1940's that the radioactivity of potassium was well understood and techniques were developed for determining the ages of granite and other igneous rocks.

The potassium-argon method is now frequently used in age determination. Potassium atoms of a certain kind transform at a known rate to atoms of argon gas. It is necessary to measure the minute amounts of argon accumulated beside potassium in a crystal from which the argon cannot escape until the crystal is melted. The black mica called biotite is most commonly used, but a few other minerals will do. It is an injustice here to dismiss the elegant and precise operations performed in a vacuum in complex glassware, but space does not permit a full discussion. A value is derived for the elapsed time since the biotite crystal was formed by nature.

Canadian scientists have led the way in developing these techniques and in initiating programs for age determination. R.E. Folinsbee of Alberta pioneered the work in B.C. The Geological Survey of Canada has achieved world renown in extending age dating back into the Precambrian era where fossils are virtually absent. At the University of B.C., W.H. White, W.H. Matthews and others have pinpointed in time the dates of Earth rocks. Meteorites too have been under study for many years and, as we have recently heard, Moon's rocks have been dated with fascinating results.

C.S. Ney

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### **End Note # 38: Seen on an October Day (see page 280)**

#147 June 1970

#### **Editorial**

This quarter the Bulletin issues forth under its newly acquired name ***Discovery***. Chosen by democratic process in open competition among the members of the Society, 23 of whom submitted a total of 44 suggestions. A committee of three selected the winning name which was submitted by Miss Peg Briault, who therefore qualified for the book prize that was offered.

It is recognized that there exists in Britain a scientific journal bearing this same title, but a search failed to “discover” any other Canadian publication named ***Discovery***, and indeed if such existed, it would seem something of an affront to Vancouver, [which is] so closely associated with this name from the day Captain Vancouver’s ship, H.M.S. Discovery, sailed into False Creek!

However, in order to avoid confusion in library lists – a somewhat unlikely contingency – the name ***Discovery*** will appear on our Bulletin covers prefixed by the legend “Vancouver Natural History Society”.

Apart from Vancouver’s special association with the name ***Discovery***, the selection committee felt, with reason, that operating as our Society does in an area whose natural history had in many respects been only surface-scratched, the name of ***Discovery*** associated with our activities takes on an additional significance. New varieties, new species, even new genera may at any time be brought to light by our enthusiastic and sharp-eyed naturalists!

P.J. Croft, Editor.

#### **Prof. John Davidson, F.L.S., F.B.S.E., F.R.H.S.**

**1890 – 1970**

John Davidson passed away February 10<sup>th</sup> 1970 in his 92<sup>nd</sup> year. He came to British Columbia in 1911 from his native Aberdeen Scotland.

To the older members of the V.N.H.S. he will be remembered as its founding President in 1918, and President for 20 years thereafter. More than any other he is responsible for the pattern of the Society’s activities – the field trips, the evening meetings, the summer camps, the interest sections, and the Society’s support of educational and conservation activities.

We can only be reminded of the contributions of this Scottish immigrant to our community over a long and industrious life, contributions to secondary and higher

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education in B.C., to the B.C. Pharmaceutical Association, to the Boy Scouts Association, to his church, to the photographic arts and to the science of surveying mountainous terrain; to garden clubs and general horticulture, and not the least, to the Vancouver Natural History Society.

From his pen came some one hundred publications and addresses, largely directed at public service, but many also contributing directly to science. To him we credit place names that continue to charm us – locally “Hollyburn Ridge”, in Garibaldi Park – “Mimulus Creek” and “Gentian Ridge”, near Lytton – “Botanie Valley” and many others.

V.C. Brink

*“Who goes to the Hills goes to his Mother”* (from “Kim”) .

### **G. Clifford Carl, Ph.D.**

**1908 – 1970**

Cliff Carl died March 27<sup>th</sup> 1970 of acute leukemia at the Royal Jubilee Hospital in Victoria. He entered the service of the B.C. Government on Oct. 1<sup>st</sup>, 1940 as Assistant Director of the Provincial Museum of Natural History and Anthropology. On April 1,

1942 he became its Director. For many years he had been quietly pushing for a new building to house and display the treasures that are the heritage of B.C. On August 16, 1969 his dream came true. The [Royal] British Columbia Provincial Museum was dedicated.

In January 1970, at his own request, Cliff stepped down from the Directorship to become the Curator of Marine Life, thereby returning to his first loves, research and the sea. Let us hope that the *Hall of the Sea* that was going to be Cliff’s work until he retired is named in his honour.

Cliff was a man of many talents. Beside his extensive scientific knowledge he possessed an excellent singing voice and in his earlier days he played the violin extremely well. He travelled all over the continent lecturing on behalf of the National Audubon Society. Cliff will be remembered for his many accomplishments, his quiet sense of humour, and his unfailing kindness to his fellow beings, and above all perhaps, for his philosophy – *If you cannot say something good about a person, do not say anything.* E.K. Lemon

*Enid Lemon was active with the Victoria Naturalists and Librarian for the B.C. Forestry Services in Victoria. A strong supporter of naturalists in B.C.*

### **Exploring Manning Park**

Bernie Epting, an application services clerk at B.C. Hydro and his wife Gundy, a freelance photographer, enjoyed their weekends exploring B.C.’s great outdoors, and just over two years ago they decided that there should be a definite purpose to their excursions. The



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culmination of their efforts since then can be seen in their publication *Exploring Manning Park*, the first complete guide to a Provincial Park in B.C. [published in May, 1970.]

The 96-page book describes the Park in detail and includes sections on the history of gold panning, fishing, horse riding, nature house and naturalist programs, geological history, plants, wildlife and trails. Descriptions of the Park's many miles of trails comprises about half of the volume. It also contains 40 full-page black and white photographs and 15 half-page photos that illustrate the Park's alpine scenery and special attractions. There is also a detailed map of the area. The book is pocket sized making it ideal for hikers to carry.

Why did they choose Manning Park? "It's a spectacular recreation area only a few hours drive from the Province's most densely populated area", Bernie said, "but there was very little information available about it. It's been a tremendous amount of work, but a valuable experience. First, we just started exploring and taking photographs. We used a measuring wheel to accurately measure all the trails and compiled a lot of information about the area that even the Parks Branch [B.C. Parks] did not have."

While Bernie and Gundy collected the information and provided the general concept, photography, layouts, and are the publishers, Robert Cyca and Andrew Harcombe, two university students who were Park Naturalists at Manning in the summers of 1968 and

1969, did the writing. Bernie and Gundy have invested most of their savings into publishing *Exploring Manning Park*. The book sells for \$2.95 plus 15¢ sales tax. Bernie and Gundy Epting and Robert Cyca are members of our Society and we wish them success with this publication and any future books that are planned. Editor

### **Mt. Arrowsmith, Vancouver Island.**

Here are a few suggestions for those going on the Mt. Arrowsmith hike on August 15<sup>th</sup>. The trail is good but bushes have grown over it and when wet with dew they can make a hiker soaking wet. Plan for about a 5-hour hike to reach the camping area. Beyond that, the terrain is not suitable for children or for those who are not fairly agile, as there is some steep scrambling over rocks. However, the camping area is the best wild flower place, so those who don't go beyond that point will not miss a great deal.

Be prepared for a fairly cool night, as we will camp at about the 5,000 ft. elevation. Warm clothing is a must. Cool, moist air from the Pacific can build a cold blanket of cloud around the mountain on very short notice, even in fine weather. There is good drinking water from the little streams that come from large snow patches just above the camp. Here is a partial list of the more noteworthy wildflowers to be found on the hike:

|                             |  |
|-----------------------------|--|
| <i>Campanula scouleri</i>   | woodland bluebell [Scouler's harebell] |
| <i>Chimaphila umbelata</i>  | Pipsissewa [Prince's pine]             |
| <i>Chimaphila menziesii</i> | small [Menzies'] pipsissewa            |
| <i>Achlys triphylla</i>     | Vanilla-leaf                           |

A.G.

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*Art Guppy was an outstanding naturalist who resided in Port Alberni.*

**End Note #39: continuation of Mt. Arrowsmith plant list (see pages 280-282)**

**End Note #40: An Unusual Garter Snake Mortality (See page 282)**

### **Plantings to Attract Birds**

*[Many of the following species are not native to B.C.]*

| <b><u>Name of Plant</u></b>  | <b><u>When Fruit Available</u></b> |
|------------------------------|------------------------------------|
| Alder, red                   | Jul to Apr                         |
| Arrowroot                    | all year                           |
| Ash, mountain                | Jul to Apr                         |
| Barberry, Japanese           | all year                           |
| Bayberry                     | Jul to May                         |
| Bearberry                    | all year                           |
| Bittersweet                  | Sept to Jun                        |
| Cedar, red                   | all year                           |
| Cherry, choke                | Jun to Oct                         |
| Cherry, wild black           | Jun to Oct                         |
| Chokeberry, red              | Jul to Apr                         |
| Coralberry                   | all year                           |
| Creeper, Virginia            | Sept to Apr                        |
| Dogwood, alternate leaved    | Jul to Oct                         |
| Dogwood, silky               | Jul to Oct                         |
| Dogwood, panicled            | Jul to Nov                         |
| Dogwood, flowering [Pacific] | Aug to Feb                         |
| Elderberry, black            | Jul to Nov                         |
| Elderberry, red              | Jun to Nov                         |
| Grape, wild                  | Jul to Nov                         |
| Greenbrier                   | all year                           |
| Hackberry                    | all year                           |
| Haw, black                   | Jun to May                         |
| Hobblebush                   | Jul to Oct                         |
| Holly, American [English]?   | all year                           |
| Honeysuckle, tartarian       | Jun to Jul                         |
| Huckleberry, black           | Jul to Oct                         |
| Inkberry                     | Aug to May                         |
| Juneberry [Saskatoon]        | Jun to Oct                         |
| Mulberry, black              | Jun to Jul                         |
| Mulberry red                 | May to Aug                         |
| Mulberry, Russian            | Jun to Jul                         |
| Mulberry, white              | May to Aug                         |
| Nannyberry                   | Oct to Jun                         |
| Pokeberry                    | Jul to Oct                         |
| Raspberry, flowering         | Jul to Sept                        |
| Raspberry, wild              | Jul to Oct                         |
| Rose, multiflora             | Sept to Apr                        |

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|                 |            |
|-----------------|------------|
| Rose, pasture   | all year   |
| Snowberry       | all year   |
| Spicebush       | Jul to Nov |
| Sumac, smooth   | all year   |
| Sumac, staghorn | all year   |

### **End Note #41: Bird Chatter & Birds for the Record (see pages 282-283)**

#148 September 1970

#### **Editorial: The Many Faces of Our Society**

The job of producing a bulletin like *Discovery* every three months to meet the various needs of our membership, provides an unusual opportunity to appreciate how varied these needs are and what a wide diversity of opinion exists as to where the Society is going, and what it is, or ought to be doing. A large and light-hearted section of our membership, lovers of the great outdoors, support and attend the weekly field trips and annual camps, which in some respects are the core and life of our natural history work. Others, generally speaking an older group, find their chief interest in attending the bi-monthly evening meetings during the winter, listening to and learning from the experts.

Some feel the Society and its Bulletin should be primarily a forum for gathering and official reporting of their technical findings in various fields of natural history specialization. Others think the Society should don armour and sword and become militant in the fight against pollution and in the whole cause of conservation. Still others, and perhaps your ageing Editor is one of these, find in the active study of natural history, indoors and out, a fascinating and rewarding pastime, leaving the holy crusades to others more vigorous and able.

In short, in a membership of well over six hundred, we include all possible shades of opinion, and *Discovery* would like to feel it is mirroring, as far as possible, all of these attitudes. More submissions therefore, from the membership at large would be thankfully received and given the most earnest consideration for publication. P.J. Croft

#### **Of Interest to V.N.H.S. Members**

The attention of members is drawn to the new quarterly *Davidsonia* published by the Botanical Gardens of the University of British Columbia, and named for the late Professor John Davidson, whose passing earlier this year was noted in the last issue of *Discovery*. Issue No. 1 of Vol. 1 of the *Davidsonia* appeared in May of this year and a complimentary copy was sent [to the V.N.H.S.] by Roy L. Taylor, Director of the Botanical Garden. In addition to an appreciated account of Prof. Davidson and his work, written by our own Bert Brink, the issue contains interesting material on the western flowering [Pacific]

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dogwood, *Cornus nuttallii*, an article on the 1970 renovation to the Rose Garden, and other Botanical Garden notes and news. P.J. Croft

### **Let It Go!**

Every year a great number of native reptiles and amphibians are captured as pets and every year a great number die. They die not through conscious neglect, but because many would-be terrariasts don't know how to care for them adequately. Suppose you have captured a snake and want to take it home. If you have the tiniest feeling that your mother may not like snakes, or you don't have a proper cage, or you might not have a steady food supply, or you might not have enough time [to look after it], then ***let it go!*** You are not doing it any kindness by having to release it in the city, or by keeping it in a jar, or by starving it to death. Find out how, where and if you can keep it *before* you bring it home, not after you have scared your sister!

If you meet these requirements start with an animal that is easy to care for. Try a medium sized western toad, about two to three inches long, or a mature fat red-legged frog tadpole, or a small turtle under three inches. A western toad is a beautiful animal for beginners, easy to tame, easy to feed, clean, odourless and easy to house. It needs only room to crawl around in, a dish of water to soak in (filled at all times), a rock or log to hide under, and soil to dig in. They eat anything that moves, provided it's the right size – worms, slugs, and insects. Toads need a week or two to get used to their new surroundings after capture.

Tadpoles live in pond water and eat water plants; while they are transforming, they don't eat anything. Never use tap water straight, as the chlorine is deadly to water-breathing animals; let it stand for a day. Young tadpoles are difficult to keep. Get a full grown one and you can watch it transform. Provide a rock just projecting above the water surface for the almost-frog to rest on when it needs to. Don't lower the water level and don't remove the froglet until the tail has almost disappeared, then...***let it go!***

Painted turtles, though not found on the Coast, are common in the Interior. They require meat and live food, not "turtle food", clean 75°F water, and a rock to bask on.

After you have reared a few tadpoles or shared a room with a toad for a year, you can call yourself an experienced terrariast and go on to newts, tree frogs, lizards or snakes. Look it up in a book first to be sure of its needs, and *remember*, if you're not prepared to care for the animal properly, ***let it go!*** David Green

**End Note # 42: Museum Docents Invited & Museum Lecture Series (see page 284)**

**End Note # 43: Birds for the Record (see pages 284-285)**

### **White Butterflies**

Observant naturalists in the Vancouver suburban areas and especially on the North Shore may have noticed during the latter part of July and into August, a preponderance of small white butterflies fluttering about among the high branches of the Douglas-fir trees. Most people may dismiss these insects as just so many more of the ubiquitous so-called cabbage butterfly, always present and more or less abundant throughout the summer months.

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However a somewhat closer observation, plus a refusal to jump to conclusions (regarded as two characteristics of a good naturalist), will reveal two marked differences.

First the butterfly, unlike the cabbage species that is a vigorous flier, has a weak and fluttering flight. Secondly, it flies almost exclusively around the high branches of Douglas-firs, where the cabbage butterfly stays fairly close to the ground bustling about busily over cabbages, nasturtiums and other plants on which its caterpillar feeds. A still closer look at a settled specimen will reveal that it is an entirely different insect, similar to the cabbage butterfly only in its white ground colour, but dissimilar in its wing markings.

The newcomer is the pine white butterfly *Neophasia menapia*, an insect that every few years (of which 1970 seems to be one), appears in large numbers often approaching “pest” proportions when its green caterpillars can inflict serious damage in the coniferous forests. In the intervening years, however, it is usually rare and the overall economic loss due to its depredations is not great. The pine white is an indigenous butterfly in the Pacific northwest, whereas the cabbage butterfly, *Pieris rapae*, as most people know, was introduced from Europe during the nineteenth century since which time, like the house sparrow and the starling, it has established itself all across the continent and has become a major nuisance.

The true cabbage butterfly *Pieris brassicae*, which causes the worst depredations in European cabbage patches, but which has not been introduced into North America, is very similar in wing pattern to *Pieris rapae*, but is a much larger insect. It is known in England as the “large white” as distinct from *Pieris rapae*, the “small white”.

*P. rapae*, *P. brassicae* and *N. menapia* are all members of the huge family *Pieridae* which includes the whites, sulphurs, orange-tips and many other forms occurring on all continents of the world except Antarctica.

P.J. Croft

### **A Danger of Salmonella Infection in Songbirds**

A sporadic die-off of songbirds in Germany chiefly in mild winters, has been recorded. The phenomenon was first noticed in 1961. The first massive, but local, die-off was noticed in the Schwaebische Wald and in Sauerland in the winter of 1965-66 and an extensive mass die-off was registered in western Germany in the area bounded by Stuttgart, Freiburg, the Bodensee and Darmstadt.

Many bird diseases such as *ornithosis* and *coccidiosis* as well as the chief killer *salmonella typhi murinum* have been identified in these outbreaks. The principal reason for the epidemics among songbirds has been that the feeding stations have not been cleaned, thus allowing excrement, dirt and food scraps to form culture media for bacteria, especially *salmonella* on warm winter and early spring nights. It is believed that a single sick bird is sufficient to infect even clean feeding stations. Thus rigid cleanliness is not enough to prevent local infections, but it will prevent a massive die-off. Similar *salmonella* infections are known in the United States but to date only among some game birds.

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Since it is well known that more and more people are feeding all kinds of wild birds at the feeding stations, it is to be expected that a disastrous outbreak of bird diseases will soon occur among the songbirds. In *salmonella*-infected birds, the first symptoms are the very ragged plumage and in a few cases, bloody droppings and a foamy mucous from the bill. Many infected birds do not show any obvious symptoms until the moment of death. Others have fever and show some symptoms but continue eating well and thus are a danger to the incoming uninfected birds. It is expected that birds of prey will also be infected due to being attracted to the unnatural numbers of sick small birds at feeding stations, which means of course, a further upsetting of the balance of nature. It is also suspected that many birds have lost at least part of their natural resistance to disease due to their having ingested pesticides.

A common symptom in birds already infected is an inordinate thirst. Since seldom in nature is bird food found in heaps, large concentrations of small birds are usually found only at established feeding stations. The feeding stations therefore are the main cause for massive *salmonella* and other disease infections among wild birds.

The most important things to remember in combating a *salmonella* outbreak are: (1) make sure the food does not come into contact with bird excrement or dirt, and (2) be sure to have the drinking water supply arranged in such a way that excrement cannot foul the water. Food that falls to the ground from a feeding station should be covered by wire mesh (1/2 inch size) raised at least 5 inches off the ground. This is to prevent infection of newly arrived birds as the fallen food may well be infected. Birdbaths and drinking water should be small and provided with flowing water that will automatically clean them of excrement and bacteria. At the first appearance of infected birds, the automatic seed dispensers should be put out of operation. Birds may be fed, on cold winter days with good snow cover, by scattering a thin layer of seeds on a snow-clean area in the proportion of a teaspoon per square yard. Another good method of feeding birds is to plant special bird-attracting plants that have seeds or fruit all winter. Horst Zeberl

*See Bulletin #147 June 1970 for a list of such plants*

### **Those Were The Days**

We in British Columbia are accustomed to the evidence of two types of Ice Age – an old and very extensive “continental glaciation”, and a localized contemporary “alpine glaciation”. Various observers in B.C., notably W.A. Don Munday and W.H. Matthews, have demonstrated that the alpine glaciers we see today are not the remains of the old continental glaciation but are the produce of the “Little Ice Age” that developed during the last 2000 years and reached a climax [ended] late in the 19<sup>th</sup> century. The two Ages were separated by a period of many thousands of years during which the weather was warmer than it is today.

A beautiful map recently published by the Geological Survey of Canada shows the extent of former continental glaciers in America. Shaded isochron lines show the time that has elapsed in various parts of the country since the ice melted. In the Seattle area the time is

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15,000 years, at Vancouver 12,000, at Anahim Lake 8,500 and in Labrador it was a mere 6,500 years ago.

It is a universal observation among mountain travelers that apart from a few local and temporary exceptions, the alpine glaciers of the Little Ice Age are fast disappearing. The rate of recession in northern B.C. has been catastrophic. In some cases six miles of valley glaciers have disappeared and the surface of the ice has been lowered by as much as 1,000 feet, all within the last five or six decades. The pitiful little glaciers now lying dirty and stagnant in vast U-shaped valleys are tragic reminders of once magnificent scenery that will be as unknown to the next generation as steam railroad engines.

Yet there is still speculation as to whether the Ice Age is really and finally over because no one knows exactly why they happen. There are records in the rocks of many continents of Ice Ages more than a *billion* years in the past, but the surprising thing is that so few Ice Ages are indicated. It seems that the presence of large amounts of ice on the Earth is an anomalous situation.

A cold snowy winter followed by a cloudy summer makes one feel that another Ice Age is upon us. Such summers occurred in 1933, 1938, 1955 and 1964, but the glaciers continue to melt. A remarkably cloudy summer of 1933 followed a winter of excessive snowfall. Dense patches of old snow lingered about the local mountains through August and into September. On September 21<sup>st</sup> a new snow fell to the 2,000 ft. level on Seymour Mountain and on that weekend I made a climb to the summit with K. Shives, now also a V.N.H.S. member. It was fascinating to see on a cold blustery day about a foot of new snow lying upon extensive patches of the previous winter's snow up to six feet thick.

On our return we stopped at the old Alpine Club hut – at that time perched on a knoll across the meadow from the present chair lift terminal – and reported the snow conditions to some visitors there. One of them, obviously a lover of snow and ice, clapped his hands and cried: “hurrah, hurrah, there’s going to be another Ice Age.” We thought so too, but would you believe it, by mid-October not only had all the new snow gone, but all the old snow as well, and we were swimming at Mystery Lake that fall before winter finally set in.

C.S. Ney

### **Bird Chatter**

The publication of an Annual Bird Report as a chronicle of the affairs of active field ornithologists is most certainly needed in the Greater Vancouver area, as shown in the 1969 Checklist of Vancouver Birds. The purpose of the Report to be compiled and issued for 1970 will be two-fold: to promote and encourage the study of birds, and to supply a source of ornithological information. Published from year to year the information will be particularly valuable in determining the effects of environmental changes on avian fauna and can serve as an index to environmental change and contamination. Topics to be included are Field Notes, Christmas Count, Bird Banding Reports, Special Surveys, Pacific Nest Records Scheme, and Field Trips.

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The Annual Bird Report will:

1. increase our knowledge of breeding species where its status in the Greater Vancouver area is not clear or is undergoing change;
2. add to existing knowledge on the occurrences of unusual or rare species;
3. add data relating to migration, many aspects of which are still imperfectly known;
4. stimulate interest in field observers to keep accurate records and to participate in each birding year;
5. provide a valuable source of information for an "environmental index" to changes in the area; and
6. provide a source of reliable information for compiling briefs on areas that should be preserved.

All birders and naturalists are invited to participate by providing their notes and records to Wayne Campbell, Vertebrate Museum, Dept. of Zoology, U.B.C. All contributors will receive a copy of the Annual Bird Report.

The Victoria Natural History Society has just published its first Annual Bird Report (1969). This 34-page booklet is available for 50¢ from Dr. J.B. Tatum, Victoria.

According to an issue of *Animal* magazine, swifts may spend 9 months or more each year in the air, landing only to nest!

Bill Anderson studied the nesting behaviour of 33 pairs of yellow-headed blackbirds on Sea Island this summer and banded 52 nestlings and an adult male and female. No nests were found in the sewage lagoons at Iona Island this year!

Many birds die each year on our highways. The Campbells counted road kills from freeway traffic between Chilliwack and Burnaby (64 miles) on August 8<sup>th</sup> and recorded 9 [American] robins, 2 barn swallows, 1 Swainson's thrush, 5 [European] starlings, 1 black-headed grosbeak, 3 Brewer's blackbird, 1 house sparrow, 1 [American] goldfinch, 1 savannah sparrow and 4 unidentified birds. Nine species, 27 birds with an average kill of one bird for every 2.4 miles! Six dead mammals were also counted.

Several ornithologists in western North America are colour tagging and dyeing gulls. If you see a 'coloured' gull please send your name and address, date and place of observation, and as much information about the dye or tag as you can, to Dr. R. Drent, U.B.C. Western, glaucous-winged and California gulls are presently being studied.

R. Wayne

Campbell

### **Photographing Oil Birds**

Springhill Estate, Trinidad, April 28<sup>th</sup>, 1970.

This morning I set out for the cave of the oilbirds with the hope of photographing these strange darkness-loving creatures, about which I have often heard and read. I am delighted



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to learn that there is a small colony of them in a cave at the bottom of a canyon within walking distance of this estate where I am a paying guest.

The pathway from the plantation house winds through a citrus orchard heavy with grapefruit, and among thickets of fragrant cassia bushes above which big yellow *catopsillia* butterflies are sailing in the blazing sun. A sudden sharp turn to the right and the path dips steeply downward to begin its zigzag course to the bottom of the jungle-clad ravine. The little Guacharo River can be heard gurgling far down among the tropical growth. Laden with camera equipment, binoculars and butterfly net, I pick my way carefully down the narrow trail that is moist and slippery from yesterday's heavy rainstorm. On every hand the boles of great trees tower up into the canopy, their branches laden with air plants and festooned with glossy-foliated creepers. The split-leaved philodendron is everywhere in evidence.

From time to time I pause for a rest and a brilliant sapphire hummingbird "buzzes" me, hovering for a second or so in a spot a foot or two above my head, as though keeping a wary eye on the intruder. Insect life is abundant and at one point a great blue morph butterfly flaps lazily down and settles on a nearby bush long enough for me to fit a 200mm lens to the Pentax and capture its portrait. It is a solitary, quiet and altogether lovely place.

At last the opposite wall of the canyon looms before me and I am at the bottom of the ravine. On my right, huge arum plants arch their enormous triangular leaves above the little river as it bubbles forth from a tunnel of greenery. On my left the canyon walls close together into a solid sandstone precipice and the stream dives into a cavern at its base – the cave of the oilbirds.

The oilbird *Steatornis caripensis*, being unlike – and apparently unrelated – to any other species, is placed in a family of its own, *Steatornithidae*. Its habit is nocturnal and only at night does it venture forth to feed on the fruit of the oil palm, spending the daylight hours in the dim recesses of such caves as this, where it also nests and raises its young in colonies, sometimes of several hundred birds. This colony has between sixty and seventy, not counting current nestlings. The young, fed also on the oil palm fruit, develop into veritable balls of fat and the native people used to raid the nests, kill and render the young into cooking oil. Hence the name 'oilbird', and its Latin translation, *Steat-ornis*. This custom is now prohibited and the oilbird is regarded as a rare species, although in view of its retiring nature and nocturnal habit, there may be many more colonies in caves unexplored in the vastness of the Andes jungle.

As I peer into the dim interior of the cave and my silhouette no doubt appears threatening against the brilliant opening, the oilbirds within set up an appalling clamour, fluttering about the cave with their harsh calls echoing and re-echoing in the rocky interior. The Carib name for the bird, "Gaucharo" is said to be an onomatopoeic rendering of its call.

A small problem of access now confronts me. Twenty-five feet in from the opening the stream plunges over a rock ledge several feet high, into a pool whose depth it is not

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possible to guess in the dim light. How to negotiate this miniature waterfall without becoming thoroughly drenched? As I am due to leave Trinidad for Venezuela tomorrow, wet clothes, slow to dry in this humid climate, pose a packing problem. Moreover, my bush boots, excellent for footholds along the steep forest trails, are unreliable on bare, slippery wet rock. Accordingly, I remove every stitch of clothing and place it in a neat pile on a dry rock outside the cave, retaining only my khaki canvas jungle hat against the eventuality of messy reprisals from the oilbirds. My camera and electronic flashgun I place on a short loop around my neck, and ease myself carefully over the lip of the cascade and into the pool which happily turns out to be little more than waist deep. My camera and flashgun are still dry.

The stream continues down the slope in a narrow cleft between almost vertical rock sides and I follow it into the near darkness, walking in the water on a bed of soft sandy ooze mingled with thousands of what at first I take to be small round pebbles, but which turn out to be the pure white seeds of pits from the oil-palm fruit brought into the cave at night by the birds. The clamour from the alarmed birds is deafening as I proceed, but I pause and take up a stand perhaps a hundred feet into the cavern, opposite a ledge from which I thought I had seen, in the dim light coming down from a 'chimney' high above, a bird rise from a nest. Braced uncomfortably between rocks, I stay absolutely still for perhaps fifteen minutes and the bird noise dies down and ceases, as the noisemakers return one by one to their nests or roosting ledges. Meanwhile my eyes have become more accustomed to the gloom and I am just able to discern that directly in front of me, slightly above my line of sight and about eight feet distant, a female oilbird is placidly sitting on a clutch of eggs.

Unable to focus directly in the semi-darkness, I set my 'distance' at 8 feet and my lens diaphragm at f5.6 by 'feel'. Very slowly and smoothly, I raise the Pentax and its telephoto lens until it points at the spot where I believe the bird is sitting, and 'fire'. Even in the short one-thousandth of a second duration of the electronic flash, I am able to catch an instantaneous impression of a long, graceful brown bird with white spots on its wing feathers and a flat hawk-like head with a sharp hooked bill. Moreover, the brief brilliant blaze of light and the soft 'slap' of the Pentax shutter failed to alarm the bird so that I am able to take another 'shot' before my cramped position, with the rough wet rock boring into my naked derriere, becomes too agonizing for more, and I return amidst a further clamour of scandalized birds, by the way I came.

Outside the cavern mouth I dry myself off in a patch of sunshine, resume the appearance of decency, and climb back up the ravine to the plantation house for a very welcome rum punch before luncheon.

P.J. Croft

#149 December 1970

### **Editorial: Nature Houses on the North Shore?**

Many members may be aware that the Executive has given consideration to the possibility of establishing a Nature House at a suitable location in the environs of Vancouver.

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Preliminary informal discussions have been held with Parks and Recreation in West Vancouver to the possible establishment of one in the Lighthouse Park at Point Atkinson. It is an attractive idea but there are many problems (of staffing, supervision and so on), to be solved before a formal proposal can be placed before the Mayor and Council of the municipality.

Another attractive location is the Lynn Valley in North Vancouver and the Executive has been happy to learn that tentative plans for a Nature House in that lovely wooded locality are already well advanced and much support has been obtained. At our invitation the Manager of North Vancouver District Parks Department attended a recent meeting of the Executive and explained the current position. It would be a Centennial Project making use of funds set aside by the District to which would be added funds contributed by the two senior levels of government that would permit the building and equipping of a good Nature House.

However, there are of course, as in all such cases, other proposals for Centennial projects competing for the same funds – a swimming pool, a sports arena, and so on. The District Council will feel constrained to follow what it believes to be its citizens' wishes in making its ultimate decision.

The Executive assured our visitor that the V.N.H.S. would lend all the support it could to the Nature House proposal and we were informed that, whether or not we are residents of the North Shore, members of the Natural History Society should not hesitate to write to the N.V. D. Council expressing their views in support of this project. Your Editor therefore urges all who can do so, to write to the Chairman, Centennial Committee, District of N. Vancouver, 355 W. Queen's, North Vancouver, B.C.

P.J. Croft

### **End Note #44: Proposed Field trip to Europe (see page 285)**

#### **Those Latin Names!**

Most people well understand the reason and purpose behind the scientific naming of natural species and the use of the classical Latin and Greek languages which do not alter and are understood by all scholars throughout the world, so that hopeless confusion of infinitely-varying 'local' names for plants and animals is thus avoided. It is frequently only at the cost of some effort that the amateur gains sufficient familiarity with the scientific nomenclature to make confident use of it, and having achieved this desired goal, is somewhat exasperated to find that those difficult-to-pronounce Greek and Latin words just won't stand still. Those horrible taxonomists keep changing them!

When the great Swedish philosopher Carl Linne (*Linnaeus*), in publishing his *Systema Naturae*, evolved the binomial naming method of natural objects by genus and species, he laid the foundations for all that is done today. Linnaeus, however, for all his profound scholarship, had little appreciation of the vastness and complexity of the animal and vegetable kingdoms. His system was admirable for a natural world of relatively few

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species, but somewhat inadequate to deal with the advance of knowledge over the two hundred years since his time. He made use of simple descriptive Greek and Latin words, but also drew heavily on the names of personages in mythology and classical history, that were known to all, and were spelled and pronounced more or less similarly in all modern languages. Thus 'Ajax', 'Menelaus', 'Hector', 'Priamus', 'Polyphemus', 'Cecropia' and so on. He'd a logical mind, had Linne, but had no way of realizing the size and complexity of the job he was tackling. For instance, he based his cataloguing of butterflies on the 192 kinds known to him in 1758, and put them all in one family or genus, which he called 'Papilo'.

Today we know there are many thousands of species of butterflies in the world, not even counting the still far more numerous moths, and not taking into account the bewildering multitudes of sub-species and local races and varieties. This differentiation within a species into geographically separated sub-species has made necessary the use of additional names, and Linnaeus' binomial now becomes a trinomial. For instance, in the case of the tropical silk moth *Automeris janua* the form of the insect on which the original description was based, known as the 'type', now becomes *Automeris janus*, and local races or sub-species of it are *Automeris janus Metzii*, *Automeris janus collateralis*, and others.

It could well be that the further advance of knowledge may require still further subdivision in the naming system of nature's species. A great friend of the author, Dr. Paul Schwartz, an ornithologist working under contract to the Government of Venezuela, is doing an intensive study of the mating calls of many species of tropical birds, constructing 'sonograms', graphic records of these calls that can be minutely compared. He is convinced that variations are much more significant in the selective mating of these birds and thus in the whole genetics of the species, than has hitherto been realized and that some still further differentiation of sub-species and races on the basis of 'vocalization' may become necessary, possibly requiring still another addition to the naming system. The trinomial may become a quadrinomial! Good old Joe Smith, that we all thought we knew so well, has now become Josephus Maximum Montmorency de Smythe!

Then too, sometimes a whole genus is divided up or renamed and species long and widely attributed to a well-known genus are placed by some new writer into another. All very confusing to the amateur student of nature. One must be charitable and assume that in the main, these changes are based on real and adequate new learning and beneficial to science. The suspicious mind however, can scarcely help wondering whether the changes are intended for the true benefit of science, or whether chiefly to provide a thesis subject for someone's Doctor of Philosophy degree! Unhappily natural science that should raise men's minds above the small and petty is not free from a modicum of personal vanity among its practitioners!

According to the rules of the International Congress of Nomenclature, the person first describing a new species has the privilege of naming it, and that name shall persist, even though the position of the species as to genus and family may be subject to change. The naturalist of the last century, notably more modest and self effacing than the present crop, generally used simple descriptive Greek or Latin words, *convexipennis* (curved winged),

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*albolineata* (white-lined), *quadrimaculatus* (four spotted) and so on. More recently there has been a tendency for species namers, apparently seeking personal fame in a field of endeavour that does not greatly lend itself to individual glory, to use their own name, taking on the Latin genitive ending, and thus we arrive at such absurdities as Schmidtii, Brownea and even Rabinovitchii. Not only confusing but mildly amusing.

Still and all, considering the difficulty and complexity of the task, and in spite of human frailties, the Linnaean binomial system and its offspring, the trinomial, on the whole have served us well. / In spite of the slightly critical tone of this article, the author modestly admits he can't think of a better one!

P.J. Croft

### **End Note #45: Birds for the Record (see pages 285-286)**

#### **Wing-tagged Glaucous-winged Gulls**

A wing-tagging program was initiated in the summer of 1969 on Mandarte Island, a small sea bird colony located 4.5 miles ESE of Sidney, B.C., when 110 glaucous-winged gulls were captured on the nest and marked. Each bird received the standard aluminum leg band provided by the Canadian Wildlife Service and an additional circular red tag that was fixed to the right wing. Each bird could be identified by code letters on the tag. By marking breeding adults we hope to close two gaps in our study: 1) how far afield do the adults forage when they are raising chicks; and 2) where Mandarte adults winter. Although banding has gone on for many years, there are few returns for adult birds and in most cases nothing is known about the birds except 'found dead', so it was felt that a project making it possible for repeat sightings of live birds would be the best way to obtain detailed information. Last year we inserted a note in the Bulletin letting V.H.N.S. members know of the project and as a result so many people have been involved that we felt it appropriate to provide this summary as we begin our second winter's observation.

Since last June we obtained over 200 sightings of tagged gulls, all of them within 100 miles of the colony. Gulls have been clocked on radar at an average speed of 25 miles per hour so it appears that Mandarte's breeding birds live within easy reach of their island all year. This is contrary to the wide dispersal of the juvenile birds that regularly reach the San Francisco Bay area in winter. Tagged birds were seen in the Vancouver area – especially at the main garbage dump, following ferries between Tswassen and Swartz Bay, in Sidney, and Victoria. This really exciting aspect of the project is when repeat sightings are made, allowing a case history to be built up on an individual bird.

What have the observations told us about the two key questions? Thanks to the wing-tagged birds we now know that Mandarte birds regularly forage on the Delta dump south of Vancouver in the summer, which involves an 80-mile round trip each time. These trips become especially frequent when the chicks have passed three weeks of age. In July adults leave Mandarte well before dawn on their first trip, starting shortly before 4 a.m. to gather food for the chicks, and 80% of them head for Vancouver.

Observations of the wintering areas are equally fascinating. They leave Mandarte Island late in September and return again on fine days in February, so we have considered 15

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October–15 January as constituting the ‘winter period’. Altogether sightings on 40 birds were obtained during this time span. Twenty-five of these were seen in Vancouver, but it would not be correct to infer that most Mandarte birds winter here, since 60% of the sightings were made as a result of special searches in the area (by Ian MacGregor and John Ward). If we consider only sightings by the general public, then equal numbers were found in Vancouver, the southern Vancouver Island region including the Gulf Islands, the San Juan Islands and Washington.

As a rule, the birds did not shift very much in this period. Although most sightings were made at garbage dumps or in parks, the most complete history of wintering was obtained by Mr. and Mrs. R.C. Losee at Bremerton [WA] where bird #71 was an almost daily visitor to their waterfront garden from August 15<sup>th</sup> through to February 10<sup>th</sup>. Thereafter the bird began revisiting Mandarte and it was seen on the Island during two spring visits, March 26<sup>th</sup> and April 14<sup>th</sup>, but slipped back to Bremerton occasionally, and sighted by the Losees, again on April 19<sup>th</sup>. Another bird was seen following the Vancouver/Victoria ferries on several dates through the winter, and bird #49 apparently wintered in the Victoria area. More observations will be needed to decide how restricted a bird’s wintering area actually is. Once the adults start to return to Mandarte for the day, they are likely to be seen at the Delta dump, so before the eggs are laid the birds make the trip to Vancouver to forage.

Several birds have died since the study started. Some were shot by hunters, no doubt because of curiosity regarding the tag. Mr. A.R. Connell of Sidney saw a mink kill one of our birds in Tsehum Harbour, a unique observation. Altogether, some 80% of the birds tagged in 1969 were seen on the Island again in the next season, so the death rate was 20% or less over the year.

R. Drent and J. Ward, Zoology Dept. U.B.C

### **End Note #46: Table 1 – Selected Case Histories of Tagged G-w Gulls (see page 286)**

**Editor’s Note:** In view of the foregoing very interesting report by Drs. Drent and Ward on the sightings of glaucous-winged gulls with the special wing tags, your Editor felt the following letter, sent to Mrs. S.F. (Dolly) Bradley by Mr. Maguire a Consulting Engineer of County Kent, England, would be of interest. He was stationed in Vancouver 1964-65.

Dear Mrs. Bradley,

I received a note from the U.S. Department of the Interior, Fish and Wildlife Service that the bird I reported seeing in 1965 was in fact a glaucous-winged gull that was banded in its infancy by you on the 27<sup>th</sup> July 1958 – serial number 597-07711. You might be interested to know the circumstances under which I obtained the band number.

At the time, I was working in an office on the top floor of the Rogers Building on Granville Street in Vancouver. In the fall of 1964 I had noticed, amongst the gulls flying around the building, one that had been banded. After many unsuccessful efforts I managed to get it to alight on the windowsill and from then on it became a frequent visitor and, though I was never able to touch the bird, I gradually obtained by observation what I thought was the complete inscription. On referring the matter to Washington I learned that a digit was missing, but in the meantime the bird vanished.

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Then in early 1965 the bird reappeared. Its previous rather unkempt appearance had been transformed, I suppose from the growth of new feathers, but it was obviously the same bird. It visited me for a few days during which I found the missing digit and advised Washington once more but received no reply. Shortly afterwards I moved to the United Kingdom and but for a rather poor photograph which I have of him (or perhaps her) the gull flew out of my life. The note from Washington forwarded by one of my colleagues was an interesting and welcome reminder of the gull for which I had developed a special affection.

*L.J. Maguire*

(The following information was on the slip sent to Mr. Maguire from Washington):

Band #597-07711 Recovered Address: 4490 Glenview St., Vancouver, B.C.

Species: Glaucous-winged gull

Banding Location – Gabriola, B.C.

Banded by: Mrs. D. M. Bradley Date: 7/27/58

Date Recovered: May 1965

### **Bird Chatter**

We did it! One team got 119 species on “break 100 day” and the other recorded 115 species. Together 131 species were seen for the day. We started at Stanley Park with tufted duck, redhead and European [Eurasian] wigeon, picked up spotted redshank at the [Reifel] waterfowl refuge and ended the day with ancient murrelet at Point Roberts.

A checklist of Birds of the South Okanagan has just been published. A road map of British Columbia including delightful notes and drawings of wild flowers and birds can be obtained from Home Service Stations.

Gull watchers! Dr. Drent is still interested in hearing from you about colour-banded gulls as well as wing-tagged gulls. Dr. Stoner Have, Dept of Biological Sciences at SFU would like birders to send him reports of gulls seen eating starfish. He is interested in knowing if the gull is selective in the colour of starfish it chooses. Observations, especially from the West Coast of Vancouver Island, will be very helpful.

**Canada Geese:** While traveling through a bird sanctuary near the town of Alturas, California, we noted poles about 10 feet in height with a dark platform on top. On enquiry we found that they were just old automobile tyres nailed on top of a piece of plywood. The Canada geese filled them with nesting material and have successfully

raised many young in the past two years. Previously they nested on the ground but skunks robbed their eggs to the extent that very few hatched. The conservationists experimented with the pole-and-tyre idea with great success. It might be a good idea for the V.N.H.S. to try the same experiment here as we have thousands of old tyres which could be put to good use.

C. Gough

*An en-tyre-ly satisfactory solution! – Ed.*

### **End Note #47: A Photoduplicate File for B.C. Vertebrates (see pages 286-287)**

### **The Campbell River Regional Park**

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Many of us who attended the Society's regular meeting on November 3<sup>rd</sup> [1970] to hear Al Grass's excellent presentation had an entirely wrong idea of the area we were to be told about. The waterway we had in mind was that Campbell River beloved of sport fishermen that drains the once-limped waters of Buttle Lake into the Strait of Georgia [on Vancouver Island]. We were miles off! A glance at the B.C. Dept. of Lands and Forests' topographic map (inexpensively obtained from the Dominion Map Company on Howe Street) will reveal the other Campbell River that rises just north of the U.S. border and flows its meandering course westward to empty its waters into Semiahmoo Bay at the Indian Reservation just south of White Rock. At a point due south of Langley 'city' the little stream makes a wide northward bend and the new [Campbell River Regional] Park embraces this northward turn, lying principally in the district Municipality of Langley.

Your Editor has obtained, by courtesy of Roy Edgell, photostat copies of a number of articles from the Vancouver Sun which outlined the efforts over the past several years by the Vancouver-Fraser Regional Parks Authority to obtain and piece together the necessary parcels of land so as to enable the development of a park embracing the whole area of some 1,100 acres – measurably larger than Stanley Park.

The newspaper articles date back to September 1<sup>st</sup>, 1967 when the difficulty of acquiring alienated land was mentioned, especially with respect to one 200-acre farm. An article dated August 6<sup>th</sup>, 1968 quotes the chairman of the Parks Authority as expressing the hope that the whole property would be obtained by 1970. The problematical 200-acre farm however had been purchased. An article dated August 14<sup>th</sup>, 1969 reported that the Park Authority had acquired 830 of the desired 1100 acres. The Administrator was quoted as saying, "We are not after a well-manicured Park with tennis courts and the like, but we will provide hiking, walking and riding trails and develop the fishing areas." (Progress – definitely progress!)

Under dateline June 4<sup>th</sup> of the present year a brief article [entitled] "Lower Mainland's Biggest Park Eyed" (such syntax!) announced that the total 1100 acres had now been acquired. The most recent article is dated June 27<sup>th</sup>, 1970, a very sprightly piece by Sun Staff Reporter Barry Broadfoot, who states in much more detail, the size, location and nature of the tract, with a small accompanying map and a fuller statement about the Authority's intentions with respect to the Park – all very gratifying from our Society's point of view. From this culminating article, one would conclude that all obstacles were removed and that the area is now, virtually a Park.

It was therefore disconcerting to hear from Al Grass, who knows the area better than any of us, of difficulties that still remain, of local residents who will not recognize that a Park has been formed and who think they still have the right to graze cattle within its confines and who deny access to the public that own the Park. Al's address and pictures and the lively discussion that followed, seemed to indicate a need for pressure from the Vancouver Natural History Society to assist the Vancouver-Fraser Regional Parks Authority to complete the development of this wilderness Park.



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King Charles II, England's Merrie Monarch, ever eager for a new experience, complained on his deathbed that he was "an unconscionable long time a-dying". Seems that parks in our modern scene, are an unconscionable long time a-borning! P.J. Croft

**End Note #48: Geology [of] Lakes (see pages 287-289)**

#150 March 1971

**End Note #49: Editorial – Wildlife or Wild Death, Notes to the Intermediates, Junior Section, European Field trip, In Memoriam –Allen R. Wooton & Birds for the Record (see pages 289-291)**

### **Bird Chatter**

A smew was seen by Ed Moody on Lost Lagoon November 14<sup>th</sup> and Neil Dawe reported a rusty blackbird at Pitt Meadows on November 22<sup>nd</sup>. Radio station CHQM has been broadcasting sightings of rare birds during the winter and will continue this service through 1971. The 1970 Annual Bird Report has now been compiled. About 200 observers submitted 18,000 sightings that represent 260+ species. A list of Birds of Langley has also been prepared by Al Grass

Tufted duck, spotted redshank, Ross' gull, scissor-tailed flycatcher, brown thrasher, [northern] wheatear, blue-gray gnatcatcher and the common grackle have recently been submitted to the Photoduplicate File for B.C. Vertebrates. Many barn owls died as a result of the recent snowfall. It appears that a prolonged snow cover makes food difficult to obtain and consequently many birds starved.

### **Christmas Bird Count – Compilers Comments;**

As expected with more people looking for birds in the field and better coverage of sub-areas, there were high counts of individual birds reported. The woodlands and fields were better covered than ever before resulting in the highest ever counts of wrens, kinglets, chickadees, [ring-necked] pheasants and [Western] meadowlarks. Numbers of common and Arctic loons were close to last year's total but red-throated loons were more than twice the 1969 count. Generally grebe numbers were down slightly.

Since most interior lakes were covered with ice one would expect a decrease in birds frequenting them. This may account for the high number of puddle ducks and geese reported. High counts include Canada goose, gadwall, [northern] pintail and wood duck. Also some diving duck totals were higher. Many birds probably left the interior frozen lakes and gathered in rafts along the shore.

Canvasback 154 (78), Barrow's goldeneye 3,388 (3,279) and red-breasted merganser 518 (437) were high counts. Only 100 common mergansers were reported, a drop of 490 from 1969. The usual 450 counted on Deer Lake in Burnaby in 1969, but forced to leave

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because of ice cover, would bring this total to about the same. This also applies to ruddy duck.

### **End Note #50: Continuation of Bird Count - compilers Comments, Ladner Christmas Bird Count 1970 (see pages 291-293)**

#### **Pelagic Birding Trip**

Oceanic birds like the albatross, petrel and shearwater have stirred the imagination of amateur and professional ornithologists for years, often lifetimes. To get to see birds on the open ocean is often difficult to arrange. As the sport of bird watching grew in popularity, pelagic trips were organized to meet the demand of the ever curious birdwatcher. Along the Pacific Coast, Californians were the first to enjoy the scheduled offshore birding trips. Recently, Terry Wahl has organised trips to sea from Westport for Washington birders and in the fall of 1969 a pelagic trips were initiated for B.C. birdwatchers, scheduled from Tofino. The excursion was unexpectedly productive as numbers of black-footed albatross, [northern] fulmars, pink-footed shearwaters and fork-tailed storm petrels were seen. Three New Zealand [Buller's] shearwaters then considered hypothetical for B.C. were also spotted. Spring and fall trips were arranged in 1970 that were also considered very rewarding. In future years, as long as the demand is evident, regular spring and fall trips will be scheduled from Tofino for naturalists in the Province. The trips will be held on the first three weekends in May and September each year. They usually leave Tofino harbour early on the Saturday morning. If it is too windy or raining heavily, the trip is postponed until Sunday. If the weather is still poor, birders have to be content to use the weekend for birding locally. Depending on the weather, the boat with a maximum of ten passengers, ventures out to sea 50 miles or more in search of seabirds.

On the return trip the skipper, Ernie Bach, usually visits Wickaninnish Bay off Long Beach for good views of [northern] sea lions and gray whales then returns along the shore

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arriving in port by late afternoon. The cost for the boat trip is \$12.00 per person. The total weekend expenses total about \$20.00.

During the past six pelagic trips 97 species were recorded. Trip highlights included jaegers seen chasing, catching and eating small passerines migrating offshore; an elephant seal photographed with a dogfish in its mouth, and an Audubon's [yellow-rumped] warbler photographed on the ship 20 miles from shore. Surprising also was the sighting of a red-shafted [northern] flicker far out at sea.

R. Wayne Campbell

### **End Note #51: Continuation – Summary Table of Species Recorded on the Pelagic Birding Trips from Tofino, Notes from the Conservation Committee, Photographic Competition Results, & Mountain Access Committee. (see pages 294-298)**

#### **Skunk Cabbage – *Lysichiton americanum***

Leaves 1 to 2 feet long, oblong-elliptic; peduncle shorter than the leaves; spadix thick, becoming 4 or 5 inches long at maturity; spathe somewhat hood-shaped and golden yellow, at first enclosing the spadix which later extends beyond it. Blossoms somewhat pleasantly fragrant but stems and leaves produce skunk-like odour. Habitat – swamps.

There is nothing more typical of this humid western coast in early spring than the big swamps of yellow skunk cabbage. The great spathes begin to appear in February and from then until May the swales and swamps are bright with these magnificent blooms. Following the blossoms come the great tropical looking leaves in dense clusters, single blades often three or more feet long and a foot broad. There is real beauty.

Forget the name; disabuse your mind of any connection with the mephitic animal and the plebeian vegetable, and see this swamp for what it really is – a veritable 'field of cloth-of-gold'. Think of what the name *Lysichiton* means – a loosened mantle (chiton). Think of a cloak of golden weave thrown carelessly over the shoulders of a water sprite, or fairy boatman in coats of gold who have gathered to honour the coming of spring with a water fete. Thus only can you see this glorious plant in its true person. When the flowers are fresh their scent is very sweet, and although rather sickish, not excessively unpleasant. The older or wilting flowers or the bruised or crushed stems, however give some excuse for the common name.

The roots are very hot and peppery, but bears and elk are fond of them and plough up whole swamps in their search for this food. Among the Coastal Indians the roots were also an important article of diet, particularly in early spring when famine was threatening and this poor, despised plant saved thousands from starvation. They cooked them in pits together with scrapings of the tender inner bark of the hemlock, and when the pits were opened it was said it was so savoury the whole village was scented with it. Cooking destroys much of the acrid, peppery flavour.

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The Kathlamet Indians have an interesting myth concerning the skunk cabbage. In ancient days they say there was no salmon. The Indians had nothing to eat save roots and leaves. Principal among these was the skunk cabbage. Finally the spring salmon came for the first time. As they passed up the river someone shouted, "Here come our relatives whose bodies are full of eggs. If it had not been for me, all the people would have starved." "Who speaks to us?" asked the salmon. "Your Uncle, Skunk Cabbage" was the reply. Then the salmon went ashore to see him and as a reward for having fed the people, he was given an elk-skin blanket and a war club and was set in the rich soft soil near the river. There he stands to this day, wrapped in his elk-skin blanket and holding aloft his war club.

-author unknown (Contributed by Nancy Anderson)

Editor's note: The skunk cabbage of eastern North America, *Spathyema foetida*, is closely related, but a quite distinct species and is much less attractive as to both appearance and 'personal hygiene'. It lives up to its name *foetida*! P.J. Croft

### **The Good Friday Earthquake, Barnacles and Sea Floor Spreading**

Easter visitors to Radium Hot Springs in 1964 were dismayed to find that there was no swimming. Spring waters coming from fissures in the rocks had suddenly discharged brown rust into the sparkling pools. This disruption of nature's plumbing was attributed to an earthquake that struck southern Alaska in the evening of Good Friday, March 27<sup>th</sup>, 1964. Earthquakes are a natural consequence of restless mountain building activities in the crust of the Earth. In an average year several million earthquakes are recorded by instruments throughout the world. Most of them pass unnoticed by humans, but about 300 of them would be above magnitude 6 and potentially destructive. The Good Friday earthquake ranked with the largest on record having a magnitude of 8.4.

What do these numbers mean? Press reports tell us that the Richter magnitude is a scale to ten. This is both true and false. The scale is really open-ended; there is no limit to the size of an event it can describe. But it turns out that the largest known earthquakes have a magnitude just under 9. There appears to be a natural limit to the size of earthquakes that may be a function of the strength of the Earth's crust. Richter magnitude expresses the amount of energy released by an earthquake, and the arithmetic of the expression is such that for a jump of two magnitudes, there is an increase of energy by a factor of 1000. Magnitude 8 corresponds to an energy 1,000 times that of 6, and 1,000,000 times that of 4.

The magnitude number gives us the amount of energy in terms of ergs, [one of] those tiny fundamental units we learn about in high school then forget. Most of us are more familiar with the foot-pound; the amount of energy required to raise a pound through a height of one foot against gravity. A foot-pound is equal to 13 million ergs, but it is still a small unit for measuring earthquake energy. To avoid large numbers we can invent a unit call the foot-mountain – the amount of energy required to raise a cubic mile of rock through a height of one foot.

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Did such land movements actually occur? Indeed they did, on a scale many thousand times greater than would be expected. The movements were partly compensating; one section of land was depressed while an adjacent section was uplifted. But even after the two are subtracted one from the other, there is an excess of uplift that should have required about 500,000 foot-mountains of energy, about 100 times that expressed by the Richter magnitude of 8.4.

Areas of uplift were indicated immediately after the 'quake by raised sea floors strewn with dead starfish, bryozoans and kelp. Areas of down warp were indicated by drowned spruce forests with new barnacles becoming attached to their lower trunks. The resurveying of known marks made it possible to determine some of the horizontal and vertical movements that had taken place, but over much of the affected area there were no surveys and it fell to biologists to help geologists evaluate the movements. Two organisms indicated accurately the former high water level – the common acorn barnacle and an olive-green rockweed *Fucus distichus*.

Throughout the broad region of bays and islands, including the Kenai Peninsula and Kodiak Island, some 800 measurements were made of former well-defined limits of these organisms now displaced both above and below water, to determine the changes of elevation. The measurements indicated that a panel of the Earth's crust subsided an average of 2.5 feet. Parallel to this on the southeast and mostly under water, a panel 500 by 120 miles was uplifted an average of 6 feet, and locally as much as 38 feet. Instrumental surveys also showed that much of this warped area had been moved horizontally southeast by as much as 64 feet.

This warping of the crust was accomplished in just a few minutes and of course the overlying ocean waters were warped as well. Suddenly they were bowed into an enormous flat wave, energized and ready to travel. The tsunami, or seismic sea wave did travel, at speeds of several hundred miles an hour, across the Pacific Ocean, to wreak havoc down the west coast as far as Crescent City, California.

Many Californian earthquakes are related to movement on a visible rift in the Earth's surface such as the San Andreas Fault. The Good Friday earthquake was not related to a surface rift, but to a deep zone of shear apexing in the deep water of the Aleutian Trench and dipping gently northward under the arc of Aleutian volcanoes. Along this shear the floor of the North Pacific Ocean was thrust northwesterly against Alaska. Over many centuries this sea floor spreading builds up a state of strain in the rocks of the Aleutian Arc until eventually a point of rupture is reached. Then the strained rocks rebound, and the stored energy is spent on a gross displacement of the land; earthquake waves radiate through the rocks of the world and in seismic sea waves.

When will another similar earthquake occur? It has been found that slow changes of land level affected the area for many centuries before the quake took place. Plafker quotes observations of these effects by Captain Vancouver in 1801. A recent study of long-term movements indicates that the potential for the earthquake was built up slowly over a period of between 900 and 1300 years. It may therefore be an equally long time before

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we can expect another large one in the same area. The effects of seafloor spreading extend 100 miles or more inland through southern Alaska and the southwest corner of the Yukon. In a more complex way they have brought about the rise of the great, youthful, St. Elias Mountains.  
C.S. Ney

#151 June 1971

### **Editor's Note**

As your Editor of the past three years takes on new duties, the editorial blue-pencil, scissors and paste pot is being passed on to the new incumbent, Dr. Keith Wade, professional ecologist and field trip leader extraordinaire, and well known to a large section of the Society. He will no doubt bring a new and youthful approach to the publication and we wish him well in his task, in which he will be supported by Miss Louise Irwin as Assistant Editor.

The regular publication of our little quarterly has been a challenging and rewarding job if sometimes an exacting one during the week or so up to Editorial deadline. An Editor's worst frustration is a tendency to tardiness on the part of intending contributors. Your Editor, therefore, pleads on behalf of his incoming successor that all those with material to contribute, please observe the published deadlines and send in manuscripts, typed, in duplicate, as far as possible *ahead* of the deadline dates. P. J. Croft, retiring Editor.

### **The Annual General Meeting**

The Society's AGM and Banquet was held on April 30<sup>th</sup> in conjunction with that of the Federation of B.C. Naturalists at the Vancouver Golf Club. One hundred and seventy-six members and guests participated in a pleasant evening marking the wind-up of the Society's operating year. Following the introduction of head table guests, the retiring president, Mr. Arnold W. Greenius gave a brief account of the year's principal activities, and the Treasurer, Dr. Fred Fisher gave an ultra-abbreviated financial report divulging only the comforting intelligence that the year's operation had been conducted "in the black".

Life Memberships in recognition of valuable services to the Society were conferred on Mrs. Ruth Brink and, *in absentia*, Mr. and Mrs. Foote Waugh who, due to illness, were unable to attend. Illustrated hand-lettered certificates of citation were provided for the recipients. The 12 elected Directors of the Society were presented by Mr. Greenius who then handed the gavel of office to the incoming President, Mr. Phillip J. Croft. The new President made a brief speech of acceptance and thanks.

Following a brief intermission for table clearing, the FBCN President, Dr. Tom Taylor, introduced the guest speaker, Dr. Roderick Haig-Brown, celebrated naturalist, fly

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fisherman, conservationist and author, who delivered a most thought-provoking address on the subject of the "Role of the Naturalist in Conservation". The speaker urged the members of our Society to pursue their various interests with a view to gathering a great volume of expert knowledge. He pointed out the value of large associations of societies and clubs like the Federation of B.C. Naturalists, which could speak on behalf of conservation with the strongest and widest possible voice. Dr. Haig-Brown spoke movingly of the recently suggested damming of the mainstream of the Fraser River (Moran Dam) and of the ecological havoc this would create, and urged the Society and the Federation to keep the closest possible watch on this and all such proposals. After this presentation, Mr. Croft thanked Dr. Haig-Brown and the meeting adjourned at 10:30 pm.

### **End Note #52: Junior Section (see pages 298-299)**

#### **...And Spring Came Late**

It comes but slowly and somewhat unnoticed. Why? Because spring is different things to different people. A friend believes it starts in February with the first robin tugging worms from thawing lawns. To some the season officially arrives with a radio announcement on March 21<sup>st</sup>. Strike three!...and grass-stained knees mean sunny skies and painted lines on fields for the ball players. As the sun embraces the Earth in its light for longer periods each day the country air is filled with the burning of the old cover for what the new spring will offer. Evicted field mice must now search to homestead elsewhere and foxes and hawks follow them home. Spring is calves and lambs stumbling under mama over unfamiliar ground; and people celebrating the reawakening of life on Earth with blossom festivals and barn-raising.

To those of us who soil our knees searching for beetles in buttercups or are amused at the first attempts of the song sparrow's song, spring is much more. The great horned owl's hooting tells us something. Later we see the hen on her nest, motionless, with patches of snow on her back. Ten days she's been there peering at the bleak landscape. She notices the first white tassels of the Indian plum and senses that the new cover will hide her now large young, but the added foliage will also hinder the hunt.

The songs of the spring peepers [tree frogs] seem quicker and clearer; the days are getting warmer. Small flying bugs are appearing - food for the tree frogs. The gentle rays of sunlight filter through the open canopy to touch the moist forest floor with warmth. Johnny-jump-ups burst from the moss carpet, while trilliums roll out to exhibit their showy heads. We're still looking for the white spider and the yellow beetle that live within. Slugs sense the new food and crawl out to graze on the tender greens. Unfortunate is the slug basking [in the sun's warmth] caught by the early snake.

Where the forest meets its Maker the earliest of marsh plants pops up to splash the scene with yellow. Only marsh critters like muskrats and skunks appreciate the air about them. And the clever crow sensing something amiss is seen moving last year's nest, twig by twig, to a protective conifer.

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Orion the hunter is disappearing from the night sky. Is he the signal that the northern nesting grounds are waiting? From the warm southern lands the birds have followed

spring northwards. Impatiently we have searched and waited. Finally the swallows come. It's been a long winter...and spring came late.

Wayne Campbell, Neil Dawe & Al Grass

### **Look Back, Look Ahead**

Jimmy Brown knew the North Thompson country before the C.N. Railway; he was the best man on the back trail I have known. Long before there was a chance to see them, Jimmy would say, "there are mowitch (deer) ahead", and always, as we advanced, we saw them. His hindsight was as impressive as his foresight and sometimes he would say, "there's a curious cat (cougar) back there"; almost always a stop and a backward glance would bring a tawny distant flash. Acute awareness of changes old and new in browsing, odour and other minutiae that I could not sense were the basis of Jimmy's presentiments. At least I learned something of value of looking back and looking ahead. I am confident there is value in this for Vancouver naturalists.

Years ago a regular Society trip was made to the vicinity of the Musqueam Reserve in Point Grey. Is it possible that it was only in 1918 that Mr. Carl shot the last cougar there? Today the middens and sandy outwash are bulldozed, weedy or in truck gardens; housing, freeway and golf course supplant the old trails and skid roads; a small but pleasant park has been established to alien grasses and, an erstwhile beach with a distinctive flora is covered with logs, rusting wire from the booming grounds, and mud. I continue to visit the area to see the may leaves [vanilla-leaf] and dentaria [toothwort] in bloom but so much has gone and so little of interest to the naturalist has been added. On the other side of Point Grey not many years ago, we saw in the first gully [cutthroat] trout in a pretty little stream. Today the waters of the catchment are diverted to sewers and much of the gully is a massive landfill. In ponds drained long ago at Jericho, Professor Davidson once showed us aquatic plants we no longer see in B.C.

In Surrey, salmon spawned in Bear Creek that for many years has been barren. Bear Creek, a suburban park eminently acceptable in its way, scarcely replaces the pleasant countryside, half wild, half rural through which our V.N.H.S. field trips once took us. At Crescent Beach, Ocean Park and White Rock we wandered through lanes of the tall *Mahonia*, red flowering thimbleberry. [*According to Bert Brink these were naturally occurring and not horticultural*] and native *Delphinium* [larkspur] to the bright yellow mud buttons [brass buttons] of Mud Bay. Lots of mud buttons remain but I've not seen the other species for years although some plants may persist in private gardens.

It is easy to recount losses of habitat in the Lower Mainland and to point out that much of the loss cannot be regained. Looking ahead let us, as naturalists, cooperate with the rising tide of public interest in ecological reserves and comb the Lower Mainland for what can and should be conserved.



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Thacker Mountain at Hope is a good start. Cooperating with Surrey Parks and Recreation in the "help" program is a possibility and we should continue to work with the Vancouver-based "Save Our Parks Association". It is doubtful if any area can remain

pristine, untrammelled, unprotected and undamaged but we should recall the words of Aldo Leopold: "Conservation is getting nowhere because it is incompatible with our Abrahamic concept of land. We abuse land because we regard it as a commodity belonging to us. When we see land as a community in which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man, nor for us to reap from it the aesthetic harvest it is capable, under science, of contributing to culture. That land is a community in the basic concept of ecology, but that land is to be loved and respected is an extension of ethics. That land yields a cultural harvest is a fact long known but latterly often forgotten. C.V. Brink

### **End Note #53: Ornithology Section – Birds for the Record (see pages 299-301)**

#### **A Note on Nature Education**

We hear very little about the work our naturalists do in the area of nature education, but behind the scenes a small active group are doing a lot of good work for the general public. In most cases these are the same people who lead our field trips and give of their time and knowledge freely in our own discussion groups, lectures, workshops and committee meetings. Here is some of the work our members are doing:

Volunteering as docents at the Aquarium and Museum. Giving talks and discussions on radio and TV. Co-sponsoring Audubon Wildlife Films. Leading field trips for guiders, cubs and scouts, teachers, garden clubs, kindergartens, elderly people and any group wishing a guided tour of parks such as Lighthouse, Capilano, Lynn Canyon, Munday, and Stanley Park, as well as Burns Bog, the University Endowment Lands, beaches and bird sanctuaries etc. Teaching night school. All ornithology and botany courses given on the North Shore and in Vancouver are taught by members of our Society.

Help is provided to a number of outdoor schools including lectures and field trips and training programs for teachers. Illustrated lectures are provided to groups such as the YMCA, Girl Guides, Consumers' Association of Canada, mining exploration groups, schools, the Faculty of Education, Zoology Department, park naturalists, golf and country clubs, Chamber of Commerce, the Neurological Congress, Parents Without Partners, libraries, the Over-Sixty clubs, church groups, banquets, photography and other such clubs. We owe a strong vote of thanks to these members who so willingly give their time to these endeavours.

### **End Note # 54: Photographic and Geological Section [reports] (see pages 301-302)**

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### **End Note #55: Editorial – Hunting Promotion (see pages 302-303)**

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**The Skagit:** The fate of the Skagit Valley is still unknown but efforts to prevent it from being flooded are continuing. Dr. Brink, the Fed. of B.C. Naturalists' delegate to the Ross Committee, presented one of the many Briefs at the International Joint Commission

hearings in Vancouver in June and it was obvious that the views presented in his Brief would receive careful consideration by the Commission.

**End Note # 56: Continuation of "The Skagit", Photographic Section, Geology – Nickle, Sudbury and Falling Stars, Birds for the Record (see pages 303-307)**

### **Bird Chatter**

A lesser scaup banded by Ken Kennedy in Stanley Park on February 26<sup>th</sup>, 1970 was recovered by a hunter in Los Mochis, Mexico on December 4<sup>th</sup>, 1970.

**Bird Fatality:** Moira Greaven produced the unusual record of an immature [European] starling that died by strangulation when entangled in horsehair used as nesting material by bullock's orioles near Osoyoos Lake in the summer of 1967

**Transient Youth:** The Sanders reported barn swallows nested successfully on the B.C. Ferry "Langdale Queen" and were seen actively feeding their young in transit on June 9<sup>th</sup>.

**Turkey vultures** were seen feeding on the remains of ring-necked pheasants accidentally killed during crop mowing in the Delta lowlands in late May.

A black-necked stilt was identified by Bill Anderson and Jim Biggar on Sea Island on May 14<sup>th</sup>, 1971. It was later photographed and proved to be the first reported record of the species in B.C.

Don't be too surprised if, on your next bird outing you see a great blue heron wearing coloured bracelets. In fact we ask that you pay particular attention to this project. Nesting herons have been colour banded in red, white, yellow, blue and green during the summer months in an attempt to study feeding locations and distribution behaviour.

A delightful book, *Birds of Vancouver* by our own John Rodgers is now available for \$3.75 from Bryon Publications and local bookstores. It is written and intended as a guide for the novice birdwatcher.

**Domestic robins?** Mrs. Wilson of Richmond reported an interesting event. Finding a nestling [American] robin on her lawn seemingly abandoned, she fed it worms and put it in a canary cage on the back porch for the evening. The next morning a parent bird was at the cage with a beak full of worms and when Mrs. Wilson opened the cage door, the youngster was fed right there by the adult!

**Annual Bird Report:** Wayne [Campbell] and his assistants are performing a fantastic job on this report, but they can only produce if birders submit material. Don't forget, field notes on rare or unusual reports.

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**Anyone for Arizona.** Jack and Eileen Husted have returned from an exotic bird trip to Arizona with 80 new bird sightings for Jack. Their experience is available to anyone planning a trip to this area. Telephone 261-9485.

### **End Note # 57: A Nest Record of an Albino Robin in B.C. & [Bald Eagle Observation in Stanley Park] (see page 307-308)**

#### **Nesting Observations of House Finches**

This summer (May 30<sup>th</sup> – July 5<sup>th</sup> 1971), I had an opportunity to watch at close range a pair of house finches build their nest, raise their brood and leave 38 days later with their 4 fledglings. For three summers I had a small, moss filled basket hanging outside my dining room window. I had tied it to the framework of a canopy, protected from rain and wind, with a southern exposure. I kept it filled with wild birdseed and for the past two summers have had several pairs of house finches feeding there regularly. This spring one pair decided to build a nest and completed the job in several hours one Sunday morning. Three days later there was an egg, then one a day until there were four. The male was marked with dull gold instead of the normal reddish colouring. A normal red male was commonly observed in the vicinity of the nest, however, and frequently approached, only to be driven away by the gold male.

On the 15<sup>th</sup> and 16<sup>th</sup> days, four naked chicks with some down on their heads were hatched. The next day both parents were feeding them and the following day I could see the beaks pushing up as the parents landed on the edge of the nest. The mother was not off the nest very long at one time, and was always settled down for the night by 9:00 p.m.

In one week's time the chicks had considerable down and well-established pinfeathers, especially on their wings. When they were 10 days old they were stretching their wings and scratching themselves with claws and beaks. Their toilet habits were interesting. They defecated on the edge of the nest which gradually became festooned with fecal sacs, although at first the mother carried some of them away.

Both parents were kept busy as the chicks ate vociferously and gradually became more active and completely filled the nest. At this stage they were well covered with tiny feathers. On the 11<sup>th</sup> evening they were fed early, after which the mother sat on them to warm them and then left for the night. This routine continued from then on. By their 13<sup>th</sup> day the chicks were restless and when the parents called to them from nearby trees, they would cheep and stand up in the nest, flapping their wings. On the 15<sup>th</sup> day they were very active. I did not see what actually happened, but suddenly both parents, the red male and several others came rushing in chirping excitedly. When they left, the babies were crouched down in the nest, close to the 'safe' side against the canopy, not moving for an hour or more.

The next day they were back to their usual movements, the largest picking at the nest and nibbling some of the droppings. The morning of the 17<sup>th</sup> day he was gone. I soon saw him flying close to the gold male. All day they remained in a nearby tree, the youngster frequently begging for food from the male, with no apparent results. The mother fed the other 3 chicks in the nest and they in turn left before 6:00 a.m. the following morning with rapid, sure flight and gay cheeps. I saw very little of them after this, but once saw the whole family in the usual trees. After watching them for so long, I missed them very much when they were gone.

F. Kirkpatrick

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**The Faithful Snail:** One of the most beautiful and fascinating creatures that make its home in the humid forests of the Pacific slope of North America is *Mondaenia fidelis* Gray, the faithful snail. Specimens range in colour from albinistic to melanistic depending where you find them. It has been my observation that specimens from Vancouver Island are generally darker than those from the Mainland and may grow as large as 1.5 inches in diameter. Often it can be found living in association with *Haplotrema vancouverensis* Lea, *Polygyra towsendiana* Lea (Townsend's snail) and *Polygyra columbiana pilosa* Henderson, the hairy-shelled snail.

It might be interesting to note that the Vancouver haplotreme snail is a carnivorous species often preying upon such creatures as the hairy-shelled snail and certain millipedes. The faithful snail is largely vegetarian and on one occasion I observed them feeding on the leaves of salal. It is best known for its habit of making a structure called an epiphragm. Epiphragms resemble blotting paper and are made of dried mucous. They are not permanent structures such as opercula, but are a protection for the animal during periods of extreme cold and drought. The animal gets rid of the epiphragm by simply eating its way through it when more favourable weather is at hand.

Josiah Keep in his classic *West Coast Shells* (1935) says of the faithful snail: "The animal has a tinge of red in its complexion, and altogether I know of no more beautiful combination of form and colour than is seen some misty morning in summer when the snail is found extended on a cushion of fresh green moss beneath the foliage of an old forest tree".  
Al Grass

**A Glimpse of Wasa Park:** Years ago man, with axe and saw in hand, came into the East Kootenay area in what is now Wasa Provincial Park. The Douglas-fir and ponderosa pine of the Interior were large then, and marketable. When man left, those majestic trees were gone. Remnants of his early visit are there today if one looks closely. Parts of the old railroad bed that used to carry out timber can still be seen. A few large stumps remain – nature's history books long since out of print.

Ponderosa pine was quick to cover the scars and today they share the land with the more recently invading Douglas-fir. The open pine canopy allowed the Saskatoons to flourish too and now, in late spring, the evening air is filled with their fragrance. The wild rose also thrives in these surroundings, flowering as the Saskatoon fades. Oregon grape and kinnikinnick have claimed the poorer soil, protecting it from further damage by spring rains. Poison ivy has found a home in the Park too. The wooded area of Wasa ends abruptly and gives way to open grassy fields of larkspur, salsify, fleabane and beardtongue [penstemon]. The strange little stonecrop exhibits surprising beauty as its yellow starflowers open and the tiny rock rose [bitterroot] exhibits its bright pink flowers.

The animals have come too. Red squirrels feed on the seeds of the ponderosa and the ground squirrel's shrill whistle warns of nearby intruders. Enlarged ground squirrel holes half circled by mounds of earth indicate that the badger has feasted. Throughout the Park evidence of whitetail deer and elk can be seen by those who read the signs. Everyone reads the sign of the skunk!

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A walk through a shady grove is a harrowing experience the first time one is confronted by the hissing and gesturing of the ruffed grouse protecting her brood. Here the raucous call of the Clark's nutcracker sometimes breaks the afternoon stillness, some of the empidonaxes [flycatchers] can be heard "che-beking" and "fitz-bewing" and a cautious birder may see the least flycatcher on her nest. Through the day, the [American] redstart, calliope hummingbird, western tanager, white-breasted nuthatch and the ever present chipping sparrow may be seen. At dusk the common nighthawk soars overhead and cricket choruses swell. Now is the time a careless camper may get a rude awakening from a foraging black bear.

The East Kootenay Valley holds many surprises and Wasa Park is but one. Here the naturalist will be amazed at the rapid biotic zone changes in this dry and dusty land of coyotes, sagebrush and ponderosa pine.  
Neil and Karen Dawe

*Neil Dawe, employed by the Canadian Wildlife Service is one of the co-authors of the Birds of B.C. He is also a co-founder of the Brant Wildlife Festival in the Parksville/Qualicum Beach area.*

#153 December 1971

**End Note #58: Editorial – After Amchitka, Title for 'the' Book [Nature West Coast], Audubon Wildlife Films, & Heron There (see pages 308-311)**

### **UBC Great Blue Heron Project**

This summer we started a research project on great blue herons. Most of our work was carried out in a heronry in a patch of alders in the UBC Endowment Lands. We also banded nearly 100 young in a large colony at Port Coquitlam and made observations of a colony in Stanley Park.

About 60 pairs bred in the UBC heronry this year. In order to observe them at close quarters we constructed a tree house some 100 feet up in a Douglas-fir. Wayne Campbell, Dr. R. Drent, and several UBC students did much of the hard work involved. Together with three students, I made detailed observations of the birds throughout the period of egg-laying, incubation and hatching of the young.

The birds generally used nests left over from the previous year adding a few extra twigs and branches to refurbish the old platform perched precariously in the thin tops of 80 ft. alders. The clutches of 3-5 pale blue eggs were laid in mid-to late April, somewhat later than usual possibly as a result of the cold weather. The eggs were incubated by both parents, each individual staying on the nest for as long as 20 hours at a time. The parent not incubating usually spent most of its time away from the colony on the feeding grounds.

After a month of incubation the down-covered young hatched; they were incubated most of the time during the first week or two and fed once or twice every 4 to 6 hours, usually

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when the parents changed over incubation duties. As the nestlings grew older, the parents no longer incubated them but spent all their time rushing back and forth with food for the continually begging young. At this stage, the raucous cacophony of the colony could be heard through the forest for ¼ mile. The young spent two months in the nest before finally making their first tentative flights out of the colony.

In addition to observing behaviour, we were interested in the population ecology of herons; estimating numbers in the area, finding out when and why they die and how far they disperse from a particular colony. As a start we colour-banded as many young as possible from the UBC heronry (over 100), and almost as many from Port Coquitlam.

The colour bands are in six colours, red, green, yellow, white, black and blue. Each bird was given one or two colours, placed above the “knee” and a metal numbered band placed above the foot.

Local birdwatchers can make a valuable contribution to our study if they record any banded herons they observe, noting the colour combination (check if there is one band or two), which leg the bands are on, which colour is on top (if there are two bands) and pass on this record to Wayne Campbell or myself.

J.R. Krebs.

*Dr. J.R. Krebs was a Professor of Zoology at U.B.C. and an outstanding biologist with many publications. He was known and appreciated globally.*

### **End Note #59: Heerman's Gulls with White Wing Patches (see pages 311-312)**

#### **Geology, Nemaia Valley Camp, 1971**

The 1971 camp area proved to have few obvious geological attractions but it was an interesting site for behind-the-scenery geology, being located almost on a northwesterly trending hinge line separating the Chilcotin Plateau, on the north, from the Coast Range to the southwest. From the vantage point of Konni Mountain, north of the Nemaia Valley, the view to the north down over the nearly flat plateau extending to the horizon was in sharp contrast to the view south to a sea of rugged glacier-clad mountains. The plateau surface is to a large extent formed of flat-lying basaltic lava flows. The Coast Ranges are composed of older volcanic and sedimentary rocks turned up on edge and intruded by a variety of granitic rocks. These predominate in the axis of the Range and account for its ruggedness.

The rocks around Nemaia Valley are mostly of an older sedimentary group and include a conspicuous gray limestone on the southern flank. A younger group of sedimentary conglomerate and volcanic rocks form the mass of Mt. Tatlow. These have been designated Kingsvale Group from the locality near Princeton [Merritt]. They contain petrified Cypress logs at a locality near the south end of Chilko Lake, about 28 miles southwest of the camp. There may well be other localities yet to be discovered.

The flat-lying lava flows of the plateau form escarpments along the valley of Vedan Lake and along part of Taseko River, and they form the conspicuous headland of Cardiff Mountain. Small areas of similar rock have been mapped on the north slopes of Mt. Tatlow but they are not conspicuous from a distance. The west and south faces of Cardiff

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Mountain show a vertical face of basaltic lava with classically perfect columnar jointing. The columns are five or six sided and measure about one foot on a side. They have a regular transverse joint pattern that enables them to part into plates half a foot thick. The columns are surmounted by 50 to 60 feet of jointed lava which is a more resistant rock and makes bulging overhanging cliffs above the more rapidly weathering columns below.

Mt. Cardiff is not a volcano but only a promontory left by erosion. The source of the lava flows may be far to the north, possibly near Anahim Lake. They were evidently hot and fluid so were able to flow like water and assume a nearly horizontal surface. This surface is no longer horizontal but has been warped upward along the southern edge by the rising of the Coast Range. It is at an elevation of 3,600 feet on Mt. Tatlow. It is evident that the mountains were thrust up mainly after these lava flows formed in the Miocene period, about 10 million years ago.

Glaciers of the last Ice Age have helped to shape the present scenery. One or more huge tongues of ice passed through Nemaia from west to east, giving it its splendid U-shaped profile. Rounded boulders and gravel were dumped on the lower flanks of the valley providing material for the gravel beach on the east end of Konni Lake, shaped to a fine crescent by the incessant action of westerly waves. Meltwater from this glacier must have cut a temporary channel to the northeast, shaping the finger valley occupied by Elkin and Vedan Lakes. The ridge separating Tsoloss Valley from Nemaia appears to have been piled up by the valley glacier.

At a much earlier stage of the Ice Age, continental sheet glaciers poured from the Interior south-westward toward the Coast Range. Erratic boulders of basaltic lava high on the ridge of Mt. Konni (elevation 7,600 feet) are explained by this early glaciation. Again, high on the ridge of Mt. Konni there is a peculiar gash in the rock that can best be explained as the result of powerful streams of meltwater off high-level glaciers.

C. Ney

### **A Word For The Crow**

The crow is perhaps the best known bird in North America. Many call it a scoundrel; many are entertained by its antics; but all are amazed at its ability to survive. Persecution through open season the year round and concentrated drives by 'sportsmen', have had little effect on the crows' numbers. Being one of the most intelligent of birds, it has outwitted many crafty methods of extermination and left the hunter dismayed. Yet very few people know much about the crow and its personality. How often is the blame unrightfully put on the crow?

A year ago I studied the [northwestern] crow in a seabird colony [Mitlenatch Island] – an excellent place for the 'scoundrel' to go about its supposedly evil deeds. I also studied its cough [regurgitated] pellets to see how many nests it had raided. I watched it at the nest, the beach and from behind blinds in the seabird colony. I rose before it did in the early morning, and I watched where it roosted at night until it was too dark to watch anymore. I found by cough pellet analysis that in June the crow ate 56% unripe blackberry seeds; 18.8% shore crabs, 10% seeds and grasses, 3.7% [Japanese] little neck clams, and 11.5%

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small items. In July the birds ate 40% blackberries, 10.5% shore crabs, 12% [Japanese] little neck clams, 7.2% down (possibly young [glaucous-winged] gulls) and 30.3% smaller items. In August, 45% blackberries, 25% shore crabs, 15% gull down and 15% small items.

I decided to investigate the reason for the gull down appearing so often during July and August and thought I should be able to witness the crow killing a young gull. I watched and listened and found the crows feeding on young gulls that were killed by other means. In seabird colonies the gulls set up territories from which the young birds must not venture until they can fend for themselves. If the chicks do leave their home territory the neighbouring gulls will attack them. When man visits seabird colonies he often causes young birds to panic and run from their territories. The chicks are then very often killed. So man is at fault – not the crow. Next time you see a crow, stop and watch. It may teach you something.

Robert Butler

*Robert J. Butler, a scientist with the Canadian Wildlife Service, has done outstanding work with shorebirds which is of international interest. He was notable for his rapport with the general public and with the Vancouver Natural History Society.*

**End Note #60 – VNHS Summer Camp – Bird Report by Edward Sing: Illegal Shooting: Leaves and Protection Against Water Loss: Campbell River Park – Where Green is Green – pages 312-319**

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## **End Notes**

During the transcribing process some sections of text were inadvertently omitted. In addition, when reviewing the final draft, a number of items of ‘interest’ were deemed worthy of inclusions. Due to the nature of the Index and the way it was generated, it would have been very difficult to insert these ‘deletions’ into their appropriate locations. As a result they are being added as ‘**End Notes**’. These are indicated in the body of the text in the same sequence (location) where they occurred in the original newsletters. Their content was then added to the Index.

### **End Note #1 – from #79 May 1952 (from page 59)**

**Botanical Notice:** Do the botanical minded members of the Society wish to participate in a scheme for studying the flora of Stanley Park? Permission has been obtained from the Board of Parks Commissioners for a few of our members to collect specimens of the native flora. The purpose of the study will be to focus attention on the native plants growing in the park. Later on we would like to concentrate on the fauna, the geology etc. Perhaps a guide book on the Natural History could be prepared which would be of great value to all visitors.



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What is planned at this moment is this – a few people would be given individual permits for collecting purposes. Specimens would be carefully pressed and mounted, and then next winter under the direction of Dr. [T.M.C.] Taylor, they would be identified at the UBC Herbarium. Dr. Taylor has kindly offered to devote one night a month for this work, as well as permitting us to use the herbarium facilities and specimens on this night.

Will those members interested in spending some pleasant hours this summer in Stanley Park, collecting specimens of the native flora, send their names to the secretary at once. Plans will then be finalized for the commencement of this project.

### **End Note #2 - # 108 September 1959: Continuation of “The Rocky Mountain Trench” (from page 107)**

Other features in the Rockies are caused by faulting and the faulting is believed to have something to do with the trench because of its length, linearity and the truncated structures flanking it. Prince George breaks the trench into north and south parts. From Finlay Forks to the Liard River the trench is very straight and there is no doubt at all that it is controlled by faulting. North of Canal Flats too, the trench suggests faulting, but from here south to the International border it is poorly defined. This summer, field work in the trench will be undertaken near Findlay Forks. Dr. Armstrong and archaeologists have worked on dam sites in the trench. In the main, the trench is covered by glacial till underlain by gravel and sand. Glacial deposits occur frequently from Big Bend to 300 miles south and more. It is hard to find solid rock for dam sites. At Kimberly occurs the largest lead and zinc ore body in the world, but this is not in the trench.

There is a great complexity of detail based on the features of the trench and it will mean much hard work for many years to come before full knowledge of it is obtained and the final answer given as to its origin.

### **End Note #3 - #113 January 1961 - Bird Notes (from page 112)**

Betty Wise reports that during the field trip of Oct. 29, 1960, six immature Barn Swallows were seen by Norman Precious and herself at Point Roberts, near the Lighthouse. Unfortunately the other members of their group had just left the area. The birds were flying N.W. quite low, and in a most erratic fashion. According to Washington [State] records this would appear to be about one week later than previously noted. It was a fine sunny morning, about 9:00 a.m.

In addition to the above record, the undersigned observed two Barn Swallows flying directly above us in a northward direction at about 11:30 a.m. on Oct 30<sup>th</sup> 1960, on the dyke near the new causeway between Sea and Iona Islands.

Werner and Hilde Hesse

### **End Note #4 - #123 January, 1964 (from page 130)**

#### **About C.F. Connor**

Mr. C.F. Connor, who at 86 is still active in teaching and gardening, is a regular attendant at our annual banquet. For our newer members we might add the Mr. Connor was very active in

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the early days of the Society and has always been a strong supporter of it. We were glad to see him at our fall banquet and wish to assure him that he is always very welcome in all our affairs.

### **End Note #5 - #124 April 1964 - Society Representatives in other Organizations (from page 130)**

B.C. Nature Council  
[Vancouver Public] Aquarium  
B.C. Waterfowl Society  
Mountain Parks Committee  
Save the Beaches Association

Dr. J. E. Armstrong  
Mr. A. R. Wooton  
Mr. N. F. (Dick) Pullen  
Dr. V. C. Brink and Mr. A. R. Wooton  
Dr. J. E. Armstrong

Auditor

Mr. Ernest Penn

### **End Note #6 - #126 January 1965 - Second Aquarium Docent Course (from page 138)**

The Vancouver Public Aquarium's series of lectures on marine biology will be repeated in January for those wishing to participate in the second term of the school year. Any member who would like to take the course is asked to telephone Mrs. Middaugh at the Aquarium by January 15th. The course will begin January 19, and will consist of two lectures a week, for four weeks.

### **End Note #7 - #130 -February 1966 - What to do if you find a [bird] band. (from page 150)**

What to do if you find a live banded bird?

Do not remove the band, but read the number on the band, write it down, and release the bird carefully. Hopefully, the banded bird may be caught again elsewhere. Remember, don't take the band off: you might injure the bird.

Please send in the following information:

1. Your name and address (plainly printed).
2. All letters and numbers on the band.
3. The date you found the bird.
4. The place where you found the bird.
5. How you obtained the bird.

**PLACE THIS INFORMATION IN AN ENVELOPE AND SEND IT TO THE ADDRESS ON THE BAND.**

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If you find a band on a dead bird, straighten the band out and tape it securely to a piece of heavy paper. Send the following information with the band.

1. Your name and address (plainly printed).
2. All letters and numbers on the band.
3. The date you found the bird.
4. The place where you found the band.
5. Tell how you obtained the band (on a bird found dead - shot, trapped etc.)

**PLACE THIS INFORMATION AND THE BAND IN AN ENVELOPE AND SEND IT TO THE ADDRESS ON THE BAND.**

If the band you found was that of the U.S. Fish & Wildlife Service you will receive a letter from the Bird Banding Laboratory telling you where the bird was banded, what kind [species] it was and who banded it. The Smithsonian's Pacific Program, or whoever banded it will also learn that you found the band.

Please do not send bands to the Smithsonian Institution. This may cause confusion with other banding programs operating in the Pacific.

### **End Note #8 - #131 - May-July 1966: Nature Walks through Lighthouse Park (from page 154)**

On Sunday, June, 5th the West Vancouver Centennial Committee is sponsoring Nature Walks through Lighthouse Park as part of their Centennial celebration.

Members of the V.N.H.S. will be leading Nature Walks, which will start at 10:00 a.m. and another at 2:00 p.m. Everyone is welcome.

Meet at the gate in the parking lot.

### **End Note #9 - #131 - May-July 1966: Save the Beaches Association (from page 154)**

Once again the future of Boundary Bay is threatened - this time by surveys for possible deep sea harbours in the Lower Mainland.

The Save the Beaches Association remains alert and ready at all times to oppose commercial exploitation of the last large recreational area available to the people of the Lower Mainland.

Our association is dedicated to the preservation of Boundary Bay - all of it - for recreation and conservation. We hope to assist in the formation of a Lower Mainland Parks Authority which will undertake its development.

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The necessity for prompt action, to have the bay reserved for recreation, is emphasized by the latest news of potential industrial development. We believe there are enough other sites available for harbour development and that the best possible use for Boundary Bay is as a public playground.

We have expressed this view in a letter to all M.L.A.'s. We hope you will write to your member too.

### **End Note #10 - #131 - May-July 1966: Lighthouse Park Survey (from page 154)**

We would like very much to finish this project and so a call for "HELP" goes out to anyone interested in typing notes, collecting with Nancy Anderson and myself, or working with Joy Bryenton on gathering information on the various plant species. We need you all to put this project on the road. Please contact us, thank you.

Kathleen Smith

### **End Note #11 - #131 May -July 1966 Aquarium Docents (from page 154)**

The magnificent new extension of the Vancouver Public Aquarium will require additional docents for school tours in October. Men and women interest in this fascinating project are invited to phone Mrs. Dan Middaugh, Mu 4-3433. A course in aquatic biology will be given at the Aquarium throughout September (no previous training necessary).

### **End Note #12 - #131 May-July 1966: B.C. Waterfowl Society (from page 154)**

The following members of the Vancouver Natural History Society and members of the B.C. Waterfowl Society were among those elected as directors of the Waterfowl Society:

Mrs. W. J. Smith  
Dr. J. Bendell  
Dr. Fisher

Mrs. J. Anderson  
Dr. M.D.F. Udvardy  
Mr. R. W. Campbell

### **End Note #13 - #133 - December 1966 - February 1967: "Birding in a Breeze" participants list (from page 159)**

Naturalists Included: Bill Anderson Sr.  
Lauren Hay  
Lowell Orcutt  
Ian Yule

Errol Anderson  
Daryl Livingston  
George Sirk  
Ron Gray  
Elaine Mathews  
James Switzer

### **End Note #14 - #133 - December 1966 - February 1967 (from page 160)**

**Pacific Nest Record Scheme:** A very worthwhile project for all V.N.H.S. members.

An appeal to all ornithologists to help build a valuable collection of data on the biology of breeding birds.

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The British Columbia Nature Council will now work with the Dept. of Zoology, U.B.C. on this project, with Mrs. L. Gibbard, 465 Ellis St., Penticton, as corresponding secretary. The official records to be kept at the U.B.C. Zoology Dept.

The Nest Records Scheme is a very interesting project for all amateur ornithologists. Please help record as many nests as you can this coming year. Write to Mrs. Gibbard for information and record cards. Let us see who can reach 100; come on Seniors, see if you can beat the Intermediates [Intermediate Section members of the V.N.H.S.].

### **End Note #15 - #134 March - May 1967 (from page 160)**

#### **Intermediate Naturalists are Busy Birders.**

Dear Sir:

I would like to submit this list of the birds the intermediate naturalists have seen in the year 1966. I hope it will show that many of the younger naturalists have been hard at work in the field. I have made one list of the more common birds and another list of the rarer birds, including who sighted them, where and when. The birds marked with asterisk were known to have nested.

|                            |                                   |                           |
|----------------------------|-----------------------------------|---------------------------|
| 1. Common Loon             | 15. [Greater] White-fronted Goose | 29. Canvasback            |
| 2. Arctic Loon             | 16. Snow Goose                    | 30. Greater Scaup         |
| 3. Red-throated Loon       | 17. Black Brant                   | 31. Lesser Scaup          |
| 4. Red-necked Grebe        | 18. Mallard *                     | 32. Common Goldeneye      |
| 5. Horned Grebe            | 19. Gadwall *                     | 33. Barrow's Goldeneye    |
| 6. Eared Grebe             | 20. [Northern] Pintail            | 34. Bufflehead            |
| 7. Western Grebe           | 21. Green-winged Teal             | 35. Oldsquaw              |
| 8. Pied-billed Grebe *     | 22. Blue-winged Teal *            | 36. Harlequin             |
| 9. Dbl-crested Cormorant * | 23. Cinnamon Teal                 | 37. White-winged Scoter   |
| 10. Brandt's Cormorant     | 24. American Widgeon              | 38. Surf Scoter           |
| 11. Pelagic Cormorant      | 25. European [Eurasian] Widgeon   | 39. Common [Black] Scoter |
| 12. American Bittern       | 26. [Northern] Shoveler           | 40. Ruddy Duck *          |
| 13. Whistling Swan         | 27. Wood Duck *                   |                           |
| 14. Canada Goose           | 28. Ring-necked Duck              | Lowell Orcutt             |

#### **[Rarer Birds]**

|                   |                |                    |                |
|-------------------|----------------|--------------------|----------------|
| House Wren        | Errol Anderson | Point Roberts      | June 23rd      |
|                   | Barry Edwards  | Grouse Mountain    | June 21st      |
| [Gray] Catbird    | Roy Fryer      | Pitt Meadows       | May 29th       |
| Mountain Bluebird | Barry Edwards  | Trout Lake         | June 1st - 4th |
|                   | George Sirk    | Hollyburn Mountain | January 10th   |
| Nashville Warbler | George Sirk )  |                    |                |
|                   | Ian Yule )     | Lighthouse Park    | August 21st    |

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|                        |                  |                    |               |
|------------------------|------------------|--------------------|---------------|
| Magnolia Warbler       | George Sirk      | Hollyburn Mountain | November 23rd |
| White-winged Crossbill | George Sirk      | Hollyburn Mountain | December 26th |
| Chestnut-sided Warbler | Lowell Orcutt )  |                    |               |
|                        | George Sirk )    | Pt. Grey           | July 27th     |
| Common Redpoll         | George Sirk      | Hollyburn Mountain | November 23rd |
|                        |                  |                    | December 26th |
| Pine Grosbeak          | Daryl Livingston | Grouse Mountain    | January 8th   |
| Harris's Sparrow       | Errol Anderson ) |                    |               |
|                        | Lowell Orcutt )  |                    |               |
|                        | George Sirk )    | West Vancouver     |               |

### **End Note #16 - #135 June - August 1967 (from page 163)**

#### **Report on Intermediates:**

Birding continues to hold most interest for the intermediates. There is a nucleus of from six to eight youths who are very well informed on birds and a further group of six to ten who are coming on.

Attendance at meetings and trips has taken big ups and downs throughout the season and it is most difficult to know what progress is being made with the organization.

The first mentioned group needs little incentive but it becomes increasingly difficult to provide new and interesting fields, for balance, to those who are not so dedicated.

The real lack is a young inspired leader with lots of time to spare and an enthusiasm to arouse and hold their interest.

Introduction of subjects other than birds has met with some success but little more than lip service is paid to them by most.

The loss of Robin Best was keenly felt as no one has arisen to replace him.

Frank J. Sanford

#### **Annual Report - Vancouver Junior Naturalists**

The Junior Section is suffering a bit from lack of members. During the 1966-1967 season 30 were all we could muster. This fall-off in membership began when the Intermediate Section was formed, as the nucleus of older children moved away from the Juniors, leaving us rather raw. At many of our meetings there are as many or more parents than children.

This is fine, as we need the help of the parents and their cars, but children tend to pay less attention to the leader when Mum and Dad are along and the children's "own club" feeling is lost. This is very noticeable when only children show up for a trip. We have no solution

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to this “problem”.

We had 19 field trips, mostly fairly well attended, 7 evening meetings and our annual Christmas party. Those who attended were most enthusiastic.

We have an executive who meet three or four times a year, made up of the Intermediate and Junior leaders, two intermediates and two juniors, as well as several parents, and one or two senior members.

It is our present plan to have a membership drive this fall. The last one we had, about eight years ago, resulted eventually in our top membership of 95 children.

As always, we should appreciate any help from senior members and wish to thank all of them who so kindly offered their time and talents to make our year an interesting and instructive one.

Winnifred I. Pearson, Chairman.

### **Vancouver Natural History Society - Intermediate Section**

The Intermediate Section has, I feel, left a great many people in the dark as to what we are doing. In addition to most of us spending our spare days in the field, there have been at least two planned and organized field meetings a month since the section came into being in January 1965. Although our primary interest at the moment lies in ornithology, we are anxious to incorporate other subjects, such as perhaps botany, entomology, mycology and astronomy.

Had it not been for the great help and support from our leaders, especially Miss W. Pearson and our co-ordinator, Mr. Sanford, this section would never have got off the ground.

Even though some people get plastered with mushrooms, get a little wet, lose their car keys (sorry Mrs. Smith), had their cars demolished (Mr. Sanford), get a plague of fleas from cleaning wood duck nesting boxes under the slave driving Wayne Campbell, escape to India, or get stranded on islands and have their boat stolen, the twenty-four paid up members whom we now have, learned a great deal as well as had a lot of fun.

The Intermediate Section, whose ages range officially from 14 to 18, have their evening meeting with the Juniors to ensure adequate attendance.

Although we have had quite a few work parties at the George C. Reifel Waterfowl Refuge, we are in desperate need of another project to work on.

Rob Gray.

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### **End Note #17 - #137 December 1967 - February 1968 (from page 167):**

#### **Attention Intermediates - Specimen Hunting for the Aquarium**

This year the Intermediate Section of the Society has a project to work on. As of early January, with the help of some of the Aquarium staff, we will go out occasionally to find and return to the aquarium, live marine plants and animals, for the biology classes held by the Education Department.

On the afternoon of October 26th, the old and new executive of the group went down to the Aquarium to discuss the plans with Miss [Sharon] Proctor. We hope you will all do a little studying on the invertebrates, crustacea and marine plants to ensure a little knowledge of what we will be involved with. We hope you will all enjoy this project as it should prove very interesting as well as educational.

Jim Switzer

### **End Note #18 - #139 - June - August, 1968 (from page 178)**

#### **Docent Training - Vancouver Aquarium**

The Vancouver Public Aquarium will be holding another docent training course this fall, commencing in early September. The course will include training for conducting elementary school tours and the Grade 11 program. V.N.H.S. members have been active docents in the past and their participation is much appreciated. We are also encouraged to continue the good work by taking the fall Docent course and helping to lead the tours next winter. Watch the next bulletin for information regarding the dates for the fall course, and information on how to apply.

### **End Note #19 -#139 - June -August, 1968 (from page 183)**

#### **Ornithology Comments**

The Snowy Owls and Northern Shrikes departed about the end of March. Would members please report any April sightings of these species to J. [Jack] Husted.

Members are reminded that the shorebirds migrate south through Vancouver starting in July. Later in August, Point Roberts is an excellent site for the terns, Jaegers and other species.

There are no ornithology field trips scheduled for July or August.

### **End Note #20 - #140 - September – November, 1968 (from page 186)**



## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

### **Chairmen of Sections**

The following new officers have recently been appointed:

|                                  |                     |
|----------------------------------|---------------------|
| Geology                          | Mr. Charlie Ney     |
| Mycology                         | Mr. Foote Waugh     |
| Entomology                       | Mr. Allan Wooton    |
| Co-ordinator of Evening Meetings | Mr. Arnold Greenius |

### **Botany Section - Orchids**

Attention members of the orchid group:

Summer is almost over and I hope you have found many orchids in many places. I would like to remind you to get your reports ready and send them to me. Should any of you have seen orchids, but did not possess the proper maps, please phone me, as the Society has maps

including Vancouver Island, Vancouver and the region up to Manning Park. In many instances you will still be able to pin-point your findings on the maps and then send your reports, according to the instructions, to me. Reports should be in by October, or early November. What would you think of an evening of your slides and comments regarding the orchids?

Mrs. Fred (Emmy) Fisher

### **End Note #21 - #140 September - November, 1698 (from page 190)**

#### **Some Interesting Plants from Crescent Beach**

Crescent Beach, from the botanical point of view, is a very interesting area. One of the attractions is the large selection of marsh species. There are other interesting habitats, each with its characteristic flora. These habitats can be classified as: salt marsh, Upper Beach, Fields and Meadows, Woods, Bushy Hillsides, and what I call the 'roadside zone'. Fresh-water plants are limited to a few ditches and low spots.

Listed here are some of the more interesting and colourful plants:

[Seaside] Arrow Grass, [seashore] Salt Grass, Small False Solomon's Seal, [Hooker's] Fairy Bells, *Asparagus officinale* [garden asparagus], Fumitory, Whitlow Grass [common draba], Sea Rocket, Tower Mustard, Beach Salt Bush [silvery orache], [American] Glasswort, Sweet-after-death [vanilla-leaf], Goat's-beard, Rough [Norwegian] Cinquefoil, Wild [beach?] Pea, Giant Vetch, Small [common?] Vetch, Naked-stemmed Hog-fennel [barestem desert-parsley], [saltmarsh] Dodder, Hemp-hettle, [European?] Bittersweet, Canada [blue] Toadflax, Seaside [sea] plantain, Oyster Plant [common salsify], Sand Bur [silver burweed], Brass Buttons, and *Collomia linearis* [narrow-leaved collomia].

Al Grass

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**Note:** Mr. Grass' text includes scientific names, and some general notation as to habitat, which space limitations have regrettably forced us to delete. - Editor.

### **End Note #22 - #140 September - November, 1968 (from page 191)**

#### **Ornithology Section - Interesting Bird Sightings**

Al Grass reports the following:

|                           |                |                                    |
|---------------------------|----------------|------------------------------------|
| Stilt Sandpiper           | Burnaby Lake   | May 20, 1968                       |
| Horned Grebe              | Crescent Beach | June 16, 1968 In breeding plumage. |
| Surf Scoters (23)         | Point Roberts  | June 30, 1968                      |
| White-winged Scoters (45) | " "            | " "                                |
| Eastern Kingbird (6)      | Blaney Creek   | August 4, 1968                     |
| Green Heron (2)           | " "            | " "                                |
| Heerman's Gull (15)       | Point Roberts  | August 11. 1968                    |
| Black Brant               | " "            | " "                                |

Kay Smith submits the following species as having been sighted at the VNHS Summer Camp at Garibaldi Park: Common Goldeneye, Sharp-shinned Hawk, Ruffed Grouse, Bald Eagle, White-tailed Ptarmigan, Pectoral Sandpiper, Spotted Sandpiper, Rufous Hummingbird, Gray Jay, Clark's Nutcracker, Common Raven, Black-capped Chickadee,

Chestnut-backed Chickadee, Dipper, Red-breasted Nuthatch, Winter Wren, [American] Robin, Hermit Thrush, Golden-crowned Kinglet, Water Pipit, Gray-crowned Rosy Finch, Pine Siskin, Slate-coloured and Oregon [both Dark-eyed] Juncos, and Golden-crowned Sparrow.

### **End Note #23 - #141 - December, 1968 -February, 1969 (from page 201)**

#### **Pacific Nest Record Scheme**

Mrs. V. Gibbard, of 465 Ellis St., Penticton, is the Corresponding Secretary for the Pacific Nest Record Scheme. In the two years since Mrs. Gibbard took on the task, there has been an increase in the number of contributors of nest record cards from 40 in 1966 to 127 in 1968. However Mrs. Gibbard is not satisfied; are there not a number of "birders" who could add to the interest of their field trips by recording nests? Nest Record cards and instructions can be obtained from Mrs. Gibbard at the above address.

#### **Botany Section Dr. K. I. Beamish, Co-ordinator**

##### **Attention Orchid Group**

Dr. Beamish has kindly invited us to an evening of orchid slides and exchange of information on the orchid project. The meeting will be on Thursday November 21st at 8:00 p.m. in the taxonomy lab at the Biological Sciences Building, U.B.C. Room 3220.

Please bring your orchid slides . There will also be our maps available for those who have

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not yet pinpointed their findings, as reports have to go in soon.

Do try to come. There will be some interesting slides to be seen, and we would like to hear about your experiences collecting orchids.

Mrs. F. Fisher, Co-ordinator Orchid Group

### **Attention Botanists and photographers**

In the spring and summer of 1969 we plan to pool our talents, and produce a slide series that will become the property of V.N.H.S.

The object of this series will be to give instructions in identifying common plant families of British Columbia. Content will be directed by Dr. Katherine Beamish.

Four Wednesday meetings will be held in which the series content, and the necessary photographic techniques will be discussed. These are scheduled for Jan 15th, February 12th, March 12th and April 16th.

It would be most helpful for planning purposes to know the number of photographers prepared to take an active part in this project, also the number of members likely to attend the above meetings.

If interested please phone Roy Edgell, 922-2664.

### **End Note #24 - #141 - December, 1968 - February, 1969 (from page 202)**

#### **V.N.H.S./B.C. Nature Council-Joint Conservation Committee**

Dr. V.C. Brink, Chairman of the joint committee had the second annual meeting with the Hon. Kenneth Kiernan, Minister of Recreation and Conservation, in Victoria on 9th October, 1968.

Points of interest to members of the V.N.H.S. which emerged were:

1. Agreement that a committee on Conservation and Recreation was desirable. That the Minister would chair such a Committee and that its composition should include naturalists and other outdoor groups, and professional groups concerned with the use of natural resources. Function of the committee would be communication.
2. Trail construction in Mount Seymour [Provincial] Park will continue.
3. Minister accepted with interest the idea of a major park in the inner Chilcotin area, first scouted by Norm Purssell.

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4. Minister concerned to conserve open areas in the Lower Fraser Valley, and the V.N.H.S. should support his Department's efforts. In organized (municipal) areas 25% of cost of purchase, etc. will be met by the province.
5. Situation concerning access to Cathedral Lakes well understood by the Minister, and action being taken by the Crown to ameliorate the situation.

Peg Briault, Secretary, B.C.N.C.

### **End Note #25- #142 - March - May 1969 (from page 203)**

#### **Editorial - The High Cost of Living**

The attention of members of our Society is drawn to the Notice of Motion, printed in the following paragraph, in connection with a proposed amendment to the By-laws, raising the annual membership dues. The membership will be asked to vote upon and approve this motion at the regular meeting of March 19th, 1969. For reason well know to all, the Society has always endeavoured to keep the membership dues at a rock-bottom figure so persons from every walk of life might enjoy the benefits of membership, and these dues have been raised only twice before in the Society's long history. Currently heavy increases in costs of every kind now render a further increase unavoidable. The increased cost of producing the Bulletin, and the recent "hike" in mailing costs are only two examples of our rapidly rising operating costs.

It should also be remembered that the Society offers much more to its members than formerly was the case. Our participation in the valued work of the B.C. Nature Council, which surely no member would wish to repudiate, represents a substantial annual cost to the Society, which is about to be increased. Our affiliation with the Vancouver Museums Association, whereby our members enjoy the privileges of the fine new Civic Museum, is a further very worthwhile item which, however, also involves a substantial cost not formerly facing the Society. It may be reflected that the great bulk of the Society's year-to-year activities, enjoyed by all, are provided gratis by a group of dedicated members, experts in their several fields.

It is confidently expected that the membership will ratify this very necessary increase in annual dues by approving the following motion on March 19th, 1969, to approve a recommendation that the Society renew for a further year, its affiliation with the Vancouver Museums Association, at a cost (to the Society's treasury).

Moved Dr. Fred Fisher, Seconded P. [Phil]Croft that;

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“The Annual Dues shall be five dollars per year for an individual and eight dollars per year for a family”.

### **End Note #26- #142-March-May 1969 (from page 203)**

#### **Night School Courses in Botany and Ornithology**

The Adult Education Department of the North and West Vancouver Night Schools is putting on a number of courses this spring of particular interest to natural history people. “Botany for Campers and Hikers” will be a ten week course commencing Tuesday, March 18th, from 7:30 to 9:30 in Delbrook Secondary School, Room B-2. “Bird Watching”, a ten session course commencing Wednesday, March 18th, 7:30 to 9:30 in Carson Graham Senior Secondary School, will be on field recognition of birds and includes field trips. Other courses in Astronomy, Photography, Geology for Rock Hounds, and Driftwood Finishing are also being given. For further information phone the Night School office 985-8741.

### **End Note #27 - #142-March - May 1969 (from page 205)**

#### **Ornithology Section - Birds for the Record - Co-ordinator Wayne Campbell**

|                             |                   |          |                                |
|-----------------------------|-------------------|----------|--------------------------------|
| Buff-breasted Sandpiper (3) | Iona Island       | Sept. 28 | R. E. Luscher                  |
| Spotted Sandpiper (1)       | Stanley Park      | Nov. 1   | J. G. Sarles                   |
| Harris's Sparrow (1)        | West Vancouver    | Nov. 17  | E. G. Barnes                   |
| Townsend's Warbler (1)      | Stanley Park      | Nov. 23  | W. J. (Kay) Smith              |
| Hutton's Vireo (1)          | Stanley Park      | Nov. 26  | John Yak                       |
| Barn Swallow (6)            | Westham Island    | Dec. 5   | Campbell, Foottit<br>and Weber |
| Whistling Swan (2)          | Pitt Meadows      | Dec. 8   | Ken C. Boyce                   |
| Green Heron (1)             | Ladner            | Dec. 21  | Grass & Ryder                  |
| Short-Eared Owl (1)         | Reifel Refuge     | Jan. 28  | Grass & Ryder                  |
| American Bittern (1)        | Reifel Refuge     | Jan. 26  | Al Grass                       |
| Snowy Owl (2)               | Richmond No 3 Rd. | Feb 1    | Al Grass                       |

### **End Note #28 - #143 - August 1969 (from page 208)**

#### **Ornithology Section - Birds for the Record (1969) - Co-ordinator Wayne Campbell**

|                        |                 |         |               |
|------------------------|-----------------|---------|---------------|
| Band-tailed Pigeon (2) | South Vancouver | Feb. 18 | R. E. Luscher |
| Trumpeter Swan (2)     | Westham Island  | Feb. 22 | Brian Davies  |
| Gyr Falcon (1)         | Westham Island  | Feb. 22 | W. Campbell   |
| Emperor Goose (1)      | White Rock      | March 2 | John Toochn   |
| Cinnamon Teal (2)      | Westham Island  | April 2 | Brian Davies  |
| Barn Swallow (1)       | North Burnaby   | April 7 | W. Campbell   |

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

|                                    |                 |          |                              |
|------------------------------------|-----------------|----------|------------------------------|
| Sandhill Crane (2)                 | Ladner          | April 8  | G. Trevitt                   |
| Yellow-headed Blackbird (1)        | Iona Island     | April 13 | W. Campbell                  |
| Sora Rail (1)                      | Iona Island     | April 13 | Ian Kennedy                  |
| Whimbrel (1)                       | Beach Grove     | April 14 | W. Campbell<br>& Ian Kennedy |
| Vaux Swift (1)                     | North Vancouver | April 25 | W. Weber                     |
| Myrtle [Yellow-rumped] Warbler (1) | North Vancouver | April 25 | W. Weber                     |
| Black-throated Gray Warbler (1)    | North Vancouver | April 25 | W. Weber                     |
| Blue-winged Teal (1)               | Iona Island     | April 30 | R. Foottit                   |
| House Wren (1)                     | Galiano Island  | May 3    | T. Stevens                   |
| Turkey Vulture (1)                 | Sea Island      | May 7    | G. Peatfield                 |
| Nashville Warbler (2)              | Alice Lake      | May 7    | Campbell & Foottit           |
| Hammond's Flycatcher               | Alice Lake      | May 3    | Campbell & Foottit           |
| Olive-sided Flycatcher             | Alice Lake      | May 8    | Campbell & Foottit           |
| Solitary Vireo                     | Alice Lake      | May 6    | Campbell & Foottit           |
| Marbled Godwit                     | Iona Island     | May 11   | Bill Anderson                |

### **End Note #29 - #144 - September to November, 1969 (from page 209)**

#### **Intermediate Section**

During the past twelve months, we have been fortunate in having a good variety of meetings. For the benefit of those who were not able to attend, here is a short resume of the most outstanding ones:

On the 23rd of November, we had a most interesting expedition to the Salmon Fisheries Lab at Cultus Lake, where Maisy Ferguson showed us both the histology lab, and a dissection of the alveoli [sic]. In the former, salmon tissues were first dehydrated, and then placed in a block of wax, to be finely sliced (1/10,000mm) for microscope study. In the early spring, we hiked about Bowen and Finnistere Islands and as well as birds and spring flowers, we had a short look at the intertidal landscape. Three weeks later, Foote Waugh took us about the rocks at Lumberman's Arch, where we had a more detailed study of marine biology. That day happened to have about the lowest tide in the year. The Valley Tour on June 21st

took us to Kanaka Creek, where most of us found at least one or two fossils, leaf imprints estimated to be between 50 and 75 million years old! That was the last scheduled trip in the 1968-69 year, and it looks as if the next programme will be just as good. Please note that Sunday is now our meeting day, which means that more will be able to turn out. Finally, your name will not be included in the membership list unless you pay your dues by the beginning of October.

Elaine Matthews (President)

#### **Junior Section - Leaders Bob Foottit and Ken Kennedy**

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

The Juniors have been quite busy this summer. There was a total of seven field trips to various parts of the Lower Mainland. We would like to thank Dr. Stace-Smith, for leading a group of youngsters through the intertidal zone at Brockton Point. We would also like to thank Mr. R. D. Harris for taking a group to the George C. Reifel Waterfowl Refuge.

The field trips in the summer and the ones coming up now are not on any single topic. It is hoped to get the juniors interested in all fields of natural history and not be too specific at such an early age. This does not mean that if a junior likes one particular topic better than any other, that he cannot work harder at it. In the fall program there will be field trips, weather permitting, or a program of films and other indoor projects will be carried out in the Junior museum.

All field trips will begin at the Centennial Museum and Planetarium at 10:00 a.m., unless you are otherwise notified. Always bring a lunch, notebook, binoculars and/or a camera.

### **End Note #30 - #144 - September - November, 1969 (from page 211)**

#### **Botany Section - Co-ordinator Stan C. Roberts**

With the start of the Camp in the latter part of July, the Botany workshop Study Group, under the competent guidance of Kay Beamish, curtailed their activities for the rest of the summer. Since early June, about a dozen interested amateur botanists spent at least one evening each week in the University area, generally returning after an hour field trip to Kay Beamish's lab to key the specimens collected. The workshop had its humorous incident, one being the time when the members formed a sort of shield to protect Kay from the view of the University Police Station while she collected specimens in the boulevard exotic flower plot!

It is hoped that the Botany Workshop can be continued during the fall and winter months on an information basis limited to the study of family groups. Kay Beamish has indicated that her lab may be available for one evening every week or two weeks. Possibly those in the Botany-Photography group may like to attend these meetings so as to learn to key the plant in the family which they are photographing in order to become familiar with their characteristics.

#### **Botany - Photographic Group - Co-ordinator: Roy Edgell**

A meeting of this group will be held at Pacific Press, 2250 Granville on Tuesday, September 9th at 8:30p.m.

Before the meeting, groups are requested to choose the slides they wish to present on their selected family (botanic) so that we may show and assess the results of our project to date.

#### **Attention - Orchid Group - Co-ordinator: Emmy (Mrs. F.) Fisher**

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

This group will meet on Saturday, September 20th at 2:30 p.m. in Dr. Beamish's lab to make up their yearly reports. The available maps will be there.

Please remember that reports must be typed in triplicate with triple spacing.

### **End Note #31 - #144- September-November 1969 (from page 212)**

#### **Ornithology Section - Co-ordinator Wayne Campbell**

##### **Birds for the Record (Summer 1969)**

|                                   |                   |             |                 |
|-----------------------------------|-------------------|-------------|-----------------|
| Ruddy Turnstone (1)               | Iona Island Jetty | May 13      | Bill Wilson     |
| Ring-billed Gull (1)              | Iona Island       | May 13      | Bill Wilson     |
| [Northern] Mockingbird (1)        | Pitt River,       | May 24      | F. Pratt        |
| [Gray] Catbird (1)                | Pitt Meadows      | May 24      | J. Toochin      |
| Turkey Vulture (1)                | S. Pender Island  | June 2      | Eve Smith       |
| Least Flycatcher (1)              | Stanley Park      | June 7      | Wayne Weber     |
| Avocet (2)                        | Iona Island       | June 13     | Bill Anderson   |
| Bank Swallow (5)                  | Trout Lake        | June 17     | Barry Edwards   |
| Green Heron (1)                   | Iona Island       | June 28     | Bob Baker       |
| [Greater] White-fronted Goose (1) | Iona Island       | June 28 )   | Bill Anderson,  |
| Cackling [Canada] Goose (1)       | Iona Island       | June 28 )   | Switzer & Baker |
| Bullock's Oriole (1)              | Langley           | June & July | Glen Ryder      |
| Lesser Yellowlegs                 | Westham Island    | July 6 )    | Madelon         |
| Greater Yellowlegs                | Westham Island    | July 6 )    | Schouten        |
| Ruddy Turnstone (1)               | Iona Island       | July 24     | Wayne Weber     |
| Semi-palmated Plover (1)          | Westham Island    | July 27     | Jack Husted     |

### **End Note #32 - #145 - December 1969 - February 1970 (from page 214)**

##### **Birds for the Record (Fall 1969)**

|                        |               |         |                    |
|------------------------|---------------|---------|--------------------|
| Sora Rail (1)          | Iona Island   | Aug. 13 | Bill Anderson      |
| Franklin's Gull (1)    | Iona Island   | Aug. 16 | Jack Husted        |
| Ruddy Turnstone (2)    | Point Roberts | Aug. 23 | V.N.H.S. Trip      |
| Black Turnstone (1)    | Point Roberts | Aug. 23 | V.N.H.S. Trip      |
| Northern Phalarope (3) | Diamond Head  | Aug. 30 | Barbara Howie      |
| Parasitic Jaeger (1)   | Roberts Bank  | Sept. 1 | Peter McAllister   |
| Golden Plover          | Point Roberts | Sept. 6 | Ken C. Boyce       |
| Lewis's Woodpecker (2) | Point Roberts | Sept. 6 | Ken C. Boyce       |
| Ruffed Grouse (1) )    | Iona Island   | Sept. 7 | Bill Rae, Verna    |
| Willet (1) )           |               |         | Newson & M. McFeat |
| Sabine's Gull (1 Imm)  | Richmond      | Sept. 7 | Wayne Campbell     |



## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

|                                       |                      |          |                         |
|---------------------------------------|----------------------|----------|-------------------------|
| Peregrine Falcon (1)                  | Westham Island       | Sept. 7  | V.N.H.S. Trip           |
| Green Heron (1)                       | Westham Island       | Sept. 7  | V.N.H.S. Trip           |
| Sharp-tailed Sandpiper (1)            | Iona Island          | Sept. 14 | W. H. Hesse             |
| Semi-palmated Sandpiper (2)           | Iona Island          | Sept. 15 | Bill Wilson             |
| Oregon [Dark-eyed] Junco (1)          | Iona Island          | Sept. 15 | Anderson, Baker         |
| [Northern] Goshawk (1)                | Westham Island       | Sept. 24 | Brian Davies            |
| Black-billed Magpie (1)               | Queen Elizabeth Park | Sept. 26 | Ken C. Boyce            |
| Harris's Sparrow (1)                  | West Vancouver       | Sept. 26 | Kay Smith (Barnes)      |
| White-throated Sparrow (1M)           | Pitt Meadows         | Sept. 28 | M. Schouten & E. Fisher |
| Yellow-shafted [Northern] Flicker (1) | South Vancouver      | Oct. 2   | J. Toochin              |
| Skua (1)                              | Brocton Point        | Oct. 9   | Ken C. Boyce            |
| Ancient Murrelet (2)                  | Galiano Island       | Oct. 12  | Tom Stevens             |
| Rough-legged Hawk (2)                 | Iona Island          | Oct. 14  | Wayne Campbell          |
| Northern Shrike (2)                   | Iona Island          | Oct. 14  | Wayne Campbell          |
| European [Eurasian] Wigeon (1)        | Stanley Park         | Oct. 17  | Ed Moody & John Yak     |
| Saw-whet Owl (1)                      | Stanley Park         | Oct. 17  | Ken Kennedy             |
| White-winged Crossbill (1)            | Point Roberts        | Oct. 25  | Wayne Weber             |
| Whistling Swan (5)                    | Spanish Banks        | Oct. 27  | George Sirk             |

### **End Note #33 - #145 - December, 1969 - February, 1970 (from page 216)**

#### **Christmas Bird Count**

This year the day-long count will be held on Sunday, December 21. All people interested in participating please contact Wayne Campbell so arrangements can be made for a meeting of participants before count day. Anyone can participate, at least one experienced birder will be with each field party.

A post- count smorgasbord supper is being arranged for all participants, their families and friends.

#### **Wing Tagged Gulls - by R. [Rudi] Drent**

As part of an intensive study of the ecology of the Glaucous-winged Gull, 119 adult birds were marked by University of British Columbia ornithologists with wing tags this past summer at one of the breeding colonies in the Gulf Islands. These tags are circular pieces of bright red plastic attached to the right wing by means of an aluminum rivet. Each tag bears a number, or a number and a letter combination printed in black so that each bird can be recognized as an individual.

the object of marking these birds in such a conspicuous way is to allow their movements to be traced throughout the year especially with the view of finding out how important garbage dumps may be as feeding areas.

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

Please report any sightings on these birds, even if you have not been able to read the Number, to John Ward, Dept. of Zoology, U.B.C., Vancouver. Progress reports will be prepared from time to time and sent to all co-operators.

### **End Note #34 - #145 - December 1969 - February 1970 (from page 222)**

#### **Use of V.N.H.S. Membership Cards to Gain Admittance to the Museum**

The attention of the Members is drawn to the fact that the Society is an Affiliate group in the Vancouver Museums Association, and free admittance to the Museum is available to all V.N.H.S. members in good standing, upon presentation of their V.N.H.S. Membership cards. This year the Museums Association is not issuing separate Affiliate Membership cards to V.N.H.S. members (as was done last year), and your V.N.H.S. card will be your passport into the Museum. The free admittance does not include the Planetarium.

### **End Note #35 - #146 - March - May 1970 (from page 223)**

Dr. Beamish reports that the Lighthouse park project [Nature West Coast] is progressing slowly but steadily. Our dozen artists have finished 200 line drawings and have others in various stages of completion. The ferns and seed plants, marine life, insects and the mushrooms are well in hand. Mosses, lichens, mammals and birds are following closely. Discussions of geology and ecology are done and a number of people are writing data and comments to accompany the drawings. Maps are in preparation. The goal for publication is now dimly in sight.

#### **Library News**

Some time ago Mrs. H. Pinder-Moss listed all the books belonging to the Society, numbering about 150 volumes.

The Society has permission to place the locked bookcase in the Museum's Members' Lounge so that the books may be more readily available to members. Plans are underway to obtain a bookcase compatible with [the] Museum furnishings. Mrs. Pinder-Moss has offered to look after the signing out of books at our regular meetings and at other times convenient to her.

Mr. C. F. Connor has recently offered the Audubon Encyclopedia to the Society. His generosity and that of others who have recently presented books to the Society is sincerely appreciated. Books will be listed in a future edition of the bulletin.

#### **Vancouver Junior Naturalists - Co-ordinator Ken Kennedy**

It has been confirmed that we will have our first Nature Display Day on March 21, 1970. It will be held in the Junior Museum beginning at 10:00 a.m. There will be some time for you

to set up your project. Once all the projects are set up then you will have a chance to hear what the others have done. You will be able to ask questions. The public may be allowed in from 12:00 noon if time permits.

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

Your project would be best in the form of a chart. Maybe you have a small collection or a pet you might like to bring and tell a little about. You might want to show what plants and animals might be found in a wooded area or a list of inhabitants of a salt water tide pool? It is entirely up to you how much detail you include and how big your project should be. Because of limited space it should not be TOO large! If you need help in any way or have any other questions please give me a call.

It is hoped that you will learn from this project and that you will help in teaching others. So good luck and don't forget to bring your parents out!

### **End Note #36 - #146 march - May 1970 (from page 223)**

#### **The Name Game**

A Committee of Selection appointed by your executive, and consisting of Mrs. Nancy Anderson, Mr. Charlie Ney, and your Editor met to consider the 44 names suggested by 23 contributors as a future title for our quarterly Bulletin. A great variety of suggestions included many very attractive names, and the Committee has made a first, second and third choice. Following an investigation to make sure that the "first-choice" infringes no copyright, and following ratification by the Executive, announcement of the winning name will be made, and the name used on the next Bulletin cover.

### **End Note #37 - #146 - March - May 1970 (from page 224)**

#### **Birds for the Record (Winter 1969)**

|                                     |                    |         |                 |
|-------------------------------------|--------------------|---------|-----------------|
| Dipper (1)                          | Lost Lagoon        | Oct. 11 | Roy Phillips    |
| Pine Grosbeak (3)                   | Seymour Mountain   | Nov. 12 | Wayne Weber     |
| [Northern] Mockingbird (1)          | Main & 33rd Ave.   | Nov. 15 | Roy Phillips    |
| Long-eared Owl (1)                  | Iona Island        | Nov. 23 | David Stirling  |
| Harris's Sparrow (1)                | Iona Island        | Nov. 23 | David Stirling  |
| European [Eurasian] Wigeon (6)      | Iona Island        | Nov. 23 | Wayne Campbell  |
| Barn Owl (1)                        | South Richmond     | Nov. 30 | Colin Clark     |
| Pigeon Hawk [Merlin]                | North Vancouver    | Dec. 5  | Penny Haering   |
| Audubon [Yellow-rumped] Warbler (2) | Westham Island     | Dec. 6  | Wayne Weber     |
| Audubon [Yellow-rumped] Warbler (1) | Dunbar & 31st Ave. | Dec. 9  | Michael Shepard |
| Barn Swallow (7)                    | Westham Island     | Dec. 6  | Weber & Shepard |
| Green Heron (1)                     | Sea Island         | Dec. 14 | Colin Clark     |
| Common Redpoll (40)                 | Centennial Park    | Dec. 31 | Bill Wilson     |
| Lapland Longspur (12)               | Centennial Park    | Dec. 31 | Bill Anderson   |
| Orange-crowned Warbler (1)          | Ladner             | Dec. 31 | Rudi Drent      |
| Harris's Sparrow (1)                | Ladner             | Dec. 31 | Wayne Campbell  |
| Lincoln's Sparrow (1)               | Iona Island        | Dec. 31 | Wayne Weber     |
| Short-eared Owl (12)                | Centennial Park    | Jan. 1  | Tom Stevens     |
| Pine Grosbeak (4)                   | Beach Grove        | Jan. 3  | Daryl Johnson   |

## Vancouver Natural History Society - Newsletter Notes -1943-1971

|                     |                 |         |                     |
|---------------------|-----------------|---------|---------------------|
| Least Sandpiper (4) | Westham Island  | Jan. 4  | Wayne & Robin Weber |
| Virginia Rail (1)   | Westham Island  | Jan 4.  | Wayne & Robin Weber |
| Green Heron (1)     | S. W. Richmond  | Jan 16  | Robert Foottit      |
| Saw-whet Owl (1)    | North Vancouver | Jan. 20 | Penny Haering       |

### **End Note #38 - #146 - March - May 1970 (from page 228)**

#### **Seen on an October Day by Marjorie McFeat**

October 25, 1969

On this grey day I joined our Mr. Rae in a walk along the sea wall of Stanley Park. At Third Beach there was, very suddenly, a great commotion among the many gulls flying about and in their midst a bald eagle. In close proximity to the shore a lone female goldeneye swam, the target of the eagle.

Three times, in wide swooping arcs, the great bird dove at the small duck, having evidently wounded it on the first strike. Failing to retrieve its prize the eagle flew off followed by the harassing screaming gulls. Quiet descended and the duck swam slowly from the shore, making futile efforts to raise itself in flight and finally scrambling on to the tip of a rock, as yet uncovered by the incoming tide.

A seal appeared close by and swimming to the rock seized the duck, shaking and submerging it. A cruel "drama of cat and mouse" began. Over, and over as we watched anxiously and helplessly the duck managed, somehow to escape and flutter back to the rock only to be dragged back to the water by the seal, again vigorously shaken and submerged. It seemed to go on endlessly and we marveled that this small wounded creature could withstand such punishment for lengthy a time. The whole period of observation extended for about half an hour.

It was become dusk and chilly and time to leave. At Ferguson Point we turned our heads for a last look. Nothing remained - not a gull, nor a seal, nor the little maimed duck, not even the crest of the rock - only the still expanse of a cold, steel-grey sea.

### **End Note #39 - #147 - June - August, 1970 (from page 231)**

#### **Mount Arrowsmith Area, Vancouver Island (Flower List by Art Guppy cont.)**

|   |                         |                           |
|---|-------------------------|---------------------------|
| <i>Tiarella laciniata</i>                                 | (Cut-leaved Foamflower) |                           |
| <i>Tiarella trifoliata</i>                                | (Foamflower)            | [Three-leaved Foamflower] |
| <i>Tiarella unifoliata</i>                                | (Foamflower)            | [One-leaved Foamflower]   |
| <i>Penstemon</i> [ <i>Nothochelone</i> ] <i>nemorosus</i> | (Turtlehead Penstemon)  | [Woodland Penstemon]      |
| <i>Allotropa virgata</i>                                  | (Candystick)            |                           |
| <i>Hemitomes congestum</i>                                | (Gnome-plant)           |                           |

## Vancouver Natural History Society - Newsletter Notes -1943-1971

|  |                            |                            |
|--|----------------------------|----------------------------|
| <i>Pterospora andromedea</i>               | (Pinedrops)                |                            |
| <i>Goodyera oblongifolia</i>               | (Rattlesnake-plantain)     |                            |
| <i>Moneses uniflora</i>                    | (One-flowered Wintergreen) | [Single Delight]           |
| <i>Pyrola asarifolia</i>                   | (Pink Wintergreen)         |                            |
| <i>Pyrola virens</i> [ <i>chlorantha</i> ] | (White Wintergreen)        | [Green Wintergreen]        |
| <i>Pyrola picta</i>                        | (Veined Wintergreen)       | [White-veined Wintergreen] |
| <i>Pyrola aphylla</i>                      | (Leafless Wintergreen)     | [Now part of White-veined] |

### Upper Part of Trail:

|                                |                      |                               |
|--------------------------------|----------------------|-------------------------------|
| <i>Gaultheria ovatifolia</i>   | (Western Tea-berry)  |                               |
| <i>Rhododendron albiflorum</i> | (White Rhododendron) | [White-flowered Rhododendron] |
| <i>Stenanthium occidentale</i> | (Mountain Bell)      | [Western Mountainbells]       |
| <i>Parnassia fimbriata</i>     | (Fringed Parnassia)  | [Fringed Grass-of-Parnassus]  |

### Mainly Above Tree Line:

|   |                           |                             |
|---|---------------------------|-----------------------------|
| <i>Silene acaulis</i>   | (Moss Campion)            |                             |
| <i>Silene douglasii</i>   |                           | [Douglas Campion]           |
| <i>Arenaria verna</i> [ <i>Minuartia rubella</i> ]                        | (Mountain Sandwort)       | [Boreal Sandwort]           |
| <i>Sibbaldia procumens</i>  |                           | [Sibbaldia]                 |
| <i>Ranunculus eschscholtzii</i>   | (Mountain Buttercup)      | [Subalpine Buttercup]       |
| <i>Leptarrhena pyrolifolia</i>  | (Pearleaf)                | [Leatherleaf Saxifrage]     |
| <i>Sedum divergens</i>  | (Alpine Stonecrop)        | [Spreading Stonecrop]       |
| <i>Heuchera glabra</i>  | (Alum-root)               | [Smooth Alumroot]           |
| <i>Caltha leptosepala</i>   | (Mountain Marsh Marigold) | [White Marsh-marigold]      |
| <i>Empetrum nigrum</i>  | (Crowberry)               |                             |
| <i>Allium crenulatum</i>  | (Mountain Onion)          | [Olympic Onion]             |
| <i>Erythronium grandiflorum</i>   | (Glacier Lily)            | [Yellow Glacier Lily]       |
| <i>Cassiope mertensiana</i>   | (White Moss Heather)      | [White Mountain-heather]    |
| <i>Phyllodoce empetrifomis</i>  | (Pink Mountain Heather)   |                             |
| <i>Phyllodoce glanduliflora</i>   |                           | [Yellow Mountain-heather]   |
| <i>Vaccinium uliginosum</i>   | (Bog Billberry)           | [Bog Blueberry]             |
| <i>Mimulus tilingii</i>   | (Alpine Monkey Flower)    | [Mountain Monkey-flower]    |
| <i>Pedicularis ornithorhyncha</i>   |                           | [Bird's-beak Lousewort]     |
| <i>Pedicularis racemosa</i>   | (Alpine Elephant-head)    | [Sickletop Lousewort]       |
| <i>Oxyria digyna</i>  | (Mountain Sorrel)         |                             |
| <i>Lewisia columbiana</i>   | (Alpine Lewisia)          | [Columbia Lewisia]          |
| <i>Saxifraga bronchialis</i>  | (Spotted Saxifrage)       |                             |
| <i>Saxifraga arguta</i> [ <i>odontoloma</i> ]                             |                           | [Stream Saxifrage]          |
| <i>Saxifraga ferruginea</i>   |                           | [Alaska Saxifrage]          |
| <i>Saxifraga lyallii</i>  |                           | [Red-stemmed Saxifrage]     |
| <i>Saxifraga mertensiana</i>  |                           | [Wood Saxifrage]            |
| <i>Saxifraga occidentalis</i> var. <i>rufidula</i> [ <i>S. rufidula</i> ] |                           | [Rusty-haired Saxifrage]    |
| <i>Saxifraga tolmiei</i>  |                           | [Diverse-leaved Cinquefoil] |
| <i>Luetkea pectinata</i>  | (Meadow Spirea)           | [Partridge-foot]            |

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|  |                    |                          |
|--|--------------------|--------------------------|
| <i>Dodecatheon pauciflorum</i>           | (Shooting Star)    | [Pretty Shootingstar]    |
| <i>Campanula alaskana [rotundifolia]</i> | (Dwarf Harebell)   | [Common Harebell]        |
| <i>Luinia hypoleuca</i>                  |                    | [Silverback Luinia]      |
| <i>Solidago multiradiata</i>             | (Alpine Goldenrod) | [Northern Goldenrod]     |
| <i>Arnica latifolia</i>                  |                    | [Mountain Arnica]        |
| <i>Aster paucicapitatus</i>              | (White Aster)      | [Olympic Mountain Aster] |
| <i>Erigeron peregrinus</i>               | (Mountain Daisy)   | [Subalpine Daisy]        |

### End Note #40 - #147 - June - August, 1970 (from page 231)

#### An Unusual Garter Snake Mortality by Al Grass

On March 7, 1970, near Langley, a Northwestern Garter Snake (*Thamnophis sirtalis*) was found dead with about 1/3 of its body stuck in the ground. Resistance was encountered when attempts were made to extract the snake. A disc of soil 6" in diameter and 7" in depth was removed around the animal's body in an attempt to find the point of resistance. Further examination revealed the snake to be entangled in grass roots at a bulge in its lower abdomen. Dissection of the bulge disclosed four well-developed young.

### End Note #41 - #147 - June - August, 1970 (from page 232)

#### Bird Chatter

**Road and Window Kills.** Often naturalists find dead birds whose plumage is in good condition. Many of these birds, especially birds of prey, warblers and uncommon species etc. are of value to student and research collections at UBC. Please call Dept. of Zoology (Vertebrate Museum) at 228-2131 and leave information concerning the bird and where it may be picked up.

**Red Crossbills** invaded the Vancouver area this winter. Some reports were; Burnaby Lake (20), Ken Kennedy; 32nd and Crown St. (15), Michael Shepard; Devonshire Park (18) Roy Philips; North Vancouver (30), Gloria Norton; Cambie and 44th (12) Vic Ford and UBC (2) Michael Shepard.

**Don't Forget** nest record cards can be obtained from Mrs. L.A. Gibbard, 465 Ellis St., Penticton, B.C. The cards are used to record information on single as well as colony nesting birds found each summer in B.C.

**Chukars now at Point Roberts!** Jim Biggar mentions that on April 4, 1970 a gun club bought 60 chukars from a pheasant farm in Whonnock, B.C. and released them for the purpose of training their dogs. Apparently the introduced birds are not doing too well. There was one report from Dion Wheeler of a chukar in a tree in North Burnaby.

**[Worm 'Chatter']** - Gertrude Smith reports that a friend of hers found small balls of earthworms, about the size of a Robin's egg, on the lawn at a Chilliwack Golf and Country Club on April 25. Gulls, which were feeding on the earthworms were also regurgitating the

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worms. The fairways were apparently sprayed for leatherjackets just prior to this interesting observation. Perhaps this accounts for the gull's unusual behaviour.

### **Birds For the Record (Spring 1970)**

|                              |                 |          |                   |
|------------------------------|-----------------|----------|-------------------|
| Tree Swallow (1)             | Westham Island  | Feb. 21  | Jack Husted       |
| White-winged Crossbill (1)   | Point Roberts   | Feb. 22  | Al Grass          |
| Glaucous Gull (1)            | Richmond Dump   | Feb. 22  | Bob Baker         |
| Snowy Owl (1)                | Patterson Park  | Feb. 22  | Al Grass          |
| Violet-green Swallow (1)     | Iona Island     | Feb. 22  | Bill Anderson     |
| Emperor Goose (1)            | White Rock      | Mar. 1   | Ed Sing           |
| White-breasted Nuthatch      | Stanley Park    | March 5  | Michael Shepard   |
| American Goldfinch           | 33rd & Main     | March 5  | Roy Phillips      |
| Pine Grosbeak (8)            | North Vancouver | March 1  | E. N. Copping     |
| Swainson's Hawk (1)          | Point Roberts   | March 7  | Richard C. Smith  |
| Dowitchers (55)              | Burnaby Lake    | March 19 | Wayne Campbell    |
| Savannah Sparrow (2)         | Westham Lake    | March 28 | Bill Rae          |
| Band-tailed Pigeon (2)       | 57th & Oak      | April 2  | Robert E. Luscher |
| Cinnamon Teal (pr)           | Burnaby Lake    | April 1  | Robert Foottit    |
| Northern Waterthrush (1)     | Westham Lake    | April 12 | Husteds           |
| Barn Swallow (1)             | Westham Lake    | April 13 | Brian Davies      |
| [Northern] Mockingbird       | Point Roberts   | April 22 | John Yak          |
| Whimbrel (2)                 | Iona Island     | April 22 | Ken Summers       |
| Golden Plover (3)            | Iona Island     | April 24 | Wayne Campbell    |
| Yellow-headed Blackbird (1M) | Pitt Meadows    | April 25 | Mel Elias         |
| Hooded Merganser (17)        | Pitt Meadows    | April 25 | Mel Elias         |
| Blue-winged Teal (2M)        | Westham Island  | April 26 | Robert Foottit    |
| Wilson's Phalarope (1)       | Westham Island  | April 27 | Robert Foottit    |
| Sandhill Crane (2)           | Burns Bog       | April 26 | Richie Elliot     |
| Western Tanager (1)          | Near UBC        | April 30 | Michael Shepard   |

### **End Note #42 - #148 - September - November, 1970 (from page 234)**

#### **Museum Docents Invited**

There is an opportunity for people interested in participating in the school tour programmes at the Vancouver Centennial Museum. Through lectures and guided reading, volunteers will be trained by Museum Staff to guide students in the Museum. By October, changes in five galleries will allow teachers to make this general introduction to museums a part of units on Archaeology, Northwest Coast Indian Arts and Crafts, settlement and

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exploration by Europeans, and studies of Forestry and Fishing. For further information please call:

Mrs. Joy Inglis, Education Department,  
Vancouver Centennial Museum

### **Museum Lecture Series - "Spaceship Earth"**

Hold Thursday evenings for an exciting new lecture discussion series by the Museum Association and the Centennial Museum. Called "spaceship Earth", it will place some of the problems of the human environment into perspective, and suggest some solutions.

### **End Note #43 - #148 - September - November, 1970 (from page 235)**

### **Ornithology Section - Co-ordinator Wayne Campbell**

#### **Birds for the Record (Summer 1970)**

|                                   |                     |          |                       |
|-----------------------------------|---------------------|----------|-----------------------|
| Red-throated Loon (1)             | Coal Harbour        | May 9    | Mel Elias             |
| [American] Avocet (1)             | Iona Island         | May 20   | P & M Wilding-Davies  |
| Western Kingbird (1)              | Acadia Camp, UBC    | May 21   | Steve Johnson         |
| Green Heron (1)                   | Sea Island          | May 21   | Ken Summers           |
| Lazuli Bunting (1)                | Pitt Meadows        | May 23   | Robt. E. Luscher      |
| Hooded Merganser (1M)             | Sea Island          | May 23   | Bill Anderson         |
| Bobolink (1) (photo)              | Sea Island          | May 28   | Bill Anderson         |
| Long-eared Owl (1)                | Richmond            | May 29   | Colin Clark           |
| Northern Phalarope (1)            | Iona Island         | May 30   | Bill Rae & J. Philips |
| Common Nighthawk (1)              | South Vancouver     | June 2   | Mel Elias             |
| Bullock's Oriole (1)              | Richmond            | June 5-9 | Colin Clark family    |
| Black Swift (400+)                | UBC                 | June 15  | Wayne Campbell        |
| Vaux Swift (1)                    | Seymour Mountain    | June 20  | Allen Poynter         |
| [Greater] White-fronted Goose (2) | Burnaby Lake        | June 21  | Wayne Campbell        |
| Eastern Kingbird (2)              | UBC Endowment Lands | July 1   | Dave & Myrnl Hawes    |
| Lazuli Bunting (2)                | Pitt Meadows        | July 4   | Webers & Campbells    |
| [Gray] Catbird (1)                | Pitt Meadows        | July 4   | Webers & Campbells    |
| Northern Phalarope (3)            | Iona Island         | July 4   | Susan Smith           |
| Semi-palmated Sandpiper (3)       | Sea Island          | July 17  | Bill Anderson         |
| Surfbird (5)                      | Passage Island      | July 18  | Rudi Drent            |
| Black Turnstone (3)               | Passage Island      | July 18  | Rudi Drent            |
| Whimbrel (3)                      | Sea Island          | July 21  | Wayne Campbell        |
| Caspian Tern (1)                  | Iona Island         | July 21  | Steve Johnson         |
| Stilt Sandpiper (1)               | Iona Island         | Aug. 1   | Susan Smith           |



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Caspian Tern (1)

Sea Island

Aug. 9

Campbell & Anderson

### End Note #44 - December, 1970 - February, 1971 (from page 241)

#### Proposed Field Trip to Europe - co-ordinator Dr. Fred Fisher

Following the note contained in a special mailing to all members during September, a positive response was received from a number of members which has now reached the approximate maximum number of participants that could be handled on the type of field-trip envisaged. Preliminary arrangements are now under way by the co-ordinator.

### End Note #45 - December, 1970 - February, 1971 (from page 242)

#### Birds for the Record (Fall 1970)

|                             |               |           |                           |
|-----------------------------|---------------|-----------|---------------------------|
| Golden Plover (1)           | Iona Island   | Aug. 1    | Susan Smith               |
| Marbled Godwit (2)          | Iona Island   | Aug. 1    | Susan Smith               |
| Franklin's Gull (2 imm)     | Iona Island   | Aug. 9    | Poynters                  |
| Hudsonian Godwit (1)        | Iona Island   | Aug. 9    | Poynters                  |
| [Northern] Goshawk (1)      | Reifle Refuge | Aug. 10   | Brian Davies              |
| [Red] Knot (1)              | Iona Island   | Aug. 11   | Campbells                 |
| Nashville Warbler (1)       | Kerrisdale    | Aug. 12   | Virginia Whitelaw         |
| Ruddy Turnstone (2)         | Iona Island   | Aug. 15   | Allen Poynter             |
| Solitary Sandpiper (1)      | Sea Island    | Aug. 16   | Campbell & Anderson       |
| Peregrine Falcon (1)        | White Rock    | Aug. 24   | Susan Smith               |
| Upland Plover (1)           | Iona Island   | Aug. 30   | Husteds                   |
| Nashville Warbler (1)       | Ambleside     | Aug. 31   | Poynters                  |
| Red-breasted Merganser (12) | English Bay   | Sept. 1   | John Rogers               |
| Bank Swallow (1)            | Iona Island   | Sept. 1   | Campbell, Shepard & Smith |
| Buff-breasted Sandpiper (1) | Sea Island    | Sept. 7   | Wayne Campbell            |
| Sandhill Crane (2)          | Pitt Meadows  | Sept. 7   | Poynters                  |
| Golden Plover (20)          | Sea Island    | Sept. 7   | Shepard & Anderson        |
| Common Egret (1)            | Reifle Refuge | Sept. 10  | Stan Devereaux            |
| Stilt Sandpiper (2)         | Sea Island    | Sept. 12  | Campbell & Shepard        |
| Wandering Tattler (1)       | Siwash Rock   | Sept. 13  | Ed Moody                  |
| Turkey Vulture (12)         | Point Roberts | Sept. 20  | Glen Ryder & Al Grass     |
| Yellow-shafted Flicker (1)  | Dunbar        | Sept. 20  | Bill Anderson             |
| Black Tern (1)              | Ladner        | Sept. 20  | Al Grass & Glen Ryder     |
| Sharp-tailed Sandpiper (1)  | Sea Island    | Sept. 20  | VNHS Banding Group        |
| Surfbird (20)               | Howe Sound    | Sept. 27  | Ian Robertson             |
| Palm Warbler (1)            | Stanley Park  | Oct. 6-12 | Ed Moody                  |
| European [Eurasian] Wigeon  | Stanley Park  | Oct. 11   | Ed Moody                  |
| Tufted Duck (1)             | Stanley Park  | Oct. 13   | Ed Moody                  |

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|                      |               |         |                    |
|----------------------|---------------|---------|--------------------|
| Redhead (3)          | Stanley Park  | Oct. 17 | Ed Moody           |
| Ancient Murrelet (2) | Point Roberts | Oct. 17 | VNHS Big Day       |
| Spotted Redshank (1) | Reifel Refuge | Oct. 17 | Shepard & Webers   |
| Trumpeter Swan (1)   | Reifel Refuge | Oct. 17 | VNHS Big Day       |
| Snowy Owl (1)        | Iona Island   | Oct. 31 | Shepard & Anderson |
| Harris's Sparrow (1) | Shaughnessy   | Oct. 31 | Victor Ford        |

### **End Note #46 - December, 1970 - February, 1971 (from page 243)**

#### **Table No. 1 Selected Case Histories of Glaucous-winged Gulls tagged in June 1969**

- No. 16 Oct 28/69, C.N.R. Station, Vancouver; Jan. 11-18/70, Sidney; Jan. 30/70 Sidney; Mar. 26 & Apr. 14/70, Mandarte Island.
- No. 27 July 5/69, Delta Dump (bird had chicks then); Oct.28/69, Stanley Park, Vancouver; Mar. 16/70. Delta Dump; Mar. 26/70, Mandarte Island; April 10/70, Delta Dump; Apr. 14/70, Mandarte Island.
- No. 33 (Mated with #27 both in 1969 & 1970) Aug 25 & 30/69, Delta Dump; Sept. 7 & 21/69, Everett [Washington]; Jan 10/70, Delta Dump; Mar. 26, Mandarte Island; Apr. 10/70, Delta Dump; Apr. 14/70, Mandarte Island.
- No. 49 Nov. 16/69, Beacon Hill Park, Victoria; Jan. 11/70, Beacon Hill Park; Mar. 8/70, Beacon Hill Park; Mar. 9/70, Delta Dump; Apr. 20/70, Delta Dump; Apr. 14/70, Mandarte Island.
- No. 56 Aug. 5/66. Sidney; Dec. 9/69, Sidney. 30/70, Sidney; Feb. 9/70, Sidney; Mar. 26/70 & Apr. 13/70, Mandarte Island.
- No. 71 Aug. 15/69 through Feb 10/70, almost daily, Bremerton [Washington]; Mar. 26 & April 14/70, Mandarte Island; Apr. 19/70, Bremerton.
- No. 72 June 26/69, Delta Dump; Sept. 14,69, Delta Dump; Oct 11/69, Delta Dump; Dec. 28/69. Point Roberts, Washington, 12 miles from dump; Feb. 12 & Mar. 16/70, Delta Dump; Mar. 26/70, Mandarte Island.

**Editor's Note:** This article contained a map showing the locations (from Comox, B.C. to Tacoma, Washington) with the place names mentioned above. This was the first illustration to appear in the Society's newsletters.

### **End Note #47 - #149 - December, 1970 - February 1971 (from page 245)**

#### **A Photo Duplicate File for B.C. Vertebrates**

With picture taking as popular as it is today naturalists throughout British Columbia have a new "tool" they can use to substantiate rare sightings, unusual nestings etc., of amphibians,

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reptiles, birds and mammals in the Province. We are organizing a method of handling, and [a] centre of deposition for photographic records in British Columbia.

What is it?

The PHOTODUPLICATE FILE will consist of duplicate or original 35 mm slides (black & white or colour) or prints (black & white or colour) not exceeding 4x6 inches, of rare mammals, birds, reptiles and amphibians occurring in the Province. For example, photographs of birds listed as accidental or casual or local checklists could be included in

the photoduplicate file as well as new birds, mammals etc. for local areas. Unusual plumages, pelages, nesting etc., could add greatly to the files importance. Marine mammal strandings documented by photograph would also be acceptable.

Where will it be kept?

The photoduplicate file will be housed in the Vertebrate Museum at the University of British Columbia along with the Pacific Nest Record Scheme. Photographs should be sent to either:

David Stirling  
3500 Salisbury Way  
Victoria, B.C.

Wayne Campbell  
Vertebrate Museum  
Zoology Department  
University of B.C.  
Vancouver 8, B.C.

We will accept the responsibility of maintaining the photoduplicate file and deal with accessions and correspondence. The file will be available to anyone wishing to use it, either by visiting the Museum at U.B.C. or by correspondence. EACH CONTRIBUTOR WILL RECEIVE AN ANNUAL REPORT OF THE PHOTODUPLICATE RECORDS OBTAINED.

When to send photos?

Photographs can be sent at any time. Closing date for inclusion of records for the current year will be December 1st. Each photographic record should contain the following information:

|  |                 |
|--|-----------------|
| Photographer:  | Address:        |
| Species (English and Latin names if possible)  |                 |
| Date:  | Exact Locality: |
| Remarks: (anything pertinent to further substantiate the records, such as witnesses, duration of stay etc. ) |                 |

Why a photoduplicate file?

Bring them back alive !!!!      Need we say more!

**End Note #48 - #149 - December, 1970 - February 1971 (from page 246)**

**Geology Section: Lakes - Co-ordinator - C.S. Ney**

I have often noticed travelers examining lakes and wondering how they came to exist. Subconsciously they know that lakes are anomalies of nature. Normally we would expect rising land to be uniformly eroded by streams and rivers so that their slopes do not contain water-filled basins. However there are many ways in which lakes of all shapes and sizes can be produced by geologic processes.

Rivers are little able to erode basins below their average gradients, except when they make deep pools below waterfalls, or when in old age, wandering across wide valleys, they cut off and abandon, the crescent-shaped lakes we call Ox-bows.

Glaciers characteristically tend to erode downward below the average land surface. Where the continent-wide glaciers of the Great Ice Age rode over the hard rock of the pre-cambrian shield of northern Canada, there are now millions of lakes of all sizes with a variety of shapes that reflect the direction of ice movement and the structure of the rock. On a very large scale, we find that the Great Lakes of North America are located along the perimeter of the shield where it is overlapped by younger and softer flat sedimentary rocks. This geological discontinuity was a line of weakness that the glaciers were able to attack and cut down to depths of several hundred feet.

The power of downward erosion by valley glaciers is well shown by the fiordlands of Norway, Patagonia and British Columbia. We can see on our coast a continuous sequence from deepened arms of the sea (Indian Arm), to partly connected tidal lakes (Nitinat), and to elevated lakes that are still salty at depth (Powell). Most of the large picturesque finger lakes in B.C. are glacially deepened valley basins, and some (Slocan) are very deep. The fiord-like east arm of Great Slave Lake has been gouged down by glaciers to give a water depth of nearly 2000 feet.

On a small scale, cirque basins are scooped by localized alpine glaciers which shrink or melt away and leave the mountain bejeweled with sparking tarns. Glaciers can produce lakes indirectly by piling morainal dams in the path of streams. The ice itself may provide the dam, and there are many examples of small lakes marginal to valley glaciers, and some quite large ones (Tide Lake, Tulsequah Lake) in B.C. The ice makes a rather poor dam, leaking sporadically and sometimes allowing the lake to drain out catastrophically, as those people who live down valley from Tulsequah Lake will well be aware. There is evidence of enormous lakes of this kind in North America toward the end of the ice age. We find their silt deposits throughout the interior (Kamloops, Okanagan) and we find evidence of the wondrous flood that occurred when the ice dams let go.

Many lakes are the result of volcanic activity, and we need only look as far as Garibaldi for an example of a deep body of water majestically impounded by lava flows. A similar lake at

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the head of Bridge River has now become almost entirely gravel filled. Less common are lakes that occupy craters or calderas of volcanic origin. Lake Taal in the Philippines occupies a crater of an active volcano, and a rise in water temperature will monitor an impending eruption. Crater Lake in Oregon is perhaps the world's best known example of a lake occupying a caldera formed by the collapse of a volcano.

Lakes may form suddenly when a landslide dams a valley, and there is a good example at Lake of the Woods, about three miles north of Hope, where a slide of coarse granitic blocks from the west side of the valley made a permanent dam. In other cases the landslide debris may make a very poor dam, and when the eventually rising water pours over the top, the whole dam goes out catastrophically.

Yet another class of lakes are of tectonic origin. They are formed simply by the warping of the land through the mountain building processes that are continually affecting the earth. The great inland seas of Eurasia are of this class, actually being chopped up segments of ocean, and like the Caspian Sea, they retain their oceanic depths of many thousands of feet. In western United States there would be many inland lakes like those of the Rift Valleys of Africa if the climate were not so arid and if the basins had not filled up with gravel. Great Salt Lake occupies a tectonic basin, and it is the shallow saline remainder of a much larger lake called Bonneville, whose old beaches can be clearly distinguished several hundred feet up on the mountainside.

Last but not least are the biogenic lakes, the small ones produced by beavers, and the large ones produced by men.

### **End Note #49 - #150 March - May, 1971 (from page 246)**

#### **Editorial - Wildlife or Wild Death**

We have, in recent years, seen a large increase in the number of commercially-shown and quite heavily advertised film "showings" offered under such descriptions as "wild-life epics" but which turn out to be trophy-hunting portrayals in which death rather than life, seems to be the main object in view. "*Discovery*" was recently provided with tickets to one of these films, "Yukon Safari", shown to packed houses at the Queen Elizabeth Theatre.

As the official editor of the Vancouver Natural History Society, "*Discovery*" does not see eye to eye with the rod and gun fraternity, but tries hard not to become emotional or uptight on the subject, for a number of reasons which seem valid to your Editor. In the first place, it is recognized that some of the best fish and game organizations, such as Ducks Unlimited, well organized and affluent, render valuable financial support in certain areas of conservation, even if for what many naturalists will consider most of the wrong reasons. Further, it can scarcely be denied that fishing and hunting is carried on in the highest traditions of the sportsman are ancient and manly sports, though, as Dr. Roderick Haig-

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Brown pointed out in one of his writings, there are nowadays just too many people who want to hunt, far beyond the ability of the game population to withstand the pressure, - Haig-Brown's personal reason for no longer hunting.

"Discovery's" tendency to tolerate attitude, however, was not sufficient to suppress a feeling of revulsion and disgust at some of the sequences in the "Yukon Safari" and the accompanying piece "Cougar Hunt in Utah". The photography was tolerably good, with occasionally superb sequences, but there was little or none of the informative commentary on the life and habits of the animals portrayed which one always looks for in a "wild-life" film. Instead the emphasis was on killing. Find the biggest and the finest, and kill it, with quite unnecessary sequences of butchering the gory remains. In the Cougar Hunt, it is true, the animals were not killed but were taken alive, though the procedure was no less sickening. Two of these splendid cats were first harried by savage dogs, and when finally treed, the terrified creatures were then lassoed, hauled down by the neck with ropes, and trussed up, an admittedly tricky and courageous, but not a very edifying performance which left a

very bad taste in your Editor's mouth. But in this, he was much in the minority. The laughter and shouts of merriment and glee from the capacity audience were if anything more distressing than the "Epic" itself.

Whether man can bring himself to confront an unsuspecting wild animal, and calmly and deliberately snuff out its life, must be in the final analysis a matter for his own conscience and mental refinement. But when displayed publicly to a paying audience, with boastful running commentary and "stirring" music, it becomes a spectator-blood-sport, and is a sad commentary on our current state of civilization. Presumably such a film, like any other, cannot be publicly shown without clearance from the Board of Censors. "*Discovery*" wonders if nudity is the only form of nastiness these gentlemen recognize?

### **Notes to the Intermediates**

Interested members could see the Vertebrate Museum at U.B.C. on the Birders' Nights mentioned in the Senior Section trips.

A car wash may be held to collect enough money for all members involved to go on a camping trip this summer to David Hancock's zoo on Vancouver Island. If you are interested, in the camping trip and the car wash, please phone Heather Switzer or Sue McQuillan. Everyone's help in the car wash would be appreciated, whether attending the camp or not.

### **Junior Section - Leader Ken Kennedy**

On March 20, there will be an open house or display day. The children will be able to bring their hobbies, pets, project or simply anything that is connected with natural history. Parents and friends are welcome and the public will also be allowed in. It will take place at

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the Junior Museum at the Vancouver Centennial Museum and Planetarium from 10:00 a.m. Till about 1:00 p.m. If there are any questions please don't hesitate to get in touch with Ken Kennedy.

For those who are new or would like to join the Junior group, just show up at the Junior Museum on the above date at 10:00 a.m. Bring a lunch, dress for the weather, and dues are only 50c for a full year. The age range is 6 years to 14 years old. Chow.

### **European Field Trip**

Dr. Fred Fisher reports that final arrangements are underway for the forthcoming field trip to Austria. A full quota of participants has been reached, and no further applications can be accepted.

### **In Memoriam - Allen R. Wooton**

In the death of Allan Wooton, our Society has lost a dedicated and enthusiastic member. Allen joined the Society in 1922 and through the years served as President, Secretary, leader of the Entomology Section, Editor of the bulletin and artist for various displays put on by our group.

Mr. Wooton was instrumental, when President, in starting the Junior Section of the Society, partly through his work as examiner for the Boy Scouts for their Nature Badges. He was still an Examiner for the Scouts at the time of his death.

For many years, Mr. Wooton was on the executive of the Junior group, as well as the Senior Section. He took many field trips for the Juniors on botany and entomology, as well as giving illustrated evening talks.

In addition to his work for the Society, Allen served for many years on the Aquarium Board of Directors, acting as representative for our Society. He also served on the Board of Directors of the museum.

Mr. Wooton was interested in Alexander Camp and helped set up many nature trails for young people's camps.

Wherever there was work to do to further the knowledge and appreciation of our beautiful natural heritage amongst youngsters and adults, you would find Allen Wooton there, ready and willing to give his time and leadership.

### **Ornithology Section - co-ordinator Wayne Campbell**

#### **Birds for the Record - (Winter 1971)**

Surfbird (10)

Whytecliff Park

Nov. 6

Wayne Weber

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|                        |                  |         |                       |
|------------------------|------------------|---------|-----------------------|
| Smew (1)               | Lost Lagoon      | Nov. 14 | Ed Moody              |
| Rusty Blackbird (1)    | Pitt Meadows     | Nov. 22 | Neil & Karen Dawe     |
| Old Squaw (53)         | Brocton Point    | Nov. 24 | V. Newson & M. McFeat |
| Virginia Rail (6)      | Waterfowl Refuge | Dec. 6  | Jack Williams         |
| Gyr Falcon (1)         | Pitt Meadows     | Dec. 13 | Jim Biggar            |
| Western Grebe (3000)   | English Bay      | Dec. 17 | Bill Rae              |
| Emperor Goose (10)     | White Rock       | Dec. 26 | Jack Williams         |
| Tufted Duck (1)        | Lost Lagoon      | Dec. 31 | Ed Moody              |
| Anna's Hummingbird (1) | Vancouver        | Jan. 1  | Betty Molyneux        |
| Bohemian Waxwing (50)  | North Vancouver  | Jan. 25 | Gloria Norton         |
| Common Teal (1)        | Iona Island      | Feb. 2  | Wayne Weber           |

### **Endnote #50 - March - May 1971 (from page 247)**

#### **Continuation of Vancouver Christmas Bird Count - Compiler's Comments**

All hawk and eagle counts were comparable with those figures for 1969.

Shorebirds were generally down with the exception of surfbird 68 (38). Gull totals were also comparable with 1969 figures.

Counts of owls were impressive. Only two owls, the pygmy and long-eared owls were missed of the possible eight we could record. Secretive owls were lured out of their resting places by playing their calls on tape recorders; hence the all-time high of 8 Screech Owls,. Field walkers produced 87 short-eared owls for a high, and snowy owls were also 'abundant' locally this year.

In most cases woodpecker counts were up slightly, this being attributed again to better coverage. Woodland bird counts were also high for this reason.

Starling counts were about the same, however 300 more House Sparrow were counted this year than ever before. Thrush counts were highest ever, [American] Robin 1660 (1558) and Varied thrust 929 (310).

There was a drop of over 3,000 pine siskins from last year but an increase of 600 (American) goldfinches.

The total number of birds counted was 17,025 down by about 600 birds from the 1969 total, which indicates a fairly accurate count.



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Total species seen were 137 and one additional race, namely the Thayer's gull. This bird is considered to be a subspecies of the larger Herring Gull; Rock Doves are not accepted by Audubon Field Notes.

### **Count Highlights**

The unusual birds that are seen on Count Day are exciting to hear about. Five birds new for the Vancouver count area were seen, namely black brant (boat party), long-billed dowitcher (Hesses'), hummingbird sp. (Mrs. Darling), tree swallow (Elias and Dorst) and rusty blackbird (Polson and Jones). This brings the total number of species recorded in our circle since 1965 to 178.

Birds seen during the count period (Dec. 22 - Jan. 3) include tufted duck, red-breasted nuthatch, Swainson's thrush and white-throated sparrow.

Memories of the 1970 count will surely include Roy Phillips' Yule Log desert, Ken Kennedy's tam, the silent film, the harrowing "clutch for life", water-drenching sail across English Bay, Ken Kennedy's short lunch break, the "Hollywood birders" in the newspaper, the spacious facilities for the post mortem, wind burn and 137 species reliably reported.

R. Wayne Campbell.

### **Ladner Christmas Bird Count 1970 - Compiler's Comments by Rudi Drent**

On 26 December, 1970 twenty-eight observers and several helpers in 11 parties hiked 91 party miles, recording the highest number of species (125) ever found on a Ladner Count (this was the eleventh held in the area). Notable were the following:

American Bittern: total of 5 (two parties). Why were none seen before 1963?

Trumpeter Swan: one individual, regular at Reifel Refuge since October, adds this species to the Ladner list.

Dabbling Ducks: overall totals were down from last year (37 versus 47 thousand) but this is probably due to the favourable conditions this year.

Blue-winged Teal: 7 seen by Ryder party, the first record since 1962

European [Eurasian] Widgeon: seen by Weber party, the first time this species was recorded on a count day, although they winter here regularly.

[Northern] Shoveler: 120, most of them on Westham, a remarkably high count.

Red-tailed Hawk (30), Marsh Hawk [Northern Harrier] (77), the highest counts we have ever had of these raptors; duplication was virtually eliminated by plotting all

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observations on maps, noting the time of each observation.

Long-billed Dowitcher (8), the first time we have been confident about the species wintering here (Westham Island), up to now "dowitcher species".

Gulls: We are getting used to Glaucous Gulls on the dumps, but having 6 was a surprise; glaucous-winged, totalling 30 thousand, certainly no exaggeration judging from our recent roost counts: the Ryder party discovered two California gulls, the first time we have had this species wintering.

Mourning Dove: 39, the highest count ever, (three parties)

Owls; we have seldom had such complete coverage, but in fact this is the first count with Long-ears (Westham Island); Short-ears highest ever (54).

Bushtits & [American] Goldfinches: highest counts were (215 and 312), in sharp contrast to the usual scarcity of Pine Siskins (lowest ever).

[European] Starling: only 4228, way down from the whopping 56,000 last year (the decrease was general, with 9 of 11 territories reporting much lower counts) and the lowest count since 1960) leaving out 1954-65, when coverage was less complete). Only complete roost counts in January can tell us if the decrease is real, rather than just a local shift.

### **End Note #51 - #150 - March - May, 1971 (from page 248)**

#### **Continuation Summary of Spring and Fall Pelagic Birding Trips from Tofino**

Spring trips scheduled for 1971 are May 1, 8, and 15; fall trips September 4, 11 and 18. Interested people should contact Wayne Campbell, several weeks in advance so arrangements can be made.

The following tabulation contains 97 species reported from the past six pelagic trips. Lists with numbers were usually kept during the voyage from Tofino. Numbers were kept for solitary species (Albatrosses, petrels and jaegers), however for some shearwaters, gulls and murres, numbers were estimated. The total numbers of birds at the end of the tabulation are again estimates of number of birds seen and are included only for the purpose of a general summary of the trips.

The following list of birds has been compiled from the notes of Bob Baker, Wayne Campbell, Rudi Drent, David Hatler, Jack Sarles, Michael Shepard, Tom Stevens, David

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Stirling, Ken Summers, John Tootchin and Wayne Weber.

|   | May<br>2nd<br>'70 | May<br>10th<br>'70 | May<br>15th<br>'70 | Sept.<br>12th<br>'70 | Sept.<br>13th<br>'69 | Sept.<br>26th<br>'70 |
|---|-------------------|--------------------|--------------------|----------------------|----------------------|----------------------|
| Common Loon                                 | 10                |                    | 5                  | 1                    | 2                    | 3                    |
| Arctic Loon                                 | flocks            | 84                 | 15+                | 4                    |                      | 9                    |
| Red-throated Loon                           |                   |                    |                    |                      | 1                    |                      |
| Red-necked Grebe                            | 75                | 8                  | 2                  | 12                   | 6                    | 4                    |
| Horned Grebe                                | 8                 |                    |                    |                      |                      |                      |
| Western Grebe                               | 50                |                    | 1                  |                      |                      |                      |
| Black-footed Albatross                      | 5                 | 1                  |                    |                      | 16+                  | 1                    |
| Fulmar                                      | 2                 | 1                  | 1                  | 2                    | 7                    | 2+                   |
| Pink-footed Shearwater                      |                   | 1                  |                    | 13                   | 125                  | 3+                   |
| Pale-[flesh] footed Shearwater              | 2+                |                    |                    | 1                    |                      | 2                    |
| New Zealand [Buller's] Shearwater           |                   |                    |                    | 11+                  | 3                    | 25+                  |
| Sooty Shearwater                            | 1000's            | 250's              | 50+                | 900+                 | 800+                 | 600                  |
| Slender-billed [short-tailed]<br>Shearwater | 2(?)              | 2                  |                    |                      |                      |                      |
| Fork-tailed [Storm] Petrel                  | 4                 | 3                  | 1                  | 4                    |                      |                      |
| Double-crested Cormorant                    | 12                |                    |                    |                      |                      |                      |
| Brandt's Cormorant                          | 100's             | 35                 | 60+                | 247                  | 1500                 | 50+                  |
| Pelagic Cormorant                           | 100's             | 20                 | few                |                      | 200                  | 10                   |
| Great Blue Heron                            | 5                 |                    |                    | 2                    | 3                    | 1                    |
| Canada Goose                                | 6                 |                    |                    |                      |                      |                      |
| [Greater] White-fronted Goose               | 1                 |                    |                    |                      |                      |                      |
| Black Brant                                 | 250+              |                    | 40                 |                      |                      |                      |
| Mallard                                     | 2                 |                    |                    |                      |                      |                      |
| Pintail                                     |                   |                    |                    |                      | 1                    |                      |
| Green-winged Teal                           | 15                |                    |                    |                      | 40                   |                      |
| American Wigeon                             | 8                 |                    |                    | 17                   |                      |                      |
| Greater Scaup                               | small flocks      |                    |                    |                      |                      |                      |
| Bufflehead                                  | 2                 |                    |                    |                      |                      |                      |
| Harlequin                                   |                   |                    |                    | 3                    |                      | 3                    |
| White-winged Scoter                         | 10's              | 10's               | 22                 | 12                   |                      | 15                   |
| Surf Scoter                                 | 100's             | 60                 | 19                 | 43                   | 30                   | 34                   |
| Common [Black] Scoter                       | few               |                    |                    |                      |                      |                      |
| Red-breasted Merganser                      | 1                 |                    | 1                  |                      |                      |                      |
| Bald Eagle                                  | 1                 | 2                  | 6                  | 1                    |                      | 1                    |
| Osprey                                      | 1                 |                    |                    |                      |                      |                      |
| Peregrine Falcon                            |                   | 1                  |                    |                      |                      |                      |
| Black Oystercatcher                         |                   |                    |                    | 5                    | 2                    | 3                    |
| Semi-palmated Plover                        | 2                 |                    |                    |                      |                      |                      |
| Killdeer                                    |                   |                    | 3                  | 1                    |                      |                      |

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|                        |            |      |     |      |      |       |
|------------------------|------------|------|-----|------|------|-------|
| Surfbird               | 10         | 5    |     |      |      | 10    |
| Ruddy Turnstone        |            |      | 3   |      |      |       |
| Black Turnstone        | 100+       | 30   |     |      | 7    |       |
| Whimbrel               | 1          |      | 4   |      |      |       |
| Wandering Tattler      | 2          |      |     |      | 2    | 8     |
| Dunlin                 | few        | 4    |     |      |      |       |
| Western Sandpiper      |            | 12   | 3   |      |      |       |
| Sanderling             | few flocks | 15   | 40  |      |      | 10    |
| Red Phalarope          |            |      |     | 20   |      |       |
| Northern Phalarope     | 100's      | 230+ | 30+ |      | 60   | 10    |
| Parasitic Jaeger       |            |      | 3   |      | 6    | 2     |
| Pomarine Jaeger        |            |      | 3   |      | 6    | 2     |
| Skua                   |            |      |     |      |      | 1     |
| Glaucous-winged Gull   | 100's      | 32   | 3   | 215+ | 3    | 102   |
| Western Gull           | 100+       | 4    |     |      |      | 3+    |
| Herring Gull           | 25+        |      |     |      | 6    | 2     |
| California Gull        |            |      |     | 245+ | 75   | 52    |
| Mew Gull               |            | 10   |     |      | 8    |       |
| Heerman's Gull         |            |      |     | 5    | 4    | 31    |
| Black-legged Kittiwake | 50+        | 9    | 4   |      | 9    |       |
| Sabine's Gull          | 8          |      |     |      | 500  | 90    |
| Tern (unidentified)    |            |      |     |      |      | 4     |
| Common Murre           |            | 42   | 10  | 800+ | 150  | 1350+ |
| Pigeon Guillemot       | 20         | 3    | 35  |      | 4    | 1     |
| Marbled Murrelet       | few pairs  | 6    | 4   | 3    | 2    | 2     |
| Tufted puffin          |            | 7    | 2   | 2    | 2(?) |       |

|                                 |          |    |    |    |     |    |
|---------------------------------|----------|----|----|----|-----|----|
| Cassin's Auklet                 | 3        | 2  |    |    | 3   | 3  |
| Rhinoceros Auklet               | numerous | 21 | 4  | 11 | 6   | 6  |
| Band-tailed Pigeon              |          | 1  |    | 6  |     |    |
| Rufous-hummingbird              |          | 1  | 1  |    |     |    |
| Belted Kingfisher               |          | 1  |    | 1  | 2   | 1  |
| Red-shafted [Northern] flicker  |          |    |    | 1  |     | 2  |
| Western Flycatcher              |          | 1  |    |    |     |    |
| Tree Swallow                    |          | 1  |    |    |     |    |
| Violet-green Swallow            |          | 1  |    |    |     |    |
| [Northern] Rough-winged Swallow |          | 1  | 4  |    |     |    |
| Barn Swallow                    |          |    | 4  |    |     |    |
| Steller's Jay                   |          |    | 3  | 4  | 3   | 2  |
| Common Raven                    |          |    | 3  |    |     |    |
| Northwestern Crow               |          | 4  | 40 | 24 | 15  | 5  |
| Chestnut-backed Chickadee       |          |    |    |    | 4   | 3  |
| [American] Robin                |          |    |    | 4  | 30+ | 1  |
| Golden-crowned Kinglet          | 15       |    |    |    |     |    |
| [European] Starling             | 2        |    |    | 12 |     | 12 |
| Red-eyed Vireo                  |          | 1  |    |    |     |    |
| Orange-crowned Warbler          | 3        | 3  | 2  | 2  |     |    |

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|                                  |      |      |     |      |      |      |
|----------------------------------|------|------|-----|------|------|------|
| Audubon [Yellow-rumped] Warbler  |      |      | 1   |      |      |      |
| Townsend's Warbler               | 8    | 1    |     | 2    |      |      |
| Wilson's Warbler                 | 3    | 2    |     |      |      |      |
| Western Meadowlark               |      | 1    |     |      |      |      |
| Brewer's Blackbird               |      | 20   |     |      |      |      |
| Brown-headed Blackbird [Cowbird] | 2    |      |     |      |      |      |
| Pine Siskin                      |      | 2    |     |      |      |      |
| American Goldfinch               |      | 1    |     |      |      |      |
| Savannah Sparrow                 |      | 2    |     | 3    |      |      |
| White-crowned Sparrow            |      | 2    |     |      |      |      |
| Fox Sparrow                      |      | 1    |     |      |      |      |
| Song Sparrow                     | 2    | 4    |     | 4    | 2    | 5    |
| Total Species                    | 44   | 46   | 46  | 35   | 42   | 44   |
| Total Number (Approx.)           | 7500 | 1000 | 550 | 5000 | 3800 | 2500 |

### **Conservation - Chairman Dr. V.C. Brink**

#### **Notes from the Conservation Committee**

1. Members of the *Save Our Parks Association* and the Conservation Committee met with the Hon. Kenneth Kiernan and Bob Ahrens of the B.C. Department of Recreation and Conservation, Dec. 7, 1970 to stress the need for (a) greater support for recreational and conservancy areas in the B.C. Lower Mainland, (b) a works program from Lower Mainland Centres relating to parks and conservancies and (c) a larger parks budget.

Mr. Kiernan promised action on Mt. Seymour trails and actions on the Tschaikazan

Coast Range Park Survey. The Minister in addition, promised that legislation to control the misuse of power boats, snowmobiles and all-terrain vehicles would soon be enacted by both Federal and Provincial governments. (It can be stated that plans and some work is already under way on Mt. Seymour Trails).

2. Your committee is preparing a brief on the Federal Parks Service plans for Banff, Jasper, Kootenay and Yoho Parks to be presented to the parks commission, April 26, in the Hotel Georgia.
3. All who are interested in maintaining some of the natural features on the Burnaby Lake area are urged to attend a "Burnaby Lake Day" on March 14. Details will appear in the Press and will be broadcast. Do you want power boat races on the lake or do you want waterfowl, gardens, and perhaps some nature trails?
4. The Federation of B.C. Naturalist is supporting a compromise on the Nitinat Triangle associated with the recently formed "West Coast Park". They are asking for inclusion of Tsusiat Lake in the Park and reasonable logging control around Nitinat Lake.

### **Photographic Section - Co-ordinator Roy Edgell**

## Vancouver Natural History Society - Newsletter Notes -1943-1971

### 1970 Photographic Competition Results

A word of thanks to all the members who entered the 1970 competition. To ensure a good entry, your chairman decided not to limit the number of slides that a competitor could enter. 597 slides later, he realized he had made a mistake.

That 42 members submitted such a large number of excellent slides speaks well for the quality of photography within the Society. This quality was also highlighted by the two twenty minute television programmes in which our Phil Croft presented a number of the slides.

There were too many slides to submit to the judges. Also, about 150 slides is the maximum that should be shown for an evening's entertainment. It was therefore decided to submit 300 slides, representing what was considered to be each photographers best work, for judging, and present each photographers highest scoring slides at the society meeting.

While this enabled the judges and the membership to see a representative cross section of the slides submitted, it did mean unfortunately that many beautiful slides were not shown. Your chairman regrets this and suggests that many of these slides could be resubmitted to future competitions.

The winning member were:

|                          |                            |                    |
|--------------------------|----------------------------|--------------------|
| Botany                   | Sundew                     | Ervio Sian         |
| Ornithology              | Young Hummingbird          | Ann Hau )Tie       |
|                          | Rufous Hummingbirds        | Ervio Sian )       |
| Other Natural History    | Ram of the Rocky Crag      | Alma Carmichael    |
| Landscape; VNHS Activity | Yukon Aretes               | Norman Pursell     |
| Macrophotography         | <i>Vanessa californica</i> | Phil Croft         |
|                          | [California Tortoiseshell] |                    |
| Conservation             | Forest Fire                | Valery May-Wetterl |

### **1971 Photographic Competition**

Entries for the 1971 photographic competition will be submitted under one of the following classes;

- |                |                                  |
|----------------|----------------------------------|
| 1. Botany      | 5. Marine Biology                |
| 2. Ornithology | 6. Conservation                  |
| 3. Mammals     | 7. Landscape and VNHS Activities |
| 4. Entomology  |                                  |

All entry details will be published in a later bulletin.

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

### **Mountain Access Committee - VNHS Delegate - Roy Edgell**

The Provincial Parks Branch has agreed to the construction of a safety trail on Mt. Seymour. This trail will be located in such a position that it will offer an exit route to lost walkers.

Volunteer labour, co-ordinated by the Mountain Access Committee, will be used to build the trail. Any VNHS members willing to assist with this project please ring Roy Edgell at 922-2664.

### **End Note #52 - #15 - June - August 1971 (from page 252)**

#### **Junior Section**

Due to your leader being on holidays throughout most of June there will be no scheduled trips for that month. However we will begin in July: July 3, 10, 24 and 31; and August 14 and 21.

Once again the summer is upon us. A lot of you are going to be going away on holidays. I would like to repeat myself just to remind you of the two **DON'TS** that you should remember about animals. First, don't pick up baby deer or fawns that you may find lying beside the road. They may appear to be injured and the mother may not appear to be around but she is probably watching. Very seldom does a mother animal leave her young. If you know that something has happened to the mother then contact a game warden, police officer, park naturalist, zoo keeper, or anyone who would know what to do with the animal. But don't you take it home! The second DON'T concerns bears. There is no bear that you

can trust. The ones along the road are the most dangerous because they are not afraid of people. **DON'T FEED THE BEARS.** Most of the parks have signs up and they are there for a reason. If you feed a bear on the side of the road you are helping to kill the bear. The more food a bear gets the bigger he gets. The bigger he gets the more food he wants. So if you give him a small part of your lunch and he wants more, then he will chase you. If you are feeding some cubs and the mother thinks you are too close she will chase you. You may get away then go and tell the game warden, or someone else, that the bear chased you. He has then no option but to go and shoot it. So please don't feed bears, or any wild animals along the side of the road or in picnic or camping areas. These animals may appear tame but they are still wild animals and should be treated with a lot of respect.

Another DON'T I would like to remind you about is that parks are for people and animals. Don't pick handfuls of flowers, leave them for others to see. Also make sure that every place you go you leave it cleaner than when you found it. Have a good holiday and always remember to be a good naturalist. Still your fearless leader.

Ken Kennedy

### **End Note #53 - #151 - June - August, 1971 (from page 254)**

#### **Ornithology Section - Co-ordinator R. Wayne Campbell**

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### Birds for the Record [Spring 1971]

|                                    |                     |         |                     |
|------------------------------------|---------------------|---------|---------------------|
| Cinnamon Teal (1)                  | Iona Island         | Mar. 20 | Anderson & Baker    |
| Golden Eagle (1)                   | Stanley Park        | Mar. 14 | Bill Rae            |
| Golden Eagle (2)                   | Pitt Lake           | Mar. 20 | Ken Summers         |
| Gyr Falcon (1)                     | Delta               | Feb. 13 | Michael Shepard     |
| Sandhill Crane (1)                 | Pitt Meadows        | Apr. 1  | Robert Luscher      |
| Ruddy Turnstone (1)                | North Vancouver     | Mar. 6  | Allen Poynter       |
| Ring-billed Gull (1)               | Delta               | Feb. 13 | Michael Shepard     |
| Snowy Owl (1)                      | Sea Island          | Apr. 10 | Anderson & Baker    |
| Rufous-hummingbird (1)             | Horseshoe Bay       | Apr. 2  | John LeJeune        |
| Violet-green Swallow (3)           | North Vancouver     | Mar. 14 | Allen Poynter       |
| Tree Swallow (40)                  | Burnaby Lake        | Mar. 16 | Jim Biggar          |
| Barn Swallow (1)                   | Mud Bay             | Mar. 30 | Barry Harman        |
| Hermit Thrush (1)                  | Stanley Park        | Mar. 3  | Rob Butler          |
| Mountain Bluebird (4)              | Pitt Meadows        | Apr. 3  | Shepard & MacDonald |
|                                    |                     |         |                     |
| Common Teal (1)                    | Tsawwassen          | Apr. 11 | Wayne Campbell      |
| Townsend's Solitaire (1)           | U.B.C.              | Feb. 26 | John Krebbs         |
| Solitary Vireo (1)                 | Campbell River Park | Apr. 12 | Campbell & Grass    |
| Orange-crowned Warbler (1)         | New Westminster     | Mar. 14 | Wayne Weber         |
| Myrtle [Yellow-rumped] Warbler (1) | Lost Lagoon         | Apr. 11 | Bill Rae            |
| Wilson's Warbler (1)               | Lost Lagoon         | Apr. 21 | Michael Shepard     |
| Yellow-headed Blackbird (1)        | Burnaby Lake        | Apr. 17 | Campbell & Watts    |
| American Golden Plover (1)         | Boundary Bay        | Apr. 24 | Wayne Campbell      |
| Whimbrel (2)                       | Boundary Bay        | Apr. 24 | Wayne Campbell      |
| Long-billed Curlew (1)             | Sea Island          | Apr. 25 | Terry Finch         |
| Pectoral Sandpiper (1)             | Sea Island          | Apr. 27 | Michael Shepard     |

### Bird Chatter

Show of Bird Paintings. Some of Ted Capella's art work will be on display at the Richmond Art Gallery (next to Minoru Park) from Aug 27 through September 30 this fall.

Here are some tips from a circular of the Royal Society for the Prevention of Cruelty of Animals for methods of cleaning oiled birds: 1. as soon as rescued, the bird should be covered with a cloth "poncho" to prevent preening, conserve body heat, and absorb some of the oil. 2. Weak or hypothermic birds should be killed. 3. Remove oil by immersing birds in sulphonated castor oil for a few seconds, then massage the oil into the plumage, followed by a rinse in warm water. 4. Place in warm dry atmosphere for at least two days. 5. Feed with saline-dipped fish. 6. Spray birds twice daily with sea water or salt solution or allow to bathe. A report on rehabilitation by this method notes that the plumage, upon losing its waterproofing quality, recovers it only after the next moult. The report states that (in guillemots) the entire moult took six weeks. Tremalon was considered the best detergent, It was very effective and nonirritant.



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Tufted Puffins, Leach's [Storm] Petrels, Rhinoceros Auklets and other seabirds can be seen on a trip to Cleland Island on July 31. Eleven people can participate and there are still a few spaces available. A charter boat will leave Tofino early on Saturday morning and travel out to sea in search of Albatross and return early in the afternoon for a short visit to Cleland Island. If you are interested in details concerning the trip call Wayne Campbell before June 15.

[Pacific Nest Record Scheme] Don't forget to write Mrs. L.A. Gibbard, 465 Ellis Street, Penticton, for cards to record information on nests found this summer. Most important, try to check each nest about four times. This is especially valuable for nesting success.

Fall Pelagic Bird Trips are scheduled for September 4, 11, 18 and 25 from Tofino. Send a cheque for \$13.00 to Wayne Campbell to reserve your spot on the boat.

Vacationing in the Province this Summer? Some of our members will be employed as naturalists in many provincial parks from June through August. Bill Anderson will be at Alice Lake, Neil Dawe at Wasa Lake, Al Grass in Wells Grey Park, Michael Shepard at Mount Robson, the newly weds (Sirks) on Mitlenatch and Tom Stevens at Shuswap Lake. Drop in and say hello!

From the Annual Bird Report Naggers!! Please send in field observations of birds in the Greater Vancouver area every month or so. This will enable us to work on the records gradually during the year and eliminate the year's end pile up.

### **End Note #54 - #151 - June - August, 1971 (from page 254)**

#### **Photographic Section - Co-ordinator Roy Edgell**

##### Annual Competition

The annual photographic competition will be held in November. The categories under which slides will be entered were published in the last bulletin and full entry details will be published in the next bulletin.

##### Members Night

We are considering a "members' night" meeting early in 1972. This would consist of several short presentations by society members who have topics of interest not requiring a whole evening for presentation.

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Would members who are prepared to speak with or without slides please contact Roy Edgell prior to October 30th, 1971.

### **Geology Section - Co-ordinator C. S. Ney**

#### **Geology Summer Camp Area**

After preliminary investigations by G. M. Dawson in 1875, the first comprehensive surveys of Chilko Lake area were made in 1924 by Dr. Victor Dolmage, a well known Vancouver geologist. His work is briefly presented in Summary Report 1924, Part A of the Geological Survey of Canada. In those days geologists were inclined to be more eloquent about scenery than modern scientists, and Dolmage had this to say for the country about Chilko Lake:

*“The long, narrow, deep lakes, though inclined to be windy, are easily navigated and form lines of communication between the southern and northern parts of the district. By no means their least important quality is their great beauty, particularly that of Chilko Lake. The water of Tatlayoko is clear and colourless, and that of Taseko white and opaque due to the large amount of rock flour produced by the glaciers which feed it, but the water of Chilko, particularly in its northern part, has a bluish opalescent colour of remarkable beauty which contrasts pleasingly with the green vegetation along the shoreline, the red colour of the rocks above, and the white snow field still higher. It would be difficult to imagine a more delightful camping ground than the shores of Chilko Lake.”*

In this report Dolmage also describes the Coast Range, as seen from the Chilko Lake area. He notes that the great British Columbia Land Surveyor, P.R. Bishop, had made

instrumental measurements from Chilko Lake area to peaks as far as the Coast Range. One outstanding peak measured out to be over 13,000 feet “*probably higher than M. Robson*”. His claim was greeted with derision and disbelief, and it was many years before Don and Phyllis Munday, those intrepid Coast Range explorers, came to grips with this mysterious mountain, and gave it the name “*Waddington*”. [Mt. Waddington is, in fact 13,104 feet high; Mt Robson only 13,015 feet!]

Most detailed studies of the geology have been made in recent years by D. Oward Tipper of the Geological Survey of Canada. Through most of the Nemaia valley the rocks are of sedimentary origin, deposited in the seaways of the Jurassic and Cretaceous periods, 150-180 million years ago. These rocks are now upturned to steep angles and the country is segmented by many faults. Some masses of granite have intruded into them, and they are now overlain in small areas on Mt. Tatlow by remnants of the extensive Miocene lava flows that form the plateau of the north. There are a few indications of copper and molybdenum about, but this part of the province seems remarkable free of important large ore deposits.

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### International Geological Congress

My predecessor [and V.N.H.S. Honourary Life Member ] Dr. J. E. Armstrong was recently summoned to Ottawa to take on the herculean task of organizing the 24th International Geological Congress. This is a gathering, from all parts of the world, of people concerned with Earth Science.

For further information, contact Dr. J. E. Armstrong, Secretary General, 24th International Geological Congress, 601 Booth Street, Ottawa 4, Canada.

### End Note #55 - #152 - September - November 1971 (from page 254)

#### Editorial - Hunting Promotion

Your new editor would first like to take this opportunity to thank the retiring Editor, Mr. P. J. Croft, for the good wishes expressed in his Valedictory and to express also the hope that future editions of “*Discovery*” will come up to his expectations. Certainly every effort will be made to have them do so!

At a time when conservation issues, and many other issues of an environmental nature, are apparently being taken seriously for the first time by a larger and larger segment of the public, it is probably fairly common knowledge that habitat destruction plays a far larger role in the eventual elimination of various species of animals than does hunting itself. Indeed moderate hunting pressure has been shown to have virtually no effect on the populations of some species while having much more severe effects on others. Hunting seldom proves beneficial to a species involved, however; the argument that man the hunter simply replaces the ‘natural’ predators is a false one. Carnivores tend to take the old and the weak, thus strengthening the prey population. Man tends to take the biggest and best specimens, particularly in trophy hunting, a process which if carried to extremes might quite conceivably lead to the weakening of the population involved.

Quite aside from the conservation questions, but important nevertheless, are the attitudes of callousness and the unthinking infliction of cruelty that so often accompany sport hunting.

Your Editor was more than a little disgusted upon reading a small brochure entitled “*Hunt Canada’s Arctic*”, published under the authority of the commissioner of the Northwest Territories, and distributed by the British Columbia Tourist Bureau in Vancouver.

The brochure starts off “*High on a rocky ledge above the sprawling river, a snow white Dall’s [thinhorn] sheep cocks his head for danger. His curved golden horns glint I the sun. His nimble hooves scabble for a foot-hold. In the trackless forest a great paw crushes the leaves. A Grizzly bear searches for food. Alert as he is for natural enemies, his huge bulk has little to fear from them - and he has never known the scent of man.*

*Suddenly a rifle shot splits the stillness and before its echoes have stopped bouncing around*

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*the encircling crags, your target has dropped. You have won your first trophy in the pristine fastness of the MacKenzie mountains - that 60,000 square miles of hunter's paradise known as zones 12 and 19 in Canada's Northwest Territories". It continues with such phrases as "where thrills come thick and fast as you battle with grizzly bear and black bear, Dall sheep and mountain goats, moose and caribou" and "For spring seal hunting, the solid hitting power of a .270 is just fine. For white whales you need a heavier caliber such as a 30.06."*

The quotes could go on and on, but these few serve to underline the tone of the pamphlet, and in your Editor's view at least, it is regrettable in the extreme that anyone, and least all those government agencies, should promote and foster such primitive and barbaric attitudes towards our wildlife heritage.

### **End Note #56 - # 152, September -November 1971: continuation of "The Skagit", Photographic Section, Geology Section, and Birds for the Record (from page 255)**

#### **The Skagit - continued:**

The next hearing will be that of the Federal Power Commission and with such a determined adversary as Seattle City Light, it is likely that much work and much money will be required before a final decision is known.

The ROSS [Run out Skagit Spoilers] committee has many helpers but needs money and it was hoped that the fund raising appeal which was sent to our members in the last *Discovery* Would resolve the money question. Unfortunately the results have been disappointing and the strength of the conservation movement is seriously jeopardized if the apparent support of very many persons turns out to be lacking, even the sacrifice of a few dollars. It is not too late to send a contribution and V.N.H.S. members are asked to be generous since in the likely event of a quick decision they can be assured that any surplus money will be diverted to any of several equally pressing conservation projects. We who know the valley know that it is worth saving.

Contributions should be sent to:  
Skagit Defense Fund, c/o B.C. Wildlife Federation,  
3020 Sumner, Burnaby, B.C.

#### **Photographic Section - Co-ordinator - Roy Edgell**

##### **Photographic Competition**

We are hoping to present a good representative cross-section of our members' works, so do not hesitate to enter your best slide or slides.

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

Closing date for entries is Monday, November 1st, 1971. Accepted slides will be shown and winning entries announced at the regular monthly meeting held on Wednesday, November 17th, 1971 at the Vancouver Centennial Museum.

### **Competition Entry Instructions**

- a) Members may enter not more than four slides in any class, and they are limited to three classes plus conservation, i.e. 16 slides maximum.
- b) Standard cardboard mounts are acceptable.
- c) Subjects should be shown in their natural environments.
- d) All slides must be titled and entered under one of the following seven classes:

- |                |                                  |
|----------------|----------------------------------|
| 1. Botany      | 5. Marine Biology                |
| 2. Ornithology | 6. Conservation                  |
| 3. Mammals     | 7. Landscape and VNHS Activities |
| 4. Entomology  |                                  |

- d) Mark each slide entered with:
  - 1. A number, for 1 to 7 indicating its class
  - 2. Title of the slide
  - 3. Your full name
  - 4. A spot placed in the lower left corner when the slide is held correctly for hand viewing.

Include with your slides any special instructions regarding their return and mail or deliver to:

Roy Edgell, 4102 Rose Crescent, West Vancouver, BC.

### **Geology Section - Co-ordinator - C.S. Nev**

#### **Nickle, Sudbury and Falling Stars**

Canada's stature in world commerce was long upheld by grain, lumber and nickel. For many decades we monopolized world production of the metal, but more important in the long run, we sold the world on the strength and beauty of nickel and its alloys. Most of the nickel, plus a lot of copper, and much of the world's supply of platinum, came from a rich

group of mines located around a very singular geologic feature, the Sudbury Basin of Ontario.

Visitors to Sudbury may not be happy about the price we paid for this superiority; the utter devastation of plant life by smelter fumes. For miles around, vegetation was erased; soil, stripped off by erosion, and the bare rocks blackened by the surface of a fictional planet born too close to a sun. But this was the folly of ignorant profiteers of decades past. Modern reduction plants remove almost all the harmful sulphur. The thin white plumes of mountain-high chimneys rarely foul the air or dull the view. Now one can sense the joyous surging back of trees, shrubs and flowers across the scorched land.

But to return to the geology of Sudbury Basin. Despite decades of intensive study, no simple

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hypothesis emerged to explain the origin of the rocks, ores and structure of the Basin. The wise still wrangle, but in recent years an exciting new twist has been added to the plot. In plain terms what is this Basin? Its main element is a slab of rock two miles in thickness that is warped into the shape of a great spoon, 20 by 40 miles in area. The rock is a darker member of the granite family that originated as liquid magma from deep in the crust of the earth. This spoon-shaped mass lies upon a floor of ancient rocks of the Precambrian Shield, but not always directly. Squeezed beneath it like an ink-blot is an irregular thin sub-layer, composed of sulphides of iron, nickel and copper, with bouldery masses of dark igneous rocks that appear to have originated at still deeper levels of the earth. Above the spoon-shaped mass of rock, and filling its hollow, is an intensely fragmented formation, similar to that produced by an explosive volcano, but developed on a scale unaccountable by any past or present volcano.

These enigmatic facts awaited the analysis of a geological Sherlock Holmes. There appeared on the scene an oceanographer by the name of Dr. S. Dietz, who spends his weekends doing geology. He had been studying known circular structures from various parts of the world. Dissatisfied with conventional theories of their origin, he came up with the idea that they were produced by the impact of giant meteorites. For these structures he coined the term 'astrobleme', meaning star-scar. With great scientific courage he predicted that several well known structures, including the famous Sudbury Basin, would be found to be astroblemes.

Saying this was very well, but could he prove it? Strangely, it was the testing of atom bombs that provided the means of proof. Craters produced by these intense explosions resembled those known to have been produced by meteoric impact. Certain diagnostic structures, microscopic and macroscopic, had been noted and described, that could only be produced by the ultrahigh pressures of impact. Dietz predicted that these structures would be found at the Vredefort ring structure in Africa and at the Sudbury Basin. It is said that he could not afford to go to Africa, but did go to Sudbury, and indeed found the characteristic structures, pointing to a high explosion over the basin. It was, Dietz said, the fall of a meteorite about two billion years ago that blew a hole in the crust of the earth and allowed magma to well up rapidly to form the spoon shaped mass of granitic rock. The explosion shattered great volumes of the surrounding rock and produced the deposit of fragmented material that now occupies the hollow of the spoon.

These ideas were discussed, and the field evidence reviewed, at a conference in Sudbury in May 1971, held by the Geological Association of Canada. Many conventional geologists came away from the meeting converted to the idea of meteorite impact. But there remained great differences of opinion concerning the sub-layer with its rich ores. Most geologists thought that the meteorite only served to allow the mass of molten magma to escape to the surface. Thereafter the ores would form by a process of crystalization and mineralization whose laws were thought to be understood. Dietz and a few others take a more way-out view. They consider that the ore-layer is the material of the meteorite itself, strewn on the floor of the basin then covered over by the molten magma. The splattered tentacles of this sub-layer protrude only here and there beyond the edge of the spoon, where our great mines are located.

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It is interesting that in 1957 a well know Vancouver geologist, the late Gus Skerl, introduced the idea that the erratic distribution of metals throughout the earth might be caused by ancient meteorite falls.

### **Birds for the Record (Spring and Summer 1971)**

|                             |                      |             |                                     |
|-----------------------------|----------------------|-------------|-------------------------------------|
| Lapland Longspur (1)        | Sea Island           | April 30    | Michael Shepard                     |
| Common Tern (c40)           | Iona Island          | May 1       | VNHS Field Trip                     |
| Lapland Longspur (1)        | Iona Island          | May 1       | VNHS Field Trip                     |
| Yellow-headed Blackbird (6) | Iona Island          | May 1       | VNHS Field Trip                     |
| Lewis's Woodpecker (1)      | Burnaby Lake         | May 1       | Roger Mayer                         |
| Turkey Vulture (2)          | Mt. Seymour          | May 3       | Barry Harman                        |
| Black Brant (c40)           | Tsawwassen           | May 4       | John & Areta Sanders                |
| Black-necked Stilt (1)      | Sea Island           | May 14      | Bill Anderson &<br>Jim Biggar       |
| Western Kingbird (1)        | Pitt Meadows         | May 16      | Roger Mayer                         |
| Northern Shrike (1)         | Sea Island           | May 20      | Wayne Campbell<br>& Dave Hatler     |
| Pomarine Jaeger (1)         | Tsawwassen           | May 20      | Adrian Dorst                        |
| Lazuli Bunting (1)          | Eagle Harbour        | May 25      | Pat Swindle                         |
| Black-legged Kittiwake (4)  | St. of Georgia       | May 28      | Rudi Drent                          |
| Ruddy Turnstone (1)         | Iona Jetty           | May 31      | Roy Phillips                        |
| Eastern Kingbird (4)        | Pitt Meadows         | June 2      | Bill Rae &<br>Verna Newson          |
| Western Kingbird (1)        | Waterfowl Refuge     | June 5      | Rick Jerema & group                 |
| [Gray] Catbird (1)          | Pitt Meadows         | June 6      | Jack Williams                       |
| [Gray] Catbird (8)          | North Alouette River | June 6      | Jack & Eileen Husted                |
| Eastern Kingbird (6)        | North Alouette River | June 6      | Jack & Eileen Husted                |
| Lazuli Bunting (1)          | Mt. Frome            | June 9      | Allen Poynter                       |
| Franklin's Gull (1)         | Stanley Park         | June 13     | Allen & Helen Poynter               |
| Golden Eagle (2)            | Pitt Meadows         | June 17     | Rick Jerema &<br>Jim Biggar         |
| Stilt Sandpiper (1)         | Iona Island          | July 4 - 31 | Husteds, Bill Rae<br>& Floyd Dumont |
| Caspian Tern (1)            | Iona Island          | July 4      | Many people                         |
| Semipalmated sandpiper (1)  | Westham Island       | July 17     | Allen Poynter &<br>Ted Farley       |
| Franklin's Gull (1)         | Iona Island          | July 31     | VNHS Field Trip                     |
| Whimbrel (3)                | Iona Island          | July 31     | VNHS Field Trip                     |
| Solitary Sandpiper (1)      | Iona Island          | July 31     | VNHS Field Trip                     |

**End Note #57 - #152 - September - November 1971 (from page 256)**

**A Nest Record of an Albino Robin in British Columbia by John (Jack) G. Sarles:**

During the summer of 1968 there were a number of sightings of partial albino [American] robins in Vancouver. One was reported in May on 64th Avenue and Angus Drive. Another in central Burnaby on April 30 and several reports were received from the campus at the University of British Columbia.

Early in March, Mr. V. T. Walters saw a partial albino Robin in his garden at 6996 Brooks Street, Vancouver. It had been resident in the area for several weeks and occupied a deciduous woodlot across 54th Avenue. On April 15th, it was photographed in the Walters' garden accompanied by an adult in normal plumage. No unusual behaviour was noticed and both birds reacted to a normal feeding pattern. On April 20, the partial albino was seen with an adult in normal plumage. It was aggressive and frequently attacked the latter. The following day, the bird was again sighted and on the 24th, its grass-lined nest containing three normal bluish eggs was located in the fork of an alder tree about twelve feet above ground. On April 25, the partial albino was seen incubating the eggs. The bird was not seen in the woodlot or near the nest on April 27. Three days later, Mr. Walter saw the partial albino in the area and on May 2, reported that although the nest and eggs had been destroyed by vandals, the birds remained, usually accompanied by another adult. During

May 11 to July 14, Mr. Walters noted that the partial albino robin returned to the area, built a new nest in a blackberry thicket about three feet above ground, laid a clutch of three bluish eggs, and three young, bearing normal plumage, were hatched and fledged.

During the period of observation the partial albino Robin seemed difficult to approach. It was nervous and suspicious by comparison in this respect to the normal behaviour pattern of the other adult.

I can find no published breeding records for albinistic robins in the zoological files at the University of British Columbia.



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Thanks are due to Mr. and Mrs. Walters for their hospitality, to Miss Helen Allen, Mr. and Mrs. E. G. Barnes, Mr. R. Wayne Campbell for their reported sightings; Lynne Kemper for the U.B.C. Campus records and to Mr. L. N. [Norman] Precious for Transportation.

### **[Bald Eagle Observation - Stanley Park] by Donald and Fraser Bruce**

On May 31 at about 7:30 p.m. an unusual sighting of an adult Bald Eagle was made from the seawall near the nine o'clock gun in Stanley Park. The eagle was clearly observed directly overhead at a height of about ten yards. It was carrying two good sized flounders, one in each foot. Its double burden seemed to weight the eagle to this unusually low course. It was pursued and harassed by an assortment of gulls, crows and starlings, all with the eagle, in full cry. The cortege disappeared in the direction of Beaver Lake.

### **End Note #58 - #153 December, 1971 - February 1972 (from page 258)**

#### **Editorial - After Amchitka [Alaska]**

The furor over Amchitka has now died away. The blast took place despite an unprecedented number and variety of warnings and protests all, it would seem to no avail, unless thinking of possible future blasts on Amchitka has been affected. No earthquake, tidal wave or immediate radiation hazard has resulted from the blast and to many no doubt, the feeling is both one of relief and perhaps a sense of undue alarmism in the first place. However, at the possible risk of "overkill" on the subject, two aspects remain cause for concern.

Although there was a report of no immediate radiation leakage, the fact remains that large amounts of dangerously radioactive material remain "bottled up" in the chamber created by the blast. Due to the slow rate of radioactive decay of many of these materials, high levels of radioactivity will remain in the chamber for many years to come. As long as these materials remain "bottled up" no harm will result, but the area is a geologically active one and there seems to be no guarantee whatsoever that future tremors or earthquakes in the area, might not crack or otherwise damage the chamber, allowing leakage of radioactive materials into the environment. Such a leak could conceivably occur many years or even many decades in the future, with very serious results.

The second question concerns the sea otter population of Amchitka. Little mention was made of Amchitka's sea otters before the explosion, but in fact Amchitka is part of the northern centre of population of these extremely interesting and once seriously threatened

mammals. Pushed to the brink of extinction by the turn of the century, the sea otter's chances of survival seemed remote. Finally in 1911 the United States, Great Britain, Japan and Russia signed a treaty banning the killing of sea otters and in the ensuing decades the animal has made a remarkable recovery, although even today it inhabits only about one quarter of its original range. After the treaty was signed, Amchitka became a wildlife refuge for the sea otter and apparently remained one until political expediency decided underground nuclear testing constituted a "higher priority" for the island.

Some biologists have predicted dire effects ranging from deafness to death for the Amchitka sea otters as a result of the nuclear blast. Even supposing there are no immediate effects, the

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threat of radioactive leakage poses an ever-present potential danger. What has been the immediate effect of the blast on Amchitka's sea otters? Few appear to have asked the question and your Editor at least has not seen or heard the subject mentioned since the test.

Even more dangerous perhaps than the effects of the explosion on the sea otters is the precedent that has now been set. Wildlife sanctuaries appear to exist "in perpetuity" only unless "higher priorities" are established for the land in question. Such a precedent makes a mockery out of the principle of wildlife refuges and for this, as much as for any other single reason, it was a bleak day for the cause of conservation when the five megaton nuclear blast exploded under Amchitka on November 6, 1971.

### **A Title for the Book**

At a recent Executive committee meeting it was reported by Mrs. W. J. (Kay) Smith and Mrs. J. M. (Nancy) Anderson that the Society's "Lighthouse Park Booklet" [*Nature West Coast*], a major project of the last several years, is now in the final stages of preparation and will soon be ready for the printer. Publication next spring is confidently expected.

A suitable title is needed for this booklet, which will be an illustrated guide to the fauna and flora of the Lighthouse Park at Point Atkinson, West Vancouver, and on which many writers and artists from the Society's membership have been steadily working for many months.

The title should be arresting or "catchy" - without being flippant, and should convey an instantaneous indication of the general nature of its coverage. Without seeming 'stodgy' or over-learned, the title should nevertheless convey the message that it is a popular but serious work.

Many of our members are bright and full of wit. Could we have some suggestions? Send them to Nancy Anderson at 2145 Lloyd Ave., North Vancouver. A cover and jacket have soon to be designed.

P.J. Croft, - President

### **Audubon Wildlife Films**

The editor regrets that the "Audubon Wildlife Film" notes were inadvertently omitted from the last issue of *Discovery*. The remaining film nights are as follows:

|                      |                    |  |
|----------------------|--------------------|--|
| January 17 (Monday)  | Buss Moss          | "Mule Deer Country"                                    |
| February 13 (Monday) | Bower E. Rudrud    | "Treasure of East Africa"                              |
| March 13 (Monday)    | Robert W. Davidson | "Journey in Time - Reflections<br>On the Grand Canyon" |

Point Grey High School - 5350 E. Blvd. At 37th Ave., - 8:00 p.m.

Admission: \$1.25

Students - 65c

Children under 14 - 25c

### **Heron There:**

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

Conserving Canada' Wildlife is the subject of the August monthly newsletter published by the Royal Bank of Canada. Copies can be obtained from the Head Office in Montreal.

Did you know that Mike Shepard has already compiled 10,000 records for the 1971 bird report? Please send sightings of birds from Greater Vancouver in 1971 to the Vertebrate Museum at U.B.C.

Hungry Hummer? Mrs. H. S. Howard of Tulsa, Oklahoma provides a successful formula for feeding captive hummingbirds. It is 3 teaspoons mellinsfood, 4 teaspoons super hydramin powder, 4 teaspoons sweetened condensed milk (Eagle Brand), 10 teaspoons clover honey, 1 teaspoon Beef Bacto extract and 16 drops of A,B,C,D,E, aqueous solution. Mix above with water to make one quart [U.S.?] of hummingbird feed. Can be frozen in cubes and thawed to room temperature as needed.

Food for thought! Maryland State Forester A.R. Bond, writing in the *Maryland Conservationist*, says that just one tree has the cooling effect of five air conditioners; that green belts (of trees) 100 feet wide reduce noise levels 6 - 8 decibels; an acre of growing trees will clean air polluted by eight cars running for 12 hours or absorb carbon dioxide generated by 50 autos in 12 hours; and that a greenbelt 100 yards wide would have the same effect on the atmosphere as a one-mile increase in altitude.

Nearly 100 species of birds were identified by our members on the "Austrian Trip" lead by Dr. and Mrs. Fred Fisher from June 3 to July 2, 1971. Lifers included such morsels as golden oriole, whinchat, Kentish plover, yellowhammer, alpine chough, ring ouzel and hoopoe!

Two 4-page leaflets on Oregon's Hawks and Owls are available free of charge from Oregon Fish and Game Commission, 1634 W. Alder Street, P.O. Box 3503, Portland, Oregon, 97208

Dual Purpose - Rubber ponchos that can be used as a tent, ground sheet or rain coat are on sale (\$3.49) at Vancouver's Army and Navy Store.

The Eagle Killers: Testimony before a U.S. Senate subcommittee recently revealed more than 500 golden and bald eagles were slaughtered since September 1970 by Wyoming ranchers obsessed with the Neanderthal notion that eagles are a serious threat to livestock

say a recent issue of Conservation News. It has been against Federal Law to kill bald eagles since 1940. Violating that law can earn the criminal up to a \$500 fine and/or six months in prison. It is clear that a \$500 fine is not a deterrent to well-heeled Neanderthals who will hire helicopters and airplanes to slaughter eagles, so conservationists around the country are calling for the Justice Department to seek imprisonment for all criminals convicted of the deliberate slaughter.

Bird of the Year. Any nominations for the best bird seen in the Vancouver check-list area in 1971? The winner will be awarded a \$25 book prize and be presented with a plaque, which

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can be kept for a year. Bring your suggestions to birder's night.

### **End Note #59 - Heerman's Gulls; Observations of White Wing Patches by G. A. [Allen] Povnter (from page 260)**

Heerman's Gulls appear in the littoral waters of British Columbia in mid-July during the post breeding migration. As this is the northern limit of their wanderings the population observed each year varies considerably but is always represented by immature, sub-adult and adult birds, the ratio of which is also variable.

While flocks of considerable size are common along the west coast of Vancouver Island During migration, the numbers entering the Strait of Juan de Fuca rapidly decline north of the Gulf Islands to the point that occasional reports of the species, from Campbell River or the Vancouver area, are considered worthy of mention.

During thirteen years of field observations on southern Vancouver Island, at least six individual birds were seen to have distinct white wing patches in the upper wing coverts at the bend of the wings. These birds were all sub-adults or adults and the extent of the white feathering varied from a well defined square in each wing to uneven or small patches, with one individual showing only a single white feather [in one wing] and a substantial window in the other.

Little has been written on this rather rare colour aberration which also occurs very occasionally in other species of Larids including the Western Gull, Lesser Black-backed, Great Black-backed and Herring Gulls.

The most comprehensive study of this subject appeared in the *Condor*, September 1951, when C.L. Hubbs and G.A. Bartholomew compiled data on collected specimens and sight observations, theorizing on the cause and abundance of this occurrence in Heerman's Gulls, as well as commenting on the potential emergence of a new subspecies.

Considering the white patches as defectively pigmented feathers, the authors indicate an occurrence of possibly one in 10,000 while referring to another author's opinion of one in 1,000. The present writer, applying the jizz principle based on the volume of Heerman's Gulls in the area each year would place the abundance at one in 2,000 to 3,000 birds.

Applying basic logic, the evolution of a sub-species through natural selection is likely to be impeded only through thoughtless collecting practices so apparent in the 1910 - 1918 period on the California coast.

N.B. "Jizz" meaning the scientifically unacceptable or indefinable sense that allows the "feel" of a given situation. GISS also = General Information on Size and Shape.

### **End Note #60 - #153 - Dec. 1971 - February 1972 (from page 261)**

#### **VNHS Summer Camp Bird Report - submitted by Edward Chan-Sing**

*"Hast thou named all the birds without a gun?"*

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Ralph Waldo Emerson: Forebearance (1842)

Since this is the first such report re summer camp, I am “borrowing” copiously from the “Bird Report 1970 for Southern Vancouver Island,” by J.B. Tatum, Editor.

The purpose of the report is to record the observations of many members of the summer camp. The majority of sightings were witnessed and those that were not have been checked out by discussion with the “loners”. In any case, it is up to the reader to decide.

All birders were “fun” birders and not ornithologists. A “fun” birder is one whose heart soars on seeing familiar birds in different surroundings, while the sighting of a “lifer” brings a lump to the throat. This is not to imply that the motivation is the collecting of “lifers” - the “lifer” is only the icing on the cake.

The weather for the week in camp was made to order, a tribute to the perspicacity of the camp organizers.

Sightings include all birds from William’s Lake to, from , and at Camp [in the Nemaiah Valley].

### Highlights:

1. Spotted Sandpiper nest: This was right in camp beside the lake. Ribbons were put around the area, and at the first campfire all were advised not to disturb [the] area if possible. Several photographs of eggs were taken. [The] eggs were later found broken. Unable to ascertain whether they were abandoned due to the proximity of campers or if eggs were broken by crows, blackbirds etc.

2. Osprey: Nest found beside Vedan Lake - good slides obtained.

3. [European] Starling: One of the first two records for this species was of two birds seen in Bella Coola in March 1947. It is common to see flocks of thousands near Vancouver. Only one bird was seen near camp in the entire week! Obviously the Cariboo-Chilcotin has no starling problem.

4. There were several sighting of adult birds (woodpeckers etc. ) feeding young

Nests: 1. Spotted Sandpiper - 4 eggs in midst of camp at water’s edge. Adult either abandoned due to proximity of people or predation by blackbirds or cowbirds.

2. Ruffed Grouse - 6 young able to fly

3. Black and white Warbler - 2 females and three young

4. Audubon [Yellow -rumped] Warbler - 2 females and three young

5. Lesser Scaup - 7 eggs

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5. Attempt at calling owls with tape recorder resulted in one screech [owl] reply, no sightings, followed by an increase in great-horned owls (6) sighted next day in daylight. The night sky was clear and I have never seen the stars so bright. Spotted one falling star and two satellites, most impressive!

Note: The list of observers includes those who joined the first field trip around the lake at base camp who signed a sheet circulated on that trip. If anyone has been omitted, I beg your pardon.

| Species                            | 84   | Individuals: 340                          |
|------------------------------------|------|---|
| 1. Common Loon                     | (16) | 43. Horned Lark (2)                       |
| 2. Red-necked Grebe                | (1)  | 44. Violet-green Swallow (2)              |
| 3. Horned Grebe                    | (2)  | 45. Tree Swallow (27)                     |
| 4. Mallard                         | (1)  | 46. Barn Swallow (5)                      |
| 5. Gadwall                         | (1)  | 47. Cliff Swallow (2)                     |
| 6. Blue-winged Teal                | (1)  | 48. Canada Jay (6)                        |
| 7. Lesser Scaup                    | (4)  | 49. Steller's Jay (1)                     |
| 8. Common Goldeneye                | (1)  | 50. Common Raven (4)                      |
| 9. Bufflehead                      | (2)  | 51. Common Crow (12)                      |
| 10. White-winged Scoter            | (4)  | 52. Clarke's Nutcracker (1)               |
| 11. Ruddy Duck                     | (5)  | 53. Black-capped Chickadee (6)            |
| 12. Hooded Merganser               | (1)  | 54. Mountain Chickadee (7)                |
| 13. Common Merganser               | (1)  | 55. American Robin (5)                    |
| 14. Red-tailed Hawk                | (2)  | 56. Varied Thrush (1)                     |
| 15. Bald Eagle                     | (6)  | 57. Hermit Thrush (1)                     |
| 16. Osprey                         | (1)  | 58. Swainson's Thrush (1)                 |
| 17. Kestrel                        | (2)  | 59. Mountain Bluebird (14)                |
| 18. Blue Grouse                    | (2)  | 60. Townsend's Solitaire (2)              |
| 19. Ruffed Grouse                  | (2)  | 61. Ruby-crowned Kinglet (1)              |
| 20. Sharp-tailed Grouse            | (1)  | 62. Bohemian Waxwing (10)                 |
| 21. Killdeer                       | (9)  | 63. [European] Starling (1)               |
| 22. Spotted Sandpiper              | (6)  | 64. Warbling Vireo (1)                    |
| 23. Greater Yellowlegs             | (16) | 65. Black & White Warbler (1)             |
| 24. Lesser Yellowlegs              | (1)  | 66. Orange-crowned Warbler (1)            |
| 25. Least Sandpiper                | (1)  | 67. Yellow Warbler (3)                    |
| 26. Wilson's Phalarope             | (1)  | 68. Audubon's [Yellow-rumped] Warbler (3) |
| 27. Screech Owl (heard)            | (1)  | 69. [Common] Yellowthroat (1)             |
| 28. Great Horned Owl               | (6)  | 70. Wilson's Warbler (1)                  |
| 29. Common Nighthawk               | (24) | 71. Western Meadowlark (1)                |
| 30. Black Swift                    | (2)  | 72. Yellow-headed Blackbird (1)           |
| 31. Rufous Hummingbird             | (2)  | 73. Red-winged Blackbird (10)             |
| 32. Belted Kingfisher              | (3)  | 74. Brewer's Blackbird (13)               |
| 33. Red-shafted [Northern] Flicker | (9)  | 75. Brown-headed Cowbird (7)              |
| 34. Yellow-bellied Sapsucker       | (5)  | 76. Western Tanager (1)                   |
| 35. Hairy Woodpecker               | (3)  | 77. Purple Finch (1)                      |
| 36. Downy Woodpecker               | (3)  | 78. Pine Siskin (4)                       |

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|                                    |     |                                      |     |
|------------------------------------|-----|--------------------------------------|-----|
| 37. Northern Three-toed Woodpecker | (1) | 79. Savannah Sparrow                 | (1) |
| 38. Eastern Kingbird               | (2) | 80. Slate-coloured [dark-eyed] Junco | (1) |
| 39. Western Kingbird               | (1) | 81. Oregon [Dark-eyed] Junco         | (2) |
| 40. Traill's Flycatcher            | (6) | 82. Chipping Sparrow                 | (2) |
| 41. Western Wood Pewee             | (2) | 83. White-crowned Sparrow            | (8) |
| 42. Olive-sided Flycatcher         | (1) | 84. Song Sparrow                     | (6) |

Locality: Chilcotin (Mount Tatlow area)

Dated: July 10 - 17, 1971

Weather: Sunny and hot

Observers: Ed Sing, Frank Sanford, Win Pearson, Heather Levenson-Gower, Valerie May, Barbara Adams, Bob MacAllister, Vera MacAllister, Pearl MacAllister, Vi Bennet, June Smith, Judy Donaldson, Heinz Wolff, Frank McLeod, Dudley Godfrey, Monica Godfrey, and Mavis McEwan

### **Illegal Shooting, by Jack Sarles**

Recently there has been reports of illegal shooting of birds.

It is distressing to see a hunter fire at sandpipers or to come across a dead or injured snowy or short-eared owl.

Here are some things that you can do if you ever see anyone unlawfully shoot at birds in the Lower Mainland Area:

1. Note the date and time
2. Write down licence plate number of vehicle
3. Note description of vehicle, individuals and any other pertinent information
4. If there are any dead or injured birds pick them up and deliver them to the following enforcement officers, whichever may apply;

#### **If You Are Here**

#### **Phone**

Vancouver City, North & West Vancouver,  
New Westminster, Richmond & Burnaby

Local R.C.M.P. detachment or  
Police Office

Ladner area to Abbotsford  
south side of Fraser River, including Delta  
and Boundary Bay

574-5711 - (Fish and Wildlife  
Branch, Province of British  
Columbia OR  
946-4411 - Delta Police.

Obtain as much information as you can as no charge can be laid without sufficient evidence.

### **Leaves and Protection Against Water Loss by Terry Taylor**

The leaves of most plants have microscopic pores, termed stomata, which allow gaseous exchange with the atmosphere. During the process of transpiration, water vapour escapes from these stomata, along with oxygen from the process of photosynthesis. The loss of water vapour is necessary to the proper functioning of the plant, and in an "average" climate causes no problems. In a dry climate or dry habitat, however water loss through transpiration would often exceed water intake had not the plants that live under such

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conditions evolved various modifications to slow down or minimize water loss through the stomata.

These adaptations are abundantly apparent to anyone who stops to look at a moisture-limited environment. Next time you are traveling through the dry Interior valleys, note the appearance of the surrounding plants. Unlike the showy green leaves of most coastal forest species the foliage here is quite nondescript, and at first glance has a monotonous similarity. Leaves are frequently small, or narrow and linear, thereby reducing water loss by reduction of surface area. The general grayish coloration of the foliage is also readily apparent. This is due to insulating hairs, which are especially common on the undersides of the leaves, where stomata are usually concentrated. The rock rose [Bitterroot] *Lewisia rediviva* and [Sagebrush] Mariposa Lily (*Calochortus macrocarpus*) lose their leaves completely in the hot summer months.

In the Vancouver area, xeric habitats can be seen on rocky bluffs - both along the seashore and in the mountains. Note: the thick leaves of the Arbutus with their shiny surfaces, or the succulent *Sedum* [stonecrop] leaves with their great moisture storing capacity.

Bogs and coastal flats also illustrate these conditions. Although there is abundant water in these environments it is not readily available to plant tissues. The coastal [intertidal] flats present the chemical barrier of extreme salinity, and bogs have chemical and physical obstacles - high acidity and cold water. Study some of the plants in local bogs and you will soon see similarities with dry-area flora. Labrador tea (*Ledum groenlandicum*) for example, has inrolled leaves with strikingly woolly lower surfaces, and the bog blueberry (*Vaccinium uliginosum*) has leaves with a protective waxy bloom.

Many other examples of leaf adaptation to dry environments exist among the local flora, but those that have been mentioned in this article will perhaps serve as an introduction to this fascinating topic.

### **Campbell River Park - Where Green is Green - Text and Photographs by Al Grass**

*"is there no place where a stream winds  
and a beam shines and green is green . . .  
Is there no place where I can dream in ancient woods . . ."*

Interest in Campbell River [Regional] Park has grown in the last few years and not without good reason. More and more people are becoming aware of the need to preserve some of our natural lands and open spaces so that future generations will have "room to breath". The contemporary interest in problems of ecology has stimulated concern for the welfare of our wild things. The idea that wild things not only need, but also deserve, a place to live is gaining more popular acceptance.

Evidence is all around us that the Fraser Valley is being swallowed up by that monster land-eating creature called Vancouver. It has been estimated (1971) that some 6.9% of the Fraser Valley's land is being devoured annually for "development", and that much of this is our best agricultural land! Perhaps this more than any other reason is why we must act now and



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not when we have asphalt parking lots instead of meadows and high-rises instead of trees.

It is a valid question to ask: What is so special about Campbell River Park? Surely, it is argued, there are other areas in the Lower Mainland just as unique.

The protected area of the park is some 1,100 acres (more than 100 acres larger than Stanley Park). I might add that Campbell River Park is not a maze of roads, hot dog stands, and rubbish. It is located about one's hour's driving distance from Vancouver. To get to the area, one simply has to go 2 miles south of Langley City on Carvolth Road, turning left at North Bluff. From this intersection it is only a few hundred yards to the park (opposite the McLean Park sign).

Mankind has always admired and been fascinated by birds. Why not? Birds can fly. Just try flapping your arms and see how far you get. And by the way, if your mechanical flying contraption should run out of gas . . . Many birds are colourful and sing pleasing songs; this appeals to our aesthetic senses. Campbell River Park has a good variety of birds and to date more than 100 species have been named. This seems rather remarkable since there is no "Saltchuck". Not all the birds can be seen in the park at the same time. Some are seen only in summer, others in winter; still others pass through on their way north or south (transients).

Waterbirds are found in the park although not in large numbers. Mallards nest regularly and Common Goldeneyes have nested in some years. It may be surprising to learn that the park is one of the few areas in the central Fraser Valley where Canada geese stop to rest and feed. Each spring a "gaggle" can be seen in the meadows just east of the river grazing on the tender new shoots.

In the spring of 1970 a pair of Wood Ducks showed up at the park. It is not known if these rainbows of the duck world stayed to raise a family but it might be a good project for an ambitious youth group to build and erect nest boxes in an effort to encourage these birds to stay.

Often in the winter Great Blue Herons can be seen working the river. Many times they take up the fine art of "mousing", helping man to control what might otherwise become a problem.

Birds of prey make Campbell River Park a special place. These include falcons, hawks and owls. Many times when walking through the "ol' nut Grove"[sic] one is greeted by the indignant complaining screams of a red-tailed Hawk. This large broad tailed, broad-winged species can often be seen perched on its favorite roost (the highest tree on the west hill).

In the spring of 1970 (and again in 1971) a great event took place - a pair of Great Horned Owls chose Campbell River park to raise their young. They used an abandoned red-tail

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nest situated about 80 feet up in a cottonwood. The nest was observed for many hours as the parents brought cottontails and hares to those hungry mouths. In addition, two other owls are seen in the park; the Screech Owl (likely the most abundant) and the somewhat rarer Saw-whet Owl. It is hoped that numbers of boxes can be erected to encourage more of these small owls to nest in the park.

“Dickey” birds should not be forgotten; these include warblers, vireos, creepers, nuthatches, flycatchers, sparrows and finches. The best time to see most of them is in early June and the best place is the ‘ol’ nut grove.

Heralding spring with a call of ‘quick three beers’ is the Olive-sided Flycatcher. Older books interpret the call as “hip, three cheers” (times have really changed!). Activity in spring reaches a feverish pitch as birds busy themselves building nests, laying eggs and then the fun begins - feeding all those hungry mouths! Typical of these nesters are the American Goldfinch, Black-headed Grosbeak, Cedar Waxwing and White-crowned Sparrow.

It is possible to see five species of woodpeckers at Campbell River Park in a single day. Topping the list is the magnificent pileated woodpecker with its brilliant red top-notch [sic]. Pileated woodpeckers need old forest for feeding and nesting; Campbell River Park provides this habitat. They have nested in the park, usually choosing old cottonwoods in the central marsh area. Evidence of the birds’ feeding activity can be found everywhere in the form of large oval holes chiseled into trees in search of grubs and ants. Close examination of apparently sound trees worked over by these woodpeckers usually reveals diseased heartwood or insect infestations of some type. Other woodpeckers found in the park include the Downy, Hairy, Red-shafted[Northern] Flicker and Red-breasted Sapsucker.

One of the purest sounds of spring must surely be the drumming of the Ruffed or Willow Grouse. These birds nest in the park and it is the lucky person indeed that discovers a family.

Mammals are always exciting to see. At Campbell River Park they range in size from the black-tailed deer which can reach 250 pounds to a tiny shrew which can weight less than a dime.

A pair of foxes have made their home in the park and have raised several families there. The den has been excavated under the root of a large stump. However there still exist certain persons who would blame all their woe on foxes; so the exact location of the den must remain secret.

Cottontails are often seen romping in open areas but not far from a safe retreat from horned owls and foxes.

Some kinds of mammal work the day shift: others the night shift. Flying squirrels are one of those that roam by the cover of darkness. It is possible to see them in daytime by finding the nest cavity of a woodpecker in an old tree. Try scratching the trunk with a stick (it sounds like a ‘coon climbing the tree). ‘Possums are yet another night critter. These rather

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strange marsupials with their grizzled hair, pointed snouts and rat-like tails are not native to the Fraser Valley but came to us by way of Washington State. They were first located in British Columbia at Crescent Beach in 1949 [after] they were introduced earlier this Century [into Washington State].

Black-tailed deer are frequently seen at dusk; the best place to see them is in the north-western corner of the park where they find both food and shelter.

In all 22 species of mammals have been recorded in the park.

Wild flowers are yet another part of the Campbell River Park story. Orchids, lilies and a host of other plants paint a picture, which is unique to the Fraser valley. Five species of orchids had been found including the beautiful Calypso and the elegant Spotted Coral root.

Creeping along the forest floor is the twin-flower, with its bell-like blooms. Orange [Western Trumpet] Honeysuckle often twines around old fences of the park making good places to watch for hummingbirds each summer.

What would summer be without Columbia tiger lilies to brighten the roadsides each year? In this regard we should protest with greatest vigor the spraying of roadsides with herbicides. This thoughtless practice is destroying some of our most beautiful flowers in the Fraser Valley and creating strips of ugly brown wasteland.

In autumn another floral spectacle takes place with the blooming of the wild aster. L.L. Haskin (*Wild Flowers of the Pacific Coast*) describes it as :

*“Fringing the stream at each turn  
Swing low the waving fronds of fern:  
From stony cleft and mossy sod  
Pale asters spring and goldenrod.”*

Trilliums are lilies of the damp forest. Each spring they form an abundant display in the north-western corner of the park.

Two kinds of wild rose bloom in the park - Common [Nootka] Wild rose, a larger species of open areas having large more or less pink petals and a Dwarf [baldhip] rose, a smaller species of the woods having small magenta petals.

Those from the prairies may be surprised to learn that saskatoons bloom in the park; but not in sufficient numbers for picking (just enough for the birds). When saskatoon bloom, columbine are attracting little ‘hummers’.

I could go on but the only way to learn about an area and its wildness is to experience it. This cannot be communicated by words.

Only a *very few* of the wild things found in the Campbell River Park have been mentioned

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but there are thousands of others including insects notably the Western Tiger Swallowtail, salamanders, snakes, lizards, fishes, snails [and] mushrooms. Each one is important since each has its own job to do. If we ever ask ourselves the question: "What good is it? And the answer isn't obvious, maybe the wrong question is being asked. Perhaps the question should be: "what good am I?" It's time we started looking a little harder for some of the answers.

Campbell River Park is by no means a pristine wilderness. It does however have great potential in the context of what we call the Lower Mainland. The area could serve as a natural classroom and outdoor laboratory for school children, college students and youth groups from Vancouver to Hope. In this regard a small nature centre would be a valuable addition to the park. Perhaps an affluent group such as the Vancouver Natural History Society could consider this as their first major project. The public at large simply needs places to find peace and quiet; a change from the dizzying pace of modern urban living. Add to this the variety of wild things found in the park compared with other areas in the Fraser Valley and the case is a clear one - the preservation of the natural wonders of Campbell River Park!

Photos accompanying this article included: Faithful Snail, Red-legged Frog, a 'nest' of voles, Hairy Woodpecker at its nesting hole, Twin-flower and Great Horned Owl on its nest.

This issue also contained a Photo with the caption: "Nature Knows - Do You?" The next newsletter (#154) identified the object as a Black-capped Chickadee impaled on a rose thorn [by a Northern shrike].

### End Note #61: Birds for the Record [1968] (from page 200)

|                        |                |          |                |
|------------------------|----------------|----------|----------------|
| Baird's Sandpiper (2)  | Crescent Beach | Sept. 22 | Al Grass       |
| Wood Duck (4)          | Burnaby Lake   | Oct. 6   | Wayne Campbell |
| Pectoral Sandpiper (1) | Burnaby Lake   | Oct. 6   | Wayne Campbell |
| Black turnstone (2)    | Point Roberts  | Oct. 12  | Al Grass       |
| Heerman's Gull (2)     | Active Pass    | Oct. 14  | Wayne Campbell |

|                            |                         |         |                |
|----------------------------|-------------------------|---------|----------------|
| White Pelican (3)          | Port Moody              | Oct. 16 | Mrs. D. Levae  |
| Common Tern (1)            | Deer Lake, Burnaby      | Oct. 16 | Wayne Campbell |
| Sharp-tailed Sandpiper (1) | Reifel Waterfowl Refuge | Oct. 27 | Barry Edwards  |
| Pileated Woodpecker (1)    | Deer Lake, Burnaby      | Oct. 31 | Wayne Campbell |
| Long-eared Owl             | near Aldergrove         | Nov. 3  | Al Grass et al |
| Great-horned Owl (1)       | West Vancouver          | Nov. 4  | P.J. Croft     |

Send or phone your interesting Bird sightings to Wayne Campbell, 5536 Hardwick St., Burnaby, B.C. (298-4561) for inclusion in the Spring Bulletin.

## **Vancouver Natural History Society - Newsletter Notes -1943-1971**

**Note:** This brings the V.N.H.S. index to the “Bulletin” to a close. Issue # 154 became the first issue of *Discovery* (New Series) Volume 1, Number 1.

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