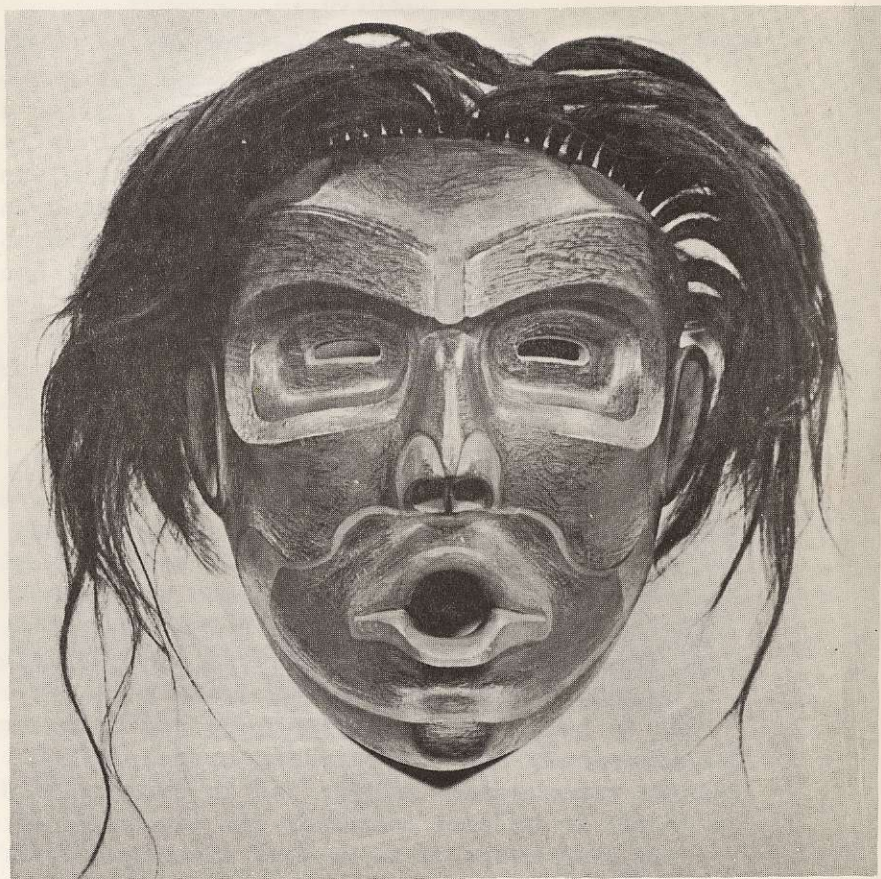


Jan. 1970  
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# THE VICTORIA NATURALIST



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**Victoria B.C**

THE VICTORIA NATURALIST

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COVER PICTURE

A KWAKIUTL INDIAN TSONOQUA MASK

Courtesy, British Columbia Provincial Museum

COVER STORY

A KWAKIUTL INDIAN TSONOQUA MASK

by Peter L. Macnair

The mythology of the Northwest Coast Indian was full of creatures possessing supernatural attributes and it was the Indian's belief that these creatures often intruded into the real world. Among the Kwakiutl Indians of northern Vancouver Island, one of these mythological creatures was Tsonoqua, a female giant living deep in the forest. She is characterized by sleepy, sunken eyes, a mouth pursed forward indicating her low cry "ū,hū,ū,ū," a wild shock of black hair, large pendulous breasts, and a black body. Stories of Tsonoqua differ in detail, but essential to all is the fact that she is a cannibal, carrying on her back a basket in which she imprisons children she intends to devour.

Although possessed of supernatural qualities, Tsonoqua often succumbs to the cunning of abducted children. She admires the ear ornaments of a captive boy and allows him to pierce her ear lobes with wooden stakes. The boy drives the stakes through her head, killing her. In another version, she finds the plucked eyebrows of a girl attractive and is decapitated when the child induces Tsonoqua to have her eyebrows cut by a warrior's chisel. With Tsonoqua's death, her property and prerogatives are assumed by her vanquishers. During dances performed by the descendants of the original recipients of her rights, elaborately carved masks are worn by actors who re-enact details of the original encounter. Thus masks such as that shown here help make the supernatural world real and visible.

Fungi are highly successful organisms, their great numbers being evidence of this fact. At least 100,000 species have been identified and each year more are being discovered. Some authorities think there may be as many as 250,000 still unknown. Their success is closely related to degrees of heat and moisture and it has been stated that if the temperature and humidity of earth were to rise just a little, fungi would become the dominant form of vegetation.

The nearly eighty species of fungi, found during our November 8 "hunt" in Francis Park, could be grouped in many ways; by size - from 1/4 inch to 10 inches; by colour - white, buff, yellow, pink, red, brown-grey or black; by texture - fragile, firm, brittle, leathery, jelly-like or woody. But grouping by relationships is more satisfactory. For example, those known as Cup Fungi were represented by three members, two of them called rabbit-ears; Otidea onotica of bright yellow-buff colour and Otidea leporina, a larger brown species. The third cup was Patella albida, externally covered with tufts of brown hairs but sporting a pearly-white lining, which is the spore-bearing surface.

The Club and Coral Fungi were well represented as usual, but one less common species we found was Clavaria truncata, a handsome 3"-4" yellowish-tan trumpet.

In the jelly-like group belong witch's butter (Tremella mesenterica), bright apricot jelly (Phlogiotis helvelloides) and the so-called false hydnum (Protohydnum gelatinosum).

Only two true members of the "toothed" or Hydneace Family were found, Hydnum repandum, sometimes called spreading hedgehog mushroom, and the "little spoon", Auriscalpium vulgare, whose mycelium always feeds within a dead fir cone.

Most of our specimens were of the gilled type and of these the Russulas were prominent although past their prime and more often than not partially eaten by slugs. There were still many reddish-capped Russulas, a few of Russula foetens wearing dull yellow caps, and also several whitish Russula delica, most of these showing rusty-brown stains.

The most common Lactarius was L. subdulcis, with cap and stipe both reddish-brown and of a very firm texture. Its juice has the milky colour typical of the genus. There were also a few Lactarius deliciosus showing the green stain

they acquire in age, but still yielding their orange-colored juice when broken.

As usual there were numerous species of Cortinarius, perhaps the handsomest being C. semisanguineus, so named for its reddish gills. Various Clitocybes were still much in evidence but only two species of Inocybe, I. geophyla and I. fastigiatus, all of these with whitish caps.

The largest of the bright-colored specimens was Gymnopilus junonius, formerly called Pholiota spectabilis which still seems the more suitable name for this bright yellow-orange species whose caps may exceed six inches in diameter.

Several species of Hygrophorus were collected. This is a large and important genus in which there are many beautifully colored members whose gills are characteristically waxy and more or less triangular in cross-section. Three of these were H. borealis, a small white species, H. miniatus, scarlet at first then fading to orange or yellow, and H. conicus whose yellow-orange-red cap, though remaining unexpanded, stands out plainly on the dull forest floor.

All the species so far mentioned can be lumped under the general term "fleshy fungi". Their durability is usually limited to a few days or to a week or two at most. There are many other forms much more substantial such as the so-called bracket or shelf fungi, some of which are perennial while others are annual. Brackets of the genus Polyporus and genus Stereum are annuals, that is, they finish their growth in one year although each bracket may remain intact for several years. Even the large velvet-top (Polyporus schweinitzii) makes all its growth in one year. Perhaps the most common annual of the Polypores is P. versicolor and in this area the most common Stereum is S. hirsutum. All of these were collected.

On the other hand the brackets of Fomes pinicola, Fomes pini and Fomes subroseus are perennials and continue to increase in length, width and thickness for several years.

The Forestry Branch of the Department of Fisheries and Forestry has this year published a small book (illustrated), Common Tree Diseases of British Columbia by R.E. Foster and G.W. Wallis. You would find this book very useful if you are interested in fungi of this sort. Enquire for it at the Burnside Laboratory.

Although many people search out mushrooms for food, it would appear that flavour far outweighs their actual food

value. Dr. J.W. Groves, Chief Mycologist, Ottawa, gives the following figures in his book Edible and Poisonous Mushrooms of Canada:-

|                        |     |
|------------------------|-----|
| Water content          | 89% |
| Protein                | 3%  |
| Fat                    | .4% |
| Carbohydrates          | 6%  |
| Minerals approximately | 1%  |

In addition mushrooms are known to be high in vitamins, especially vitamin C.

Certain species easy to recognize such as puffballs, shaggy-manes, meadow mushrooms and the delicious lactarius are edible and safe. But always remember never eat any mushroom unless you are well aware of its identity and known edibility.

On the other hand it is pleasant to know that it is always safe to "feast your eyes" on all these attractive inhabitants of woods and fields.

At the same time we should remember the great debt we owe these plants whose job it is to live and work in the remains of dead plants and animals and break down this material into forms suitable for the food of green plants everywhere, and at the same time to release into the atmosphere gases essential to all living things, directly or indirectly.

M.C. Melburn

#### IT WASN'T AN ILL WIND

After three days of near-gale and gale force winds, we went out on November 8 to Shoal Bay to see if the little Eared Grebes were in their winter quarters. We did not see them, but as we were looking around a small bird flew in from the bay and alighted as lightly as an autumn leaf on the water near the shore where we were standing.

Much to our surprise it was a Phalarope, and when Mrs. Jarvie wanted to know the species I immediately said "Red", basing my snap identification on the time of year. Later I verified this by looking up Mr. Allen Poynter's "Bird Report" and "Migration Chart" for 1958-59, and Mr. A.R. Davidson's 1966 "Annotated Bird List" of southern

Vancouver Island. These gave mid-October as the last of the northern phalarope's migration through this region.

This is not a method of identification I would recommend, but in this case I have my poor eyesight and the light as an excuse for not being able to see any details of the bird.

As this was a "first" for Mrs. Jarvie, she took particular notice of the bird and its plumage, and after looking in her "Guide" she told me I was right, as she had been particularly struck by the white forehead and crown.

This dainty little bird is interesting, and when we got home we looked it up in some of our books.

Mr. Forbush, in his book on the birds of eastern North America, tells us that the red phalarope are shorebirds on their breeding grounds in the Arctic tundra but are sea birds on migration and during their winter sojourn in the Southern Hemisphere.

Their family life is also peculiar for the male is smaller and less brilliant in colour than the female who does all the courting. It is the male who builds the nest, and after the female has laid the eggs, incubates the eggs and raises the young on his own. By the large flocks seen on the open waters round Victoria in the fall by fishermen, he seems to make a good job of it.

Because of its pelagic habits the red phalarope is a rare bird to most birdwatchers, as it stays out in the open waters around Victoria, where it cannot be seen from the waterfront, and only comes in close during a bad storm or when driven in by gale force winds.

Today Mrs. Davidson reported seeing two of these birds at Clover Point, and those together with the one we saw were undoubtedly influenced by the strong winds of the past couple of days.

It is an ill wind that blows nobody any good.

J.M. Barnett

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CANADIAN AUDUBON is holding a conference in Winnipeg on May 16-18. Plans include one day of meetings, one day of field trip. Mr. C. Morehen is our delegate. But any Society member is welcome. Details from our delegate or president.

### SIMPLE MULTICELLULAR FORMS

One of the simplest multicellular animals is the Hydra, a small polyp growing on the underside of the floating leaves of aquatic plants. It is common in freshwater ponds and easily obtainable.

A few floating leaves of small aquatic plants are put in a glass jar and, with luck, when all is settled down again, we can observe the polyps uncoiling their tentacles again in search of food. Hydras are hermaphroditic, having both male and female organs in the same individual. Also, and perhaps more interesting, they propagate themselves asexually by budding. In this process a bud develops on the stem. This grows into a complete individual.

As soon as the mouth is functional, the place of connection between bud and parent becomes constricted. The bud is detached and becomes an independent individual. As Hydras are considerably larger (about 1 cm) than the microscopic Protozoa, budding can be observed with an ordinary magnifying glass. In fact, when Hydras first came to my notice, attached to the underside of the leaves of some aquatic plants in a home-made aquarium, I could see this with the unaided eye. But that was many years ago.

It is less well known that certain jellyfishes, Scyphomedusas, have also a stationary phase in which they appear to be like the Hydras. The polyp in this case is attached to the sea bottom, and the upper part looks like a number of shallow bowls stacked together. The top one matures first and is pinched off (strobilization) becomes detached and grows into the adult jellyfish.

As there are thousands of worms there are understandably, numerous ways in which they reproduce themselves. To mention all methods would be impossible. I give a few.

Planarians are small fresh-water flatworms well known to every student of biology for their regenerative powers. They are hermaphroditic and reproduce either by self or cross fertilization. Several zygotes (fertilized ova) with many yolk cells are enclosed in a capsule which is attached to a submerged plant or stone. Here they develop into little worms that are eventually released. But, in addition, planaria resort on occasion to reproduction by transverse fission, when the worm divides into two pieces, each able to regenerate the missing parts.

Although everyone has heard of tapeworms, those that infect humans are really very scarce now (in this area). In about fifteen years of looking for medical parasites, I have only seen about six and these were acquired elsewhere. A typical tapeworm consists of a head or scolex armed with a number of little hooks, with which it maintains its position in the host's bowel, and a body composed of numerous sections or proglottids. Behind the scolex is the budding zone where the proglottids originate and as new ones are formed the older ones become farther and farther removed and eventually, when mature, become detached, either singly or in short chains. The interesting fact here is that each one of these segments contains a complete set of both male and female organs. Self-fertilization of each segment is possible as well as cross-fertilization as the worm is folded upon itself, possibly when there is more than one worm present.

When it is realized that one worm may produce thousands of proglottids and each contains possibly thousands of embryos, one marvels at the fecundity of these creatures. It is, of course, typical of parasites with complicated life cycles, and there is such an enormous waste that only very few reach their final host. Anthony Dehen

### A PROPOSAL TO PROTECT BIRDS

The October 7, 1969, Winnipeg Free Press carried a Reuter's news story from Moscow.

Soviet scientists, it said, had proposed an international agreement to protect birds of prey. They told a Moscow congress of world wildlife biologists that extermination of owls and daytime predators should be stopped for at least ten to fifteen years.

The congress, attended by scientists from 34 countries, was discussing the problem of how to increase game. "The more ruthlessly we destroy them (birds of prey), the more pesticides will be used against rodents, while this, as we know, frequently leads to the death of game birds", Alexander Cheltsov-Bebutov told the congress.

The Congress was also told that biologists in some countries had noticed an increase in diseases among reindeer when the numerical balance between deer and wolves was upset.

THE COMMON MERGANSER AT KLEENA KLEENE, B.C.

The breeding pairs usually secure a territory in early May, sometimes near a river, sometimes near a lake. The young are usually hatched in the second half of June and may soon be seen with parent on the water. One such family, hatched near a lake, was seen to swim out into the lake - the little downies crowding against the mother's tail - and to make a landing a quarter-mile along the shore.

No doubt they were avoiding some buildings where cats and dogs abound. Another young family was hatched near a float where boats were tied, and when not exploring the lake for food, had the habit of sunning themselves on the float. (The ducklings' webbed feet are relatively enormous, and when scurrying downstream close behind the parents, they seem to be running on the water).

There is no local evidence as to what happens to the females in the fall, but the males assemble in flocks to finish their moult, and then join larger flocks of up to 1,000 birds, and attain their black and white plumage by freeze-up in November.

Adrian Paul

VICTORIA NATURAL HISTORY LIBRARY

New members may not know that the Society has its own library.

The library, which was started with a generous gift of books from Mr. J.W. Winson, writer of nature articles, now has about one-hundred-and-fifty volumes, mostly donated. Amongst the valuable and irreplaceable books are the six volumes of the Rev. F.O. Morris' History of British Birds, published in 1857 and illustrated with hand-tinted plates. There are also three volumes of Forbush's Birds of Massachusetts, Dawson's Birds of California, and Holland's Butterflies and Moths of Canada. There is much good reading in these old books.

Also on the shelves are Theed Pearce's Birds of the Early Explorers in the Northern Pacific, The Mushroom Hunter's Handbook, Between Pacific Tides, The Earth Beneath Us, the magnificent Birds of the World, Life of Audubon, and many of the Museum and standard handbooks. Publications received regularly and stored for future reference include the Canadian Audubon Magazine, The Wood

Duck and the Blue Jay.

We hope that some day it may be possible for our library to be housed in the Provincial Archives building. In the meantime it may be found at 2144 Brighton Avenue. If you want to browse or borrow, just phone our obliging librarian, Mr. A.R. Davidson, 384-9595.

K. Sherman

REVOLT IN THE AIR

On October 13, 1969, the Globe and Mail ran an interesting piece by Mr. Henderson, executive director of the National and Provincial Parks Association of Canada.

Summarized, Mr. Henderson wrote that the character of conservation is changing - with conservation groups focusing attention on critical environmental situations and forcing remedial action through legal means backed by the testimony of the experts.

One such activist group in the United States is the Environmental Defense Fund.

With growing evidence to support the possibility of worldwide environmental collapse in the not-too-distant future, the new conservationists claim it is too late to try to change ingrained attitudes by the traditional educational approach alone.

In the United States, conservation groups have won a number of recent court skirmishes. But these have often been holding actions or procedural victories. Their value is that they buy time until public opinion is sufficiently stirred to force a change in legislative or executive action.

Mr. Henderson specifically mentioned the Pollution Probe in Ontario, and the Algonquin Wildlands League. Both groups, he wrote, are forerunners of the new wave of conservationism in Canada.

"With the new-look conservation about to take hold in Canada, could it be that we shall write history by being the first country to guarantee under law to all citizens the right to decent environment? We have the opportunity. Will we have the vision?"

Editor

## BIRDS FOR THE RECORD

by G.N. and G. Hooper, 2411 Alpine Crescent (477-1152)

|                                                    |                       |                                        |
|----------------------------------------------------|-----------------------|----------------------------------------|
| Upland plover (1) - Clover Point -                 | Nov. 3 -              | Alex James                             |
| Canada goose (1, Cackling, minima) - Esquimalt L.  | Nov. 8 -              | Ron Satterfield and Ralph Fryer        |
| (1) - Yacht Pond, Dallas Road -                    | Nov. 17 -             | Ralph Fryer                            |
| Slate-colored junco (1) - Alpine Cres.-            | Nov. 13, 14, Dec. 8 - | Gordon and Gwennie Hooper              |
| (1) - Ascot Drive -                                | Nov. 29 - Dec. 9 -    | Henry and Vera Walker                  |
| Virginia rail (1, dead) - Old West Saanich Road -  | Nov. 17 -             | Frank Doyle                            |
| White-throated sparrow (1) - Lochside/Martindale-  | Nov. 22 -             | Rob and Flo Mackenzie-Grieve           |
| (1) - Roslyn Road -                                | Dec. 7 -              | Enid Lemon                             |
| Snow bunting (1) - Clover Point -                  | Nov. 22 -             | Rob Mackenzie-Grieve, Bird Field Trip  |
| Short-eared owl (1) - Martindale -                 | Nov. 22 -             | A.R. and Eleanore Davidson             |
| Barred owl (1) - Sims Avenue -                     | Nov. 26 -             | Ralph Fryer, David Stirling, Kerry Joy |
| Yellow-shafted flicker (1) - Ascot Drive -         | Dec. 5 -              | Henry and Vera Walker                  |
| (Third winter)                                     |                       | Henry and Vera Walker and Jeremy Tatum |
| Harris's sparrow (1 imm.) - Ascot Drive -          | Nov. 21 - Dec. 9 -    | Jeremy Tatum                           |
| European widgeon (1) - Ascot Drive -               | Dec. 5 -              | Bristol Foster                         |
| Parasitic jaeger (1) - Ten Mile Point -            | Dec. 7 -              | Mrs. B. S. Deacon                      |
| Rufous hummingbird (1) - McAnally Road -           | Dec. 11 -             |                                        |
| <u>Winter residents</u>                            |                       |                                        |
| Common scoter (5) - Oystercatcher Bay (ARD)        | - Nov. 22             |                                        |
| Black oystercatcher (30) - Oystercatcher Bay (ARD) | - Nov. 22             |                                        |
| Barrow's goldeneye (6) - Saseenos, Sooke (ARD)     | - Nov. 29             |                                        |
| Ancient murrelet (small flocks) - Clover Pt. (ARD) | - Nov. 29             |                                        |
| Common murre (100) - Clover Point - (ARD)          | - Nov. 29             |                                        |
| Black-bellied plover (82) - Bowker Avenue (TG)     | - Dec. 2              |                                        |
| Evening grosbeak (4) - Cadboro Bay (ARD)           | - Dec. 6              |                                        |

## BOOK NEWS FOR NATURALISTS

Recent additions to Greater Victoria Public Library

|                       |                                     |
|-----------------------|-------------------------------------|
| Ashley-Montagu, M.F.  | Man, his first 2,000,000 years      |
| Alexander, G.         | General biology. 2nd ed.            |
| Storer, T.I.          | General zoology. 4th ed.            |
| Fisher, James         | Wildlife in danger                  |
| Kapitsa, P.L.         | Peter Kapitsa on life and science   |
| Manley, S.            | Beaches: their lives, legends, etc. |
| Morris, Desmond       | The Human Zoo                       |
| Animals of the World: | Africa                              |
| Cogger, H.            | Australian reptiles in colour       |
| Hindwood, K.A.        | Australian birds in colour          |
| Cockrum, E.L.         | Biology                             |
| Evans, W.F.           | Communication in the animal world   |
| Klages, Jurg          | Born in the Zoo                     |
| Duddington, C.L.      | The Living World (Biology)          |
| Rosenfeld, A.         | The second Genesis                  |
| Ricketts, E.F.        | Between the Pacific tides. 4th ed.  |
| McMichael, D.F.       | Treasury of Australian wildlife     |

List supplied by G. McBride

Circulation Department, Greater Victoria Public Library

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STOP GREEN ALGAE. First reading was given to MP David Anderson's private member's bill calling for reduction of the phosphate content in detergents.

ANNUAL BIRD REPORT. As this will be a continuing project involving much work and specialized knowledge, the Executive, using Bylaw 3, Sections b and h, has appointed two Assistant Editors, Dr. Jeremy Tatum and Mr. A. Schutz.

THE FRAIL OCEAN by Wesley Marx is now out as a Sierra Club-Ballantine pocket book. 95¢, not to be missed.

POLLUTION SYMPOSIUM (see final page of magazine) aims to tell local secondary students about pollution problems in the marine environment.

SOUTHWEST COAST OF VANCOUVER ISLAND was the title of the color-slide program given by Mr. Bruce Scott at our December 9, General Meeting.

PROGRAM FOR JANUARY 1970

- Executive Meeting 8:00 p.m. at home of Mrs.S.Prior,  
 Tuesday January 6 1903 Shotbolt Road
- General Meeting 8:00 p.m. Douglas Building Cafe-  
 Tuesday January 13 teria. The program by  
 David Hancock, "From San Miguel  
 to Triangle", originally sched-  
 uled for December will be given  
 at this meeting.
- Bird Field Trip Meet at Douglas and Hillside  
 9:30 a.m. or Esquimalt Lagoon  
 Saturday January 17 10:00 a.m. Bring lunch.  
 Leader: A.C. Schutz 386-0541
- Ornithology Meeting 8:00 p.m. Room 216 Oak Bay Junior  
 Tuesday January 27 High School
- Audubon Wildlife Film: William A. Anderson presents;  
 "Our Unique Water Wilderness -  
 the Everglades". 8:00 p.m.  
 Thurs. Fri. Sat. Newcombe Auditorium, Provincial  
 January 29, 30, 31 Museum. (South entrance)
- Junior Group: Meet every Saturday 1:30 p.m. at  
 Douglas and Hillside for field  
 trip. Leader: Freeman King 479-2966

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NATIONAL AUDUBON CONVENTION will be at Seattle, May 15-18.  
 Open to our members on payment of registration fee. Some  
 American members hope to visit here on May 12 or 13, for  
 birding, botanizing, sightseeing, shopping. Details will  
 be announced at our General Meetings when available.

POLLUTION SYMPOSIUM. Oak Bay Senior Secondary School is  
 sponsoring this. To be held at UVIC, January 9 and 10.  
 M.P. David Anderson will chair a panel of six scientists  
 from UBC, SFU, UVIC, and Provincial Museum. Open to public.

CLASS A PARK CUT. By order-in-council, 7.4 acres have been  
 lopped off Goldstream Park for a B.C. Hydro right of way.  
 From a Class A Park near a metropo<sup>l</sup>itan area in an era of  
 exploding population! Happy 1970! Editor

Black-billed gull (52) - lower stream (16) - Dec. 1  
 Evening grosbeak (4) - Cadboro Bay (ARD) - Dec. 6



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|                                                                                   |          |
|-----------------------------------------------------------------------------------|----------|
| <i>Programs</i> —A. D. Turnbull, 3614 Cadboro Bay Road - - - - -                  | 592-6025 |
| <i>Botany (Summer)</i> —Miss M. C. Melburn, 2397 Heron Street - - - - -           | 592-2069 |
| <i>Botany (Winter)</i> —Mrs. J. M. Woollett, 624 Harbinger Avenue - - - - -       | 384-4836 |
| <i>Entomology</i> —Dr. John A. Chapman, 962 Lovat Street - - - - -                | 384-5568 |
| <i>Ornithology</i> —A. C. Schutz, 2060 McNeill Avenue - - - - -                   | 386-0541 |
| <i>Audubon Wildlife Films</i> —Miss Enid Lemon, 1226 Roslyn Road - - - - -        | 385-4676 |
| <i>Federation of B. C. Naturalists</i> —Dr. J. Bristol Foster, 3050 Baynes Road - | 477-1247 |
| <i>Junior Naturalists</i> —Freeman F. King, 541 McKenzie Avenue - - - - -         | 479-2966 |
| <i>Junior Group Assistant</i> —Mrs. K. Osborne, 1565 Begbie Street - - - - -      | 385-8164 |
| Mrs. Loraine Jones, 1833 Beach Drive - - - - -                                    | 592-0501 |
| <i>University Liaison</i> —Dr. W. E. M. Mitchell, 2171 Granite Street - - - - -   | 383-2579 |
| <i>Publicity</i> —Freeman F. King, 541 McKenzie Avenue - - - - -                  | 479-2851 |

Annual Dues, including subscription: Single, \$3; family, \$5; juniors, \$2.

Life Memberships: Single, \$50; husband and wife, \$75.

Junior membership is restricted to those not under 9½ years and not over 18 years.

Dues and changes of address should be sent to the Treasurer.