THE VICTORIA NATURALIS



THE VICTORIA NATURALIST

Published by THE VICTORIA NATURAL HISTORY SOCIETY

Vol. 24, No.9

May, 1968

COVER PICTURE: ARBUTUS BLOSSOMS

By the late W.D. Reith

ARBUTUS

By David Stirling

The arbutus, Arbutus Menziesii, is a tree of Western America's Pacific fringe from Vancouver Island south to Mexico. Look at a map of British Columbia showing the range of the arbutus and you will see that it shows as a narrow frame around the Strait of Georgia. In this region well known for its mild climate with dry sunny summers, the arbutus is often found with Garry oak on dry rocky sites.

The arbutus is often a small tree with twisted branches and leaning trunk but it sometimes can be a massive tree up to three feet in diameter with a dense rounded crown. Finest examples of the latter form grow on rocky headlands close to the sea.

The madrona, as the arbutus is called in the United States, is Canada's only broadleafed evergreen. The thick, leathery leaves are whitish beneath and shiny on their upper sides. Its smooth reddish-brown trunk looks as if it were freshly polished and immediately attracts the attention of the visitor to Vancouver Island's forests.

In late April the creamy bell-shaped flowers of the arbutus attract crowds of bees and other insects; in autumn and winter the orange-red berries invite hungry robins, cedar waxwings and varied thrushes.

In spring, the Gulf Islands Biotic Zone, home of the arbutus, produces a host of wild flowers rivalling that to be found anywhere else in Canada. When the arbutus is in bloom look for easter lilies, chocolate lilies, shooting stars and camas, a few of the many plants to be found in the arbutus-Garry oak association.

Why not get out this spring to see arbutus blossoms and the many flowering plants of the Gulf Islands Zone around Victoria?

THIS WIRE RESERVED FOR SWALLOWS

At Waterlea there was a shed that was always known as the Power House because it had once housed a gasolinedriven electric light plant. Every summer a pair of barn swallows nested among the rafters of the shed, and we had to leave a window partly open to give them easy access, and put up an old sheet of wallboard to catch their droppings.

A favourite perch for the swallows was the power wire leading from the main house to the shed. Here the resident family of barn swallows would be joined by other swallows of various kinds, including both tree swallows and violet-greens. Then their happy chirping sounded as if they were having a regular gossip session. But there must have been an invisible sign on the wire: "Reserved for swallows, no trespassing." If a robin or starling dared to set foot on it, all the swallows within sight, all three species together, would gang up on the intruder. The poor robin would be dive-bombed, snapped at and cursed, and the little swallows would have no difficulty in driving away the bigger bird. Even a crow could not long withstand the attacks of the swallows.

The swallows' gathering wire was also the place where they taught their children to catch insects on the wing. We had read about the way swallows train their young, and we were especially interested to observe the procedure ourselves. When the young swallows were no longer being fed in the nest, and had learned to fly, two or three of them would line up on the wire. Meanwhile both parents would dart around catching insects. Every so often one of the parents would fly past the wire just above the perch of one of the infants. Just as the parent was a foot or so above the infant he or she would drop a dead insect, and the infant was expected to catch it as it fell past his beak. The children learned very quickly. The parents kept increasing the height of the drop and the distance the infant had to fly from the wire to make the catch. Soon the infants were catching live flies that happened near their perch, and in a few days they were flying around. getting their meal on the wing themselves.

Hugh Grayson-Smith.

PARK USES

What is a Park?

This will depend upon the user. It may be a large or small landscaped piece of land where people like to go and see flowers in rows, where they can sit on a bench or chair and absorb the beauty of the riot of colours.

To others it is a place where they can go for amusement in its many forms - some like to go for picnics, hot dogs, pop. etc. A park to some, especially small children is where they can go to play on swings or paddle around in some shallow pond. To others it is a place where they can drive to some hilltop and look at the sprawl of houses below them. To many it's a place to go and camp (?) - where wood and water and other facilities are available. To many of these it is a place where they can just sit and talk maybe, a party in all it implies, often where they can escape their responsibilities for a few hours. To others a park is a wilderness, where man has left nature untouched, where they can see the living things in their natural state, a place where they can escape from the society of man, where they can think and contemplate on the "Why of Things."

Then again there is the park where the mountains reach up to the sky and the mountaineer climbs just because the mountain is there to climb and, on reaching the summit, he can look afar at the vastness of the land, and in doing so get the perspective that man is but a tiny speck of life upon the earth.

There are a few people who use a park as a laboratory in their quest for knowledge in the field of biology, ecology and kindred subjects. I feel there must be a new word coined for parks so as to differentiate one kind from another. I think we must learn to interpret each kind of park according to its own particular merits. Our aim must be to bring out the best feature of each type of park, and in so doing we shall help those who want their own particular kind of park, to use it to the best advantage and enjoyment. Each and all of us have a particular "stamping ground." Let's develop it and use it wisely.

Freeman King.

PARASITES WITHIN PARASITES

"So, naturalists observe, a flea Hath smaller fleas that on him prey; And these have smaller fleas to bite 'em, And so proceed ad infinitum."

These lines are attributed to Jonathan Swift, who as far as I know was a seventeenth century political writer and poet. He must also have been a shrewd observer. Many parasitic wasps, flies, ticks, fleas, worms, etc. are themselves hosts to still other smaller external or internal parasites. These range from members of their own families to intestinal flagellates and amoebae. Most of these are of not too much interest to us as we are unaware of their activities and few of us have the patience and/or apparatus necessary to demonstrate for instance the presence of nematodes (roundworms) in a wasp's intestinal tract. But some of these so-called secondary parasites are of enormous importance.

The tsetse flies of Central Africa which are periodic parasites of many warm-blooded creatures such as horses, cattle and men are in turn hosts of Trypanosomes which cause much sickness in Central Africa in both men and domestic stock. Similarly, the Anopheline mosquitoes which are themselves periodic parasites of warm-blooded animals and man are in turn hosts to the various Plasmodia which cause malaria. These pathogens (disease producers) are exchanged by the bites of the fly and mosquito.

While, as stated before, several of the parasites of medical importance are described in any "Home Physician", this series would not be complete without mentioning one example, not only for its interesting life history but to show how the study of its life cycle is of practical value in leading to ways of controlling these pests.

Clonorchis sinensis is a liver fluke found in East Asia and Japan where it causes a great deal of disease. The adult lives in the liver. Ova pass through the bileduct to the intestinal tract and to the outside where they reach the water in irrigation ditches and are there ingested by certain snails (Parafossalarus). Here the larvae live in the tissues and after undergoing three changes escape from the snail to encyst on a fish (Carp) which in turn is eaten by man, so completing the cycle.

The way then to prevent infestation would seem to be to prohibit the eating of fish. In an area where there is always a scarcity of food this is difficult to enforce. But, once it was understood that the organism parasitizing the snail (which was first thought to be unrelated) was in reality a different phase in the development of the fluke, control became easier as children were given a small bonus for collecting the snails which live in shallow ditches. These were destroyed, thus interrupting the cycle and so greatly reducing the number of infestations.

While there are thousands of other parasites, those of the insect world have been emphasized as anyone interested can make observations in backyards, roadside banks, gravel pits and so on.

Finally, I should like members to realize that observations made by dedicated laymen have often helped to establish relationships where efforts of professionals have failed. Members should be encouraged by the fact that many original discoveries are yet to be made and gaps in existing life histories to be filled.

End of Series

A. Dehen

JUNIOR JOTTINGS

This has been an active month for the Junior Branch, bringing good weather and many signs of spring. At the beginning of the month, the Intermediates went on a field trip to Mill Hill by Atkins Road. Two weeks following we went to Francis Park for tree-planting in our Patrons' Plantation. Several of our members also completed the new trail in the same afternoon. Travelling through several different types of habitat the trail was surveyed by Skip and begun by the Eskimos of H.M.C.S. Naden.

The younger section has also been very busy. They went on a field trip to John Dean Park to investigate the Thunderbird Cave. The juniors came up after the Intermediates' workbee and finished the tree-planting. Later in the afternoon, Skip took us on a tour of the new trail. If you have not been out to see it, you have missed an enjoyable hike.

At the recent Audubon Wildlife film Wild Rivers of North America several Intermediates ushered.

Genevieve Singleton

LOW TIDE

One of the rewards of living on the sea coast is being able to explore a beach at low tide. Any beach is fascinating at its lower levels but for sheer beauty of form and colour a rocky beach with lots of vertical faces and overhangs is hard to beat. Such a spot, even on the quiet waters of the inner coast, will be festooned with starfish, anemones, and the myriad forms of intertidal life. If you are fortunate and get to a rock beach on the exposed coast, the rewards are even greater. Here, all the animals of the inner coast are represented as well as those that require the high salt concentration of ocean water and the almost super-oxygenated water of the surf line.

On the inner coast, the commonest colour phase of the starfish is a bluish purple and only occasional animals are browny orange. On the exposed coast, starfish take on a new brilliance and the colours range from a vibrant orange to a deep and almost iridescent purple. The small rather subdued brown or red anemone of the local beaches can, on the outer coast, become a five or six inch wide turquoise flower that would rival the finest blossom in a flower show.

An equally startling transformation takes place in barnacles. On the inside the common acorn barnacle is often cursed but seldom admired. As the pollution level decreases and the oxygen and salinity increase, the shell of this animal becomes a clear beige and whole areas are taken over by its larger relatives the goose and whale barnacles. A tightly packed colony of goose barnacles hanging on a vertical rock face and looking for all the world like a gargantuan shepherd's plaid has a quiet beauty all its own.

Surf swept rocks are a hostile environment and any animal which is not adapted to it has no chance of survival. Despite the tremendous force of the waves, incredibly fragile creatures thrive in this niche. Poke in amongst the goose barnacles and you'll find various small snails and limpets. One wonders how the delicate spines and fragile shell of a sea urchin can survive in the dubious shelter of a cranny in the rocks. Always remember that man is poorly adapted to survive in the surf environment and keep a constant watch for that bigger than usual wave.

Hanging on like a starfish is probably the safest tactic but one does get rather wet. Running over slippery rocks is dangerous at the best of times and a broken bone is no help in the surf.

Some of the beaches around Victoria provide interesting places to explore at low tide. Broken rock and boulders make ideal cover for millions of intertidal animals. Go to any of the small coves when the tide is out, turn over a rock and count the number and kinds of animals clinging or hiding underneath it. You'll have to be fast for at the first sign of movement the mobile creatures will start to scuttle away. Of the larger animals, the purple shore crab is probably the commonest but on some beaches blennies of all sizes shelter under the rocks. Hermit crabs, limpets and the occasional chiton are also the reward of the rock turner. After you have looked, please please turn the rock back. You wouldn't like some creature to turn your house upside down and the drying action of the air can be fatal to some of these animals. It wouldn't take many thoughtless rock turners to seriously upset this fascinating but fragile environment.

Spectacular pollution, such as the <u>Torrey Canyon</u> disaster is a vivid reminder of the hazards of a technological society but the creeping pollution of sewage and other urban wastes is a far more dangerous threat. We, as naturalists, decry the industrialist pumping his effluent into our streams but ignore the fact that our untreated wastes pour into these same waters. We legislate against industrial smoke and burn garbage in our backyard incinerators. We reject bylaws designed to provide for sewage treatment plants. Pollution is a threat to everyone and it is everyone's responsibility. Can we, in all fairness, expect industry to do as we say and not as we do?

Oil pollution destroys billions of intertidal creatures annually and naturalists the world over are concerned. But let us not forget that by our apathy we ourselves are contributing to a far more deadly form of pollution. Every year more of our beaches are posted UNSAFE FOR BATHING - WATER POLLUTED. If these waters are not safe for bathing think what has happened to the creatures who used to live in them. Compare the intertidal zone at Clover Point with that at Albert Head. Compare the fresh clean water of Becher Bay with the sewage soup of the inner harbour, and enjoy your low tide beaches while you

still can. When your favourtie beach is closed and posted POLLUTED, don't mutter, "They ought to do something." Have a good look at "they" - in your mirror!

Murray Matheson

SOME LOCAL LOW TIDES

To help you enjoy our local beaches - polluted, maybe! - the lowest tides in each of the summer months are listed below. All are morning tides and the time is Standard. The lowest tides in August, although less than a foot, are higher than the lowest in May, June and July. Only May 12 and June 9 are weekend dates. June 11 is the lowest of all

MAY				JULY		
12	8.55		0.0	8	7.35	2
13	9.40	-	.7	9	8.25	6
14	10.25	-	.8	10	9.05	5
15	11.15	-	.6	11	9.50	2
JUNE				AUGUST		
9	7.50		0.0	5	6.35	.6
10	8.40	-	.7	6	7.15	.3
11	9.20	-	1.0	7	8.05	.2
12	10.10	-	.9	8	8.45	.5
13	10.55	-	.3			

If you are getting a Tide Table, Volume 5 (Juan de Fuca & Georgia Straits) will give you Victoria, Sooke and Fulford Harbour among Reference Ports. Volume 6 (Barkley Sound and Discovery Passage to Dixon Entrance) will give you, among Reference Ports, Campbell River, Port Alberni and Tofino. The tides at lesser places such as Becher Bay, Point No Point, William Head, Esquimalt, Oak Bay, Brentwood Bay, Swartz Bay, Ganges Harbour, Montague Harbour may be worked out by calculating the expected difference from the tide given for their nearest Reference Port. The tables show the areas clearly.

NOTE WELL. The tide times given are Standard Time. If you follow the time on your clock, you'll arrive an hour before the tide changes, and will be able to watch ebb, turn and rise. The choice is yours. Why not play hookey and enjoy yourselves?

Editor.

SOME BOOKS OF INTEREST TO VICTORIA NATURALISTS

Some books of interest to naturalists added to the stock of the Greater Victoria Public Library. February - March 1968.

Serviss, G.P. Astronomy with an opera-glass

Murata, K. Practical bonsai for beginners.

Lessing, L.P. DNA: at the core of life itself.

Rue, L.L. Pictorial guide to the mammals of North America.

Broms, A. Thus life began.

Strickberger, J. Genetics.

Morris, D. The naked ape.

Fristrup, B. The Greenland ice-cap.

Baker, J.W. Patterns of nature.

Williams, L. Man and monkey.

Ziswiler, V. Extinct and vanishing animals.

Speakman, F.J. Out of the wild.

Carr, A.F. So excellent a fishe: sea turtles.

Lockley, R.M. Grey seal, common seal.

Harris, W. Salmon fishing in Alaska: how and where.

Cramond, M. Game bird hunting in the West.

MONADNOCK AND NUNATAK: For members who enjoy the sound of words - in which branch of Natural History would you be likely to find monadnock and nunatak? What do they mean? Where did these words come from?

DEADLINE FOR SEPTEMBER ISSUE. August 10, please.

GLAUCOUS-WINGED GULL INCIDENT

Many birders along our coast are familiar with the method by which glaucous-winged gulls open clams and oysters. From the air the shellfish are dropped on to rocks and driftlogs or other hard surfaces, until cracked. Once opened, the gull retrieves the bivalve and picks its contents clean.

While photographing waterfowl at Deer Lake Park in Central Burnaby on February 8, 1968, I saw a rather amusing incident involving this fascinating habit.

An adult glaucous-winged gull flew from the lawn in front of me with a bright white object in its bill. From about 30 feet the bird dropped the object on to the soft lawn where it landed half-buried. The gull retrieved its "food" and this time, from about the same height, dropped it on a nearby pile of sand. Then the gull took the still uncracked or broken object and, from about 20 feet, dropped it on to an asphalt parking lot. The gull followed the object down and curiously waited for it to stop bouncing. The strange 'shellfish' was cautiously investigated and then, apparently disgruntled, the gull flew off and settled on the lake.

I left my camera and found the mysterious object. It was a golf ball.

R. Wayne Campbell.

ON GULLS AND HUNTERS

The glaucous gull is a species considered rare in the Victoria-Vancouver area, and any individuals stopping over are usually scrutinized by many birders if, and when, they are detected.

Such was the case in the Fraser Delta in January when an adult bird was found on the shoreline and two members of the Vancouver bird group, including Jack Husted, their leader, witnessed an unusual feed performance.

The shoreline in the Fraser Delta-Ladner area is a place of carnage during the open season for duck; one has to see this to appreciate the fact that anything that flies is fair game and a single shot of a 12 gauge into a tight flock of shore birds in flight simply blasts a hole through the flock, scattering dead, dying and

mutilated birds all over the waterfront. (Where is our Game Department?)

This particular glaucous gull was performing its basic function, economically speaking, as it moved along the shore feeding on the carcasses of dead dunlin which had been shot quite recently. Our local glaucous-winged gull was about in small numbers, feeding on the remains left by the glaucous gull.

The gull in question was seen, on more than one occasion, to swallow whole a dunlin that was not yet dead; legs, wings, bill and all.

Sometimes I don't think the human race deserves these natural scavengers but should be left to suffer the consequences of the ignorance, selfishness and inhumanity so blatantly displayed in our dynamic society.

G. Allen Poynter.

SWARMING SWALLOWS

In the late summer of 1965 for the first time in my forty years in Trail, swallows gathered in large numbers to roost in the tall trees near my home, 200 feet above the Columbia river. Swallows are numerous in the area, the most noticeable being the violet-green which arrive regularly each spring within a week of March 17. They nest and raise their young close to the houses and by midsummer both young and adults line the telephone wires. In the latter part of July most of them disappear and only an occasional violet-green swallow is seen.

Bank swallows are numerous and nest in large colonies where the sandy banks of the Columbia river provide suitable sites. They arrive later than the violet-green and can be seen skimming the surface of the river on summer evenings. Other varieties, barn, cliff and tree swallows are not as numerous.

On July 22, 1965, as dusk approached large numbers of swallows began congregating. They came in small groups, apparently from all directions and circled in ever-growing flocks around a group of three or four maple trees which were 50 to 60 feet tall. They flew around for perhaps three quarters of an hour until it was nearly dark, and then settled down in the treetops to spend the night. I judged that there were perhaps two thousand swallows in the flock and they came back each night to

Apr. 4 -

Dr. D.B. Sparling

roost in this one group of trees, sometimes favouring one and sometimes another. This procedure continued until, in early September, the number diminished and they finally all disappeared.

Since they did not gather until dusk and were away at dawn, identification was difficult. They were smallish, brown-backed, with light underparts except for an indefinite darker band across the breast. Their voice was hoarser than the twittering of violet-green swallows and I could see no sign of the white band on the sides of the rump. I concluded that these were bank swallows.

A friend from Trail told me recently that this swarming had been repeated in 1966 and 1967 and that he had identified the swallows as the violet-green variety.

Is this a new habit of swallows or has it been going on for many years in other localities? When the violet-green swallows disappear in midsummer, have they been swarming in some other place? Are they violet-green or bank or a mixture of the two, or some other species? I wish I knew.

A. Douglas Turnbull.

SOCIETY BUSINESS: Our fiscal year ends on April 30. Annual dues are listed on the back cover. They, like changes of address, should be sent direct to Mr. E.E. Bridgen, 2159 Central Ave., Victoria, B.C. Cheques and Money Orders should be payable to Victoria Natural History Society. ANNUAL MEETING: is on May 14 (see final page.) The Nominating Committee is headed by G. Allen Poynter, 39 35 Emerald Place (477-3230). He is assisted by Mrs. F.A. Sherman, 2168 Guernsey St. (386-1965) and by Mr. A.G. Porcher, 2817 Murray (384-5823). The consent of the nominee must be obtained before submitting the name to the Committee.

JUNIOR QUIZ: With this issue we complete the series on notable naturalists. Can you answer the following?

- 1) Two native trees honouring Archibald Menzies?
- 2) A familiar native tree named for a Lancashire printer?
- 3) A bird and a sea mammal bearing Steller's name?
- 4) Two place names honouring a Canadian geologist?
- 5) Which naturalist wrote a column in the Sidney Review?
- 6) Who wrote Birds of Western Canada?

BIRDS FOR THE RECORD

by G.N. and G. Hooper, 2411 Alpine Cr. (477-1152 eve.) European widgeon (1) - Beacon Hill Park -Mar.10,12 -A.C. Schutz Mar.18 -White-fronted goose (1) - Prospect Lake Rd. -E.H. Hart Mar.31 -Great horned owl (1) - Florence Lake -Tom and Gwen Briggs Apr. 7.10 -Gray-crowned rosy finch (2) - Clover Pt. -John Comer (L.t. tephrocotis) New arrivals: Rufous hummingbird (1) - Ten Mile Pt. -Mar.16 -R. Mackenzie-Grieve Mar. 26 -Orange-crowned warbler (1) - Linnet Lane -Tuesday Group Mar. 25 -Tree swallow (4) - Florence Lake -Solitary vireo (1) Apr. 2 -Tom and Gwen Briggs Mar.24 -Turkey vulture (3) - Sooke River -Mar.30 -Band-tailed pigeon (6) - University -Savannah sparrow (1) - Clover Pt. -Apr. 2 -Allen Poynter Savannah sparrow (brooksi) (11) - Saanich Pen. - Apr. 6 -Osprey (2) - Tsehum (Shoal) Harbour - Apr. 6 -A.R. and Eleanore Davidson

To look for in May - Blue-winged teal, semi-palmated plover, tattler, ruddy turnstone, pectoral sandpiper, dowitcher, flycatchers, w. wood pewee, Wilson's warbler, cowbird, tanager, black-headed grosbeak.

Chipping sparrow (3) - St. Denis St. -

オオオオオオオオオオオ

A BOOK TO WATCH FOR: The McGill University Press, as Canadian representative for the Columbia University Press, has written our Society about a book <u>Hummingbirds and their Flowers</u> by Karen A. Grant and Verne Grant. The retail price is \$15.00. To date, that's all we know.

EARLY NATURALISTS COMMEMORATED IN MUSEUM GALLERIES

Most of the exhibits in the galleries of the old Museum building are "historic" in that they each tell something of the natural history or the human history of our province. Some are historic for other reasons; either they are the product of a technique no longer used and therefore worth preserving as an example of a past art, or they are named after persons who are now part of our history.

A number of the latter are of particular interest and it might be appropriate to consider them in this final article on pioneer naturalists in British Columbia.

Occupying a prominent spot is Dawson's caribou which is specially significant because it now appears that this Queen Charlotte Island species is extinct. At least none has been seen since about 1920. The species was described by Ernest Thompson Seton in 1900 and named after Dr. George M. Dawson (1849-1901), the famed Canadian geologist who first called Seton's attention to this unique animal.

Dr. Dawson was born in Pictou, Nova Scotia, and eventually became one of Canada's most distinguished geologists. During his busy career he held the post of geologist and naturalist to the North American Boundary Commission and became the director of the Geological Surwey of Canada. He travelled over much of British Columbia and submitted voluminous reports on its natural history and Indian life in addition to his accounts on geology.

In 1887 he was placed in charge of the Yukon Expedition which resulted in Dawson City being named after him. Besides the Queen Charlotte Island caribou other animals bear his name, including a sun star, a vole, a grasshopper, and a fresh-water sponge. In the botanical field the Mountain parsnip (Angelica Dawsoni Wats.) also commemorates his name.

Adjacent to the caribou is another ungulate originally called Fannin's sheep after John Fannin the first curator of the Provincial Museum. Mr. Fannin was born in Ontario in 1837 and after a varied career as a miner, a taxidermist and a big game guide in British Columbia he was appointed curator of the Museum in 1886, a post which he held until shortly before his death in 1904. Our local race of the blue heron is also named in his honour.

Another member of this distinguished group of animals is the Kermode bear named after Mr. Fannin's successor, Mr. Francis Kermode (1874-1946). Mr. Kermode came to British Columbia as a youngster from his birth place, the Isle of Man, and joined the Museum staff when he was 16 years old and became director in 1904. He was instrumental in obtaining specimens of British Columbia's unique bear and in having it recognized by the scientific world. Later he played a part in acquiring a cub which lived in Beacon Hill Park for many years. After 50 years of service Mr. Kermode retired in 1940.

In the fossil section a number of molluscs commemorate the name of Dr. Charles F. Newcombe (1851-1924) one of the great pioneer naturalists and anthropologists of this province. A scientist of wide interests he won international recognition in several fields and played a dominant role in the work of the Museum in early days. His son William (1884-1960) accompanied him on field trips and also became a capable scientist and collector. A great mass of material assembled between them was purchased by the Provincial Government in 1961 as a very significant contribution to the scientific and cultural life of British Columbia. It now forms a valuable part of the Museum and Archives collection.

The Newcombe interests also included the field of botany and they made extensive collections which now have real historical value as well as being of considerable scientific worth. Two plants bear the name of Newcombe, a Saxifrage and a groundsel, Senecio Newcombei Greene.

A whole host of other notable people are intimately connected with British Columbian animals and plants though only a few of them ever set foot within our province. An impressive gallery of historic figures is brought to mind in naming just a few: Roosevelt elk, Stone sheep, Dall porpoise, Baird dolphin, Steller sea-lion, Scammon blackfish, Keen bat, Douglas squirrel, Townsend chipmunk, Lewis woodpecker, Clark nutcracker, Ross goose, Heermann gull, Richardson grouse, Kennicott owl, Coulter whitefish, Engelmann spruce, Garry oak and Douglas fir.

These names do more than commemorate outstanding naturalists and explorers; they mark an era of exciting discoveries the like of which will not be seen again on this planet.

G. Clifford Carl.

SUMMER PROGRAM, 1968

BOTANY FIELD TRIP: Sat. May 4: Meet at Monterey Parking Lot, Douglas at Hillside, 1.30 p.m. for trip to Girl Guide Camp "Kingswood" via Old West Road and Linnet Lane. Bring tea. Leader: Miss M.C.Melburn, 384-9052.

EXECUTIVE MEETING: Tues. May 7, 8 p.m. in Dr. Carl's office.

B.C. NATURE COUNCIL ANNUAL MEETING: Sat. & Sun. May 11 & 12. In Vancouver. Meet other naturalists. Field Trip. For information Phone H.D. Walker 477-2851.

GENERAL MEETING: Tues. May 14: 8 p.m. in Douglas Bldg. Cafeteria. After election of officers, David Stirling will show some slides of his nature tour in Australia.

BIRD FIELD TRIP: May 25: To East Sooke. Meet at Monterey Parking Lot 9.30 a.m. or Colwood Plaza 10.00 a.m. Bring lunch.

BOTANY FIELD TRIP: Sat. June 8: Meet Monterey Parking Lot 9.30 a.m. for trip to Mt. Prevost. Bring Lunch. Leader: Miss M.C.Melburn 384-9052.

BIRD FIELD TRIP: Sat. June 15: To Spectacle Lake. Meet Monterey Parking Lot 9.30 a.m. Malahat Summit 10.00 a.m. Bring lunch.

BOTANY FIELD TRIP: Sat. July 6: Monterey Parking Lot 1.30 p.m. for trip to Esquimalt Lagoon. Bring Tea. Leader: Miss M.C. Melburn 384-9052.

BIRD FIELD TRIP: Sat. July 20: To Saltspring Island.

Meet Monterey 8.30 a.m. or Swartz Bay 9.15 a.m. Bring
lunch. Please note times. They're important on this trip.

BOTANY FIELD TRIP: Sat. August 3: Monterey Parking Lot at 10.00 a.m. for trip to Goldstream Park Campsite and Picnic Area. Bring lunch. Leader: Miss M.C.Melburn 384-9052.

BIRD FIELD TRIP: August 24: To Cowichan Bay. Monterey P.L. at 9.30 a.m. or Robert Service Memorial 10.15 a.m. Bring lunch.

JUNIOR GROUP: Meet every Saturday, 1.30 p.m. Monterey Parking Lot, Douglas at Hillside for field trips. Leader: Mr. Freeman King 479-2966 Happy holidays!

REPEAT REMINDER Deadline for September issue, is by August 10, please.

VICTORIA NATURAL HISTORY SOCIETY

OFFICERS 1967-68

Honorary Presidents

HONORABLE W. K. KIERNAN
Minister of Recreation and Conservation

MR. J. W. EASTHAM
Former Provincial Plant Pathologist

Honorary Life Members
DR. G. CLIFFORD CARL
MR. FREEMAN F. KING
MR. ALBERT R. DAVIDSON
MR. GEORGE E. WINKLER
MR. A. L. MEUGENS
MISS M. C. MELBURN
MISS E. K. LEMON

Past Presidents

ROBERT CONNELL .		1944-48	P. M. MONCKTON .		1957-58
G. CLIFFORD CARL .		1948-49	MRS. G. E. SOULSBY		1958-59
GEORGE A. HARDY .		1949-50	RALPH FRYER		1960
MRS. R. G. HOBSON -		1950-52	FREEMAN F. KING .		1960-62
J. A. CUNNINGHAM		1952-54	P. J. CROFT		1962-63
C. W. LOWE · · ·		1954-56	MISS E. K. LEMON		1963-66
A. O. HAYES · · ·		1956-57	G. ALLEN POYNTER		1966-67

President
DR. D. B. SPARLING
No. 9 - 1354 Beach Drive
Telephone 385-2229

C. W. MOREHEN 4584 Bonnie View Place Telephone 477-3383

Vice-President

Editors

MRS. L. E. CHAMBERS 4317 Blenkinsop Road Telephone 477-1676

Secretary-Recording MRS. F. A. SHERMAN 2168 Guernsey Street Telephone 386-1965

Secretary Corresponding MRS. S. PRIOR 3164 Shelbourne Street Telephone 384-0187 DR. G. CLIFFORD CARL 410 Queen Anne Heights Telephone 383-8524

Treasurer
E. E. BRIDGEN
2159 Central Avenue
Telephone 383-3577

Librarian
A. R. DAVIDSON
2144 Brighton Avenue
Telephone 384-9595

Chairmen of Groups

Programme and Publicity
D. STIRLING
3500 Salsbury Way
Telephone 385-4223

Botany (summer)
MISS M. C. MELBURN
2397 Heron Street
Telephone 384-9052

Botany (winter) MISS D. PAGE 975 Haliburton Road Telephone 658-5573

Nature Council D. STIRLING 3500 Salsbury Way Telephone 385-4223

Conservation

DR. F. THOMAS ALGARD 3090 Uplands Road Telephone 385-7372 Ornithology
M. C. M. MATHESON
441 Victoria Avenue
Telephone 383-7381

DR. JOHN A. CHAPMAN
962 Lovat Street
Telephone 384-5568
Audubon Wild Life Films
MISS ENID LEMON
1226 Roslyn Road

Telephone 385-4676

Junior Group FREEMAN KING 541 McKenzie Avenue Telephone 479-2966 MRS. K. OSBORNE 1565 Begbie Street Telephone 385-8164

University Liaison DR. L. G. SAUNDERS 2758 Dunlevy Street Telephone 386-1756

Annual Dues, including Subscription: Single, \$3.00; Family, \$5.00; Junior, \$2.00; Life Memberships: Single, \$50.00; Husband and Wife, \$75.00.