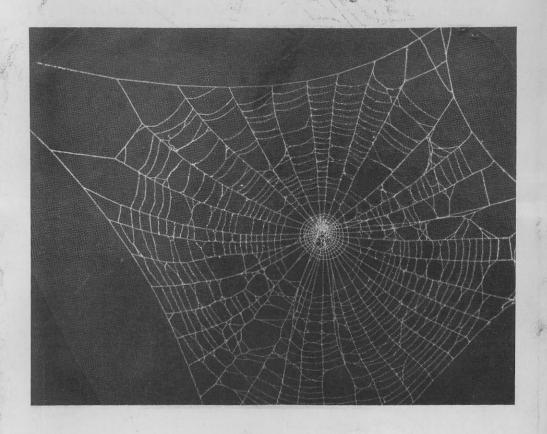
# VICTORIA NATURALIST

Vol. 21, No. 5

January, 1965



Published by the
VICTORIA NATURAL HISTORY SOCIETY
Victoria, B.C.

#### THE VICTORIA NATURALIST

## Published by THE VICTORIA NATURAL HISTORY SOCIETY

Vol. 21, No. 5

January 1965

#### COVER PICTURE

#### COLLECTING SPIDER WEBS

By David Stirling

Naturalists, and other less fortunate people, have long admired the design, beauty and symmetry of spider webs, but few people have attempted to collect them. This month's cover photo by Bill Reith shows an orb weaver spider's web that I collected last summer.

Recently, I noticed an article in the <u>Scientific</u>
<u>American</u> (<u>Amateur Scientist</u>, February, 1963) explaining in detail the technique involved in the collecting and preserving of spider webs. Here, briefly, is a summary of the article together with a few notes of my own.

Orb webs are the most desirable and the easiest to collect. First spray the web with coloured lacquer, using one of the handy spray bombs. Give the web several coats, allowing the lacquer to dry between "shots", but take care not to add too much paint as the strands will sag, or even break. Next, place a contrasting sheet of stiff paper or cardboard behind and against the web and spray with clear lacquer. A steady hand is needed now while the lacquer hardens glueing the web to the paper. Now, carefully cut the guy lines holding the web to the bushes, and the web is "in the bag". Several more coats of clear lacquer are necessary in order to glue the web securely and prevent it from being rubbed off the paper.

Collecting is best done in the morning or in the evening when webs are easily seen against the sun. New uncluttered webs are common after heavy rains have knocked down the old ones. Small webs are the rule in early summer, while large webs predominate in autumn.

You will find webs almost anywhere; I found the logstrewn upper beach at Esquimalt Lagoon to be especially productive. Webs here are particularly tough in order to withstand the almost constant wind, and therefore need not be handled with the same extreme care accorded webs in other locations. And always collect on a calm day; otherwise you will waste a lot of lacquer, and you might wind up with a painted face instead of a collected web.

Often the orb weaver sits in the centre of her web; if so, poke her gently with your finger so that she will take cover while you spray and she will survive to build a new web.

Web hunting can be a pleasant hobby and you will get to know more about the fascinating ways of spiders and other things while you are about it.

#### SILKEN STRANDS

#### By G.A. Hardy

Late summer and early autumn is the heyday of the spider, that accomplished aeronaut and trapeze artist, when the population increase of spring and summer makes itself felt in no uncertain manner by all who walk in woodland glades and bushy fields; the silken threads, nets and entanglements swathe our faces and hands in a non-stop process of irritation; thus are we made aware of the unique methods employed by the spider in both transport and food acquirement.

Long before man invented the balloon and plane, young spiders were floating at ease, seeking pastures new. They did not wait until experience helped them in their aerial travels, but soon after leaving the eggballs in which they had passed the winter, or early spring and summer, they climbed to the top of a nearby grassblade or bush and worked out a fine silk thread that, floating in the warm currents of air, soon enabled them to become air-borne.

In some parts of the world these floating strands, shimmering in the sunshine, occur in such numbers as to attract the attention of all country dwellers to which the name gossamer or goose-summer was given because it occurred in the late summer during a period of warm windless days.

Not all the strands that annoy us are directly due to this gossamer; if a careful search is made among the low herbage, tiny spiders will be revealed, just landed from their aerial travels and already busily constructing a fly-catching orb. As they increase in size, it is the supporting threads that wrap about our faces as we wend our way along the trails.

Spiders are among the most abundant of small life that frequents vegetation; they are carnivorous, feeding on insects for the most part, and consequently are among our best friends. Recently, the winged stage of a large and common termite was seen being consumed by an orbweaving garden spider — as soon as one flew into the web by accident, or by my friend Andrew Harcombe's design, down she shot from her cubicle, like an arrow from a bow, and immediately commenced to wrap it up in a sheet of silk, then to tow it back to her den to be sucked dry at her leisure.

Thus, the forcible manner in which our interest in spiders has been aroused can set off a series of enjoyments in the study of a group of small wildings that have made a place for themselves in the economy of nature, as a result of fierce competition against each other and their neighbors.

#### BALLINGALL ISLETS NATURE PARK

#### By R. Y. Edwards

Between Galiano and Saltspring Islands, near Montague Harbour, are several small, nearly barren rocks with a total area of less than an acre. These are the Ballingall Islets, now your second provincial nature park. A colony of double-crested cormorants is the main feature of the islands. These nest spectacularly in the gnarled and twisted skeletons of several dead junipers. Underneath the cormorants is a small colony of glaucous-winged gulls. A few pigeon guillemots nest in crevices in the rock. Plants are not numerous. There is much bare rock, and lime from the birds has burned away most life. It would be easy for some energetic botanist to someday

compile for us a complete list of plants to be found on these rocks. The best plant watching month is probably May.

These rocks are worth a visit with camera and notebook. (Remember not to disturb the birds when they have eggs or small young). It is easy to visit them in a small boat in good weather from either Saltspring or Galiano.

#### ANNUAL FUNGUS FORAY

#### By M.C. Melburn

Fine weather, a good crop of fungus, and 44 observers made for successful hunting, Saturday, November 7th, in Francis Park. Specimens of more than 75 species were found, and, as usual, they were all sizes from quarter—inch to eight inches, and of all colours from white to black.

Many species found in the area last fall were absent this time; conversely, many not found in our 1963 hunt, were present on this occasion. This well illustrates the fact that by no means all fungus plants fruit every season; some may skip several years while their mycelium builds up sufficient stored food to produce fruit again.

Perhaps the best represented genus was Clitocybe, whose species vary greatly in size, but commonly have light coloured-caps and de-current gills. There are many small forms of Clitocybe which require the skill of a specialist for identification and, since several are known to be poisonous, it is best for fungus-hungry folk to leave them alone.

A handsome bolete found in abundance was the edible Boletus zellerii, its thick reddish stem supporting a compact dark-brown cap lined with yellow pores.

Another genus well represented in this area is Cortinarius. And with good reason. There are approximately 400 species in the North Temperate Zone; and we counted at least 15 species during our two-hour hike. The name Cortinarius comes from the webby veil (cortina)

which covers the gills in the early stages of development; These delicate threads vary in colour and disappear fairly quickly; but they are essential for identification purposes as are also gill colours in the very young stages. There are many strikingly colourful species of Cortinarius here; but we should be content to admire their beauty and leave the slugs and insects to test their edibility.

One observer found a three-foot dead branch completely moss-covered and gaily beset with blobs of orange-yellow witch's butter, which seemed to light up a good bit of its surroundings. Nearby were two species of Gomphidius, both very sticky, G. glutinosus (peg-top), and its smaller relative - G. subroseus.

White inocybe (Inocybe geophylla) and conic hygrophorus (H. conicus) are easily recognized mushrooms to be avoided as food material. Both have caps usually less than two inches across, and both are cone-shaped; although the former does expand as it matures. The inocybe cap is white, while the hygrophorus shows a brilliant scarletorange-yellow range of colouring; one point in identification is the fact that its cap and stem become black-stained with age or when handled.

Golden trumpets and white trumpets (Xeromphalina campanella and X. umbellifera), grow in clusters on rotting logs. Their striated caps are usually about three-quarters of an inch in diameter, and have a definite depression in the centre. Edible? Yes, but only of interest to someone with a bird-like appetite.

Puff-balls and their relatives were rather scarce, but jelly fungi, stereums and polypores were numerous.

Three of the cup-fungus group were found, two being species of yellowish-brown rabbit-ears (Otidea onotica and O leporina); the third was Patella albida, a small rather roundish cup with a white lining and a dark-brown covering of tufted hairs.

Members of the coral family were Clavaria flava (yellow), Clavaria cinerea (ash-coloured) and Clavaria formosa (pinkish-buff).

These dainty branching growths lend a very pleasing variety to the flora of the forest floor.

The hunting was good, but the season short. Before next fall rolls around those who are interested would do well to get and study the Provincial Museum's 170 page handbook No.24, prepared by Dr. R.J. Bandoni, of the University of British Columbia, and Dr. A. F. Szczawinski, Curator of Botany at the Provincial Museum. The title is "Guide to Common Mushrooms of British Columbia", price -50 cents.

#### 1964 JUNIOR GROUP BIRDING

By Sean Newton and David Lundell

On a freezing day, sitting on a log facing the sea, a happy type of people watch the graceful terns fluttering in the air and suddenly plunging into the rolling sea to emerge with a silvery fish.

You may wonder what these people are doing sitting in the cold and watching what seems to be ordinary birds flying about -- these people are bird watching.

Bird watching isn't really the silly old thing of silly old ladies watching some silly little birds in a silly little tree, as some people think. It is the enjoyment of our natural resources - not in zoos or museums, but in their natural state.

These people will go out any time of day or night just for the sake of seeing a new bird or a 'lifer'. Those who have not had the enjoyment of knowing that they have seen a rare bird are really missing something.

So, to encourage the younger generation, we present this summary of birds seen during the year by us, the younger generation:

- Jan.1/64 Beacon Hill Park. 4:30 p.m. Sunny; mild; light winds:
  Canvasbacked Duck, 1 male, 3 female, Hooded Merganser, male and female, Scaup, Lesser and Greater, Coot.
- Jan.4/64 Francis Park. 3:00 p.m. Sunny; winds light;
  Fox Sparrow,
  Mallard Ducks swamp.

- Jan.4/64 Island View Beach. 3:30 4:00 p.m.
  Sunny; mild; light winds:
  American Goldeneye.
- Jan.8/64 Richmond Road. 8:30 a.m. Winds south-east:
  Pale-footed Shearwater (confirmed and supported by description and specimen)?
- Jan.8/64 Thetis Lake Park. 3:30 p.m. Rainy; calm:
  Osprey's nest.
- Jan. 20/64 St. Patrick School. 9:00 a.m. Sunny; mild; light winds: Franklin's Gull flying low over field, being chased by dog. Cedar Waxwings - about 20.
- Jan.11/64 Bowker Avenue at beach. Cloudy; calm; cold; 9:30 a.m.

  Bird answering description of Stilt
  Sandpiper flew off a rock and made high call, "who-oo-oo". ?
- End of Lansdowne at beach some day:
  Whimbrel,
  Hooded Merganser.
- Lochside near Royal Oak Avenue same day:
  Steller's Jay, 3
  Ruby-crowned Kinglet,
  Green-winged Teal,
  Downy Woodpecker,
  Evening Grosbeak (heard).
- Jan.12/64 Blenkinsop Road:
  Steller's Jay, 4
  Green-winged Teal, 1
  Turkey Vulture, 1
  Shoveller, 5
  Ruby-crowned Kinglet, 2.
- Jan. 25/64 Beaver Lake:
  European Widgeon,
  Pied-billed Grebe,
  Goshawk (?)

- Mar. 24/64 Ladner, Vancouver, B. C.

  Black-capped Chickadee,

  l possible Short-eared Owl ?

  A Bob-cat and a flying squirrel

  were also seen.
- Mar.26/64 Hudson's Bay Woods, Foul Bay Road,
  5:30 p.m. Mild; sunny:
  Lewis Woodpecker hammering at dead snag.
  A little lower below there was a wood-pecker hole from which flew a starling.
- Apr. 2/64 Francis Park. 2:45 p.m. Clear; mild; winds light:
  Ruffed Grouse on swamp trail,
  Saw Whet Owl maybe (heard)?
- Apr. 4/64 Thrushmere property adjoining Beaver
  Lake Park:
  Wood Duck,
  Long-billed Marsh Wren.
- Apr. 5/64 Near Victoria Yacht Club: Evening Grosbeak - 30 to 40.
- Discovery Island: Myrtle Warbler,
  Audubon Warbler,
  Bald Eagle by nest,
  Black-bellied Plover breeding plumage,
  Kildeer by and on eggs,
  Red Crossbill,
  Raven,
  Lutescent Warbler (Orange-crowned),
  Ruby-crowned Kinglet,
  Common Loon breeding plumage,
  Hermit Thrush.
- May 2/64 The Gorge. 11:30 a.m. Sunny; warm: Ring-necked Duck.
- May 16/64 Burnside Road:
  Cinnamon Teal, male and female (lifer)
  Dowitcher.
  Prospect Lake Road:
  Ferruginous Hawk or Roughlegged ?
- May 30/64 Allison Road: Black-headed Grosbeak (lifer),

- May 30/64 Elk Lake:
  Mute Swan flying close and low over lake.
- May 31/64 Allison Road:
  Blackheaded Grosbeak,
  Pileated Woodpecker,
  California Quail by nest with 1 egg.
- June 5/64 Salt Spring Island: Black-capped Warbler (Wilson's) Swainson's Thrush, Starling, Song Sparrow. Robin. Marbled Murrelet, Mallard with Kildeer and eggs ducklings Traill's Flycatcher, Loon heard calling, Warbling Vireo, Sparrow Hawk, Red-tailed Hawk Solitary Vireo. All swallows except Cave.
- June 7/64 Allison Road Swamp: 2:30 p.m. Sunny; mild; clouds; moderate winds:

  Blue-winged Teal (lifer), Virginia Rail (lifer)
- June 13/64 Prospect Lake Road: Blue Birds - 3; Western Tanager. Munn Road: Blue Grouse with chicks: Blue-winged Teal; Red-breasted Nuthatch; Chipping Sparrow; Warbling Vireo; Solitary Vireo; Yellow Warbler: Cowbirds (heard) Goldfinch: Cedar Waxwings - a flock at Francis Park Traill's Flycatcher; Swainson's Thrush; Olive-sided Flycatcher; Western Flycatcher;

Also seen: Black-tailed deer grazing.

- July 13/64 Thrushmere, Beaver Lake Park area:
  Yellowthroat in marsh,
  Red Crossbills,
  Wilson's Warbler.
- July 25/64 Sooke. 9:30 3 p.m.;
  Red Crossbills; Western Tanager (heard),
  Evening Grosbeak.

  Metchosin Road:
  Western bluebird.

- July 31/64 Bowker Ave. at beach, 10:00 a.m.
  Ruddy Turnstone several (lifer),
  Bonaparte Gulls; Lesser Yellowlegs.
- Aug. 11/64 Shawnigan Lake: Winds strong; cloudy; Osprey flying over.
- Aug. 18/64 Bowker at beach. Sunny; warm Common Tern,
  Knot ? (lifer) seen also by Tuesday Bird
  Group. Identification questioned.
- Aug. 29/64 Goldstream Park. 10:00 a.m.
  Dipper.

  Cowichan Bay:
  Solitary Sandpiper (lifer),
  Turkey Vulture;
  Song Sparrow
  Barn Swallow,
  Spotted Sandpiper,

Longbilled Marsh Wren.

Sept.1/64 Willows Beach: Kildeer, Western Sandpiper, -Sanderling. Murrelet, (marbled?), Bonaparte Gull. Common Tern. Rock Dove. Hudson's Bay Woods: Winds mild; cloudy; Temp. 45°; Time: 9:30 - 2 p.m. Mourning Dove, Band-tailed Pigeon, Western Tanager, Purple Finch, California Quail. Olive-sided Flycatcher, Towhee, Bush-tit, Orange-crowned Warbler,

Calaveras Warbler, (lifer).

- Sept.19/64 Esquimalt: Pomarine Jaeger.
- Oct.13/64 Lansdowne School: Horned Lark.

- Nov. 7/64 Foul Bay Road. 10:00 a.m. 2 p.m.: Light wind; cool; thin clouds and sun: Screech Owl - knot hole in oak tree.
- Ascot Drive Swamp:
  Snipe, Chickadee,
  Green-winged Teal Shoveller,
  Mallards, Widgeon,
  Golden-crowned Sparrow, Junco.
- Nov. 7/64 Thrushmere, Beaver Lake Park area parkland, pond, swamp, wood, marsh, & field:
  Mallard about 12,
  Hooded Merganser a pair,
  Bufflehead, 1 male,
  Ruby-crowned Kinglet 4,
  Golden-crowned Kinglet 4,
  Towhee,
  Song Sparrow,
  Heron,
  Raven,
  Wren in marsh several sounded like
  Longbilled M.W.
- Same day Esquimalt Lagoon:
  Old Squaw, at least 25,
  Pintail, 7 to 9,
  Redbreasted Merganser,
  Hooded Merganser,
  Bufflehead,
  Western Grebe, 200 plus,
  American Goldeneye,
  Common Loon,
  Meadow Lark very grey above; very
  yellow markings,
  Surf Scoter.

Surf Scoter,
White-winged Scoter,
Gulls - Mews and Glaucous-winged,
maybe some others. They were not studied.

#### BIRDS FOR THE RECORD

Fulmars Clover Point -- Dec. 11th, - R. Fryer.

Orange-crowned Warbler - Heron St. - December 12th,
- Miss M. C. Melburn.

White-throated sparrow - Ascot Drive - December 12th,
- H. Walker.

#### SALMON RUN

#### By Freeman King

This year's run of spawning coho salmon in Goldstream Creek is better than it has been for several years. At the beginning of the run, the water was very low, but the Water Board authorized an increased flow from Humpback Reservoir, giving the fish a better chance to move upstream to the spawning beds.

Early in the run, the fish are nervous and easily disturbed by people tramping along the streambank, but as the time for spawning approaches, their movements portray greater urgency and they are less easily distracted.

At the beginning of the run, the salmon lie in the broad, quiet, brackish pools close to the sea. As time goes on, they move upstream, dashing through riffles and shallows to reach quiet, gravel-bottomed backwaters where they will spawn. A few struggle on as far as the waterfall at the park campsite. As they move on, fighting the current and buffeting against obstacles in the shallows, they become almost white as their normal "bloom" is rubbed off. The shape of their heads changes also as their spawning run, "fighting jaw" develops. In deeper, shadowy pools, they are difficult to see. Many people who go to watch the fish, come away thinking the run is over, or not yet begun.

It is interesting to see two or more males fighting for the company of a female, and at times a female will drive away males she does not favour.

Most fascinating, is the spawning act. The female fans the gravel bottom with her tail and body, creating a depression or cradle for her eggs. She then deposits her eggs and the male moves in to milt them; immediately, the female covers the eggs with sand and gravel, and the pair moves on to the next selected site. As the laying progresses, both fish become weaker, and by the time the process is over they are completely exhausted, drifting listlessly with the current, and soon die.

As with all things in nature, even helpless salmon eggs have enemies. Trout lurk about, hoping for a feed of eggs as they are laid. The water ouzel, or dipper, a bird with many remarkable characteristics, is also fond of salmon eggs.

After the adult salmon have laid and fertilized the

eggs and died, another phase of natural process takes place; crows, ravens and seagulls feast on the carrion. Not long after spawning season is over, barely a sign of birth and death remains -- scavengers have swept the stage for the next act.

#### THE LONG SHADOWED FOREST

An excellent book for Christmas reading is -- "The Long Shadowed Forest" by Helen Hoover, published early this year.

Anyone sincerely interested in man's relationship to his environment will enjoy following Helen Hoover through nine winters and summers as she walks in Wisconsin forest and lake country. She set herself the task of minutely studying all wild creatures she encounters. She is concerned with the complexities of their lives in their natural habitat, and she records her observations in meticulous detail.

She writes with understanding sympathy. Her descriptions of the surroundings are beautifully expressed; trees, plants, the forest "floor", the skies, clouds, the sounds, the geology, even the long history of evolution, - all is brought clearly to the reader's vision.

There is beauty and tragedy. There are many amusing incidents, such as playing the game "bite the fingers" with a three-legged mink in his hideout and he was careful to only pinch the biscuit-giver.

Helen Hoover accepts Nature's ways of keeping wild life in balance. This is NOT a sentimental, nostalgic book. Yet a deep vein of compassion threads through her writing, leading in the final chapters to her conservation imperatives.

### BIRDS FOR THERAPY

Want to do a "shut-in" a favour? -- present him or her with a bird feeder. The house-bound friend will benefit and so will the birds.

\*\*\* \*\*\* \*\*\*

#### JUNIOR JOTTINGS

#### By Nancy Chapman

An all-day trip to the Fisheries Research Laboratory at Nanaimo was the highlight of last month's activities. Six cars took about thirty intermediate section Juniors, and to parents who drove the cars, go our thanks.

The laboratory was more than interesting, the tour excellently arranged, the staff most helpful and everyone learned a great deal about Pacific salmon. But there was so much to see that it was difficult to absorb it all.

Younger members of the Group had interesting trips to Bear Hill and Mount Douglas. On Bear Hill, they found several species of fungi and Arbutus trees laden with fruit. The view from Bear Hill, in itself, was worth the hike. On Mount Douglas, they practiced identifying trees and shrubs in their present leafless state, and noted the special features that make identification possible.

New members of the Group now realize that winter field trips can be as interesting as those of other seasons, and that there is always something to observe.

# LOCAL INSECT PESTS By W. H. Warren

When the European Earwig was first introduced here, it multiplied at an enormous rate, and people were most concerned about its ravages amongst ornamental plants. This pest seems to have reached some sort of equilibrium following introduction of parasites. It is also true that modern insecticides are more effective. In the 1930's the City of Victoria spent thousands of dollars, annually, baiting all the lots in Victoria with a mixture composed of bran, molasses and sodium fluosilicate, a poison to control earwigs. Gradually, the menance subsided and the practice was discontinued.

Tent caterpillars used to be a pest of the first magnitude, thirty years ago in Victoria. Now it is never serious in the city, although still a pest in the country. This has come about because of the change in environment within the city. The city is no longer covered with acres of vacant lots full of rose bushes and other plants beloved by the tent caterpillar.

I recall as a boy about the period of World War I, that the satin moth was a bad pest on poplars and particularly on Lombardy poplars. There seemed to be a great number of Lombardy poplars (Populus nigra var. italica) around Victoria, all planted, I suspect, about 1890 or thereabouts. For various reasons the Lombardy poplars fell into disrepute as a city tree and they were removed. With the removal of the host tree, the satin moths disappeared too. I haven't seen one for years.

\* \* \* \* \*

#### THE YEAR AHEAD

Your editors beg your forgiveness for the lack of seasonal warmth in the December issue of The Victoria Naturalist. But, when the pre-Christmas issue "went to bed", Yuletide seemed far in the future -- next thing we knew, there were only a few shopping days left. This seems symbolic of the whole year -- 1964 was a busy one and flitted by so quickly we were almost convinced that months had been reduced from four weeks to two!!

Even though 1964 seemed to pass quickly, it was a good year. More people became interested in nature. Conservationists became more united. Greater weight of numbers and the ability to present a more solid front will mean greater achievements in the future.

We wish you all the best for the year just begun -- may 1965 be pleasant, memorable and fruitful for you and the Society.

\* \* \* \*

#### MEETINGS AND FIELD TRIPS

EXECUTIVE MEETING:

January 5, 1965

Dr. Carl's Office,

Provincial Museum - - - 8:00 p.m.

GENERAL MEETING:

January 12

Douglas Building Cafeteria,

Elliot Street -- - - - 8:00 p.m.

Speaker: W. D. Reith,

Subject: "A Highland Fling", (Illustrated talk on Mr. Reith's

recent trip to Scotland).

AUDUBON SCREEN TOUR:

January 15 & 16

Oak Bay Junior High School, 8:00 p.m.

Speaker: Charles T. Hotchkiss

Subject: "Teton Trails"

BIRD FIELD TRIP:

January 23

Leader: Murray Matheson.

Meet at Monterey Parking Lot

(Douglas & Hillside) - - - 9:30 a.m.

or Portage Inlet on Trans
Canada Hwy., near Helmcken Rd.

at - 10:00 a.m.

Bring Lunch.

BOTANY GROUP:

January 26

Provincial Museum -- - 8:00 p.m.

Speaker: Dr. Mark Bell,

Subject: "Botanical Classification of Flowering Plants".

JUNIORS:

Meet each Saturday at the Monterey parking lot, Hillside & Douglas,

at - 1:30 p.m.

for field trips.

Leader: Mr. Freeman King, 479-2966.

## VICTORIA NATURAL HISTORY SOCIETY

OFFICERS, 1964-65

Honorary Presidents

HON. W. K. KIERNAN
Minister of Recreation and Conservation

MR. J. W. EASTHAM
Former Provincial Plant Pathologist

Honorary Life Members
DR. G. CLIFFORD CARL
MR. GEORGE A. HARDY
MR. FREEMAN F. KING
MR. ALBERT R. DAVIDSON
MR. GEORGE E. WINKLER

#### Past Presidents

ROBERT CONNELL .		1944-48	A. O. HAYES		1956-57
G. CLIFFORD CARL		1948-49	P. M. MONCKTON		1957-58
GEORGE A. HARDY		1949-50	MRS. G. E. SOULSBY		1958-59
MRS. R. G. HOBSON			RALPH FRYER		1960
J. A. CUNNINGHAM					
C. W. LOWE		1954-56	P. J. CROFT · · ·		1962-63

President

MISS ENID K. LEMON 1226 Roslyn Road Vice-President

FREEMAN F. KING Telephone 479-2966

#### Editors

W. D. REITH 6882 Wallace Drive Brentwood Bay, B.C. Telephone 474-2223

Secretary
MISS EDITH VALENS
Telephone 385-8855

G. CLIFFORD CARL 410 Queen Anne Heights Telephone 383-8524

Treasurer

J. L. RIMMINGTON Telephone 384-9257

Librarian

A. R. DAVIDSON Telephone 384-9595

#### Chairmen of Groups

Programme M. POPE Telephone 479-2374

Publicity
H. D. WALKER
Telephone 477-2851

Botany
MISS M. C. MELBURN
Telephone 384-9052

W. H. WARREN Telephone 383-5163

Federation
MRS. G. E. SOULSBY
Telephone 386-5028

Ornithology
M. C. M. MATHESON
Telephone 383-7381

Entomology
DR. JOHN A. CHAPMAN
Telephone 384-5568

Audubon Lectures
MISS ENID K. LEMON

Junior Group

Geology
A. H. MARRION
Telephone 384-1983

Annual Dues, including subscription: Single, \$2.00; Family, \$3.00; Junior, \$1.00; Life Membership, \$30.00; Life Membership, husband and wife, \$50.00.