

October, 1966
Vol. 23 No.2

THE VICTORIA NATURALIST



published by the 
VICTORIA NATURAL HISTORY SOCIETY

Victoria B.C

THE VICTORIA NATURALIST

Published by
THE VICTORIA NATURAL HISTORY SOCIETY

Vol.23, No.2

October 1966

ACORNS TO MIGHTY OAKS

by R. Y. Edwards

Victoria is losing its oaks. Slowly but regularly the big ones are coming down, and no one seems to be growing young ones. Last winter a number of people in Victoria expressed concern. It is generally agreed that something must be done, and soon.

In a matter like this, one is apt to write a few letters to the papers, send a few more to the municipal governments, complain loudly to friends, and then feel that not much else can be done. This may be why naturalists have a reputation for loud complaining. Perhaps it is time for a new approach. Instead of merely writing letters in the hope that someone else will do the job, we could roll up our sleeves and get our own hands dirty really doing something about our oaks. Project Quercus (P.Q.) could go something like this.

At least part of the problem is based on the fact that it is almost impossible to obtain a Garry oak to plant unless you start with an acorn or hunt down a wild seedling. Nurseries don't have them. If people can't get them, they can't plant them. The solution is simple. Start an oak nursery.

A local group could establish a small plantation from which oaks would be made available to land owners. If a few people would donate the use of unused corners of land, and if volunteers would devote a few days a year to plant and care for the little trees, there is not much doubt that more oaks would be planted about the city. It would be a newsworthy project sure of notice, and free trees would certainly bring forth the friends of oaks in and about Victoria. The project should also make people aware of the need to save old trees.

It's a simple plan, and it would work. Or perhaps someone can bring forth a better plan. In any event, let's do something.

(COVER PICTURE- GARRY OAK- courtesy Victoria Press Ltd.)

WHICH PHOEBE?

by R. Sparling

A phoebe? Which one? There are three listed in the bird lists of North America but none in Europe. Except in museums the three are not to be expected together. There are more distinguishing features among them than among some species. The eastern phoebe stays in the east - east of the 100th meridian -- rather a plain bird, no strong wing bars, no eye-ring and mostly white breast and belly. West of the 100th, Say's phoebe takes over and it also goes north even as far as north-central Alaska and northern Saskatchewan. But it rarely goes west of the Cascades in to southern California. Its rosy belly easily distinguishes it which is fortunate for those who saw one in Victoria last November.

However California does not lack a phoebe for the black phoebe is found there and in the nearby States. Its completely black head and chest set it out.

But I wasn't sure that you did not have my Great Aunt Phoebe in mind. Because Phoebe has been a female name for centuries. St. Paul recommended "Phoebe our sister" to the Romans. Searchers in old records in England noted the first use of this name in 1568 and that it was fairly common in the 17th century. From there it came to America and was often used there up to the end of the 19th century.

Phoebe comes from the Greek meaning "shining one" and, like many Greek names, moved into astronomy. Phoebe in the sky is an astonishment. Of the nine Saturn satellites, discovered in 1655 by telescope, Phoebe goes in the opposite direction of the other eight. Why? Astronomers are not sure. Which one did you mean?

HART'S TONGUE FERN

(Scolopendrium vulgare Smith)

by M. C. Melburn

A clump of this fern was found growing in damp, dimly-lighted soil under a bench in a greenhouse. The proprietor, Mr. L. Simmonds, Blenkinsop Road, has no idea where it came from and it certainly appears to be a long way from home.

British botanist, J. D. Hooker, gives its distribution as: "From Gothland southward, North Africa, West Asia, Japan and Northwest America". In Gray's Manual of Botany its habitat and distribution on this continent are stated to

be "Shaded ravines and under limestone cliffs; Gray and Bruce Counties in Ontario; central New York State and Tennessee; very rare." Recently it has been collected at Zeballos on the West Coast of Vancouver Island, but Dr. T.M.C. Taylor, our Provincial authority on ferns, considers it has definitely been introduced there, somehow.

According to British botanists McClintock and Fitter it is the only British fern with undivided leaves. Its strap-shaped leaves grow in tufts and vary in length from a few inches to two feet with a width up to two inches. The leaf base is heart-shaped and the stalk is short, dark and hairy.

The elongated sori containing the spores are arranged in double diagonal rows on the underside of the leaf resulting in a rather unusual appearance, suggesting numerous pairs of legs; hence the genus name derived from the Greek word for centipede, Scolopendra.

According to some authors this interesting fern should be called Phylitis scolopendrium (L.) Newman and the common name is sometimes spelled "Hartstongue". It belongs in the Polypodiaceae Family and is therefore a relative of our sword fern, lady fern and many other common species. Perhaps its most interesting close relative is the Walking Leaf Fern (Camptosorus rhizophyllus) of Eastern U.S.A. and parts of Southeastern Canada.

A JUNE TRIP TO THE MAINLAND

by Eleanor and Albert Davidson

A trip to the mainland in search of birds provides many interesting experiences. There we find familiar birds in unfamiliar settings, and others not found on the Island, also different flowers, shrubs and trees; magnificent scenery, great rivers, and innumerable creeks and swamps. Nevertheless we always return convinced that, as a place to live, nothing betters Victoria.

We travel slowly. It took us seven days to reach the border of Alberta, a distance of 622 miles, as we explore the side roads as we go, investigate each slough and lake and the many forest trails. We find birds everywhere, even at the 5000 foot levels, birds such as nesting varied thrush, juncos, ruby-crowned kinglets and chickadees.

It was on the east side of the main highway between Calgary and Edmonton that we found the largest number and

greatest variety of nesting ducks, most of them common around our coast in the fall, winter and spring months. There was one small section of the country around Camrose which contained many small bodies of water where we saw the following birds at their breeding places - goldeneye, scaup, shoveller, pintail, mallard, ruddy, widgeon, canvasback, redhead, ring-necked and gadwall. On some of the sloughs were green-wing, blue-wing and cinnamon teal, eared, horned and Holboell grebe. Other water-loving birds were there too, black and common terns, Franklin gull, yellow-headed blackbird, and even willet, marbled godwit, Wilson phalarope, lesser yellowleg and avocet. Small birds common to that area included Baltimore oriole, grackle, kingbirds, magpie, mountain bluebird and others. In fact, over a distance of 120 miles between Camrose and Fort Saskatchewan we listed 81 species.

Rain had been plentiful and the countryside everywhere was green and fresh looking, while the flowers of the mountains and the prairies were indescribable; one would have to be a combination of a poet and a botanist to do them justice, and we are neither.

On our walks into the forests we encountered many animals, from picas to porcupines, and found that on going over some of the cattle ranges one had to walk warily to avoid the cactus, and even the rattlesnakes. Going in to a little clearing close to the Trans-Canada highway between Chilliwack and Hope, we met a bear and her cub. We don't know which of us was the more surprised, but certainly we were the more alarmed, as we hadn't expected to see bears in that locality.

Another surprise was the meeting with Mrs. Monckton, who in April had left Victoria in her camper, travelling alone, for Hamilton and Point Pelee in Ontario. We were stopped at one of the avalanche tunnels in Glacier National Park, and she drove in right behind us, so we spent the rest of the day together. Another coincidence came our way on this trip. We were approaching the eastern foothills of the Rockies on a little-used gravel road, and as many of these side roads are not mapped, we were lost. However, a farmer and his wife drove up in a truck on their way to an auction, and he turned out to be our good friend Rob McKenzie-Grieve's brother. Rob lives at Cadboro Bay.

Coming down the Yale Road on the last stretch of our journey we found an old-fashioned motel. Our cabin was

situated on the edge of a rushing creek where we saw a dipper feeding on the rocks and disappearing under the fast moving water. A delightful finish to a most interesting birding expedition. For the record we travelled 2760 miles in twenty-four days and listed 206 species of birds.

B I R D N O T E S

Aug.14 to Sept.14, 1966. GMB

(Late report: Aug.6th, Sanderling, 5, Is. View bch. AP)

- Aug.
- 14: HORNERD LARK, 2, Martindale Rd. Mr & Mrs ARD. Since then groups.
 - 18: MARSH HAWK, 1, swamp nr Bvr Lk Prk. GMB, EH & Tex. vstrs.
 - 18: OSPREY, 2, imm. ovr Bvr Lk Prk. GMB & Texas visitors.
 - 18: LEWIS WOODPECKER, 1, Dncstr area. WS (Last rpt year ago. SN)
 - 23: BAIRD'S SANDPIPER, 1, Clvr Pt. ARDs. 27th, 8, Sidney Spit, BG; 29th, 1, Esquimalt Lagoon. JT.
 - 23: RUDDY TURNSTONE, 1, Clvr Pt. SC; 24th, 1, Clvr. Pt. RF.
 - 25: WANDERING TATTLER, 2, Shoal Bay, AP & JT.
 - 25: SABINE'S GULL, 1, Radcliffe Lane. Poynter & Tatum.
 - 26: COMMON TERN, 1, Rdcliffe-sea, GS & GMB. By Sept. 14 numerous; Sept. 27th, c50, off Sidney Spit. BG.
 - 27: BUFF-BREASTED SANDPIPER, 1, Sidney Spit. BG.
 - 27: TUFTED PUFFIN, 10, Mandarte Island. BG.
 - 27: MARBLED MURRELET, c80, waters adjacent to Sidney. AP.
 - 27: SANDERLING, 3, Sidney Spit. BG.
 - 27: BLACK BRANT, 2, Mandarte. BG.
 - 27: PARASITIC JAEGER, 1, off Sidney Spt. BG; Sept. 1, 1, OB golf links, Mrs. Monckton & Mr. & Mrs. Davidson.
 - 27: SEMI-PALMATED PLOVER, 6, Sidney Spit. BG.
 - 29: DOWITCHER, 6, Esq. Lgn JT., Sept. 3rd, 1, Trial Isl. E. & ARD.
 - 30: FRANKLIN GULL, 2, Clvr. Pt. RF and ED. (LM & Mr & Mrs FS.)
 - 31: GREEN HERON, 1, "Poynter's Puddle," PB Hi-way. JT
 - 31: WHITE-FRONTED GOOSE, 5, Esq. Lgn, Mr. & Mrs. JHCP; Sept. 1, immature, Resthaven, Sidney, RF.
 - 31: BLACK-THROATED GRAY WARBLER, several times seen at Flo. Lake last week of August. Mr. & Mrs. T. Briggs.
- Sept.
- 1: LINCOLN SPARROW, 4, Uplands Pk. E & ARD; Sept. 7th, 1, St. Patk Street garden. GMB
 - 3: 'PEEPS', 400-500, Whitty's Lagoon. Mr. & Mrs. ARD.
 - 3: PIPIT, 1, Trial Is. LM, E & ARD, Mr & Mrs. FS; small groups now to be seen Clvr. Pt & Ctl Pt; sometimes with Horned Larks.
 - 3: LESSER YELLOWLEGS, 1, Whitty's Lgn. Mr. & Mrs. ARD.

Bird Notes cont'd

Sept.

WARBLERS known to our part of the country are moving through - Yellow, Macgillivray, Lutescent, Townsend, et al; but there is not room to list them all! The various Flycatchers are noticeable, the Vireos also; and others, if not leaving for the winter then coming back for it; the Golden-crowned sparrow is one returning.

- 5: RING-BILLED GULL, 1, Campion-sea, EKL
 5: HEERMANN'S GULL, 65, Campion-sea, EKL
 5: VARIED THRUSH, 1, Cordova Bay, RF
 5: GREEN-WINGED TEAL, 9, pond, Bvr.Lk., GMB; four continually on pond ever since. Autumn plumage and silent.
 5: BANK SWALLOW, 1, Gordon Hd, JM&CM; Sept. 13th, 1, Cat. Pt. TG.
 6: SPARROW HAWK, 3, Jimmy Chicken Island, Tue. Group
 BLUEBIRDS have been seen at Prospect Lake Rd. and Burnside. Audubon Warblers are mixed in with them.
 12: CLARK'S NUTCRACKER, 1, Mt. Douglas Lookout. Mr. & Mrs. CWM
 13: LONG-TAILED JAEGER, 1, Clvr. Pt. ED & RF
 13: SANDHILL CRANE, 6, off Race Rocks. THCC (non-mem).
 14: LONGSPUR, 1, Clover Point. JFL

Observers: Bird Group; Tuesday Group; Mr. & Mrs. T. Briggs; T. H. C. Christie (non-member); A. Poynter; S. Cannings (Okanagan); E. Davidson, Mr. & Mrs. A. R. Davidson; R. Fryer; E. Hansen and Texas visitors; J. F. Lansdowne; E. K. Lemon; L. Monckton; Mr. and Mrs. C. W. Morehen; P. McAfee; Mr. and Mrs. J. H. C. Palmer; Mr. & Mrs. F. Sherman; W. Sendall; J. Morehen (Jr. VNHS); S. Newton (Jr. VNHS); G. Soulsby; J. Tatum; G. M. Bell.

* * * * *

INTERNATIONAL COUNCIL FOR BIRD PRESERVATIONREPORT ON USE OF INSECTICIDES IN BRITAIN

Copied from Chickadee Notes by Harold Mossop in Winnipeg Free Press June 1966.

"The fifth report of the Joint Committee of the British Trust for Ornithology and the Royal Society for the Protection of Birds on toxic chemicals was published in September, 1965. In this report it was stated that 469 bodies of birds of 84 species and 232 birds' eggs

of 84 species were sent in. In the analysis of 236 bodies of birds only ten (four per cent) were found to be completely free from residue of organochlorine compounds and all 47 samples of eggs (covering 145 eggs) which were analyzed contained these compounds. Blackbirds and song thrushes were the species most frequently recorded, and kestrels were third."

The Ministry of Agriculture in Britain has moved to restrict the use of aldrin, dieldrin and other persistent organochlorine pesticides.

INSECTICIDE REPORT FROM KELOWNA as recorded in the July issue British Columbia Nature Council Newsletter.

"June 5, 1966, a six acre orchard was sprayed with Parathion, one pound to 100 gallons." Within an hour 3 Cedar waxwings were taken to the S.P.C.A., victims of the spray, "feet balled up and paralyzed, the beak slightly open and the head moving from side to side." A temporary incubator was prepared to provide warmth, and with an eye dropper milk was pumped into them. More birds were arriving by this time.

"By the end of the day 52 dead waxwings, 4 robins and a female Lazuli bunting had been picked up. Thirty-two waxwings, still living, were retrieved, and these were given first-aid treatment, i.e. warmth and milk. After about an hour the birds rallied a bit, their heads ceased moving from side to side, and their feet started to relax. Their mutes, which were very dark after poisoning, seemed to grow paler. At this stage the birds were able to take currants from the fingers. They also ate egg white chopped into small pieces." These birds were liberated next morning.

"Of the 32 waxwings found alive we saved 27." The birds were remarkably tame and easily handled. This mission of mercy saved 89 valuable insectivorous birds.

* * * * *

HEMLOCK ROOT SURVEY

by Freeman King

A little known project is being carried out by the Federal Forestry Department from its British Columbia headquarters at Burnside Road: a complete study of the root system of the western hemlock.

This June I paid a visit to the site of the work at Honeymoon Bay. Here the investigator in charge had selected four hemlocks ranging in diameter from 2 inches to 10 inches. Each tree had been cut down almost to ground level and each part had been bundled, numbered, and tagged before being sent to the laboratory. Each stump was held in place by wires and strong jets of water were being used to uncover the roots by removing the soil and overburden.

The overburden was mainly forest duff mixed with glacial till consisting of stones and boulders ranging from pebbles to rocks weighing many pounds. All were smooth and water-worn and most were of granite.

When uncovered the smooth, purplish-red roots were seen to spread in all directions, some reaching twenty-five feet or more from the stump. Many had penetrated old rotting logs or standing snags. They were much inter-woven around boulders and other roots, some as fine as hairs others up to 3 inches in diameter. No root system seemed to be fused to that of another individual as will often occur in Douglas fir.

While the main function of the root system is to provide water and minerals it also serves as an anchor for the ever-growing tree. In the specimens under study there seemed to be as much root system as there was overhead foliage.

When all the soil has been washed away a plan of the system will be made, and each root will be cut into sections, bundled and labelled and taken to the laboratory for further study.

At the Honeymoon Bay site other trees associated with hemlock were red alder, western maple and Douglas fir. It is planned to make similar studies in other areas where different types of soil and associations are to be found.

By this method biologists can determine the conditions that are best suited to growing the much sought-after western hemlock.

* * * * *

WOOD DUCKS

by C.W. Morehen

The pair of wood ducks in Beacon Hill Park are now in their full plumage after a summer of rather subdued appearance due to their moult. During the midsummer there was some fear for their safety as they could not be seen. Was this due to an attempt at nesting?

Presently these ducks may be seen on Goodacre Lake on the east side of the islands at any time of the day. They put on quite a show vying with the mallards for food and actually driving them off.

Although the female is quite plain she may be picked out by the white around her eyes and the fact that she is never more than a few feet from her attentive mate. The test of winter is yet to come but so far they have spent over six months frolicking in Goodacre Lake and seem to be thriving.

Colorful wood ducks may also be seen in the Beaver Lake area either early in the morning or in the evening. Look for them either flying at tree-top height or settled amongst the lily pads. As many as five have been seen at one time there. Being shy birds one should depend on hearing their distinctive call notes as a means of locating them.

While son Jim and I camped out near one of the many ponds in the area we were awakened at daybreak each morning by the wood duck serenade.

OBSERVATIONS OF SOME INSECTS IN THOMAS FRANCIS PARK 1966

by Ross Storey, Junior Naturalist

During the months of June, July and early August, their seemed to be an unusual abundance of the common sheep moth (*Pseudohazis eleganterina*) in the open fields of the Park. Over a dozen males were seen but only one female. Since the latter was caught on the ground, we theorized that the female flies little resting on the underbrush, waiting for a male to find her. The female appeared strikingly different from the male. She was much lighter in color, and did not have as much black shading on the edges of the veins as the males. She also lacked the second black stripe on the forewings closest to the body.

During the last half of July and in early August there was also an abundance of painted ladies. Going into any

patch of thistles one could see many of them at one time. The caterpillars of the painted lady were also found in great abundance on the thistles earlier in July. When they entered the pupa stage all but one emerged about fifteen days later.

On the stinging nettles we found many caterpillars of the comma. There were even more of them than of the painted lady. They went into the pupa stage a few days earlier than the painted lady. Of the ten chrysalises formed only six produced adults. We could see that the comma is attacked more by flies than the painted lady.

THE HAYMAKING MOUSE

A review by D.B. Sparling

Adolph Murie, naturalist, in his book "A Naturalist In Alaska" published in 1961, tells about his research on animals there. This book is most interesting reading, though somewhat detailed. One chapter gives a vivid word picture of the life and habits of the Toklat vole (*Microtus miurus oregonus*), a rare mouse.

The author had come across many caches of hay which arrested his attention. This discovery suggested the presence of the cony which keeps close to rocks. After some time of close observation he found the Toklat vole to be the hay harvester. These hay caches varied in size from a handful to an equivalent of a bushel basket all so well cured as to retain colour and fragrance. The curing is done by stacking and done in the wet season when curing is most difficult. Special care had to be taken in gathering and position to keep the stacks dry. They were found in clusters of branches formed basketlike and protected above, in sheltered rock niches, piled against a tree trunk with an elevated root underneath and under a log, one such extended for six feet in length. This hay is eaten in the winter months. At times the snowshoe hare takes advantage of these stacks.

The vole collects fireweed, horsetail, coltsfoot, willow, mountain avens, lupines, sage with smaller quantities of pyrola, alder heather and considerable quantities of grass. The variations in quantity of some plants suggests that herbal values had some significance in collecting. The plants were uniformly cut at an inch from the ground, leaving an even stubble. Pieces collected were about fifteen inches in length. Imagine this small mouse

struggling with a piece of coltsfoot eight to ten inches in diameter and placing it to dry! Great care is necessary in stacking to prevent spoilage. This indicates a surprising "know-how" in such a small animal.

In addition these voles collect roots and store them underground necessitating an altogether different type of care for preservation. Roots of horsetail, coltsfoot, fireweed and sandalwood are collected to fill the underground chambers. These underground chambers are dug out with elaborate tunnels and passages, hay above ground and roots below. One chamber explored was sixteen inches by five by five and another was eighteen inches by ten by five inches, packed with food. The larger one held 1,021 underground buds of coltsfoot, 155 coltsfoot roots, and 2,808 grass buds or shoots and three feet away yet another chamber the same size to be filled.

Another unique feature was found in the burrows. The burrows had many passages but all were constructed with a narrowed neck through which the voles could squeeze to another larger passage. The constrictions were placed at intervals making it necessary for the vole's enemy, the weasel, to stop and open up the runway while the vole escaped.

WINTER GAME

from "To A Mouse" by Robert Burns

That wee bit heap o' leaves an' stubble
Has cost thee many a weary nibble!
Now thou's turned out, for a' thy trouble,
But house or hald,
To thole the winter's sleety dribble
An cranreuch cauld!

But Mousie, thou art no thy lane
In proving foresight may be vain;
The best laid schemes o' mice an' men
Gang aft a-gley,
An lea'e us nought but grief an' pain,
For promised joy.

* * * * *

MEETINGS AND FIELD TRIPSEXECUTIVE MEETING:

October 4

Dr. Carl's Office, 8 p.m.
Provincial Museum.AUDUBON WILDLIFE FILM

Friday, September 30

Saturday, October 1

Oak Bay Jr. High 8 p.m.

Speaker: Mr. D.J. NelsonSubject: "Inherit the Wild"GENERAL MEETING

October 11

Douglas Bldg. Cafeteria

Elliot Street 8 p.m.

Speaker: Mr. W.T.(Bill) Ward,
Editor of Wildlife
Review.Subject: "Things that have
interested me"BIRD FIELD TRIP

October 15

Meet at Monterey parking lot
9:30 A.M. or Island View Beach
at 10 A.M.Leader: Mr. M. MathesonJUNIOR GROUPMeet every Saturday at
Monterey parking lot, Douglas
at Hillside, 1:30 P.M. for
field trips.Leader: Mr. Freeman King
Phone 479-2966CORRECTION:

The latin name for "An Unusual Fungus" by G. Allen Poynter, in the Sept.issue is spelled in error; it should be "SARCOSPHERA CORONARIA". A further correction-"First found in the woods at Ten Mile Point April 20,1957 and at Thetis Lake May 20, 1958."

- - - - -

PLEASE NOTE:

All material for the November issue of the Natural History Magazine should be sent to -

Dr. G. C. Carl at the Museum.

VICTORIA NATURAL HISTORY SOCIETY

OFFICERS 1966-67

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

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	1950-52	RALPH FRYER	1960
J. A. CUNNINGHAM	1952-54	FREEMAN F. KING	1960-62
C. W. LOWE	1954-56	P. J. CROFT	1962-63
MISS E. K. LEMON		1963-66	

President

G. ALLEN POYNTER
3935 Emerald Place
Telephone 477-3230

Vice-President

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

Editors

DR. D. B. SPARLING
No. 11 - 1354 Beach Drive
Telephone 385-2229

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

Treasurer

E. E. BRIDGEN
2159 Central Ave.
Telephone 383-3577

Librarian

A. R. DAVIDSON
2144 Brighton Ave.
Telephone 384-9595

Secretary

MRS. F. A. SHERMAN
2168 Guernsey St.
Telephone 386-1965

Chairmen of Groups

Programme

D. STIRLING
3500 Salsbury Way
Telephone 385-4223

Publicity

R. FRYER
212 Robertson
Telephone 383-8795

Botany (summer)

MISS M. C. MELBURN
2397 Heron St.
Telephone 384-9052

Botany (winter)

W. H. WARREN
1041 St. Charles St.
Telephone 383-5163

Nature Council

R. Y. EDWARDS
2264 Windsor Road
Telephone 384-0989

Conservation

DR. F. THOMAS ALGARD
3090 Uplands Road
Telephone 385-7372

Ornithology

M. C. M. MATHESON
441 Victoria Ave.
Telephone 383-7381

Entomology

DR. JOHN A. CHAPMAN
962 Lovat St.
Telephone 384-5568
Audubon Wild Life Films
MISS ENID LEMON
1226 Roslyn Rd.
Telephone 385-4676

Junior Group

FREEMAN KING
541 McKenzie Ave.
Telephone 479-2966

MRS. K. OSBORNE
1565 Begbie St.
Telephone 385-8164

University Liaison

DR. L. G. SAUNDERS
2758 Dunlevy St.
Telephone 386-1756

Annual Dues, including subscription:

Single, \$2.00; Family, \$3.00; Junior, \$1.00; Life Membership, \$30.00;
Life Membership, husband and wife, \$50.00.