

Churalle

Vol. 5, No. 8
February, 1949

(Photo by J. A. Munro.)
Nest and eggs of lesser scaup duck.

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

A. American Goshawk; scale, $\frac{1}{6}$ Adult

B. Red-tailed Hawk; scale, $\frac{1}{6}$
(Western Red-tail, most common phase) Juvenile Adult

THE VICTORIA NATURALIST

## Published by

The Victoria Natural History Society
$\qquad$

## Report of the January Meeting

The regular meeting of the Society was held in the Reading Room of the Provincial Library on Tuesday, January l8th, at 8 p.m. New members welcomed to the Society were Mr. and Mrs. H.D.R.Stewart of 110 Wildwood Ave. and Mrs. W. Cummings of 2731 Dewdney.

It was regularly moved, seconded and unanimously passed that the Victoria Natural History Society sponsor the Audubon Screen Tours during the 1949-50 season. Notice of motion was also given concerning a change in the Constitution to permit the setting up of an Honorary Membership category. The President announced that Miss Perry and Mrs. Leveson-Gower had been appointed to act as a nominating committee. The Treasurer noted that our present membership now ex ceeds that of the previous year and was still increasing.

As a specimen for exhibition $M r$. H. B. Binny showed a $19 \frac{1}{2}$ pound nut of the coco-de-mer tree, a native of the Seychelles Islands. The fruit, the largest in the world, requires 6 years to mature and may attain a weight of 99 pounds. Mr. Hardy exhibited specimens of Yerba buena or Oregon tea and earth-star (Geaster), a fungus related to the puffoball. The chairman then introduced Dr. Carl who gave an illustrated talk entitled --

Some Famous Fishes
The waters of our coast contain more than 245 species of fishes of which some are well known because they are of economic value. However, there are many others of non-commercial importance which are not well known but which are of interest for several reasons. The largest of these fishes is the basking shark which attains a length of over 40 feet. The cartilaginous skeleton, when found on shore, is sometimes mistaken
for the remains of a "sea-serpent". The rat-fish attracts attention because of its unusual appearance. In ancient times it was thought to be related to the fabulous chimaera, a monster with the head of a lion, the body of a goat and the tail of a serpent. The liver oil makes an excellent lubricant for guns and fine machinery. Other unusual fishes include the electric ray, king-of-the-salmon, grunt-fish, lump-sucker, remora, sand-lance, wolf-eel, singing-fish, cling-fish, ocean sun-fish, sailor-fish and prow-fish.

Perhaps the most famous fish is the eulachon or candlemish. In the spring this fish enters the major rivers of our coast in large numbers for the purpose of spawning. The eggs sink to the bottom and become anchored on sand bars by the adhesive outer cover which ruptures and fastens the eggs to the sand grains. On hatching the larva drifts down to the sea to return as an adult four years later.

The Indians collect the spawned-out eulachons in nets staked in mid-stream. They are allowed to partly decompose in piles or in pits on the river bank after which they are boiled in large wooden tanks. The resulting oil is skimmed off and stored for future use. Some fish are strung on sticks and dried for winter use.

The Tsimshian Indians controlled the largest fishery which was at the mouth of the Nass River. Interior Indians trekked overland by the "Grease Trail" and Haidas journeyed from the Charlottes each season in order to obtain supplies of the oil by trade.

The oil was used extensively as a sauce, the dried food being dipped into the grease at each mouthful. The dried fish were mainly used as food but some were utilized as torches or as candles when fitted with a red cedar bark wick.

Present fishery regulations are designed to conserve the eulachon for the use of the natives of our Province.
G.C.C.

A true raptorial bird, nesting across the continent in the northern wooded sections often wintering southwards.

This Accipiter is in direct competition with man when it visits settled areas. The habit of feeding upon fowl for the great part, particularly upon poultry and grouse, renders this bird an obnoxious visitor. Unfortunately the depradations of this species is attributed by many to all of the hawks, which has led and still leads to the destruction of many desirable birds.

In the wilderness areas, however, it has yet to be proven that predation has any great effect upon a population of prey species. In these areas, under normal conditions, it is senseless to destroy this competant and colorful killer, which, in killing is merely satisfying the urge of hunger.

The Goshawk is one of the few American raptores that will make direct contact on the attack when eggs or young are being molested. Many an egg collector bears the scars of the slashing talons of this ferocious bird.

## C.J. Guiguet.

Red-tailed Hawk - Illustration B.
Distributed across the continent north to the tree limit this Buteo does little harm and should be protected. Occasionally an individual will attack poultry and game birds, but the species is recognized as a rodent-eater. It is quite probable that the amount of rodents eaten by hawks in British Columbia, doesn't amount to a "hill of beans" in the over-all picture of rodent control, but their presence in our out-of-doors lends a touch of the wilderness that is imparted only by the colorful predators. Remove these so-called predator species and what is left? A barnyard type of wildife community as unpalatable to the naturalist as dishwater is to the epicure.

Unless it is eating your chickens - never kill a hawk:
C. J. Guiguet.

CHRISTMAS BIRD COUNT, December 27,1948


partly frozen over.
Shoal Bay count by J.O.Clay and A.R.Davidson. Two hours. Frosty, still, clear.

Lost Lake count by G.A.Hardy. Three and one-quar -
ter hours. Frosty, still, clear; water frozen over. Sidney count by A. R. Davidson.
Sooke Harbour and foreshore count by Robert Taylor
by car and on foot. Overcast; temp. 370; snow flurries.

> J.O.C.

## Lesser Scaup Duck <br> (see front cover)

The nest and eggs of this species may be found in the interior of the Province throughout the Cariboo Parklands north to the Vanderhoof region, Peace River area and Atlin. Although it is a common bird in the interior in summer the lesser scaup or bluebill is a transient and scarce visitor on the coast in winter.

## BIRD NOTES

A Burrowing Owl was observed by C.J. Guiguet, E.J. Maxwell and H.D.R.Stewart on the edge of the Oak Bay Golf Links on January l2th while making a census of wild fowl. Previous winter records of this bird are listed for Trial Island, Snake Island (near Nanaimo) and Comox. This appears to be the first winter record for the Victoria area.

FURTHER BOTANY NOTES FOR 1948
by W. Tildesley
The first of this series of notes took us only as far as the first field trip in April but the remarks regarding the weather were mild to those expressed later in the season. These were strictly not for publication.

The weather-man was very kind to us though and all our field trips were called on perfect days. Our restrictions were of time and distance rather than weather, although to my mind the restriction of lack of transportation is often exaggerated in botany. The greatest fun in botany is the unexpected and nothing can be more unexpected than the finding of an unfamiliar plant in a very familiar setting. Time and time again I have found a particular species in which I was interested, growing right under my nose on land with which I thought I was familiar. A barren rocky lot and a neighbor's garden just across the street from me yielded three species last summer in which I was very interested, yet I had examined these places many times before and will probably do so many times again with as much profit.

There seems to be a mistaken idea that there is something deep and mysterious about plant identificac tion. What is mysterious to me is, how so many people carry the identity of masses of our wild flowers in their heads without some method of sorting them out in their relationship to one another. To get the most fun out of botany I think the first requisite is that one should have a fair idea of where the plant one is looking at fits into the general picture. Then every trip out of the house is a walk among well-remembered friends or the pleasant experience of meeting new ones, all happily related. Well: that's enough of that, at least until some "Botany Section" meeting. Now on to what was seen in 1948.

The second field day was held at the Uplands on May lst, and turned out to be a very happy choice. It is difficult to imagine anything more beautiful than
the vista that spread out before us when we got off the bus at the old street-car loop. It was like a calm sea of blue and gold interspersed with every shade of green, washing around the grey and brown bases of oaks and islands of scrub which were themselves traced out above with soft and feathery green. The motif of blue and gold was carried of course by masses of Camas or Quamash (Camassia quamish Green.) in a sea of Western Buttercup (Ranunculus occidentalis Nutt.). A good contrast in the yellows was made by quite extensive colonies of our local form of Nuttall's Violet- Viola Nuttalii var. praemorsa Wats. and the Camas varied from light blue to deep purple with an occasional pure white.

While the lovely landscape effects are produced by masses of these conspicuous species, it is unexpectedly coming upon specimens of the more inconspicuous kinds that gives the greatest thrill in plant hunting. One of the rather striking-looking plants that are quite common on the Uplands is the Rice Root (Fritillaria lanceolata Pursho) This species is not inconspicuous through its form, which is quite bold, but through its colouring which is dark brownish purple flecked with green and yellow. The peduncle which arises from a whorl of dark green lanceolate leaves, usually carries two bell-shaped flowers, an inch or more deep, which hang down in a nodding manner. The common name - Rice-Root-is derived from the bulb which is made up of a great number of scales or bulblets about the size of grains of rice. Several other common names are applied locally - Snake Lily, and Chocolate Lily, from the mottled colours of the flower and Stinking Lily, from its somewhat unpleasant odour are two I heard on the field trip.

On May 30th when I was looking over the land before the field trip, I got one of those pleasant, unexpected surprises. I noticed quite a number of patches of narrow-leaved plants with rather a brownish tinge, which I thought were colonies of the Bulb-bearing Bluegrass (Poa bulbosa $L_{0}$ ). On examination though these proved to be, not grasses but miniature replicas of Indian Paint-brush so tiny that it is necessary to use a hand lens to see the perfect form of the flowers.

When these were traced down to Orthocarpus pusillus Benth. ("Lesser Indian Paint-brush") I wondered how "Lesser" a plant could get so I called Mr. Hardy for conformation of my identification. The flower colour is a bright brown, almost purple with a bright yellow throat. The leaves are pinnatified with the divisions as fine as grass. The whole plant is never more than four inches high and grows in masses, often several feet across but probably unnoticed by ninty-nine percent of the people who walk over it.

There is a very interesting member of the Rose Family which also grows in masses, particularly along the banks at Beacon Hill. This little white-flowered species is often no more than an inch high, and delights in the quite impressive name of "Ladies Mantle" (Alchemilla macrosepala Rydb.). The name originates from the stipule of the leaf which encloses the small cyme of flowers at the axil. This stipule, which is much larger than the leaf, is shaped rather like ladies' shoulder capes or mantles, which were popular in the late ninteenth or early twentieth century. The Latin name is evidently a misnomer for the sepal is anything but "macro"; evidently the intention was to refer to the stipule which is the most noticeable part.

The infinite variety which can be observed within some of the commoner species is always a source of interest. The differences in available moisture, exposure, and soil condition make an area like that of our second field trip particularly adapted to this type of obser vation. That obtrusive pest of Victoria gardens, "Dove's Foot Geranium" (Geranium molle L.) must have been collected a dozen times because of the way it adapted itself to its surroundings. Its first cousin the "Crane's Bill" (Erodium cicutarium L.) was in almost as profuse variety, although it is a perennial. Some of these plants had a total width of only an inch or so, and it is an interesting reflection to temember that but for the accident of location these same plants might be eighteen inches across with single leaves that would shade four or five of these whole plants. Yet these dwarfs are perfect in detail and produce flowers and seed in no way different from the normal plants. This the common goal of all plants - reproduction - carries on the species, no matter how unfavourable the conditions.

## JUNIOR PAGE

Adaptations and Specialization of the Porpoise by Brian Ainscough

The porpoise is one of the world's most interesting aquatic mammals.

Being aquatic, it tends to be specialized in many ways. As water is much denser than air and as the porpoise has need of speed, both for food-getting and for safety, the body has become streamlined. Its name "Athlete of the Sea" is well chosen for it has often been seen travelling at great rates through the water. Through the course of time all external features not used primarily for locomotion have tended to become compressed into the body. Thus it offers very little resistance to the water. As in most aquatic mammals, its fore limbs have been modified into flippers. At the rear is the fluke which is placed in a horizontal position. This organ provides the motice power for swimming. On the top of its body it has developed a dorsal fin for equilibrium. All these adaptations for speed are most necessary for the life it leads. Speed is a necessity for catching fish, its main food, and escaping its enemies, the killer whale, the shark, and other carnivorous fish.

As it is carnivorous itself, it has sharp teeth. These are to be found in the harbour porpoise (Phocoena phocoena) in a long even row. In certain other species of porpoises, the teeth have sunken into the gums, a sharp ridge being in their stead. However, as the food is not chewed in the mouth, this lack of protruding teeth is not a serious deficiency.

Since the porpoise is a mammal, it is an air-breather, and must come to the surface for air. For this reason, the nostrils are placed on top of the head. In order to breathe it merely has to come to the surface, stick its back out of water, let out its air, take in a now supply of air, and submerge again. It exhales and inhales almost simultaneously. The nostril is closed by a flap of skin, or valve, which prevents water from coming in. Another specialization of the respiratory system is found in the lungs. These are composed of an elastic tissue which allows them to
become completely collapsed on exhalation enabling the mammal to remain under water for a longer period of time.

The porpoise, as it is a warm-blooded animal, and in water which is cold, must have a warm coating. This is supplied by the blubber, a layer of fatty tissue an inch or so thick, which is situated just under the skin.

On the whole, the porpoise is adapted and specialized in many ways for an aquatic existence.

## A BOOK FOR BOTANISTS

"Flora of Mount Rainier National Park" by C. Frank Brockman, U. S. Department of the Interior, National Park Service, 170 pages, 104 illustrations, 1947. Available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. at 75 cents a copy. Although Mount Rainier is not immediately accessible to us, similar peaks are to be found in British Columbia and a similar flora is present. The book, then, is of value to local botanists. The simple keys, the large number of excellent illustrations, and the informative notes make it also of value to anyone interested in the out-of-doors.

Mr. John H. Baker, President of the National Audubon Society, has recently written extending an invitation to join the National Audubon Society. The annual dues of $\$ 5.00$ entitles one also to receive the well-illustrated "Audubon Magazine" as well as special folders on wildife in general. The address is National Audubon Society, 1000 Fifth Ave., New York 28, N.Y., U.S.A.

## NOTICE OF MEETINGS

Tuesday ORNITHOLOGY GROUP MEETING at the home of
Feb. 1st: Mrs.E.J. Read, 1025 Bewdley, at 8 p.m. (Take Munro bus at corner of Douglas and Johnson). Speaker: Mr. H.D.R.Stewart on "Don Patton and his Bird Sanctuary".

Tuesday GEOLOGY GROUP MEETING, Provincial Museum Feb. 8th: at 8 pom. Speaker: Dr. Wm. Mathews on "The Work of Wind and Water"。

Tuesday GENERAL MEETING, Provincial Museum at Feb.15th: 8 pom. Speaker: Mr. N.F.Putnam, Dept. of Agriculture, on "Wildflowers out of Place". (Note change of place and date because Parliament is in session.)

Saturday
February 19:
First of series of "Museum Movies" for school children at 9:30 and 11 a.m. (Junior Naturalists will meet as usual on Saturday mornings until the 19th when they will attend either session of the movies.)
Monday AUDUBON SCREEN TOUR, Prince Robert House
Feb.2lst: Auditorium at 8 pom. Speaker: Allan D. Cruickshank on "Trails for the Millions".

AFFILIATED SOCIETY:
Society for the Preservation of Native Plants --
Officers for 1948: President: Mrs. Hugh Mackenzie, 1039 Richardson St., Victoria, B.C. Phone E. 1475
Secretary: Miss Ellen Hart, 1513 Laurel Lane, Victoria, B.C. Phone G. 5425.
Treasurer: Mr. John Worthington, 247 Government St., Victoria, B. C.

## Victoria Natural History Society

OFFICERS.
Honorary Presidents:


Editor:
G. Clifford Carl, Provincial Museum. Telephone: E 1111, Local 417.

## Secretary:

Mrs. James A. Bland, 1049 Richmond Avenue. Telephone: E 8556.

Treasurer:
Rev. T. TAylor, 935 Metchosin Road, Box 3503, R.R. 1.
Telephone: Belmont 90M.

Chairmen of Groups:
Programme: Mrs. E. J. T. Woodward.
Telephone: Colquitz 12-T.

Botany: Wm. Foster.
Telephone: E 1111, Local 472.
Marine: George A. Hardy. Telephone: Albion 154-R.
Geology: George E. Winkler. 415 Scollard Building.

Ornithology: J. O. Clay. Telephone: E 3101.

## Zoology: G. Clifford Carl.

 Telephone: E 8524.
## Junior: Ron Forbes.

Telephone: E 0778.

Annual dues, including subscription: Single, \$2; Family, \$3; Junior, \$1.

## Jo

