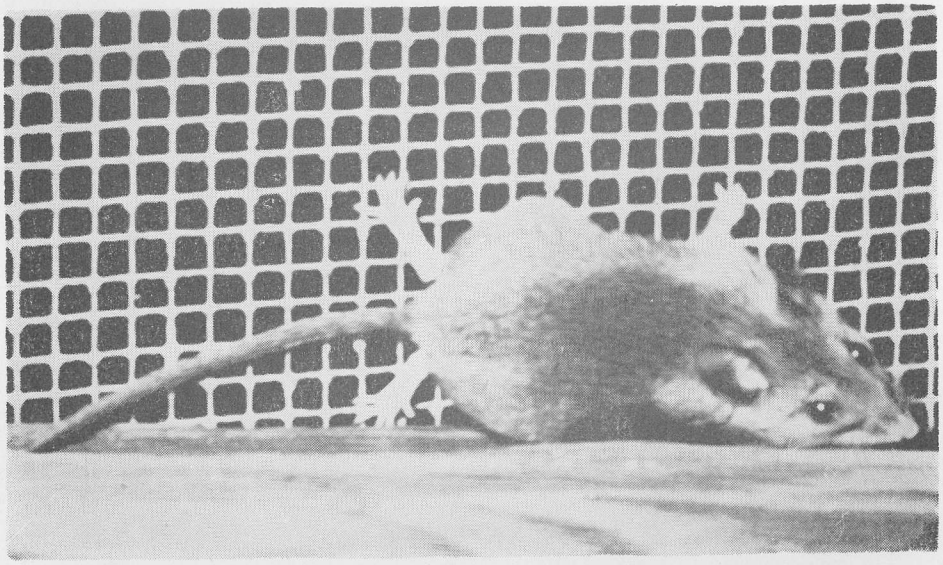
The VICTORIA NATURALIST

Vol. 9, No. 2 May, 1952



(Courtesy B.C. Forest Service.)

White-footed mouse (*Peromyscus*).

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

THE VICTORIA NATURALIST
Published by
THE VICTORIA NATURAL HISTORY SOCIETY

Vol.9,No.2. May, 1952

REPORT OF THE MONTHLY MEETING, APRIL, 1952

The monthly general meeting of the Victoria Natural History Society was held in the Provincial Museum on Tuesday, April 8th, at 8 p.m. This was the last general meeting before the change over from winter to spring and summer activities. It took the form of a social gathering with informal discussion, a film and refreshments. This opportunity to get together and chat was enjoyed by all present and the attendance was good.

The Museum is a pleasant setting for such a gathering and the exhibits set up for the occasion were an added attraction. A number of publications of interest to naturalists was displayed on a table at one side of the hall, and along the opposite wall were more tables of exhibits. One of these shewed a set of decorative and colorful bird studies by twelve year old David Berry. There was also a difficult bird identification test and an amusing composite bird set up as a gentle satire on the projected discussion of the choice of a bird to serve as a provincial emblem for British Columbia.

The members gathered round in an informal group. The President, Professor J.A. Cunningham, called on Mr. A. R. Davidson, Mr. J.O. Clay and Mrs. James Hobson to open the discussion on the bird emblem.

Mr. Davidson had a list of five birds which he placed in his own order of preference, leading off with the Pileated Woodpecker, which he recommended very strongly. His second choice was the Chickadee, either the Chestnut-backed or the Black-capped. Thirdly, the Ruby-crowned or the Golden-crowned Kinglet, fourthly, the Pine Siskin,and fifthly, the Purple Finch. He gave a concise account of each of these birds, closing with the sentence: "All the birds on this list are definitely resident birds and can be found all the year in most parts of the Province, which I think is desirable for a bird which is to be the British Columbia bird emblem."

Mr. J.O. Clay then read a list of twenty-nine species collected from the following districts:- the Kootenays, the Okanagan, Huntington, Vancouver, Comox and Victoria. Of these birds five are summer visitors, fifteen residents in the South of the Province, and nine are fully resident. From these his choice for an emblem ran in order as follows:-

(1) Dipper (2) Varied Thrush
(3) Black-capped Chickadee (4) Pileated Woodpecker
(5) Purple Finch (6) Western Bluebird
(7) Western Tanager

Mr. Clay commented fully on these and added as further possibilities for choice the Lazuli Bunting, Osprey, Trumpeter Swan and two species of Waxwing.

Mrs. Hobson read a list of four birds:-

(1) Red-shafted Flicker (2) California Purple Finch
(3) Bewick's Wren (4) Western Bluebird

A lively discussion followed - other birds were suggested and various reasons brought forward for the acceptance or rejection of birds nominated. Mr. Clay then gathered together the threads of the discussion by suggesting the elimination of various categories of birds, giving examples:-

(1) Exotics (Skylark) (2) Scavengers (Seagull)
(3) Predators (Peregrine Falcon)
(4) Game Birds (Wood duck)
(5) Nuisances (Killdeer Plover) (6) Harmful(Steller Jay)
(7) Poorly distributed (Seattle Wren)
(8) Lacking in individuality (Juncos)
(9) Non-musical (Towhee)
(10) Summer visitor (Western Tanager)
(11) Common across Canada (Blackbird)

Professor Cunningham closed the discussion. It has not been the intention of the meeting to press for a definite decision at this time, but merely to stimulate interest and to ventilate ideas.

Dr. Carl then shewed a very interesting film of reptiles with an excellent commentary.

Refreshments were served by Miss Eugenie Perry, Mrs.E.W. Adshead and Mrs. H.D.R.Stewart. Several people were heard to remark on the excellence of the coffee. We take this opportunity to thank the three ladies for a very acceptable contribution to the evening's enjoyment.

THE MYTH OF THE BARNACLE GOOSE

by
D.B. Quayle, Provincial Shellfish Laboratory, Ladysmith,B.C.

The common or acorn barnacles which cling to rocks and piling along our coast are well known to most people. Probably not so many know of the stalked barnacles of the open west coast of British Columbia. These cling to rocks or to floating pieces of timber by means of a fleshy stalk and are known as goose barnacles. Also not so well known may be the fact that all barnacles are near relatives of the crustaceans (crabs, shrimps, etc.) The similarity may be noted by observing the feeding habits of barnacles. The shells or valves open and there are protruded six pair of jointed feather-like structures. These move through the water with a sweeping and grasping motion gathering the tiny floating food particles. The jointed appendages are typical of the crustaceans and the relationship is further demonstrated by the similarity in methods of reproduction. But our story is about the goose barnacle and how it derived its name.

The strange belief---once widespread---was that the stalked barnacles were the young of a kind of goose, known as the "barnacle goose." This was reputed to hatch out of the shells of the barnacle, a fanciful idea current in western Europe for several centuries. As recently as 1661, Sir Robert Moray read a paper to one of the early meetings of the British Royal Society in which he described how he had observed the bird-like inhabitant within the shells of the ship's barnacle and indicated his belief that it metamorphosed into a bird.

The legend appears to have originated in the East, about the 11th century and the earliest written statements indicated the existence of a tree from the fruits of which birds were hatched. This idea appeared to have been the source of another version, more prevalent in western Europe and the British Isles, whereby the marine barnacles were the origin of geese. In Ireland the Brent goose was identified with barnacles and in Scotland barnacles were reported to grow on trees. The legends persisted until the end of the 17th century, when detailed examination of the anatomy showed only superficial resemblance to a bird. The feather-like "cirri" or appendages were, no doubt, the main source of the

"bird" idea. In Britain the supposition that geese were produced by barnacles was probably assisted by the fact that the black goose (Brent) does not breed there, yet it appeared in numbers in areas where the right type of barnacle was found. Thus, learned monks--who knew of the barnacle-goose relationship in the east--assumed that this black goose bred from barnacles and, accordingly, it became the "barnacle" goose. It has been recorded that this interpretation was acceptable to the clergy who were able to claim the abundant barnacle goose as a fish in its nature and origin, rather than as a fowl, so its use on fasting days could be permitted. Pope Innocent III found it necessary in 1215 to issue a bull prohibiting the use of barnacle geese in Lent, since he maintained that they live and fed like ducks and should be considered as such.

At the end of the 12th century a medieval historian, Giraldus Cambrensis, reported to Henry II, the following account after a visit to Ireland.

"There are in this place many birds which are called "Bernacae": Nature produces them against nature in the most extraordinary way. They are like marsh geese but somewhat smaller. They are produced from fir timber tossed along the sea and are at first like gum. Afterwards they hang down by their beaks as if they were a seaweed attached to the timber and are surrounded by shells in order to grow more freely. Having thus in process of time been clothed with a strong coat of feathers, they either fall into the water or fly freely away into the air. They derive their food and growth from the sap of the wood or from the sea by a secret and most wonderful process of alimentation. I have frequently seen with my own eyes, more than a thousand of these small bodies of birds hanging down on the seashore from one piece of timber, enclosed in their shells and already formed. They do not breed and lay eggs like other birds, nor do they ever hatch any eggs, nor do they seem to build nests in any corner of the earth. Hence bishops and religious men in some parts of Ireland do not scruple to dine off these birds at the time of fasting because they are not flesh nor born of flesh, but in so doing they are led into sin for if anyone were to eat of the leg of our first parent (Adam) although he was not born of flesh, that person could not be adjudged innocent of eating meat."

In 1435 Sylvius, who later became Pope Pius II, visited King James of Scotland, partly because of his interest in the tree growing in Scotland, from the fruit of which geese were born. When he asked to see the tree on his arrival, he was told it grew further north in the Orkneys, to which he complained that "miracles will always flee farther and farther." In 1597 John Gerard, in his "Herbal or History of Plants," wrote: "There are found in the north parts of Scotland and the islands adjacent called Orchades, certain trees whereon doe grow certaine shells of a white colour, tending to russet, wherein are contained little living creatures: which shells in time of maturitie doe open and out of them grow those little living things which, falling into the water doe become fowles: which we call Barnacles: in the north of England Brant geese and in Lancashire Tree Geese; but the others that doe fall upon the land perish and come to nothing. Thus much by the writings of others and also from the mouths of people of those parts which may very well accord with the truth, but what our eies have seene and hands have touched we shall declare. There is a small island in Lancashire called Pile Foulders wherein are found the broken pieces of old and bruised ships, some whereof have been cast hither by ship-wracke and also the trunks and bodies with the branches of old and rotten trees cast up there likewise; whereon is found a certain spume or froth that in time breedeth certaine shells in shape like those of the Muskle but sharper pointed and of a whitish colour, wherein is contained things in forme like a lace of silk finely woven as it were together of a whitish colour, one end whereof is fastened unto the inside of the shell, even as the fish of oysters and the Muskles are: the other end is made fast unto the belly of a rude masse or lumpe which in time cometh to the shape and forme of a bird; when it is perfectly formed the shell gapeth open and the first thing that appeareth is the aforesaid lace or string. Next cometh the legs of the bird hanging out and as it groweth greater it openeth the shell by degrees till at length it is all come forth and hangeth merely by the bill; in short space after it cometh to full maturitie and falleth into the sea where it gathereth feathers and groweth to a fowle bigger than a mallard, lesser than a goose, having black legs and bill or bake and feathers black and white, spotted in such a manner as in our magpie,

called in some places a Pie-annet, which the people of Lancashire call by no other name than Tree Goose.

"For the truth hereof if any doubt may it please them to repair unto me and I shall satisfy them by the testimonie of good witnesses."

In reference to the legend Linnaeus gave the name Lepas anatifera to the stalked ship's barnacle. The name "anatifera" means the "goose bearer."

There are two theories to account for the legend of the barnacle goose. The first connects the Latin name given to the Brant or Brent goose with the Celtic name for shellfish. However, on close examination the theory is not a very plausible one. The other theory is that the Mykenaean artists of Cyprus and Crete, about 1,000 B.C., in their paintings on pottery, were given to using animals for their decorative motifs; also because of the nature of their religion and their proximity to the sea, marine animals played a large part in their lives. Even in those days the artists used "conventional simplification" and they converted the octopus and argonaut with their eight arms into a bull's head with a pair of spiral horns. Similarly, they drew barnacles floating on drift wood and noted the general resemblance to geese and by the exercise of imagination and fancy they converted the barnacle into a goose. How the connection was established in intervening years, between the time of these paintings and the first recorded intimation of the legend, may be well imagined. A French zoologist, Frederick Houssay, has published an account of this in the "Revue Archeologique" in 1895, and illustrations depicting the transition from the barnacle to the goose are given in the work of two French archaeologists, Perrot and Chipiez in their work on "L'Ossuaire de Crete".

Reference to the legend of the origin of the barnacle goose are numerous in ancient literature. A full account of the myth, together with many of the references, may be found in Heron-Allen's "Barnacles in Nature and in Myth", and Sir Ray Lankester gives an abbreviated account in "Some Diversions of a Naturalist."

RODENT CONTROL BY POISON

BY
A.L. Orr-Ewing, British Columbia Forest Service

It should hardly be necessary to remind readers that on Vancouver Island large areas of land which once supported valuable forest are, at the present time, completely unproductive and that one of the most urgent problems confronting the forester is that of developing ways and means of bringing such areas back under forest. These areas have to be reforested by artificial means in the majority of cases and planting is the only method possible until effective control measures have been developed against Peromyscus, the deer mouse (see cover illustration), which would permit direct seeding to be a valuable aid in this vitally important reforestation programme.

This little rodent with its avid appetite for Douglas fir seed is one of the most serious obstacles to both the natural and artificial restocking of logged-over areas; and its effective control is a matter of major economic importance. Many varied control measures have been experimented with over the years but it is only within recent years that prospects of success have appeared hopeful.

To begin with, information regarding the life history and habits of this mouse was virtually non-existent until quite recently, although such information is absolutely essential in experimenting with control measures. Recent life history studies, however, have revealed many interesting facts concerning this little mouse which have already been used to advantage. Secondly, much valuable research work has been carried out by the United States Fish and Wildlife Service in Oregon, Washington, and California with the specific aim of developing effective control measures against this same mouse. Recent close co-operation with this Service, therefore, allows foresters to try out some of the latest controls.

One of their most promising control measures has been the development of the poison 1080 (Sodium Fluoracetate) and, in the spring of 1950, a small area in the Sayward Forest was poisoned and later seeded with Douglas Fir. Results from this first experiment with 1080 were definitely encouraging; the numbers of mice present were substantially reduced; less

Douglas fir seed was eaten; and no damage to other forms of wild life was observed. This was confirmed by a careful examination of the poisoned area by representatives of the Game Commission. Now it would be rash indeed to predictfrom the results of this one experiment that the use of 1080 for the control of deer mice will not endanger other forms of wild life as there is obviously a need for more experimental work on a larger scale. On the other hand, it is considered that provided certain precautions are observed, damage to other wild life can be kept to the very minimum on Vancouver Island.

It should first be emphasized that since 1080 is one of the most deadly poisons yet developed, its use should be rigidly restricted to qualified personnel only. The experiment at Campbell River, for example, was very carefully organized, a biologist from the United States Fish and Wildlife Service inspected the area prior to poisoning and recommended the strength of bait to be used and the manner in which it should be distributed. The bait itself was prepared and its distribution on the area supervised by the author personally. The area was regularly trapped after poisoning so that a careful check on its effect on the mouse population was kept.

The whole operation was completed at the time of year when the minimum of other forms of wild life would be in the vicinity and there is no doubt that these precautions contributed to the favourable results from the experiment. The need for a close relationship with the United States Fish and Wildlife Service has already been referred to and it should be added that this Service has been most cooperative, new control measures are constantly being developed, and it is possible that the use of 1080 itself may be discarded for something better in the future.

In conclusion, this article has necessarily been rather brief but further details regarding the experiment referred to and to the life history of the mouse have been published and can be obtained from the British Columbia Forest Service.

Victoria, B.C.
March 14, 1952.

- - - - - -

WATERFOWL AT BEACONHILL PARK, VICTORIA

by

I.McT. Cowan, Department of Zoology, University of B.C.

The winter aggregation of waterfowl on the lakelet and ponds in Beaconhill Park, Victoria, offers excellent opportunities for quantitative appraisal of waterfowl. The environment is not attractive to diving ducks and consequently few of these appear but counts made week by week through several years can yield significant data upon the migration of several species of ducks and gulls, the relative abundance of certain ducks from year to year and in some instances, as with the bufflehead duck, the onset of the breeding cycle. The latter species winters on salt water but repairs to fresh water - often in quite small bodies - to breed. It can be seen from the accompanying table that this affinity for fresh water began in late November but became most pronounced in February and March just before this species left for the breeding grounds.

Comparison of my table for 1939-40 with the counts made by Mr. E.F.G. White in October and November 1945 (see Victoria Naturalist 2(7); 109) reveal a significant increase in mallard and widgeon over the six year period and possibly also an increase in green-winged teal. The latter species was seen occasionally on the lakelet in 1938-39 but not in 1939-40. On the other hand pintail seem to be present in about the same numbers while canvasback, woodduck and bufflehead have decreased. In addition to the species listed on the table several other ducks occurred from time to time. On Jan.5, 1940 an American goldeneye, 2 greater scaup and a drake European widgeon were present. On Feb. 24, 1940 three ring-necked ducks put in an appearance. On April 9, 1940 a black brant landed and remained for some hours. In 1938-39 a cackling goose spent the entire winter at the pond. One of the most noteworthy gull records made in the park was the appearance on March 21, 1939 of a juvenile Point Barrow gull in its almost pure white plumage. This bird was quite tame and several excellent photographs were obtained.

(cont'd over)

WATERFOWL AT BEACONHILL PARK
1939-40

	Mallard	Wedgeon	Pintail	Lesser Scaup	Canvasback	Wood duck	Bufflehead	American Merganser	Coot
July 30, 1939	50	1@	1@		1@	3			
Oct. 1 "	80	10	2		1@	3			
Oct. 30, "	156	48		2	2				
Nov. 1 "	74	119	7	3	15				2
Nov. 11 "	176	99	2	3	3		3		2
Nov. 19 "	250	128	5						3
Nov. 26 "	171	89	5	3	9	5	3	1	3
Dec. 2 "	80	228	2	3	35	5	2	1	2
Jan. 5, 1940	132	266	1@	3	19	4	3	4	3
Feb. 24, "	66	116	1@	3	19	6	6		4
Mar. 28 "	40	150	1@	3	14	6	6		
Apr. 9 "	50	139	1@		15				2
Apr. 24 "	45	84	1@	1	1@		1		

@ Pinioned birds

EUROPEAN STARLING

By C.J. Guiguet, Provincial Museum, Victoria,B.C.

European Starling have now been recorded as far west as the Queen Charlotte Islands where two specimens were collected recently by Mr. Herbert Hanmer of the Department of Forestry.

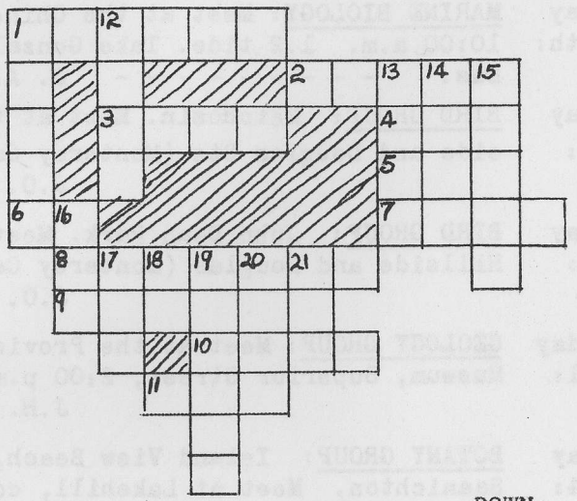
Starlings have been seen in the Victoria area in the past few weeks; at Telegraph Bay, Ten Mile Point and Glen Lake. On April 9th a pair was seen near the berry farm at Goldstream by a museum party.

EDITORS' NOTE: This being the last issue of the Magazine until September, the Editors remind our readers that subject matter gathered during the spring and summer will be very welcome at any time. We would like to start preparing our September issue from a well-stocked file of manuscripts.

JUNIOR PAGE

Editor: Geo. Merrick Phone: B.4380

Ass't Editor: Bruce Colvin Phone:G.2749



ACROSS:

1. Australian bird (pet)
2. A number
3. Growth on your toe
4. Sighing noise
5. Cone-bearing tree
6. You
7. Biting insect
8. Idea
9. Middle
10. Mud
11. Small jump

DOWN:

1. Easter symbol
12. Water bird
13. Fishing tool
14. Frozen rain
15. Number
16. And so forth
17. Not him
18. Not off
19. Top limit
20. Hold
21. Same as 17

David Berry of 350 Foul Bay Road is 12 years old. He has made a collection of 32 water birds. No, they are not alive and not dead; they are painted, each complete with scenic background, on corrugated cardboard squares cut the size of hearth tiles. We hope that David Berry will go on collecting birds on paper, and will show them to us if we can get him to join our group in September.

Our meetings end April 26 until September, but read the Junior Natural History page and bring or send in contributions for it.

NOTICE OF MEETINGS

1952

Saturday May 3rd: BOTANY GROUP: Thetis Lake. Meet at the corner of Hillside and Douglas Streets (Monterey Cafe) at 1:30 p.m.
C.W. Lowe.

Saturday May 10th: MARINE BIOLOGY: Meet at the Chinese Cemetery at 10:00 a.m. 1.2 tide. Take Gonzales (Crescent Rd.) Bus. - - - - - - - - - - J. A. Cunningham

Saturday May 17: BIRD GROUP: Metchosin. Meet at the cor.of Hillside and Douglas Sts.(Monterey Cafe) at 9:30 a.m.
J.O. Clay.

Saturday May 31: BIRD GROUP: John Dean Park. Meet at the cor.of Hillside and Douglas (Monterey Cafe) at 3:00 p.m.
J.O. Clay.

Wednesday June 11: GEOLOGY GROUP: Meet at the Provincial Mineral Museum, Superior Street, 2:00 p.m.
J.H. Whitehouse.

Saturday June 14: BOTANY GROUP: Island View Beach, Telegraph Rd., Saanichton. Meet at Lakehill, corner of Quadra and Reynolds at 1:30 p.m.
C.W. Lowe.

Saturday June 21: BIRD GROUP: Trip to Bare Island. Meet at Corfield Boat House, Harbour Road, Sidney. Boat leaves at 10:00 a.m. Space limited to 23. To secure space please telephone Mrs. K. Drury, Garden 7410.
J.O. Clay.

Thursday July 8th: MARINE BIOLOGY: Pattullo's Beach, between 963 Beach Drive and 951 Beach Drive - 10:00 a.m. .2 tide.
J.A. Cunningham.

Saturday July 26: GEOLOGY GROUP: Trip to Islands off Sidney. Meet at Corfield Boat House, Harbour Rd., Sidney. Boat leaves at 10:00 a.m. Space limited to 23. To secure space please telephone Mrs. K. Drury, Garden 7410.
J.H. Whitehouse.

Victoria Natural History Society

OFFICERS, 1952–53

Honorary Presidents:

HON. WM. T. STRAITH,
Minister of Education.

J. W. EASTHAM,
Former Provincial Plant Pathologist.

J. A. MUNRO,
Former Dominion Wildlife Officer.

Past Presidents:

ARCHDEACON ROBERT CONNELL.

G. CLIFFORD CARL.

GEORGE A. HARDY.

MRS. JAMES HOBSON.

President:

J. A. CUNNINGHAM,
Telephone G 3897.

Vice-President:

C. W. LOWE,
1826 Hollywood Crescent.

Editors:

MRS. E. J. T. WOODWARD,
Box 1498, R.R. 3, Victoria, B.C.
Telephone Colquitz 12-T.

G. CLIFFORD CARL. MRS. A. F. SARRATT.

Secretary:

MISS MARGARET KIRBY,
32 Marlborough St.
Telephone G 1818.

Treasurer:

E. W. ADSHEAD,
2116 Hall Rd.
Telephone B 2834.

Chairmen of Groups:

Programme: MRS. KENNETH DRURY,
Telephone G 7410.

Botany: C. W. LOWE,
1826 Hollywood Crescent.

Ornithology: J. O. CLAY,
Telephone E 3101.

Marine: J. A. CUNNINGHAM,
2474 Hazel St.

Zoology: G. CLIFFORD CARL,
Telephone E 8524.

Geology: J. H. WHITEHOUSE,
Telephone B 1684.

Conservation: DAVID B. TURNER,
Telephone B 4975.

Juniors:

Chairman: PEGGY CARL. *Secretary:* DIANA LIVESEY.

Editors: GEORGE MERRICK and BRUCE COLVIN.

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

To