The VICTORIA NATURALIST

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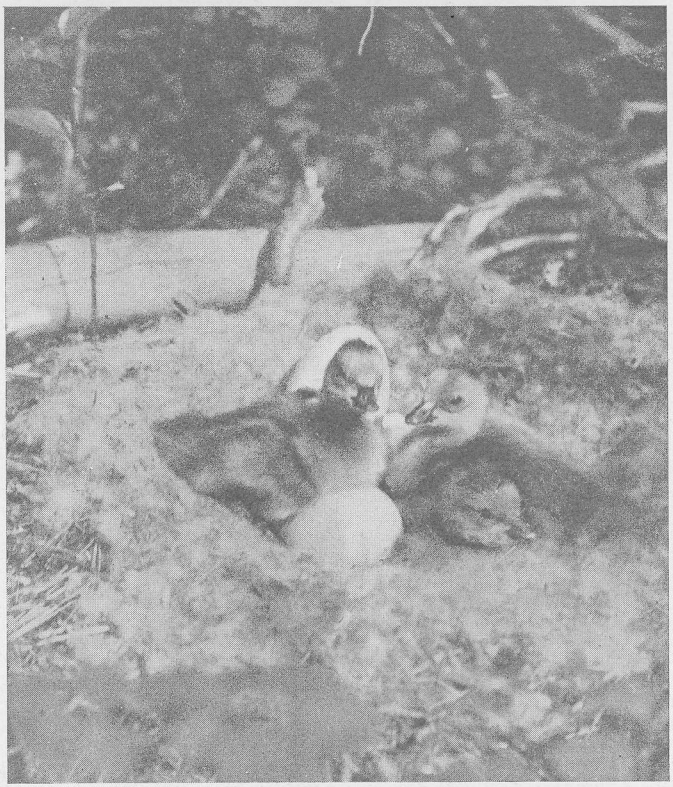

(From "Bird Study in B.C.," Munro.)

Downy young of Canada goose.

Published by the

VICTORIA NATURAL HISTORY SOCIETY

VICTORIA, B.C.

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Report of the April Meeting

After a short business session the Chairman, Mr. George Hardy, welcomed new members who were introduced by Miss Perry as follows: Miss Helena Grant, Mr.Alex. Gray, Mr. and Mrs. Lloyd R. Gudewill and Mrs. Eva Walker. As specimens for examination Dr. Carl exhibited four skins of Vancouver Island wolves, an adult female and three juveniles taken by Mr. A. Olsen at Cowichan Lake last fall. The size and colour pattern indicated the presence of domestic dog strain in these individuals.

The President then introduced Dr. William Newton, Director of the Plant Pathology Laboratory at Saanichton, who gave an address entitled "The Cultivation of the Native Plants of B.C.", which was illustrated by kodachrome slides shown by Mr.A.E.Collins of the B.C. Forest Service. A digest of his presentation is as follows:

Within a few miles of Victoria there are many plants that well deserve a place in your garden. Shooting Stars (Dodecatheon) are particularly easy to establish in a garden providing the location is well drained and the plants are allowed to dry out during the summer. The Erythronium is also worth attention. In transplanting this species take only the smallest (youngest) ones since the bulb goes deeper each season making it difficult to remove mature plants successfully.

Alpine plants are particularly attractive. If more interest were taken in native alpines they would become known the world over. Six or seven generations are sometimes required to produce plants adapted to growing at low elevations. Dwarf trees, such as the

prostrate Juniper and Mountain Hemlock, will remain small in size only if collected from isolated areas not reached by seeds from normal sized trees.

The Flowering Dogwood is our only native tree with colour in the fall. Small specimens should be transferred to the garden in late fall or early spring. The Cascara is found only in the Pacific Northwest; in a damp place in the garden it makes an interesting ornamental tree which is especially attractive to birds because of the lush, purple fruit.

The Lady's Slipper (Calypso bulbosa) is undoubtedly the gem of our local woods. Artificial propagation of the seed on agar has been accomplished but is difficult. Do not try to cultivate the Calypso until you have studied carefully the nature of its natural habitat, and then transfer a good sized piece of sod along with the plant. (Editors' note - See Victoria Naturalist, Vol. 4, No.2, for further details).

Even the Sandhill Rose (Lewisia rediviva) which is a native of the dry belt, will survive under a variety of conditions, providing the plants are quite dry during a good part of the summer. Place specimens in soil mixed with sand and crushed granite in a high location.

Dr. Newton and Mr. Collins were ably thanked by Mr.W. T. Tildesley on behalf of the Society.

G.C.C.

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Steller's jay (Insert B) is a permanent resident of British Columbia. Normally found on the outskirts of the urban areas it sometimes invades the city during the winter, apparently in search of food.

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SOME NOTES ON LOCAL PLANT MIGRATION

by Robert Connell

The spread of plants by seeds and spores is a common-place of botany and so familiar that ordinarily we take little notice of it except in the encroachment of weeds. Water-frequenting birds also play a part, important though less striking. Some years ago at a summer camp at the base of the Olympics the owner dammed a small creek and so made a pond of about a quarter of an acre. The ground herbage was of course submerged, but two years later when I visited the place I found a number of aquatic plants had established themselves and the aspect of the pond had changed from its bare artificiality to natural picturesqueness. Such plants probably came by the agency of water-fowl.

Plants move about by human agencies and are thus introduced into regions far from their native one. Thus the wall lettuce (Lactuca muralis) started its flourishing campaign on Southern Vancouver Island and some of the Gulf islands less than 30 years ago. It seems to have come in with packing when the B.C. Electric Company established their Jordan River plant.

Some of these plants brought in by man among farm or garden seeds are limited in their spread by isolation. For example I found in 1943 the sticky bartsia (Bartsia viscosa), a pretty little British wild flower, growing abundantly on the Anderson farm at Muir Creek. Cut off by forest from other farms it is prevented from further spread pretty effectively at present. Bergamot mint (Mentha citrata) I found growing plentifully along the marshy border of Mackenzie Lake in Otter Point district. Since it is a mile or more from the nearest garden it is a little difficult to decide by what means this European plant arrived at this watery corner where it has for neighbors such plants as the blue gentian (Gentiana sceptrum) and the round-leaved sundew (Drosera rotundifolia), both hardy natives.

By the roadside outside an old farm near Goldstream I found a pretty little aromatic plant with comparatively

large pink flowers, the common calaminth (Calamintha officinalis). The plant has a pleasantly sharp aromatic perfume and for that reason was valued in olden days in England where it grows wild "in woods, hedges, roadsides, and waste places." It was in just such surroundings I found it here, a bit of bare ground by the side of the old road. It was probably originally grown in the farm garden long years ago.

One of the most interesting examples of plant migration occurs up the hilly valley of Sooke River. Here many years ago I came on a large colony of a fern quite new to our British Columbia flora. By the kindly interest of my old friends, Dr. Newcombe and Mr. Kermode, who enlisted the attention of Washington botanists, it was found to be the Sierra water-fern (Phegopteris oregana), and so far it has nowhere else been found north of the Washington-Oregon border. To this must be added a small annual of the Campanula family known by the long name of Githopsis specularioides, found at different points in the near-by hills. It is possessed of a dark blue flower, rather suggestive of a small gentian. This plant also is known north of the Washington-Oregon border only at Sooke River. It is of course possible that these plants occur in the mountainous interior of the State of Washington. In any case their seeds and spores must have been brought either by the prevailing southerly winds or by birds.

Plants are also brought down by rivers and this evidence is again forthcoming on the Sooke. At the Devil's Pot-holes, the first set of these remarkable water excavations above the falls, are to be found some unusal plants. First of all, the yellow cypress (Chamaecyparis nootkatensis), of which J. T. Barnes and I counted some fifty specimens some years ago,none of them very large it is true, grows just above the Pot-holes. Then in the crevices of the basaltic rock are to be found such plants as Luina hypoleuca which has no popular name, a composite with silvery white leaves, well described by Henry as a "beautiful mountain plant". This wanderer is also found in the

Cattle Hills on the south side of the Sooke highway. Other plants in the rocky canyon are the blue harebell (Campanula rotundifolia), the windflower (Anemone multifida), the leaf-clasped arnica (Arnica amplexicaulis) with the slender-leaved onion (Allium attenuifolium). It is interesting to note in passing how these plants adapt themselves to their peculiarly exposed situation. The harebell for example is naturally a plant of the open ground with fibrous roots adapted to the loose soil but here among the rocks where it can only find a lodgement in the deep narrow crevices it develops a woody root-stock by which it securely anchors itself and is able to resist the force of the river in spate when it comes thundering down laden with sand and gravel. The same river that has brought these plants from loftier positions makes it impossible for any but the hardiest and most firmly secured to establish themselves permanently.

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The photograph of newly-hatched Canada geese (reproduced on the front cover) was taken by Mr. J.A. Munro at the Vaseaux Lake Bird Sanctuary in the Okanagan Valley. While Canada geese do not usually nest in the Victoria area a few pair have apparently done so at Elk Lake during the past year or so, and others are apparently nesting at Quamichan Lake near Duncan.

Mr. Theed Pearse of Comox has estimated that during the middle of April there were 13,700 Brant along the beach between Oyster River and Qualicum Beach.

AN APPRECIATION OF MR. WINKLER'S LECTURES ON HISTORIC GEOLOGY

On March 30th Mr. George E. Winkler presided over the last of his lecture series on Historic Geology.

This was a most interesting series, particularly to those of us who have previously been inclined to measure time in terms of the age of man. As outlined on Mr. Winkler's Geological Tables, this is but a few days in the history of the earth, and recorded history only a few days. All modern scientific advancement has taken place within the last hour or so and the rise and fall of the Roman Empire was just a short episode of yesterday.

It is just our good fortune that we had George Winkler to present this subject to us. As a practical geologist he was able to call on his own wide experience to illustrate the various formations and modifications of geological structure as they came up for discussion. It was this wide experience which also made the question periods so animated and informative.

So long as the Natural History Society has members like George E. Winkler who are willing to take the time and trouble to prepare and the ability to present such a series of lectures as this, we can remain satisfied that we shall continue active and alive.

NOTES ABOUT EGGS

by T. Richards

In ordinary conversation when mention is made of eggs we think first of hens' eggs, but actually man makes use of many kinds of eggs. Biological supply houses sometimes do a thriving business in eggs of frogs and salamanders. These eggs as you know are found floating or submerged, encased in jelly in ponds. They are collected and sold to schools where biology students put them in tanks and watch them develop into tadpoles. Some salamander eggs are shipped to research laboratories where scientists prefer them to other eggs in making certain studies of the development of the embryo.

"Roe", which are masses of fish eggs, may be cooked in different ways for our consumption and for making caviar. The best caviar is made from the great white sturgeons found in rivers of Russia. Present-day caviar, which lacks the fine flavour of the original, often is made from roe of the spoonbill, buffalo fish and catfish. In Brittany, fishermen use salted codfish eggs mixed with flour as bait to attract sardines.

Eggs of many kinds are put to various uses. Sugar companies in Mexico have recently imported certain insect eggs from Cuba in their fight to control other insects which attack sugar cane. Cormorants' eggs from the islands off the coast of Peru form a large part in the diet of the Peruvians. Eskimos eat large quantities of sea-birds' eggs. In Nicaragua, hungry natives dig in the sand for alligators' eggs which contain large yolks and are said to taste like duck eggs. In Mexico eggs of certain species of flies are used in making a food paste which is considered a "piece de resistance" (scrumptious!). Then there are the Chinese who prefer "ripened" eggs. To prepare these they bury hens' eggs in the earth until decomposed to a decided degree, or as we would say

"rotten", then eat them as a special treat!

Humans are not the only creatures with a developed taste for eggs. Ants and spiders lick their mouths over the eggs of butterflies and other insects. Fishes too will readily eat the eggs of other fishes which they come across in their travels. Unless the Peruvians get there first, they are apt to find the rookeries on the Bird Islands of Peru full of rifled nests and broken eggshells, signs of earlier visits by gulls and vultures.

Birds with few enemies lay but one or two eggs. Many of the northern sea-birds such as auklets and murres which breed on arctic cliffs lay but a single rounded egg pointed at one end. This shape causes it to roll in a circle so that it does not fall off the ledge upon which it is laid. The king penguin of the Antarctic takes special care of its egg, carrying it about on top of its foot, protected by a fold of skin. The male and female take turns relieving each other at the task. Robbed of its egg a king penguin may sometimes be seen attempting to shuffle about with a stone on its instep.

The duck-billed platypus which lives in the streams of Australia and Tasmania and the echidna are the only mammals which lay eggs. The platypus with its beaver-like fur and habits, with webbed feet and bill similar to a duck, lays two eggs each three-quarters of an inch long encased in a flexible white shell.

Game birds which have many natural enemies usually have large broods. Some quail lay as many as 30 eggs for a setting. However quail take a back seat compared to marine creatures which because of their many enemies must lay eggs by the million in order to hold their own. A codfish lays about five million eggs, a sturgeon seven million, a turbot fourteen to fifteen million, but so greatly are the young preyed upon that only a small proportion live to

maturity. A lobster (in berry) will carry from three to 75 thousand eggs glued to the under surface of her body, like clusters of berries. A single female oyster may spawn as many as 60,000,000 eggs in a season, only a few will develop into adult oysters. A mother oyster may be considered lucky if she raises one out of 10,000,000 children.

This great destruction has its advantages for if every egg in the sea matured the sea would soon become a solid squirming mass of fishes and marine creatures.

Eggs vary in colour size and shape. Most domestic fowls lay ovoid, white or brownish eggs. But there are exceptions even in these. We find that the Araucana, a strange South American fowl, lays blue eggs. Eggs laid in holes or domed nests usually are white; coloured eggs, invisible in dim light, would be in danger of being broken. Although puffins lay coloured eggs in holes they cover the shells with a chalky incrustation which reflects light, and obscures the original colour. Eggs of many fishes, floating at the sea surface in masses sometimes 30 feet long, are transparent which probably prevents their being detected and eaten. Shells of kingfisher eggs are translucent (semi-transparent), those of some snails slightly iridescent.

Plovers lay pear-shaped eggs, while owls and titmice lay spherical ones. Grebes' eggs are pointed at both ends. The generally soft shells of eggs of most lizards stretch to accommodate the growing embryo. Eggs of certain shell-bearing slugs are so elastic that if dropped on a stone they rebound several inches.

Birds' eggs vary in size from the tiny white ones of hummingbirds to the large one of the ostrich which in turn was small compared to that of the extinct Aepyornis which measured 9½ by 13 inches.

Drifting sands in Madagascar have uncovered several of these largest of all eggs, any one of which would have made a meal for a family!

Editor's note:- Regarding the raising of insects' eggs for the biological control of pests, our own government has used this method for raising parasites of a number of insects. One introduced for earwigs has been moderately successful and another on Holly leaf-miner only slightly more so but two others, one on the greenhouse white-fly and another on the woolly aphis in the Okanagan, have been very successful.

Note about Registration and Dues:

The Treasurer, Mr. T. Taylor, announces that a new system of membership registration is being adopted. He would appreciate having all members submit their dues together with correct name and address as soon as possible. This will insure that you receive your copy of the Bulletin. Names of prospective members will also be welcome.

JUNIOR PAGE

Activities: On the 3rd of April Mr. Hardy of the Museum gave an outline of the life histories of the Easter lily (Erythronium oregonum) and the satin flower (Olsynium grandiflorum). The group then explored Beacon Hill Park in quest of wild flowers. The secretary, Brian Ainscough, listed the varieties found as follows: wild geranium, wild mustard, oregon grape, whitlow plant, owl clover, satin flower, shooting star, rock saxifrage, buttercup, spring gold, dandelion, stone crop, camass and Easter lily.

On the 10th of April the Juniors viewed the surveyor's instruments, stereoscopes, and various types of maps of the map display in the Rotunda of the Legislative Buildings.

The morning of the 17th of April the group was conducted on a tour of the Provincial Archives.

On Saturday, April 24th, Mr. Foster of the Plant Pathology branch gave an interesting talk concerning the commoner plant diseases of British Columbia. The talk was illustrated by slides and a series of colour charts.

The meeting of the 24th was the final regular Saturday morning meeting until September. The Juniors are, however, invited to attend the field meetings which are to be held on Saturday afternoons and which are listed on the last page of each issue of this bulletin.

Charles Faulkner,

Junior Editor.

NOTICES OF MEETINGS

1948

Saturday May 1st: Botany Group field meeting. Meet at terminus of old Uplands Street-car, 2 p.m. Mr. W. T. Tildesley.

Thursday May 6th: Audubon Screen Tour. Robert House at 8 p.m. Mr. Telford H. Work, "Bits of Land along the Coast."

Saturday May 8th: Ornithology Group field meeting. Meet at corner of Nottingham and Lansdowne Rd. at 2 p.m. (Not at Gorge Park). Mr. J. O. Clay.

Tuesday May 11: General Meeting in the Reading Room of the Provincial Library at 8 p.m. Speaker: Mr. W.H.A.Preece, President of Victoria Rock and Alpine Garden Society. Subject: "Native Plants of garden value."

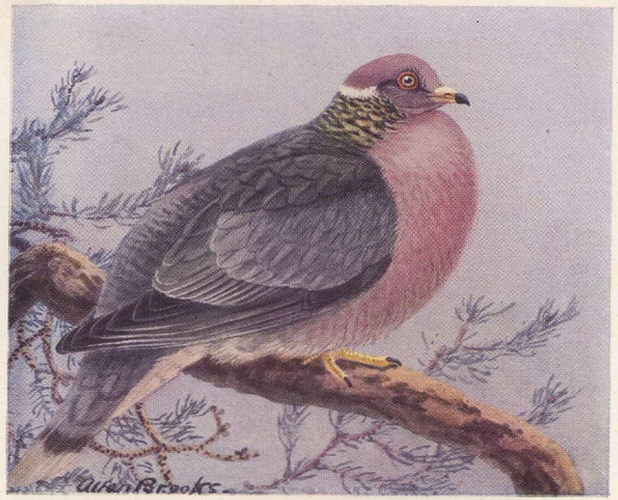
Saturday May 15: Marine Biology Group field meeting. Gonzales Point (near Chinese Cemetery) at 2 p.m. Mr. G.A. Hardy. Take Richardson bus to terminus.

Saturday May 22nd: General Outing. Mount Douglas Park at 2 p.m.

Sunday May 30th: General Outing. Witty's Lagoon. Phone Museum Office (E.1111,local 417) for information.

Saturday June 19: Ornithology Group. Time and place to be announced.

The Band-tailed pigeon (Insert A) is common on Vancouver Island and on the adjacent mainland west of the Cascade range, usually arriving about the middle of April. The solitary nest, a small platform of twigs, is placed usually in a small Douglas fir and only one egg is laid. Food consists of wild fruits, seeds, leaves of certain plants, acorns and grain. Because of an alarming decline in numbers some years ago Band-tailed pigeons are given protection under the Migratory Bird Treaty so that their threatened extermination has been prevented.



A. Band-tailed Pigeon; scale, ¼
Male

B. Steller's Jay; scale, ¼
(Black-headed Jay)

Victoria Natural History Society

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Jo