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## MATURE NOTES FROM ACADIA

VOL.2 NO.5 NOV. -DEC., 1933 ACADIA BAR HARBOR, MAINE

Department of the Interior; Office of National Parks, Buildings & Reservations.

# UNITED STATES DEPARTMENT OF THE INTERIOR OFFICE OF NATIONAL PARKS, BUILDINGS, AND RESERVATIONS. ACADIA NATIONAL PARK BAR HARBOR, MAINE

#### NATURE NOTES FROM ACADIA

Volume 2

November-December, 1933

Number 5

This bulletin is issued bimonthly by the park naturalist of Acadia National Park. Its purpose is to make those who are interested in Acadia better acquainted with its plant and animal life and with its geologic story. Publications wishing to use these notes should give credit to the writer and to "Nature Notes from Acadia."

George B. Dorr, Superintendent
A. H. Lynam, Asst. to Supt.

B. L. Hadley, Asst. Supt.

Arthur Stupka, Temporary Jr. Park Naturalist, Editor

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#### SNOWY OWLS

There is hardly a winter which comes and goes without at least a few reports of the Snowy Owl (Nyctea nyctea) coming from some parts of the state of Maine. In some years great numbers of these birds leave their homes in the Arctic tundra and make their appearance in the New England and nearby states, creating considerable local interest. These winter visitors are fully as large as the Great-horned Owls, are predominantly white in color with more or less grayish-brown barrings, are chiefly diurnal in their habits, and often allow close approach - factors which, in their entirety, account for the conspicuousness of these birds.

On November 10 of this year, one of these birds was captured on Mount Desert Island at Sand Point after being slightly wounded by Mr. G. H. Hamor. After keeping the owl for almost three weeks, Mr. Hamor turned it over to me. By this time its slight injury had healed, and after being photographed the big white bird was liberated in Acadia National Park.

One of the park rangers reported a Snowy Owl on Cadillac Mountain at about the time the individual already mentioned was captured at Sand Point. Mr. Gilley, taxidermist at Southwest Harbor, informs me that two of these birds were taken in late November in the southern reaches of Mount Desert Island - one at Seawall and the other on Great Cranberry Island, just a mile to the east. He also tells me that another was seen in the road at Manset, just below Southwest Harbor, at about the same time.

At the Fred C. N. Parke taxidermists' establishment in Bangor, Maine, Mr. A. A. Carter informs me that three Snowy Owls were received during the month of November. One of these came from Brooksville, another from Criehaven Island, and the third from still another place on the Maine coast. The first two localities are, respectively, but 15 miles west and 40 miles southwest of Mount Desert Island. Mr. F. L. Morill, taxidermist, also of Bangor, tells me of having received one Snowy Owl in mid-November and another in early December of this year.

In a letter dated December 13, Mr. W. J. Clayton, taxidermist and naturalist in Lincoln, Maine, writes that "four or five" of these birds had been



reported to him, but that he had received none to mount. Mr. Arthur H. Norton, Curator in the Portland Society of Natural History, reports seeing a Snowy Owl along the city boulevard in Portland on December 9. He writes of approaching to within 30 feet of the bird on two occasions, and goes on to say: "It held a large brown rat in its right hand talons, and carried the prize about as it flew from place to place." In Boston, Mass., on December 29, with the temperature down to the record low of 17° below zero, the Evening Transcript reported a large white owl (continued on next page)

perched on the Wood End station. From as far westward as Circleville, in southern Ohio, comes a report of this bird, and doubtless there are many other far-away stations where it has been seen this year.

Naturalists have shown considerable interest in the occasional great invasions of Snowy Owls into territory far to the south of their more normal range. I take the liberty of reproducing the following records of Snowy Owl invasions, kindly furnished me by Mr. Arthur H. Norton:

 1867 - noticeable flight
 1905-06 - noticeable

 1876-77 - very large flight
 1918 - noticeable after January

 1882 - noticeable
 1922-23 - noticeable

 1884-85 - "
 1926-27 - very large flight

 1889 - "
 1929-30 - noticeable

 1890-91 - "
 1932-33 - noticeable

 1892-93 - "
 1933-34 - noticeable

 1901-02 - very large flight

Dr. Alfred O. Gross, careful student of the migrations of these arctic owls, in the latest of two excellent reports on the more recent invasions,\* presents a most interesting comparison between the years when these birds fly to the southward in large numbers and the years when maximum numbers of Arctic Foxes are handled by the Hudson's Bay Post at Fort Chimo. The foxes, feeding on very much the same forms of wild life which fall prey to the owls - hares, lemmings, ptarmigans, etc. - are caught in greatest number when their natural food becomes scarce. This same scarcity of food drives the owl far south of its more normal hunting grounds. Dr. Gross shows that "fox years" and years of Snowy Owl invasions synchronize to a remarkable degree.

The "owl years" which Mr. Norton lists are very much in agreement with those reported by Dr. Gross, and are in full accord as far as the years of the great migrations are concerned. William Brewster, editing H. D. Minot's "The Land-Birds and Game-Birds of New England" (1895), makes the following statement on Snowy Owls: "The greatest flight on record took place in the autumn of 1876, when most of the leading New England taxidermists secured from fifty to one hundred and fifty birds each." E. H. Forbush, in his classical "Birds of Massachusetts," writes: "Mr. J. H. Fleming, of Toronto, estimated that at least one thousand of these owls were killed in Ontario alone during another great flight that occurred in the winter of 1901-02, when many owls were killed in New England."

A considerable amount of information is available in regard to the next great invasion which took place in the years 1926-27. (It is of interest that these three most outstanding flights - 1876-77, 1901-02, 1926-27 - are separated by even 25-year intervals). This migration has been summarized admirably in Dr. Gross' earlier paper, in which he reports having received 2,363 records of Snowy Owls from within the borders of the United States. (continued on next page)

<sup>\*</sup>The Auk, Vol. 44, No. 4, October, 1927. The Auk, Vol. 48, No. 4, October, 1931.

Mr. Arthur H. Norton writes that "The large flight of 1926-27 appeared before the middle of November and came with a rush, while stragglers were noticed well into the spring. No less than three hundred were handled by taxidermists in Maine alone. Many were not shot which were seen by Life Saving crews. A local taxidermist paid only \$.50 each against \$3 in early years." In a catalog issued by Fred C. N. Parke, taxidermist in Bangor, Maine, is a photograph showing 81 mounted Snowy Owls - all of them received during the 1926-27 invasion. Beneath the picture Mr. Parke makes the statement, "I received 168 of them in less than a month." Mr. A. A. Carter of Parke's establishment informs me that these owls came in so fast they had to be put in cold storage. Most of these birds were received in November. Mr. F. L. Morill, another Bangor taxidermist, mounted 32 Snowy Owls which were killed during this same flight. Mr. W. J. Clayton, taxidermist in Lincoln, Maine, writes me he received "about 100 of them." Although of lesser magnitude than the flight just discussed, the 1930-31 migration was an appreciable one. Dr. Gross reported a total of 1313 Snowy Owls, 497 of which came from within the United States.

Mr. Arthur H. Norton informs me that "While the larger flights come with a rush in the late fall and are prevailingly heavy along the coast, frequently the lesser flights are inshore and come later in the winter." The distribution maps included in the aforementioned reports by Dr. Gross show in a striking manner the concentration of the records along the New England coast.

Are sun spots the distant indirect causes of these periodic invasions of Snowy Owls? According to this theory the sun spots affect the rays of ultraviolet light, directly or indirectly affecting the lemmings and hares, causing pronounced periodic fluctuations in the numbers of these animals, and resulting in very extensive migrations of the owls in years when there is a dearth of food on the tundra. This problem of animal numbers, involving as it does the cyclic rise and fall of animal populations, may be as difficult to solve as it is fascinating to try to comprehend.

When these big arctic raptores descend upon a hunting ground which, to the great majority of them, is entirely new, what do they feed upon? Detailed examination of the stomachs of 94 of these owls, reported by Dr. Gross as having been made by Angell and Cash, taxidermists of Providence, Rhode Island, "resulted in finding 55 of them empty, 24 contained rats, 3 contained squirrels, 7 contained wild native birds, 1 poultry and 4 miscellaneous food." Dr. A. K. Fisher of the Biological Survey (Circular No. 61, p. 13, July, 1907) writes that the stomach of one of these owls contained 14 white-footed mice and 3 meadow mice. He remarks, "The common rat appeared in a number of stomachs and seems to be considerably sought after. It is a lamentable fact that this useful bird is slaughtered in great numbers whenever it appears within our limits."

Mr. W. J. Clayton, already referred to in this article, has favored me with the use of notes which relate to his examinations of the stomach contents of these birds. The dates given refer to the great 1926-27 invasion. I have (continued on next page)

summarized his report as follows:

November 9 - Of 18 Snowy Owls examined, 2 contained remains of hares; 1, a house rat; 1, a shrew; 1, a non-parasitic worm; and the rest were either empty or else contained traces of hair.

November 24 - Of 6 Snowy Owls examined, 2 contained remains of hares; 1,

a small bird; and 3 were empty.

November 30 - Of 5 Snowy Owls examined, 1 contained remains of a ruffed grouse; 1, a shrew; and 3 were empty.

December 1 - Of 8 Snowy Owls examined, 1 contained a meadow mouse; 1, miscellaneous matter (bark and paper); and 6 were empty.

January 15 to 29 - Of 9 Snowy Owls examined, 3 contained mice; 2, fish; 1, house rat; 1, small bird; and 2 were empty.

January 30 - Of 2 Snowy Owls examined, 1 contained a house rat and 1 contained 2 mice.

February 18 - 1 Snowy Owl was examined and found to contain remains of a gull.

February 26 - Of 2 Snowy Owls examined, 1 contained 2 mice and 1 contained a white-footed mouse.

In summary, of 51 Snowy Owls examined, 8 contained mice; 4, hares; 3, rats; 2, shrews; 2, small birds; 1, gull; 1, ruffed grouse; 2, fish;1, worm; 1, miscellaneous matter; 14 were empty; and 13 were either empty or else contained traces of hair. Mr. Clayton remarks that due to the large number of these birds which he was forced to care for in a relatively short period of time, many whose stomachs were found to be empty were not listed in the above report.

- Arthur Stupka

#### OUR NEW HOME

Through the interest of Superintendent George B. Dorr, the Park Naturalist's headquarters have been moved to a new and far more suitable location in the Jesup Memorial Library in Bar Harbor. This office is a large private room furnished with a desk, bookcases, file cabinet, worktables, and blackboard. Two framed Audubon bird paintings and over a hundred reference and reading books on natural history subjects, loaned by Mr. Dorr, add tremendously to the attractiveness and usefulness of this room. Two 9 x 12 grass rugs and a large fireplace screen have also been added through Mr. Dorr's interest.

Only the choicest of our specimens are exhibited here, the remainder being stored in our old headquarters in the Information Office. Mounted specimens of a White-tail Deer fawn, a Pine Marten, Bald Eagle, Hawk Owl, and Wood Duck are placed about the room. In the garden just outside this office a bird-feeding platform has been erected. Meetings of the newly-organized Mount Desert Island Bird Club are held in this new headquarters.

#### THE OLD MAN OF THE SEA

In the region of the "Ovens," on the side of one of the high rocky cliffs which sends its roots down into the sea, is a strikingly well-proportioned face in the stone. Its rugged masculine features, looking out across Frenchman's Bay to the mainland, have been carved by nature's forces, especially by the action of the waves which, at high tide, break only a few feet below the powerful chin of this heretofore nameless sage. I have called him "The Old Man of the Sea," for how many times he must have witnessed this regular rise and fall of the Atlantic waters! At low tide a belt of chalky-white barnacles girdles the cliff half way between its base and the Old Man's chin - a multitude entirely dependent upon the life-sustaining sea.

I like to think of the Old Man as a character of great antiquity - one who had seen this drowned coast hundreds and thousands of years ago when the giant Sea Mink, the Great Auk, the Labrador Duck, and many other animals now extinct, found a home here.

Although seemingly impregnable, the cliff wherein the Old Man is fashioned will some day fall before the repeated onslaughts of the ocean, and he, like the panorama of life which for ages has

paraded before him, will disappear entirely from the earth.

In the words of Tennyson:

"From searped eliff and quarried stone

She cries, 'A thousand types are gone:

I care for nothing, all shall

- Arthur Stupka

#### CENSUS OF CHRISTMAS BIRDS

Under a clear sky and with the temperature at 8° above zero a little party, consisting of Dr. A. E. Brower of Bar Harbor, Mr. Vernon Lunt of Indian Point, and myself, began our census of Christmas birds. Our plans,

like the plans of so many other groups of bird enthusiasts who were compiling similar records for Bird Lore Magazine's 1933 Christmas census, were to spend the daylight hours in the field and, keeping within a prescribed area, list the species and numbers of birds observed. The area in which we worked lies within the eastern half of Mount Desert Island and includes various sections of Acadia National Park.



Snow covered the ground to an average depth of 10 inches and a light wind was blowing from the northwest. The highest temperature reading for the day was 20°.

Twenty-four species numbering 446 individuals were observed. Mest outstanding of these, and the ones which gave us the greatest thrill, were American Crossbills and a lone female Arctic Three-toed Woodpecker. The former were seen with the more common White-winged Crossbills feeding in the spired cone-laden crowns of the tall-growing red spruces which stand on the grounds of the Jackson Memorial Laboratory. The Arctic Three-toed Woodpecker, working low on a large dead balsam fir, permitted me to approach within five feet before moving up the trunk. While all three of us were watching the bird, a Ruffed Grouse alighted upon a nearby tree in the snowy woods, but upon catching sight of us hurried away, sending the snow which lined the branches flying.

The birds seen in the course of the day were as follows:

Holboell's Grebe - 3
Red-legged Black Duck - 71
American Golden-eye - 8
Old Sqwaw - 28
White-winged Scoter - 2
Bald Eagle - 1
Canada Ruffed Grouse - 1
Herring Gull - 164
Northern Downy Woodpecker - 10
Arctic Three-toed Woodpecker - 1
American Crow - 13
Black-capped Chickadee - 18

Red-breasted Nuthatch - 17
Brown Creeper - 4
Eastern Robin - 3
Eastern Golden-crowned Kinglet - 16
Starling - 10
English Sparrow - 2
Pine Grosbeak - 10
American Crossbill - 21
White-winged Crossbill - 27
Slate-colored Junco - 4
Eastern Tree Sparrow - 10
Eastern Song Sparrow - 2

#### NOTES FROM THE FIELD

Pine Grosbeaks. - Throughout December, the most approachable birds in Acadia National Park were Pine Grosbeaks. Time and again people wanted to know the name of these confiding heavy-bodied birds which, in a few weeks' time and along with appreciable help from the Starlings, stripped the orange fruit from almost every Mountain Ash in the town of Bar Harbor. The Pine Grosbeak is a most welcome winter visitor with us, coming from the extensive far-northern forests. The rosy-red plumage of the handsome male birds is especially attractive in the winter sunshine. Females and immature males are slaty-gray and have the crown, upper tail-coverts, and breast washed with olive yellow. Seeds, wild fruits, and the buds of coniferous trees are their commonest items of food.

- A. S.

An Early Winter. - By mid-November our winter had come to stay, and before the first of December, the Moon of the Long Night, a considerable amount of snow had fallen. December proved to be one of the coldest twelfth-months on record, the temperature going below zero on at least six days. On the 28th the mercury tumbled to 10° below zero, on the 29th it was at a record low of 27° below, and on the 30th the reading was 22° below in Bar Harbor. Snow fell on at least 10 of the 31 days. Flocks of Crows and Herring Gulls, driven by hunger, kept flying low over the town, occasionally settling in streets and yards where some food was to be had. Heavy freezing over of the inter-tidal region inflicted considerable hardship on these beach-combers.

- A. S.

Red Squirrel. - One of the Red Squirrels (Sciurus hudsonicus) living in the spruce forest in the region above Anemone Cave had just put the finishing touches to its compact ball-shaped outside nest before winter's early blasts blew out of the north. This nest was saddled well out on the dense limbs of a spruce at some distance from the ground. Made largely of the soft, spongy, light-green Usnea lichen ("moss," to the layman) and surrounded by dense, close-growing conifers, it appeared to be a warm and habitable winter retreat. Perhaps it is because of the scarcity of hollow trees on the island that our Red Squirrels so frequently construct these globular outside nests.

- A. S.

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Acadia National Park - Bar Harbor, Me.

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(Compiled by Margaret Stupka)
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#### Flowering Plants

Alder - Nl, p.5 Anemone, Wood - Nl, p.7 Arbor Vitae - N4, p.4 Arbutus, Trailing - N1, p.5 Aspen - N1, p.5; N4, p.4 Bearberry - Nl, p.7 Birches - Nl, p.5 Birch, White - N4, p.4 Blueberry - Nl, p.7 Bluets - N1, p.5 Bunchberry - N1, p.7 Buttercup - N1, p.7 Cherry, Fire - N1, p.7 Chickweed, Meadow - N1, p.7 Chokeberry, Black - Nl, p.7 Clintonia - N1, p.7 Cottongrass - N2, p.4 Cottonwood - N1, p.5 Crowberry - N4, p.4 Currant, Fetid - Nl, p.6 Elder, Red-berried - N1, p.7 Fir, Balsam - N4, p.4 Goldenrod, Seaside - N3, p.4 Goldthread - Nl, p.6 Hazel, Beaked - Nl, p.5 Hobblebush - Nl, p.6 Honeysuckle, Blue - N1, p.6 Honeysuckle, Fly - Nl, p.6 Hornbeam - N1, p.5 Huckleberry - N1, p.7 Labrador Tea - N2, p.4 Laurel, Bog - N2, p.4 Laurel, Sheep - N2, p.4 Lavender, Sea - N3, p.4

Leather Leaf - N1, p.6; N2, p.4 Lily-of-the-Valley, Wild - N1, p.7 Lily, Yellow Pond - N2, p.4 Lovage, Sea - N3, p.4 Lupine, Wild Blue - Nl, p.7 Maple, Mountain - N4, p.4 Maple, Red - Nl, p.5 Maple, Striped - N4, p.4 Moosewood - Nl, p.7 Mustard, Black - N1, p.7 Oak, Red - Nl, p.7 Orchid, Bog Rose - N2, p.4 Pea, Beach - N3, p.4 Pine, White - N4, p.4 Pitcher Plant - N2, p.4 Plantain, Seaside - N3, p.4 Plants of the Ocean Front - N3, p.4 Rhodora - N1, p.3; N1, p.7; N2, p.4 Rosemary, Bog - N2, p.4 Rosy Bell - N1, p.7 Sarsaparilla, Common - N1, p.7 Seawall Heath in Early June - N2, p.4 Shadbush - N1, p.5 Solomonplume, Bog - N2, p.4 Solomon's Seal, False - N1, p.7 Star Flower - N1, p.7 Strawberry, Wild - N1, p.6 Sundew, Round-leafed - N2, p.4 Trillium, Painted - Nl, p.7 Violet, Northern White - N1, p.5 Wild Flowers of Early May - Nl, p.5 Willow - Nl, p.5 Witch-hazel - N4, p.7 Yew, American - Nl, p.6

#### Mosses and Lichens

Cladonia - N4, p.4 Lichen, Reindeer - N2, p.4

Moss, Sphagnum - N2, p.4 Usnea - N4, p.4; N5, p.7

#### Fungi

Bracket fungus - N4, p.3 Chantarelle, Orange - N4, p.2 Clavaria fusiformis - N4, p.2 Hydnum, Bear's Head - N4, p.3 Laccaria ochropurpurea - N4, p.2 Mushrooms, The Pagaent of the Fall - N4, p.2
Polyporous cinnabarinus - N4, p.3
Puff-balls - N4, p.3

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