NOVA SCOTIA MUSEUM of SCIENCE



VOL. 2 NO. 1 MARCH, 1957

DEPARTMENT OF EDUCATION

MINISTER

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EDITORIAL

"You Made Us What We Are Today"

An old definition of museums goes somewhat as follows: "An institution for the collection and preservation of those objects which best illustrate the phenomena of nature and the works of man and the use of these in the culture and enlightenment of the community". That last phrase, "use of these in the culture and enlightenment of the community", poses a question. Do we decide what "use" shall be made or does the "community" decide? It has often been remarked how various our museums are and sometimes it seems that they individually reflect the preferences or even idiosyncrasies of their curators or directors. Though this may be partly so, the degree to which the community accepts, uses, patronizes what is offered decides in great measure whether the service is to be expanded, barely maintained or discontinued. This process of following the public may go so far that the museum develops characteristics which were not deliberately planned, and the museum itself may evolve a character which could not have been fore-This is not all bad, and, where it happens, is more likely to indicate that the museum is alive and useful than that it has no mind of its own. Sometimes, the preferences of the public are healthful correctives for our own opinions which may be too much influenced by closeness to the material or love of the subject involved.

For ourselves, while we shall continue to offer what we think our "community" should have, we know that our judgment will be influenced by what we discover is appreciated and even demanded. In short, in the words of the heading, "You made us what we are today", and we accept the results and hope you will make very much more of

us in the future.

D. K. Crowdis

Cover subject: The photo shows a 10" mirror blank in the process of grinding. The making of one's own telescope is a fascinating hobby and one that is growing in the Halifax area. During the past two months a group of 12 enthusiasts has met at the Museum one evening every week to learn the art of lens grinding. The class, which was sponsored jointly by the Museum and the Halifax Centre of the R.A.S.C., was given instruction by a member of the Museum's staff. It is hoped that similar classes will be formed in the future.

THE PLANETARIUM

The Newsletter of December, 1955, carried a cover picture of a model of the planetarium dome and a note to make known the fact that we had a planetarium. Now, over a year later, we can report that the planetarium has been a popular and busy place ever since its opening. The first official demonstration was given to the Alumnae of the Children's Hospital in late February, 1956. Regular 3 p.m. showings began in early July.

During the first year 4,000 visitors, including 325 students from rural high schools, have come to see the planetarium showing and to tour the exhibits. School classes have come by appointment in the morning and afternoon, and in the evening groups of guides, scouts,

cubs, and church and social clubs have kept the staff busy.

Because of the increasing interest and demand, the Museum has been open regularly on Friday evenings since February 1st. regular times for the planetarium showing now are Tuesday and Thursday at 3 p.m., Friday at 8:15 p.m., with other showings by appointment.

NOVA SCOTIA AQUARIUM SOCIETY

The interest in tropical fish shown by hundreds of Halifax citizens, of all ages, during the last half dozen years has culminated in the formation this winter of the Nova Scotia Aguarium Society. These enthusiasts had been encouraged and stimulated by the help and advice given to them individually by the Museum's biologist, Mr. Victor Paskevski. The time devoted to such help increased to the point where it seemed advisable to try to deal with the inquiries in a group, instead of separately, and so this fall Mr. Paskevski gave a series of lectures on "Aquarium and Tropical Fishes". The lectures were open to the public and were well attended.

At the conclusion of the series, a committee was appointed to draft a constitution and regulations for a society. On January 11th the first meeting was held, at which the proposed constitution was approved and the Nova Scotia Aquarium Society formally organized.

The main purpose of the Society is "to foster friendly relations among aquarium enthusiasts and to co-operate with the Nova Scotia Museum of Science in this endeavour".

At present the affairs of the Society are being directed by the

Organizing Committee, namely:

Mr. C. L. Illsley, President

Mr. Keilor Bentley Miss Eveleen Burns Dr. Gerry Davis

Mr. D. K. Crowdis

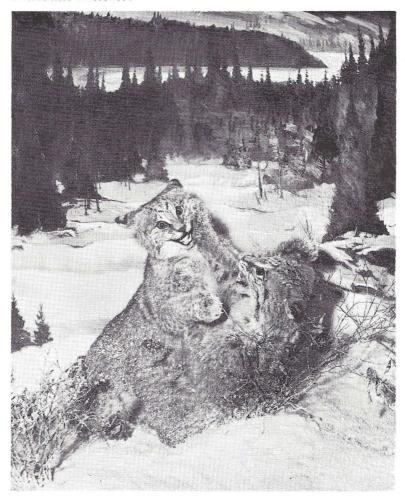
Annual membership fees: Adult, \$2.00; Junior, \$1.00.

Mr. V. Paskevski

Dr. D. C. Chipman, Treasurer Dr. Derek Schofield, Secretary 16A St. Margaret's Bay Road

Armdale, N. S.

Museum Exhibits



NOVA SCOTIA WILDCAT

The habitat group illustrated in this issue of the Newsletter represents two adult males of the Nova Scotia wildcat fighting in a snowy, moonlit setting. Museum taxidermist Lloyd Duncanson collected both specimens at Gaspereau, Kings County, and prepared the exhibit with the assistance of Edward Longard, also of the Museum's staff, while the background was painted by the Lunenburg artist, Joseph Purcell. This exhibit is unique in being the first to utilize a new type of background dome of fiberglas and plastic, designed and molded by Messrs. Longard and Duncanson.

Our wildcat may be distinguished from the better known bobcat or bay lynx (Lynx rufus) of the eastern United States and is usually treated in the literature as a geographical race (Lynx rufus gigas). Other authors regard the Nova Scotia cat as a separate species, listing it as

Lynx gigas.

Although never displaying a pleasant disposition, the wildcat is none the less a very beautiful animal, in habits and bearing not at all unlike the ordinary house cat. It is several times larger, however, and mature individuals probably average 25 lbs. or more in weight. About 40 lbs. may be regarded as the maximum, and reports of larger ones must be viewed with suspicion. A number of such reports investigated on behalf of the Museum in recent years turned out to be gross exaggerations. An old 38 lb. male killed with bow and arrow by Lloyd Duncanson in the Black River district of Kings County, March 1955, is the largest ever submitted to the Museum. Contrary to popular belief, the Nova Scotia wildcat averages larger than the Canada lynx, with which it is commonly confused. The true lynx is extinct or at least exceedingly rare on the Nova Scotian mainland. but is reported to be the commoner of the two on Cape Breton Island. Neither species is known to attack man except in defence, and then only as a last resort.

We believe that the wildcat is actually much commoner in the forests of Nova Scotia than is generally supposed, but, like the cougar and other members of the cat family, it possesses an incredible ability for keeping out of sight. The wildcat's main food is rabbits, although it will attack anything from small birds and mice to full grown deer. Most of those examined at the Museum have had the remains of porcupine quills embedded in their mouths. Rather than being wholly destructive, it seems likely that the wildcat is an acceptable member of the forest community, helping to keep the rabbit population vigorous and stable. Also, the population level of deer in this region precludes

any assumption that wildcats are taking a serious toll.

Nova Scotia wildcats in captivity can usually be seen at the Department of Lands and Forests Wildlife Park at Shubenacadie.

(See also D. A. Benson's illustrated commentary on the wildcat, N. S. Journal of Education, Series 5, Vol. 4, No. 2, p. 41. March, 1955).

D. C. F.

SCHOOL LOANS

A mimeographed news sheet describing Museum activities and services, together with illustrated list of school loans available from the Museum, was distributed to schools in the city and vicinity early in the fall. The response from teachers wishing to borrow exhibits has kept many of them out on loan continuously.

SUMMER NATURE CLUB, 1956

By Marilyn Jenkins

Earth, sky and water led us a merry chase this summer. We tried to challenge all of Mother Nature's works at once. We nibbled briefly at as many "ologies" as we could fit in, hoping to catch some feeling of the "whole forest". Our ambition was to paint pictures ecological in our memories.

We began with the shore. Deep tide pools fringed with slippery seaweed opened new silent worlds as colourful as Picasso's and stranger than fiction. Bristling sea urchins, mauve and pink starfish, delicate furry tubularia, laceworks of bryozoa and flowering anemonae crowded together in the icy water. We gathered a harvest of material for our own collections, we tagged them with unpronounceable names and glued them onto sheets of coloured cardboard, hoping that some fragment of shell or seaweed might recall again the beauty of its native home.

A very mucky bog challenged us next. It may have won. I found myself swimming in the inky, fuming water before the day was out and I was not alone. We made leaf tracings, saw lots of interesting swallows, warblers, chickadees and of course the inevitable red-winged blackbirds, collected and pressed typical plants, waded a stream for insect larvae, water pennies, beetles, leeches, etc., and then tried to wash off the layer of muck in a nearby lake. The muck came off, but

the memory of it lingers.

A sudden ecological jump found us next setting out through the cool half-light of a virgin forest. The gentle rain was caught over our heads by the thick canopy of leaves. Small creeping plants mingled with ferns and mosses beneath our feet, making a soft springy carpet, a welcome relief from bouldered beach and slimy bog. We filled our plant presses and butterfly bottles and watched a variety of birds. A quick swim in a still, gray lake encircled by sandy beaches ended a very unusual and special day.

Back at the Museum we learned about stars and planets and traced their paths in the planetarium. We memorized constellations and

listened to their mythical histories.

On our last field trip we attempted to bridge the gap between bog and forest. We visited a farm whose outlying fields were returning to the natural state. Seedling pines, maples, birches and poplars were pushing up between the heath plants, bushes and shrubs. Birds, butterflies and blueberries abounded. An older forest which skirted the fields offered variety and a path to the lake where we swam.

Then at the Museum we held closing exercises. We awarded prizes and asked the children for criticisms on the summer's activities. None was unfavourable, although we knew there must have been many

flaws.

We had hoped to offer a new look at old Mother Earth, a chance to get really acquainted with her ways. The future will show whether the habit-forming seeds we tried to sow took root and survived.

BIRDS OF THE

COLE HARBOUR - CHEZZETCOOK AREA

By L. B. Macpherson and C. R. K. Allen

The purpose of this account is to draw attention to the wealth of bird life that becomes apparent only when an area is thoroughly and repeatedly examined. Our area is to the east of Halifax and follows the road along the coast from Cole Harbour to Head of Chezzetcook, passing through Lawrencetown, Three Fathom Harbour and Seaforth, with side trips on the inland roads and seaward to Fox Island, Wedge Island and Chezzetcook Range. Sometimes only two or three, sometimes four or five of us make the trip, or part of it, which may take two to seven hours and cover up to forty miles. As a group we are strictly amateurs, some with years of experience, others enthusiastic beginners. We watch birds largely for recreation and pleasure but any data on occurrence, numbers and habits that we gather (we all keep careful notes and records) is profit that accrues in knowledge of Nova Scotia birds.

From September to the end of December, 1956, we visited the area more than thirty times. Some 120 species were seen during this period; 48 species one day, as few as 15 on others. Some of the rarities and strays we have seen — Western Kingbird, Snowy Egret, Mockingbird, Yellow-breasted Chat — sometimes lead us to think that sooner or later everything will turn up there, but in our more rational moments we realize that it is a restricted sort of habitat, most suitable for sea

birds, shorebirds and water birds in general.

Some of us saw our first grebes in this area, for the little Horned Grebe is quite common inshore, while the larger Holboell's Grebe is sometimes seen farther off. On the brackish inlets an occasional Piedbilled Grebe also occurs. During the fall and winter, too, loons are common. For a time in October we were beginning to mistrust our eves in this regard — nearly every loon was a Red-throated, a bird few of us had seen before — but by the end of November the familiar Common Loon, in his winter plumage, again became the dominant bird. A few Dovekies and two Black Guillemots (in "white" winter plumage) have been observed. Sometimes Gannets appear, wheeling in wide circles over the open ocean and diving spectacularly into the waves, but it takes a good binocular or even a telescope (and good visibility!) to make this observation. The area is attractive to Great Blue Herons, as we have counted 80 there in a day in September (50 in view from one vantage point). Their number drops to about 20 in October and only 5 or so were to be seen in November, the last on the 18th this year.

Cole Harbour is the feeding ground of two or three hundred Canada Geese, but they usually spend the day a half-mile or so at sea, out of the range of gunners. We have noted 18 species of ducks and consider ourselves lucky this fall to have seen the Ruddy Duck (up to 13 in

one day in the latter half of November), Baldpate (a flock of more than 100 during most of October and November), Pintail (11 was the greatest number at once), Bufflehead (up to 50 at one time), and one Shoveller. The mergansers are always in evidence, the Redbreasted seeming to be commoner from October to February, with the American Merganser becoming common in March and April. at least, are our impressions, based on two years' observations. far we have looked in vain for the little Hooded Merganser.

A surprise for us this fall was the appearance in some numbers of the Coot, a bird generally considered to be a great rarity in Nova The question now arises: Is the Coot really a rarity or is it that bird-watchers have until now been rarities in this area? raises still another question: How many other birds now considered mere stragglers in Nova Scotia will provide similar surprises when their territory is explored? With the growth of the Nova Scotia Bird Society and the increasing enthusiasm for field trips and home feeding stations. many surprises of this sort will probably occur during the next few years.

The coastal sections of the whole area are excellent places for So far we have seen 20 species there and have accumulated data on the numbers and times of occurrence of several of these. Black-bellied Plover was commonly present this year from the first days of August until about November 17th. Two of the rarer Golden Ployer were also seen in November. The Greater Yellow-legs was in evidence during the same period and reached its greatest concentration during the latter part of October, when it was not unusual to see 70 or more in a day. Their last appearance was on November 25th, when three were observed. The flashing Willet, like many shorebirds happily on the increase, is near the northeastern limit of its range here. a dozen or more pairs breeding at the head of Chezzetcook Inlet and disappearing for the south by the end of August. A winter delight for the bird-watcher is the Purple Sandpiper, of which we saw 64 at once on December 22nd on the rocky, seaward end of Wedge Island.

A good many Herring and Great Black-backed Gulls frequent the area. This fall it has also been a favoured spot for Ring billed Gulls and for a visitant to our coasts, the Black-headed Gull of Europe. many as 10 of the latter have been seen at once at West Lawrencetown and on that occasion one Bonaparte's Gull was with them, thus providing a rare opportunity for comparison of these closely similar species. (For variety and numbers of gulls, however, Halifax Harbour and the city dump are the places of choice. Nine varieties are wintering there.)

Birds of prey are not plentiful. We have seen the Short-eared Owl on a few occasions, as well as Bald Eagles and small numbers of the commoner hawks. A pair of Ospreys have nested for some years at Lawrencetown Beach, but there are more in the area, as we have seen eight at once plunging into the surf and, if lucky, emerging with fish clutched in their talons. The last appearance of an Osprey this year was on November 16th.

The land birds are mostly those one would expect to see in a coastal area. The spruce woods that run down to the sea are the haunt of the Canada Jay, both kinds of Chickadees, Golden-crowned Kinglets and Red-breasted Nuthatches. For a part of the year the coastal marshes hold a goodly population of Savannah and Sharp-tailed Sparrows. The latter disappear by the end of August, but the Savannah Sparrow continues to be common for some time and a few appear to attempt to winter over. Three were seen on the 5th of January, but none was found on the 26th. We were very pleased to observe one Ipswich Sparrow (a distinctive race of the Savannah) on December 2nd. Mourning Doves migrate through the area, as many as six in a day being observed from the 15th to the 25th of October. It is also a good area in which to see Pipits, Horned Larks, Lapland Longspurs and Snow Buntings, as all of these species seem to find favoured foods on exposed dunes and headlands. It is of interest to note that a fair number of Song Sparrows winter in the same bleak and wind-swept habitat.

This has been only a bare outline of the observations that we have made and the pleasure that we have obtained. It is presented as an example of the variety of birds that can be seen in any area if close attention is paid to it. There are probably more such unexplored areas in Nova Scotia than in the other settled parts of Canada, for the number of bird students here has always been small compared to that in other regions. Your local area is therefore, in all likelihood, one that has never been thoroughly studied and may yield just as interesting and valuable results as ours if you will only take the time to examine it

carefully and often.



BIRD WATCHERS — From left to right: C. R. K. Allen, Ian Macpherson and L. B. Macpherson. (Photograph by Willett Mills).

NEW INTERGLACIAL FOSSIL ACQUISITIONS

By William Take

Recently the Museum acquired, through presentation, an interesting series of interglacial Pleistocene fossils. The items include a hickory nut, a beech nut, a gale seed, and, of most interest, a piece of poplar (?) that had been gnawed by a beaver. These remains have been dated geologically and by radio active "carbon 14" methods. The results indicate that they grew during the last interglacial period and were probably buried, and hence preserved, by the last great advance of the glaciers over Nova Scotia. This ice advance probably occurred some 29,000 years ago, the ice lasting for thousands of years before it fully retreated from the region. The fossils are interesting also in indicating that the climate must have been very similar to our own.

This collection is a welcome addition to our growing Pleistocene collections. The specimens were presented to the Museum by Mr. C. O. Campbell through Dr. J. E. Blanchard, Associate Professor of Geophysics, Dalhousie University. Mr. Campbell, geologist for National Gypsum (Canada) Ltd., discovered and recognized the significance of the specimens while examining the excavations for the recent large gypsum development at Dutch Settlement. The Museum appreciates his interest and generosity. It is hoped to have the specimens

on display as soon as they have been protected from decay.

News Notes

The Royal Astronomical Society of Canada, Halifax Centre, is now holding its monthly meetings at the Museum. This fall and winter the members have been busy with the construction of a four inch reflector telescope. Those interested in astronomy are invited to attend the meetings.

The Antiquatian Club of Halifax sponsored a showing of antique glass, china, silver and furniture in the Citadel Hill Branch during the week of October 7, Museum Week across Canada. The exhibits, all loaned by discerning collectors in the Halifax district, specialized in porcelains, old prints, silver and Waterford and other old English and

Irish glass.

The Citadel Hill Branch was fortunate in having a most unusual exhibit from Australia on display for three months, November to February. This was a travelling exhibition of Australian aboriginal culture arranged by the Australian National Committee for Unesco and is the most comprehensive display of its kind that has ever been assembled. It received much attention from the hundreds of visitors who came to the Museum while it was on view. Classes from city schools and regional high schools also made special trips to the Museum to study the exhibit.

The recently organized Free Divers Club has been holding its meetings at the Museum. The group, originally interested in diving as a recreation, plans to make its services available to such institutions as the Museum. In our case it is very likely that our marine biological

collections will benefit from this co-operation.

Edward Longard, our Liaison Officer, has been busy giving illustrated talks on the work of the Museum to interested groups. He has shown his collection of colour slides to the Central Consolidated Teachers' Study Club at Tangier, Tower Road Home and School Association, Bayers Road Baptist Church Men's Club, and to the Musquodoboit Rural High School Area Teachers' Study Club, which came to Halifax for a tour of the Museum.

Four members of the Museum's staff have taken part in Max Ferguson's T.V. program "Gazette" during the past few months. Mr. Crowdis appeared to speak with reference to the Australian exhibit, and again to describe dinosaurs and methods of making miniature group exhibits at the Museum. Mr. Paskevski exhibited several tanks of tropical fish and discussed their care and habits. Mr. Carrigan celebrated New Year's Eve by telling about the planetarium. Mr. MacLaren exhibited historical relics for a "What is it" program.

The unique collection of antique china, furniture, and other varied items, gathered together by the late Percy Inglis in his home at Mahone Bay was photographed with colour film by Edward Longard in November. A set of minature slides provides a fairly comprehensive record of the hundreds of pieces of china, which in some rooms are hung on the walls from ceiling to floor, and also of many beautiful old clocks,

tables, chairs and curios.

AUDUBON SCREEN TOURS

Four out of five Audubon Screen Tours for the 1956-57 season have already taken place. At the end of September Bert Harwell visited Shelburne, Yarmouth, Greenwood and Halifax with his film "Forgotten Country". Mr. Harwell delighted and astonished his audience with his imitations of bird calls and songs. Anyone who heard him will not forget his unique performance.

Our next lecturer was Robert C. Hermes, who brought the first Audubon Screen Tour to Halifax four years ago, when he showed his "Bonaventure Diary". This year he visited Middleton, as well as Halifax, at the end of November and presented his film "Between the

Tides".

G. Harrison Orians came to Nova Scotia for the first time in January and showed his beautiful "Great Smoky Skyland" at Halifax and Bridgewater. His audiences rambled with him through the Great Smoky Mountains area of North Carolina, enjoying its scenery and wild life.

Dick Bird, one of the few Canadian Audubon lecturers, returned to Halifax in February with his excellent film "Alberta", which included shots of local rodeos, oil wells, the famous Calgary park with its life-size models of pre-historic dinosaurs, the Royal Canadian Mounted Police, as well as the varied scenery and wild life.

Calendar

- AUDUBON SCREEN TOURS A yearly series of five colour films, with commentary by the photographer-naturalist. Sponsored by the Audubon Society of Canada and the Nova Scotia Museum of Science. Information may be obtained from the Museum Office.
- NOVA SCOTIA BIRD SOCIETY Formed January 26, 1955. President, Robie W. Tufts. Secretary-Treasurer, Willett J. Mills, 100 Spring Garden Road, Halifax. Membership fee, \$1.00 per annum.
- ROYAL ASTRONOMICAL SOCIETY OF CANADA HALIFAX CENTRE At the Nova Scotia Museum of Science, 8 p.m. last Tuesday of the month. Secretary, Mrs. Dean Naugler, 18 Ralph Devlin Drive, Halifax. Annual fee, \$3.00.
- DAWSON GEOLOGICAL CLUB At the Geological Rooms of Dalhousie University, Coburg Road and Oxford St. Fortnightly, Monday at 8 p.m., January to April inclusive. In the fall, three or four field trips. Hon. President, Professor G. V. Douglas. Annual fee, \$1.00.
- HALIFAX WEST FISH & GAME ASSOCIATION Meets at call of President.

 President, P. R. DeYoung. Vice-President, Joseph Reardon. Secretary,
 F. J Munro. Chairman of Membership Committee, Fred Boutilier, Jollimore,
 Halifax Co., N. S. Treasurer, E. J. Vincent. Annual fee, \$1.00.
- NOVA SCOTIA AQUARIUM SOCIETY At the Nova Scotia Museum of Science, 8. p.m. second Friday in every month, except July and August. Secretary, Dr. Derek Schofield, 16A St. Margaret's Bay Road, Armdale, N. S. Membership fees: Adult, \$2.00; Junior, \$1.00 per annum.

Museum Hours

Science exhibits, office and library, Spring Garden Road

MONDAY to FRIDAY, inclusive
FRIDAY NIGHT
SATURDAY
SUNDAY
OFFICE HOURS8:30 a.m. to 5 p.m.

Historical exhibits, Citadel Hill Branch

EVERY DAY, including Saturday and Sunday......9 a.m. to 5 p.m.

Copies of each number of the Newsletter are available at the \mathbf{M} useum at 10c each.

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