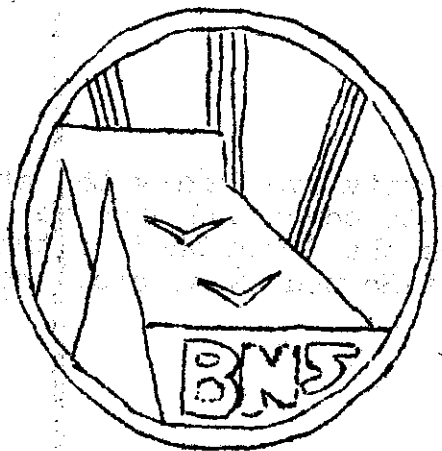
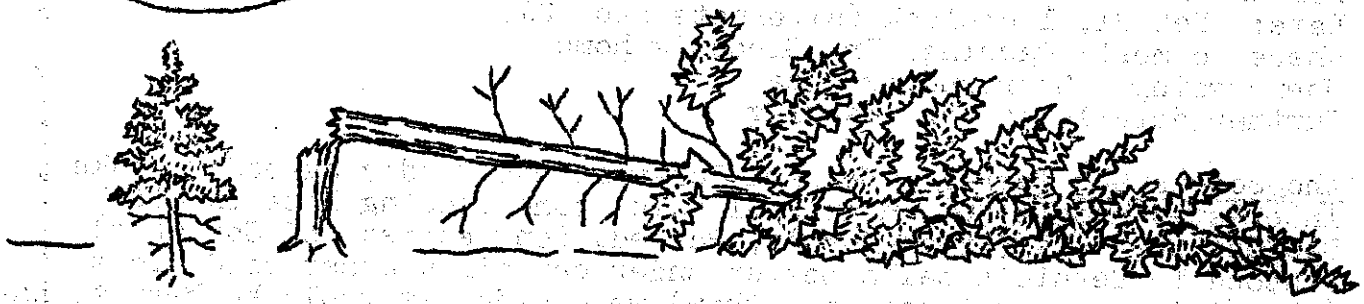


BOGAN



# BLOMIDON NATURALISTS' SOCIETY NEWSLETTER



Vol. 7 No. 4

December, 1980

The BNS Newsletter is published on the equinoxes and solstices.

Editors: Jean Timpa and Larry Bogan

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The primary objective of the Society shall be to encourage and develop in its members an understanding and appreciation of nature. For the purpose of the Society, the word "nature" will be interpreted broadly and shall include the rocks, plants, animals, waters, air and stars.

From the BNS Constitution

### BNS Executive:

President: Peter Austin-Smith, Wolfville, N.S. 542-2109

Vice-President: Sherman Williams, Avonport, 542-5104

Secretary: Peter Armstrong, Wolfville, N.S. 542-5852

Treasurer: Roy Bishop, Avonport 542-3992

### WINTER PROGRAM

(mark your calendar now!)

### Evening Meetings of the Blomidon Naturalists

Third Monday of the Month

8 p.m. Room 241, Beveridge Arts Center

Acadia University, Wolfville, N. S.

### January 19th

Subject: The Terns, Puffins and Petrels of Machias Seal Island

By: Reg Newall, Masters student, Acadia University  
- illustrated with slides

### February 16th

Subject: Some Small and Not So Small Mammals of Nova Scotia

By: Tom Hermann, Prof. of Animal Ecology, Acadia University  
- illustrated with study skins, slides and living animals!

### March 16th

Subject: Sable Island

By: Dr. Tony Locke of the Canadian Wildlife Service  
- illustrated with slides



## FIELD TRIPS

1. Eagles, Ravens and Caged Birds - Cyril Coldwell  
Sunday morning, Jan. 25, meet at the Acadia University Gym Parking Lot at 10 a.m. We will proceed to the Gaspereau Valley to count and observe Bald Eagles (13 were seen on Jan. 1st) and to see the Raven banding trap maintained by Cyril, and the injured birds (Great-Horned Owls, etc.) he attempts to return to the wild.
2. A Winter Nature Walk - Dr. Merritt Gibson  
For cross-country ski and snow-shoe buffs!  
Date: Feb 21, 1 o'clock (alternate Feb. 22)  
Where to meet: Canning. Dr. Gibson's home  
Where going: Surrounding area  
Further details at next meeting.
3. Whooooo's Out There? - Bernard Forsythe has kindly agreed to take interested people out on an "owl walk" some evening late in March. Because the owls (Great-Horned, Barred, Long-eared and Saw-whet) respond to Bernie's calls better under certain weather conditions (the rising temperatures of a thaw) we decided it would be best to have a "spur of the moment trip". Those interested in going please call 542-5678 right now before you forget! and I will keep a phone list of people to call with information as to the where and when of this outing. Be sure you dress warmly.

Please remember that our meetings and field trips are open to everyone. Bring a friend with you and introduce them to BNS!



## ACKNOWLEDGEMENTS

Since October we have had a number of invaluable helpers who deserve special thanks for their time and talent in order to keep BNS programs going: To Dr. Kenneth Harrison for yet another marvelous browse through the mushrooms of the Kentville Ravine (Oct. 4); to Susan Rotroff for coming all the way over from Mt. Allison to show us her Greek Wild-flower pictures (Oct. 20); to Ross Baker and Harry Brennan for a truly outstanding slide show of N. S. birds and flowers (Nov. 17); to Lynn Dixon for her fine presentation of the Kings County Natural History Project (especially the brain teasers!) (Dec. 15); and to all who have made this Newsletter possible.

## A WELL-MERITED TRIBUTE

R.W. Tufts  
Wolfville, N.S.  
Dec., 1980

Those of our readers who were privileged to know Louise Daley, of Digby, will be saddened to hear that she died early in December. Known widely throughout the western end of the Valley as the "Bird Lady", she had been for many years caring for young and injured birds that were brought to her. I recall one occasion when a brood of newly-hatched, featherless Barn Swallows were presented. Under her talented and dedicated care they all survived. I have a snap-shot of them perched on her wrist just before they were released. Only those who have had some practical experience in this field can appreciate the time and unlimited patience that was required in such an undertaking.

Miss Daley will be missed by the host of friends and acquaintances she had acquired throughout a long life.

An application for a project grant to complete the manuscript for the natural history guide was submitted last fall to the Canada Community Development Projects program. Our project application was approved recently, and we now can employ 3 young people for 16 weeks beginning January 5th. At the time of this writing, we are extremely pleased to report that Lynn Dixson will return as our Project Manager, and Twila Robar also has agreed to join our staff. The many talents of these two people, together with their biological backgrounds, augurs well for the success of the guide.

As before, the project will be headquartered in Patterson Hall (Biology Department), and for providing us with this space, we are grateful to Dr. Merritt Gibson.

BNS LOGO

The logo on the title page is that selected by the Executive with modifications as suggested when it was presented to the membership during our November and December meetings. At the November, the logo stimulated quite a bit of discussion, and if you have some opinions or observations you wish to share, please relay them to our executive. As was pointed out at the December meeting, we can change or modify the logo at any time at the pleasure of the membership.

L. Bogan

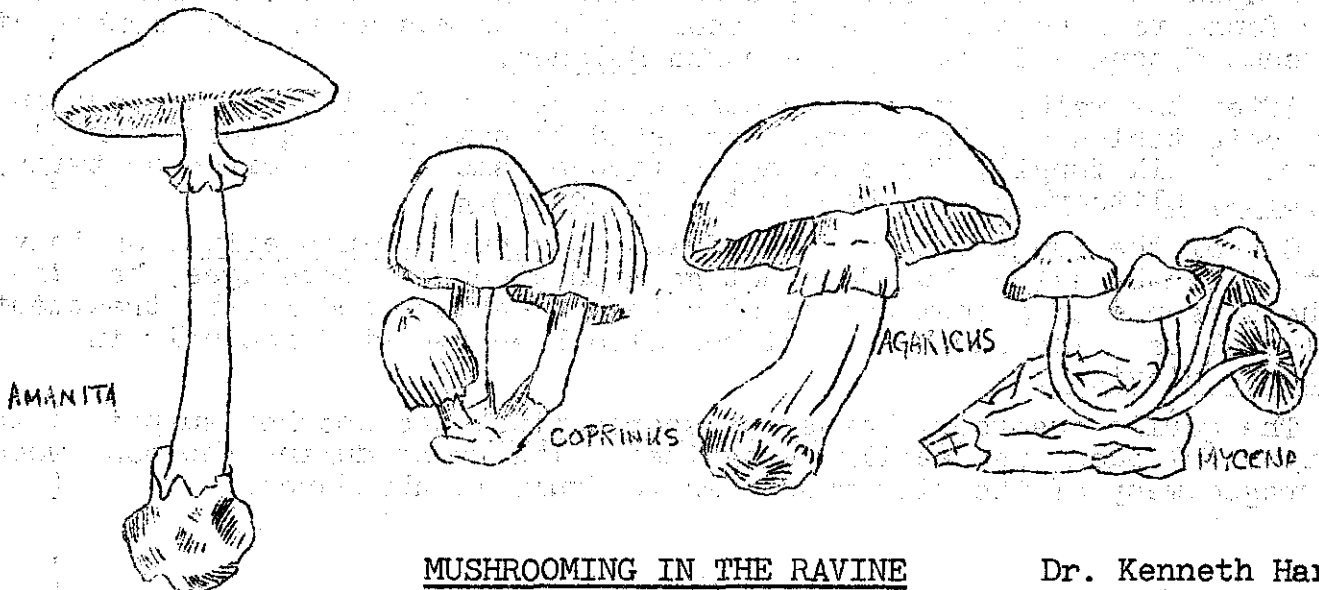
DUES

This Newsletter will be sent to those members who are in good standing. New members, or those wishing to rejoin, should send their name and address and \$4.00 (\$1.00 for members under 16 years of age) to Roy Bishop, Avonport, N. S. BOP 1B0

BNS NEWSLETTER DEADLINE

March 21

O come all ye BNS members and WRITE! Please! Our contributions are at an all time low. Send articles to Jean Timpa, Box 1382, Wolfville, N.S. BOP 1X0, or give them to Jean or Larry Bogan at meetings, or call 542-5678 for any quick, last minute observations.



MUSHROOMING IN THE RAVINE

Dr. Kenneth Harrison  
Kentville, N. S.

The weatherman reported on the possibility of showers for Saturday, the 4th of October, but somehow it was delayed, and some 40 interested people arrived at the Picnic Grove, Agricultural Research Station, Kentville around 1:30. The temperature made hiking comfortable, and everyone started to look for fungi large and small, exotic and common place.

It was pointed out that anyone who missed the roads out of the "Farm ravine" could reach the Kentville-Wolfville Road by following the trail down stream along the brook for about 1 mile; however, no one appeared to become confused, and all returned to their starting point in good time.

## Mushrooming in the Ravine, cont.

The ravine is a remarkable feature to have within a town's limits. The larger pines and hemlocks date back to 1755 at the time of the expulsion of the Acadians. There are also spots in the duff on the forest floor that indicate that a fire occurred a long time ago. In addition, the flats along the brook form areas where maples, elms, willows and alders thrive, so that there is a diversity of habitats suitable for a great range of fungi. It is not an undisturbed area, for it has been necessary to maintain a fire road accessible to fire protection vehicles, and many of the forest giants that have completed their life cycle have had to be removed after their death. In 1927, when first studied intensively, these rotting trunks made wonderful habitats for innumerable wood rotting fungi, and it was possible to find great baskets of exotic fungi on every trip through the ravine.

Saturday's trip was interesting in many ways. Several family groups were there, and it was a delight to see the keen-eyed interest of the younger members. They were able to spot and collect many species overlooked by older people.

Some of the fungi found during the afternoon were a tiny group of bird's nest (crucibulum vulgare) fungi on a small twig. There were many other things growing on twigs. The little, reddish lumps on dead poplar and willow limbs were Stereum rufum. (Modern names are often different because the rules which regulate naming of fungi did not become fixed by international conferences until 1935.)

One of the interesting discussions was held when the deadly Destroying Angel (Amanita virosa) was found, and it was possible to compare it with specimens of the field mushroom (Agaricus Campestris) and the woods mushroom (Agaricus Silvicola) also known as a Horse mushroom when found in woods.

Another interesting find was a parasite on an underground fungus (Cordyceps capitata on Elaphomyces Sp.). The genus Cordyceps is most commonly found as a parasite on various insects.

Many species of Russula were found; also Payillus involutus, and the abortive stage of Clitopilus abortivus, those strange white lumps that have recently been shown to be mixtures of the Clitopilus and Armillaria Mellea mycelium.

The leader was stumped by several finds. One was a slender, pink, bell-shaped fungus that could have had either pink or white spores. It was later found to have a clear white spore print so was an unusual member of the genus Mycena and not a pink-spored Nolanea.

After the walk, a very respectable number of fungi were laid out on the picnic tables and the leader was asked to name Boletes (pore fungi), Lactarii (milk fungi), Thelephoraceae (tough, smooth ones often on twigs), Lycias, Clitocybes, and one or two Tricholomas.

One of the fungi that was found was Coprinus atrementarius, an inky cap that can be eaten, but does not go with alcoholic beverages, because of the presence of a chemical related to anti-abuse used in the treatment of alcoholics. The same chemical has also been reported recently in Clitocybe clavipes.

The garlic mushroom, Marasmius scorodoni, was another surprise, and its powerful odour was easily recognized. The rains during the past week encouraged many of the tiny mushrooms to fruit in abundance.

## JANUARY

" Then came old January, wrapped well  
In many weeds to keep the cold away  
Yet did he quake and quiver like to quell  
And blewe his nayles to warm them if he may;  
For they were numbed with holding all the day,  
An hatchet keene, with which he felled wood  
And from the trees did lop the needlesse spray."

Faerie Queen  
S. Spenser

The first field trip was to Boot Island early in April to check on the mortality from the crow roost during the winter months. Approximately 50 dead crows were found under the roost trees, which really wasn't very many when you consider that 25,000+ birds used this roost daily throughout the winter months. At this early date a few Black-backed Gulls were constructing nests on the high marsh, and Great Blue Herons were beginning to congregate in the spruce woods. The single Raven's nest contained 6 newly hatched young. Members of the biology department returned again on June 29 to band juvenile Black-back Gulls and check on other species nesting there. Both gulls were nesting over the entire high marsh area, but it appeared as if the Black-backs were to crowd out the smaller Herring Gulls. Other species using the Island were as follows: 3 Long-eared Owls, 26 Great Blue Herons, 100+ Double-crested Cormorants, a few crows, some Ring-necked Pheasants and a thriving colony of Bank Swallows.

On July 2, the group went out to Bon Portage Island for four days to band Leach's Petrels. A total of 425 birds were tagged along with several returns from previous years. The one pair of Osprey on the island was back at its usual site, caring for two newly hatched chicks. The occasional Grey-cheeked Thrush shows up at the banding site, so it is quite possible this bird does breed here. The same is true of the Fox Sparrow, although no nest has as yet been found.

We returned to Bon Portage again early in October for banding during the fall migration. Large numbers of passerines were tagged at this time along with 16 Sharp-shinned Hawks, 2 Long-eared Owls, and a few young Petrels that had not left the island for their life on the open ocean. New birds for Bon Portage were: 1 Prairie Warbler and 1 Pine Warbler.

The last trip of the season on Bon Portage took place early in November to check on the Saw-whet Owl migration, which seems to occur here regularly in late fall. Twelve of these little owls were banded, which is somewhat less than 1979, along with 2 Long-eared Owls and many of the smaller passerines too numerous to mention.

A number of trips were made to Brier Island to assist Ross Anderson at banding during the fall migration. Birders will be interested to know that two Western Tanagers were banded on Brier this Fall, extremely rare birds for Nova Scotia. Mrs. Robert Thexton tells me she had a brightly coloured male in her back yard in Wolfville this Fall (late October) for a while, so perhaps this is going to be the bird to look for during 1981.

## F E B R U A R Y

"One month is past, another is begun,  
Since merry bells rang out the dying year,  
And buds of rarest green began to peer,  
As if impatient for a warmer sun;  
And though the distant hills are bleak and dun;  
The virgin snowdrops, like a lambent fire,  
Pierces the cold earth with its green-streaked spire,  
And in dark woods, the wandering little one  
May find a primrose."

Feb. 1, 1842  
Hartley Coleridge

## ..... AND THE GRASS GREW TALL

Dec. 1980

Robie Tufts  
Wolfville, N.S.

Sometimes we birders, in our desire to promote the welfare of our feathered friends, act unwisely. Here is an example, details of which have just been given to me orally by an interested resident of the area concerned. It must have caused considerable embarrassment to those involved in the action.

Some years back a barren strip of land, which lies off the southern coast of New Brunswick known as Machias Seal Island, was established as a bird sanctuary under the terms of the Migratory Birds Act. I recall

...And the Grass Grew Tall, cont.

visiting the light-keeper there and inducing him to accept the responsibility of being the caretaker. It is a small island comprising some 8 - 10 acres of infertile soil which has since unrecorded times been the breeding centre of a large colony of Arctic Terns. It is, incidentally, one of the most southerly colonies of these birds, and the desire to give them the ultimate in protection was widely approved at the time.

The sanctuary was established mainly to provide protection for the nesting birds from visitors who came there to collect the eggs for food, a practice long known as 'egging.' But there was another problem with which the birds had to contend. For many years the island had supported a flock of sheep which, in the course of their feeding were known to destroy, by trampling, an undetermined number of eggs and young terns. After several years of annoying delay those responsible for the sanctuary were able to exert sufficient pressure to have the sheep removed, and for a period all seemed well.

As is customary the terns begin their nesting early in the spring. At that time the grass is short. But as the season advanced and without the 'lawn-mower' capabilities of the sheep, the grass grew tall. After hatching, it is customary for young terns to wander, and under the new prevailing conditions numbers of them were found hopelessly entangled in the long grass. I am advised that the sheep have not yet been brought back, and it appears that the terns, in their determination to cling to their ancestral home are gradually moving from the interior to the marginal beaches for nesting. No one seems to know just when the sheep were introduced to Machias, but it seems highly probable that until they were the terns breeding area was restricted to the rocky beaches to which they now seem to be returning, for it is an established fact that terns do not nest where the grass grows tall.

M A R C H

" The stormy March is come at last  
With wind, and cloud, and changing skies;  
I hear the rushing of the blast  
That through the snowy valley flies.

Ah! passing few are they who speak  
Wild stormy month in praise of thee;  
Yet though thy winds are loud and bleak,  
Thou art a welcome month to me.

For thou, to northern lands again  
The glad and glorious sun dost bring  
And thou hast joined the gentle train,  
And wear'st the gentle name of Spring.

And in thy reign of blast and storm  
Smiles many a long, bright summer day  
When the changed winds are soft and warm  
And heaven puts on the blue of May."

Bryant

SABLE ISLAND

(Part 2 of 3 parts)

by; John S. Erskine  
from the Journal of Education  
March 1955

My own view of this island does not include any probability that it has a long future before it or a long past behind it. In my second visit in 1953 I found that the storms of the previous winter had driven up on both beaches at the eastern end of the island large quantities of pebbles which had not been noticeable the year before. These were of quartz, quartzite, granite, felsite and less definitely classifiable igneous rocks typical of Nova Scotian glacial moraines. The pebbles were all somewhat water-rounded, but the larger ones usually showed a flattened "sole" suggesting a glacial past. Professor Cameron of Acadia was of the opinion that these stones had been through the glacial mill and were of types to be expected in local deposits. Of course, one cannot eliminate the possibility that wrecked ships may have been ballasted with such material from the mainland, but if so, many such ships must have been wrecked along

## Sable Island, cont.

some 10 miles of beach, all of them ballasted with the same types of rock. With this reservation, the origin of the island as a glacial moraine is supported, since no ocean current could have swept together such large pebbles. However, the accepted dating of the glaciation of Nova Scotia is under criticism, so that we must describe the life of Sable Island as having been "post-glacial" without attempting to assign to it more definite dates.

A moraine, such as this island with its supporting bank must have been, would have been reduced to sand in the course of centuries of storms in this exposed position, and then it would have been cut down gradually to below the level of the waves. It is possible, but not probable, that Sable Island may have been submerged during the period from 500 A.D. to 1100 A.D. when the sea stood more than fifty feet higher than today, but it would have emerged again when the level was lowered so that the top of the bank was again acted upon by the waves.

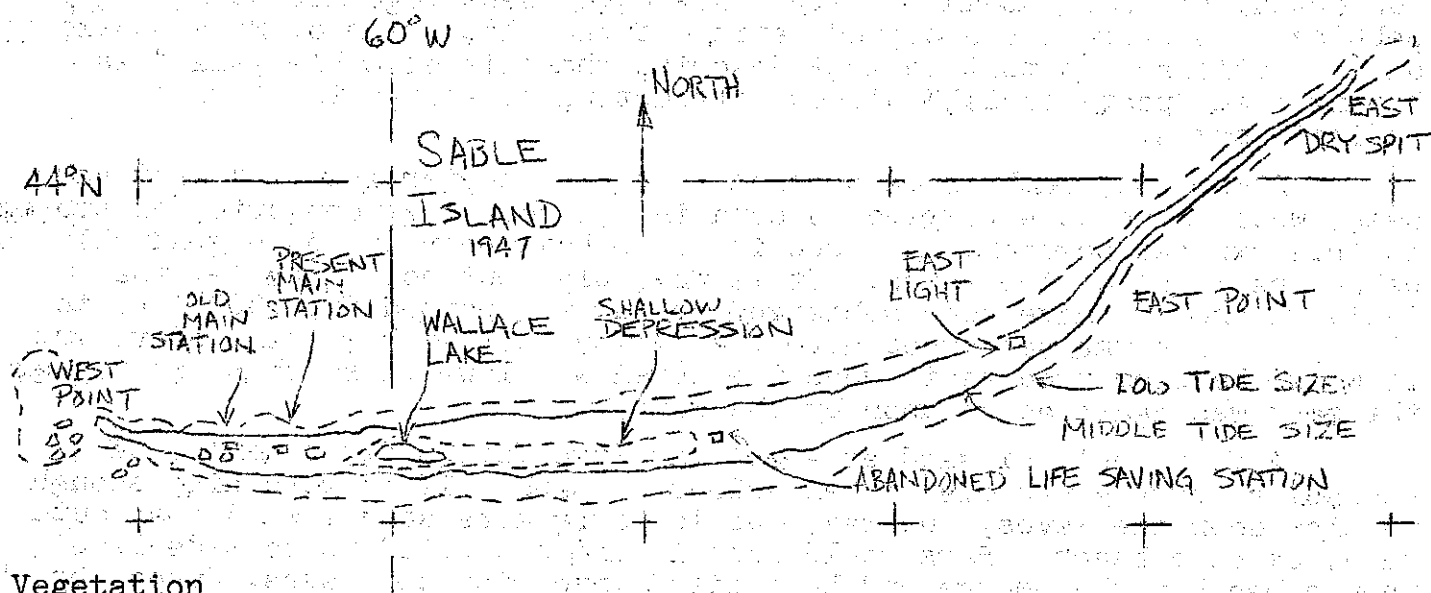
A flat table of sand at about the five-fathom depth would, of necessity, have given rise to an island of sand. If it were high enough to slow down the waves, the waves would carry more sand inward than outward, as on a beach. Bars would roll inward and build up to tide-level. Then a beach would emerge and be drifted into ripples, waves, dunes, by the action of the wind. So the island would emerge like an atoll of sand, highest at the outer edge parallel to the edge of the submerged sandbank, holding in its centre a lake, at first of the original depth of the surface of the sandbank but slowly filling up. The prevailing westerly winds would tend to drift the island eastward, but the average force of the waves would be least strong from the west, in which direction they have the shortest run so that the sea would tend to push it back again. The inward movement of the dunes of Sable Island, the narrowing of the island unmistakable on the charts, is a measure of the gradual attrition of the mass of sand upon which it rests. If the present island were to be erased in a night of storm, a few years of waves and wind would rebuild it in much its present form, for the emergent island must be less than one percent of the submerged bank. But, when the bank is worn down, the island must go with it, and all the sand-binding plants in the world will not stop it. We may expect in the next two centuries to see the dunes squeezing together until they meet and then are cut down to a fifty-mile bar below the level of the tide.

St. John's visit to Sable Island was inspired by Fernald's "coastal-plain hypothesis" which tried to explain an interrupted distribution of beach-plants from Maryland to Newfoundland. If the present fishing-banks had emerged above the water, they would have provided the desired stepping-stones of unglaciated land along the coast. This theory was at first welcomed by New England geologists who needed some such row of islands during the glacial period to explain why their coast had been then so little eroded. However, other geologists have insisted that the banks are too deep to have emerged, and Fernald himself was later obliged to push his coastal-plain back in time to the beginning of the Tertiary period when it was, in my opinion, not needed. If, however, our theory of the origin of Sable Island is correct (and such an island can result from a comparatively small lowering of sea-level) we should have expected many such islands to have emerged during the progressive lowering of the sea during the ice-age. Each of these would have been built up and cut down again during its brief thousand years, only to emerge again with the next lowering of the sea. Yet during their short lives they may have offered temporary footing for many sand-plants which the ice killed out on the neighbouring shore; while the present level of the banks, a few fathoms below the lowest level of the recent sea, is the state in which we expect Sable Island to remain in another thousand years.

St. John found confirmation for Fernald's theory, as he held it at that time, in the presence of southern species, such as *Centaurium* and *Centunculus* and Macoun's sponge, as well as of northern species. *Tillaea*, *Epilobium nesophilum*, *Potamogeton oblongus* and *Juncus bulbosus*, which were not known on the Nova Scotian mainland. Since that time, however, *Tillaea* has been found in Shelburne and Cape Breton counties. *Centaurium* is probably introduced. There remain three northern plants not known from nearer than Newfoundland, and an endemic sponge of southern affinities, to support the theory of the antiquity of the island. Theories have been built on less. On the other hand, my suggestion that the island may have emerged as recently as 1100 A.D. must be viewed rather as an anti-thesis to the older thesis than as a serious hypothesis. We can only reach a

## Sable Island, cont.

sound dating when geologists can give us a clear table of the relative movements of land and sea in this area during the post-Pleistocene period.



### Vegetation

The terrain of the island may be divided into about six categories, each with its own flora.

The sea-beaches, particularly the northern one, are remarkably soft, and the surf in rough weather runs up to the very foot of the sand-bluffs, churning up the beach so that plants find no footing. Here and there, however, in the mouths of wind-channels in the dunes, a few salt-loving plants find foothold. *Cakile edentula* is common. *Atriplex patula hastata* is common on the south beach. St. John recorded that in 1913 *Arenaria peploides robusta* was in great clumps much visited by the ponies, but today only small fragments remain. *Senecio Pseudo-Arnica* was found in this habitat by all previous collectors, but I failed to find it.

Next inland come the high dunes. These are continually being eroded on the sea side, and build up on the landward side by sand blown up from the beach. Small plants cannot stand such burying or the dryness of the site, so that the flora consists chiefly of marram-grass, beach-pea, yarrow and seaside goldenrod, the last two growing to unusually great size. On the high narrow dune that separates the west end of Wallace Lake from the north shore, there is often a thin covering of *Poa subcaerulea*, a native blue-grass. In this area the beach-pea is thick and luxuriant in agreement with St. John's description of the whole island in 1913, whereas in the rest of the island the growth seems feeble, probably because the peas are over-grazed in spring in the neighbourhood of the freshwater ponds. This high dune is grazed in winter, at least, as is shown by the droppings of the ponies, which consist of compacted fibres of sand-grass roots.

The middle of the island receives less and finer sand. The low dunes are covered with much vegetation, a few inches in height. Beach-grass is consistently overgrazed; tall plants of *Spartina pectinata* are untouched by the ponies; common juniper makes thick mats; *Juniperus horizontalis* droops like a blue valance over the edge of raw bluffs dug out by the wind. *Rosa virginiana*, *Rubus arcuans*, *Viburnum cassinoides* and *Myrica pensylvanica* are the tallest shrubs. On the open dunes are evening primroses, *Oenothera parviflora* and *Oenothera cruciata sabulonesis*. Near the houses and ponds there is an abundance of centaury, *Centaurium umbellatum*, a pink-flowered gentian common on sandy soils in Europe but hardly known in North America. Both St. John and Macoun found no difficulty in distinguishing native from introduced plants and both considered this plant to be a native. I find the greatest difficulty in making up my mind about several plants of the island, but I should have no doubt that this gentian was introduced, probably in the ballast of wrecked ships. It spreads readily in the sand and is not eaten by the ponies, an important factor in survival. Chaffweed, a cosmopolitan sand-plant, was found only once by me, although earlier collectors considered it to be abundant.

(to be continued)