# NEWSLETTER

c/o Nova Scotia Museum
1747 Summer Street
Halifax, N. S.

sept-oct '76

NEWSLETTER

c/o Nova Scotia Museum
1747 Summer Street
Halifax, N. S.

sept-oct '76

Mary Primrose
Biol. Dept.
Dalhousie U.

# HALIFAX FIELD NATURALISTS NEWSLETTER

sept-oct '76 NUMBER seven

Meetings are held on the third Tuesday of each month, at eight pm; in the Auditorium on the ground level of the Nova Scotia Museum, 1747 Summer St., Halifax.

Field Excursions are held at least once a month, or as can be arranged.

Membership is open to anyone interested in the natural history of Nova Scotia. Membership is available at any meeting, or by writing to Membership, Halifax Field Naturalists, c/o the Nova Scotia Museum. Fee three dollars yearly, with a family membership at five dollars. Members receive the newsletter and notice of all excursions or special programs.

Executive for 1975-76

| | | |
|---|---|---|
| President ..... | Paul Keddy | 422-7238 evenings |
| Secretary ..... | Winnie Cairns | 4[illegible]-5581 evenings |
| Newsletter ..... | Debby Burleson | 429-4610 daytime |
| Program ..... | Scott Cunningham | |
| | Nan Hennessey | |
| | Don MacDougall | |
| | Mary Primrose | |

Mailing Address

Halifax Field Naturalists
c/o Nova Scotia Museum
1747 Summer Street
Halifax, N. S.
B3H 3A6

HFN is a member organization of the Canadian Nature Federation

Mary Primrose

Mailing Address

Halifax Field Naturalists
c/o Nova Scotia Museum
1747 Summer Street
Halifax, N. S.
B3H 3A6

# news and events

The August meeting, featuring Scott Cunningham on Mushrooms, was exceedingly well attended. Our new Museum meeting space was stuffed with people, many of whom were new faces to HFN. About 30 people joined the Society that night. If future meetings suffer space problems, we may ask your opinion on changing meeting places again, or perhaps restricting attendance to "members only", or "members first".

Two notes from this newsletter have been reprinted in a recent issue of the national magazine, Nature Canada. Submit an article and maybe speak to all of Canada!

The Maitland gypsum area and Hayes Cave were the locale of an HFN field trip last July. Now the area is undergoing some unexpected alterations--see Paul's article (President's Report). We would appreciate receiving copies of any press coverage of this affair.

Has Hemlock Ravine indeed been purchased by the city? So rumour has it.

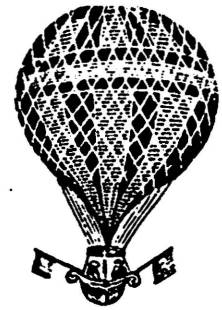
My thanks to several of you for helping in the production of the newsletter--Howard, Winnie, Harriet, and those unseen individuals who staple and address into the small hours. Want to help? Contact your editor.

Now that we have real mugs for our post-meeting teatime, we need mugwashers. Just stick around after the meeting--we'll supply the dishtowels.

And there's been a shocking 50% HFN fee increase--info overleaf.

| | |
|---|---|
| November 3 - 6 | Canada West Museumobile at MicMac Mall |
| Nvoember 6 | Bird Society to McNabs Island. Phone Ross Anderson, 463-4188 for details. |
| November 16 | Our regular Tuesday meeting--Bumblebees. Sneak preview article in this issue. |
| November 21 | Field excursion to Admiral Cove. Meet at the Museum visitor parking lot, 1pm. |
| November 26 | Friday members' slide night, 8pm at the Museum. Get your favourite few slides of nature, especially any from HFN trips, to 463-4188 for details. |
| November 16 | Our regular Tuesday meeting--Bumblebees. Sneak preview article in this issue. |
| November 21 | Field excursion to Admiral Cove. Meet at the Museum visitor parking lot, 1pm. |
| November 26 | Friday members' slide night, 8pm at the |

## FEE INCREASE FOR 1977



At the last executive meeting, we decided to raise 1977 HFN membership fees to $3.00 per annum for individuals and $5.00 per annum for families. This is not due to inflation (which, of course, everyone else blames), but due to our desire to increase the services we offer members and expand activities which promote the aims of HFN.

Many members may be unaware that HFN only started one year ago in the fall of 1975. The basic membership fee of $2.00 was set more or less by guess, the family membership was added at a later date. A founding grant from the Dalhousie Association of Biology Students improved our 1975 financial situation, but clearly we must be self-supporting in the long run.

Of course, as a volunteer organization, newsletter preparation, the many hours of organization, as well as speakers and hike leaders are services donated by HFN members and interested citizens.

At present we offer memberships on a calendar year basis only. We realize that members who join later in a given year will have received fewer services than those who joined earlier. However, as long as we use volunteer labour, the simplicity of the calendar year scheme will make it a necessary part of membership.

To help minimize the inequity of this scheme, members who joined in September or later of this year will receive a membership for the following year. This will also entitle these members to copies of the fall newsletters.

Of course, $3.00 and $5.00 for HFN membership is still the bargain of the year. Where else can you get twelve evenings of entertainment, six newsletters, not to mention frequent conducted hikes and representation on conservation issues of interest to naturalists all for less than the cost of one evening at a movie theatre!

.....Paul Keddy, President

Star notes -

-That bright object in the eastern sky these evenings is the planet Jupiter.

- Watch for meteors on November 16, December 13. December 22.

Star notes -

-That bright object in the eastern sky these evenings is the planet Jupiter.

## Cole Harbour Walk

Jane Eye
Nancy Marshall

It is not always hard to find a parking space at Mic Mac Mall. Twenty-three bird enthusiasts found the lot quite deserted when they rallied there at 6:30 on the morning of August 7th to accompany Don MacDougall on a shore walk at Cole Harbour.

The weather was rather hazy when we left Dartmouth but as we neared our destination the sun appeared.

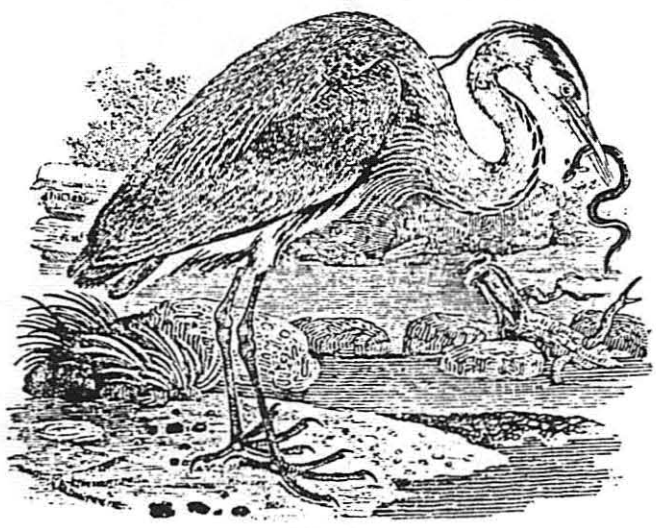
Before we set out on the actual walk, our leader, with the aid of aerial photographs, acquainted us with the area we were to cover. There were to be two expeditions, the first down the abandoned railroad which runs through the shallows of the harbour, the second along the beach.

Armed with scopes, binoculars and field guides the troop descended. Among the birds spotted on the first walk were Willets, Dowitchers, Black-bellied Plovers, Great Blue Herons, Least Sandpipers and both Greater and Lesser Yellowlegs. We returned to our cars at 10:00.

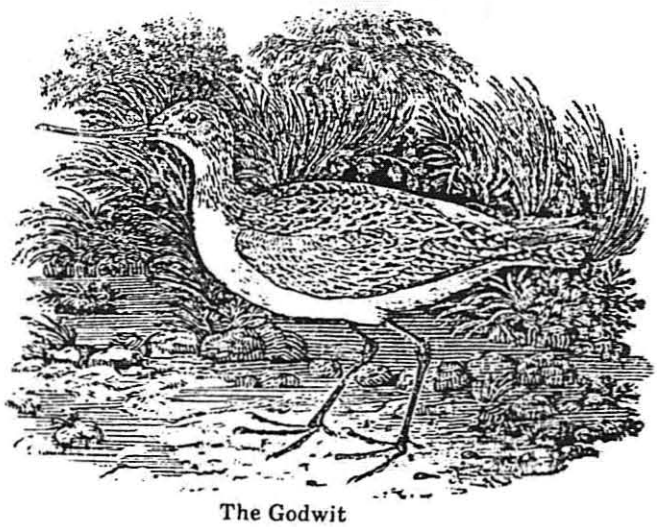
A short drive down the road brought us to the sandy shore where we were greeted by the smell of pancakes cooking on an open fire. Thank you Rosemary Eaton for the excellent breakfast.

The second walk along the beach to the salt marsh revealed several Semipalmated Plovers and Sanderlings, a Ruddy Turnstone, a Piping Plover and some Godwits on the wing.

At about noon we started the journey back to the city.



The Heron



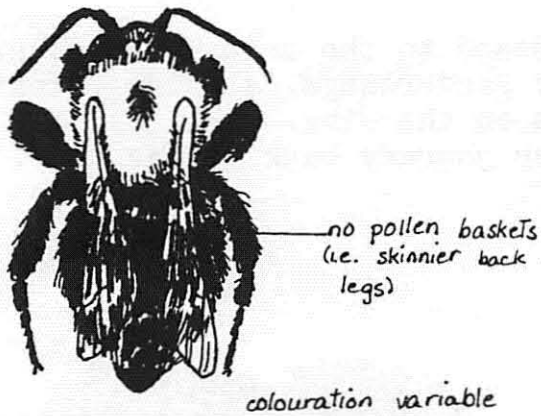
The Godwit

# a jumble of bumbles (bzzzz)

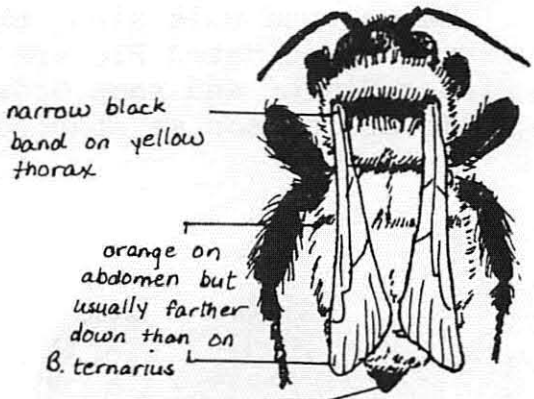
## november meeting preview

A bumblebee is a bumblebee is a bumblebee. Most of us conjure up a picture of those big, furry, black and yellow (sometimes orange) bees that buzz around pretty flowers all day. Fact is, there are sveral different species of bumblebees, big (queens), little (workers) bumblebees, even bumblebees with "moustaches". The topic of November's meeting will be "The Bumblebees of the Maritimes", given by Harriet Rueggeberg and Lester Hartling, two students who, this past summer, worked on a research project dealing with these insects. Come on November 16th and find out what's been buzzing around your garden!

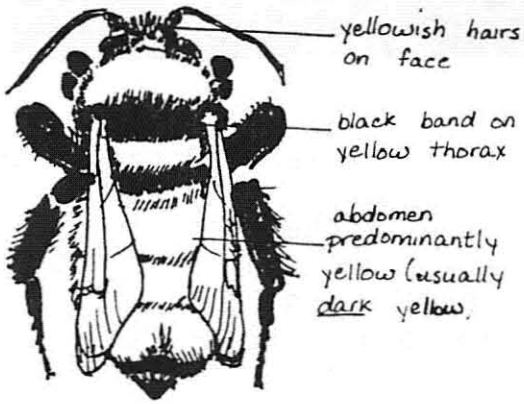
To introduce you to the subject, here are some characteristics used in identifying the eight most common species in the Maritimes. It may be useful to bring this along to the meeting, to compare the sketches to the pictures and specimens that will be on display.




*Psithyrus* species

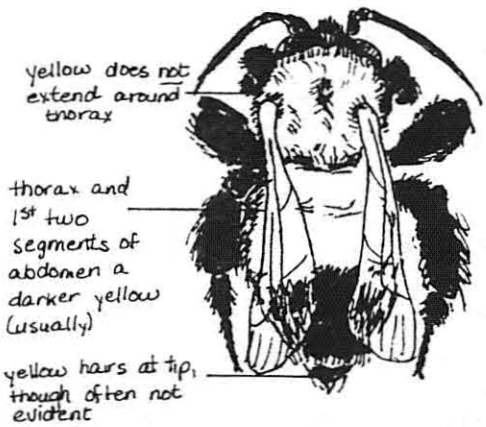



*Bombus rufocinctus*



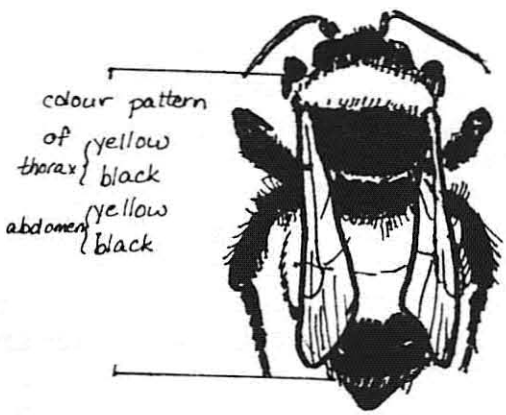

Bombus borealis


Bombus fervidus

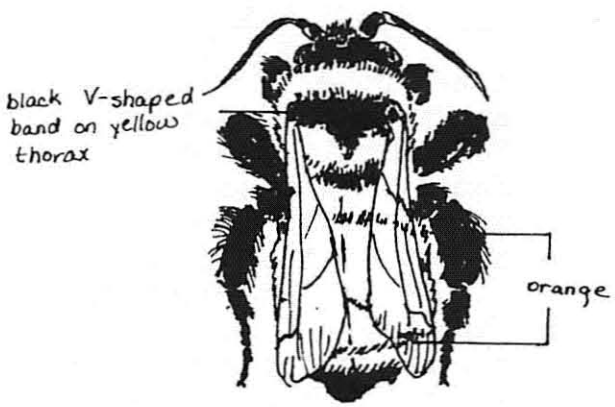



Bombus perplexus


Bombus vagans

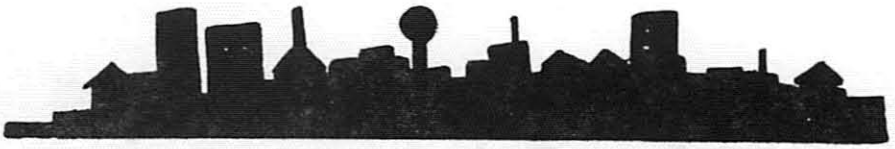



Bombus terricola




Bombus ternarius

# city life



Halifax is home to many unusual species. Consider trees--have you seen the Magnolia blossoms on Connaught Avemue, or the Sassafrass, Gingko, and Tuliptrees? Or the weeds from all corners of the world in downtown vacant lots. Do you know about the pink-tentacled sea slugs and the heather in Point Pleasant Park? And then there's the dramatic remains of a post-glacial stream-bed, complete with waterfall, in a schoolyard in Fairview. More on these and other city subjects in future issues.

Sometimes creatures stray into our urban setting--hawks and owls, for example, especially in winter. Who can forget the Sawhet Owls that turned up in Halifax backyards one snowy winter a few years ago. Or the sharp-shinned hawk that seemed to take up residence on Oxford Street last winter.

To start the series off, here are two interesting events that have come to my attention during the past month:

Snappers in Chocolate Lake ?

One afternoon in early October I received a phone call from a frantic resident of the Bay Road area. There was a turtle "bothering" the children of her street, she said. She had called the city police, the R.C.M.P., and the Department of Lands and Forests, but no one would help. It was a slow day, so I drove out to her home and found a cluster of worried citizens staring at a large cardboard box, overturned and with bricks on top. Under the box was the terror of the neighbourhood--a snapping turtle, about 16" shell length. It turned out that the turtle had been wandering around the area for several days. No one would touch it, or let their small children out when it was near. The turtle now resides in a lake near the airport.

Home Sweet Home

There's a young man in south end Halifax who once built a tree house in his back yard. One morning early in October he awoke to find his tree house occupied by a sleeping raccoon. Fortunately his bedroom window gave him a good view, and the family spent some time observing the visitor through binoculars, and of course speculating on its origin. Worried about its safety in the city, they obtained a king-size havahart trap in the hope of capturing the raccoon and releasing it outside the city. Sardines were the bait. Next morning, a rather irate neighbourhood cat was the only catch. The raccoon stayed for several days, sleeping most of the time, and did not seem to accept any of the food that was put out for it. It left during the night. Has anyone ever seen evidence of raccoons in Point Pleasant Park?

# more about mushrooms

## scott cunningham

Fall is almost upon us again and with it comes the red maple leaves, the mist covering the lakes on chilly mornings and, unaware to most of us, the most prolific season for the mushroom. People with an observant eye and occasion to stray from the sterile domain of the city will be confronted with a fascinating sight - that multitude of form and colour which is the domain of the mushroom. Whether you pass through a meadow or a wood, along a stream bed or in a swamp you will find yourself surrounded by those varied little creatures. They are known to some as mushrooms, to others as toadstools and to others simply as fungi. Take a closer look around you when on your next hike or canoe trip and you will get a glimpse of a new world among those fallen leaves on the forest floor.

Locally interest has grown in this large group of organisms as well it should. The importance of these plants without chlorophyll is immeasurable. They are responsible for the proper growth and subsequent decay of most green plants. They produce antibiotics such as pennicillum but also the potent cancer causing aflatoxins. They rot your house and boat and kill your elm tree, but without the fungi we would not have bread, beer, wine, or most cheeses. However, the purpose of this article is not to describe the many varied roles that fungi play in our lives. That would require a book and books have already been written on the subject. What I wish to offer here is a few suggestions to those of you who are just beginning to notice these organisms and are wondering what approach to take in order to learn more.

For the budding mushroom collector I recommend two essentials: (1) The first and most important is to find someone who has a knowledge of fungi and is actively collecting. This person doesn't need to be an 'expert'(those in N.S. I can count on the fingers of one hand) but should be someone with a solid knowledge of the basics - and someone well aware of what he or she knows or doesn't know as regards this group. Ask this person if you can tag along on a collecting trip. You should have no trouble as most collectors are more than willing to share their knowledge and experience with someone who is genuinely interested. Ask questions and pry out information. You will be surprised how quickly you gain a 'feel' for mushrooms. (2) The second essential is a good book(s). While there is no 'the book' for the mushroom collector there are many good books on the market which will assist you greatly in the pursuit of this hobby. However, as with most things you pay for quality, and you should be willing to invest $10 -$20. One good book is worth several cheap ones and I will list some of the books that I would recommend at the end of this article. Now that you have acquired a book and met an experienced collector you have the basic essentials. The details of equipment and techniques as well as the subtleties of identification you will

be able to pick up from these two sources.

I think that it would be appropriate here to make a few comments to those who are collecting mushrooms for the dinner table - which will include most of you. I advise strongly to avoid any simple rules for distinguishing edible from poisonous mushrooms and those individuals that propagate such stories. This is because THERE IS NO SIMPLE RULE(S) FOR DISTINGUISHING A POISONOUS FROM AN EDIBLE MUSHROOM! Many people have died or become violently ill by failing to heed this advice. The only sure way of avoiding poisonous mushrooms is to pick only those species with which you are very familiar and which you know not to be poisonous. This is not as difficult as it sounds since there are some very distinctive mushrooms of excellent quality. For example anyone who is capable of distinguishing a fir tree from a maple tree should have no trouble distinguishing the edible chanterelle from any poisonous species. With a little effort you can soon familiarize yourself with over a dozen common edible species.

It is curious that so many simple edibility tests or 'old wives tales' have developed concerning the fungi. No comparable 'tests' exist to tell an edible from a poisonous berry or an edible leaf from a poisonous one. And no one seems to expect that there be any. Why then do we have so many when it comes to mushrooms? There is no clear answer but such stories date from the Middle Ages when mushrooms were continuously associated with the mysterious and the supernatural.

What are some of the old wives tales and how serious can the mistakes that they cause be? There are many and you are probably aware of a few yourself so without going into all of the dozens of foolproof methods that exist throughout the world I will mention only a few of them that apply to Amanita virosa - the Destroying Angel. This is one of the deadliest mushrooms and one which is very common in N.S. in the fall. I will tabulate the tests into two columns for emphasis:

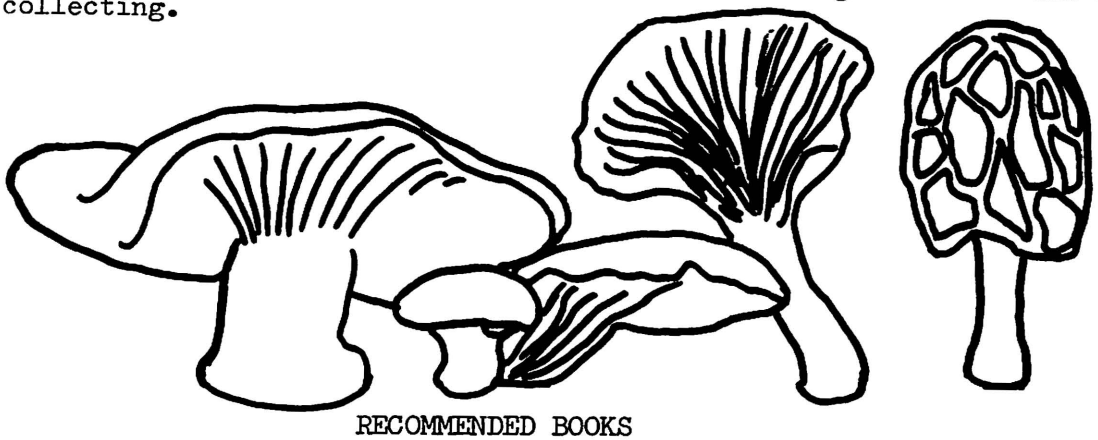
| The Old Wives Tale - "A mushroom is edible if:" | Amanita virosa (DEADLY) |
|---|---|
| 1 It is white | - pure white |
| 2 The skin of the cap peels readily | - the skin of the cap peels readily |
| 3 It is cooked | - still deadly if cooked |
| 4 Cooking water is discarded | - still deadly if cooking water discarded |
| 5 It is dried | - still deadly if dried |
| 6 It doesn't turn a silver spoon black | - doesn't turn a silver spoon black |

As you can see there is a whole list of established, foolproof methods demonstrating that the Destroying Angel is edible. However, it doesn't matter how often you 'prove' that this mushroom can be safely eaten - it will still kill you. And it will kill you in an extremely unpleasant way. It might be difficult to believe that some people still use such insane methods to determine mushroom edibility but it is true. Only last fall there were a few tests announced on the radio and we were all aware of the media's longstanding record of presenting only factual information.

spoon black

As you can see there is a whole list of established, foolproof methods demonstrating that the Destroying Angel is edible. However, it doesn't matter how often you 'prove' that this mushroom can be safely eaten - it will still kill you. And it will kill you in an extremely unpleasant way. It might be difficult to believe that some people still use such insane methods to determine mushroom edibility but it is true. Only last fall there were a few tests announced on the radio and we were all aware of the media's

for the table but only to impress on you the need to identify individually each and every mushroom that you intend to eat. It isn't impossible. We do it daily with all other foodstuffs that we consume. And if we couldn't distinguish the potato flower from the tuber or the rhubarb leaf from the stem we would also get quite sick. So find an 'initiated' and a good book - and happy collecting.



RECOMMENDED BOOKS

1 Mushrooms and Other Fungi - an illustrated guide
Augusto Rinaldi and Vassili Tyndalo
The Hamlyn Publishing Group
Toronto
Excellent colour drawings of ca. 1000 species and varieties of mushrooms, most of which are found in North America. The descriptions are also well done although there are some things lost in the translation. Various chapters deal with mushroom cooking, preservation, growing, nutrient properties and toxins.
ca. $15.

2 Mushrooms of North America
Orson K. Miller Jr.
E.P. Dutton & Co., Inc.
New York
The largest and best collection of colour photographs of the North American fungi. Some mistakes in labelling plates and some false hues in the colour reproductions but overall an excellent book. ca. $20.

3 Collins Guide to Mushrooms and Toadstools
Morten Large and F. Bayard Hora
William Collins Sons & Co.
London
This is the only good mushroom book which approaches a field guide format. It has an easy to follow key and over 600 excellent water colours. The descriptions are accurate and concise. Most of the species are found in North America.
ca.$11.

4 Edible and Poisonous Mushrooms of Canada
J. Walton Groves
Queens Printer
Ottawa [illegible]
London
This is the only good mushroom book which approaches a field guide format. It has an easy to follow key and over 600 excellent water colours. The descriptions are accurate and concise. Most of the species are found in North America.
ca.$11.

4 Edible and Poisonous Mushrooms of Canada
J. Walton Groves

## Martinique Beach

An opportunity to apply your naturalist skills to make a real contribution to resource management.

Here's a great opportunity for someone interested in spending a day or so at Martinique Beach each year for the next few years, and a real opportunity to make a contribution to our knowledge about sand dune ecology in Nova Scotia.

The Department of Lands and Forests is finally fencing off the perimeter of the access road on Martinique Beach.This will restrict dune buggies, four wheel drive trucks, etc. to the road. Large areas of the beach which have been damaged by vehicles will therefore now be protected, and the vegetation should begin to grow back.

There is almost nothing known about regeneration of sand dune vegetation after disturbance in Nova Scotia. Because of the long term nature of the project, there is almost no chance of a government or university funding a study here. Unless an interested volunteer takes this up as a project, a perfect opportunity to learn about dune regeneration in N.S. will be lost.

The sorts of things you might do could include:

1) Marking a cross-section (called a transect) asrocc a road and counting Marram grass stems across it each year to see how long it takes to fill in the tracks.

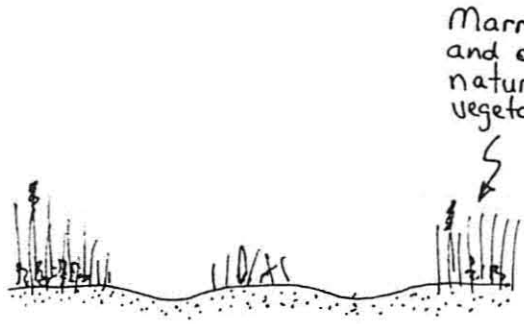
2) Counting the number of species of sand dune plants in this cross-section to see how long it takes for the road to grow back all natural species.

3) Measuring a blowout to see how its size changes over time, and counting a cross-section to see how long it takes Marram grass to grow back.

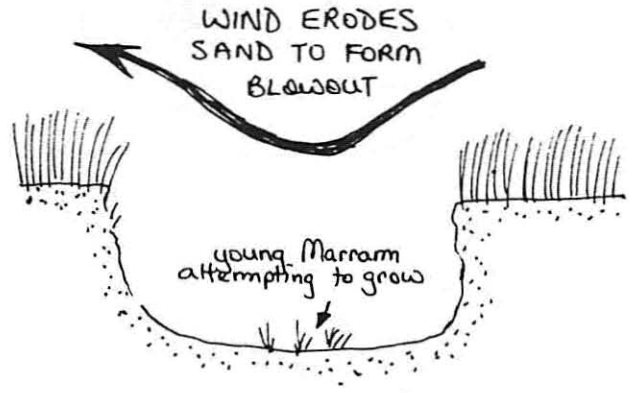
4) Measuring the depth of blowouts to see if they decrease with time.

These, and many other projects which no doubt will occur to you, could be carried out with the most basic of equipment (perhaps only a tape measure or yardstick!). A knowledge of the sand dune plants would help, put as there are only a few common species you could learn then quickly. Dr. Goldsmith of the Dal.Biology Dept. says he will lend equipment you might need. Both Dr. Goldsmith and myself would be available for consultation and setting the project up.

common species you could learn then quickly. Dr. Goldsmith of the Dal.Biology Dept. says he will lend equipment you might need. Both Dr. Goldsmith and myself would be available for consultation and setting the project up.




CROSS SECTION OF ROAD



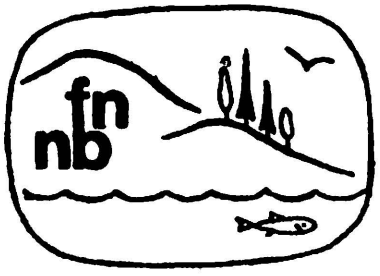

CROSS SECTION OF BLOWOUT

common dune plants: Marram grass
Evening primrose
Bayberry
Sea rocket
Dune sedge
Sow thistle
Chickweed

It might only be necessary to visit the beach once a year, and even a single day would be long enough to collect a lot of information. With a couple of friends you could make an enjoyable day of it. Since the important changes will probably take at least several years to occur (nobody really knows how long!), you should plan on being aroung N.S. for at least a couple of years to carry this out.

So here's a chance for an amateur naturalist to make an important contribution to the science of resource management in Nova Scotia. Takers, anyone? If you're interested, give me a call.

Paul Keddy
422-7238 (evenings)




Report on....
New Brunswick Federation of Naturalists and
New Brunswick Conservation Council
annual meeting on.....
FUNDY TIDAL POWER ?

Two members of HFN (Winnie Cairns and Harriet Rueggeberg) attended the combined annual meetings of the New Brunswick Federation of Naturalists and the New Brunswick Conservation Council held in Sackville (N.B.) September 10-12. The whole weekend was devoted to the theme Fundy Tidal Power?, with films, speakers, discussions and field trips largely centered around the topic.

Representatives of the N.B. Power Commission and N.B. government outlined the present state of tidal power development proposals. A two-year study of the feasability of tidal power development is presently underway, sponsored by the Power Review Board, a group which includes members drawn from the N.B., N.S. and federal governments.

The study involves consideration of a broad spectrum of concerns, among them tidal paln design and optimization; marketing and transportation systems; and socio-economic and environmental effects. Phase 1 of the study is to be completed by February 1977, at which time a decision will be made whether or not to continue into a second phase. Only at the end of such a second phase (some two years hence) will a final decision be made whether Fundy tidal development will receive a go-ahead or not.

At the meetings, it soon became evident that thus far there is a great paucity of information regarding possible effects any such development might have, but it surely to be hoped that following completion of the first and second studies of the Power Review Board, that comprehensive reports will be released. It will then be up to the public sector to make sure that their reactions and opinions are heard and considered.

Participants at the Sackville meetings evidenced a high degree of concern over the possible implications any power development along the upper Bay of Fundy might have upon the whole environment, as well as upon the quality of human life there. It is unthinkable that a project of such tremendous scope and vast implications for both Nova Scotia and New Brunswick should be considered without maximum input from the citizens of both provinces. It is clear that our fellow naturalists and conservationists in New Brunswick are preparing to become prominently involved in the debate over the future of the Bay of Fundy, and it is high time that we in Nova Scotia began to get involved too.

For more information about Fundy tidal development proposals and their possible implications contact Winnie Cairns.

For more information about Fundy tidal development proposals and their possible implications contact Winnie Cairns.

PRINCE EDWARD ISLAND



DEPARTMENT OF THE ENVIRONMENT

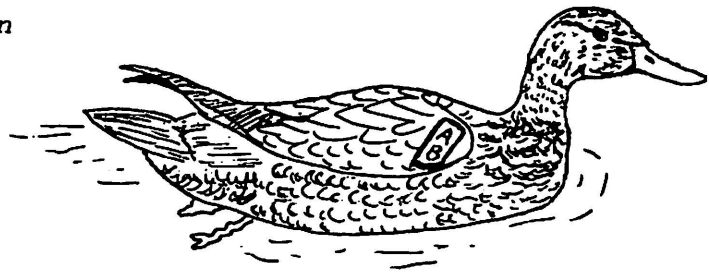
# Help an Island Count its Ducks

*The movement and behavior of black ducks is the subject of a study being undertaken from April, 1976 until September, 1977 in Prince Edward Island; Canada. Previous work has suggested that a portion of the P.E.I. population of black ducks are non-migratory in that they over-winter and breed on P.E.I. It is believed however the majority of the birds do migrate south within the Atlantic Flyway. To aid in the study of movements both within natal marshes and P.E.I. generally, as well as the establishment of a year round time-budget for black ducks, color markers have been used to allow for recognition of individual ducks.*

*Patagial tags will be used on all birds captured with the exception of nesting females who will be marked with colored nasal saddles. The patagial tags are 3 cm x 7 cm and are attached to both wings of the bird. There is a two letter code on each tag which is visible when the bird is on the water or standing on land. Birds captured in summer will carry white tags for males and orange tags for females. Wintering birds will also be marked and will bear red tags (males) and yellow tags (females). As of August 1976 one hundred and twenty-two black ducks were marked on Prince Edward Island. The letter code on the patagial tag can generally be read within 200 feet with a spotting scope. Any resight, recapture, or recovery information would be greatly appreciated. Observers of marked black ducks will receive banding information on each individual reported as well as past re-sightings. Even if the letter code cannot be read I would greatly appreciate receiving information on colors of patagial tags observed.*

---

*Resight Information*



*(circle or fill in blanks)*

*Color marker: patagial tag, nasal saddle*

*Code:* _____

*Color: orange, white, red, yellow*

*Observer:* _____

*Address:* _____

*Observation date:* _____

*Coordinates* _____ *Temp* _____ *Wind* _____ *Cloud Cover* _____

*Location:* _____

*Nearest town* _____ *County* _____ *Prov./State* _____

*in association with:* _____ *other blacks* _____ *other species*

*Observer:* _____

*Address:* _____

*Observation date:* _____

*Coordinates* _____ *Temp* _____ *Wind* _____ *Cloud Cover* _____

*Location:* _____

*Nearest town* _____ *County* _____ *Prov./State* _____

# president's report

Paul
Keddy

## N. S. Dept. of Environment Invades Proposed Maitland Ecological Reserve

In the early 1960's, the International Council of Scientific Unions sponsored the International Biological Program. One aspect of this program was the Conservation of Terrestrial Communities. "It is an international effort to preserve samples of the world's ecosystems for present and future biological research, as reference points by which to measure man-made changes in ecosystems, and for future educational and demonstration purposes."

Fifty-eight countries participated in mapping and describing small areas which were to be set aside as "Ecological Reserves". Canada was one participating country; the Maritimes Panel, with government support, designated a total of 110 such sites, 69 of these in Nova Scotia. Although 69 sounds like a great many, the total area involved is trivial--a mere 0.36% of the total area of the province.

New Brunswick, Quebec and British Columbia now have formal legislation to protect their ecological reserves, and most other provinces have equivalent legislation under Parks Acts, etc., or else are in the process of drawing up such legislation. Nova Scotia has no legislation, but the Dept. of Lands and Forests has verbally committed itself to protecting proposed ecological reserves on Crown land until such time as legislation is drawn up.

One especially interesting area designated in Nova Scotia is the proposed South Maitland Ecological Reserve. It combines a number of significant features: the largest known bat cave in the province, a gypsum cliff with an associated cliff flora including rare or unusual species of plants, and a rich floodplain with associated flora. According to the Terminal Report of the Scientific Advisory Council on Maritime Ecological Reserves, the rich flora of the floodplain includes Blue Cohosh and Bloodroot, both of which are very rare in Nova Scotia. Floodplains, having such rich soil, were often the first areas cleared for agriculture, and as a result few examples of rich floodplain flora are left in the province.

The floodplain at the proposed South Maitland Reserve has been severely disturbed in the past, and thus contains a number of old fields in addition to the river bank flora; however, sections of disturbed river bank were regenerating in alder, maple, and ash, and would almost certainly have reverted in time to a characteristic flood plain forest. A number of associated herbaceous species including Avens and Jack-in-the-Pulpit were also spreading. There has been some local use of the area for picnicing, but on such a small scale that it appeared to be causing little damage to the reserve.

It was therefore a complete surprise to find, on Sunday Sept. 19, that a sizeable section of young forest had been cleared completely to the banks of the river. A few shade trees had been spared, but gone was the developing deep shade in which the special floodplain plants could thrive.

alder, maple, and ash, and would almost certainly have reverted in time to a characteristic flood plain forest. A number of associated herbaceous species including Avens and Jack-in-the-Pulpit were also spreading. There has been some local use of the area for picnicing, but on such a small scale that it appeared to be causing little damage to the reserve.

It was therefore a complete surprise to find, on Sunday Sept. 19, that a sizeable section of young forest had been cleared completely to the banks of the river. A few shade trees had been spared, but gone was the developing deep shade

(1) No one knew that there were rare plants on the floodplain, although they knew the area had been designated an ecological reserve.

(2) Even though officials knew the area was a proposed reserve, no one had considered hiring a botanist to check where the rare plants were before initiating clearing.

(3) The Dpt. of Environment intended to develop a section of the proposed reserve into a picnic and swimming area--the "Hayes Cave Recreational Park". They clearly had no concept of the importance or value of ecological reserve sites.

(4) Clearing of the area was continuing while we talked.

Two days later, on Wednesday, the reply came. No need to be concerned, we were told, "only an old field is being cleared to provide swimming and picnic facilities. The flora will not be harmed".

An interesting answer. Although they had admitted they could not recognize the rare plants, and did not know where they occurred, they could apparently guarantee that no damage was being done! Moreover, this did not consider the central issue--that ecological reserve sites are <u>not</u> for recreational use, and that given time (and no clearing) the original forest and flora would also have returned to the area now being cleared.

When I pointed this out, and added that the river bank had been cleared as well, I was told it was unreasonable to deny the public the right of access to a picnic and swimming area. When I pointed out that there were many places in Nova Scotia suitable for picnics and swimming, but only one South Maitland Ecological Reserve, I was told (in so many words) not to be a crank and to get lost. Besides, I was told, "the clearing is almost finished now, and another day or so won't make any difference". The Department of Environment official then abruptly terminated our "discussion".

Having exhausted all attempts at co-operation (and as the clearing project neared completion), representatives of the Canadian Nature Federation, Nova Scotia Resources Council, and Halifax Field Naturalists took the case to the media. Both the Halifax dailies, and the Hants Journal (lead story) carried articles, including accusations that Jack Hawkins, Minister of Environment, was carrying out the work to further his own political career. CBC Radio interviewed Don MacDougall (an HFN executive member), and past president and director of the Nova Scotia Resources Council, and then invited Jack Hawkins to state his side of the story. He declined.

The Dept. of Environment, in a press interview in the Hants Journal, declared the "clean-up" was carried out "under careful supervision...care is being taken not to encroach upon areas known to contain unique or delicate floral species". This is an interesting statement, in light of their earlier statements, and even more so when one considers that no one in the work crew even knew that there were rare plants in the area when we approached them near the end of the project.

The entire affair served to demonstrate the need for ecological reserves legislation in Nova Scotia. The Minister of Lands and Forests and two senior officials met with members of CNF, NSRC, and HFN. It was agreed that [illegible] ecological reserves legislation is badly

light of their earlier statements, and even more so when one considers that no one in the work crew even knew that there were rare plants in the area when we approached them near the end of the project.

The entire affair served to demonstrate the need for ecological reserves legislation in Nova Scotia. The Minister of Lands and Forests and two senior officials met with members of

# books

Book Review Janet Dunbrack

Edible Wild Plants of Nova Scotia
Heather MacLoed and Barbara MacDonald.
Illustrated by Dean Brousseau. Printed by the Nova Scotia Museum. iv + 143 pp. $1.50.

This is a good, useful book. It describes over 50 edible Nova Scotian plants. Each is classified according to family, genus, species, description, season, habitat and edibility. This last section includes cooking directions and often an intriguing recipe for a delicacy such as Acorn Bread, Japanese Knotweed Jam, or Coltfoot Coughdrops. Each plant has a full-page illustration opposite its text. The plants are further grouped into habitats by sections on woodlands, fields and waste places, ponds and streams, seashore, and bogs and barrens. This is helpful for the novice who would otherwise have to leaf through the whole book searching for the plants appropriate to the habitat she or he is exploring. In addition to the fifty plants treated in detail, there are short sections about other useful plants, plants to avoid eating, a glossary of botanical terms used in the text, a list of references, and an index.

This organized approach to the subject is one of the book's strong points. Once the reader becomes familiar with the format, it is very easy to locate desired information. In keeping with this organized approach, the writing is delightfully clear and simple.

Special mention should be made of the illustrations, which are excellent. The illustrator seems to have an artist's eye as well as an accurate hand. Most of the drawings convey a sense of the love and care with which they must have been done.

Once I had read the book through and was eager to go out and gather some of the plants, I realized that the book in its present form does not, unfortunately, make a good field guide. It is printed on 8½" x 11" paper, which makes it rather large, and it is bound only with glue. After two readings, many of the pages of my copy had come loose at the inner corners. Perhaps the authors did not intend the book to be a field guide, but its excellent descriptions and illustrations certainly tempt me to use it as such. If you want to take it along on foraging expeditions, you'll probably have to devise a more durable binding for yourself. It was perhaps a desire to make the book available at a low cost to the public that prompted the choice of binding, and at $1.50 this book is a bargain.

This guide should not be [illegible]
and it is bound only with glue. After two readings, many of the pages of my copy had come loose at the inner corners. Perhaps the authors did not intend the book to be a field guide, but its excellent descriptions and illustrations certainly tempt me to use it as such. If you want to take it along on foraging expeditions, you'll probably have to devise a more durable binding for yourself. It was perhaps a desire to make the book available at a low cost to the public that prompted

# ANIMAL SIGNATURES

## A FIELD GUIDE TO SOME NOVA SCOTIA WILDLIFE

Developed by

Edward Claridge & Betty Ann Milligan
Education Section

Published by
The Nova Scotia Museum

"This manual has been prepared as an introduction to some Nova Scotia wildlife. No attempt has been made to make it a complete coverage. Rather, the most commonly encountered animals and their signs are depicted on the following pages. Knowledge of some of the animal life of the province may increase the pleasure obtained from a walk through Nova Scotia Countryside."

Although this Museum publication has not yet been released, I have an advance copy for an HFN member who will review it for this newsletter. Contact Debra Burleson, 429-4610, promptly please.

Membership in the Halifax Field Naturalists is open to anyone interested in the natural history of Nova Scotia. Membership fee is three dollars annually, family membership five dollars. Come to a meeting or write care of the Nova Scotia Museum, 1747 Summer Street, Halifax.

All members are reminded that we would like to receive your fees for 1977.

---

Halifax Field Naturalists new ___ or renewal ___

name _____

address _____

occupation or interests _____

suggestions for programs? _____

_____