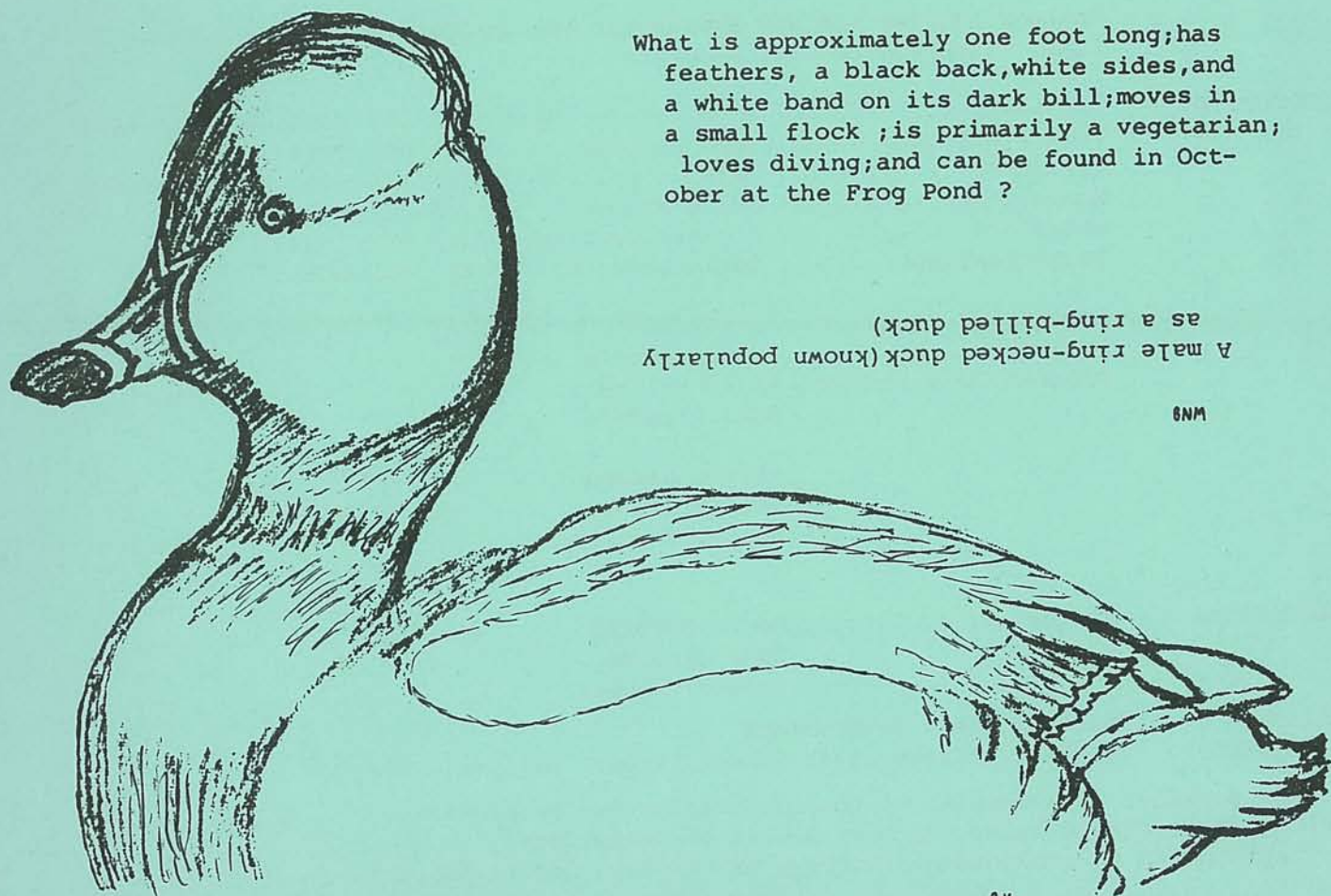


Halifax Field Naturalists Newsletter

SEPTEMBER - NOVEMBER 1984.

No. 37



What is approximately one foot long; has feathers, a black back, white sides, and a white band on its dark bill; moves in a small flock; is primarily a vegetarian; loves diving; and can be found in October at the Frog Pond?

A male ring-necked duck (known popularly as a ring-billed duck)

BNM

RN

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

Halifax Field Naturalists

SEPTEMBER - NOVEMBER 1984

No. 37

MEETINGS: First Thursday of every month at 8.00 pm in the Auditorium of the Nova Scotia Museum, 1747 Summer Street, Halifax.

FIELD TRIPS: are held at least once a month.

MEMBERSHIP: is open to anyone interested in the natural history of Nova Scotia. Memberships are available at any meeting of the Society or by writing to --- Membership Chairman, Halifax Field Naturalists, c/o Nova Scotia Museum.

Individual memberships \$7.00 per year

Family " \$10.00 " "

Sustaining " \$15.00 "

This covers our fiscal year - January 1 to December 31.

Members receive the HFN Newsletter and notices of all meetings, field trips and special programs.

| | | | | |
|--------------------------------|----------------------|-------------------|---------------|--------------|
| EXECUTIVE for 1984: | President | John van der Meer | (r) 455-1029. | (o) 426-8276 |
| | Vice-President..... | Edna Staples | (r) 868-2919 | |
| | Treasurer | Bernice Moores | (r) 422-5292 | (o) 445-2500 |
| | Membership | Colin Stewart | (r) 455-6576 | |
| | Secretary | Michael Downing | (r) 823-2081 | |
| | Past-President | Doris Butters | (r) 463-0033 | |

Directors:

Projects John Brownlie
Program Co-ordinator. Filip Volckaert
Bill Freedman

Aileen Meagher
Mary Primrose
Pierre Taschereau

| | | | |
|-------------------|--------------|----------------|----------|
| NEWSLETTER | Editor | Doris Butters | 463-0033 |
| | | Edna Staples | |
| | | Aileen Meagher | |

MAILING Halifax Field Naturalists
ADDRESS: c/o N.S. Museum, 1747 Summer Street, Halifax, B3H 3A6.

HFN is a member organisation of the Canadian Nature Federation.

HFN is incorporated under the Nova Scotia Societies Act.

HFN NEWSLETTER is produced by courtesy of the Nova Scotia Museum.

*** Now that running a car is so expensive, it would be appreciated if those travelling in someone else's car on field trips share the cost of the gas.
Thank you.

hfn news



AN OPEN LETTER FROM THE PRESIDENT

At a recent meeting someone stated that the HFN had great potential. That comment brought a certain feeling of satisfaction but after a little reflection my reaction changed to one of uneasiness. The reasons for my concern I want to share with you here.

The word 'potential' is double-edged. It correctly suggests that our club has the capacity and talent to undertake certain things we consider important to ourselves and our community. It also implies, however, that our talent is largely untapped and our capacity to do things largely unrealised.

I believe our club has a problem. It is a common problem and not yet so serious it can't be resolved, however, it is becoming increasingly evident. The problem is declining involvement. Attendance at talks could be better, attendance on recent outings is becoming marginal, memberships themselves are slowly falling, the same few people carry the ball for everything. I cannot believe this trend does not concern you. Your Executive is uneasy and anxious to discover the reasons for the decline. Are we doing something wrong? Are the planned activities boring? Is HFN become redundant? Do we need more activism?

Just before writing this letter your Executive approved the formation of a committee to undertake a publicity and membership drive. That seems a good first step and you can all help by bringing some potential new members along to our activities. The members of the Executive, however, are people just like yourselves and have, like you, many other responsibilities. We cannot do much more than we are doing. At the same time there is much more to be done. We need more active members; members with ideas, members to put ideas into motion. We need members as resource people and members to do field work. In a nutshell we need more active involvement. Our Club has the potential - let's come alive!

John van der Meer
President.

N O T I C E

The Department of Part-time Studies at Dalhousie University is considering offering a non-credit course in plant identification, food uses, or general natural history. The course would be given by Pierre Taschereau on one or two evenings a week with a field trip on Saturdays.

Pierre is planning the course and would welcome suggestions as to content, most suitable time of year, etc., and who might be interested in such a course. If you would like more information call:

Pierre Taschereau
Institute for Resources and
Environmental Studies
Phone - 424-3632

¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶

OF BATS AND BELFRIES -

The bats in the belfries of most people's minds are usually vampires, tanglers of women's hair and the chief agent in the transmission of rabies. Legends abound and have clouded our way of thinking of these elusive creatures of the night.

But these beliefs are well on their way to being changed. "NIGHTWINGS" - a travelling exhibit on bats now on

display in the foyer of the Nova Scotia Museum, effectively dispels many of the myths and mysteries surrounding these much-maligned mammals. It provides an opportunity to learn the true facts and to see some of the other bats of the world.

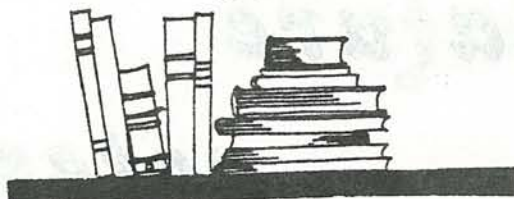
On display until January 6, 1985, visitors have a chance to change, or confirm, their perspective on the bats in the belfries of their minds.

Linda Morris.

FRIENDS OF THE PUBLIC GARDENS:
AN APPEAL -

At a recent Executive meeting we received a request for financial aid from the Friends of the Public Gardens. A decision was made to withhold such support on the grounds that it is primarily a heritage issue rather than a wildlife issue; also on the grounds that we have never before used our finances to support an outside group and wished to avoid a precedent. However, we do support their efforts to ensure protection for the Gardens and urge our members to consider supporting them with individual donations.

John van der Meer -
President.



ON THE SHELF

On the bottom shelf behind the NSM Reception Desk is our collection of periodicals from government, newsletters from other naturalists groups, and Nature Canada journal put out by the Canadian Nature Federation. For anyone who desires to compliment or challenge the government we have an up to date issue of the Atlantic Regional Directory. Reads nicely - "The purpose of Environment Canada is to 'foster harmony between society and the environment for the economic and social benefit of present and future generations of Canadians'"

Nature Canada summer issue contains an item by David Folster on the permanent damage to fragile terrains and wildlife habitats across the continent. In his view "Nowhere is a solution to this problem more urgently needed than on Canada's east coast". Another article (with some good colour shots) describes how predation by other insects reduces the maturing capability of Deerfly eggs: in the marsh Ladybugs eat deerfly eggs and minute Fairyflies parasitize the eggs.

Catherine Traill Naturalists' Club newsletter, October issue, contains its usual quota of very informative and well-written articles. Examples include:

- An article on the Scanning Electron Microscope. Since 1790 naturalists and biologists have accepted Goethe's definition for the flower; now, instruments such as the SEM are providing a new definition of the structure of a flower.

- Aquatic plants have been around for a very long time but relatively little is known about the environmental factors that affect their growth: "Freshwater Plants" provides a comprehensive report on emergent, floating and submerged plants.

- Questions on 'is it a bog, a marsh, a swamp or just shallow open water' are answered in another feature.

Saint John Naturalists latest newsletters are also on the shelf and a copy of New Brunswick Naturalist - another publication with good well-written features and very professionally laid out. Henrik Deichmann, biologist, describes his experience of a July dawn;

an update on the CWS Peregrine Falcon Release Program again asks for reports on sightings of these banded birds to be sent to the CWS.

- One feature of local significance, especially coupled with Nature Canada's article on predation by other insects on Deerfly eggs, is "Bugs"; Tony Thomas deals specifically with Horse and Deerflies - the tabanids - their habits and life cycle. Wonder if I would be out of line if I quoted part of a poem, Deer Flies, written in 1930 by Prof. J.G. Needham of Cornell University? ---

*Beautiful flies
With shining eyes
Of deep green hue and marvellous size
With golden sheen
On bars of green
And depths opalescent that glow between
Such are the eyes
Of these beautiful flies.*

NEXT DEADLINE ---

25 January 1985 for the
FEBRUARY issue. Mail
contributions to the Editor,
N.S. Museum, or phone
463-0033.



nature notes

...Charlotte Lindgren spotted a very large fungal growth on a White Ash tree along Coburg Road; brilliant buttery yellow, 'lumpy' and with flashes of orangey-red along the raised edges - no doubt a *Polyporus sulphureus* At rush hour on 24 October Doris Butters' attention was drawn to an owl in the topmost branches of a horsechestnut tree on Argyle Street; too many leaves in the way to identify the species but it did have speckly brown feathers, and quite a lot of white in its somewhat short tail. It was about 18" long but no matter where one stood it was not possible to see the face or head clearly.

... On October 17 Maud Godfrey spotted a hawk-like bird sitting on the grass in the Public Gardens. Colouration was basically white heavily flecked with a light sandy brown. The tail was rounded with two light-brown bands, the outer one slightly darker. The bird was about the size of a crow or slightly larger. When approached it flew up about seven or eight feet, flew a few yards and then settled on the grass again. The plumage did not appear to be disarranged and its legs and wings appeared normal-- did anyone see it who would know what it was and why it was in the Gardens?

NOTE FROM A BYGONE ERA -

"... an Ivory-billed Woodpecker... wounded slightly in the wing...which I carried with me... I took him upstairs and locked him up in my room. In less than an hour I returned ...He had mounted along the side of the window, nearly as high as the ceiling, a little below which he had begun to break through. The bed was covered with large pieces of plaster; the lath was exposed for at least fifteen inches square, and a hole, large enough to admit the fist, opened to the weather boards. I now tied a string round his leg, and fastening it to the table, again left him in search of suitable food for him. As I reascended the stairs, I heard him again hard at work. He had almost entirely ruined the mahogany table to which he was fastened...he lived with me nearly three days, but refused all sustenance, and I witnessed his death with regret."

(From A World of Naturalists by Joseph Kastner, 1977. [English title A Species of Eternity] Abstracted from an essay on Alexander Wilson, b.in Scotland in 1766; came to the New World in 1802; a schoolteacher and self-taught naturalist and wildlife artist)

WELCOME TO NEW MEMBERS -

Perry and Pamela Conrad
Anne Feyrer
Kathryn McPhee
Gillian McNeill
Charlotte Myhre
Frank and Mary Hims
E.A. (Al) Dakin
Kristen E. Schlech
Frances Hansen
Dr.I.G. Mobbs and family
Richard C. Sircom and family
Susan Queen
Timothy Russell
Nancy MacNearney

reports

As naturalists we are all aware of how harsh the environment can become and how resilient living organisms must be to survive. All of us can probably remember at least a few cold, wet, truly miserable days when we were glad to return to the man-made comforts of our modern homes. But think of the plants and animals that have to stay 'out there' and take it!

Life has adapted to some very extreme conditions, surviving in near-boiling water of hot springs at one extreme, and in the frozen wastes of Antarctica at the other. Life is found airborne in the atmospheric fringes near space and under incredible pressures at the bottom of the deepest ocean valleys. However, you don't have to go far from home to visit one of the harshest habitats on the globe, and the organisms that live there have to be considered amongst the most resilient that can be found anywhere. Where is this place and what are these organisms? It is the ocean's intertidal zone and the seaweeds that inhabit it. For those who receive this revelation with scepticism, let me convince you.

Seaweeds are aquatic plants and they must be wet to carry on their normal life processes. Nevertheless, those high in the intertidal zone spend more time out of the water than they do submerged. At certain times of the month such plants may spend several consecutive days out of the water. Many of us have seen the brown seaweed *Fucus* as dry as lichen, waiting for the tide to return. Few other creatures can withstand such wet-dry cycles. There can also be abrupt changes in temperature. Although the ocean itself changes temperature only gradually, seaweeds left exposed by the tide may suddenly find themselves baking under an August sun, or alternately, freezing solid during a cold January night.

There is also the problem of salinity. Seaweeds are adapted for life in salt water and most die almost instantly in fresh water. The intertidal species, however, are able to survive exposure to hours of heavy rain and freshwater run-off during storms that catch them

while the tide is out. During wind storms the intertidal plants take a pounding from the surf but like the famous watch they "take the licking and keep on ticking."

The waves exert their effect in a variety of ways. The sheer violence of the water moving over the plants sets up drag forces that can rip all but the toughest from the rocks. Wave after wave smashes the plants against the sandpaper-like rocks to which they cling so tenaciously, and if there is a beach nearby, the plants get sand-blasted for good measure. Some plants are lost, many are damaged, but most survive.

During the winter in some localities, giant blocks of ice repeatedly scout the intertidal zone until none of the lush vegetation growing there the previous fall remains. But the plants are not defeated. In spring, when the ice becomes a memory, thousands of little plants emerge from cracks in the granite where even the ice could not dislodge them. Plants that survived the winter in protected niches release their spores into the water and soon repopulate the barren parts of the zone.

In summary, the intertidal seaweeds are able to handle constant change through a variety of adaptive responses and even when conditions become nearly impossible their immense reproductive capacity allows them to regain quickly any territory that they temporarily lost. All in all, these common plants, so easily dismissed as 'ordinary' are one of the most remarkable assemblages on earth. The next time an outing takes you to the shore, have another look..... this time with respect!

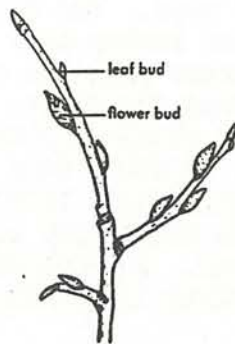
John van der Meer.



WOODY PLANTS IN WINTER -

Winter is on its way, the plants are losing their leaves in earnest now. It is the time for naturalists to look at twigs again and see how many plants they can identify without their leaves.

Like many things in nature, at first glance all the leafless woody plants look much the same. Little by little, however, as you get to know them, the differences begin to stand out.



Leaf and flower buds
of elm (*Ulmus americana*).

I have been looking at twigs over the past few winters and finding it an interesting hobby to try and identify them. With a pair of good clippers (anvil-blade gardening type), a few guides to twig identification and a small hand lens (10X) I have been able to identify many of the common trees and woody shrubs in the vicinity of Halifax.

It helps to choose a particular area - the backyard, the streets, a park, a school-yard, or a nearby green area - and become thoroughly familiar with it. There are many such areas scattered around Halifax or just outside it.

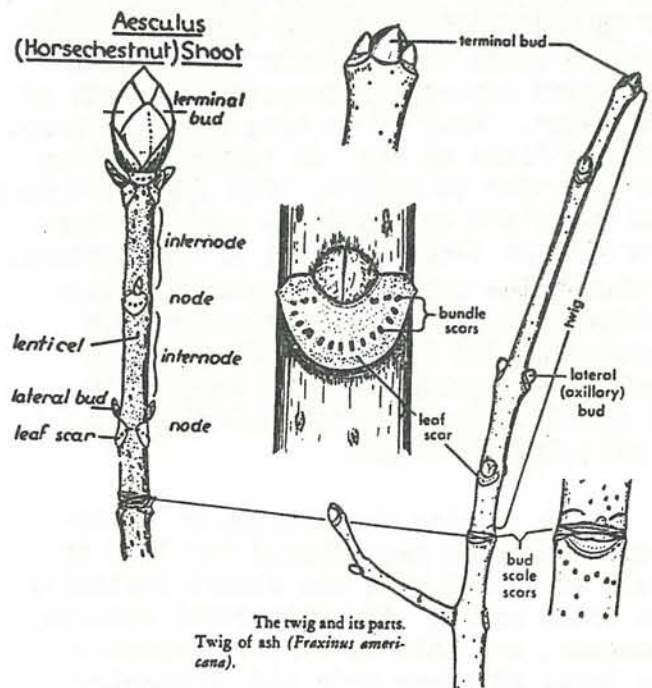
The best guide to identification I have seen is: Winter Keys to Woody Plants of Maine by Campbell, Hyland and Campbell, University of Maine at Orono Press, 1978. It is well illustrated and the keys work well. It costs about \$7.50. Your bookstore will order a copy for you, or you can get it from the library. The Nova Scotia Government Bookstore in Halifax has Summer Key to the Woody Plants of Nova Scotia, by Roland and Benson. It sells for \$1 or so, and while not designed for

use in winter, it is a good guide to woody plants in general. Native Trees of Canada by R.C. Hosie, is the best available book of its kind on Canadian tree species. It includes a key to the trees in winter and has good illustrations of all the tree species native to Canada. It is not much use on Halifax streets where most of the species are of European origin, but the keys still work to genus level.

Two other inexpensive, small books available at the Nova Scotia Government Bookstore are worth mentioning. They are: Trees of Nova Scotia by Gary Saunders; and Identification of Nova Scotia Woody Plants in Winter, by J.F. Donly. Donly's keys, sometimes trichotomous, are somewhat awkward for the beginner and many of his illustrations are not too good, but the book is useful none-the-less and well worth the dollar-or-so now being charged for it by the bookstore.

Besides some guide books with good illustrations and keys for identification, it is a help if you know where to look and what to look for on the plants. For those who might be interested in this winter hobby, I have listed some clues below.

Pierre Taschereau.



Dear H.F.N. Member,

Recent cuts by the federal government appear to indicate a strong bias against environmental protection and conservation. The Canadian Wildlife Service was hit particularly hard. It may be that there is little we can do to restore the cuts; however, a strong protest may help prevent further cuts that the minister of finance has indicated will be announced next spring. The government has to find ways to reduce its spending perhaps, but not at the further expense of our environment and wildlife.

The H.F.N. executive urge you to make your opinion felt in Ottawa. Letters to any of the addresses below would be most helpful. Details of the known cuts are summarized on the reverse side of this page.

The Rt. Hon. Brian Mulroney
Prime Minister of Canada
House of Commons
Parliament Buildings
Ottawa, Ontario
K1A 0A6

Dear Mr. or Dear Sir:

The Hon. E. Broadbent
House of Commons
Parliament Buildings
Ottawa, Ontario
K1A 0A6

Dear Mr. or Dear Sir:

The Hon. John Turner
House of Commons
Parliament Buildings
Ottawa, Ontario
K1A 0A6

Dear Mr. or Dear Sir:

The Hon. Dr. Suzanne Blais-Grenier
Minister of the Environment
House of Commons
Parliament Buildings
Ottawa, Ontario
K1A 0A6

Dear Dr. Blais-Grenier

The Hon. John Frazer
Minister of Fisheries & Oceans
House of Commons
Parliament Buildings
Ottawa, Ontario
K1A 0A6

Dear Mr. or Dear Sir

Mr. Charles Caccia, M.P.
House of Commons
Parliament Buildings
Ottawa, Ontario
K1A 0A6

Dear Mr. Caccia:

C.W.S. Cutbacks: Summary

Jobs lost:

- 1/3 of professional staff in Atlantic Region will lose jobs March 31, 1985.
- Contractors employed by C.W.S. have also had job cuts.

Local Effects:

RARE AND ENDANGERED SPECIES

Peregrine Falcon - reintroduction to New Brunswick and Nova Scotia. Program cancelled.

Piping Plover - studies on this species cancelled.

Pine Marten - Reintroduced to Terra Nova National Park, Newfoundland and Fundy National Park in New Brunswick.
- Joint program with Newfoundland Wildlife Service - Program cancelled.

Caribou/Wolf studies - research on the wolves and caribou herds of northern Labrador.
- Joint study with Newfoundland Wildlife Service - program cancelled.

Spruce Budworm - studies to find ways to control spruce budworm but minimize the effects on migratory birds. Program cancelled.

Forestry management - effect of forestry practices, such as clear-cutting and herbicides, on wildlife. Program cancelled.

Parks fisheries management: study of salmon, striped bass and trout in parks - to examine effects of overfishing
- Trout work cancelled.
- Some salmon and bass work still continuing through Fisheries and Oceans.

Oil impact on seabirds: work by toxicology section of C.W.S. on effects of oil on seabirds.
- Cancelled.

National Effects:

- Herring Gull toxicology study in the Great Lakes cancelled.
- Five wildlife interpretation centres to be closed or given to the provinces or volunteer groups. (Quebec, Ontario, Saskatchewan, British Columbia)
- The only veterinarian in C.W.S. released.
- Wildlife toxicology research at Hull, Quebec, phased out.

Cutbacks in other departments:

- NRC: - closing of the environmental secretariat which did research on contaminants in the environment.
- end to studies on alternate energy.
- research on radiation cut back.
- EPS: - withdrawing of federal offer to contribute to proposed Toxicology Centre in Ontario.

QUESTIONNAIRE ON HALIFAX FIELD NATURALISTS.

IN ORDER TO ENCOURAGE MORE ACTIVE PARTICIPATION, WE URGE THE
MEMBERS TO COMPLETE AND RETURN THE FOLLOWING
QUESTIONNAIRE

VOLUNTEERS: I would be willing to:

- a) Lead a hike
- b) Lead a hike for young people
- c) Give a talk or workshop
- d) Write a short book review or letter to the editor
for the Newsletter
- e) Write an account of a hike for the Newsletter
- f) Write a longer article for the Newsletter
- g) Help in organising displays and exhibitions
- h) Help make tea at meetings
- i) Help with publicity and membership drives
- j) Help conduct field studies in specific areas
(area studies)
- k) Help research local environment issues

SUGGESTIONS: I think it would be a good idea if:

- a) We had a talk or workshop on
- b) Someone led a hike to
- c) We got involved in
- d) Other suggestions
-
-
-

WE ARE A VOLUNTEER ORGANISATION, IF NO-ONE VOLUNTEERS, IT DOESN'T
GET DONE.

Please fill in and return to: Halifax Field Naturalists
c/o Nova Scotia Museum
1747 Summer Street
Halifax, N.S., B3H 3A6.

Name: Phone:
Address:
.

Bring this to a meeting at any time, your reply will be appreciated.

WOODY PLANTS IN WINTER -SOME CLUES TO IDENTIFICATION: WHAT TO LOOK FOR.

1. Persisting leaves or remains of fruit:
 - Red oak and beech usually retain some leaves over winter, as does the shrub leather leaf.
 - Alder has cones; Rhodora, capsules.
 - Dead leaves on the ground tell of the nearby trees and shrubs that shed them.
 - Witch-hazel capsules and flower remains.
2. Smell and taste:
 - Bayberry, sweet gale and sweetfern all have highly aromatic buds with a distinctive taste and smell when crushed.
 - Yellow birch twigs smell of wintergreen.
 - Pin cherry twigs have a musty, mousy smell.
 - Amelanchier (Indian pear) develops an almond odour a few seconds after being crushed. (So do many of the cherry trees).
 - Poplar bark with its salicin tastes extremely bitter.
3. Twig cross-section:
 - Pith, the soft central strand, is commonly white and round.
 - In red elderberry, however, it is red, in oak it is star-shaped and in alder, triangular.
 - Vessels of the wood (that carry water up the stem) are very large in oak, and like miniature straws, one can blow air through them (sometimes!).
4. Bark:
 - Striped maple has smooth bark with white stripes.
 - Amelanchier bark is smooth and grey with darker, vertical lines.
 - Poplar bark is smooth in the younger parts.
 - White ash bark is furrowed into firm, irregular ridges that are broken across and intersect one another.
5. Leaf scars, bundle scars and stipular scars:
 - In the majority of woody plants the leaf scars are alternate, but in maples, ashes and viburnums they are opposite (The are opposite also in a few other groups).
 - The number and arrangement of the bundle scars - visible as small projections or dots within the leaf scar - are important characteristics of the species.
 - Stipules may leave scars or vestiges that are characteristic of the species.
6. Buds and bud scales:
 - Most buds are covered by small brown scales. These may be hairy, smooth or gummy; some are fringed with hairs like an eyelash; they may meet end on as in speckled alder, or overlap like shingles as in sweet gale.
 - The bud may be capped by a single scale as in the willows or the bud may be naked (without scales) as in witch-hazel and the viburnums.
 - In black ash the terminal buds are sooty black.

field trips



BOTANISING AT CRYSTAL CRESCENT BEACH

Date: Sunday, 8 July, 1984. Participants: 12
Site: Crystal Crescent Beach, Sambro, Halifax County.
Guide: Jim Stewart, Dept. of Biology, Dalhousie University
Weather: Dense fog with a thin sun and cloud patches, 22°C.

The fog had at least one positive effect - the beach and dunes were not cluttered with a mass of sun-hungry Haligonians.

A variety of bog, dune and coastal plants were studied and compared. The wild strawberries tasted just excellent; the crowberries were also in fruit.

Yellowthroat parents fed their young while a lonely Osprey glided over our

heads. Tadpoles with hind legs dotted the beach of a small pond.

The main target of the trip was to seek the Calopogon and Arethusa Orchids, which unfortunately most of us didn't see as they weren't flowering yet in the area. But when returning home, Regina's sharp eye detected a small bog near Harrietsfield full of these orchids. It was a marvellous sight!

Filip Volckaert.

A WEEKEND AT KEJIMKUJIK NATIONAL PARK.

Date: Friday- Sunday - 17, 18, 19 August. Participants: 17
Site: Kejimikujik National Park and overnight at Albany New, on the
Weather: Excellent. Bright, warm, calm. River Medway.
Guides: Filip Volckaert and John Brownlie for HFN, assisted by Park
 interpreters Millie Evans, Cheryl Ogden and Cheryl Saulnier.

SATURDAY A.M. - ON THE GOLD RUSH TRAIL -

Four of us went on the Gold Rush Walk under the leadership of Millie Evans. Millie told us about the Geology of the area and why this would be a good spot to find gold.

We marvelled over the fact that the very rocks we were standing on were originally part of Africa!

Then we learned about the history of the search for gold in this part of Nova Scotia. Walter Prest, a self-taught geologist and prospector was one of the first who looked for gold in this region about 100 years ago. We found many traces of this back-breaking search. Holes that were 40 feet deep braced by cribbing, but

while we did not see the tunnel that was dug, we could still see the ditches for draining the water which seeped into the pits every day and had to be pumped out before each day's work could commence. Still standing there is an old rusty boiler which helped pump the water. Two young boys had to keep the boiler going day and night; they cut down all the trees in the vicinity to do this.

There was so much money and effort invested into this venture, but only two ounces of gold were actually sold. The Second World War interrupted the search.

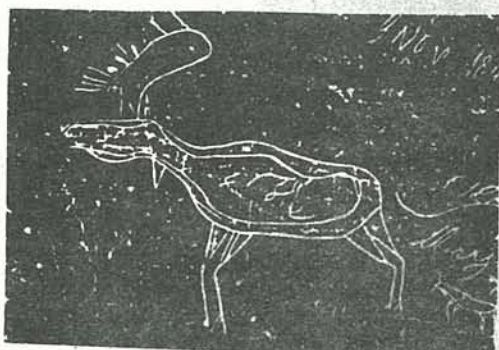
Oldtimers still claim that one could find enough gold in a certain bog to make the venture worthwhile.

As for Walter Prest, he found something rich enough to keep him poor for the rest of his life!

As we walked along the old trails listening to Millie we saw other treasures: an immature grosbeak, a green frog, a pickerel frog, a toad, and found some mushrooms for our supper!

A very interesting walk. Thank you, Millie.

Regina Maas.



SATURDAY A.M. - MIC-MAC MEMORIES -

Eight of us joined a group of Keji campers, young and old, for a guided walk in the woods near Merrymakedge Beach to hear about Mic-mac culture pre- and post-European 'invasion'.

We learned about:

(1) the use of different types of stones used for tools and arrow heads. Our guide, Cheryl, showed us replicas of quartzite gougers and scrapers, as well as slate and granite arrowheads;

(2) Micmac cookery, using local beechnuts, bayberry leaves ("Just like in spaghetti sauce?" asked one bright young chap), and huckleberries. Because the Micmac would not drink Keji water straight (they didn't trust it if leeches liked it!), they drank a lot of tea. In Pre-European-metal days, cooking was done in hollowed-out logs with hot rocks;

(3) the evolution of the canoe, from dug-outs to birch bark;

(4) trade with the Europeans. Micmac furs for European bread, metals and clothing;

(5) the myriad uses of various parts of beaver and moose. Beaver tail was a culinary delicacy, beaver teeth were used to write on slate, animal bones were used to make awls and games. Hide from the legs of moose was used as ready-made sleeves and leggings, and moose brains were used, along with hemlock bark, for tanning;

(6) Micmac graves - round pits before the Europeans introduced horizontal laying-out. A graveyard in the woods shows evidence of pre- and post-Christian practices;

(7) Micmac homes. Wigwams with reed insulation built within the shelter of a hemlock forest, where little underbrush grew; AND

(8) The pièce de resistance - the petroglyphs carved on rocks beside the lake. It's sad, though, to see signs of vandalism here, where people have declared their immortality and in some cases even obliterated the historical significance. Known historical carvings have been outlined in white. We spent a delightful half-hour making rubbings from the clearer carvings - stars, boats, hands and feet and profiles of heads.

Nancy Sherwin.

SATURDAY - P.M. - FLOWING WATERS -

"Leaves three - let it be", quoted our Park guide, steering us around a small patch of Poison Ivy, "we have a little in the Park, mostly near water".

Cheryl was leading us along the Old Big Dam Road towards a stretch of the Mersey which shows several aspects of the river - rapids, riffles, meander and stillwater - each providing a different habitat. Brown with tannic acid from the sphagnum bogs at the river's source, the fast-flowing waters flush through, carrying nutrients down to the sea.

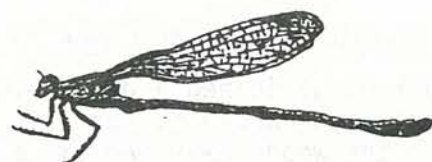
Where the waters roil and churn through the rapids there is little sign of life, only patches of creamy foam whipped up by the action of the current and indicating the presence of vegetable oils and chemicals. Here and there a large granite boulder impedes the flow and creates a riffle. Underwater insects attach themselves or their larvae to weed or the rock on its lee side to prevent being washed downstream; one example being Blackfly larvae which will emerge in spring with consequences known to us all!

At a meander, or bend in the river where the current slows, often sand and gravel is dropped, building up to form an obstruction around which the river carves for itself a new path and an islet is formed. One of the most productive areas is where the bed of the river widens into a shallow stillwater. Here nutrients collect, vegetation can take root, providing a breeding ground, protection and food for many creatures, particularly frogs and salamanders.

Just below the rapids the action of the current was nicely demonstrated by a trio of 'tubers' twisting and whirling downstream - and who hailed us cheerfully in passing - and a girl in a red kayak struggling to maintain a straight course through a riffle.

Here we found mayfly enjoying their 'crowded hour of glorious life' in the sunshine, before moving on to a stillwater where several of the group armed with nets and poles waded into the river and 'swept' up a rich variety of fauna. Cheryl produced a shallow white dish which she filled with water so that we could inspect more closely the catch of insects and larvae.

There were black sticklike water scorpions camouflaged among scraps of weed and debris; water striders; small fisher spiders; a red thread-like blood worm; a tadpole; water boatmen; an immature Red-spotted Newt and larvae of a diving beetle. There were four sticklebacks who, though separated, formed a 'school' as soon as they got oriented, and three or four dragonfly larvae twisting and curling convulsively when touched. Shiny black whirligig beetles dashed hysterically about the dish, weaving crazy patterns in the water, while one little fellow found a corner and just when round on his axis.



Damselfly

We returned them to the river and moved on. John Brownlie caught a gorgeous velvety black damsel fly, and holding it carefully by its closed wings, showed us its iridescent, peacock blue eyes. Then putting it gently down on a blade of grass, we watched it puff up its wings and flutter off into a bush. At our feet a young wood frog hopped towards the river. One of the boys caught it so that we could see the markings, then turning it onto its back, stroked it under the chin. The little frog lay perfectly still as though hypnotised until put down again - and then away it hopped.

Across the water a larged Painted Turtle sunned itself on a log - Cheryl told us that they often bask in the sun to dry off and remove parasites from their shells.

SNAILS AND SHELLS OF THE MAINLAND

Date: Sunday, 9 September 1984
 Site: Lake Egmont and Middle Musquodoboit, Halifax County, N.S.
 Leader: Dr. Derek Davis, NSM. Participants: 4
 Weather: Sunny, warm, light breeze.

Lake Egmont in the centre of the province is in an area not previously visited by HFN. There are several different habitats which Derek believes are well worth designating as 'special areas' for conservation.

We stopped at a small wooden bridge over a narrow neck between two large expanses of water - like a pair of eyeglasses. Waterlilies bloomed in profusion among spreading mats of leaves. Sweet Gale, Arrowhead and flowering grasses edged the shallows, with orangey-brown dragonflies stabbing erratically between the stems. In the deeper water a cormorant sat motionless on a stump.

We clambered down the bank to the water's edge to dredge for specimens which we observed more closely in the dish Derek had brought along. Findings included:

Two small leeches (species undetermined); a brilliant red water mite paddling among the Water Millefolium; and one Amphipod (*Hyalella azteca*). Of molluscs, Derek identified *Anodonta cataracta*, *Sphaerium simile*, *Musculium* sp., *Campelema decisum*, *Lypogyrus granum*, *Physa heterostropha*, *Lymnaea elodes*, *Gyraulus deflectus*, *Helisoma campanulatum* and *Cionella lubrica*.

Many other species have been recorded at this site, which is one of the best molluscan localities in Nova Scotia.

After lunching in a lakeside meadow we moved on to Musquodoboit Picnic Park, and poking around along the river bank found beside a large stone three more land snails: *Cionella lubrica*, *Vitrina limpida*, and *Zonitoides nitidus*.

A quietly pleasant day in the sunshine - thank you Derek.

Doris Butters.

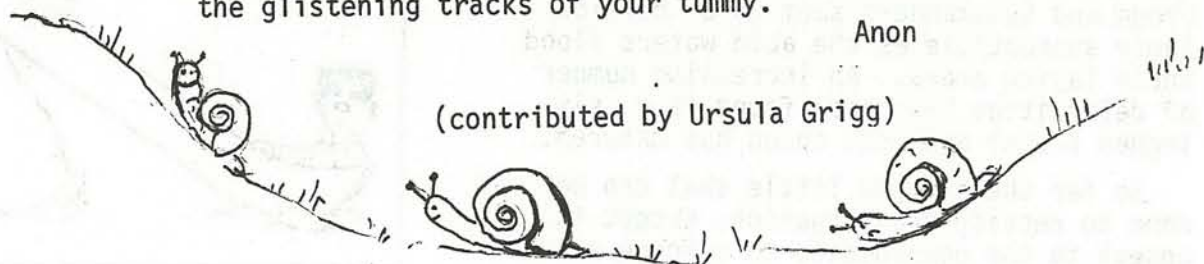
THE LIFE OF THE SNAIL

The life of the snail is a fight against odds,
 Though fought without fever and flummox.
 You see, he is one of those gaster-o-pods
 Which have to proceed on their stomachs.

Just think how you'd hate to go round on your own,
 Especially when it was gummy,
 If whenever you travelled you left on a stone
 the glistening tracks of your tummy.

Anon

(contributed by Ursula Grigg)



HEMLOCK RAVINE: ' VEGETATIVE ' WALK

Date: Saturday, 20 October 1984
Site: Hemlock Ravine and Julie's Pond, Rockingham, Halifax.
Leader: Pierre Taschereau
Participants: 11 adults and 2 children.
Weather: Cloudy but mild.

We gathered at the N.S. Museum parking lot at 10:15 a.m., when Pierre gave us a brief history of the Prince's Lodge, the area where Hemlock Ravine is situated.

Our point of entry was beside Julie's Pond, the delightful little heart-shaped pond created by a prince for his resident lady-love. However, visions of romance were soon dispelled when we were introduced to the extremely poisonous Water Hemlock (*Cicuta maculata*) a fast-acting convulsant which grows abundantly in this province in wet places and around ponds, etc.

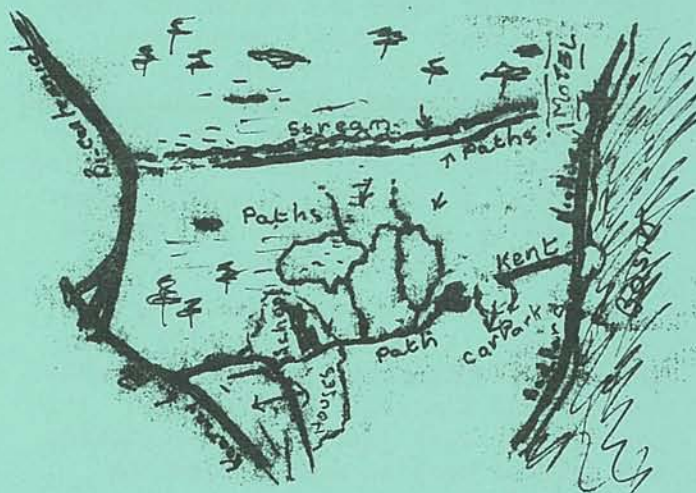
Many plants, shrubs and trees were examined vegetatively in their autumn state and their various peculiarities noted; for example the unpleasant smell of Witherod, the scaleless buds of Hobble-bush coated with a brown fuzz but showing the lines of every vein in the tightly-folded leaves-to-be, and the blobs of a dry, plastic resin on the Pin-Cherry. We identified Striped Maple, Beech, Hawkweed and Short-tufted Woodland Grass, among others.

As we moved up the bank we noted the change to coniferous forest - mainly spruce and hemlock - though still with interesting shrubs and plants in the under-storey and small clearings. Huckleberry, False Holly, the withered remains of bracken and ferns and the bright green of Christmas Fern, to name a few.

With the Ravine itself in mind, we crossed the newly-gravelled serpentine trail and struck off through the big trees and down a steep slope, hoping to hit the ravine. This was not to be. While Pierre reconnoitered for landmarks, we decided to eat lunch and have a rest. We were not exactly lost but eventually Pierre suggested that we back-track to the cars and try again from a more direct point along the Bedford Highway. (Through the Sea King Motel, which route is NOT encouraged by the operators of the motel).

Along the Ravine proper the path is well-established though rough in places; the stream which parallels the path had virtually dried up after our long rainless summer. This is the area of mature birch and the hemlocks for which the Ravine is noted. One giant must have a girth of at least 12 feet - Pierre and John Strong had difficulty touching fingers (even with Ricki's help) as they embraced the trunk at full stretch.

The afternoon was getting on, and some of the walkers had to leave at this point, but the rest of us continued along the Ravine almost to the Bicentennial Highway. We were not alone in the Ravine - a group of 40 army cadets were racing around being put through an orienteering course, and getting off course just as we were, despite their detailed maps. We were given a copy by one of their officers, just a little too late for our purpose. Part of it is shown here and gives the location of the paths between the Ravine and the Julie's Pond area.



We saw no birds but did hear the quarrelsome chatter of jays and saw two very lively squirrels chasing wildly up a large spruce before taking a flying leap into the next tree. At the end of the path by the highway a little chipmunk made an appearance, cocking an inquisitive eye at us before disappearing into the bush. And so ended a very pleasant adventure - all within city limits.

Helen Smith.

Footnote to Hemlock Ravine Report:

The Ravine area has been designated as a public park and work has already started on gravelling paths etc., in preparation for the official opening next spring or early summer. However, the group noted with dismay that in neatening Julie's Pond to define its heart-shaped outline a rock wall has been built up and a cement top is being constructed all around it. When planning the area it

seems that no thought had been given to the frogs and salamanders that breed in the area - they would not be able to reach the water to spawn and then get back up the wall to the woodland. A few urgent phone calls were made by Bernice and the city has agreed to include 'slipways' in the wet areas so that the salamanders and frogs can do their thing and return to their summer habitat. Hopefully we shall still get a Salamander Walk next April.

A VISIT TO CLAM HARBOUR, LAWRENCETOWN AND CONRAD'S BEACH

Date: Saturday, 6 October 1984. Participants: 6
 Guide: Mr. Paul Uloth, Planner, Department of Parks and Recreation,
 Province of Nova Scotia
 Weather: Sunny - cold in the morning (6°C) - warmer in the afternoon
 and less windy.

The province of Nova Scotia has several parks in operation along the Eastern Shore and plans to add a few more. Paul introduced us - with great attention to the anthropological aspects - to a well-established site (Clam Harbour) and a development project (Lawrencetown and Conrad's Beach). The former consists of a set of drumlins on the mainland, a sandspit with dunes and marshland, and a hard-to-reach island. Heavy dune disturbance by dune buggies has been successfully reduced by the construction of adequate parking space. An interpretation centre and supervised swimming are offered to the public during summer. Clam digging and cranberry picking are part of the local attraction.

During our walk we observed an adult Bald Eagle, a falcon (kestrel?) on migration, Blackbacked and Herring Gulls and several Blackbellied Plovers. The cranberries were just right for picking and several parties were collecting gallons of them.

In the afternoon we visited Conrad's Beach and Lawrencetown. The latter place has paid an extremely heavy toll to overintensive beach use. Cars were parked virtually on the beach, the dunes were fragmented by numerous blow-outs, while no sanitary facilities were available. At present the province is constructing a parking lot, has fenced off the dunes and intends to add boardwalks and an interpretive centre.

Despite the wind that morning, the sea was calm. It was most interesting to observe from a height the reflection patterns of the waves around a headland. Several terns (Arctic or Common) were migrating, while rafts of eiders bobbed on the waves. Several herons were roosting along the marsh.

Conrad's Beach is somewhat less accessible, but nevertheless, heavily used. Also it is one of the few breeding grounds of the Piping Plover. The province plans to increase the number of parking spots (something we should object to), and provide general facilities. At the moment, a natural history study of the area is in progress.

On the mudflats, tens of Blackbellied Plovers were hunting invertebrates; some sanderlings, Ruddy Turnstones and Greater Yellow-legs roosted, heads tucked among their back feathers. Three Ring-billed Gulls stood among the Herring Gulls. A number of Pectoral Sandpipers flew nervously around in the higher marsh. Sticklebacks and mummichugs flashed away in the tidal creeks upon our arrival. The not-so-nice odour of stranded seagrass wafted across our nose.....!

It began and ended as a wonderful day. We thank Paul sincerely, and would encourage others to share such events more frequently.
 Filip Volckaert.