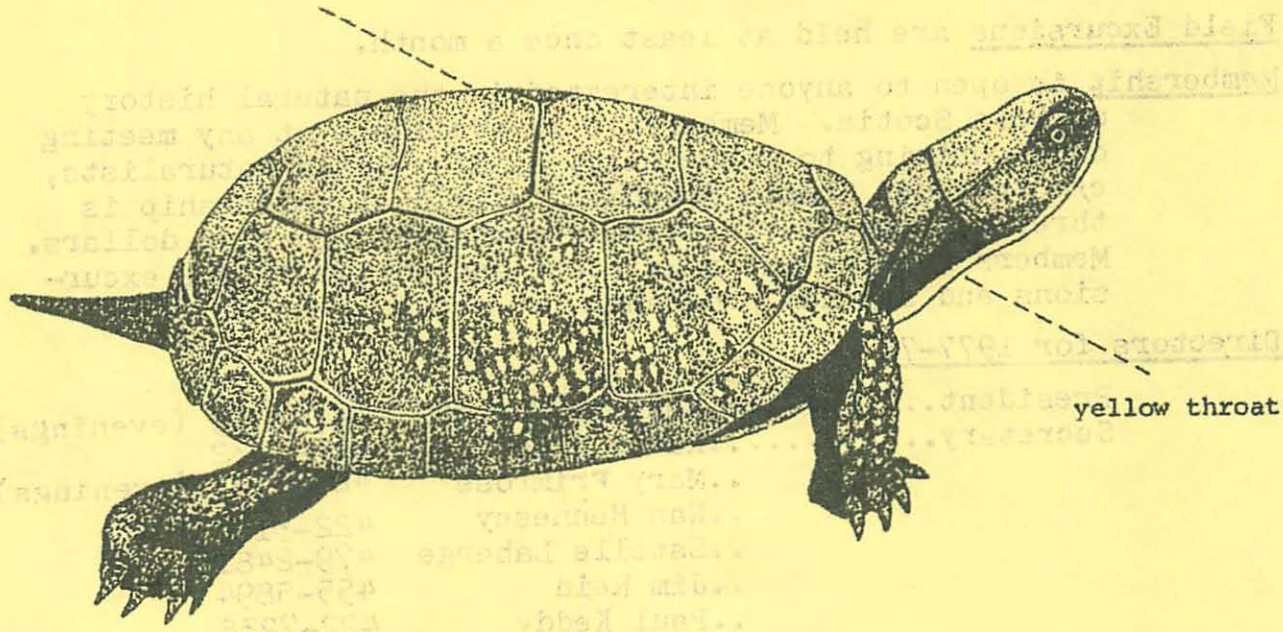
HALIFAX FIELD NATURALISTS NEWSLETTER

#11

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

MAY/JUNE 1977



HAVE YOU SEEN THIS TURTLE?

(see back page)

HALIFAX FIELD NATURALISTS NEWSLETTER

MAY/JUNE 1977 NUMBER ELEVEN

Meetings are held on the third Tuesday of each month, at 8:00 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.

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. Individual membership is three dollars yearly; family membership is five dollars. Members receive the newsletter and notice of all excursions and special programs.

Directors for 1977-78

President.....	Heather Harbord	463-9115 (evenings)
Secretary.....	Kathy Aldous	479-3032
..	Mary Primrose	423-5165 (evenings)
..	Nan Hennesey	422-3161
..	Estelle Laberge	479-2481
..	Jim Reid	455-5894
..	Paul Keddy	422-7238
..	Don MacDougall	424-2287

Newsletter: Debbie Burleson, Peter Welles, Jim Reid

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.
HFN is incorporated under the Nova Scotia Societies Act.

president's report

Still no news of the whereabouts of the January-February Newsletter which the Museum's printer has still lost. Thanks to MOVE we are able to print this issue and future ones at their office. We are continuing our policy of going to press on time even if the usual amount of copy is not in. Increasing costs of production may force us to reduce the size anyway. Copy deadline for the July-August issue is July 22nd and for the July flier is July 14th.

Doris Butters is now helping Sue MacKay with the tea for meetings and since neither one has a car, Nancy Covington is going to transport the goodies back and forth.

We have confirmation from the Museum that we can have the double meeting room on the first Thursday of the month starting in September. This should enable us to publicise our activities more without being in danger of an influx of new members that we can't seat.

We also have confirmation that Parks Canada is going to fund our Parks Awareness Project though it will be two weeks late in starting. The four students will be based in Debbie Burleson's office at the N.S. Museum and will be conducting nature walks at various parks and proposed parks around the metro area.

Thanks to Murray Cunningham for organising the duno restoration project at Martinique Beach on April 23 and 24. About a dozen members were on hand both days and used up two brush piles and two batches of excellent chili in the process.

Thanks also to Peter Hope who organised the joint weekend field trip to Keji for the HFN, Bird Society and Blomidon Field Naturalists. Even the torrential rain of Saturday night could not dampen the enthusiasm of those who were privileged to see the Scarlet Tanagers, the Barred Owl, the Painted Turtles and the Chain Fern etc. Surprisingly enough there were almost no ticks and the flies hardly bit at all.

Heather Harbord, President

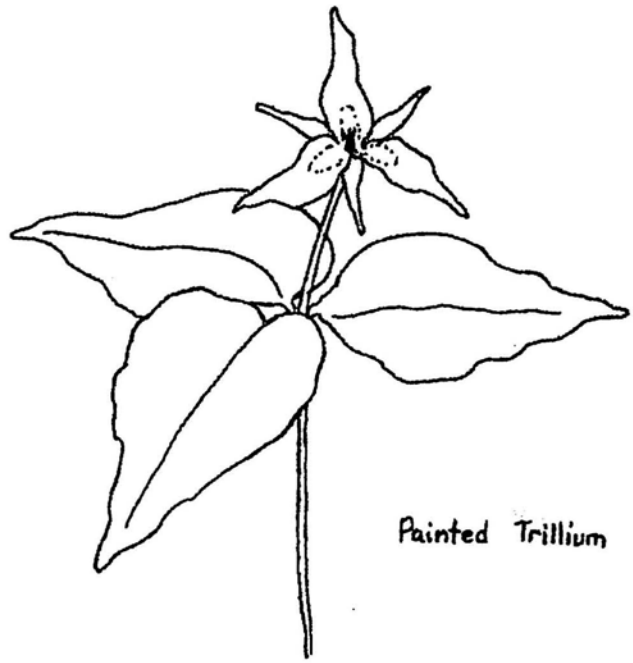
It's Time to Dust Off Your Wild Flower Guide

Paul and Cathy Keddy

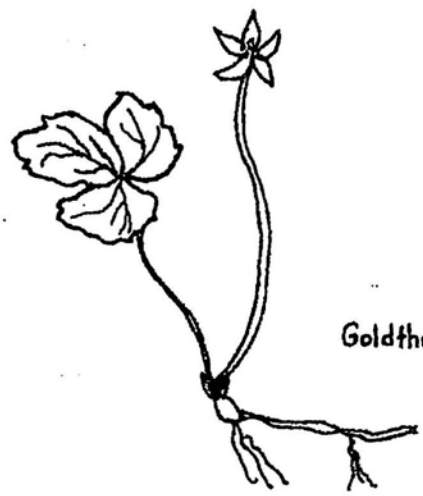
It's time to dust off your wild flower guide! If you start identifying wildflowers a few at a time as they begin flowering, before the summer is over you'll be surprized how many you've learned.

A good summer project would be to choose your favourite trail and then identify the new flowers you see each time you walk it. Keep track of what you see, and you'll note that each species has its own characteristic period of blooming.

If you choose a hardwood forest, by the end of the summer you'll have seen species such as painted trillium, trout lily, rose twisted stalk, beechdrops and perhaps spotted coral root. Coniferous forest will have bunchberry, Canada mayflower, wood sorrel, goldthread and clintonia. Should you



Painted Trillium



Goldthread

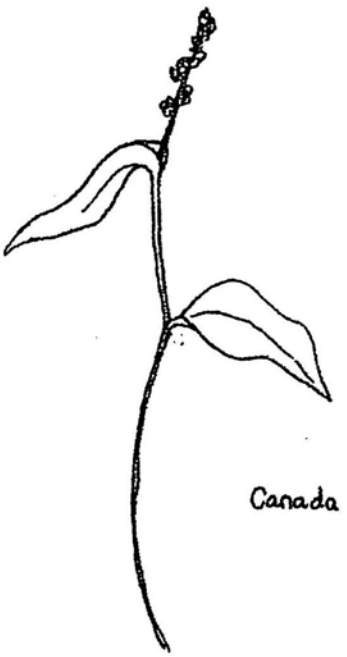
choose a sea coast trail, strawberries, three tooth cinquefoil, violets and perhaps arethusa or calapogon will be on your list.

The season is just starting, so keep your eyes open!

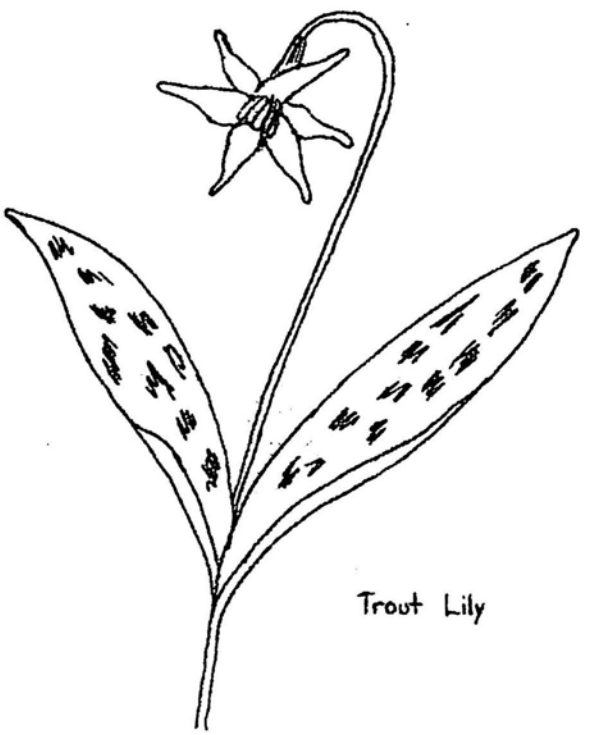
As this newsletter goes to press, a scattering of species are already in flower. Painted trilliums(Trillium undulatum) and Trout Lilies(Erythronium americanum) are scattered through hardwood areas. In mixed or coniferous woods,

Strawberry

Mayflower(Epigea repens) is almost finished, but Canada mayflower (Maianthemum canadense) is just coming out. Don't let the common names confuse you - the plants are entirely different - mayflower is in the Heath family (as you might guess from the tough leaves and white tubular flowers) whereas Canada mayflower is quite obviously in the Lily family.



Canada Mayflower



Trout Lily

Small white violets (Viola pallens) are now common in wet pockets and lakeshores. Strawberry plants (Fragaria virginiana) are in flower in open woods and old pastures.

The pictures will give you some idea of what to look for. But don't just read this article, look at the pictures, and snuggle back in your chair. Put on your walking boots, and set off into the woods to see them for yourself. Good luck! Let us know what you find.

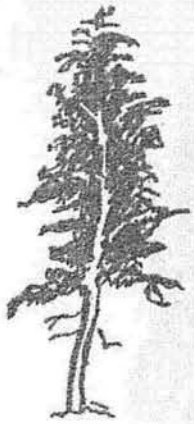
MORE OF
CAPE BRETON HIGHLANDS PARK TO BE FLOODED

The latest news in the controversial Wreck Cove Hydroelectric Project is that careless surveying by the Nova Scotia Power Corporation resulted in a serious error in estimating the size of the Cheticamp Reservoir. A sizable piece of land has already been removed from the National Park to permit construction of the Cheticamp Reservoir. Now it turns out that the reservoir could flood a further 123 hectares of the headwaters of the Cheticamp River remaining within the National Park. The consultants studying the project estimate a further 66 hectares of raised bog would also be affected, including a portion of the proposed Sunday Lake Ecological Reserve within the park.

The consultants provide several alternatives to this additional damage to Cape Breton Highlands National Park. One alternative (Alternative 2, Variation A) would prevent flooding within the park, and also result in a saving of roughly 1/2 million dollars in construction costs.

There will be one or more public meetings the week of June 20 to discuss the consultants report with Federal and Provincial Dept. of Environment Officials. Copies of the report are available locally for public review at the Public Archives and Killam Library, Parks Canada (Historic Properties), and Fisheries and Environment Canada, 6009 Quinpool Road.

HEMLOCK RAVINE



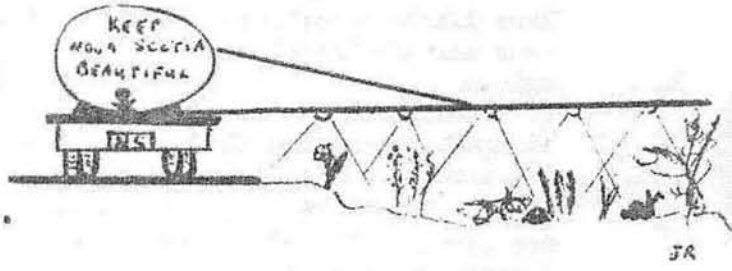
Cathy Keddy did a study on behalf of HFN on the Hemlock trees of Hemlock Ravine. The study was forwarded to City Hall for use by parks planners. It was well received. If and when our January newsletter arrives (it was lost by the printers), you'll be able to read a summary of the report.

ECOTOUR

The Canadian Forestry Service has just finished its latest guide in the "Ecotour" series. This illustrated guide book follows the Trans Canada Highway through Nova Scotia, and discusses the geology, biology and history of the route. It's most interesting reading even if you do not intend on driving from Amherst to Sydney in the near future. Look in the government publications section of your local bookstore.

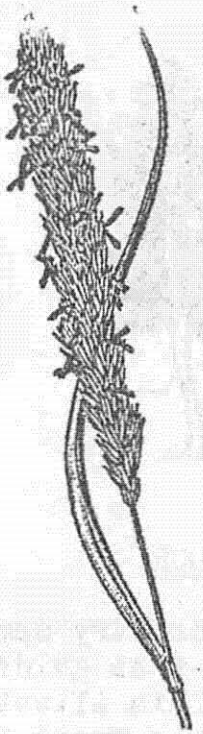
HIGHWAY SPRAYING CANCELLED

Good News! The cabinet has decided not to permit road side spraying in Nova Scotia this year. Roadsides will be mowed instead. This should mean attractive roadsides instead of expanses of brown and dying vegetation. Don't forget to thank your local MLA for this sensible decision.



FERNS!

Be sure to read about the HFN fern project - all the information is in this issue.



HFN CONSERVATION CORPS

Dr Murry Cunningham led the Conservation Corps on a busy weekend's work at Martinique Beach on April 23 and 24. Two gigantic piles of spruce trees and limbs were used to construct a barrier designed to trap sand to fill in a gap broken by a storm last winter. Several smaller blowouts, old truck tracks and weak points were also given attention by our work crew.

Before we settled on Martinique Beach restoration as a project, we examined the situation carefully. Beaches do break down naturally, and we did not want to make the common mistake of working against nature. however, it was obvious that a great deal of the damage was due to dune buggies and trucks driving on the beach. The area broken through by the storm had clearly been heavily damaged by vehicles first.

Dr Bowen in the Oceanography Dept. at Dalhousie advised us on the best methods to attempt to repair the damage.

We were pleased that Lands and Forests were interested in this venture. They provided materials like nails, twine and two-by-fours. They also undertook the difficult task of delivering two huge truck loads of brush to the site.

Conservation Corps members were kept busy by the work, but the good weather, homemade bread and chili, and teamwork made it a lot of fun as well.

Next time you're out to the beach, walk out to the end to admire the efforts of the Corps. We hope that enough sand will be trapped by the brush to form a new dune. If enough sand accumulates, we'll need Corps volunteers to plant Marram grass on the accumulated sand. This was the first project of the Conservation Corps. If you have a suggestion for other worthwhile projects, or if you are interested in joining our list of volunteers, contact Dr. R. M. Cunningham, 6299 Payzant Ave., Halifax.

P.S. We just received the following letter from Barry Diamond, head of Parks Planning in the Department of Lands and Forests.

R. R. # 1 Belmont
Colchester County
Nova Scotia BOM 1Co

Mr. Paul Keddy
Halifax Field Naturalists
c/o Nova Scotia Museum
1747 Summer Street
HALIFAX, Nova Scotia

Dear Mr. Keddy:

I wish to express the appreciation of the Parks Division for the efforts put forward by the Halifax Field Naturalists Conservation Corps toward restoring the dunes at Martinique Beach.

I have had the opportunity to discuss the results with Dick Brown of our staff as well as people in the Operations Branch of the Department and from all reports an excellent job was done. It is impressive that a conservation group should undertake to demonstrate its concern about a management problem in a Provincial Park in such a practical and effective manner and I'm pleased that the Department of Lands and Forests was able to co-operate in supplying the materials for your work in accordance with your needs.

This project certainly demonstrates the potential for groups of citizens to show their concern and/or support for government conservation programs and through co-operative efforts to achieve conservation objectives more quickly and effectively than is possible through individual actions. I would hope that this example will serve to stimulate more such co-operative efforts between Conservation Groups and the Parks Division.

The information sheet circulated by Dr. Cunningham vividly describes the work, the spirit of the workers and their sense of accomplishment on completing it; and on behalf of the Division I thank you and the others for the work done at Martinique and the excellent manner in which it was carried out.

Yours very truly,

Barry N. Diamond
Manager, Parks Planning

BND:dm

HFN FERN PROJECT

AIM

The aim of this project is to systematically collect detailed information on the distribution of ferns in Nova Scotia, using the field work of participating volunteers. This approach has been used successfully in Great Britain. There, detailed maps for all 1,500 species of vascular plants were made, using distributional data collected by volunteers.

VALUE

1) A systematic inventory of our fern species would not only allow us to make detailed distribution maps of even the commonest species, but would also be invaluable in assessing the status of rare species.

2) The success of the fern project could lead to a similar undertaking for our entire flora at some time in the future.

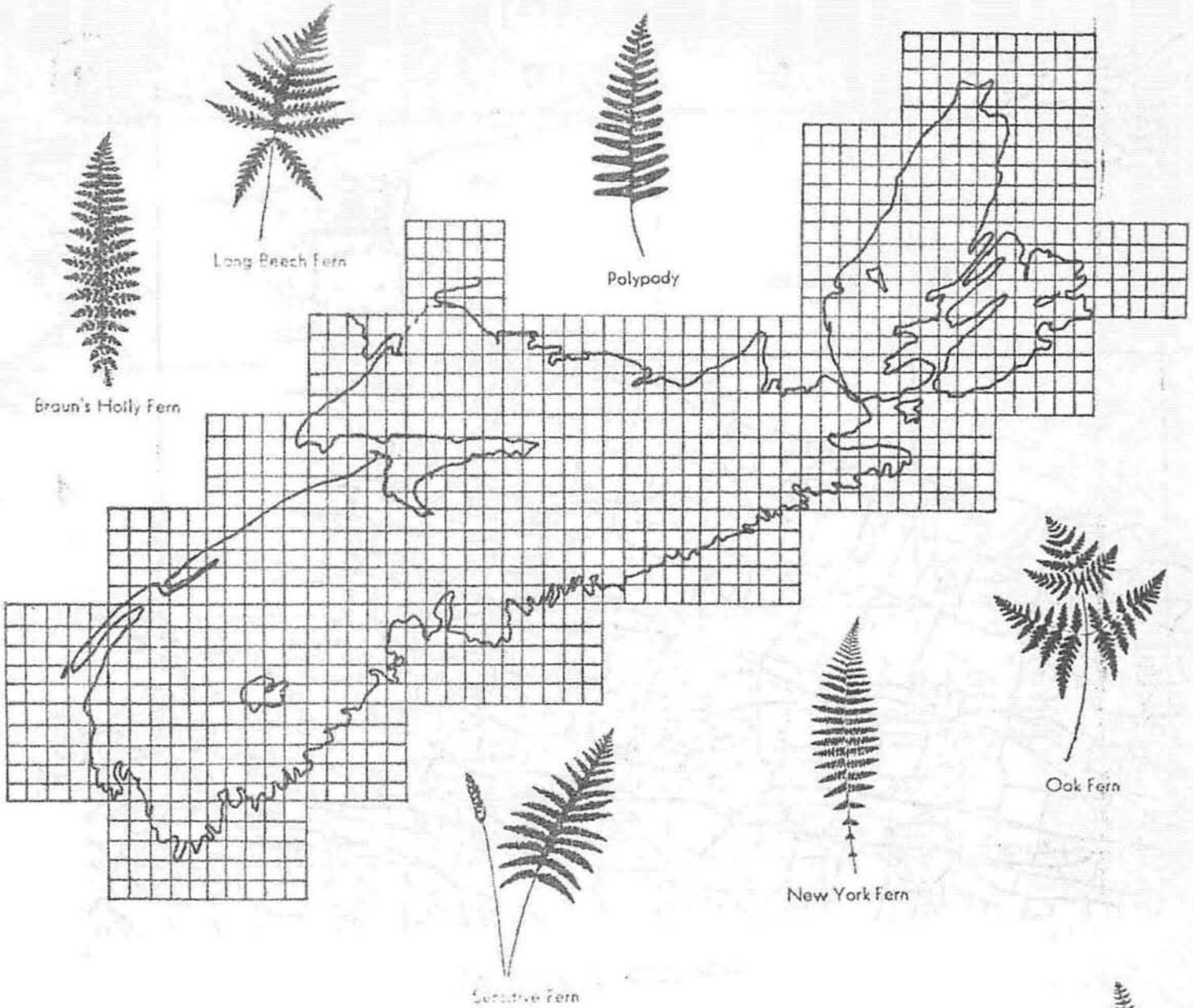
PARTICIPATION

With fewer than 50 species of ferns in Nova Scotia, this project will be ideal for beginners who would like to learn to identify a small group of easily recognisable plants. At the same time, it will be contributing valuable information about species distributions.

DATA COLLECTION

The province is divided into 10 X 10 kilometer squares by the military grid; there are roughly 750 squares. Participants are requested to take fern checklists along on their travels, and mark off species of ferns found in each of the 10 X 10km. areas they visit. Do not feel that you must intensively search the entire grid square and find all the fern species in it (although this would be nice!); any contribution is valuable. The data will be kept on file at the Nova Scotia Museum.

The following map shows the 10 X 10km. areas over the entire province, indicating the detail of the project.



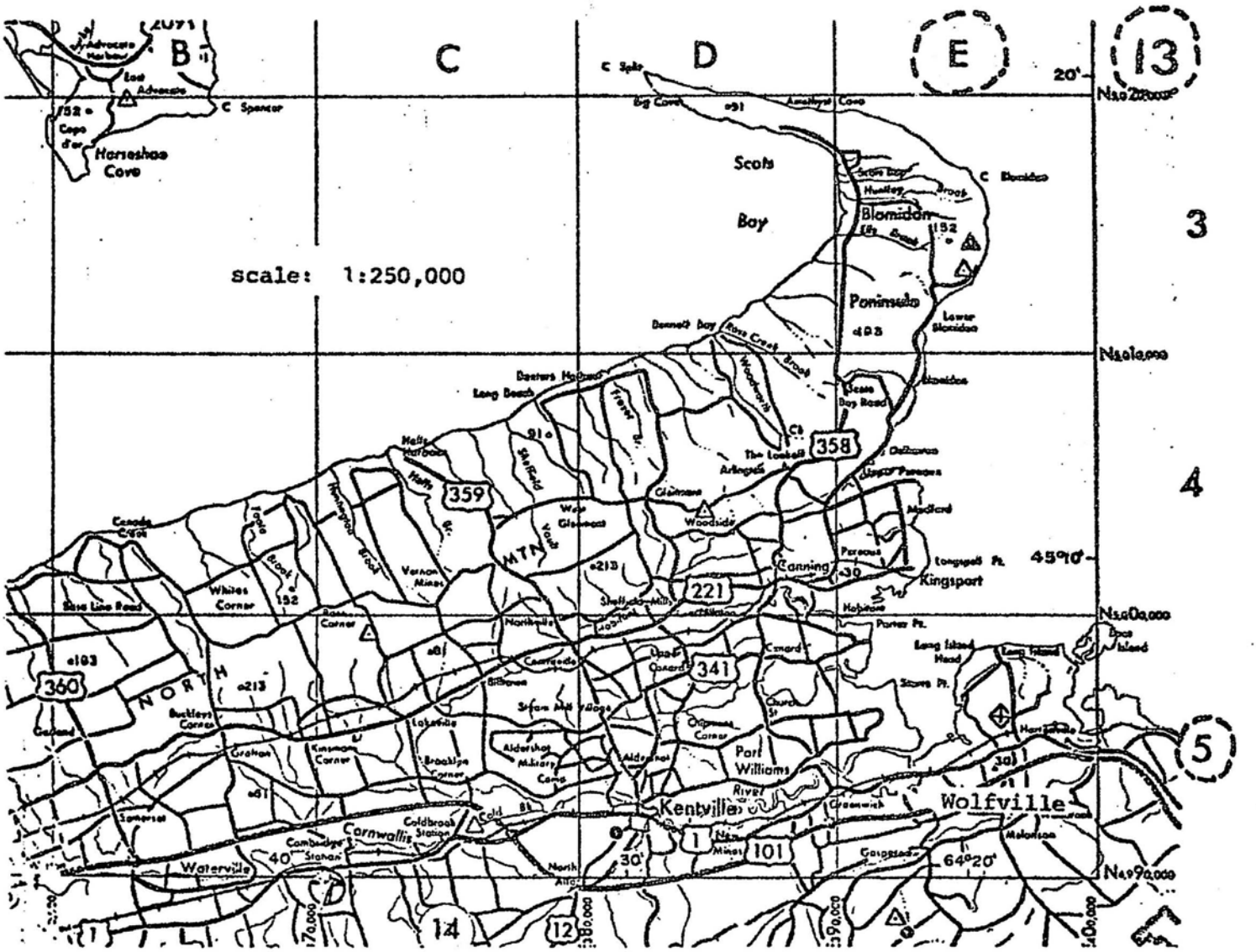
FERN FIELD GUIDE

If you would like to participate, but are not at present familiar with the ferns of Nova Scotia, we recommend getting a copy of A Field Guide to the Ferns by Cobb. Its excellent fern silhouettes and drawings simplify species identification. Copies may be obtained from the Fern Project for $4.00.

GRID REFERENCES

To simplify grid references, may we suggest using the maps in Maps of Nova Scotia, published by N.S. Communications and Information Centre, 1976 (available from the HFN Fern Project).

If you are comfortable working with topographic maps, then direct military grid references are equally acceptable (note the section letters followed by the western (left) then southern (bottom) edge of the 10 X 10km. square).



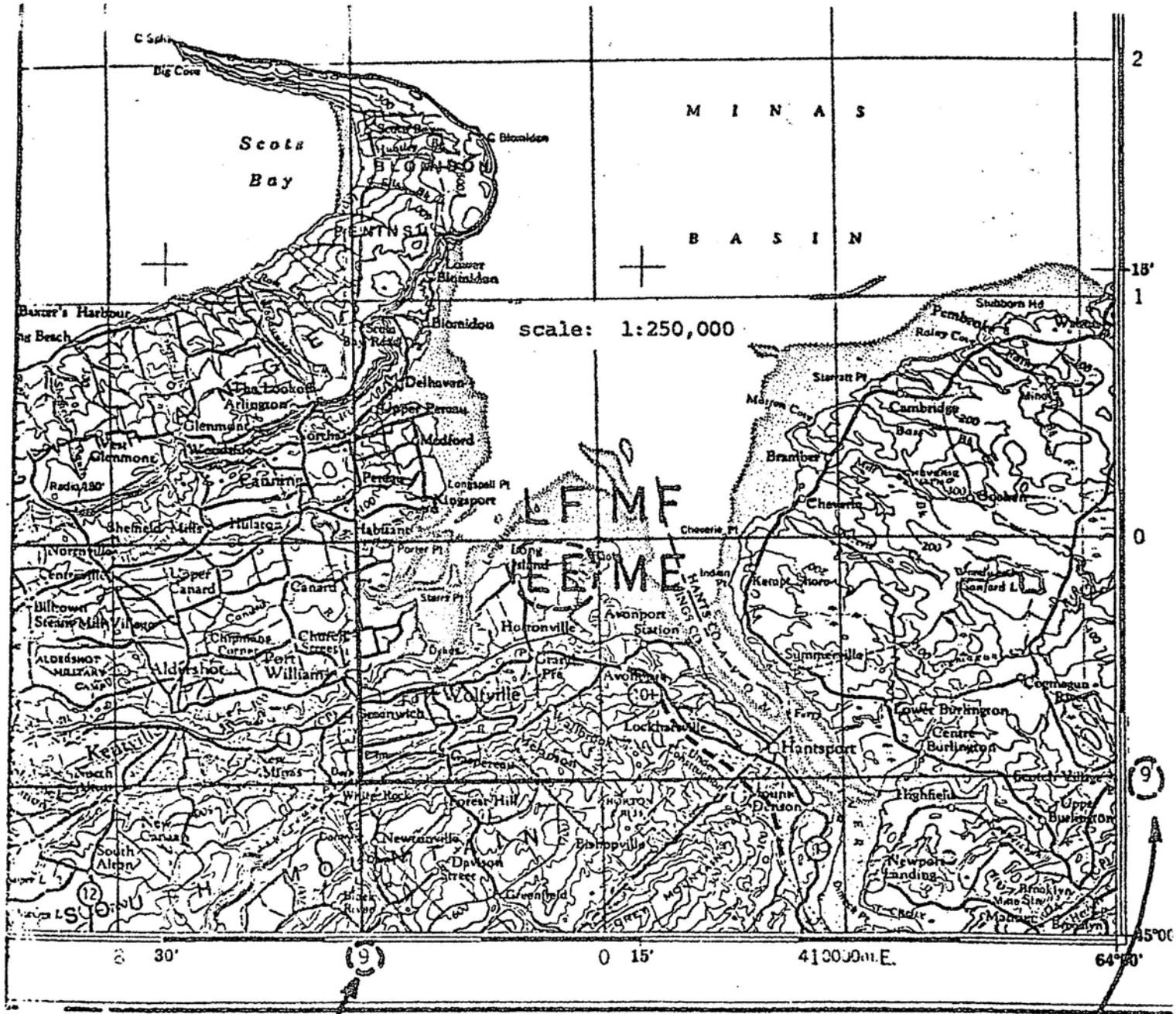
from Maps of Nova Scotia

Grid Reference Example: checklist from Acadia U. campus

locality: Acadia U. campus, Wolfville

grid reference: either - Map 13, grid E-5 (see map above)

or - LE 90(E) 90(N) (see map opposite)



topographic map 21H

left first

bottom second

CHECKLISTS

Printed in this newsletter are some checklists to cut out and use for the project. Additional checklists have been printed and are available from the project.

Mailing in completed checklists from time to time will enable us to follow the progress of the project. We will be reporting back to participants regarding the project progress.

To increase the usefulness of each checklist, we request that you give more detailed locality information (such as, "shores of Turtle Lake" or "Fish Creek flood plain") in addition to the military grid reference.

SYNONYMS

Botanists often review the classification of various groups of plants. As more information about a species is collected, its relationships to other species are re-examined. Thus the Latin name for a species may change over time. For example, the Bog Fern was at one time given the name Dryopteris simulata. Additional investigation showed that the Bog Fern was more closely related to ferns in the genus Thelypteris and the name was changed to Thelypteris simulata. As you can see, one fern species can have had several Latin names attached to it. These names are referred to as synonyms.

The names shown on the checklists are the ones generally accepted today. A few of the species on the clecklists are given different names in the fern field guide and in the Flora of Nova Scotia. These synonyms are listed below:

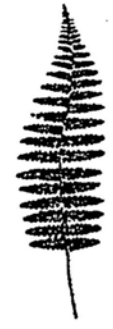
on checklist		in A Field Guide to the Ferns
Dryopteris intermedia	=	Dryopteris spinulosa var. intermedia
Polypodium virginianum	=	Polypodium vulgare

		in the Flora of Nova Scotia
Thelypteris Phegopteris	=	Dryopteris Phegopteris
Thelypteris noveboracensis	=	Dryopteris noveboracensis
Thelypteris palustris	=	Dryopteris thelypteris
Thelypteris simulata	=	Dryopteris simulata
Gymnocarpium dryopteris	=	Dryopteris disjuncta
Matteuccia struthiopteris	=	Pteretis pennsylvanica

IN CLOSING....

Remember, just take these checklists along on your holidays or weekend walks. If you know of other interested volunteers, please pass this information along to them. Or, send us their addresses and we will mail them information packets and some checklists.

I would like to participate in the HFN Fern Project.



Marsh Fern

Please send me: _____ A Field Guide to the Ferns ($4.00)

_____ Maps of Nova Scotia ($3.00)

_____ Checklists (number required)

_____ Additional copies of fern project information (number required)

Enclosed please find $_____

Name _____

Address _____

_____

_____

Mail to: HFN Fern Project, % N.S. Museum, Halifax, N.S. B3H 3A6
1747 Summer St.

Name

Address

Grid Reference

Locality

Date

___*Dennstaedtia punctilobula*	Hay-Scented Fern	Common
___*Athyrium thelypterioides*	Silvery Spleenwort	Common
___*A. Filix-femina*	Lady Fern	Scattered
___*Asplenium viride*	Green Spleenwort	Very rare
___*A. Trichomanes*	Maidenhair Spleenwort	Rare
___*Woodwardia virginica*	Chain Fern	Scattered
___*W. areolata*	Dwarf Chain Fern	Localized
___*Cryptogramma Stelleri*	Slender Cliffbrake	Common
___*Adiantum pedatum*	Maidenhair Fern	Rare
___*Pteridium aquilinum*	Bracken	Common
___*Polypodium virginianum*	Rock Polypody	Common
___*Botrychium multifidum*	Grape Fern	Rare
___*B. dissectum*	Cut-Leaved Grape Fern	Scattered
___*B. Lunaria*	Moonwort	Very rare
___*B. simplex*	Dwarf Grape Fern	Rare
___*B. matricariaefolium*	Daisy Leaf Grape Fern	Scattered
___*B. lanceolatum*	Lance-Leaved Grape Fern	Rare
___*B. virginianum*	Rattlesnake Fern	Scattered
___*Ophioglossum vulgatum*	Adder's Tongue Fern	Scattered
___*Osmunda regalis*	Royal Fern	Common
___*O. Claytoniana*	Interrupted Fern	Common
___*O. cinnamomea*	Cinnamon Fern	Common
___*Schizaea pusilla*	Curly Grass Fern	Rare
___*Woodsia ilvensis*	Rusty Woodsia	Localized
___*W. alpina*	Alpine Woodsia	Rare
___*W. glabella*	Smooth Woodsia	Very rare
___*Cystopteris fragilis*	Common Bladder Fern	Common
___*C. bulbifera*	Bulblet Fern	Restricted
___*Matteuccia struthiopteris*	Ostrich Fern	Common
___*Onoclea sensibilis*	Sensitive Fern	Common
___*Thelypteris palustris*	Marsh Fern	Common
___*Thelypteris simulata*	Bog Fern	Scattered
___*Thelypteris noveboracensis*	New York Fern	Common
___*Thelypteris Phegopteris*	Beech Fern	Common
___*Gymnocarpium Dryopteris*	Oak Fern	Common
___*Dryopteris intermedia*	Intermediate Wood Fern	Common
___*D. spinulosa*	Wood Fern	Scattered
___*D×Boottii*	Boott's Shield Fern	Frequent
___*D. cristata*	Crested (Wood) Fern	Common
___*D. Filix-mas*	Male Fern	Only Cape Breton
___*D. marginalis*	Marginal Fern	Common
___*D. fragrans*	Fragrant Fern	Localized
___*Polystichum Lonchitis*	Holly Fern	Only Cape Breton
___*P. Braunii*	Braun's Holly Fern	Common
___*P. acrostichoides*	Christmas Fern	Common

Return to: HFN Fern Project
c/o N.S. Museum
1747 Summer St.
Halifax, N.S.

Name

Address

Grid Reference

Locality

Date

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___*Athyrium thelypterioides*	Silvery Spleenwort	Common
___*A. Filix-femina*	Lady Fern	Scattered
___*Asplenium viride*	Green Spleenwort	Very rare
___*A. Trichomanes*	Maidenhair Spleenwort	Rare
___*Woodwardia virginica*	Chain Fern	Scattered
___*W. areolata*	Dwarf Chain Fern	Localized
___*Cryptogramma Stelleri*	Slender Cliffbrake	Common
___*Adiantum pedatum*	Maidenhair Fern	Rare
___*Pteridium aquilinum*	Bracken	Common
___*Polypodium virginianum*	Rock Polypody	Common
___*Botrychium multifidum*	Grape Fern	Rare
___*B. dissectum*	Cut-Leaved Grape Fern	Scattered
___*B. Lunaria*	Moonwort	Very rare
___*B. simplex*	Dwarf Grape Fern	Rare
___*B. matricariaefolium*	Daisy Leaf Grape Fern	Scattered
___*B. lanceolatum*	Lance-Leaved Grape Fern	Rare
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___*Ophioglossum vulgatum*	Adder's Tongue Fern	Scattered
___*Osmunda regalis*	Royal Fern	Common
___*O. Claytoniana*	Interrupted Fern	Common
___*O. cinnamomea*	Cinnamon Fern	Common
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___*Onoclea sensibilis*	Sensitive Fern	Common
___*Thelypteris palustris*	Marsh Fern	Common
___*Thelypteris simulata*	Bog Fern	Scattered
___*Thelypteris noveboracensis*	New York Fern	Common
___*Thelypteris Phegopteris*	Beech Fern	Common
___*Gymnocarpium Dryopteris*	Oak Fern	Common
___*Dryopteris intermedia*	Intermediate Wood Fern	Common
___*D. spinulosa*	Wood Fern	Scattered
___*D×Boottii*	Boott's Shield Fern	Frequent
___*D. cristata*	Crested (Wood) Fern	Common
___*D. Filix-mas*	Male Fern	Only Cape Breton
___*D. marginalis*	Marginal Fern	Common
___*D. fragrans*	Fragrant Fern	Localized
___*Polystichum Lonchitis*	Holly Fern	Only Cape Breton
___*P. Braunii*	Braun's Holly Fern	Common
___*P. acrostichoides*	Christmas Fern	Common

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A TASTE FOR THE WILD

by Heather Abriel

The meadows, roadsides, hiking trails and forests of our province hold a wealth of tasty treats for anyone who's interested and would like to add a new flavour to their diet. The ancient art of foraging - collecting and eating wild edible plants - once a necessity, is undergoing a re-birth and is fast becoming a popular activity for all those who enjoy the out-of-doors.

Although there is much fun and flavour to be gained through foraging for wild edible plants, caution must be exercised, as it is relatively easy to incorrectly identify a plant, thus ingesting something possibly poisonous. Always be sure that you can positively identify the plant you have selected, by either certain knowledge or with the use of a field guide. There are many field guides available at almost all bookstores and libraries, so be sure you familiarize yourself with the edible species of wild plants, before you go tasting them. Also beware of areas that have been sprayed with insecticides or herbicides and any areas near sewage drains.

The following plants and subsequent recipes are but a few examples of what is available to us all, for free and in abundance in the wild.

The Cattail (Typha latifolia)

Also known as Rushes, Cossack asparagus and swamp bulrush, to name a few, the Cattail is one of the most versatile of wild edible plants. It is found growing near swamps, ponds, rivers, and other wet areas. The roots may be harvested year round and can be peeled and dried, then ground into flour for bread or cooked in any way a potato can, i.e. boiled, fried, baked, mashed etc.

The young shoots are harvested in the spring by cutting the plant below the waterline, or pulling on the leaves upright from the root. Just below the part where the leaves begin to separate is a white shoot. When the white shoot is cut from the rest of the stalk and the outer layer is peeled off, the remaining inner core may be eaten raw or cooked like an asparagus.

The flowerheads (which eventually will turn into the brown spikes in autumn) may be harvested in late June or early July. These green flowerheads can be boiled and eaten like corn on the cob. They tend to be a bit grainy, so use lots of butter! After having eaten a plate of these, you may never eat corn again!

If the flowerheads are allowed to develop, they will turn into a vivid yellow pollen. This pollen may then be collected by bending the spike into a bucket or large bottle and shaking the pollen head. This fine pollen need only be sifted and it

will provide a beautifully coloured flour to add to pancakes and biscuits. The flavour is unique and unforgettably delicious.

The flour made from the roots of the Cattail is equal in nutrional value to that of any flour and the pollen is a good source of protein and vitamin A. Be careful not to confuse the young shoots of the Cattail with those of the blue flag which are poisonous. Cattail shoots are perfectly round down to the base. Those of the blue flag are flattened.

RECIPES

Cattail Root Stew[1]

Cut 2 pounds of stew meat into 1-inch pieces. Wash and peel 2 pounds of cattail roots and cut into ¼-inch slices. Slice 6 onions. In a 3-quart casserole dish, line the bottom with a layer of meat. Salt and pepper. Top with a layer of cattail roots and layer of onions. Repeat until all the ingredients are used. Pour a small amount of water over the layers and cover. Cook in a slow oven (325°F.) for about 2 hours, or until the meat is tender. Serve hot. Serves 6 to 10.

Sunshine Pancakes[1]

Sift together 1 cup cattail pollen, 1 cup wheat flour, 2 teaspoons baking powder, ½ teaspoon salt, and 2 tablespoons sugar.

Beat 2 eggs and stir in 1½ cups of milk and 2 tablespoons melted butter. Stir in the dry ingredients. Fry the batter in a skillet with melted butter as you would for pancakes. Serves 3 to 4.

Sweet Corn

Boil the green spikes (flowerheads) in a pot of salted water, for approximately 10 minutes. Serve with salt and pepper and lots of butter. May be eaten on the cob or off.

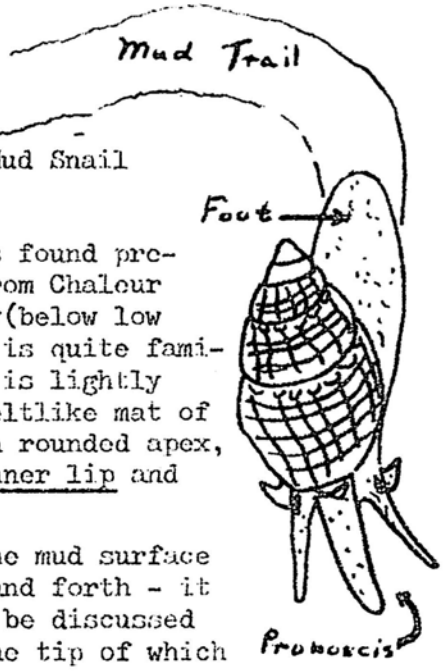
1. Knutsen, Karl Wild Plants You Can Eat pgs., 26, 27., Doubleday & Company, Inc., New York 1975.

from The Listener, New Zealand

COMMON MOLLUSCS OF NOVA SCOTIA

By Mike Burke

* NASSARIUS OBSOLETUS: New England Mud Snail, Eastern Mud Snail



General Characteristics

This snail, which attains more than 25mm in length, is found predominantly on intertidal mud flats of the Atlantic coast from Chaleur Bay, New Brunswick, to Florida, but can be found subtidally(below low tide) on eelgrass (Zostera) beds to depths of 12 feet. It is quite familiar to people who frquent extuaries. The spiralled shell is lightly beaded and black-brown in colour, usually covered with a feltlike mat of mud and algae. In younger individuals the spire comes to a rounded apex, becoming eroded and flat-topped in older specimens. The inner lip and columella of the snail is a glossy black.

The living animal is black and when in motion along the mud surface a long siphon at the anterior end can be seen waving back and forth - it is a delicate chemical sensor and its role in feeding will be discussed below. The animal also has a long tubelike proboscis at the tip of which is a mouth located between two smaller antennae.

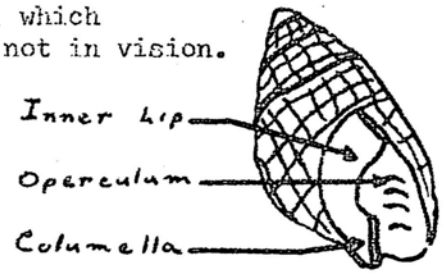
The mud snail in general exhibits a gregariousness - they tend to live in aggregations that can total thousands of individuals. As water temperatures get colder there is a mass migration into deeper water where the groups pass the winter in a dormant state below the mud surface until, with the onset of warmer temperatures, they will begin to repopulate the tidal flats.

Feeding

Nova Scotia has 2 species of mud snail (Nassarius trivittatus is our other, less common, species). Most members of the Nassariidae family are carnivores, but N. obsoletus, because of a number of structural changes, is predominantly a herbivore. As it moves along the mud flats it passes quantities of mud through its digestive tract, digesting the bacteria, plantlike diatoms, and decaying plant matter that is present on the mud surface. In addition to these main dietary components, decaying animal matter (clams, crabs, fish, etc.) is also utilized occasionally - the mud snail has also been called the scavanger of the mud flats. There is no evidence that N. obsoletus attacks living organisms.

Its behaviour of tracking down decaying flesh is quite a sight to see and deserves to be described. As a matter of fact you can perform a little test yourself. Break open a mussel or a clam and place it in the water upstream from the mud snails. The siphons of the snails are extremely sensitive to chemicals in the water and as soon as the current carrying dissolved substances from the dying mussel or clam wafts past the mud snails, the siphons wave back and forth to pick up the scent and the animals turn and begin to home in on the flesh. As they get close, each extends its proboscis and the radula, or file, within the mouth begins rasping motions so that when the dying animal is encountered by the snail, portions of the flesh are scraped off and eaten. Even snails buried in the mud enter the fray. Suddenly siphons pop out of the mud like periscopes of submarines and begin to wave around to pick up the scent, and then the animals will roll out of the mud and begin to move. Snails upstream of the decaying meat do not detect it at all, which shows that carrion detection resides in a sense of smell and not in vision.

* also known as Ilyanassa



COMING EVENTS -- SUMMER 77

June 21 — An Ecologist's View of Nova Scotian Forests - Dr. Barrie Goldsmith will speak at the monthly meeting at 8:00 PM in the N.S. Museum.

June 26 — Pond Life - An afternoon walk, meeting at the N.S. Museum at 1:30 PM. The walk will be led by Barry King.

July 19 — A Naturalist in the Cape Breton Highlands- monthly meeting, speaker: Chris Majka. 8:00pm.,N.S. Museum.

July 23 — Old Annapolis Trail - A daylong excursion through the forests of the Bowater-Mersey Paper Co. Ltd., accompanied by a representative of the company. Those interested will meet at the N.S. Museum at 9:00 AM.

August 16 — Salt Marshes - Monthly meeting, 8:00 PM, N.S. Museum.

August 21 — Field Trip - to Cole Harbour Salt Marshes will be led by HFN Staff. Meet at the N.S. Museum at 10 AM.

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.

Halifax Field Naturalists new ___ or renewal ___

name _____

address _____

occupation or interests _____

suggestions for programs? _____

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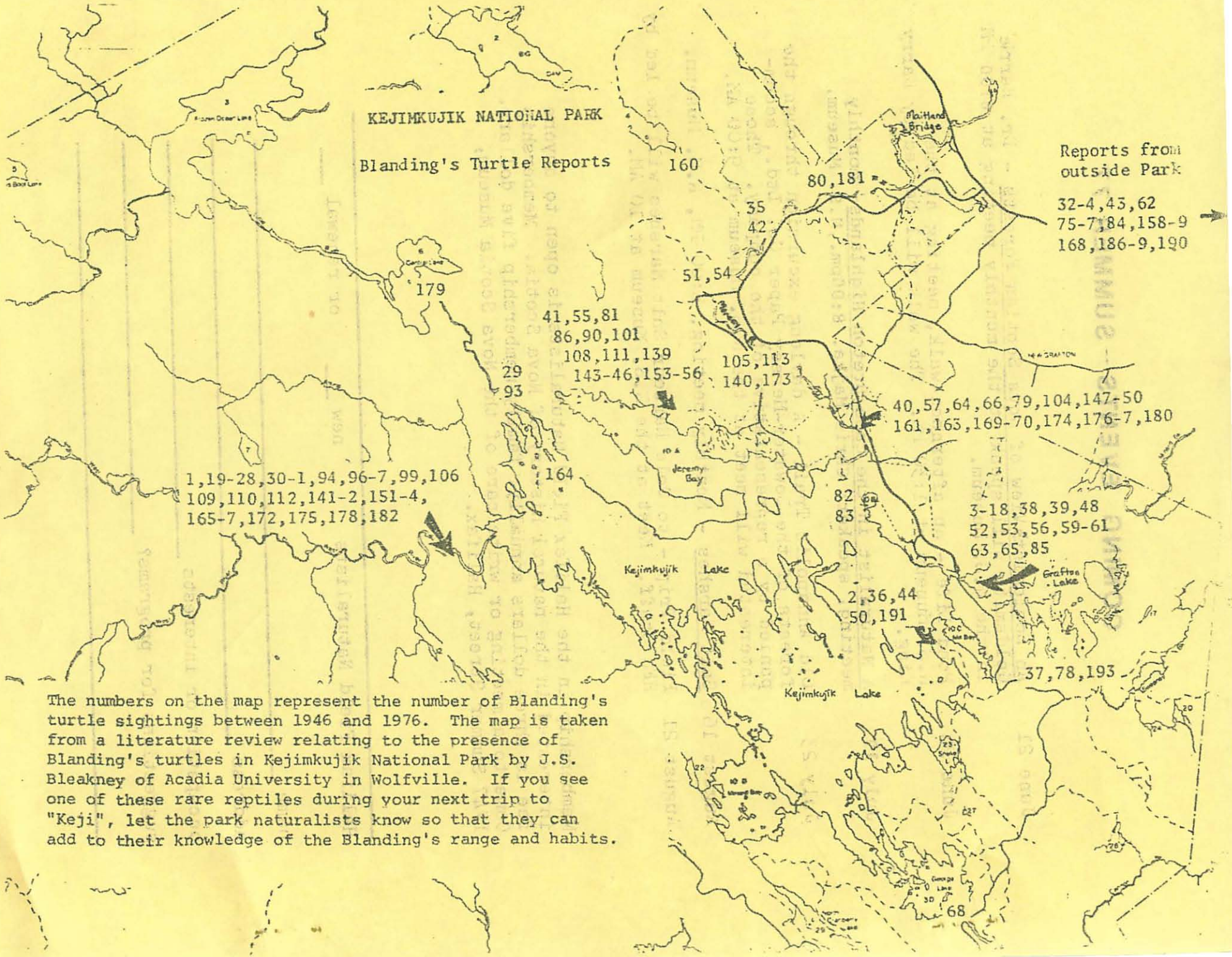

The numbers on the map represent the number of Blanding's turtle sightings between 1946 and 1976. The map is taken from a literature review relating to the presence of Blanding's turtles in Kejimkujik National Park by J.S. Bleakney of Acadia University in Wolfville. If you see one of these rare reptiles during your next trip to "Keji", let the park naturalists know so that they can add to their knowledge of the Blanding's range and habits.