

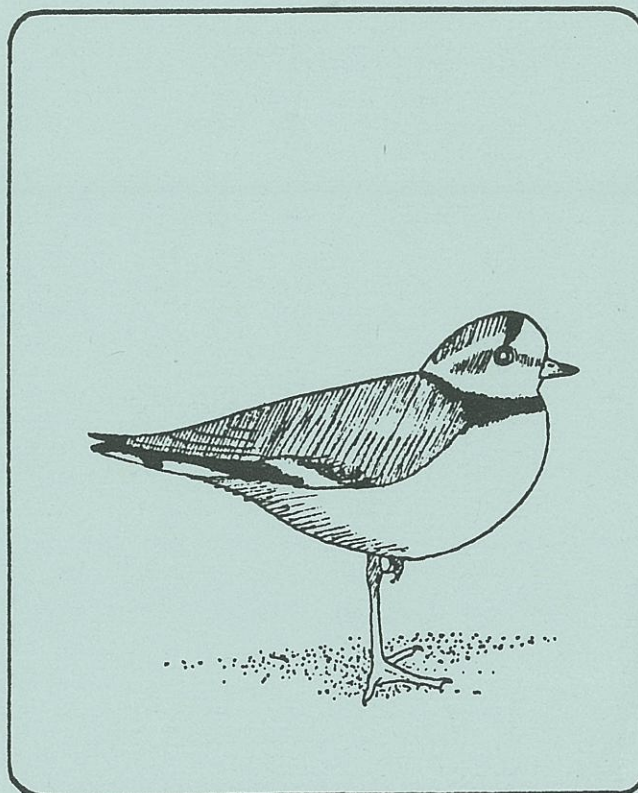
Halifax Field Naturalists Newsletter

MARCH-MAY 1983.

No. 31

HELP SAVE THE PIPING PLOVERS!

(see page six)



Halifax Field Naturalists

MARCH - MAY 1983.

No. 31

MEETINGS- are held on the first Thursday of every month at 8.00 p.m. in the Auditorium on the ground level 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 from January 1 to December 31.

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

**DIRECTORS for
1983 -**

President	Doris Butters	
Assistant to President . .	John van der Meer	
Vice-President	Bill Freedman	
Membership Chairman	Colin Stewart	
Treasurer	Bernice Moores	
Past President	Anne Greene	
Directors	Pierre Taschereau	Edna Staples
	John Brownlie	Michael Downing
	Eric Malmberg	Aileen Meagher
	Filip Volckaert	

NEWSLETTER -

. (Editor). Doris Butters
 Edna Staples Aileen Meagher

**MAILING
ADDRESS -**

Halifax Field Naturalists
 c/o N.S. Museum,
 1747 Summer Street, Halifax, N.S. 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 really nice if those members travelling in someone else's car on field trips would share the cost of gas. Thank you.

hfn news

CANADIAN NATURE CONFERENCE 1983 -

"Time and Tide Wait For You", is the title of a CNF Conference to be held in Sackville, New Brunswick, from August 11-14. A varied program on the theme "Estuaries - Where Rivers Meet the Sea" has been arranged, augmented by pre- and post-conference activities from August 7-18.

Scheduled events include workshops, seminars and a Symposium, as well as the CNF annual general meeting and many social events. A variety of scenic coastal field trips is offered to acquaint the participants with the Gulf of St. Lawrence, Northumberland Strait and upper and lower Bay of Fundy — and, for contrast, a trip to New Brunswick's interior wilderness.

Details are available in the conference brochure included in the April/June issue of Nature Canada or you can write for full information to

Mary Majka, Chairman
Conference Steering Committee
N.B. Federation of Naturalists
R.R.2, Mary's Pt. Road
Albert, N.B., EOA 1A0

SCIENCE FAIR -

On April 14 and 15 I attended the 7th Annual Halifax-Dartmouth and County Regional Science Fair. I was there in two capacities, as judge, and as representative of the HFN. In the second role I selected two winners, one junior and one senior, in the category "Best Exhibit in Natural History", which is awarded by HFN each year.

The junior winner was LARA KEITH, Grade 9, of Sir Robert Borden School, for an exhibit on spiders and spider webs called "Along Came a Spider". The senior winner was JACQUI SHAW Grade 10, of Queen Elizabeth High School, for a presentation on "The Micro-Environment of the Pitcher Plant".

The winners each received a membership in HFN, a subscription to Nature Canada and a pocket magnifier.

John van der Meer.

REPORT ON ENVIRONMENTAL IMPACTS OF FOREST PRACTICES -

A 225 page report by DR.W. (Bill) FREEDMAN of Dalhousie Institute for Resource and Environmental Studies, has recently been published and is available from the office of IRES Dalhousie University, 1312 Robie Street, Halifax, B3H 3E2 (424-3632).

The report provides an overview of the environmental impacts associated with ongoing and foreseeable forestry practices in the Atlantic provinces. It contains a literature review and an interpretation of the transitory and long-term effects of pesticide use, harvesting, road construction, site preparation and plantation establishment on wildlife and its habitat, aquatic life, water quality, soil characteristics, and forest species composition.

For information: Susan Hall,
Environmental Protection Service,
5th floor, Queen Square, 45 Alderney
Drive, Dartmouth B2Y 2N6 (426-6141).

ENVIRONMENTAL STUDIES BOOKS -

We have recently received a 'legacy' of publications put out a few years ago by the N.S. Museum on various aspects of Nova Scotia habitats. The books are well-written and clearly illustrated by photographs and line drawings and should be of considerable help to anyone with a beginner's interest in various areas of our natural history. Titles are:

The Northumberland Strait Shore.
The Atlantic Shore.
The Roadside Pond.
Pastures, Hayfield & Old Fields.

These books are in the Environmental Studies Series; texts, drawings and photographs are by members of the Museum staff.

If you are interested call me at 423-8607.

Editor

nature notes

Suddenly it's Spring! And yet just a short time ago we were so excited at spotting our individual 'first signs' of Nature's annual revival.

On January 23 Dorothy Morris found Mayflower in bud in Shubie Park and took a couple into the house where they bloomed within a few days. In the same area she found Coltsfoot on 20 March and heard Spring Peepers on April 12..... Pierre Taschereau found Salamanders on the move near Julie's Pond on April 1, next day he saw Coltsfoot in flower..... Mary Primrose checked Smiley's Intervale and Bloodroot was up an inch or so on April 10 (hope it is still in bloom when we take our May 8 field

WELCOME TO NEW MEMBERS -

T. Paris
 Ms. E. Reid
 Evelyn MacInnes
 Jacqueline le Mestral
 Susan Moxon
 Nancy Wynn
 Nancy Sherwin
 Sheila Connell
 Virginia Laffin
 Kathie Kovacs
 C. Guay

Remember George Roberts, the ebullient New Zealander who worked at Dalhousie University a couple of years ago? Kept us all amused on our walks and gave us a very lighthearted but informative talk on 'searching for minerals in countries he had never visited'. Well earlier this year during a visit to California he rang up Connie Eaton, one of our HFN'ers, to say 'Hello!' and to send greetings to us all.



trip there); Mary also heard a 'torrent' of birdsong on April 7 in the railway cutting - birds unfortunately not identified..... Colin Stewart saw a flock of Evening Grosbeaks on March 31 on Almon Street Bernice Moores noted Coltsfoot flowering on April 9 and saw an early Robin on March 27. Filip Volckaert's keen eye spotted tiny Springtails on March 19 in Frog Pond. and next door to your Editor, for the second year in a row Sparrows are carrying 'makings' for a nest to a spot under the eaves where they used to nest but which was boxed in 3 years ago when the house was re-sided; birds are really persistent little beggars, aren't they?

THE BUTTERFLIES OF SPRING

For many people, one of the surest signs that spring has firmly and finally arrived is the sight of the first butterflies of the year. Perhaps the association is because the butterflies seem to share our appreciation of a good place to be in the late spring - a sheltered spot at the edge of the forest, or a warm and windless stretch of woody road.

The earliest to be seen is the Mourning Cloak (*Nymphalis antiopa*). It has large brown wings with a creamy-white border flecked with black. Just inside the border is a single row of purple eye-spots, or ocelli. Underneath, the wings look like a dead, dried leaf. The Mourning Cloak is one of the few butterflies to pass the winter in the adult stage, waiting for spring inside hollow trees, old buildings, wood piles, and even tin cans. They will fly on sunny days in late March in the Halifax area, and can be seen among the Alders on the path behind York Redoubt. In order to get warm enough to fly, they will orient themselves towards the weak, late-winter sun, with their wings spread flat to absorb every last calorie.

Many butterflies spend the winter as pupae, with much of their body fluid converted to a chemical closely related to anti-freeze, which allows them to endure sub-zero temperatures without freezing. As winter comes to an end, the warmer temperatures trigger the final stages in the transition from a larva to an adult.

Among the earliest of these to emerge are the Elfins (*Incisalia* sp.). Well-named: they are small, about the size of a penny, inconspicuously clad in drab brown, and look like shadows as they dart from place to place. They may be found on blueberry barrens and near pine or spruce forest from the middle of May into early June. We have five species in Nova Scotia: the Brown Elfin (*I. augustinus*), the Hoary Elfin (*I. polios*), the Banded Elfin (*I. nippon clarkii*), Henry's

Elfin (*I. henrici*), and the Bog Elfin (*I. lanoraieensis*). They are very difficult to identify without close examination, but if you almost see something about the size of a penny and very dark, it can only be an Elfin at this time of year.

The familiar Spring Azure (*Celastrina ladon*) is a conspicuous and cheery re-assurance of the banishment of winter. These little iridescent blue butterflies start to appear about the same time as the Elfins, but last much longer, even into mid-July. They are the only "blues" to be seen until the larger Silvery Blues (*Glaucopsyche lygdamus*) begin to emerge in mid-June. Their larvae can be found in the flower heads of Aralia (*A. hispida*) and Virburnum (*V. cassinoides*).

A woodland walk in late May might introduce you to another spring butterfly, a Dusky Wing. Members of the Skipper superfamily (*Hesperioidea*), the Dusky Wings are larger than the Elfins and much more conspicuous. We have two species in Nova Scotia: the Dreamy Dusky Wing (*Erynnis icelus*) and Juvenal's Dusky Wing (*E. juvenalis*). Both are basically brown, with a sprinkling of small tan-coloured spots on the hindwings. Juvenal's is the larger, and can be identified by the presence of semi-transparent (hyaline) white spots on the fore-wing. Both species seem to adopt favourite localities in the sun, from which they make brief forays to drive off other butterflies, investigate flowers, or what-have-you, before returning once again to rest in the warmth of their favourite spot.

By the first week of June, the butterfly population is really starting to grow, and we begin to see the 'summer' species. Watch out for the appearance of our big yellow swallowtail, the Northern Tiger Swallowtail (*Papilio glaucus canadensis*). These are abundant along the Waverley road between the Micmac Rotary and Oakfield.

Peter Payzant

THE PIPING PLOVER PROBLEM IN NOVA SCOTIA

Concern is growing over the condition of many Nova Scotia public beaches where disturbance and destruction by motorised vehicles are on the increase. Several letters on behalf of HFN have been sent to the Minister of Lands and Forests, Hon. George Henley, requesting that the Beach Protection Act be enforced at all public beaches before irreparable damage is done.

(Editor)

Of particular urgency is the case of St. Catherine's River Beach in Queens County (originally Cadden Bay). Granted - damage there is not yet severe; the immediate problem is the welfare of the Piping Plover which nests there on the bare sandy habitat just above high water mark, where the colouring of the adults, eggs and chicks makes them very difficult to see. The Piping Plover is a sparrow-sized bird the colour of dry sand, with a black breast-band - its call a plaintive 'peep-lo' whistle. Already classified as threatened in Canada, actually it now may well be on the endangered list.

Based on studies done in 1976-77 towards an MSc by Winifred Cairns, she and Ian McLaren published a paper in "American Birds" in 1980 estimating that at most 910 pairs were nesting along the whole Atlantic Coast of North America from Virginia to Newfoundland. Of that total a maximum of 70 pairs were estimated for all of Nova Scotia - most of the nesting sites being along the south coast in Shelburne, Queens, Lunenburg and Halifax Counties. Between 27-29 pairs were estimated as nesting on St. Catherine's River Beach in 1976 - at that time a quiet, relatively isolated privately owned property.

Last year Stephen Flemming and Roland Chaisson of Acadia University released their preliminary report on the Piping Plover and the need to reduce human disturbance. They gave only 15 pairs as nesting at St. Catherine's Bay Beach in 1982 - a reduction of nearly 50% since the

Nova Scotia government expropriated the Woods property and it became a public beach. Flemming and Chaisson are already on the beach this year continuing their study and hoping by their very presence to be able to effect some safeguard for the birds during the critical weeks of May and June, by deflecting 'traffic' away from the nesting area.

Late last year the Province of Nova Scotia appointed a Committee to examine alternate uses of the property. Public hearings were held and the Committee made well aware of the Piping Plover problem. The Committee submitted its Report to Government in March 1983, but at the time of writing neither Report nor recommendations have been released to the public. HFN and Canadian Nature Federation have both written to the Provincial Government pointing out the urgency of the situation and requesting that immediate steps be taken to protect the site - at least temporarily - during this current nesting season. Perhaps you would add your voice by writing your own letter to The Honourable George Henley, Minister of Lands and Forests, Government of Nova Scotia, P.O.Box 698, Halifax, B3J 2T9.

Abstracted from Hal Mills (CNF) Report, at present held in HFN files and available to anyone interested in getting more details.

On May 1st a group of HFN'ers visited St. Catherine's River Beach to see for themselves how exposed the site is - how stunningly beautiful the whole beach - and to note at least one set of tire tracks running through the area. A report on this walk will appear in our next newsletter and more from Hal Mills' Report on the Piping Plover Problem. These birds are facing a serious problem which calls for a long-term protection and management plan.

book reviews

MEANDER RIVER FIELD TRIPS

When acting as leader on several HFN trips to the Meander River Inter-vale, I have been asked questions about the history of the area. Newport, as the district is known, has a long record of settlement, and contains many well-established farms. Recently I came across a book called Men of the Soil, published by the Nova Scotian Beautification Committee, which gives brief histories of the Century Farms of the province. To give some background information for the benefit of members who accompanied me on these field trips I quote extracts from the sections dealing with the Harvey family, whose property we are privileged to visit.

The history of the Harveys (or Harvies - original Scottish spelling) began when the Harvie family arrived in 1761 from Dalry, Ayrshire, Scotland, by way of Rhode Island. John Harvie was one of the New England Planters invited by government to occupy land formerly held by the Acadians. He it was who settled the Township of Newport; he and his wife, Experience Powers from Rhode Island, farmed in Avondale where Mr. Roland Parker now lives.

A land grant bounded by the Meander and Herbert Rivers was given to his eldest son, James; in the log cabin built there in sight of the Meander River his family was born - 13 sons and 5 daughters...each son was given approximately 200 acres of their father's grant of land... The land now known as GRAND ELM FARM going to Benjamin, who cleared land and put up

a log cabin...later building a frame house and a barn. About 1836 his two eldest sons each planted a tree - one an apple, the other an elm. The apple tree bore fruit until 1954 when it was uprooted by hurricane "Edna". The huge elm still stands and is the one from which the farm gets its name.

In 1914, the farm was deeded to John Murdoch, Benjamin's grandson, who carried on mixed farming with the emphasis on dairying, most of their produce going by horse and wagon to Halifax... a three-day trip - one day as far as 'Ten Mile House'; another day to reach the City, market the produce, buy supplies and start for home; with a third day to reach the farm. (and we now do the trip in a matter of hours!)

Later, John Murdoch and his sons increased their cultivated acreage by clearing land originally cleared in 1822... purchased neighbouring farms bordering the Meander and increased the farm area to the present 450 acres... raising of beef and hogs are chief operations on the Harvey farm today.

RETREAT VALLEY FARM - now a Century Farm - is still occupied by Harveys, and was part of the grant given by James to Stephen...born in 1803... who later built a house which is now part of the present farmhouse.

Five generations of Harveys have occupied this farm...which has gone through many stages, from being practically self-sustaining in pioneer days, through mixed farming to the present day dairy farm supplying milk to the Halifax market.

Some knowledge of the human history complements the natural history of such a beautiful and scenic part of our country. It also helps me in answering the many questions fired at me during the course of our walks. But when I think of all the questions Moses must have been asked during the 40 years in the wilderness --- I guess I'm lucky!

Tim Randall

EDIBLE WILD FRUITS AND NUTS OF CANADA

by

Nancy J. Turner & Adam F. Szczawinski

*The National Museum of Natural Sciences, Ottawa, 212 pages,
published 1979, price \$9.95 (#3 of the series "Edible Wild
Plants of Canada").*

The book is bound by a metal coil and the pages, which are spaciouly laid out, are similar in quality to National Geographic. These spaces can be used for notes such as where there is a good patch of whatever, or for other recipes.

The book treats 36 species or species groups beginning with wild rice and including many berries (blue-, black-, elder-, rasp-, cran-, etc) and nuts (acorn-, hazelnuts etc.) as well as plums, cherries and wild grapes. Unfortunately almost half of the species discussed are not native to Nova Scotia.

The introduction should be read. It defines 'fruits', which include nuts, berries - and tomatoes. It gives some cautions such as --- some fruits are poisonous before they ripen, or if eaten with the pit in (but not if pitted). It also lists the value of these fruits (e.g. elderberries for vitamin A, calcium, phosphorous and iron), and has some general hints on the collection and preparation of fruits.

The authors have taken pains to avoid being too botanical. Leaf shapes are described as oval or lance-shaped rather than 'ovulate' or 'lanceolate'. Twigs are twigs, not 'petioles'. In addition there is a glossary of the terms that do creep in. There is also a bibliography and index.

All the fruits are treated similarly. Each has sections labelled "Other Names" (if any); "Suggested Recipes"; "How to Recognise"; "Where to Find"; "How to Use"; "Warning" (if any); and "More for Your Interest". The botanical name for each group is at the bottom of the first page. Each species has a line drawing or colour photo showing leaves and fruit.

The "How to Recognise" sections are well done; they present a good description of the plant in question and also contrast it to other species with which it may be confused. (Thus, in the Pin Cherries section, they contrast pin cherry, choke cherry and bitter cherry).

The "Warnings" treat the reader as an intelligent being. For example (p.162): (the seeds of apples and pears) "contain a cyanogenic glycoside that has an almond-like flavour and releases hydrocyanic acid. Small amounts for flavour are not dangerous, but toxic reactions may result from large amounts...bark and leaves of apple and pear trees should not be consumed".

Recipes include jellies, jams, wines, raspberry bread, rose-hip puree, cherry pudding, lamb shanks with wild plums, hickory-cranberry mince pie, tortes, salads, etc. There are well over 100 recipes. The one for Strawberry 'Leather' is reprinted below (we hope with permission from NMNS). Note that most recipes list ingredients in English and metric units with standard preparation and baking instructions.

Now, that promised recipe (p.145):

"Gather as many wild strawberries as you can. Mash by hand or puree in blender and pour onto sheets of heavy waxed paper. Allow to dry to a tough, leather-like consistency in the sun or a food dehydrator. Peel off paper and store the 'leather' in jars in a cool place. Will keep well if thoroughly dried".

HALIFAX FIELD NATURALISTS

c/o N.S. Museum, 1747 Summer St., Halifax, N. S. B3H 3A6

LAWRENCETOWN - WEST MARSH SURVEY - (HFN MINI-SURVEY #4)

Date:

Ecosystem:

Type of Survey:

Transect No.:

Weather:

Station No.:

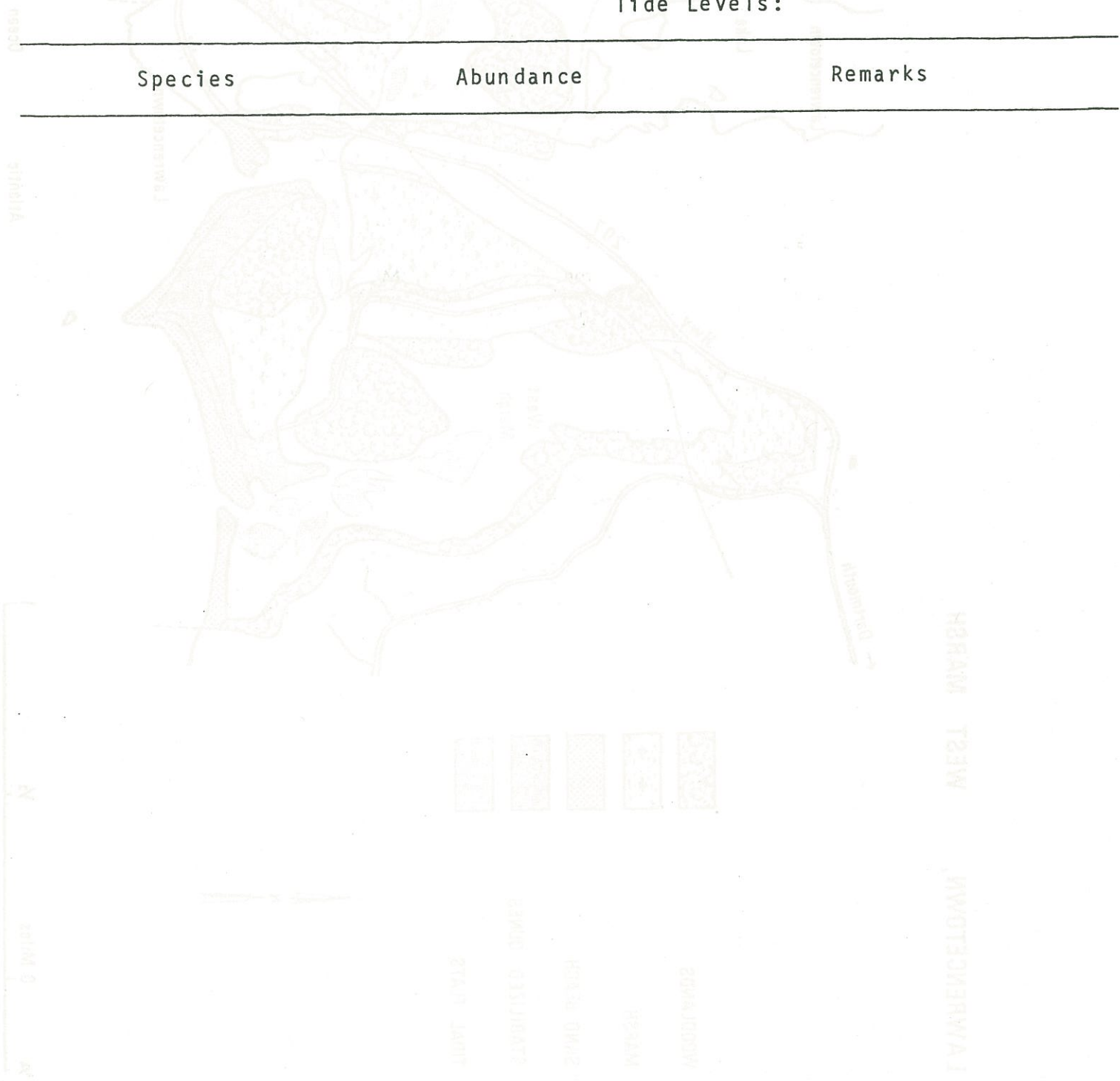
Time:

Tide Levels:

Species

Abundance

Remarks



LAWRENCETOWN,

WEST MARSH

WOODLANDS



MARSH



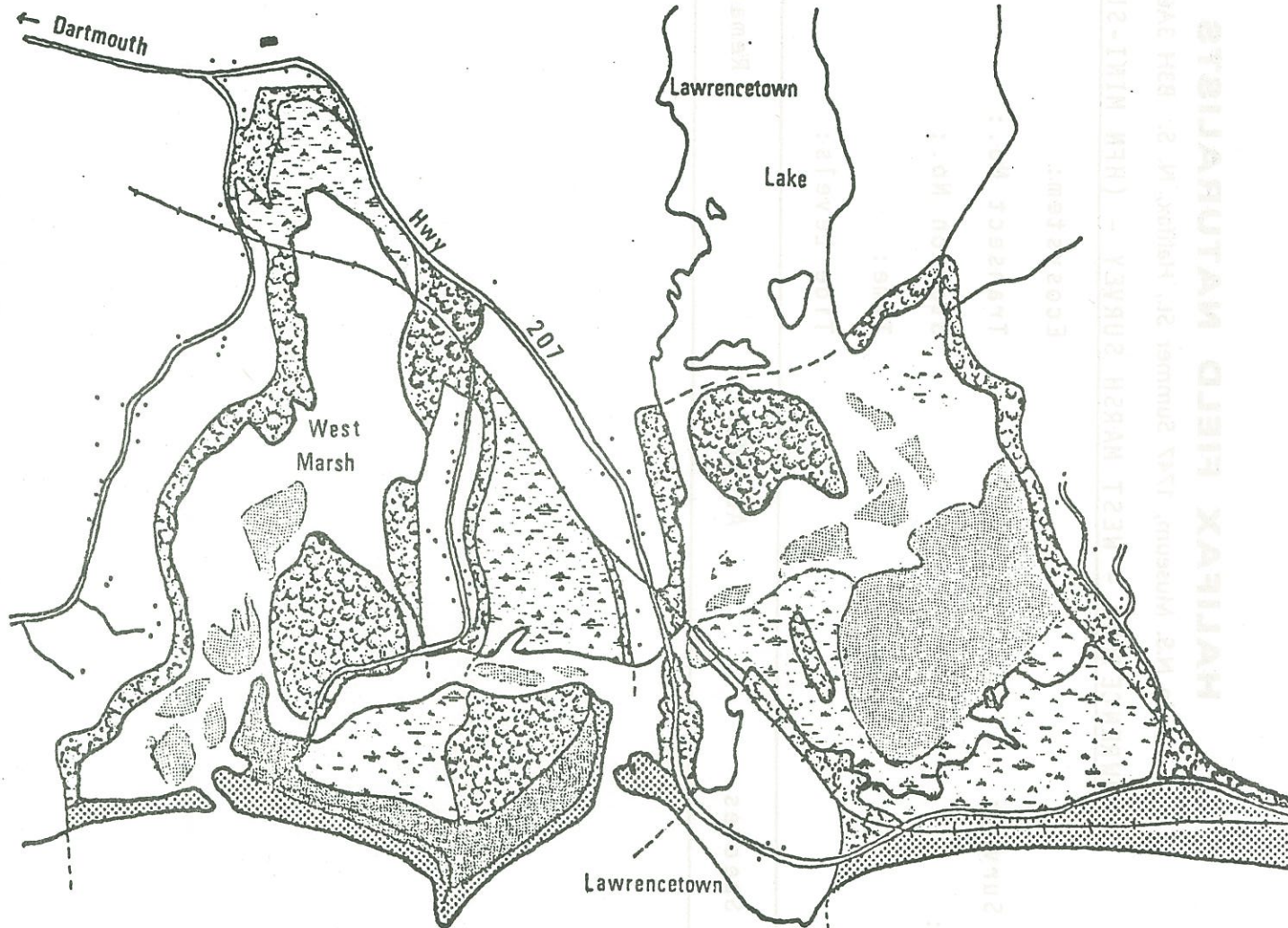
SAND BEACH



STABILIZED DUNES



TIDAL FLATS



Atlantic

Ocean

If you go berry picking, or nut collecting, then you should consider this book. Initially it will provide more information on what you do collect, and later you will probably extend your natural harvest to include new species from this book. Besides the extra enjoyment, you might even recover the cost of the book!

Did you know the name *strawberry* has nothing to do with straw, but is from the old Anglo-Saxon as an allusion to the runners being 'strewed' over the ground. Potatoes should not be planted near plum trees because a nuisance pest of the trees can carry

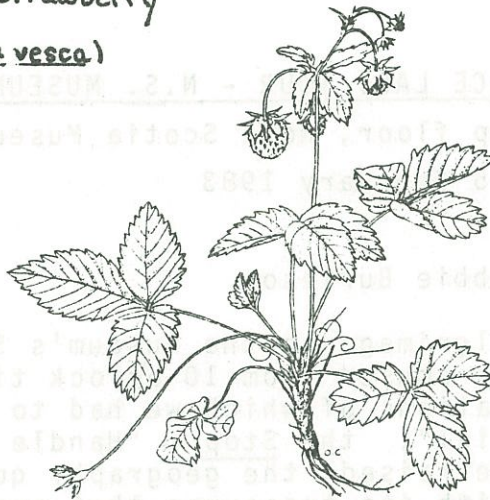
a potato disease. Cranberries were originally 'crane-berries' because the blossoms and stems resemble the head and neck of a crane (these trivia are from the "More For Your Interest" section).

Colin Stewart

(from *Edible Wild Fruits and Nuts of Canada* by Nancy J. Turner and Adam F. Szczawinski (Ottawa 1979), pp. 162, 145, by permission of the National Museum of Natural Sciences, National Museums of Canada).

woodland strawberry

(*Fragaria vesca*)



REVIVAL OF CONRAD'S BEACH SURVEY

A revival of the Conrad's Beach survey (HFN Mini-Survey #4) is now underway and will continue for approximately one year. Help is needed to inventory the plants, animals, geology, history, etc. of a number of different ecosystems making up this island/beach near Lawrencetown, throughout the seasons. Professionals and laymen alike are welcome to contribute regularly or whenever they happen to be in the area. The accompanying map is to be used to pinpoint sightings as closely as possible. Find out how from LINDA MORRIS at 463-3150. Thank you!



field trips

SCIENCE LAB. TOUR - N.S. MUSEUM

Place: Rm.412, top floor, Nova Scotia Museum

Date: Saturday, 5 February 1983

Participants: 15

Museum Guide: Debbie Burlison

On Feb 5 we undertook a pilgrimage to the Museum's Science Room
 And there we kept ourselves amused from 10 o'clock till noon.
 There were rules and regulations of which we had to be aware,
 The Red Dot meaning "Special": the Stop - "Handle with Care".
 Past wall maps with surface raised, the geography quite clear
 We ventured forth to 412 with its treasures that are so dear.
 To our amazement there were drawers and shelves full of nature's things
 Beetles, bugs, moths, butterflies, with beautiful, wondrous wings.
 Pony, mink and bones of whale, worn by the sands of the beach -
 Unique collection of fossils, shells and cones within our reach,
 There were salamanders, snakes and frogs not buried in drawers at all -
 Possibly they'd requested that their remains be pickled in alcohol!
 I almost forgot the collection of birds - to study and to touch
 And their delicate eggs; it was splendid! There really was so much.
 We may have missed a lot of things tucked carefully here and there,
 But maybe there will be a chance to go again next year.

A Field Report with a difference, sent in by
 Ricki Garrett-Smith.

And because Ricki and Anna had to
 leave a little earlier than the rest
 of us they missed the trip to the
 lower floor where we were given some
 insight into the makings of models
 and the present method of taxidermy.

The freezer was full of cello bags
 containing the rigid remains of
 future exhibits and we peeped into
 deserted workshops where David Cald-
 well the model-maker and the Museum
 carpenters create and crate.

Our thanks to the Museum for making an indoor 'outing' so pleasant.

Doris Butters

TOUR OF HALIFAX CITY GREENHOUSES

Date: Saturday, 19 February 1983 From 10 a.m. until noon
Place: Parks and Gardens "Yard" Corner Bell and Sackville
Participants: About 17
Weather: Who cared!

Our second indoor 'outing' proved to be a cram course in the nurseryman's art. My copious notes, translated, would fill a book, so I shall simply 'skip-rock' over the high spots.

Far more goes on in 'the yard' than merely providing flowers for the Public Gardens - street trees showing signs of die-back are pruned or removed and new ones planted; trees such as Hemlock are grown for parks, and thousands of Daffodils go to decorate City offices. Easter Lilies, Shamrocks and Gloxinias are raised for special local occasions.

It was too early for colour except in the tropical greenhouse, where Hibiscus, Orchids and Bird-of-Paradise were in bloom. Some years ago to honour a visiting Burmese official, a Bird-of-Paradise was transplanted into the Public Gardens, only to be ruined a few days later by vandals who stripped off the striking gold and purple blooms and discarded them - took years for the plant to recover. Other exotics in No.1 house were Castor Beans from Spain, a Four-O'Clock flower from Bermuda, Pinyon Pine from the Azores and Wallflowers from England (where I have seen them blooming from cracks in old stone walls); there was also Mimosa, Iris, Amaryllis, Pepper Plant and many more. Of particular local interest was a cutting taken from an old Willow in Africville. More 'potted' history: thousands of small plants are grown for the carpet beds - this year to form a Maltese Cross in honour of the 100th Anniversary of St. John's Ambulance Corps, and a Union Jack minus the flag of St. Patrick, to celebrate the arrival of the Empire Loyalists 200 years ago.

No.2 was a cool 55°F, housing the geraniums for about 150 City park areas. More than 15,000 plants are propagated yearly from cuttings and

seed!. Here our guide Mr. Stephen King, kindly dispensed information on soil mix and fumigation to the avid gardeners in the group.

No.3 greenhouse is justifiably their pride - the award winning Energy Efficient house built in February last year. A system of rolling benches increases growing space to 80% of total area - only one work space being required as the benches can be pushed along giving access between the beds at any point. An ingenious system of small-bore piping concentrates heat in the actual growing area under the benches, convection tubing forces warm air down from the roof and excess humidity is removed via piping along the walls. The special glass, acrylic and caulking used on roof and walls also prevents heat loss. Timer-operated curtains close to hold heat at night and open during the day to take advantage of sunshine. The curtains can also be used to prevent a too-hot sun from damaging the plants. Another feature of the rolling bench system is that watering can be adjusted to suit each section. I'm sure anyone interested in learning more about this fuel-saving method would find Mr. King only too willing to describe in detail the workings of their ingenious new system.

A 40°F temperature is maintained in greenhouse No.4, where bulbs, peat moss, Santalina Sage etc. are stored. Most of the 70,000 Tulip and Daffodils bulbs are re-used after spending their off-season in the holding beds. Last year the City kept 20,000 bi-coloured daffodils there.

Throughout our tour we were given insight into some of the methods used for that ever-present problem -

insect control. Chemical control is kept to a minimum. NO deadly Vapona strips!. Galvanised metal cone traps, insecticidal soap sprays, even a newspaper cylinder method to deal with earwigs, are all part of the system. Perhaps the most interesting is the integrated biological control of whitefly; we could see for ourselves on an infested geranium where a minute Wasp (Encarsia formosa Gahan) had parasitised whitefly pupae. The parasite

larva develops inside the whitefly and emerges leaving the pupae black and dead. Mr. King has a booklet giving details if anyone is interested in learning about this natural way of controlling at least one persistent pest.

I expected an interesting morning, but it proved to be much more so than I, for one, anticipated. Our thanks to the staff at "The Yard".

Doris Butters

WINTER TREES AND THE FIRST SIGN OF SPRING

Date: Saturday, 19 March 1983

Site: Frog Pond, Jollimore

Weather: Cold, windy, overcast

In early March, I was challenged by a friend to discover the undisputable, without-a-doubt, absolutely first sign of Spring. Spring peepers peeping, song sparrows singing, or even geese honking their way northward would not win this contest. I accepted the challenge anyway, and set out on March 19th in search of Spring's first blush.

Driving along Purcell's Cove Road at about 10.30 a.m. and naturally looking everywhere but at the road, I was suddenly aware of a flock of people crossing the road just ahead of me and entering Frog Pond park. I swerved to miss the straggler and stopped the car on the shoulder of the road. A FLOCK of people - click. Sneaking back to the park with my binoculars I observed 15 of them, in heavy coats, rubber boots and mittens. It was cold (-5°C) with a strong easterly wind and overcast skies threatening drizzle.

At the edge of the woods, the flock huddled around one man who said a few words (which I could not hear), cast a glance skywards, and then began blowing bubbles through a short stick

cut from a nearby red oak, into a cupful of water! The crowd cheered and then quickly scampered into the woods. The significance of this ritual was not clear to me, but I had a feeling it had something to do with Spring... I followed quietly.

The same man (Pierre they called him) was obviously the leader and teacher. As they walked he talked of the trees and the coming of Spring and members of the flock brought stems and buds to him. I noticed other rituals - the chewing of bark of certain trees (often resulting in a sour grimace) and the sniffing of crushed tree buds. The ritual of the "spring bubbler" was performed again by Pierre, who knelt at the edge of a brook and once more blew bubbles through a newly-clipped red oak twig. Following this another of the flock also knelt at the edge of the brook, appeared to touch his forehead to the water surface then called excitedly - "Springtails!". Others joined him and repeated the ritual. Now I was certain...I was witnessing the pre-spring outing of the Halifax Field Naturalists, and this latest ritual definitely represents their spiritual contact with Spring at Frog Pond.

Excitedly I returned to the car and drove off to find my friend, Bill.

He wanted proof of what I reported before conceding defeat in the contest for the first sign of Spring. We returned to the Frog Pond but the flock of naturalists were nowhere to be seen. Bill said I was crazy and refused to recognise my report as being the first sign of Spring. But why should I care what he thinks.... next year I won't be looking for the first sign of Spring - I'll be accompanying the HFN'ers to commune with Spring upon her arrival.

PS. - Found this list on a loose piece of paper caught amongst a clump of Japanese Knotweed - may be a guide to someone looking for Spring at Frog Pond in the future.

Trees:

Alder (speckled)
 Amelanchier (Indian pear, shadbush)
 Ash (white)
 Balsam Fir
 Beech
 Birch (yellow)
 Birch (white)
 Birch (white, grey)
 Hemlock
 Larch
 Maple (red)
 Maple (striped)
 Oak (red)
 Pine (white)
 Poplar (large-tooth)
 Poplar (trembling aspen)
 Spruce (red-black hybrid)
 Spruce (white)
 Spruce (black)
 Spruce (red)
 Witch-hazel

Shrubs:

Bayberry
 Bush Honeysuckle
 Canada Holly
 Cherry (pin, bird)
 Chokeberry
 False Holly
 Hobblebush (a Viburnum)
 Lambkill
 Leatherleaf
 Meadow Sweet
 Rhodora
 Wild Rose
 Sweet Gale (male plants)
 Sweet Gale (female plants)
 Sweet Fern
 Witherod (a Viburnum)

John Brownlie

Leather Leaf



Chamaedaphne calyculata

Labrador Tea



Ledum groenlandicum

SWEET RECOLLECTIONS OF A VISIT TO A SUGAR WOOD

All of our field naturalist walks have their individual charm but for me there is special magic associated with a visit to a sugar bush on a warm and sunny spring day. It transcends the usual pleasure of being with friends in an interesting place.

For me the sugar shack is a time-machine that transports me back to my youth when I harvested sap in the maple woods of Ontario. It brings back almost forgotten memories of sap-filled buckets ready for collecting, of carrying pail after pail of sap, sometimes through mud to your knees after a heavy spring rain, but always with high spirits and camaraderie. I remember hanging around the sugar shack after work, gazing at the roaring fire under the evaporator pans, absorbing the welcome warmth after a day in the woods and breathing in the sweet humid aroma of boiling sap, as clouds of steam billowed towards the roof vent. It was also a time of young romance with quickly-exchanged smiles, of shared maple taffy freshly formed from syrup poured on ice or snow, and of holding hands when we thought no one would see.

Inside a sugar shack you can transport yourself back even further in time. You can feel yourself forming tangible links with the pioneer past of our country and if you close your eyes or concentrate very hard on the background of white steam, you can call up a series of images, some of them hundreds of years old. You can see Indians collecting sap from slashed cuts on trees and then boiling the liquid to syrup in hollow logs by continually adding hot rocks. You can see the early settlers from Europe learning the skill from the Indians and making their own improvements. Large outdoor kettles replace hollow logs. Soon trees are drilled rather than slashed, and hollow tubes of sumac wood are inserted into the drill holes to direct the sap into buckets. Then metal spikes, neatly tapered to fit snugly, and designed

to support a bucket and lid, come into widespread use, as do large evaporator pans over a sheltered fire.

As the images approach our own time, networks of plastic tubing linking many trees to a single collecting reservoir replace individual buckets. With this most recent transformation, the magic dies, for it was the gathering of the sap that brought people together. Plastic tubing changes a social event into an efficient business enterprise.

But I daydream too much and haven't reported anything on this year's trip. When I learned the HFN was visiting one of the few remaining "old-fashioned" operations I planned a family outing, hoping my children would experience a little of the old magic. On Saturday, April 9 we joined about 30 others at the Museum, received our maps and departed. The weather became increasingly sunny, a welcome relief after almost a week of rain. By noon when most of us reached the Adams' sugar woods near Mapleton it was fine a day as anyone could hope for. Soon after entering the wood we found our first buckets and stopped to taste the sap which was not as sweet as the children had expected. The sugar has to be concentrated a lot before sap becomes syrup - 40 litres of sap for one of syrup. We also noticed that many buckets had no lids - a poor practice since the buckets can fill with rainwater. We arrived at the sugar shack just in time to see the men transfer the sap from the collecting wagon to a reservoir outside the shack. The raw sap is filtered to remove insects and debris that may have fallen into the buckets, and is stored outside the shack where it is cool, so that bacteria which could spoil the sap grow more slowly. Inside the sugar shanty were the large evaporator pans full of boiling liquid at different stages of readiness. The pans are connected by siphons which permit easy, safe transfer of the hot sugar solution from

pan to pan as it undergoes its gradual transformation from sap to syrup. The syrup is ready when its temperature is 7°F over the boiling point of water, that is, 219°F at sea level (we did say it was an old fashioned operation - not yet metric). At this point the syrup is carefully filtered to remove a calcium compound called "sugar-sand" which is present in all maple sap. Once filtered the hot syrup is put into cans for market or evaporated still further over a low heat to make other products such as maple cream, maple butter and maple sugar.

After visiting the sugar shanty we split into smaller groups, each pursuing its particular interests. Our family went for a leisurely ramble through the woods, enjoying the sun and fresh air, building up an appetite for the church dinner we planned to attend at the Southampton Community Centre. It was a good thing we did, because the combination plate of beans, pancakes and sausages, all drowned in maple syrup and followed by coffee and cake for dessert, left your writer more than slightly stuffed.

John van der Meer



SALAMANDER CRAWL 1983

On Monday night, April 11, we received word that it was time to go on the Salamander Crawl. Thirteen of us, including our leaders Bill Freedman and Jim Dale, bundled up and headed out for Julie's Pond off Bedford Highway. After a day of rain, it was still spitting, but wasn't the downpour it had been earlier. However, weather was soon forgotten as we searched for Yellow-spotted Salamanders.

Some humans expressed the opinion that perhaps it was not really warm enough for a mass movement of cold-blooded animals. Some of the salamanders apparently thought otherwise, because we saw a vanguard of about 30 of them during the evening. Most, if not all, were males. The females tend to move in later. On land they were slow-moving, almost motionless. In the water they moved faster, especially when trying to escape our lights.

Towards the end of the evening, Jim found a small pond with six or seven male salamanders in it, laying spermatophores - small white packets of sperm on a gelatinous base. The females then pick up the spermatophores with their cloaca for internal fertilisation of the eggs.

Further excursions later in the week showed that the drier, colder weather had prevented any mass migration. Presumably warmer, wetter

weather will bring out a larger number of salamanders, including the females.

Both Bill and Jim told us many interesting facts about the life history and biology of the salamanders. We saw only the Yellow-spotted Salamanders - it was either too early or too cold for other species of amphibians.

Leigh Mazany



Spotted Salamander (Ambystoma maculatum)



NEXT DEADLINE ---
25 July 1983, for
 August issue.
 Mail contributions
 to N.S. Museum or
 phone the Editor -
 423-8607

Here's another little gem from that 1880 "How to" book written by an English gardener, Charles W. Quin:

"Insects in General: In the chinks of trees, especially fruit trees - many nascent evils now lie hidden (February) in the form of eggs, and in orchards where fruit suffers much from that kind of vermin this is the time to go over the branches with a nail-brush and Gishurst soap and water. There is a capital kind of nail-brush (3d each), strong and durable, with which the gardener would do well to provide himself."

- Wonder if the apple growers in the Valley have heard about this!!