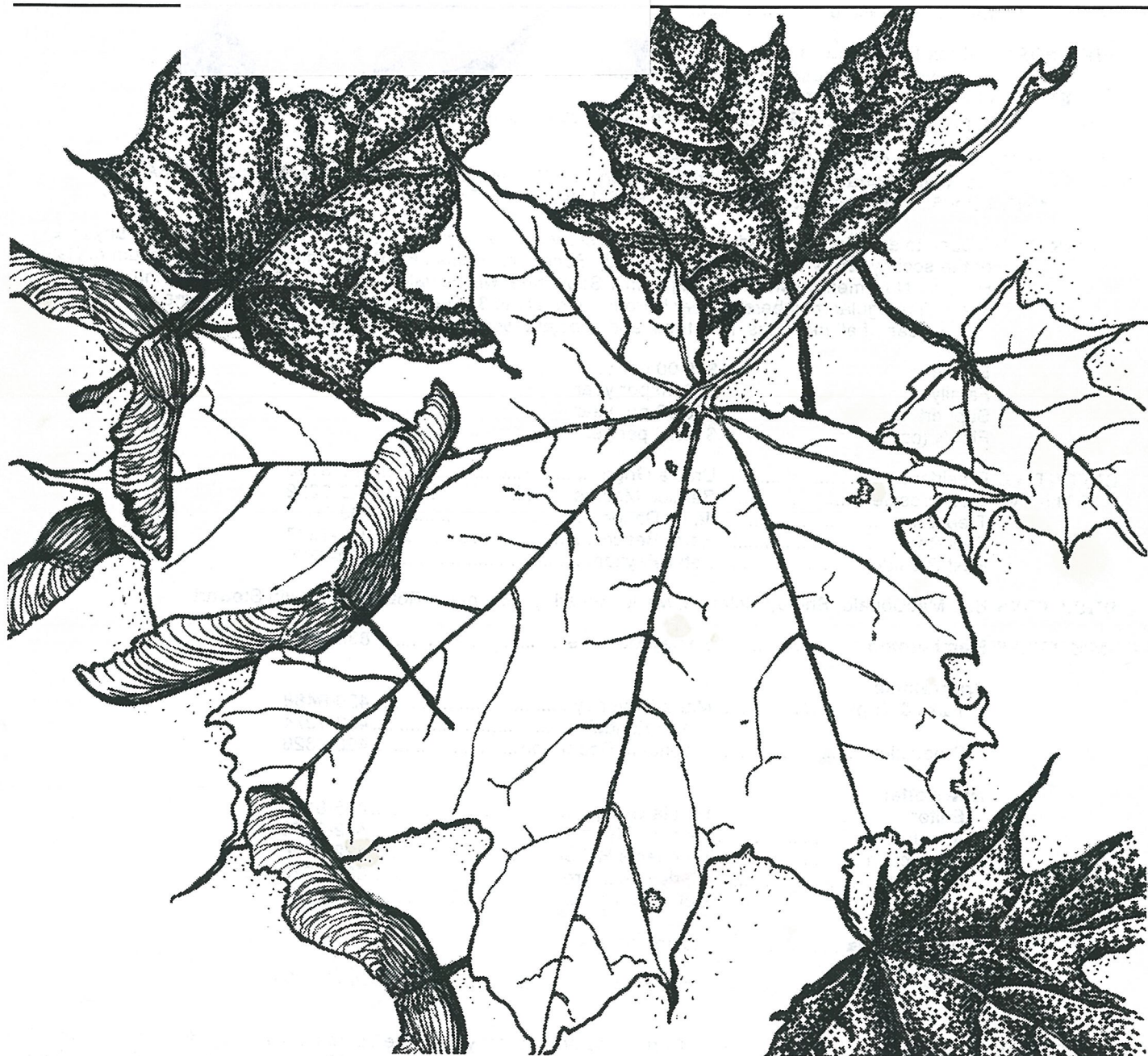


# THE HALIFAX FIELD NATURALIST



No. 100  
September to November 2000



News & Announcements ..... p. 3  
Reports ..... pp. 4-9  
Talks ..... p. 10

Field Trips ..... pp. 11-16  
Almanac ..... pp. 17 & 18  
Halifax Tide Table: October - December ..... p. 19

Return address: HFN, c/o NS Museum of Natural History, 1747 Summer Street, Halifax, NS, B3H 3A6

# HFN

is incorporated under the Nova Scotia Societies Act and holds Registered Charity status with Revenue Canada. Tax-creditable receipts will be issued for individual and corporate gifts. It is an affiliate of the Canadian Nature Federation and an organisational member of the Federation of Nova Scotia Naturalists, the provincial umbrella association for naturalist groups in Nova Scotia.

**OBJECTIVES** are to encourage a greater appreciation and understanding of Nova Scotia's natural history, both within the membership of HFN and in the public at large. To represent the interests of naturalists by encouraging the conservation of Nova Scotia's natural resources.

**MEETINGS** are held, except for July and August, on the first Thursday of every month at 7:30 p.m. in the auditorium of the Nova Scotia Museum of Natural History, 1747 Summer Street, Halifax. Meetings are open to the public.

**FIELD TRIPS** are held at least once a month, and it is appreciated if those travelling in someone else's car share the cost of the gas. All participants in HFN activities are responsible for their own safety. Everyone, member or not, is welcome to take part in field trips.

**HFN POST** Halifax Field Naturalists

c/o Nova Scotia Museum of Natural History, 1747 Summer St., Halifax, Nova Scotia, B3H 3A6

**EMAIL** hfnexec@chebucto.ns.ca

**WEBSITE** http://chebucto.ns.ca/Recreation/FieldNaturalists/fieldnat.html

**FNSN POST** Federation of Nova Scotia Naturalists

c/o Nova Scotia Museum of Natural History, 1747 Summer St., Halifax, Nova Scotia, B3H 3A6

**EMAIL** nstn0308@fox.nstn.ca (Doug Linzey, FNSN Newsletter Editor)

**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 Secretary, Halifax Field Naturalists, c/o NS Museum of Natural History. New memberships starting from 1 September will be valid until the end of the following membership year. The regular membership year is from 1 January to 31 December. Members receive the HFN Newsletter and notices of all meetings, field trips, and special programmes. The fees are as follows:

Individual	\$15.00 per year
Family	\$20.00 per year
Supporting	\$25.00 per year
FNSN (opt.)	\$ 5.00 per year

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# HFN NEWS AND ANNOUNCEMENTS

## EDITORIAL



**The Summer Issue** The Halifax Field-Naturalist, No. 99, was subject to beetlemania and other frenzies; this issue also will be late, but hopefully less dizzy! The species list for the Blomidon walk were incomplete in the summer issue; the omitted species are listed on page 16.

**HRM Council** They passed the proposed bylaw phasing out lawn and garden pesticides, and the Unsightly Premises committee is planning new bylaws to respond to more natural gardens, which are already appearing. One person's experience is on page 4.

**Another Leatherback Turtle!** It is being tracked by means of a radio tag. Her name is Helen; she is the first female Leatherback to be monitored in this way. There should be media reports later; unfortunately the web is the only place giving information at present; <[www.seaturtle.ca](http://www.seaturtle.ca)>.

**Local Parks** It's important to keep our ears open for things happening there; just before a municipal election is the ideal time to sound out our prospective councillors and mayor.

**Urgent Conservation Issues** For fun, there are Leaf Watch and Thousand Eyes, and of course – the Herp Atlas.

Of much more serious concern is the report of the Public Lands Coalition on the future of Nova Scotia's Crown Lands, and the inadequacy of its public hearing process. The invitation to the hearing held in Halifax and New Glasgow was not only signed by the regional resource manager Dave Harris, but also by Bevan Lock, "a long-term planner from Stora Enso", both on the DNR planning committee for the IRM Plan.

Only 2% of Nova Scotia's crown lands are to be protected!

Large tracts, including land previously designated park reserves, some already important to the tourist industry, are to be opened up to resource exploitation. The IRM Plan maps are available at: <<http://www.gov.ns.ca/natr/irm/slideshow/s1d021.htm>>. Changing the number in the address to s1d022, etc., brings up different maps. The following action has proved *very effective* so far in bringing about another meeting with IRM planners:

Telephone DNR Minister Ernie Fage's office (424-4037). Ask for his personal assistant. Tell her/him about your disappointment with the format of the DNR Info Sessions and the lack of public and environmental input into their planning process, and your concern with the fact that only 2% of Crown Lands will be protected. Ask when further meetings will take place. You might be referred to the DNR PR officer for Halifax, a Ms. Susan Mader Zinc (424-2354). Call her as well. List things that you would like to see take place in future meeting in point form if possible. Push strongly for a different and friendlier format that allows for more input and more questions and answers.

– Ursula Grigg

## HERP ATLAS



If you would like to participate in the N.S. Herp. Project, we have a comprehensive website, <<http://landscape.acadiau.ca/herpatlas>>. You can find out more about the project, how to identify the species, register as an atlasser, and/or submit your data online. Contact me:

Sonja Tiechert, Herp Atlas Coordinator  
Biology Dept., Acadia U., Wolfville, N.S., B0P 1X0  
902-585-1313, [sonia.teichert@acadiau.ca](mailto:sonia.teichert@acadiau.ca)

I am the liaison for our atlassers, I work to increase participation and interest in the project, and I maintain the website and database. I will send you an information package and answer any questions you may have about the project.

(Read more about this important project on Page 7.)

– Sonja Tiechert

## LEAF WATCH 2000



'Watch' is back for a third year!

Leaf Watch is a province wide monitoring program and the best way to take the guess work out of discovering fall's most colourful foliage. Leaf Watch keeps tabs on the progress of fall as it sweeps across the hardwood hills, blueberry fields, and coastal marshes of Nova Scotia. A network of observers around the province report conditions in their areas from mid September until the first of November. A project of this scope could not happen without committed 'Leafwatchers'.

A colourful and informative brochure will guide Nova Scotians and visitors of 'hot spots' and provide hints for observing. Brochures are available at the Museum of Natural History, and Visitor Information Centres around the province in September.

## SPECIES AT RISK ACT – AT RISK!

The Species at Risk Act is at a *very critical* stage. MPs need to start hearing from their constituents; they need public support on this issue – but – their phones are not ringing!

There are 353 species on Canada's endangered list. Until now, this list has meant nothing; Canada *does not* have national endangered species legislation.

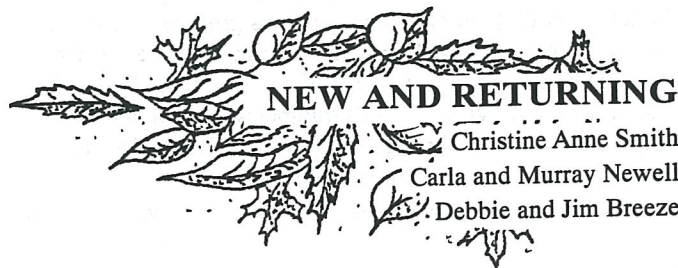
Our federal politicians need to hear from Canadians that they want legislation that protects endangered species. To be truly effective, the Species at Risk Act *needs lots of improvements*. For instance, species are not endangered because they are being killed by Canadians, but rather because the places where they live are being destroyed by factors such as increasing urbanization, deforestation, and pollution. The current legislation *does not address these threats!*

With an election looming, your views *will* count. There are many different ways to make your voice heard. Get involved in the very important legislation for protecting Canada's endangered species by phoning

Laura Telford, Canadian Nature Federation  
(613) 562-3447 ext. 299; email [ltelford@cnf.ca](mailto:ltelford@cnf.ca).

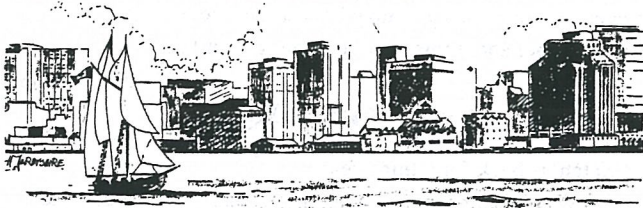
To keep up to date on the status of the Species at Risk Act, visit the CNF web site at:

<[http://www.cnf.ca/species\\_mail.html](http://www.cnf.ca/species_mail.html)>. And, more info at:  
<<http://www.speciesatriskcanada.com/>>.



# SPECIAL REPORTS

## THE GREENING OF HALIFAX VERSUS CITY BYLAWS



In early summer, HRM Council passed the bylaw banning the use of pesticide sprays on lawns and gardens. It will take four years to come into full force, but at least spraying near schools will be illegal from next April.

People who are already gardening without chemicals are beginning to shine; The Daily News is running a series of articles on unusual gardens, including HFN member Clarence Stevens I's bird and butterfly haven in Dartmouth. Also, if one looks for them, there are some amazing examples of unsprayed land in the city. In the spring, city properties blaze with dandelions, and in late summer there are patches full of Queen Anne's lace, knapweed, evening primrose and vetch, goldenrod, and asters. An empty house on a main road in Halifax has its grass mowed and edged meticulously, but the flower beds are untended – massed with cultivated perennials, wild flowers and jumbled rose bushes. Many city gardens have untended margins at the far ends reminiscent of Germany, where plots in cities and patches of land on farms must be left fallow by law, to provide food and shelter for wildlife, seeds for game birds, and grazing for deer.

Here – we have the Dangerous and Unsanitary Premises Bylaw, and – the Noxious Weeds List! These are administered by HRM's Unsanitary Committee (their name for themselves) and the Provincial Department of Agriculture, respectively. These regulations are seldom invoked, but in some parts of town, neighbours demand what they call a standard of geometric green lawns, with beds of low growing brilliant flowers set in bare earth or mulch. Nonconformists are pilloried with important notices on their front doors, with dire penalties including jail, if they do not reform at once. This happened to me again this year, and in order to protect my fruit bushes and Jerusalem artichokes I had to appeal once more to the Unsanitary Committee.

In fact, there is no such standard as the neighbours suppose; there is a vague requirement that lots should conform to the general appearance of the neighbourhood, but a walk along my eight-houses-each-side street shows something like 12 different gardening styles, including some with vegetables. The houses are alike in having mown front lawns, but several have backyard tangles.

The bylaw prescribes a maximum height for 'grass' (I believe it is 12") but ornamental grasses grow to 7', and even corn is higher. Several herbs, and morning glory, are listed as noxious weeds; perhaps they are weeds on a farm, but garden varieties are cultivars. Angel's trumpet was ordered out of city gardens a few years ago, but yew is welcome and castor beans tolerated. Both are poisonous.

My Committee hearing took half an hour and was open and

thorough. The inspector had video-taped my garden, so I was able to explain what was shown. My contention that garden design is a personal choice was accepted. I answered questions on how many plants were perennials and how many annuals, and whether I have any Noxious Weeds. I admitted not having an up-to-date Weed List. The Committee admitted that the bylaws need revision. My appeal was allowed.

There is a document (Rappoport) which is used by NSCAD's Environmental Planning classes; it's a good place to begin. (B. Rappoport, 1993: As natural landscaping takes root we must weed out the bad laws – how natural landscaping and Leopold's land ethic collide with unenlightened weed laws and what must be done about it. In: The John Marshall Law Review, Vol.25; page 865. In Dalhousie's Law Library).

I shall follow Rappoport's advice to keep the front lawn mowed, and a strip of mown grass around the back yard tangle. A wide curve will be put into the straight back path (Allan Robertson's suggestion), which means – I may not have to move the grape!

In this dilemma between manicured and natural, untouched and unkempt, there is plenty of room for naturalists and gardeners! In accepting Aldo Leopold's land ethic, which stresses humanity's responsibility to remember we are part of the planet's fauna, and must not exceed its resources, we can put our knowledge to use, enjoy and protect the living world, and design something attractive, unregimented and low-maintenance.

– Ursula Grigg

## POINT PLEASANT PARK



In 1990 the Point Pleasant Park Commission, on advice from the Nova Scotia Department of Lands and Forests, reported that from 50% to 70% of the trees in Point Pleasant Park (about 40,000 to 55,000 trees) would have to come down because of an alleged Spruce Bark Beetle (*Dendroctonus rufipennis* Fitch) infestation. The 'rivers of sap' on some trees were the proof of the infestation. The NSDL&F said the infected trees had to come down in order to protect the rest of the trees in the park, and outside the park as well.

A five-week trapping program, designed by the NSDL&F and carried out by the Halifax Field Naturalists in the summer of 1990, caught over 1,000 beetles, but *not one* of those were the species that were claimed to be infesting the park. As a result, no trees were removed.

During the trapping program, 18 longhorn, wood-boring

beetles were collected merely as samples of the other sorts of insects that were seen. They were identified by the entomologist as native species of wood-boring longhorn beetles.

In May of 2000, the Canadian Food and Inspection Agency announced in the media that a wood-boring longhorn had 'jumped ship' in 1990; that it had been misidentified and was actually the Brown Spruce Longhorn Beetle (BSLB, *Tetropium fuscum*), an exotic species found in Europe; that it had exploded into a population of millions of beetles; and, although it attacked only dead and dying trees in Europe, was attacking and killing healthy trees in the park. The agency pointed to rivers of sap as proof. Just like in 1990. The CFIA also announced that this beetle had no natural predators here and that there were no chemical treatments for it.

Upon further research, it became clear to a group of local residents, who later formed the Friends of Point Pleasant Park Society, that the scientific basis of the BSLB being in the millions and killing healthy trees was weak to nonexistent. This group's research also showed conclusively that there *are* chemical treatments (the CFIA's own unreleased literature stated this), and that there was also a very effective natural fungus, *Cephalosporium lecanii* Zimm., used in Europe and sold in the U.S. as Vertalec R. Also, (the CFIA's own unreleased literature stated the following as well), that there *are* natural insect and bird predators (including two new woodpeckers) in the park, and in Canada.

Indeed, further insect collecting in the park this summer has found significant populations of new insect predators (see page 16). The CFIA has trapped 'very few' BSLB, (Atlantic Forestry Review, September 2000), and will not share their findings openly. Repeated attempts to discuss the whole affair with the CFIA's task force were rebuffed. It became clear that the CFIA felt no obligation to discuss the issue, short of holding two 'public information sessions' which were highly orchestrated and tightly controlled. One of the group filed for Access to Information from DNR and the CFIA; they both formally requested and received an extension in its release; it is still trickling in and is difficult to access.

The CFIA issued a Notice to Dispose of a large number of trees in the park – initially 50,000 or more, then 37,000, then 10,000, now 5,000, for a total cost of \$2,000,000.00 – with any number to be removed in subsequent years. This notice cited "all trees that are infested or suspected of being infested with BSLB (*Tetropium spp.*)". They claim rights to cut "in all private and public lands (we presume parks and special places are not exempt), all public and private woodlots, and in all secluded and remote areas."

Three things were wrong with the order.

1. It was issued *before* the final draft of the Agency's Pest Risk Assessment was issued, thus violating its own regulations. The CFIA had no jurisdiction to issue the Notice to Dispose.

2. It referred to trees "suspected of being infested ...". There is no conclusive method of determining if a tree harbours the BSLB. This wording gave the CFIA license to cut any tree it wanted to cut – simply on the basis of sap on the trunk that can be caused by many other species of conifer beetle and even their predators, in the park.

3. It referred to *Tetropium spp.* But the *spp* designation refers to *all* species within the Tetropium genera. Since there are two other species of *Tetropium* beetle in Nova Scotia, and more in the rest of Canada, this effectively gives the agency license to cut any trees harbouring *any* *Tetropium* beetle. (In fact, because it is impossible to identify a beetle by the holes it leaves in the bark, the agency would have leave to cut any tree harbouring any sort of insect that made the same-size exit-hole, of which there are eight species in the park, and more outside the park.)

The CFIA began cutting trees in the park in early August. The Friends of Point Pleasant Park Association applied for a judicial review to halt the cutting shortly thereafter. After an August 14 court hearing, a federal court judge issued an order the next day for cessation of "cutting, incineration, removal or other destruction of trees in the park" until a judicial review application could be heard. The judge's Reasons for Order were issued on August 21.

*This decision represents a first in Canadian legal history and reflects an evolution in environmental law.* The FPPP have set a national environmental law precedent for the 'standing' of adjoining landowners, the irreplaceable value of trees, and successful injunctions against federal agencies. If this case is won, it will help environmentalists win battles all across Canada.

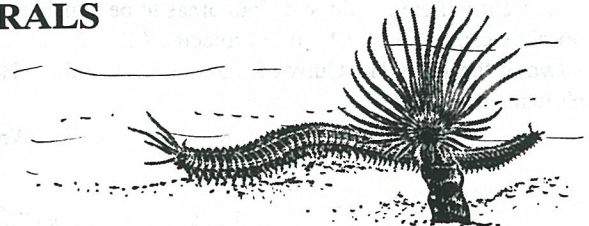
The CFIA appealed the order the next day, August 16. They also entered a motion to dissolve the injunction (to be heard on October 18). The date for the judicial review is subject to court availability; we expect it in November.

The temporary injunction is still in effect. It will be a *very* tough fight because the CFIA will simply argue that they have no mandate or need to explain their actions to anyone. They are accountable to no one (but the Minister?) and indeed, in effect, have the right to do wrong, as in the PEI Potato Virus affair in 1991 ([New Maritimes](#), March 1994).

Referring to the increasingly weakening scientific basis of the CFIA's expensive and massive cutting program, one of the seven people who submitted affidavits against the cutting was Dr. Richard Wassersug, a Resident Scientist for the Discovery Channel.

– Allan Robertson

## FIRST INTERNATIONAL SYMPOSIUM ON DEEP-WATER CORALS



I commuted from Wolfville to Halifax for parts of this symposium, which ran from July 31st to August 3rd. On the first evening, we all watched videos of corals from various parts of the world, but the most impressive reefs were off Norway (where scientists have been studying them and their threats, mainly from trawling/dragging for fishes) and off Canada's West Coast.

On the afternoon of August 1st, there was a panel discussion on the gaps in knowledge about these deep-water corals, and the state of research into them. There are oodles of gaps, and they are very basic ones.

We need to know world distribution (surveys) and detailed identification of the corals; what other organisms are associated with them and what the interrelationships are; how corals reproduce and regenerate themselves; how long it might take them to restore devastated colonies or reefs; and more.

Questions directed at speakers and at the panel discussion frequently asked, "Where are the government decision-makers and regulators or non-regulators? Their absence at the proceedings is conspicuous and problematical." (To be fair, of course, some of the Dept. of Fisheries & Oceans scientists from Bedford Institute of Oceanography were important participants at the conference.)

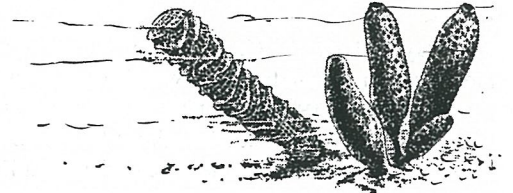
The presence of Derek Jones and Sanford Atwood, fishermen from Cape Sable Island and members of the Canadian Ocean Habitat Protection Society (COHPS), added a lot to the corals conference. Not only was COHPS' impressive display of corals attracting attention, but these fishermen were prominent participants in the day-to-day meetings and presentations. Derek showed a video on the first evening, and then was co-presenter of a paper with Martin Willison. Sanford has intimate knowledge of the ocean bottom off Cape Sable Island, especially for the Hell Hole canyon off the south edge of Brown's Bank (a very probable candidate for a Marine Protected Area for the corals). He was one of a panel discussing how to go about protecting deep-water corals while at the same time accommodating commercial fishing interests.

The last day of the conference, August 3rd, was a workshop on the Conservation of Deep-water Corals. For Canada, there was general agreement that we are extremely early in the descriptive phase, i.e. finding out just where our corals are and what species we have (many other parts of the world are at this stage, or even farther behind than Canada). Thus there is an immediate need for sea-floor mapping round the Atlantic Provinces, out to the edges of the continental shelf. Currently the SEAMAP project, being carried out by DFO and others, is in its early stages, and may require up to 10 years for completion. Several participants at the conference thought this could be sped up considerably, given some will.

Currently there are three or four areas to be considered as possible candidates for Marine Protected Areas for the corals – two of these are The Gully off Sable Island, and the Hell Hole mentioned above.

– Jim Wolford

## DEEPSEA CORAL SCIENTISTS GATHER IN NOVA SCOTIA

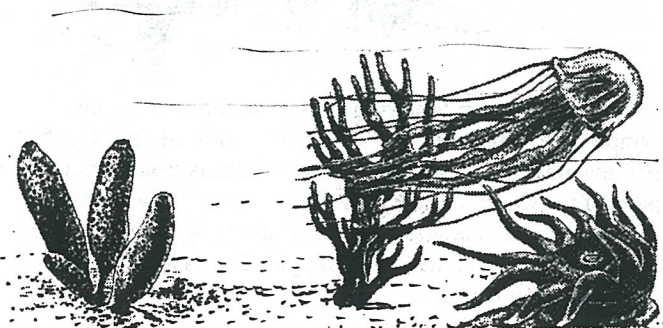


On July 30th, scientists and others interested in deep sea corals gathered in Halifax for a four-day meeting called The First International Symposium on Deep Sea Corals. People came to it from 15 countries, and most were scientists who have worked on corals from relatively frigid waters, including waters off Alaska, northern Norway, and Antarctica. The meeting was organized by the Ecology Action Centre and was held at Dalhousie University's Law School.

There was huge media interest in what at first sight may seem a rather obscure subject. Both of Canada's 'national newspapers' ran stories, as did CBC TV National news. I have heard that the CNN website had a picture of me holding a coral, and in the last few days I have had several conversations with a science reporter from the New York Times, who is doing an in-depth investigative story. There are many reasons for the interest in this compelling story, which has dimensions well beyond the fascinating natural history of the corals themselves. If you pick up any textbook on oceanography or marine biology, you will surely find reference to coral reefs, but almost as certainly, you will find that those shown are restricted to the tropics. One clear conclusion of the conference is that this is a false perception. There are numerous coral reefs along Europe's continental fringe from Africa to the Arctic, mostly at depths of 200-500 metres. There are also complex communities, with corals as important foundation species, on virtually all seamounts having peaks of a kilometre or less from the ocean surface. The best known corals belong to the Order Scleractinia, the stony corals. Some of these form limestone mounds (reefs), composed of carbonate secreted by the little coral organisms as they grow. The living coral is a colony of polyps, each of which is a small sea anemone.

Corals of the deep seas are exclusively filter feeders. At the symposium, we watched a wonderful video-tape of the deep-sea coral polyps feeding on copepods. Another video-tape showed a huge school of redfish lazily swimming over a Norwegian reef, and we heard a Norwegian fishery scientist state that the diversity and abundance of fish was several times greater in the vicinity of deep-sea coral reefs than over a non-reefed ocean bottom nearby.

It was very disturbing to hear at the symposium that the Nova Scotia experience of damage to coral communities by dragger fishing activities seems to be universal. Apparently, in several countries, the trawler fleets have devised techniques for flattening deep-sea coral reefs because the nets are torn up as they pass over the corals. Chains and other devices have been towed over the bottom by large ships in order to bulldoze the corals out of the way. The conflict over coral destruction between hook-and-line fishermen (who have traditionally valued deep-sea corals) and trawler operators is also not unique to Nova Scotia.



Some coral-destructive fisheries are particularly disturbing. Seamounts have a high proportion of endemic species (i.e. species found only on a seamount or seamount chain). A fish called orange roughy associates with deep seamounts, and is being aggressively fished now that other more accessible species have been fished out. Some seamounts have been shown to have been scraped down to smooth bare rock in the process of catching the fish, which of course do not return to a habitat which has become an alien desert. This is truly a mining operation.

In addition to stony corals which cover the surfaces of seamounts, there are often large tree corals belonging to the Subclass Octocorallia. The Nova Scotian corals that created most interest at the symposium are these tree-forming octocorals. These have probably always had a patchy distribution along the edge of the Scotian shelf, although there are clearly fewer now than there were fifty years ago. Fishermen call them 'trees' and 'bushes', and more than a dozen species are known. We watched a video, made by DFO only a few weeks before the symposium, of *Primnoa* bushes, each less than half a metre high, emerging from small rocks lying in the Northeast Channel between Browns Bank and Georges Bank.

From Cape Sable Island, fishermen Derek Jones and Sanford Atwood also attended the symposium. They brought some of their large collection of coral specimens collected from Nova Scotian waters by themselves and by other fishermen from their region. Both Sanford and Derek were riveted to the presentations, and delighted by the attention paid to their work by scientists from around the world.

At the Symposium, the Federation of Nova Scotia Naturalists presented Derek and Sanford with a cheque for \$1,000, so that they can continue their educational work in which they bring the display to schools and public functions.

It will next be set up at the Fundy Geological Museum for showing from October to December, 2000.

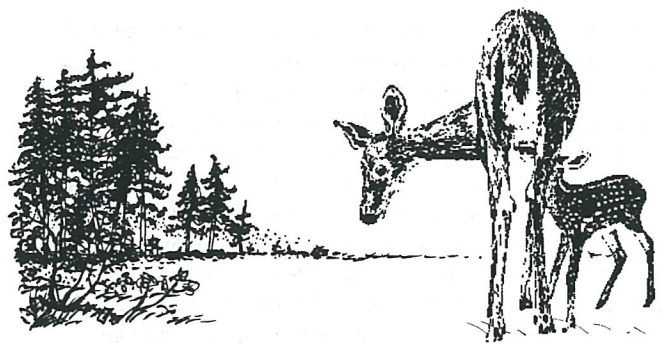
In late August I went out in Sanford's boat with several others to look at the 'strawberries' just south of Cape Sable. 'Strawberry' is the name given locally to the soft corals in the Genus *Gersemia*, of which we found two species growing plentifully on the rocks at about 18 fathoms (36 metres). We saw fascinating glimpses using a tiny submersible TV camera clamped into a small cage and weighted with a piece of concrete. As we hopped it over the bottom we saw several cod, and there were always rocks and corals in sight when the cod appeared. We saw flounder and sculpins when corals were not visible. While the sampling method is insufficient to describe this as having any scientific significance, I was left with the impression that the fisherman who accompanied us and who fishes there regularly was right – "groundfish like strawberry bottom"!

With luck you will have a chance to judge this for yourself because we had a CBC TV crew filming our excitement for a Country Canada show to be aired sometime in the late fall.

– Martin Willison



## A THOUSAND EYES



Nova Scotia, how have you changed?

Is our winter really getting milder? Is our summer getting hotter and drier, and do dandelions and robins come out earlier than usual in the spring? If you would like help find the answers to these and other important climate change questions then we have the project for you.

More than one hundred years ago Nova Scotia schools eagerly participated in phenology; the study of naturally occurring events and their timing. The driving force behind this project was Dr. A. H. MacKay who was the Superintendent of schools in the province from 1897- 1923. The project lasted 26 years, with some 1,500 schools from around the Nova Scotia observing 107 natural events each year and recording their findings in school ledgers. Their observations included flowering, fruiting, and agricultural events; bird migrations; and weather observations. Students noted when the first Mayflowers bloomed in their area and when geese began migrating each fall.

Now, one hundred years later, we are asking schools, individuals, and community groups to help again and by observing 50 of these natural events. Comparing our new findings to the historic MacKay results, we will look for evidence of climate change in Nova Scotia.

So what do we want you to look for? Plants and animals adapt with the effects of climate change over time and are sensitive indicators of temperature, precipitation, daylight hours, and humidity. These factors coupled with historic and present day weather data should give us a good sense of climate change and weather trends over the past 100 years in Nova Scotia.

How do you present your observations? Individuals reporting data for this current project will submit their results by e-mail or by touch-tone telephone. The data will then be transferred directly onto digital maps to a special Website.

Who can get involved? This project and is being launched in September 2000, and is suitable for all ages. Through 'Thousand Eyes' we will track seasonal events, and promote a greater understanding of global warming and the regional effects of climate change. If you are interested in getting involved or wanting to find out more contact:

**Thousand Eyes Project Coordinator, NSMNH**  
**1747 Summer Street, Halifax, Nova Scotia, B3H 3A6**  
**Phone: (902) 424-7370, Fax: (902) 424-0560**  
**ukilverea@gov.ns.ca**

This project is sponsored by The Climate Change Action Fund, EMAN (Ecological Monitoring and Assessment Network), and the Nova Scotia Museum of Natural History

– Elizabeth Kilvert

## THE HERP ATLAS

The Nova Scotia Herpetofaunal Atlas Project is currently in the second year of a five-year period of data collection. Our goal is to document the distribution and abundance of Nova Scotia's amphibian and reptile species (collectively referred to as 'herps'), from information collected by volunteer atlasers. Little is known about the current status of our herp populations in Nova Scotia, so this project will allow us to establish a database of information which can be compared with historic records. The end result will be publication of a Herp Atlas mapping the five years (1999-2003) of data collected during the project. Because anyone can contribute data, we expect to increase public awareness and appreciation of herps. In particular, people already interested in these animals will be able to join in scientific research on them.

Once the data is collected, we will be able to assess changes in distribution and over time in our herp populations, and can provide essential information for use in conservation and land use planning and resource management. We will be able to identify areas that need protection or more intensive monitoring. The Herp Atlas will also have established the infrastructure for following herp populations after the project is over. We shall not only be able to follow population changes, but also the impact of human activities.

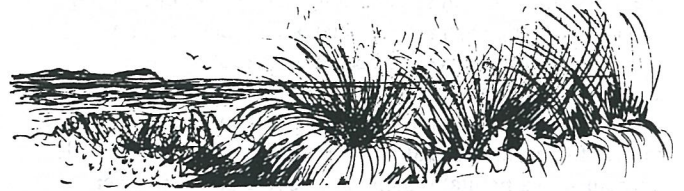
Amphibians are particularly sensitive to environmental changes because of their need for water and moist surroundings, their relatively slow rate of travel, and their permeable skins. Although it is believed that amphibian populations are declining worldwide, long-term data is needed to distinguish between local or regional fluctuations and persistent population declines; we do not yet have enough data to know if any species in Nova Scotia are declining.

Nova Scotia has five herp species which are endangered, threatened, or vulnerable: Blanding's Turtle, Wood Turtle, Northern Ribbon Snake, Four-toed Salamander, and Blue-spotted Salamander. In 1999, the first year of data collection, atlasers discovered two additional locations for Wood Turtles, at one of which females were nesting; this demonstrates the value and importance of volunteer observations. New locations might be found for other species, and could then be included in monitoring or conservation plans.

Over half the records which have been collected to date have been from people who have found herps incidentally while doing something else. Incidental records will always be an important source of data; however, in the future we shall need to focus volunteer efforts on actual atlasing. At present there are over 100 registered atlasers; 337 records were contributed in 1999.

– Sonja Teichert

## ENDANGERED SPACES N. S. – THE END OF ONE CAMPAIGN



In September 1989 the Halifax Field Naturalists were approached by World Wildlife Fund to launch their book "Endangered Spaces, the Future of Canada's Wilderness". Doug Linzey and I put together the event. This book changed the game from struggling for one park or protected area at a time to having a vision of enough protected areas to represent all the diversity of Canada's natural regions. This, said the Canadian Wilderness Charter, should comprise at least 12% of the country, and should be accomplished over the next 10 years.

Regrettably, the book implies that for the Maritimes it is already too late. It focuses on smaller reserves.

Our then Environment Minister, John Leefe, heard Monte Hummel of WWF interviewed about the book and campaign by Peter Gzotsky. This led to a meeting with the Minister and resulted in my being added to the Nova Scotia Round table on the Environment and Economy. With a few more meetings, and a Minister keen on the project, Dr. Chuck MacNeil of Natural Resources used the first meeting of the Federation of Nova Scotia Naturalists to cautiously commit the government to see what it could do. The planners in the Parks Division of DNR thus had the go ahead to present the possibilities. Strange as it may seem, cooperation from Stora really helped keep the vision large.

The next major helping hand came from a joint meeting of the Ministers responsible for Parks, Environment, and Wildlife. The so-called tripartite statement committed thirteen governments of Canada to representing our natural regions through a system of protected areas. In 1994 government was ready to go to the public with its big vision. Before this could happen, we had an election, where we switched from Conservative to Liberal.

For six months it looked like those who thought the concepts of Wilderness Area took too much from mines and forestry would prevail. But government Ministers began to buy into the vision. First Robbie Harrison, then Don Downe, and before it was through, most of the cabinet. The big vision was sent out for public review. A panel of 5 Nova Scotians met thousands of us in 26 sessions at 13 locations. Overwhelmingly we said to go ahead. The sessions ended in February 1995, then there was the long wait, first for the government to receive the report, then for them to decide. Finally, in December, 1995, the announcement – all 31 Wilderness Areas would proceed. Nova Scotia would go from 2.5% to 8% in protection. Legislation and management plans would follow.

But real life had to imitate art. The plot needed a twist. Governments moved at their usual glacial pace, and before the legislation was introduced, on December 3, 1996, the government announced that Jim Campbells Barren would be withdrawn to allow mineral development of the area.





While Jim Campbells Barren has nothing on Karmanah or Temigami for spectacular beauty, it was a promise broken, and broken in a speculative bid for wealth, perhaps on the ground, more likely on the stock market. Compared to the public process that led to the promise, the back room pressures that led to the withdrawal outraged the public. Investigations were launched by the Ontario Security Commission (insider trading) and the RCMP (breaching cabinet confidentiality). It made national news on several occasions, and was the biggest story in Nova Scotia in 1996.

It also brought together a coalition of 25 groups, not all environmental. By June of 1996 we thought we had it won. But Premier Savage had one more surprise for us. He resigned. This left it to his successor to appoint a three-Minister panel to assess the arguments. In October the result was in, and Jim Campbells was restored to the list of sites to be protected.

There were several repercussions. Protected areas were moved to the Department of the Environment. (In the event, Provincial Parks were deemed too integrated with DNR to move, but ecological reserves and wilderness areas did move over.) Perhaps more importantly, for the first time, environmentalists (or whatever you want to call the supporters of protected areas), strongly backed by the public in and beyond Nova Scotia, reversed a firm government decision. The core of that group are still in regular contact, and more have joined the ranks. Our protected areas are being defended.

It was not coincident that Don Downe became Minister of the Environment, as well as Finance, in the new government. There was an unfinished agenda. Legislation. In late 1997 it was ready. Then came Cape North. A few individuals were determined to hijack the legitimate process, and by intimidation and misrepresentation, have Cape North removed from the list of Wilderness Areas. In large part because of Jim Campbells Barren the government said bluntly, "we will not go there again." Tough negotiations followed to try to find something which would meet the government commitment without igniting the community. In the end, Cape North was given a one year window in which a management plan could be prepared before designation would automatically kick in. Despite the government's efforts, no management plan was achieved, and Cape North is now a Wilderness Area like the others.

A sideline during this time was the national effort to get Endangered Species Acts established in all provinces and for the federal government. We managed to link the importance of the two bills. The Endangered Species Act and the Wilderness Areas Protection Act were passed as the last two Acts of the legislature on December 3, 1998, ironically the second anniversary of the de-listing of Jim Campbells Barren. The Endangered Species Act, though not perfect, is still nationally recognized as the best this country has to offer. The efforts to get a good federal Act continue.

World Wildlife Fund's Endangered Spaces Campaign (the terrestrial part) ended on June 30, 2000. Those 10 years saw an unprecedented increase in protection for Canada's landscape. While nationally we moved only half way to the area minimum, and no province or territory has adequately represented even half of its regions, the campaign should be judged a success. A network of protected areas is now part of

the Canadian vision. There is momentum. Since the campaign end Quebec and New Brunswick have announced additional commitments, and BC is should announce a couple more large northern areas by year's end.

The two tables below show how we stack up nationally for natural regions.

**Jurisdictions ranked according to the proportion of natural regions assessed by WWF as either moderately or adequately represented by protected areas:**

		Natural Regions	% Represented
1	NS	77	44.2%
2	On	66	36.4%
3	BC	100	36.0%
4	Man	18	27.8%
5	Yuk	23	26.1%
6	Alb	20	25.0%
7	Sask	11	18.2%
8	NWT/ Nun	69	17.4%
9	Nfld	19	15.8%
10	QUE	75	8.0%
11	NB	7	0%
12	PEI	1	0%
	Canada	486	27.4%

**Jurisdiction ranked by percent of province/territory protected as of July 1, 2000:**

		%	Ha
1	BC	11.40%	10,770,100
2	Yuk	10.38%	5,008,000
3	Al	9.99%	6,612,303
4	On	8.74%	9,405,300
5	Man	8.61%	5,579,883
6	NS	8.30%	458,615
7	Sas	6.01%	3,912,800
8	NWT / Nun	5.22%	17,941,954
9	Nfld	4.32%	1,749,526
10	Que	4.31%	6,646,278
11	PEI	4.19%	23,709
12	NB	3.17%	231,116
	Canada	6.85%	68,339,584

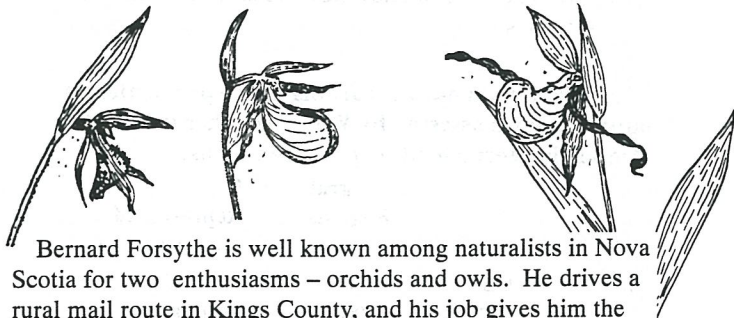
Today, in Nova Scotia, we are fending off an attempt to stall progress. The government still indicates a commitment to complete representation, but DNR's Integrated Resource Management (IRM) essentially proposes that all Crown land not already protected would be managed for multiple uses. The process has rejected all suggestions for areas worth protecting.

Once again, the broad spectrum of interests who want to see the system completed are cooperating to persuade government and its bureaucracy to honour its representation commitments.

- Colin Stewart

# HFN TALKS

## WILD ORCHIDS OF N. S. 1 JUNE



Bernard Forsythe is well known among naturalists in Nova Scotia for two enthusiasms – orchids and owls. He drives a rural mail route in Kings County, and his job gives him the opportunity to keep watch along the edges of fields and woodlots, bogs and streams, and the roadside ditches of his area, throughout the seasons. His observations of our native orchids, over the last twenty years, have enlarged our knowledge of these fascinating plants, and his willingness to share his findings, and the contributions which he has made, are a wonderful example of what an amateur naturalist can accomplish.

There are nearly forty species of orchids in Nova Scotia, and while everyone knows the beautiful and widespread Pink Lady's Slipper (or Moccasin Flower, the floral emblem of Prince Edward Island), and perhaps some of the pretty "bog pinks", there are others which are so rare or inconspicuous that few of us have ever seen them. Some of these Bernie describes, with characteristic humour, as 'LGT's', or 'Little Green Things'. Through diligent searching, Bernie has made several discoveries of new species and varieties in our province.

Bernie gave us a lovely slide show in which he illustrated the various species found in Nova Scotia. All orchid flowers have three petals and three sepals; the lowermost petal, called the lip, is often an elaborate structure, marked to attract the insects which are needed to pollinate it, or shaped to direct their movements. The sepals are often coloured like the petals.

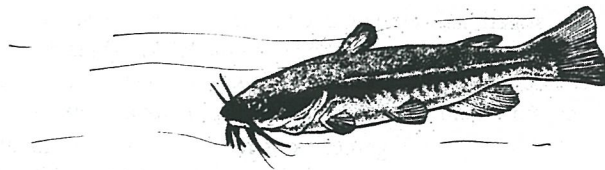
Bernie pointed out distinguishing characteristics, describing the methods by which different species attract pollinating insects, and telling us when and where to search for them. As Peter Payzant observed during the question period, there are parallels between studying orchids and butterflies in Nova Scotia: there is a small number of species to learn, many of which are quite distinctive, but others can only be identified by carefully discerning fine points.

In recent years Bernie has become intrigued by the 'aberrations' among the orchids, and he had a number of slides of the sorts of pitfalls that await the unwary botaniser: albinistic specimens, distorted blossoms, variant colour forms, and hybrids.

In the end, though, it is the beautiful ones which linger in the memory. The Large Purple Fringed Orchid for instance, which is pollinated by night-flying moths, is fragrant at dusk. Bernie told us that he likes to visit one large colony he knows several times a year to enjoy, at twilight, the scent of the flowers, surrounded by the ethereal singing of thrushes and veeries.

– Patricia L. Chalmers

## N.S. FRESHWATER EXTINCTIONS 7 SEPTEMBER



Anthony Ricciardi of the Biology Department at Dalhousie brought us a disturbing message. The extinction rates of fresh-water species in North America are comparable to those in tropical forests, although the actual numbers of species lost in the Amazon, for example, is higher.

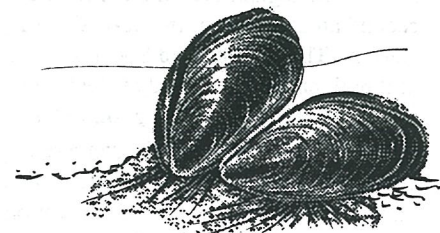
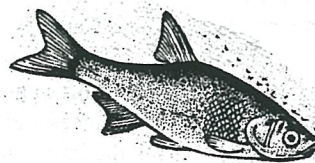
The Amazon loses 3.7% of its fresh-water species to extinction each decade, and this figure is probably true for fresh-water sites world-wide.

These organisms are not just eliminated from the area being studied; they have evolved in the places where they were found, and their elimination means they are completely gone. 129 organisms which occurred only in North America are extinct, and those are only the ones which have been described. There must be many more.

The formerly undisturbed bayous of rivers in the Mississippi watershed have produced numbers of molluscan species, including large numbers of fresh-water clams (formerly the source of a pearl button industry). Now these have been wiped out in parts of the Tennessee River. Using historic records and modern surveys and water quality reports, the decline in diversity is recorded.

Human activities cause most of it; farms, golf courses and gardens are the main sources of pesticide and fertiliser run-off. Tree-cutting, road-building, damming and imposed drainage systems divert flow, dry up wetlands, cause siltation on fish spawning beds, and disturb nursery sites of aquatic insects and other invertebrates.

– Ursula Grigg



# FIELD TRIPS

## TAYLOR HEAD

**DATE:** Sunday, 11 June  
**PLACE:** Taylor Head Provincial Park  
**WEATHER:** 10°C; rainy  
**INTERPRETER:** Mike Crowell  
**PARTICIPANTS:** 6



When I woke up Saturday morning and saw the rain, I was tempted to stay in bed. But the rain didn't stop me. All week I had calls from many people interested in the hike, but on this rainy day at Taylor Head, all six of us were in for a treat! Mike Crowell, biologist, was eager to lead us no matter what – so we headed out at 9:30 am. Earl, Ian and Lorna and their 10-year-old daughter, Anne, and myself set out in our rain gear with Mike to discover the 16 kilometers of unspoiled coastline, secluded beaches, and trails in the misty rain.

We were greeted in the parking lot by a hare nibbling quietly only a few feet away from us. We could hear the birds singing throughout the park as Mike identified each one for us. As we walked the trails we saw a variety of forested, open, coastal, and fresh-water habitats. Spruce and fir trees dominated the headlands. Many of the trees are stunted and deformed due to the salt spray and constant winds. We crossed old fields once farmed by early settlers and saw rock foundations still standing and guessed what they must have been in their day.

With only six of us on this hike, we were allowed the luxury of a private nature lesson as Mike introduced us to the many wildflowers and trees we came across on our trek. It was intimate and we learned more on this hike because we had Mike's undivided attention.

The trails were easy to moderate and a couple of times we stopped for a moment on the edge of the rocky headlands, looking down at the salt spray splashing against the rocks and we stood still in the misty rain just listening and capturing a special moment.

The views of the coastline were awesome. We saw some seals at a distance. Around 12:30 we decided it was lunchtime but since it was still raining and there was no place to sit, we ate standing up in the pouring rain. I can't remember any time in my life when I ate in the rain. What a moment!

We saw many species of birds and flora which I've listed below. Taylor Head is definitely a place to revisit, and it will have to be one of our annual treks.

Many thanks to Mike for introducing us to this wonderful paradise. After about five hours of walking, Mike had to go home to prepare for a trip to Saint John that afternoon. Thank you, Mike, for a delightful day in the rain!

– Marie Moverley

## TAYLOR HEAD SPECIES

### Ferns

Cinnamon Fern  
 Bracken  
 Wood Fern  
*Osmunda cinnamomea*  
*Pteridium aquilinum*  
*Dryopteris intermedia*

### Flowering Plants

Balsam Fir  
 White Spruce  
 Black Spruce  
 Creeping Juniper  
 Buttercup  
 Gold Thread  
 Bayberry  
 Heart-leaved Birch  
 (Mountain White Birch)  
*Abies balsamea*  
*Picea glauca*  
*P. mariana*  
*Juniperus horizontalis*  
*Ranunculus* sp.  
*Coptis trifolia*  
*Myrica pensylvanica*  
*Betula cordifolia*

Blue Violet  
 Labrador Tea  
 Creeping Snowberry  
 Rhodora  
 Lambkill  
 Foxberry  
 Star Flower  
 Dewberry  
 Shad Bush  
 Apple  
 Chokeberry  
 Common Wild Rose  
 Silverweed  
 Wild Strawberry  
 False Spiraea  
 Dogwood  
 Wood Sorrel  
 Wild Sarsaparilla  
 Morning Glory  
 Lilac  
 Wood Aster  
 Witherod  
 Twin Flower  
 Yarrow  
 Mountain Fly Honeysuckle  
 Lion's Paw  
 (Gall of the Earth)  
 Sedge  
 Sweet Vernal Grass  
 Timothy  
 Poverty Grass  
 Clintonia  
 Wild Lily of the Valley  
 Rosy Twisted-stalk  
 Blue Flag  
*Viola cucullata*  
*Ledum groenlandicum*  
*Gaultheria hispida*  
*Rhododendron canadense*  
*Kalmia angustifolia*  
*Vaccinium vitis-idaea*  
*Trientalis borealis*  
*Rubus hispidus*  
*Amelanchier* sp.  
*Pyrus malus*  
*Aronia* sp.  
*Rosa virginiana*  
*Potentilla anserina*  
*Fragaria virginiana*  
*Sorbaria sorbifolia*  
*Cornus alternifolia*  
*Oxalis acetosella*  
*Aralia nudicaulis*  
*Calystegia sepium*  
*Syringa vulgaris*  
*Aster acuminatus*  
*Viburnum nudum*  
*Linnaea borealis*  
*Achillea millefolium*  
*Lonicera caerulea*  
*Prenanthes trifoliata*



Family – Cyperaceae  
*Anthoxanthum odoratum*  
*Phleum pratense*  
*Sporobolus vaginiflorus*  
*Clintonia borealis*  
*Maianthemum canadense*  
*Streptopus roseus*  
*Iris versicolor*

### Lichens

Old Man's Beard  
*Usnea* sp.

### Birds

Double-crested Cormorant  
 Common Eider  
 Willet  
 Herring Gull  
 Yellow-bellied Flycatcher  
 Common Raven  
 Boreal Chickadee  
 Ruby-crowned Kinglet  
 Swainson's Thrush  
 Hermit Thrush  
 American Robin  
 Magnolia Warbler  
 Yellow-rumped Warbler  
 Yellow-throated Warbler  
 Bay-breasted Warbler  
 Song Sparrow  
 Junco  
*Phalacrocorax auritus*  
*Somateria mollissima*  
*Catoptophorus semipalmatus*  
*Larus argentatus*  
*Empidonax flaviventris*  
*Corvus corax*  
*Parus hudsonicus*  
*Regulus calendula*  
*Catharus ustulatus*  
*C. guttatus*  
*Turdus migratorius*  
*Dendroica magnolia*  
*D. coronata*  
*D. dominica*  
*D. castanea*  
*Melospiza melodia*  
*Junco hyemalis*



### Mammals

Snowshoe Hare  
 Seals  
*Lepus americanus*  
 Family – Phocidae

## PUFFINS AND WHALES



**DATE:** Saturday, 17 June

**PLACE:** Lunenburg to Pearl Island

**WEATHER:** Sunny and warm inshore; sunny and cold at sea!

**INTERPRETER:** Various; plus 1st mate Neil Halverson

**PARTICIPANTS:** 23

The weather was perfectly clear and about 20°C as we headed out from Lunenburg Harbour aboard a neat craft of about 30 feet with leather-covered padded bench seats along the sides. A postcard picture of Lunenburg was admired as we pulled away from the area. Shortly, 1st mate Neil called out that a Greater Shearwater was spotted and slowed the boat to a crawl. The bird must have been on Jim's payroll because it performed expertly for us as it showed off its elegant swoops and soars over the top of the swells and waves! It hung around the boat long enough for all of us to get a great view of it and several captured it on film.

More treats to come.

We steamed off again causing several of us who had not yet acquired sea legs to sit down very abruptly. We were headed out to Pearl Island, which is about 8 to 9 km from Lunenburg. As we bounced along we all started to head into our warmer clothing and waterproof jackets. The temperature must have dropped at least 15°C from when we first started. We all became aware that the sea was starting to get much more bouncy and the spray was finding its way onto the boat. The swells, although not really large (about 2 meters), were enough for many of us to be tossed around. Those of us that had started to eat lunch suddenly decided against it. Despite this, looking around, you could tell that everyone was enjoying this trip because all had contented smiles on their faces. Every face was mirroring a happy heart. As we speed along, the captain often slowed or stopped to show us a different bird.

We approached a 3.5 meter 'sun fish' which was just below the surface of the water. We first noticed its large fin sticking out of the water. It stayed where we found it for several minutes allowing us to study it closely. It appeared to resemble a shark; however, it had a blunt, rounded nose.

Several of us saw the inside of the 'honey bucket' as it hung over the side. I noticed that we all went very quiet as the swells got higher. I think many of us were doing exactly what I was doing – keeping an eye on the horizon in order to keep the stomach calm! This was difficult to do as we approached Pearl Island. I wanted to look through my binoculars at the many birds, that included the puffins, razorbills and guillemots, but my stomach wouldn't permit a long look. I had to be content to look at birds for a minute, then put the glasses down and look at the horizon for another minute. Luckily, our stay there was long enough that it still afforded a good look at the birds.

Puffins are wonderful little birds. I had forgotten that they flap their wings very fast in flight, making them look like they are always in a hurry. The waves that were breaking on

the island rocks causing high spirals of white water to fly made the twelve-inch puffins appear very small. Their red beaks, which they wear only for mating season, were starting to fade to the summer colour of brown tones.

On the way back in we stopped near a rocky reef and studied the harbour and gray seals of all ages. The seals on the rocks appeared to be people—watching as they stared back at us with great wide unblinking eyes. Large dark heads bobbed along in the water pretending not to know that our boat was there, but they couldn't resist turning their heads toward us as though to ensure that we weren't getting too close.

We arrived back in harbour three hours after we had set out. As we came into the dock we pulled alongside of a very fancy sailboat full of people that looked like tourists – with sleeveless tops and sun hats – doing the harbour cruise. They looked down at us with questioning faces – seeing a group of smiling people who were soaking wet, jacketed, some even wearing mitts and shivering!

The waves had been too rough, and we hadn't seen any whales. But no one on board minded in the least.

– Elizabeth Keizer

### PUFFINS AND WHALES SPECIES

#### Fish

Sunfish

*Mola mola*

#### Birds

Greater Shearwater

Sooty Shearwater

Northern Gannet

Black Guillemot

Tern

Arctic Puffin

Great Blue Heron

Razorbill

Greater Black-Backed Gull

Herring Gull

Leach's Storm Petrel



*Puffinus gravis*

*Puffinus griseus*

*Morus bassanus*

*Cephus grylle*

*Sterna sp.*

*Fratercula arctica*

*Ardea herodias*

*Alca torda*

*Larus marinus*

*Larus argentatus*

*Oceanodroma leucorhoa*

#### Mammals

Harbour Seal

Grey Seal



*Phoca vitulina*

*Halichoerus grypus*

## WATERFALLS CAMPING



**DATE:** Saturday & Sunday, 1 & 2 July

**PLACE:** Economy and Parrsboro areas

**WEATHER:** Foggy mornings, hot and sunny later

**INTERPRETERS:** Various

**PARTICIPANTS:** Seventeen

This was a two-day HFN event, taking place in a part of the province some of us had never seen. Only a couple of hours away from Halifax by car, it is one of the most beautiful and interesting areas we have been to in recent memory.

On Saturday, Canada Day, we met birder and naturalist Fran Spalding in Economy, and drove in a little convoy to the start of the trail to Economy Falls. This trail winds through rich mixed hardwood forest beside the Economy River. The

woods were full of bird song, including the ethereal Swainson's Thrush and a variety of warblers. The delightful song of the Winter Wren charmed us, and many of the group caught a glimpse of him, carrying food to his babies. A few butterflies enlivened the sunny openings, and of course in this habitat there were interesting plants everywhere.

It was an excellent opportunity for a little tuition in fern identification, and Joan Czapalay obliged us by patiently naming and renaming each species as we encountered them.

Some student labour has resulted in a fine set of boardwalks and bridges at the wet spots, and after an easy 6.5 km walk, we arrived at the falls themselves. Once spectacular, the rock wall collapsed during the winter of 1997-1998, and the falls are now somewhat disorganized, although the walls are still imposing. We ate our lunch on the gravel bar at the foot of the falls, listening to the water and watching Tiger Swallowtails fly up and down the river.

On the way back, we heard young birds calling for food, and soon located the nest of a woodpecker about 20 metres from the path. Before long, an adult male Yellow-Bellied Sapsucker arrived with food, and we spent a pleasant interval quietly watching him coming and going. His dark red throat and cap were particularly beautiful in the forest light.

A little further down the path, a few people saw an owl flying away with a snake, about half a meter long, in his talons. After getting a second look at the owl, we concluded that it was probably a Great Horned Owl because of the overall tawny colour and enormous size.

We returned to the parking area where there were more butterflies in the open, and then adjourned to the interpretive centre in Economy where we saw photos of the falls as they were before the collapse. After a brief rest, some of us ended the day with a delicious seafood dinner at a little restaurant in Economy.

The following day, Sunday, we gathered at the trailhead for the walk to Wards Falls. We followed a well-maintained trail up the north branch of the Diligent River, again passing through humid mixed hardwood forest. The owners of the property are C. E. Harrison and Sons Ltd. of Parrsboro, a forest products company. They have provided boardwalks, bridges and stairs, benches and even outhouses and picnic tables. The result is a very pleasant walk and the Harrison firm is to be thanked!

Although the habitat appeared similar to that of the previous day, there were some differences. For example, Cucumber-root was present on the Economy Falls trail but absent on the Wards Falls walk.

Wards Falls were somewhat more impressive than Economy Falls, and there was a ladder erected beside them for the adventurous (i.e. almost all of us).

After returning to the parking lot, with a (by now) very impressive list of plants and other organisms, we decided to go to Partridge Island, just beyond Parrsboro. The fact that we were going to leave our cars in the parking lot of an interesting old museum which served ice cream influenced us not a whit.

Partridge Island is connected to the mainland by a gravel beach, which was being pretty heavily used that hot weekend day. The island is totally forested, and a steep trail climbs up through cool woods to the top. Again we were accompanied

by Swainson's Thrushes and various warblers. Once at the top, we continued along the trail until we reached a lookout with a wooden tower. From here we were looking south across Minas Basin towards Cape Blomidon and Cape Split. Far below us on a little islet a drake Common Eider relaxed in the sun with a harem of drab females.

The day concluded for us with another visit to the museum (with only an incidental interest in ice cream), followed by a leisurely drive back to Halifax. It was an ideal way to celebrate Canada Day, and I hope that we can do it again next year.

– Peter Payzant

## WATERFALL CAMPING SPECIES, PARTIAL LIST

### Birds

Common Eider	<i>Somateria mollissima</i>
Great Horned Owl	<i>Bubo virginianus</i>
Ruby-throated Hummingbird	<i>Archilochus colubris</i>
Yellow-Bellied Sapsucker	<i>Sphyrapicus varius</i>
Northern Flicker	<i>Colaptes auratus</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Eastern Wood-pewee	<i>Contopus virens</i>
Yellow-Bellied Flycatcher	<i>Empidonax flaviventris</i>
Blue-headed Vireo	<i>Vireo solitarius</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Common Raven	<i>Corvus corax</i>
Black-capped Chickadee	<i>Poecile atricapillus</i>
Boreal Chickadee	<i>Poecile hudsonicus</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Winter Wren	<i>Troglodytes troglodytes</i>
Golden-crowned Kinglet	<i>Regulus satrapa</i>
Swainson's Thrush	<i>Catharus ustulatus</i>
American Robin	<i>Turdus migratorius</i>
Northern Parula	<i>Parula americana</i>
Magnolia Warbler	<i>Dendroica magnolia</i>
Yellow-rumped Warbler	<i>Dendroica coronata</i>
Black-throated Green Warbler	<i>Dendroica virens</i>
Black-and-white Warbler	<i>Mniotilta varia</i>
Mourning Warbler	<i>Oporornis philadelphia</i>
Ovenbird	<i>Seiurus aurocapillus</i>
American Redstart	<i>Setophaga ruticilla</i>
Song Sparrow	<i>Melospiza melodia</i>
White-throated Sparrow	<i>Zonotrichia albicollis</i>
Dark-eyed Junco	<i>Junco hyemalis</i>

### Plants

Grape Fern	<i>Botrychium dissectum</i> (?)
Interrupted Fern	<i>Osmunda claytoniana</i>
Cinnamon Fern	<i>Osmunda cinnamomea</i>
Bracken Fern	<i>Pteridium aquilinum</i>
Hay-scented Fern	<i>Dennstaedtia punctilobula</i>
Northern Beech Fern	<i>Phegopteris connectilis</i>
Sensitive Fern	<i>Onoclea sensibilis</i>
Ostrich Fern	<i>Matteuccia struthiopteris</i>
Christmas Fern	<i>Polystichum acrostichoides</i>
Northern Lady Fern (?)	<i>Athyrium filix-femina</i>
Spinulose Wood-fern	<i>Dryopteris carthusiana</i>
Marginal Wood-fern	<i>Dryopteris marginalis</i>
Oak Fern	<i>Gymnocarpium dryopteris</i>
Rock Polypody	<i>Polypodium virginianum</i>
Buttercup	<i>Ranunculus</i> sp.
Gold-thread	<i>Coptis trifolia</i>
Meadow-rue	<i>Thalictrum pubescens</i>
Dolls Eyes (White Baneberry)	<i>Actaea alba</i>
Chickweed	<i>Cerastium</i> sp.
Starflower	<i>Trientalis borealis</i>
Gooseberry	<i>Ribes hirtellum</i>
Avens sp.	
Geum sp.	
Vetch sp.	
Vicia sp.	
Beach Pea	<i>Lathyrus maritimus</i>



Red Clover	<i>Trifolium pratense</i>
Bunchberry	<i>Cornus canadensis</i>
Wood-sorrel	<i>Oxalis acetosella</i>
Jewelweed	<i>Impatiens capensis</i>
Wild Sarsaparilla	<i>Aralia nudicaulis</i>
Heal-all	<i>Prunella vulgaris</i>
Speedwell	<i>Veronica</i> sp.
Bedstraw	<i>Galium</i> sp.
Hobble-bush	<i>Viburnum alnifolium</i>
Witherod	<i>Viburnum nudum</i>
Red-berried Elder	<i>Sambucus racemosa</i>
Twinnflower	<i>Linnaea borealis</i>
Ox-eye Daisy	<i>Chrysanthemum leucanthemum</i>
Goldenrod	<i>Solidago</i> sp.
Aster	<i>Aster</i> sp.
Knapweed	<i>Centaurea nigra</i>
Pussytoes	<i>Antennaria neglecta</i>
Lion's-paw	<i>Prenanthes trifoliolata</i>
Orange Hawkweed	<i>Hieracium aurantiacum</i>
Yellow Hawkweed	<i>Hieracium floribundum</i>
Wild Lettuce	<i>Lactuca</i> sp.
Jack-in-the-Pulpit	<i>Arisaema triphyllum</i>
Painted Trillium	<i>Trillium undulatum</i>
Purple Trillium	<i>Trillium erectum</i>
Nodding Trillium	<i>Trillium cernuum</i>
Indian Cucumber-root	<i>Medeola virginiana</i>
Wild Lily-of-the-Valley	<i>Maianthemum canadense</i>
Rosy twisted-stalk	<i>Streptopus roseus</i>
Blue-eyed-grass	<i>Sisyrinchium</i> sp.
Pink Lady's-slipper	<i>Cypripedium acaule</i>
Round-leaved Orchid	<i>Plantanthera orbiculata</i>
<b>Reptiles and Amphibians</b>	
American Toad	<i>Bufo americanus</i>
Green Frog	<i>Rana clamitans</i>
Wood Frog	<i>Rana sylvatica</i>
Snake, possibly Maritime Garter	<i>Thamnophis sirtalis</i>

<b>Butterflies</b>	
Hobomok Skipper	<i>Poanes hobomok</i>
Arctic Skipper	<i>Carterocephalus palaemon</i>
Canadian Tiger Swallowtail	<i>Papilio canadensis</i>
Cabbage Butterfly	<i>Pieris rapae</i>
Summer Azure	<i>Celastrina neglecta</i>
Atlantis Fritillary	<i>Speyeria atlantis</i> Harris
Checkerspot	<i>Chlosyne harrisii</i>
Northern Crescent	<i>Phyciodes cocyza</i>
Anglewing sp.	<i>Polygonia</i> sp.
Mourning Cloak	<i>Nymphalis antiopa</i>
Red Admiral	<i>Vanessa atalanta</i>
White Admiral	<i>Limenitis arthemis</i>
Common Ringlet	<i>Coenonympha tullia</i>

## BUTTERFLIES – TRIP I



**DATE:** Saturday, 9 July  
**PLACE:** Uniacke Estate; Pockwock Watershed Road  
**WEATHER:** Mostly cloudy and breezy – poor!  
**INTERPRETERS:** Linda and Peter Payzant  
**PARTICIPANTS:** about 17

The first HFN butterfly field trip of the year to Mount Uniacke took place on Sunday, July 9. It was reasonably successful in spite of a few handicaps. One was certainly the weather – only infrequent sunny periods, and a rising breeze later in the afternoon. Another difficulty was that the field beside the road leading up to the house had been MOWED! In early summer, yet. Whatever possessed them to do this at this time of year I cannot imagine. Fortunately, the vegetation

on the Drumlin Hill was still intact. In particular, Black Knapweed (*Centaurea nigra*) was in blossom, attracting many species.

We checked out a number of areas on the property, and got a fairly respectable list (see below). A highlight was a couple of Northern Pearly-eyes in the woods by the stream just before the entrance road emerges into the open.

Many of us then moved on to the Pockwock Watershed access road off Hwy 101, exit 3. The target species here was the Bog Copper, but alas, our traditional site was rather dry, in both senses. We did get a number of Tiger Swallowtails, White Admirals, and yet another Pearly-eye, discovered by very young lepidopterist Lesley.

– Peter Payzant

## BUTTERFLIES – TRIP I SPECIES

European Skipper - lots	<i>Thymelicus lineola</i>
Tawny-edged Skipper - lots	<i>Polites themistocles</i>
Long Dash Skipper - 2	<i>P. mystic</i>
Hobomok Skipper - several	<i>Poanes Hobomok</i>
Canadian Tiger Swallowtail - 5	<i>Papilio canadensis</i>
Blue sp. - whirled away in the wind	
Aphrodite Fritillary - 5	<i>Speyeria aphrodite</i>
Atlantis Fritillary - 5	<i>S. atlantis</i>
Silver-bordered Fritillary - 1	<i>Boloria selene</i>
Harris' Checkerspot - 5	<i>Chlosyne harrisii</i>
Northern Crescent - dozens	<i>Phyciodes cocyza</i>
White Admiral - several	<i>Limenitis arthemis</i>
Northern Pearly-eye - 3	<i>Enodia anhedon</i>

...plus, in the moth department, one or two Virginia Ctenuchas (*Ctenucha virginica*), and one each *Hemaris gracilis* and *H. diffinis*, the little charmers.

## BUTTERFLIES – TRIP II



**DATE:** Saturday, 12 August  
**PLACE:** Uniacke Estate; Pockwock Watershed Road  
**WEATHER:** Heavy Overcast  
**INTERPRETERS:** Linda and Peter Payzant  
**PARTICIPANTS:** About ten

In spite of the overcast conditions and pessimistic weather forecast, the Halifax Field Naturalists' second butterfly field trip of the year took place at Mount Uniacke in mid-August. The weather no doubt kept many butterflies from flying, but we did get a good list, including one rarity.

The poor weather on both of the trips this year was actually rather educational – we learned that it is possible to find butterflies even on windy and overcast days. The numbers are lower than on a bright calm day, and probably we missed a few species as well. However, it was still a very pleasant day for butterflying.

The most abundant species by far was Common Wood-Nymph – they were everywhere in the grassy fields. They were flying enthusiastically and someone hypothesized that they might be able to get up to flight temperature because of their very dark wings.

Most skippers had vanished, but we were very surprised to find a couple of colonies of Common Branded Skipper. The standard (but very old) work on the Lepidoptera of Nova

Scotia by Ferguson doesn't even mention this species. When did they arrive in Nova Scotia, and why? We returned the following day to photograph them, and I hope that the photos will appear on the butterfly web site in due course.

Aphrodite and Great Spangled Fritillary had completely vanished from their usual haunts, but there were still good numbers of Atlantis Fritillary, as well as a few second-brood Silver-bordered Fritillaries.

We also saw fairly promising numbers of both American and Painted Ladies – perhaps this will be a good autumn for these migrants again this year.

There was no evidence of second-brood Common Ringlet in either location.

– Peter Payzant

#### BUTTERFLIES – TRIP II SPECIES

European Skipper	<i>Thymelicus lineola</i>
Common Branded Skipper	<i>Hesperia comma</i>
Dun Skipper	<i>Euphyes vestris</i>
Clouded Sulphur	<i>Colias philodice</i>
Alfalfa Butterfly	<i>C. eurytheme</i>
Pink-edged Sulphur	<i>Colias interior</i>
Atlantis Fritillary	<i>Speyeria atlantis</i>
Silver-bordered Fritillary	<i>Boloria selene</i>
American Lady	<i>Vanessa virginiensis</i>
Painted Lady	<i>V. cardui</i>
Common Wood-Nymph	<i>Cercyonis pegala</i>

## EXPLORING WITH LAURIE LACEY



**DATE:** Sunday, 10 September (originally 3 Sept.)

**PLACE:** Leipsigaek Goldfields

**WEATHER:** Sunny & hot

**INTERPRETER:** Laurie Lacey

**PARTICIPANTS:** 7

In an age of instant medicines and foods, the gathering of wild plants for herbal cures and foods requires a certain attitude of mind, patience and keen observation. Laurie Lacey was, therefore, an ideal person to lead a small group on a peaceful, leisurely walk through part of Bridgewater watershed, Minemkeak, Leipsigaek, and Hebbs Lake.

During the 1970's, Laurie had travelled between various MicMac communities learning about herbal remedies and increasing his skills of plant observation. His teachers fell into two categories – those that kept a ready store of plants, and those who practiced a more holistic approach. In the latter, the recipient helped with both collecting and preparing the remedy. Laurie also learned that the MicMacs relied on their dreams to explore the uses a plant might have and also to interpret the physical characteristics of certain plants; e.g. where the leaves wrapped around its stalk, the herbalist wrapped the leaves in a poultice around the limbs of his clients. Often during our walk, Laurie referred to his ongoing research as he tried to link plant chemicals with those used in modern pharmaceuticals.

We arrived at our hike area accompanied by three pileated woodpeckers. Passing some old turtle eggs and marking various patches of poison ivy, we were soon at the overgrown ruins of the goldmine from the 1940's. It had been one of two mines; the second one was not financially viable. Its owner never returned from the United States where he had gone to raise money. Apart from these two, Laurie said 40 individual miners worked surface mines in the area. His own grandfather had worked here too and he pointed out the remains of the 300-foot shaft which is now cemented over; the kitchen, the bunkhouse, and the school. Laurie added that the local cook, Fanny, was noted for her unpalatable meals!

The schoolmaster, complete with diploma, had four pupils. Each day would begin with a march around the building followed by the National Anthem.

Some distance away, the gold was separated from the rock. Although the process released arsenic, the watershed was never contaminated and there had only been one record of a contaminated local well.

Leaving the ruins, we continued to examine various plants and fruits along the trail. Being a small group, there was an interesting exchange of knowledge and experiences. Laurie shared his knowledge of MicMac remedies from years gone by for the numerous plants we came across.

**Alder** – warmed leaves act as a poultice

**Bayberry** – use as fish spice; a tea to aid digestion

**Beech tree leaves** from winter – treats lung problems

**Birch inner bark** – contains acetosalicylic acid (aspirin)

**Blueberries** – white dust on the berry good for diabetes

**Blue Flag Root** – chew to induce vomiting for upset stomach

**Boneset plant** – steep the leaves and cut up branches, use for arthritis, sprains, and sore joints

**Burdock** – relieves poison ivy itch

**Eye Bright** – steep flowers and rinse eyes with eyecup

**Hackmatack bark** – use as poultice on festering wounds

**Heal-all** – closed flower buds used for many cures

**Knapweed** – general healer; spring tonic for tired blood

**Lady Slipper Root** – nerve tonic, especially tremours

**Lambkill** – use for ankle strains

**Mullein** – roll leaves and smoke; boil leaves and inhale steam for asthma, bronchitis

**Pearly Everlasting** – binding qualities for two or more medicines; roll leaves and smoke as tobacco

**Poplar inner bark** – to treat worms, parasites on pets

**Seasonal berries, blueberries, huckleberries** – appear to have anti-cancer agent

**Sour apples** – pectin substitute used in making jam

**St. John's Wort** – anti-depressant; also used to produce purple dye

**Staghorn Sumac** – boiled leaves helps soothe earaches; flowerheads acidic – used to make lemonade drink

**Sweet Fern** – same ingredient as calomine lotion to treat poison ivy

**Sweet Gale** – make a tea with roots and bark; use for sore joints

**Teaberry** – a woodland toothpaste

**Wild Sarsaparilla** – chew leaves for nourishment; also use for fevers

**Witch Hazel** – astringent, treats skin problems; inhale rubbed leaves to relieve headaches

**Wood Sorrel** – tastes like lemon, use in salads and soups

**Yarrow** – heals wounds

Our lunch spot by Lake Leipsigaek was a perfect setting of vibrant colours, a few frogs and a distant loon. For once we could not hear the usual sounds of a motor way. We looked across at a small area of land with a single pine and where Laurie had been inspired to write and paint. It was easy to see why this was one of his favourite spots. As we left the lake to return home, we heard the loon's cry, perhaps reminding us to return some day.

– Patricia Leader

## SHOREBIRDS



**LOCATION:** Crescent Beach, Lunenburg County

**DATE:** 9 September

**WEATHER:** Sunny and hot

**PARTICIPANTS:** About 25

**INTERPRETER:** Shirley Cohrs

On a September day reminiscent of July – hot and sunny with only a breath of wind – some 25 birders gathered at Crescent Beach, Lunenburg County, to view the southward-migrating shorebirds. They were not disappointed, for the number of birds was far greater than usual for the time of year, the migration taking place somewhat later this season.

As the tide receded, hundreds of birds descended to the salt-marsh flats. 'Sorting out' the various species in a spread of shorebirds is a pleasurable challenge, but with the help of telescopes and binoculars many of the party were soon getting the hang of it, some even ticking off 'life' birds (White-rumped Sandpipers and Knots). We all enjoyed the varying plumages of the Black-bellied Plover – some almost in breeding colours, others in winter dress, and many more in all the stages in between. While Short-billed Dowitchers stitched along at the water's edge, hundreds of Semi-palmated Sandpipers, Semi-palmated Plover, Least Sandpipers and Sanderling dashed about in all directions. A single Ruddy Turnstone showed off its bright red legs and 17 or more Greater Yellowlegs flew and called up and down the flats.

Great Blue Herons, Double-crested Cormorants and a couple of Nelson's Sharptailed Sparrows added to the list, as well as a family of Black-throated Green Warblers disporting themselves in the spruce at the top of the beach. On the way back, a Kingfisher hovered overhead while a graceful female Northern Harrier floated quietly alongside.

The trip ended at Risser's Beach Provincial Park after a picnic lunch in the welcome shade. The weather was wonderful, the company stimulating, and the 'windbirds' – as always – spectacular.

– Shirley Cohrs

## CRESCENT BEACH SPECIES

### Birds

Double-crested Cormorant	<i>Phalacrocorax auritus</i>
Northern Harrier	<i>Circus cyaneus</i>
Great Blue Heron	<i>Ardea herodias</i>
Black-bellied Plover	<i>Pluvialis squatarola</i>

Semi-palmated Plover  
Greater Yellowlegs  
Short-billed Dowitcher  
Ruddy Turnstone  
Red Knot  
Sanderling  
White-rumped Sandpiper  
Least Sandpiper  
Semipalmated Sandpiper  
Belted Kingfisher  
Blue-throated Green Warbler  
Nelson's Sharp-tailed Sparrow

*Charadrius semipalmatus*  
*Tringa melanoleuca*  
*Limnodromus griseus*  
*Arenaria interpres*  
*Calidris canutus*  
*C. alba*  
*C. fuscicollis*  
*C. minutilla*  
*C. pusillus*  
*Ceryle alcyon*  
*Dendroica virens*  
*Ammodramus nelsoni*



## BLOMIDON PROVINCIAL PARK

### MORE BLOMIDON FIELD TRIP SPECIES

(missing from last issue, No. 99; write-up by S. Robertson)

### Fungi, Lichens

Cup fungus  
Lichen Lobularia



*Pulmonaria* sp.

### Vertebrates

Spring Peeper  
Wood Frog  
Yellow-spotted Salamander



*Hyla crucifer*  
*Rana sylvatica*  
*Ambystoma maculatum*

### Birds

Bald Eagle  
Mourning Dove  
Veery  
Red-eyed Vireo  
Solitary Vireo  
Black-throated Green Warbler  
Black-and White Warbler  
Ovenbird  
Purple Finch  
Song Sparrow

*Haliaeetus leucocephalus*  
*Zenaida macroura*  
*Catharus fuscescens*  
*Vireo olivaceus*  
*Vireo solitarius*  
*Dendroica virens*  
*Mniotilta varia*  
*Seiurus aurocapillatus*  
*Carpodacus purpureus*  
*Melospiza melodia*

### Mammals

Muskrat

*Ondatra zibethica*

## POINT PLEASANT PARK

Here is a partial, unfinished as to classification, list of insects collected in Point Pleasant Park this summer:

### COLEOPTERA

#### Cerambycidae

Pine Stump Borer  
Eastern Larch Borer  
Ribbed Pine Borer



*Asemum striatum*  
*Tetropium cinnamopterum*  
*Rhagium inquisitor*

### HYMENOPTERA

#### Bupestriidae

Spotted Bupestrid (a 'Metallic')  
Another 'Metallic'  
Rustic Borer



*Melaophila fulvuguttatus*  
*Melaophila* sp.  
*Xylotrechus undulatus*

#### Siricidae

Horntail Wasp  
Woodboring Wasp  
Woodboring Wasp



?  
*Urocerus cressoni*  
*Urocerus* sp.

#### Pteromalidae

Predatory Wasp (partic. Cerambycid larvae) *Habrocytus* sp.

All of the first nine are known to produce resin flow in trees, and make exit holes the same size and elliptical shape as that of the Brown Spruce Longhorn Beetle, *T. fuscum*.

Here is a list of a particularly voracious family of predators of longhorn beetles (they live in their galleries and predate adults, eggs, and larvae) – the Cleridae family, or checkered beetles:

### COLEOPTERA

#### Cleridae

Checkered Beetle  
Checkered Beetle  
Checkered Beetle  
Checkered Beetle

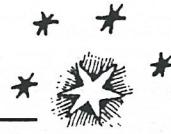


*Zenodosus sanguineus*  
*Thanasimus dubius*  
*Enoclerus nigripes*  
*Phlogistosternus dislocatus*

– S. Robertson



# ALMANAC

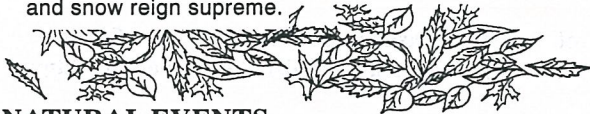


This almanac is for the dates of events which are not found in our programme: for field trips or lectures which members might like to attend, or natural happenings to watch for, such as eclipses, comets, average migration dates, expected blooming seasons etc. Please suggest other suitable items.



As if in compensation for the hard winter and the late spring, British North America has a peculiar revival of warm weather in autumn, called the Indian summer, the cause of which is, however, not well understood. Towards the end of October the first frosts take place, and the forests assume their gorgeous hues, reflecting a light so bright and yellow through the atmosphere that even a dull day displays all the glow of sunset. Then the weather becomes warm and oppressive; a haziness obscures distant objects; the calm air permits sounds to be heard at astonishing intervals; and all nature wears an object of calmed tranquility. From twenty years' observations at Toronto (1840-59), the mean continuance of this season is found to be six days, from the 27th October to 2nd November. But suddenly the cold sets in with extreme rigour, and in a single night the gay woods are stripped of their foliage, and ice and snow reign supreme.

– George Rowe, *The Colonial Empire of Great Britain* (1864)



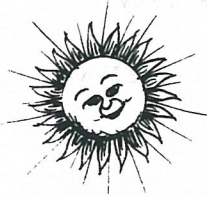
## NATURAL EVENTS

- 13 Sept. Full moon – this is the 'Harvest Moon'.
- 22 Sept. Autumnal Equinox at 14:24 ADT: Fall begins in the Northern Hemisphere.
- 30 Sept. Average first frost in Halifax (i.e. Env. Can. says there's only a 1:10 chance of frost before this date). Look forward to 210 days of frosty weather.
- 13 Oct. Full moon – this is the 'Hunter's Moon'.
- 26 Oct.-5 Nov. The 'Zodiacal Light', a pillar of faint light, is visible in the pre-dawn sky.
- 29 Oct. Return to Atlantic Standard Time; turn clocks back one hour.
- 11 Nov. Full moon – this is the 'Beaver Moon'.
- 17/18 Nov. Leonid meteor shower; probably begins after midnight on the 17th.
- 22 Nov. Daily minimum temperature goes below 0°C.
- 7 Dec. Daily average temperature goes below 0°C.
- 11 Dec. Full moon – this is the 'Cold Moon'.
- 13-14 Dec. Geminid meteor shower peaks.
- 21 Dec. Winter Solstice at 9:36 AST. Winter begins in the Northern Hemisphere.
- 25 Dec. Partial Solar Eclipse, 12:30-15:30. Maximum eclipse at about 14:00 A.S.T.

– Sources: Atmospheric Environment Service, *Climate Normals 1951-80 Halifax (Shearwater A) N.S.*; Blomidon Naturalists Society's 2000 Natural History Calendar; Colombo's Canadian Global Almanac, 1997 & 2000; Royal Astronomical Society of Canada's *Observer's Handbook 2000*; and the personal observations of the compiler.

## SUNRISE AND SUNSET ON LATE SUMMER AND AUTUMN SATURDAYS

2 Sept.	6:38	19:49	7 Oct.	7:20	18:43
9 Sept.	6:46	19:36	14 Oct.	7:29	18:31
16 Sept.	6:55	19:22	21 Oct.	7:38	18:19
23 Sept.	7:03	19:09	28 Oct.	7:47	18:08
30 Sept.	7:11	18:56			
4 Nov.	6:57	16:59	2 Dec.	7:33	16:35
11 Nov.	7:06	16:50	9 Dec.	7:40	16:34
18 Nov.	7:16	16:43	16 Dec.	7:45	16:35
25 Nov.	7:25	16:38	23 Dec.	7:49	16:38
			30 Dec.	7:51	16:43



– courtesy of David Lane, Burke-Gaffney Observatory, Saint Mary's University

## ORGANISATIONAL EVENTS

Blomidon Naturalists Society: Indoor meetings take place on the third Monday of the month at Room 241 in the Beveridge Arts Centre, Acadia University, 7:30 p.m. Field trips usually depart from the Robie Tufts Nature Centre, Front St., Wolfville. For more information <<http://www.go.ednet.ns.ca/~bns/home.htm>>

- 16 Oct. "Charismatic Cartilaginous Canadians ...", with Chris Harvey-Clark.
- 20 Nov. "Sable Island: Natural History and Review of Recent ... Issues", with Zoe Lucas.
- 11 Dec. "Vietnam Vaccinia", with Sam Vander Kloet.

**Burke-Gaffney Observatory:** Public shows at the Burke-Gaffney Observatory at Saint Mary's University are held on the 1st and 3rd Saturday of each month, except from June through September when they are held every Saturday. Tours begin at 7:00 p.m. between November 1 and March 30 and at either 9:00 p.m. or 10:00 p.m. (depending on when it gets dark) between April 1 and October 31. For more information phone 496-8257; or <<http://apwww.stmarys.ca/bgo/>>.

**Friends of McNabs Island:** For more information call Dusan Soudek at 422-1045, or Mike Tilley at 465-4563; or <<http://chebucto.ns.ca/Environment/FOMIS/>>.

15 Oct. "Fall Foliage Foray" with Cathy McCarthy (434-2254)

**Maritime Museum of the Atlantic:** For more information about programmes phone 424-7490; or <<http://museum.gov.ns.ca/mma/>>.

10 Oct. "Isle Haute: The Bay of Fundy's Mysterious Meeting Place", with Dan Conlin.

21 Nov. "A View to Sable Island", with Lynn-Marie Richard.

**Nova Scotia Bird Society:** Indoor meetings take place on the fourth Thursday of the month, October to April, at the Nova Scotia Museum of Natural History, 8:00 p.m. For more information phone 852-2428 (recording), or Fulton Lavender at 455-4966; or <<http://chebucto.ns.ca/Recreation/NS-BirdSoc>>.

7-9 Oct. "Brier Island", with Fulton Lavender, 455-4966.

8 Oct. "Cape Sable Island", with Murray Newell, 745-3340.

26 Oct. "NSBS Annual General Meeting", followed by wine and cheese.

4 Nov. "The Pubnicos", with Gisele d'Entremont 422-7739.

18 Nov. "Antigonish Coastal Waters", with Randy Lauff, 867-2471.

23 Nov. "Sable Island Birds", with Zoe Lucas.

2 Dec. "Cape Sable Island", with Murray Newell, 745-3340.

**Nova Scotia Lighthouse Preservation Society:** Organises visits to lighthouses, including boat trips to islands. For more information phone Dan Conlin at 424-6442; or <<http://www.ednet.ns.ca/educ/heritage/nslps/>>.

23 Sept. "Chebucto Head", with former keeper Jim Guptill.

15 Oct. "Maugher's Beach, McNab's Island", with the Friends of McNab's Island.

**Nova Scotia Museum of Natural History:** For more information about programmes phone 424-6099, or 424-7353; or <<http://museum.gov.ns.ca/mnh/>>.

19 Sept.-31 Oct. "Foliage Photos Display", by Stephen Patterson.

14 Oct. "Fall Colours Walk at Uniacke Estate Museum Park", with Alex Wilson.

15 Oct. "The Continuing Story of the Right Whale" with Andrew Hebda.

18 Oct. "Focus on Leaves – Photographing Fall Foliage", with Stephen Patterson.

22 Oct. "Mushroom Meander at Kentville Ravine", with Marian Zinck.



**Nova Scotia Nature Trust:** For more information phone 425-5263.

21 Oct. 3rd Annual Silent Auction and Dinner, with guest speaker Robert F. Kennedy Jr.

**Nova Scotia Wild Flora Society:** Meets fourth Monday of the month, September to May, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information phone Heather Drope, 423-7032.

15 Oct. "Brooklyn Community Trail"; contact – Charlie at 477-8272.

23 Oct. "Wildflowers of Denmark and Iceland", with Mary & Chris Helleiner.

27 Nov. "Lake Egmont", with Etta Parker.

**Photographic Guild of Nova Scotia:** Meets second Monday of the month, as well as the first and third Sundays of the month, at the Nova Scotia Museum of Natural History, 7:30 p.m. Shows are held at Saint Mary's University, Theatre A, Burke Education Centre. For more information phone Kenneth Moore, at 826-1121; or <<http://chebucto.ns.ca/Recreation/PGNS/PGNS.html>>.

9 Oct. "Labrador Extremes – Canoe Expeditions in the Far North", with Irvin Leopold.

25 Nov. "Annual Photo Guild Fall Show", St. Mary's, 8:00 p.m.

**Royal Astronomical Society of Canada (Halifax Chapter):** Meets third Friday of each month at the Nova Scotia Museum of Natural History, 8:00 p.m. For more information, go to <<http://halifax.rasc.ca>>. Public shows at the Planetarium in the Sir James Dunn Building, Dalhousie University have been discontinued.

– compiled by Patricia L. Chalmers



## PETER SERWYLO

Naturalists will be saddened to learn of the recent death of Peter Serwylo, master falconer, at the age of 43. Peter was generous in speaking to the public about wildlife control on airfields, his area of particular expertise. Using falcons and other raptors, he was employed at Shearwater Air Force Base to keep the runways clear of birds (especially gulls, crows, pigeons and shorebirds) which might dangerously impede planes on takeoff.

Members may recall the HFN meeting in January of 1998, when he brought a young Peregrine Falcon to the presentation he gave in the Museum. While she sat perched on his wrist, he told us how he had trained her, and of her eventual move to a captive breeding programme. Although "Jumbo" surveyed the rest of us with an intensely fierce gaze, she clearly had a special rapport with him.

Peter also gave demonstrations of falconry at Shearwater, where he and his birds were designated "Flight Safety Falconry Unit 1". In March of 1996 and again in March of this year, HFN members turned out in large numbers to see these marvellous displays of aerial agility, and the evidence of bonding and cooperation between trainer and falcon.

His obituary recorded that Peter "developed his career out of his life long passion for birds of prey and his love of nature." He made a unique contribution to our appreciation of these birds, and he will certainly be missed.

– Patricia Chalmers



**! NEXT DEADLINE !**  
**1 DECEMBER FOR DECEMBER ISSUE**

contributions to the Editor, HFN  
c/o NS Museum of Natural History  
Please phone 455-8160 to alert the Editor

**! HUNTING SEASON IS UPON US AND HUNTERS ARE ABROAD !**

HRM Black Bear Season ..... 11 September to 28 October  
Bow-hunters' Deer Seasons ..... 30 September - 26 October and 4 - 9 December  
Ring-necked Pheasant Season ..... 1 October - 15 December  
Ruffed Grouse Season ..... 1 October - 31 December  
White-tailed Deer Season ..... 27 October - 2 December  
Snowshoe Hare Season ..... 15 November - 15 February

**REMEMBER, IT'S HUNTING SEASON, SO DRESS TO BE SEEN IN THE WOODS!**