

Nova Scotia Herp Atlas

The Nova Scotia Herp Atlas is up and running. We are asking naturalists across the province to record *all* their observations of amphibians and reptiles (herps) for the rest of the herp season, which lasts into November for many species. We need a province-wide effort!

What is the Herp Atlas? Like the Maritime Breeding Bird Atlas, the Herp Atlas will provide baseline data on the distribution and abundance of species across the province. These data are critical for the development of conservation and land-use management plans and for the long-term monitoring of amphibian and reptile species in the province.

How to become an atlasser: If you are interested in becoming an atlasser, please e-mail us your mailing address and we will send you an Atlasser's Guide and cards. It is easy to contribute: simply familiarize yourself with the species of amphibians and reptiles in Nova Scotia, read through the Atlasser's Guide, which I will mail you, then go out searching for herps or simply record any species that you happen to see when out on any excursion (and that includes gardening).

Happy herping,

Samara Eaton

Project coordinator

e-mail: herpatlas@acadiau.ca telephone: 902 585-1313

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Group, corporate and other category rates are available. Individual membership, available directly from the FNSN, entitles you to a quarterly newsletter and a vote at the AGM. Please fill in the following information, include a cheque or money order made payable to the Federation of Nova Scotia Naturalists, and mail to:

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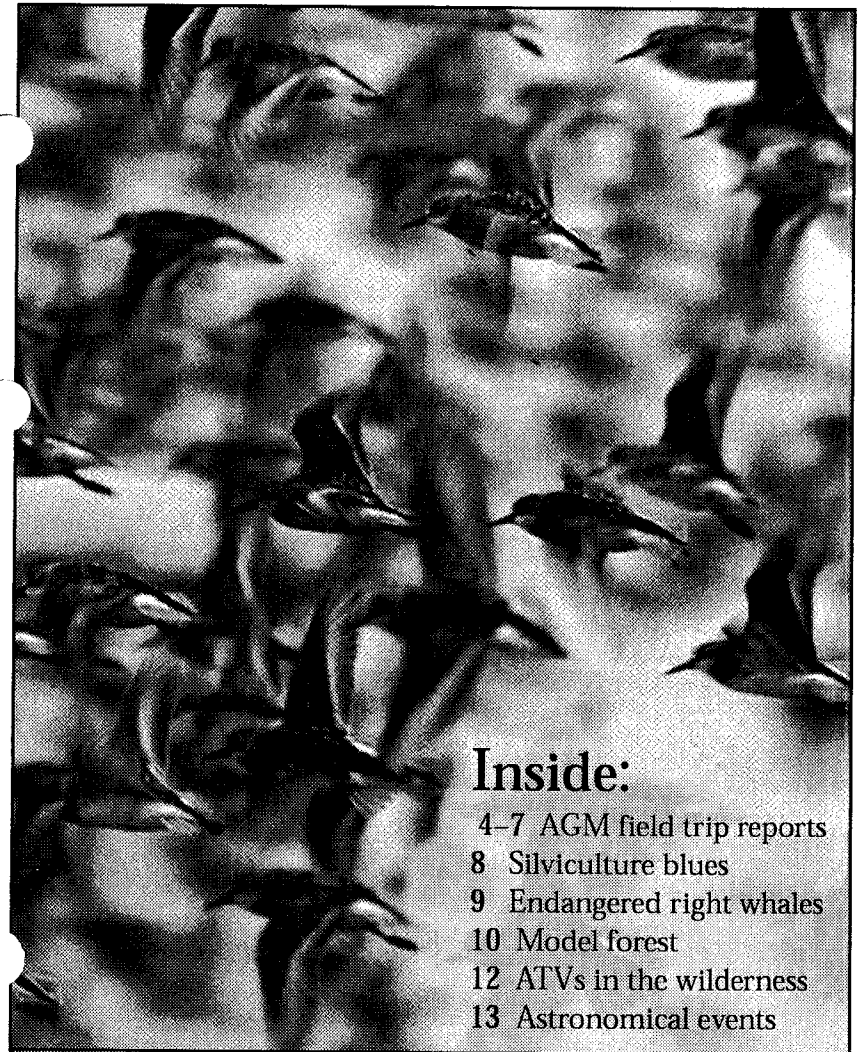
Federation of Nova Scotia Naturalists

NEWS

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Meteor showers are best observed in a dark sky. The first quarter Moon sets at midnight on November 17.

Bright Planets

Venus has been the bright evening star all summer, but it now moves to the morning sky. Rising in the morning sky, it will be at its most brilliant on September 26. It will be highest in the morning sky on October 31, when it is at its greatest elongation west (GEW).

Mars was best seen in the spring, and all summer it has been slowly moving away from the Earth, getting smaller and dimmer. Now it is less than one-half the apparent size and many times dimmer than it was in April, when it was at opposition. It becomes more and more difficult to see in September through November.

Jupiter is just becoming visible in the evening and rises after sunset and is visible in the southeast late in the evening. It will be closest and brightest at opposition to the Sun on October 23, when it will rise with the setting Sun.

At that time it will be the brightest "star" in the sky. Put your binoculars on a tripod and observe its four brightest satellites as they move around the giant planet from night to night.

Saturn is farther east than Jupiter. Rising at 11:30 PM in early August, it will not rise with the setting sun until November 6. In binoculars, it is much smaller than the disk of Jupiter but you will be able to see it as an elongated object due to its rings, which are tilted 20 degrees to our line of sight and are nearly full open.

By September 15, Jupiter and

Saturn will be in the east at 10 PM, rising about 20 degrees above the horizon, both brighter than any other stars in that area of the sky. Saturn will be lower and to the north of Jupiter, which will be the more brilliant.

Moon: In 1999 during the autumn the darkest skies will occur in the first half of the months.

The Moon is most interesting to observe near first and last quarters:

New	Sep 9	Oct 9
1st Quarter	Sep 17	Oct 17
Full Moon	Sep 25	Oct 24
3rd Quarter	Oct 2	Oct 31

Stars and Other Celestial Objects

During late summer, the brightest part of the Milky Way that we can see stretches from the southwest to the northeast. Starting in the southwest is Sagittarius, then Scutum, Aquila, Cygnus, Cepheus, Cassiopeia, and Perseus. These are wonderful areas to scan with the binoculars.

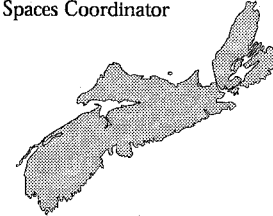
You will probably run across the Lagoon and Trifid Nebulae in Sagittarius, the M24 star cloud in Scutum, the M11 star cluster in Aquila, and the double cluster between Perseus and Cassiopeia. Below the Milky Way in the east, Andromeda will be rising and, you can turn your binoculars on the Andromeda Galaxy, our neighbour in this huge universe.

Source: *The Royal Astronomical Society of Canada, Observer's Handbook 1999, Ed. Roy Bishop*

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From the Editor

Two AGMs have come and gone since the last issue of FNSN News. In 1998, the Eastern Mainland Naturalists, under the capable leadership of Jeannie McGee, brought naturalists to Antigonish for an informative and enjoyable gathering. This year, Les Amis du Plein Air hosted a successful conference in Cheticamp. Organizers, program presenters, and field trip leaders all devote a tremendous amount of effort and knowledge to making these annual gatherings memorable and well worth attending.

This newsletter and those that follow will report on various field trips and issues arising from both meetings. Among the contributors are such stalwarts of NatureNS as Ken McKenna, Randy Lauff, and Peter Payzant. We also touch on forestry, ATVs, and some astronomy.

E.B. White, of *Charlotte's Web* fame, was a novelist, essayist, and staff writer for *The New Yorker* for many years. This excerpt from a letter to a fellow writer shows an appreciation of nature in the wild and of human nature.

The Canada Jays mentioned in my "Letter" were the first I had ever seen around our place in Maine. I spotted another bird last summer that thoroughly baffled me. It belonged, I'm pretty sure, to the family of jaegers, skuas, fulmars, etc., and it used to take a bath in the fresh-water pond in my pasture. Its wings were somewhat more daggerlike than a gull's and in the air it ranged about very rapidly. I never identified it to my own or anybody else's satisfaction, but I thought fondly of it the other day when a fulmar showed up in New York and the Times reported the intense disappointment of the museum authorities on having to release it. Seems they hoped it would die so they could stuff it.

[New York, 12 January 1956]

This committee has two other projects:

- a public opinion survey and a Pockwock/Indian Lake watershed study
- a working woodlot (to involve as many woodlot owners as possible in improving their woodlot management awareness and practice)

NFA held its second annual meeting in May 1999. Reports from three projects were presented: a woodlot land use summary for small parcels of privately owned woodland; a survey of woodlot owners in the NFA service area; and a report on the state of black ash in the province.

An open letter of concern The ATV Threat

by Martin Willison

Park and Nature lovers,

On Sunday, June 6, 1999, Jay Meeuwig and I (Martin Willison) went into the Terence Bay Wilderness at a couple of spots. ATV use continues there, and the damage to coastal heathland is extensive. The relatively open land is easy to cross and so the ATVers joyride about all over the place, smashing the vegetation and removing the soil completely where it lies thinly over granite rock.

Martin Willison, professor of Biology and Environmental Studies at Dalhousie University, is also president of FNSN.

This latter program was developed as a response to an initiative of the First Nations Forestry Association of Nova Scotia. The goal of the NFA Black Ash Embryo Rescue Project is to collect viable black ash seeds, germinate them under controlled conditions, and outplant them across the province.

The survey of woodlot owners revealed some interesting prevalent views, such as: forest-related industry is generally mistrusted; clear-cutting is disliked and selection cutting is favoured; the forests of central Nova Scotia are being over-cut; landowners are uncertain of how to manage their woodlots; and there is little interest in selling wood commercially.

We found one patch of what I am fairly sure is *Arenaria groenlandica*, a COSEWIC-listed rare plant, at the southern end of its range. I had never seen it before, as is usual with rare plants, and so I am not certain of my identification (photos were taken). The tiny colony lay directly in the middle of an ATV scar.

We agreed that the Hospital Hill region is a suitable place to take interested politicians and media. As well as the devastated heathland, there are lichen-free scars on exposed granite and

by the songs of Blackburnian Warbler, Ovenbird, and Red-eyed Vireo, and a spectacular performance of a Bald Eagle hanging in the thermals at eye level.

The trip ended with a drive down the steep mountain. The canopy covered the narrow road in many places, providing a pleasant drive despite the many switchbacks.

1999 AGM field trip: Cape Breton Birds

by Ken McKenna

On Saturday, the lower campground at the entrance to the Cape Breton Highlands National Park yielded the common warblers of the hardwood area. We had good looks at both Blackburnian and Bay-Breasted Warblers, and a cooperative Ovenbird allowed everyone (more than 20 people) a scope view from about 7 m. A Barred Owl hooted, and a Least Flycatcher was active.

The next morning, about eight early risers (meeting time was 5:30) went to the top of French Mountain, where we heard a couple of Bicknell's Thrush. On the bog trail, a couple of clearly thrush-like birds were briefly spotted, and, shortly after, a Bicknell's called and then sang. We feel confident these were the Bicknell's we saw. I was surprised, however, about the lack of thrush sound at that hour of the morning. I had briefly scouted the area the previous night and had heard more Bicknell's singing. There were about four between 9:15 and 9:30 PM on the main road between

French Lake and the Bog Trail, joined by a good sprinkling of other thrush song. Maybe an even earlier start in the morning would have been better. A more overcast morning might also have prolonged the dawn chorus.

Other sightings expected from that area included Pine Grosbeak, Nashville, Blackpoll, and Wilson's Warblers (the last one I suspected, and confirmed it later from a CD), Myrtle and Magnolia Warblers, Fox, Lincoln's, Savannah and Swamp Sparrows, Northern Harrier, American Kestrel, and Yellow-bellied Flycatcher were seen clearly by all first from a distance and then very close.

One of the more surprising birds on the Bog Trail was a Bobolink singing. It seemed a bit out of place and possibly was migrating through.

1999 AGM field trip: Corney Brook Hike

by Rick Ballard

Under the auspices of the Nova Scotia Wild Flora Society, I led the Sunday afternoon Corney Brook hike. It's a fairly easy, gentle climb through rich, open hardwood and mixed forests to a nice waterfall at the end. The trip took us two and a half hours on the way up, due to all the stopping to look at interesting sights, but only 45 minutes back.

We saw many wildflowers in bloom: Starflower, Clintonia, Herb Robert (seen and smelled), Choke Cherry,

Rick Ballard is a Halifax naturalist and keen observer of wild flora.

Nova Forest Alliance Nova Scotia's Model Forest

The Federation of Nova Scotia Naturalists is one of the originating partners of the Nova Forest Alliance (NFA). Colin Stewart represents FNSN at meetings of NFA.

The vision of the Nova Forest Alliance is "to achieve sustainable forest management through the cooperative partnership within the unique context of Nova Scotia's Acadian forest ecosystems."

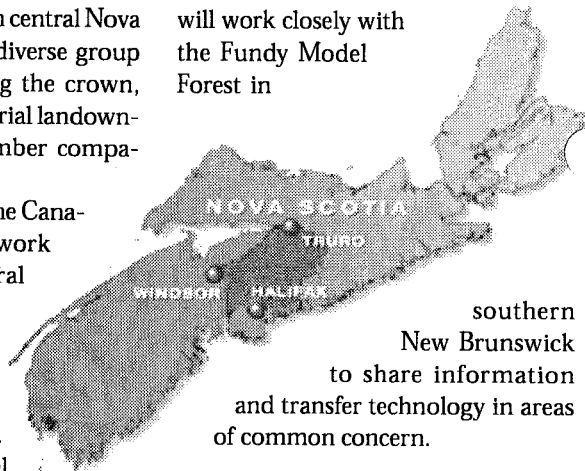
Part of the Canadian Model Forest Network, the NFA model forest is a land base of 458,000 hectares in central Nova Scotia. The forest has a diverse group of landowners, including the crown, small private, non-industrial landowners, pulp companies, lumber companies, and Mi'kmaq.

Established in 1992, the Canadian Model Forest Network was developed by Natural Resources Canada to encourage local partnerships to form and work together to sustain important local forest values.

While the focus of a model forest is on activities directed to the local area, the overall goal is to develop a process of collaborative partner-based decision-making and to develop innovative approaches to sustainability that can serve as a demonstration to others.

There are currently 11 other model forest sites in Canada.

Each model forest differs in its reflection of the unique social, economic, and ecological aspects of its location. Each has developed its own objectives related to issues such as conservation of biodiversity, cross-cultural awareness, economic diversification and public awareness. NFA has been chosen as the first site to test forest sustainability concepts developed in another model forest. NFA will work closely with the Fundy Model Forest in



southern New Brunswick to share information and transfer technology in areas of common concern.

NFA is a partnership of 43 diverse groups and organizations – including universities, pulp and lumber companies, federal and provincial government organizations, environmental groups, tourism groups, First Nations, and

Sources: Atlantic Forestry Review 5:6 and the NFA web site: http://www.novaforestalliance.com/nfa_e/wel_e/welcomee.html

Redback Salamander, which were in bottles in his vehicle (many thanks to the Nova Scotia Museum for the loan of the specimens). Members of the group asked several questions relating to the natural history of the specimens. By then it was after 11, and most people were ready to call it a day.

1998 AGM field trip: Photography

by Betty Gentile

Early Sunday morning, our group met Frank MacDonald and his wife, Anne Louise. They took us back to their home for a photographic session.

According to Frank, "There is lots to photograph right in your own backyard." Well, what a yard they have – a beautiful sloping property that takes you down to a pond and a lovely walk through the woods.

Frank showed us how important a tripod is for steady, close-up shots, and Anne Louise gave us lots of help on composition and lighting.

It was a lovely morning: the light was good, and mother nature cooperated, providing lots of bird life at the feeders and in the woods. There was also some snake life for those interested.

Many thanks to Frank and Anne Louise.

Betty Gentile is a naturalist from Sydney, Cape Breton.

A call to action Birdathon 99

The Nova Scotia Nature Trust is pleased to announce our first annual birding event: Birdathon 99 – Counting for Conservation. It includes both a one-day birdathon and a birding program for school children. Our intent is to raise awareness about, and interest in, wildlife habitat conservation, to provide a fun event, and to raise funds to preserve critical bird habitat.

Birdathon 99 will be held on October 2 (rain date October 3). Pledge forms and information are available at the Nature Trust office. It is open to everyone, from first-time birders to experts, and even those who choose to stay at home and watch birds at the feeder.

A special celebration and awards presentation will be held in Halifax (and possibly smaller regional events if we find strong interest and volunteers outside Metro).

We are looking for volunteers to help organize the event (no fund-raising is involved) and for our children's program. You might like to help out with this program for grades 4 and 5, and brownies and cubs. The children will learn about birds and bird habitat conservation in a half-hour classroom visit, and in a mini-birdathon to raise funds for conservation.

For information or to volunteer, please contact Bonnie Sutherland at the Nova Scotia Nature Trust:
telephone: 425-5263
email: nature@edm.ca

Forest replanting and the Spruce Bark Beetle aftermath

Silviculture Blues

The following is adapted from Atlantic Forestry Review 5:6.

Reports dated late spring 1999 from various forestry groups and associations contain little hints that perhaps not all is as positive as it could be for forest replanting programs in Nova Scotia.

The North Nova Forest Owners Co-op Ltd. (Pugwash), reporting on an annual uncertainty of funding for planting, states: "A better system must be out there somewhere. Imagine the efficiency of actually being able to plan ahead for work to be done, even in the short term. Even better yet, long-term planning for forest management – wow, what a concept."

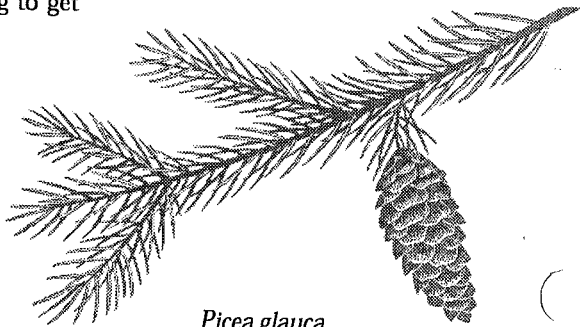
The Athol Forestry Cooperative Ltd. (Amherst), takes another, ironic view: "Tree planting has started, after we used up five acres of trees to supply the fibre to make the paper to do the applications. We hope the newly planted trees will have better success growing than we did trying to get the applications approved."

And, according to the Nova Scotia Silviculture Contractors Association (New Glasgow), "The shortage of plantation stock is a real problem."

In an e-mail to NatureNS on 21 June 1999, Blake Maybank comments on what may follow the Spruce Bark Beetle infestation of some Nova Scotia forests.

The Cobequid Hills and Cape d'Or are heavily infested with the Spruce Bark Beetle, resulting in heavy mortality, especially with the more mature trees. Woodlot owners, in many cases with considerable reluctance, are clear-cutting the forests, as the lumber companies will only accept the dead (but still useable) timber if there is healthy wood mixed in, and the only cost-effective way is to clear-cut, it seems.

However, the woodlot owners I talked to were not subsequently spraying their woodlots to kill off the hardwoods (the first trees to reappear after a clear-cut), so we should see a change in the landscape in the next 20 or 30 years. Should make the next breeding-bird atlas an interesting exercise.



Picea glauca

A species in trouble

The North Atlantic Right Whale

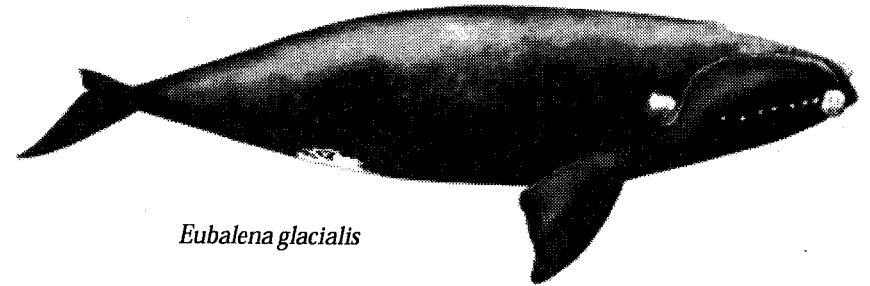
A female Right Whale named Staccato (catalogue no. 1014) was found dead in Cape Cod Bay on April 20, 1999.

First recorded in 1974, and last seen swimming in the bay on April 15, Staccato was the mother of at least six calves. She was a "Bay of Fundy mother" – she brought her calves to the nursery area in the Grand Manan Basin of the bay. She measured 45 feet and weighed between 50 and 60 tons.

With a total North Atlantic Right Whale population numbering only about 325, this death represents a serious and tragic blow to the species. A necropsy found injuries that suggested

1976, collisions with large ships have killed 14 North Atlantic Right Whales, and fishing gear entanglements have killed two. An estimated 57 percent of Right Whales display scars that indicate they've been entangled in fishing gear at some point in their lives.

New England Aquarium genetic research indicates that the remaining Right Whales may have descended from as few as four female whales. Right Whales may thus suffer from inbreeding depression, possibly reducing reproductive rates, increasing infant mortality, and curbing resistance to disease.



Eubalena glacialis

blunt trauma most likely caused by a large ship.

Human activities, primarily collisions with ships, account for about 40 percent of all Right Whale deaths. Of the known human-caused deaths since

Last fall, a male died. No more than one whale can die each year without affecting the population. At the mortality rate estimated since 1994, Right Whales in the western North Atlantic could be extinct within 200 years.

From a message submitted to NatureNS by Laurie Murison of Grand Manan on 28 April 1999.

Rosy Twisted Stalk, False Solomon's Seal (not quite in bloom), Nodding Trillium (still in full bloom), yellow and purple Violets, Red Baneberry, Red-berried Elder, and Maianthemum (just starting to bloom).

We observed some notable ferns: Braun's Holly Fern, Christmas Fern, Lady Fern, Beech Fern, and Rattlesnake Fern

Among the herpetofauna, we observed three Maritime Garter Snakes, one American Toad, and a Northern Ringneck Snake.

The Ringneck Snake was in the same place I saw one a few years ago, sunning itself on the third (humped wooden) bridge up the trail. A few years ago, the snake I saw was only 20 cm long; the latest one was closer to 30 cm, so it could conceivably be the same one. I may have seen more than one slithering through the grass, but I could only verify the single specimen. This sighting was reported to the Nova Scotia Museum of Natural History and the Nova Scotia Herp Atlas.

1998 AGM field trip: Amphibians

by Mark Pulsifer

Saturday evening, following the general meeting, eight carloads of enthusiastic "froggers" formed a small but conspicuous convoy as they travelled east to Pomquet in search of amphibians. Over

Mark Pulsifer is a biologist with DNR in Antigonish.

the next two hours, we made stops at three very different habitats. The first was a small roadside wetland with shrub margins surrounded by alder and Red Maple. Our second stop was at a freshwater marsh dominated by grasses, and the third was a roadside ditch lined with low shrubs.

Peepers were conspicuous by their calls at all three locations. Two of our youngest spotters found a peeper at the first site. The highlight of the second stop was not a herp, but a Nighthawk, which we dazzled long enough to get within 20 m before it flew off. We didn't try to get any closer for fear that it was on or near a nest.

The third stop was a few hundred metres' walk along a roadside ditch. Having given prior warning of late-night flashlight-toting naturalists to the locals that afternoon, we were not questioned by local game wardens or RCMP, and were lucky to pick up two additional frog spotters at this stop. A mother with her ten-year-old son joined us and pointed out where "all the best spots" were along the way. Here we found at least four Green Frogs, ranging in colour from a dark brownish-green to the more typical green. Unfortunately, there was not much else active that evening. Despite the overcast skies, light drizzle, and cool temperatures, we expected to see more. Particularly noticeable was the absence of any toads trilling.

Not leaving much to chance, the field trip leader showed everyone live specimens of an American Toad, Spring Peeper, Red Eft, Yellow-spotted Salamander, Blue-spotted Salamander, and

other groups – that all share a common goal of working cooperatively to meet the following goals and objectives:

- to establish a working partnership of members that represent diverse interests in the Nova Forest Alliance
- to cooperatively design an overall sustainable forest management process that enhances environmental sustainability, ecological integrity, and multiple economic and social benefits
- to develop and demonstrate forest management practices that contribute to sustainable forest management on a diverse land base
- to promote the implementation of sustainable forest management practices on all land ownership within the model forest area
- to develop a set of local-level indicators of sustainability to improve the accuracy of measuring, reporting, and monitoring the performance of sustainable forest management
- to disseminate the knowledge of sustainable forest management gained from the model forest to the rest of the Acadian forest, and to the model forest network
- to establish and maintain a working relationship with the Fundy Model Forest.

NFA has a number of working committees:

- **Access for multiple use** – includes a Trails Coordinator, Access Awareness Program, and a Forest Access Stewardship Pilot Program

• **Baseline research** – to describe and document the initial state of the local forest for future reference. Some of the information gathered to date describes current land use patterns, ownership patterns, forest cover types, and different aspects of the current forest condition.

• **Communications** – includes such things as internal and external newsletter, tours, educational initiatives, a promotional video, and special events

• **Contractors & operators** – The Contractor and Operator BMP (best management practices) Manual is a general reference tool for contractors and operators, designed to give them a readable, easy-to-understand overview of good practice during logging and silviculture operations. A Woodlot Owner BMP Manual will be less technical.

• **Criteria and indicators** – The NFA partnership has chosen to adopt the guidelines of the Canadian Council of Forest Ministers (CCFM) Criteria and Indicators of Sustainable Forest Management. The CCFM criteria are based on the need to manage forests as ecosystems in order to maintain their natural processes; the recognition that forests simultaneously provide a wide range of environmental, economic, and social benefits to Canadians; the view that an informed, aware, and participatory public is important in promoting sustainable forest management; and the need for forest management to evolve to reflect the best results, knowledge, and information.

1998 AGM field trip: Eigg Mountain

by Ken McKenna

The closing event of the meeting in Antigonish was the well-attended exploratory trip to Eigg Mountain at the Antigonish-Pictou County border. Twenty cars formed a convoy that snaked from Antigonish town, through the beautiful Pleasant Valley, and to the Connor Mountain Road, the brief traffic congestion seemingly bewildering the residents of the last house.

The first stop was a trail running west, about 2.5 km northwest of the microwave tower. The trail, quite wet from a recent rain, coursed through a predominantly hardwood forest. A number of the flowering plants such as Dwarf Ginseng (*Panax trifolius*) were already past their peak, but others – notably Wild Sarsaparilla (*Aralia nudicaulis*), Bunchberry (*Cornus canadensis*), and Wild Lily-of-the-Valley (*Maianthemum canadense*) were still in good bloom.

We observed several birds and heard such as Ruffed Grouse, Magnolia and Black and White Warblers, Red-eyed Vireo, and a Least Flycatcher building a nest about 10 m up in the crotch of a maple.

The second stop was at the trail to the northeast, which followed the channel dug from Vincent's Lake as an attempt to supply water to Antigonish. Again, a Magnolia Warbler was the first

Ken McKenna is an ardent birder from Pictou County.

to greet us, joined by Alder, Least, and Olive-sided Flycatchers. Rusty Blackbirds creaked their "rusty hinge" song and Ruby-crowned Kinglets constantly chattered along the trail. We also heard the very high-pitched Bay-breasted Warbler, Black-throated Green Warbler, Ovenbird, and Swainson's Thrush.

The trail was mostly in conifer forest, but at the lake the woods were more maple hardwood. The trees surrounding the lake looked like they had taken a lot of hard weather over the years.

A number of trees surrounding the lake were dead, and Tree Swallows hawking insects over the lake were probably using old woodpecker holes as nesting cavities. While observing a group of Ring-necked Ducks in the lake, someone noticed a female Common Goldeneye. This produced some excitement, as there was speculation that she might also be using a cavity for nesting (to this time, there was no evidence of Common Goldeneye nesting in mainland Nova Scotia).

Our next stop was about 0.4 km from a spectacular lookoff. As we walked along the road, I noticed a male Black-backed Woodpecker land on a dead conifer and enter a nest cavity. This was a great bonus, as the Black-backed is not commonly seen. Everyone present got a good look.

The view from the lookoff was of the steep valleys and surrounding hill-tops. A panoramic view of Northumberland Strait stretched from Caribou Island to some of Inverness County with Pictou Island in the centre and PEI in the background. We were entertained

deeply incised boggy swales with braided trails (i.e., classic wetland damage, albeit in small-scale wetlands). The site is a 25-minute hike from a provincial highway, at medium pace. Unfortunately, the boundary of the protected area is not posted, but we had good mapping with us and I am certain that the damaged *A. groenlandica* (suspected) is within the designated wilderness.

We also took a quick look at the damage being done at Crystal Crescent Beach Provincial Park by the movie makers who have taken it over. The place is, in my personal view, a disgusting mess (partly because of the parking lot work that was done there in a very careless manner some years ago. I don't usually go to this "park" any more because it has been so wrecked by poorly planned and executed "park development"). Someone should take

Vanessa Redgrave on a "nature walk" to see the places where orchids should be blooming and where frogs and snakes used to abound, but are now severely trampled.

When one considers that the coastal headland ecosystems of the Chebucto Peninsula are of global significance biologically, it is amazing how utterly careless we have been of them. The Terence Bay Wilderness is, in my view, literally the last hope for these globally outstanding natural heathlands, and even this remnant is now being trashed by ATVers.

Martin copied this letter to ministers of the provincial government and to the three political leaders on 7 June 1999. Just before the election was called, he received replies from the minister of Natural Resources and the leader of the opposition.

Late summer and early autumn 1999 Astronomical Events

by Larry Bogan

The **Leonid meteor shower** is normally not very notable, but every 33 years there is a dramatic increase in the number and brightness of these meteors. Last year, the shower had many very bright, fast meteors, and 1999 is expected to be similar. The peak of the shower should be best just after sunset on November 17.

Western Europe is supposed to have the best view of the Leonids, but last year the Maritimes had one of the best shows in the world – and that was not predicted. The radiant of the shower is in the constellation Leo, which rises about midnight in Nova Scotia, while the peak of the shower is predicted for 7 PM.

Larry Bogan, an FNSN director, observes the night skies from Wolfville.

Federation of Nova Scotia Naturalists (FNSN)

Annapolis Field Naturalists Society (Rep: Jon Percy)
PO Box 42, Granville Ferry, NS B0S 1K0

Blomidon Naturalists Society (Rep: George Alliston)
PO Box 127, Wolfville, NS B0P 1X0

Cape Breton Naturalists Society (Rep: vacant)
c/o Cape Breton Centre for Heritage and Science, 225 George St, Sydney, NS B1P 1J5

Chignecto Naturalists Club (Rep: vacant)
PO Box 1327, Sackville, NB E0A 3C0

Eastern Mainland Field Naturalists (Rep: Randy Lauff)
c/o R. Lauff, Box 4, Site 13, RR7, Antigonish, NS B2G 2L4

Halifax Field Naturalists (Rep: Doug Linzey)
c/o NS Museum of Natural History, 1747 Summer St, Halifax, NS B3H 3A6
website: <http://chebucto.ns.ca/Recreation/FieldNaturalists/fieldnat.html>

Les Amis du Plein Air (Rep: Eileen Rickard)
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Nova Scotia Bird Society (Rep: Joan Czapalay)
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Nova Scotia Wild Flora Society (Rep: Barry Sawyer)
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South Shore Naturalists (Rep: Jill Comolli)
c/o Jill Comolli, RR1, Rose Bay, NS B0J 2X0

Tusket River Environmental Protection Association (Rep: Bernie Deveau)
c/o C. Jacquard, Box 8A, RR1, Tusket, NS B0W 3M0

Members at large (Rep: David Lawley)
Associate Member – **Cole Harbour Rural Heritage Society**
471 Poplar St, Cole Harbour, NS B2W 4L2

The FNSN purpose is to further communication and cooperation among naturalists and natural history societies in Nova Scotia. We also work towards a coordinated effort on the provincial level to protect our natural environment.

- We promote the enjoyment and understanding of nature by our members and the general public through education via publications, lectures, symposia, field trips, and other activities; through fostering the creation of nature centres and education programs; and by defending the integrity of existing facilities and programs.

- We encourage the establishment of protected natural areas, as represented in parks, nature reserves, wilderness areas, heritage rivers, and other such protected areas.

- We defend the integrity of existing sanctuaries by exercising constant vigilance against pollution and habitat destruction.

- We promote and engage in funding and research needed for protecting the integrity of all natural ecosystems.

- We encourage and engage in the protection and restoration of threatened and endangered species, with special attention to the preserving essential habitats through: working for the inclusion of all major habitats in a system of protected areas; encouraging and facilitating the reintroduction of extirpated flora and fauna to their former ranges in the province; and encouraging and facilitating the restoration and enhancement of essential habitats.

FNSN is affiliated with the Canadian Nature Federation and is a member of the Nature Conservancy of Canada and the Canadian Parks and Wilderness Society.

Visit our website at <http://chebucto.ns.ca/Environment/FNSN/hp-fnsn.html> or call Doug Linzey at (902) 429-5997 for more information.

FNSN annual financial statement

to 31 March 1999 (unaudited)

Balance in account 31 March 1998 (A) \$23,678.88

Funds received (B) 50,316.99

Memberships	\$1,215.00
Organizational	\$400.00
Federate	815.00
Individual	0.00

WWW grant for Endangered Spaces (C) 37,500.00

Redemption of CSB 11,533.03

Bank interest 68.96

Operating Capital (D = A + B) 73,995.87

Disbursements (E) 34,353.89

Endangered Spaces coordination (F) 32,526.00

Long-term debt payments* 914.00

Newsletter expenses 913.29

Bank service and maintenance fees 0.60

Balance in account 31 March 1999 (G = D - E) 39,641.98

Other Assets (H) 36,205.08

CSB 30,000.00

Accumulated Interest on CSB 6,205.08

Total Assets 31 March 1999 (I = G + H) 75,847.06

Funds allocated to Endangered Spaces Campaign

Balance 31 March 1998 (J) 58,622.63

Balance 31 March 1999 (K = J + C - F) 63,596.63

Funds available for Federation use (L = I - K) 12,250.43

(\$10,686.33 in 1998)

*Long-term debt: \$1,828 (payable to C. Stewart: \$914 at end of each of following two fiscal years)

Respectfully submitted by Jim Wolford, FNSN treasurer (29 May 1999)