

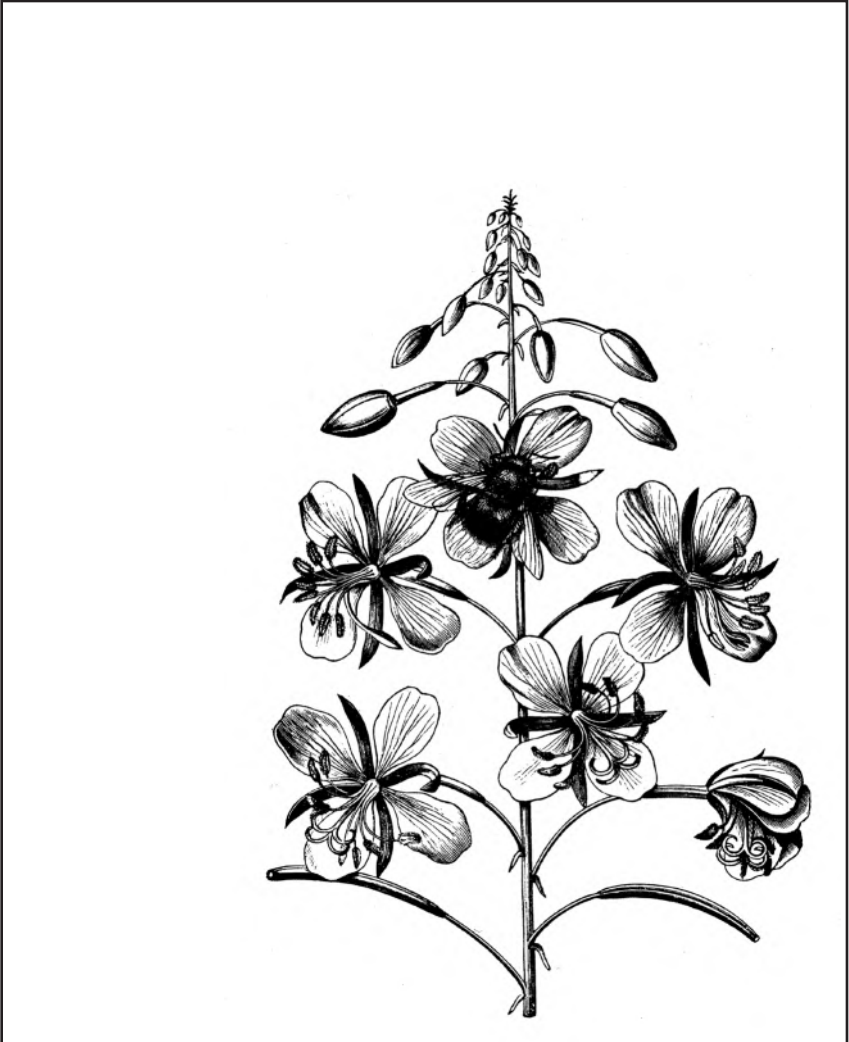
Federation of
Nova Scotia
Naturalists

NEWS

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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.

Visit our website at <http://chebucto.ns.ca/Environment/FNSN/hp-fnsn.html>

or call Doug Linzey at (902) 684-0943 for more information.

FNSN

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From the editor

With every trip I take into the city from my home in Hantsport, the advance of “development” is much in evidence. Where only a few years ago the view from the 102 was of almost unbroken wilderness, the view is now of almost unbroken disturbance and pavement and (generally ugly) buildings. As many North American cities are discovering the virtues of greenways and commons and natural spaces, we are busy squandering all those very things we had in abundance.

Halifax may be the most visible case of environmental deprivation, but it’s not alone. Unique and sensitive natural areas throughout Nova Scotia are disappearing fast. Perhaps the most insidious are the many small wetlands that are being filled in, built on, and generally “improved” in the name of development and progress. Under current legislation, pieces of wetland less than two hectares in area are not subject to environmental assessment. They’re apparently too small to matter or to care about. But every one of them that disappears leaves our world a bit more sterile and less diverse.

The forces of development often seem to be overwhelming. They’re not, of course; they’re simply better at communicating their wants than we, the silent citizenry, are.

As citizens, we have to speak out and act in favour of long-term sense and sanity. We have to stimulate genuine debate in the various legislative bodies that decide on the fate of our land and the way we live. We have to let our politicians know what’s important to us. We have to contribute to the public debate through letters to the editor, phone-ins, and any other means available. We have to get together and speak as local and community interest groups.

See page 15 for some ideas on how to learn more and help make a difference.

A message from the president

Thank you all for the honour of representing you and your various organizations as president for the coming year.

In such troubled times, in a world which has changed dramatically since September 11, we need the hope and belief that we as a people can heal ourselves and heal our planet. To this end we come together in a cooperative effort to make a positive difference where and however we can. Thank you all for being members of this federation.

I was pleased to attend the Canadian Nature Federation affiliates conference in Ottawa last January. Many issues that concern us are federal (or, more and more often, international) in nature, and so require a larger voice than ours. The issue of concern at present is the proposed legislation for a Species at Risk Act. We still have an opportunity to influence this legislation to include habitat protection and to have scientific information for the inclusion of species on the list.

Congratulations to the South Shore Naturalists for an excellent conference. The speakers, displays, field trips, and hospitality were outstanding. When I was elected at our AGM in June, I was in Saskatoon attending the Canadian Nature Federation annual conference. (I had attended the 2000 CNF conference in Newfoundland and found both to be wonderful learning experiences.)

My first official duty was to attend a meeting of the NS Habitat Conservation Fund Proposal as your representative. I was impressed by the quality of the proposals and believe we came to good agreements on the dispersal of funding, which was raised by the Wildlife Stamps sale added to cost of the hunting licenses.

In September I was invited by Martin Willison to share a bit about the federation to the all-day organizational meeting of the Maritime/Atlantic chapter of the Canadian Parks and Wilderness Society (CPAWS). Martin is the new president of this group, and I believe we shall be working very closely together. I also attended the Wildlife Festival in Eastern Passage, where I put together a small poster board and handed out membership forms and samples of our newsletter. Best of all, I had an opportunity to network with our affiliate group from Cole Harbour and to contact new groups with a nature focus. I do not have a scientific background so depend upon all of you for knowledge. What I do have is a great passion for the natural world and all of the creatures which inhabit it. We have such challenges to face on our journey. Thank you for your support.

Joan Czapalay, president, FNSN

2001 AGM & conference

South Shore Naturalists pulled out all the stops for a highly successful annual meeting and conference in Lunenburg

FNSN annual conference, Lunenburg, Nova Scotia, June 1–3, 2001

Jill Comolli, president of the South Shore Naturalists Club, coordinated the conference, which, to the outside eye at least, went off without a hitch. Apart from putting together the conference team, Jill worked on the program, arranged for the venue, organized food and door prizes, and was head troubleshooter and worrier.

Judith Smits was secretary and contact person for speakers and field trip leaders. Pat Oldfield helped organize food and drink, and, with Bruce Wiseman, the SSNC treasurer, looked after meeting-room equipment. Phyllis Wiseman looked after displays, and James Hirtle set up early morning walks. Leighton and Arlene Davis and Catherine Pross worked on registration.

Friday, June 1, 2001, 7 PM

We gather at the new firehall in Lunenburg for wine and cheese and to say hello to fellow naturalists from all over Nova Scotia. There are people here from at least nine of the 11 member clubs. More than 100 naturalists are registered for the weekend activities. This is a good turnout.

And the food is great, including some real south shore treats, like Solo-

mon Gundy and Lunenburg pudding. The caterer is Everything Nice Cafe. The wines are not bad either – local fruit wines from the Lunenburg County Winery.

A number of displays are set up around the room, including Derek Jones's fabulous corals, the Kingsburg Coastal Conservancy, the Keji Seaside Adjunct, the Piping Plover Guardian Program, the LaHave River Watershed Enhancement Foundation, Friends of Crescent Beach, Green Bay and Area Society, the Bluenose Atlantic Coastal Action Program, and the Lunenburg County Trail Coordinator.

At about 9 PM, the light fast fading, we embark on the candlelight version of Eric Croft's walking tour of Lunenburg. This is an excellent way to begin a visit to this UNESCO World Heritage site. Eric is a wonderful tour guide – and very good at walking backwards with-

Talks

Saturday 9:15 AM

Gaff Point

MC Paul Pross introduced the Gaff Point team: Wendy Muise and Merrill Heubach are board members of the Kingsburg Coastal Conservancy and Bill Freedman, professor and chair of biology at Dalhousie, is a trustee and

member of the scientific panel of the Nature Conservancy of Canada.

Wendy showed us a video by John and Janet Foster of Cyril Hirtle, a folk artist in Kingsburg. He speaks of the Nova Scotia tradition of sharing and of traditional access for all to public spaces. It all worked fine when there was little development, but he sees the landscape changing and worries about losing that traditional access.

The 122-acre Gaff Point, a headland that juts out into the Atlantic from Hirtles beach, is a classic example. Despite being privately owned by eight different landowners, its five kilometres of walkable shoreline were always accessible to the public. But when one of the properties came up for sale and development threatened, a group of nine people in 1995 formed the Kingsburg Coastal Conservancy with the goal of preserving “wise and generous stewardship of the land.”

KCC has been successful in raising donations of both money and land. To date, 71 acres have been secured, the Nova Scotia Nature Trust has become involved, and the Nature Conservancy of Canada has joined a \$1.3 million campaign to buy the whole point. About \$450,000 has been raised so far – in money and the value of land donated. KCC has reached agreement with all but two of the landowners. A local philanthropist agreed to put up funds to secure land being offered for sale until the needed funds are raised. The KCC board hopes to have the whole package wrapped up within a year and a half.

So what exactly is the attraction of this chunk of real estate? Bill Freedman

gave us an overview of the natural history of Gaff Point. It doesn't contain extraordinary natural values, but much of it does fall into the category of “pocket wilderness,” an area not significantly affected by human activity. And certainly one of its major attractions is dramatic coastal seascapes.

Bill explained that once the package is together, a management plan will be drawn up for Gaff Point. The goal will be to conserve natural values while allowing access to traditional activities. Public access will be free.

If the Gaff Point team left us with one single message it is that there is still very much a need for private initiative in Nova Scotia land conservation.

How does gold get in the rocks, get discovered, and then used?

Howard Donahoe, a geologist with DNR and current president of the Mining Association of Canada, is used to explaining geology to lay people.

Howard began his presentation by talking about how the properties of gold make it useful in our modern civilization – an extremely thin layer helps keep heat from penetrating office windows and spacecraft; its conductivity and untarnishability make it indispensable in electronics; it's still commonly used in dental crowns, and of course it will never lose its allure for jewellery. It's limitations are few, but

important – its high density and low compressive and tensile strength make gold unsuitable for electrical wiring and structural use. And, of course, it's far too costly for bulk use.

A clue to the high cost of gold became evident as a few specimens of gold ore circulated through the room. Each piece of rock had a visible piece of gold, but the gold was obviously such a small part of the whole that it would take a huge amount of rock to accumulate a small quantity of gold – an expensive operation. But Howard was here to tell us about how the gold got into that piece of rock in the first place.

Gold ores in Nova Scotia have their origin in continental collisions that took place some 500 million years ago. What is now Nova Scotia was created right where the North American continental plate ran into the African one. Magma from the earth's mantle created much of the original Nova Scotia land mass; then a granite intrusion formed a substantial part of our modern geology. As the magma moved upward, it concentrated gold from its tiny fraction of the rock to a substantially higher, but still very small, percentage. Quartz is one of the constituents of granite, and as the granite was being formed, any quartz that was surplus to the process tended to pick up gold from the neighbouring rock, concentrating it further. As the quartz solidified in fractures it became the future gold ore associated with quartz veins. That gold has been concentrated some 10,000 to 100,000 times the average amount in the earth's mantle.

Nova Scotia also has slates with

mineable amounts of gold. About 370 million years ago, hot fluids moving through fault zones in the rock making up the province caused metamorphosis of certain rock into the slates we are familiar with today. Much like the quartz, the hot fluids tended to concentrate gold, creating gold ore out of some of the slates.

Howard told us plenty more, illustrating the geologic history of Nova Scotia – its mountain building and its subsequent folding, erosion and glaciation – with the help of some terrific hand drawings. Gold is not the only metal to be concentrated by the movement of hot fluids through the earth. Iron and arsenic, for example, wind up being concentrated in much higher proportions, and therefore much more visibly, than gold. In this way, minerals such as arsenopyrite – the sulfide of iron and arsenic – wind up being reliable indicators for the presence of gold.

Moose hunters made the first Nova Scotia gold discovery in Mooseland in 1858. It was recognized by a man named Captain LeStrange, and by 1861 our first gold rush was happening in Tangier. From that time until 1880, discoveries of gold continued apace, along the eastern shore and through Halifax County, down the south shore to Lunenburg and Queens counties. Eventually, gold was found in Yarmouth and Kings counties, too.

Howard then took us on a visual trip through the world of gold mining and milling, which had its heyday from 1860 through 1930, in such places as Mount Uniacke, Waverly, Chester Ba-

sin, Yarmouth, and Kentville. Today, no one is actively mining gold.

Two legacies of the gold mining days should be of some concern to us in 2001. One is the many tunnels and openings in the earth that were a necessary feature of hardrock mining. They're still there, often hidden and posing a hazard to the unwary. The other potential hazard is the mercury that was used in great quantities for amalgamating gold in the recovery process. The Nova Scotia Department of Environment recommends that old gold mining sites be left undisturbed.

Gold can be concentrated naturally over the centuries by the action of running water wearing down gold-bearing rock. Because of its high density, gold settles readily to the bottom wherever such action takes place. (The action of gold panning has the same effect, separating the heavy grains of gold from the lighter rock.) Alluvial deposits of gold are known as placers. Because of the extensive glaciation of Nova Scotia so recently in our geological history, there is little placer gold to be found in the province. One place where panning can reveal gold, though, is The Ovens, near Lunenburg, where the beach sands contain small amounts of free gold.

Howard left us with the thought that, even though most of us missed the gold rush this time around, the whole cycle of continental collision and fresh gold movement and concentration and exposure takes place every few hundred million years. So perhaps we'll catch the next rush.

Preservation of Nova Scotian cold-water corals

Martin Willison, professor of biology and environmental studies at Dalhousie University, brought us up to date on the cold-water, or deep-sea, corals of Nova Scotia and elsewhere.

The corals of Nova Scotia and other cold-water marine habitats may be news to the public and the scientific community, but fishermen have known about them for generations. These colourful "trees" have been snagging longline hooks as long as people have been dropping those hooks to the undersea surfaces known as banks that surround the North Atlantic shores of Canada, the UK, Iceland, Scandinavia, and other parts of the temperate world. A primary characteristic of cold-water corals is that they exist at greater depths than do the warm-water corals we're all familiar with, the consequence being that no one ever sees them from the surface. The commonly held belief that corals only exist in the tropics has been dashed forever with the recognition by governments and ocean scientists that corals are widely disseminated in our northern waters.

Nova Scotia has no fewer than 20 named corals. Most live entirely in the dark, in water deeper than 200 m, some as deep as 3 km. They are widespread; they need the fixed, hard bottom that the banks offer. Large filter-feeding corals exist on the edge of the bank, where strong currents offer a plentiful supply of food. As on land, species vary by habitat, different corals occupying different depths and substrate variations.

Martin showed us a Norwegian video of mounds of corals growing on ridges left by retreating glaciers in 300 m of water. The corals are 8–9,000 years old. Another video, raw footage from NOAA (National Oceanic and Atmospheric Administration), shows hordes of shrimp apparently living and feeding on corals at about 300 m on Georges Bank. Another video, the first recorded view of Nova Scotia corals, was made with a small submersible in a lobster trap. It clearly shows a literal forest that seems to be supporting a substantial fish population.

This last video was made possible by two south shore fishermen (Derek Jones and Sanford Atwood) who are championing the preservation of the cold-water corals. They believe that the reefs hold the key to fish productivity, and that their destruction by large commercial bottom-dragging methods of fishing must be curtailed. They estimate that possibly more than 90 percent of the coral habitat in their area has already been ruined. (Estimates for European waters run to 50–65% destruction.)

We also saw part of the CBC Country Canada show (ably narrated by Martin) filmed aboard Sanford's long liner. The bottom line for the hook-and-line fishermen is that they have the most to lose with continued destruction by druggers of this "nature on the bottom."

Martin went on to talk about what comes next. Legislation *does* exist to deal with the conservation of coral beds. Section 35.1 of the *Fisheries Act* prohibits the harming of fishing habitat.

The *Oceans Act* embodies the precautionary principle: If you have evidence that an activity will cause damage, don't do it.

The challenge is to get the regulators to do something and to get the fishermen (those with the ability to cause the problems) to act in the best interests of habitat protection. As Martin says, "We must apply the laws that we have. We must be bolder in protecting our resources. Unfortunately, Canada is behind most maritime countries in marine protection (vying for last place with the United States) The philosophy of unlimited abundance no longer holds – we need a philosophical shift."

Last year (July 2000), Nova Scotia hosted the highly successful First International Symposium of Deep Sea Corals, attended by scientists, fishermen, and interested people from all over the world. Program abstracts and information on getting involved are on the symposium website: http://home.iSTAR.ca/~eac_hfx/symposium/.

At the symposium, Derek Jones and Martin Willison presented a paper: The role of the Canadian Ocean Habitat Protection Society in deep-sea coral education and conservation advocacy in Nova Scotia. The following is the abstract of their paper:

The Canadian Ocean Habitat Protection Society (COHPS) was founded in 1996 by hook-and-line fishermen in southern Nova Scotia. They recognized the need for an organization dedicated to raising awareness of the importance of marine habitat for fisheries and to promote public education about marine ecology. COHPS held many

popular displays, including touch tanks containing local fish and collections of deep-sea coral specimens, known as “trees” and “bushes” by fishermen.

The corals attracted a lot of attention because most visitors did not know corals existed near Nova Scotia. As a result, the fishermen of COHPS came in contact with teachers, professors, marine scientists, and environmental activists, who were impressed by the coral specimens. This stimulated news stories, research projects, school visits, the creation of a web page, and museum displays. Specimens were gathered from boats and wharves, and fishermen provided local knowledge, which has been accumulated by COHPS and other cooperating groups. Internet communication facilitated the rapid growth of interest in the subject.

The First International Deep Sea Coral Symposium is a product of the awareness initiated by the COHPS nucleus. Using fishermen’s knowledge, COHPS has identified the region of greatest coral diversity on the Scotian Shelf, and has proposed this as a marine protected area under Canada’s *Oceans Act*.

Visit the Canadian Ocean Habitat

Nova Scotia Biosphere Reserves

The final talk at the 2001 conference introduced the concept of Biosphere Reserves to the audience. Martin Willison (busy guy) filled in for Leif Helmer – protected areas planner with

the Department of Environment – who was unable to be present. See the April *FNSN News* 11(1) for a summary of the Biosphere Reserve concept.

Southwest Nova

Martin introduced Jennifer Higgins, project coordinator for the Southwest Nova Biosphere Reserve Association (SWNBRA), who filled us in on progress of her group’s application for status. The final application document will be submitted to UNESCO in July 2001. When approved (perhaps in the fall), the document becomes public.

The core of SWNBRA is Kejimikujik National Park and the Tobetic Wilderness area. A buffer zone will consist of C2 crown land around Keji and will include some Bowater and NSPI working areas. The transition/cooperative zone will take in the five western counties (Annapolis, Digby, Queens, Shelburne, and Yarmouth). Partners include forestry companies, NS Power, various federal, provincial, municipal, and first nations departments and agencies, and a number of NGOs. We look forward to events unfolding.

Some of the people directly involved in the SWNBRA were in the audience and helped Jennifer answer questions: Cliff Drysdale, ecosystem science manager at Keji, Steve Millay of SWNBRA, and Neil Munro of Parks Canada.

Fundy Biosphere Project

Tom Young is an economic development consultant in Parrsboro and chair of the ecotourism committee of the Bay of Fundy Ecosystem Partner-

ship Program. He is a keen advocate of sustainable development and has high hopes for an eventual Biosphere Reserve centring on the Bay of Fundy. The idea of a reserve, proposed by the tourism industry, would allow people and communities to improve their lifestyles while not compromising the integrity of the biosystem. It would “make the world of jobs compatible with the world of nature.”

A formal application is still some time in the future. A core area has not yet been defined, but would possibly include Fundy National Park and Cape Chignecto, Five Islands, and Blomidon provincial parks. We'll be keeping an eye on this one.

Field trips

The Lunenburg meeting had the usual array of (very) early morning walks (birds, plants, photography) and splendidly diversified field trips in the afternoons. The bird walk I (ed.) attended with James Hirtle in the lead on Saturday morning turned up an excellent selection of birds and afforded great views of such species as Tennessee warbler and Acadian flycatcher. And what would a federation conference be without a nighttime journey (with James Hirtle) to roust out some herps and owls. Cloudy skies put the lid on any hopes of stargazing, so Larry Bogan had to keep his telescope in the trunk of his car.

Fog unfortunately put a bit of a damper on the Saturday sailing trip, keeping the boat from leaving the inner harbour and keeping the intrepid

sailors in a refrigerated state. Likewise the Saturday trips to Gaff Point and the Ovens offered little in the way of coastal vistas, but the naturalizing was good, and it's reported that someone actually panned some gold on Howard Donahoe's Ovens trip.

As for your reporter, my wife and I went on the woodland walk – possibly the best choice for the weather, which was merely pleasantly cool on the Bayport mountainside. The highlight of this trip was two hours of roaming throughout the extensive rhododendron wilderness of the Bayport Plant Farm, guided by the flamboyant and encyclopedic Diana Steele, daughter of Captain Dick Steele, the man behind this wonderful panoply of exquisite blooms. Our host for this field trip was Jean McKiel, who generously fed us coffee and cookies on our return.

Other field trips included Cherry Hill Beach (beach geomorphology with Bob Taylor of BIO), the LaHave River Valley (natural and cultural history with DeBrisay Museum director Gary Selig), Windhorse farm (ecoforestry with Jim Drescher), and a medicinal plant walk (with author Laurie Lacey). A post-conference field trip headed off for a day's birding on Cape Sable Island.

Trip leaders included Eric and Anne Mills, who led the Gaff Point trips; Barry and Jean Sawyer of the Nova Scotia Wild Flora Society and Catherine Pross, who led botanizing walks; and Gary Woodcock, a local photographer.

Topping off the Sunday morning was the annual general meeting of the society. The minutes of that meeting are

AGM 2001

Minutes of the 2001 Annual General Meeting of the Federation of Nova Scotia Naturalists

Sunday, 3 June 2001, 11:10 AM
Lunenburg, Nova Scotia

Present: Martin Willison, president, Jim Wolford, treasurer, directors Larry Bogan (Blomidon Naturalists Society), Jill Comolli (South Shore Naturalists Club), Bernie Deveau (TREPA), Elizabeth Kilvert (member at large), Doug Linzey (Halifax Field Naturalists), Jon Percy (Annapolis Field Naturalists), Eileen Rickard (Les Amis du Plein Air), Barry Sawyer (Wild Flora Society), and approximately 50 individual and federate members.

1. Call to Order and Directors Report

Martin Willison, presiding, called the meeting to order and presented the directors report to the meeting. He emphasized the federation's position as sole provincial affiliate of the Canadian Nature Federation and highlighted a few of the past year's activities.

2. Treasurer's Report

Jim Wolford presented the treasurer's report. He noted that the financial statement (1 April 2000 – 31 March 2001) had been audited by Harold Forsyth and that the federation was in the process of applying for reinstatement of charitable status. In response to a question, Martin Willison reported that he had written a letter to Colin

Stewart confirming that all financial obligations to Mr. Stewart had been met with regard to both his position of endangered spaces coordinator for the World Wildlife Fund and his position as executive director of the federation (in 1990).

Moved by Jim Wolford, seconded by Gertrude Pitcher, that the treasurer's report be accepted as presented. CARRIED.

3. Appointment of Auditor

Moved by Jim Wolford, seconded by Eric Mills, that Harold Forsyth be appointed auditor for the 2001/2 fiscal year. CARRIED.

4. Election of Officers

The following officers were elected by acclamation for two-year terms:

President: Joan Czapalay

Vice-president: Martin Willison

Secretary: Elizabeth Kilvert

Treasurer: Jean Gibson

5. Consolidation of Bylaws

Moved by Doug Linzey, seconded by Bob McDonald, that the consolidation of the bylaws – "Consolidated to May 2001 from the original Memorandum and Bylaws dated 14 August 1990, amendment to Memorandum

sec. 2(c) and addition of Bylaw 47 by special resolution 3 February 1994, and amendment to Bylaw 11 and addition of Bylaw 48 [note: incorrectly numbered “47” in the resolution] by special resolution 3 June 1995” – be approved. CARRIED.

6. Other Business

Barry Sawyer reported on the federation’s activities with regard to off-road vehicles and the need for policy throughout the province. The dominant issues are protection of sensitive environment, damage to trails, access restriction. Eric and Anne Mills reported on the success of cooperative action on Brier Island whereby ATV operators voluntarily restrict access.

Elizabeth Kilvert spoke of the role of naturalists and their organizations in providing records (for example, museum scientific personnel use postings to the NatureNS e-mail list as a database source) and forging relationships with schools for education of young people with regard to natural history. Ursula Grigg reported that the Halifax Field Naturalists forward field trip reports to the museum and urged other clubs to do the same.

Bernie Deveau brought up the question of posting signs on beaches to inform the public of their protected

status. The meeting agreed by consensus to the need for enforcement of the existing Beaches Act. Jill Comolli reported on the success in this respect of working with local DNR enforcement offices (they do respond to positive encouragement for enforcing specific regulations in specific places).

7. Acknowledgements

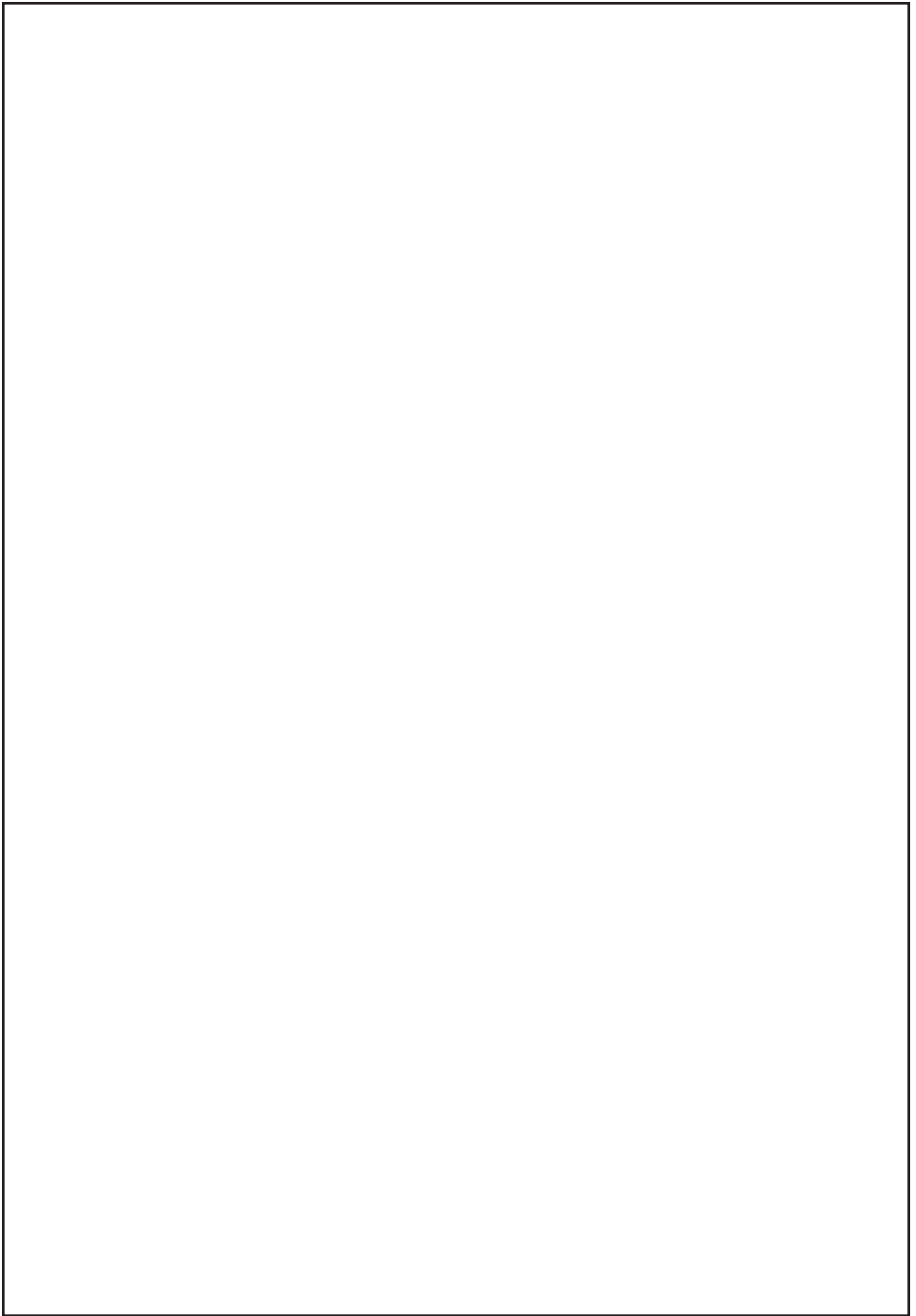
Jim Wolford acknowledged on behalf of the federation Joan Czapalay for her secretarial work over the past year and Michael Downing for his thorough documentation of federation affairs during his tenure as an officer. Jim also acknowledged Jeff Pike for his continued support in keeping the membership database and mailing the newsletter. The members acknowledged and thanked the South Shore Naturalists under the leadership of Jill Comolli for hosting this year’s conference and AGM.

8. 2002 AGM

Martin Willison reminded members that the 2002 meeting needs a sponsoring group and a venue.

9. Adjournment

The meeting adjourned at 12:20 PM.



Citizen participation

Most of us know what we like and what we despair of. As naturalists, we enjoy the natural world and we deplore the human acts that harm it. But we're not necessarily good at influencing the actions of others.

It seems to me that the logical first step is to learn as much as we can about the problems we see. And it certainly makes sense to tackle first the subjects that interest us most.

Fortunately, the self-education part is getting easier all the time, especially via the Internet. And there seem to be more and more publications, both large and small, devoted to aspects of conservation, sustainable living, habitat protection and renewal, energy efficiency, and almost limitless other topics. There are also myriad organizations, from neighbourhood to worldwide, that we

to get personally involved – to donate a bit of time and effort (it doesn't have to be much).

That old cliché “the squeaky wheel gets the grease” still holds true. Politicians and bureaucrats respond to letters and e-mails and phone calls, especially when they come from a wide range of people who obviously know what they want, have the knowledge to support their comments, and take the time to make a personal appeal.

Find out how to make that contact with your MP, your MLA, the party leaders, your municipal representative (in many jurisdictions, correspondence with the municipal clerk will go to all members). Talk to your neighbours about what interests and bugs you. Have coffee together and explore ways to work out a common message.

Here's a useful place to start browsing:
www.chebucto.ns.ca/Environment/EnvCCN.shtml

can tap for information.

Once we're reasonably up on a chosen subject of interest, we have to make that all-important commitment to do something. The obvious things include becoming members of, and otherwise donating to, organizations that deal with the things that concern us. Sure, CNF and Greenpeace and CPAWS and the Ecology Action Centre and all the other groups do need our money and support to carry on their work. But that shouldn't be the limit of our participation. The next step is

Attend informational sessions, talks, field trips. Go to town council meetings. Get copies of proposed legislation, policy papers, zoning changes, development permits – and respond to them. Join committees, volunteer for workshops. Call radio phone-ins, write letters to the editor, offer to write guest columns for newspapers or newsletters.

Issues can acquire critical mass, but it takes a lot of activity by a lot of people. Need a push? Specialize. Learn about that *one thing that really interests you* and figure out what buttons to push

2001 Conference field trip reports:

Plants and missing sea vistas

Barry and Jean Sawyer arose early two mornings in a row to give us a taste of South Shore botany

Saturday morning: 6:00 AM

Botany walk.

This walk, which followed the Lunenburg municipal walking path from the old railway station to the back harbour, attracted 5 participants, all quite knowledgeable, so Jean and I did not really lead. We had scouted earlier in the week, so had a good idea what to look for, but, as always with botanical walks ended up seeing things we'd missed earlier and missing things we'd seen. Since the trail backs on gardens for some distance and follows the former railway grade, plants were an eclectic mix of native, alien, and ornamental species. There were not a lot of flowers in bloom, though there were many fruit trees, some lovely hawthorns, yellow rocket, blue-eyed grass, violets. We amused ourselves trying to identify various plants without flowers, always a chastening experience: how little we look at the leaves of our common roadside weeds! Most interesting was the discovery of a large specimen of (we think) southern arrow-wood (*Viburnum dentatum* [or *recognitum*]). Ray Fielding has now found a second specimen farther along the trail than we walked. Were they planted as ornamentals or brought in by rail? There are small populations of this uncommon native shrub in southern Ontario and along the St Croix River in New

Sunday Morning: 6:00 AM

Botany walk

Catherine Pross led a group of 7 or 8 on this walk along part of a loop trail with spurs on the Indian Path commons. This is municipally-owned land held for the common benefit of residents of the Indian Path Road, something unique to Lunenburg County. A well-marked, colour-coded trail system is being developed, and visitors are welcome to use it. Catherine handed out a list of plants found along the various paths, as well as a pamphlet with a map of the trails. This walk provided a look at habitat totally different from that of Saturday's walk: a relatively undisturbed mixed forest. We did not have time to do a full loop, but took a side spur down to an attractive wetland which hosts inkberry (*Ilex glabra*), the less common of our two hollies. There were a few early pink ladyslippers in bloom.

Then they went for a stroll along Hirtles Beach to Gaff Point

Saturday afternoon:

Gaff Point hike

Eric and Anne Mills led this hike to explore an area we all hope will soon be fully protected. Saturday afternoon was foggy and cold, but serious rain held off. Apart from missing out on seaward vistas, conditions were actually very good for hiking; when the fog did clear, the temperature rose sharply. We'd had a presentation in the morning on Gaff Point from the Kingsburg Coastal Conservancy, which provided good background. The real importance of Gaff Point is that it is a characteristic South shore landscape; its unique feature is that it remains largely untouched by the hand of man. There are enough hikers and, unfortunately, ATV traffic to keep the trail loop open and one small cottage property about halfway to the point.

Vegetation is predominantly damp, mossy, White spruce forest giving way to open barrens near the point. Nothing unusual caught our eyes in the understory, but the many dead spruce on one stretch gave the forest a gruesome, threatening aspect. No one could suggest a likely cause for the die-back. There were many holes in the forest floor, opinion being that these were probably storm petrel burrows. As we travelled along, we saw several groups of common eiders, including chicks.

Nearing the point, with the sun coming out, we were struck by the whiteness of the cliffs. Eric Mills told us that this is due to gypsum seams; crumbled gypsum rocks litter the beach at the foot of the cliff, giving it an unusual appearance. We did not have time to investigate vegetation in this area, which might have some "gypsophylic" rarities. The return loop took us along the shoreline.

Wild naturalists I have known (part 2)

(with apologies to Ernest Seton-Thompson)

by Jean Timpa

In the last issue of FNSN News, Jean Timpa began her journey to becoming a full-fledged naturalist in Wolfville, Nova Scotia. Here, she continues her account of the many people who influenced her during that journey.

Then there were the professors at, or associated with, Acadia University in the early 1960s. Many were Acadia graduates themselves. With PhDs from such schools as Harvard, McGill, and Cornell, they not only had been trained superbly as scientists but were well known as excellent teachers. They had very little in the way of facilities and equipment, compared to today, but one thing was very much nicer: the small class sizes and family atmosphere of the school. It was not uncommon for small groups of students to be invited into the homes of the professors.

Dr Chalmers Smith, our botanist, took us on the most memorable field trips. We spent one Thanksgiving weekend exploring the ecological intricacies of Cape Breton Highlands National Park with a group of students from the Truro Agricultural College. That trip was led by the provincial botanist, Dr Albert E. Roland, who gave us a

wonderful talk the first evening on the special nature of the Acadian Forest.

When we stopped at one of the turnouts overlooking Pleasant Bay, I knew without a doubt that I had to live there at least for a while. About five years later it happened: my husband and I – two very green teachers – moved into the basement apartment of the school. We spent all our spare moments outside on the ocean or in the forests of the surrounding national park or exploring the many rivers and streams. In thanks to the wonderful botanists who had introduced us to the area, I tried to return a little of their knowledge and enthusiasm for the local plants by helping the district warden amass a botanical list for his region. That was a lot of fun and kept me from forgetting all those names.

What a playground the park was. There was no end to the adventures – some of the finest I've ever had. Dr

Jean Timpa is a keen observer of nature in the Annapolis Valley, especially on the dikelands in the vicinity of her Wolfville, Nova Scotia, home.

Smith was always keen to have me looking for new arctic-alpine relics, especially on cliff faces and in north-facing, dripping waterfall areas. I didn't happen to discover any plants, but I also collected insect specimens, which were professionally identified. Some turned out to be left over from the ice ages, a number had never been identified as being in Nova Scotia before, and one, I believe, had to be named as a new species.

Another great field trip with Dr Smith was to the Tobeatic, where we tried to encircle the huge hemlock trees. Four of us locking hands could not reach around one of them. We didn't need redwoods!

When we returned to Acadia from Cape Breton for a year of graduate study by my husband, Dr Sherman Bleakney was the zoologist at Acadia. He was just discovering the wonders of sea slugs. One afternoon he suggested that a group of us go to the mouth of the Bear River (my home turf) at low tide to see what we could find. It was quite an adventure climbing down over the bank and getting into the icky mud near the old bridge, looking for these new creatures. There must have been five or six students in the group, and we spread out across the flats to find as many specimens as possible for the good professor. Some of the slugs he discovered are endemic to the Bear River.

Taking a small break at one point, I looked a short ways upstream to the lefthand bank and recollected quietly to myself the family pirate story about

Kniffen Hollow. I hoped the ghost ship would not appear as it did to my great grandfather and friends who, by a full moon, were digging for the treasure chest on that bank and almost had it raised out of the hole when one of them forgot the sacred directions and spoke out loud. As predicted, the ghost ship appeared with all hands on deck threatening the lives of the would-be treasure hunters, who jumped into the boats and escaped just in the nick of time.

Then I looked to the right at the point jutting out into the river where my grandmother Alice was born. When the house was torn down, gold Spanish doubloons were found at the base of the chimney.

As the shadows were getting longer (the evenings come early in October), we tarried only long enough to pick up a few of the strange sea slugs and, with lots of mud on ourselves, headed back to Wolfville. I was hoping we would get out of there before a full harvest moon appeared – I didn't want to be mistaken for a gold digger. When we reached Annapolis Royal it was dark, and Dr. Bleakney pulled into the Annapolis Royal Inn where he treated us all to a wonderful hot meal, even though we were a dishevelled lot. I didn't have the courage to tell my companions the ghost story, as such tales tend to be rather unscientific.

On another occasion many years later, I had quite suddenly acquired a common loon with a broken wing. Fortunately, my two oldest boys had a functional 40-gallon tank in which I could store sticklebacks and mummichogs for the loon's bathtub dining

pleasure. Sherman and a grad student were tagging these fish in the tidal pools on the undiked marshes to see if they would return to the same pool tide after tide. When he heard of the loon and its need for fresh, swimming fish, Sherman was quite willing to be part of the rescue team. One day when he had seined some extra fish, he brought them to the house. He was checking the progress of the patient when he noticed on the table the book from which I had been trying to find information: *A Loon in my Bathtub*. "Oh, I see you have written your book already," he quipped.

Our professor of wildlife biology was Dr Donald Dodds, who not only was the renowned author of a number of books on the subject, but also travelled widely for one of the United Nations organizations, particularly to Africa and later to some of the Caribbean islands. He was the best teacher I have ever come across, not only intellectually – he was a most compassionate, caring person, concerned about each and every student and how we were doing. Many years after graduation, I worked for a local UNICEF group here in the Valley and was asked to develop some materials that elementary teachers could use. I asked Don if I could borrow some of his African slides to copy, and without hesitation he allowed me to pick and choose a great number of them. I'll always remember his saying how terribly strained things were getting in Africa, and that he was sure there would be terrible wars between the many tribes. How those words have come to haunt the world these past few years.

On a much happier note, though, Don was able to confirm my suspicion that the young man I sat beside in his ornithology class some years previous had indeed been George Archibald, now the famous Crane Man who was awarded a gold medal by Prince Philip, head of the World Wildlife Fund, for his work in saving many species of cranes worldwide from extinction. George has since spoken of his work to the Nova Scotia Bird Society and to the Blomidon Naturalists Society, and he has promised to come back and finish the talk about his work in Africa.

Not only did George become an astute ornithologist, he have to become a far better diplomat than most of the political ones ever have proven to be. Many cranes have long north-south migrations, and sometimes he had to negotiate agreements between warring nations so the few remaining birds could travel back and forth safely. At one time he had both North and South Korean soldiers coming into the demilitarized zone between the two countries to put out feed for the cranes, which were migrating without any problems.

My involvement with natural history also led me to John and Rachel Erskine as one of their helpers on the Christmas Bird Count, which they organized. No one had more enthusiasm or concern for the wild world than those two; they were legendary in their travels all over Nova Scotia to learn and record what they could about it. They were also early members of the Blomidon Naturalists Society, and for a while Rachel was able to provide a proper

British “lunch” after our meetings, until officialdom dictated that there should be no food in the lecture rooms. John was interested in my family ties with Bear River, as some of his archeological research on the Mi’kmaq had been carried out there. I borrowed some of John’s published essays about natural and human history to reproduce in the BNS newsletter. His material was a great help in showing the younger folk and people from away how natural history had evolved in Nova Scotia, where it was going, and where we had to take it further. Regrettably, I did not get to know John very well before he fell ill.

A number of us fondly remember helping to boost Rachel up into Roy Bishop’s observatory so that she could see Halley’s Comet for the second time in her life, the first time being in England as a very young girl. Halley’s did not put on a very good show this second time, but she insisted it was just as thrilling for her. For several years before she moved to Sackville, New Brunswick, she asked me on a regular basis to accompany her around Wolfville as she did her errands; she was becoming frail and unsure of her footing, especially crossing streets. We had memorable conversations during our ambling around town, conversations filled with wisps of old English wisdom.

In the early seventies I first met Dr Kenneth Harrison, who had recently retired as a plant pathologist from the Department of Agriculture in Kentville. Now he was able to devote full time to his real passion – research in mycology, in which he was considered to be a top

North American expert, especially on the Hydnums (toothed mushrooms).

I did not have the opportunity to take the mycology course at Acadia, but my husband did and was one of the lab assistants. From a European background he already had quite an informal training from his mother, so he was always ready and eager to go into the field to help collect mushrooms with Dr Harrison. I was privileged to be able to tag along on many field trips, especially the autumn trips he willingly led for the Blomidon Naturalists Society to the Kentville Ravine. While I did not learn our mycology in a systematic way, I did become familiar enough with many of the mushrooms to know at least which ones I had seen in some other setting, and sometimes even to put a name to them – and to know whether they were dangerous or pleasantly edible.

On two occasions I found mushrooms considered to be western species, one of which had been recorded once before in Nova Scotia; the other we felt pretty sure had come in as spores with the red-cedar shavings used as mulch under my neighbour’s bushes. Another mushroom find of mine was completely new to Nova Scotia, but unfortunately I discovered it just after the monograph on that group had been published. It was always a delight to take specimens to Ken, because he would give names and edibility status, but then he would offer some other special fact about each one. He was like a little kid at Christmas, oohing and aahing over a collection basket.

Ken was a wonderful gardener and often brought homegrown cantaloupes

on field trips. One day a mutual friend of ours asked if I still had horseradish growing in my garden. Being practically impossible to eradicate, it was certainly there. Apparently Ken had wanted to grow some for years but couldn't locate any, so I was more than happy to be able to supply some for him, but with great warning to contain it so that it would not choke out the rest of his garden.

He warned us over and over again not to eat mushrooms until we had had a course in mycology and really knew what we were doing. I have always followed that advice. When I pick mushrooms to eat, I take them to experts for verification, then give them some of the bounty. I remember how pleased Ken was for me on one BNS trip to the Ravine when I brought to him a mushroom and correctly named it, *Armillaria ponderosa*, or the white matsutake, one of the choicest of mushrooms to eat and definitely my favourite. He was a wonderful inspiration on the constant joy of discovery.

I've always thought it important to understand as much as possible about geology and astronomy, for these aspects of the universe are the building blocks that support our existence. To Rupert MacNeil, my geology professor, and Roy Bishop, astronomer extraordinaire and prime mover behind the startup of BNS, my many thanks for their hours of explanations and superb and patient teaching. Early in the spring of 1972, Roy gathered together a group of interested people to watch a comet – it did not materialize, but the Blomidon

Naturalists Society began that night. Roy and fellow astronomers Larry Bogan and Sherman Williams have since often delighted us with the most wonderful and mind-boggling sights through their telescopes.

Many years ago I told Roy of the pre-Christmas evening in the fifties when my dad and I had returned from a walk to Orono (Maine) for some last-minute stocking stuffers for Mom. Almost without fail, every clear night that winter the skies were filled with the Aurora Borealis, all conceivable colours flashing and dancing. This evening was no exception, and, as we stopped before our house to admire the show one more time, we became aware of the hissing and swishing of the lights as they swept back and forth across the heavens. It was absolutely one of the most spellbinding moments of my life.

Roy promptly pronounced my story "crazy," but a few years later he apologized for not believing someone who survived only three days of high school physics. He had finally read about the still mysterious noise phenomenon, but warned that the laws of physics just do not allow for light to make noise. All attempts to record the noise had failed until a few years ago when Danish astronomers were able to capture the swishing noises. We still do not have much of an explanation for it, but I hope to live long enough to hear it at least one more time, and I hope Roy and a whole group of us are together when it happens.

Roy was also able to introduce to us David Levy and Carolyn and Eugene Shoemaker, discoverers of the broken

comet that slammed into Jupiter and was so interesting to watch on TV. It was even more special to hear them speak about it in person and to meet them after the talk here in Wolfville one very hot July night.

My list of inspiration so far has included people who were academically very well prepared to teach and encourage others. I would be remiss to stop here, however, as some of my finest teachers were self-taught through their own careful observations, reading, asking questions of the experts, listening to the stories of old timers, and heeding the traditions passed down through time. My dad learned from his Mi'kmaq neighbours many of the woods ways, which were at least in part passed on to me. Then there was our guide in the woods, Les Rice, who had four wonderful cabins on the edge of an esker where we often escaped to the real world.

In the late sixties or early seventies, I met another Leslie (MacIntosh) in Pleasant Bay, Cape Breton, who was the expert on the ocean world. It was one of his relatives, a professor, who first bought some acres, erected the Lone Sheiling, and gave it to the federal government so that it could become one of our first national parks.

When we returned to the Valley I then met the farmer Cyril Coldwell, the postman Bernard Forsythe, and lighthouse keeper Wickerson Lent, three of the most astute birders and general naturalists I have known. So far I know Murray Newell of Cape Sable Island only through his marvellous messages on NatureNS, but he is obviously of

the same ilk.

Of greatest help on my path to becoming a naturalist, however, were those closest to me: my dad, insatiable trout fisherman, woodsman, admirer of great trees, photographer, and always curious to learn more about the environment despite his non-scientific background; Mom, the quiet one, but always ready to look up information – especially on birds, plants, and geology – and record our findings; and my children: Sean, who is now taking an advanced degree in geology and teaches me much about it; Stephanie, who now has a degree in park planning and hopes to get into Parks Canada; and David and John, who patiently let mother disappear frequently onto the dikes to see what she can see just for the pleasure of the game.

I want to point out not only how important are our naturalist activities of recording nature observations and fighting for environmental justice, but also to encourage you to realize what an important role you can take as a friend, teacher, and inspiration to younger ones coming up through the ranks. I hope by now you realize that in my title I did not refer to “wild” as the naughty types, but to those of us who prefer to enjoy and protect the untamed

Worm Watch

Weary of the same old birds, plants, frogs? Try something brand new. Get turned on to the underground world with WormWatch.

WormWatch is a joint program of Agriculture and Agri-food Canada, Environment Canada's Ecological Monitoring and Assessment Network (EMAN) Coordinating Office, and the Canadian Nature Federation (whew!). The purpose is twofold: to determine just where native earthworms (family Lubricidae) survive in Canada (after being mostly wiped out in the last ice age) and to learn how many earthworm species exist in Canada and where they live.

Yes, we know that winter is a comin', but there's still time to get in a little worm-sampling practice in preparation for next spring. And yes, there is a National Sampling Method (in which no earthworms are harmed) and there is a form to fill out.

We learned about this wonderful new pastime in the Autumn 2001 issue of *Nature Canada*, which includes a background story, a WormWatch poster (it's an eye opener), and a survey form. If you're not a CNF member (yet) or if you can't steal someone else's copy, you should head for the National WormWatch Web site at the address below.

Even if you're not particularly interested in worm watching, we'll bet your kids and grandkids will be. Don't disappoint them.

<http://www.wormwatch.ca>

