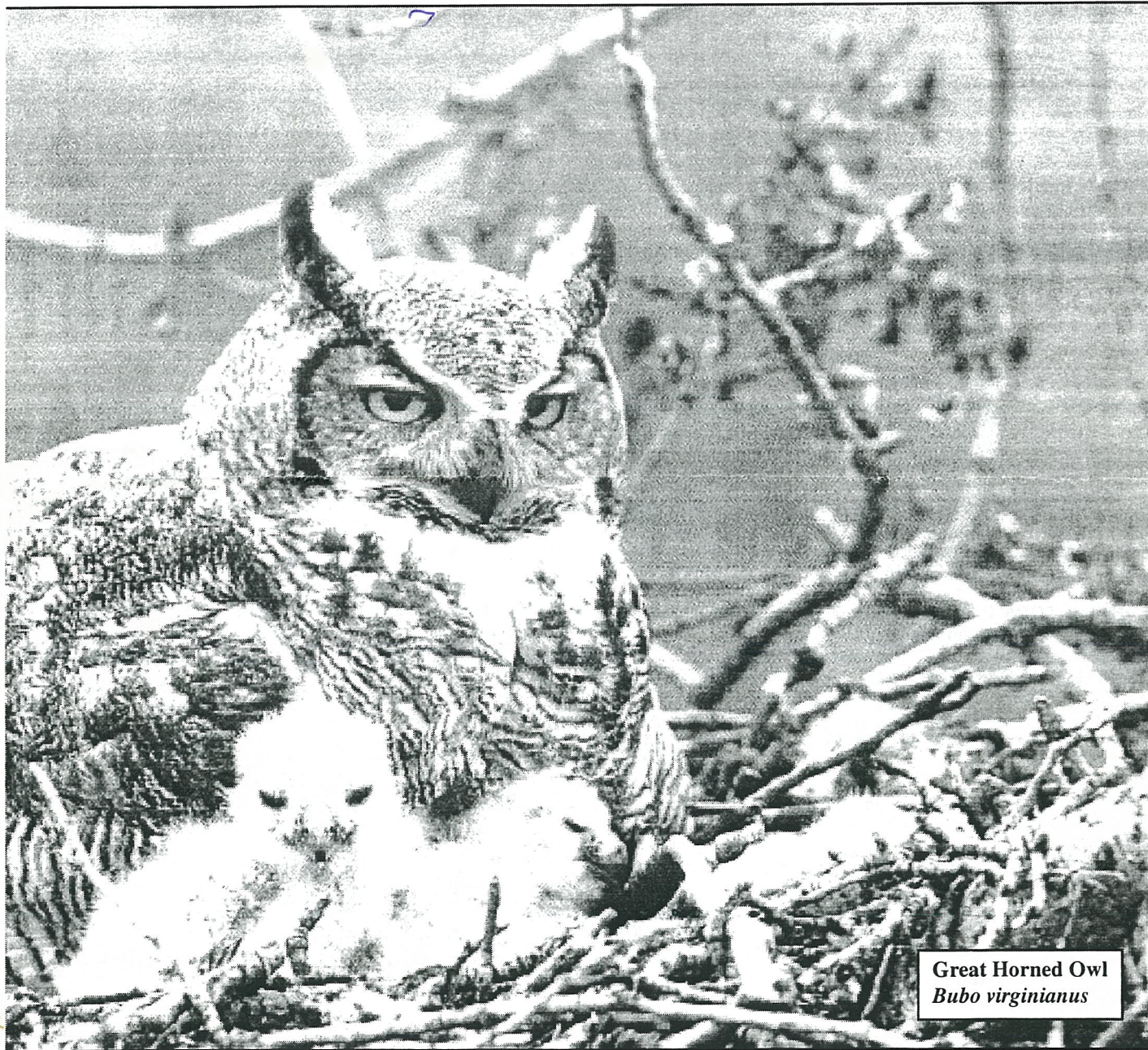


THE HALIFAX FIELD NATURALIST



No.110
March to May, 2003



Great Horned Owl
Bubo virginianus

News & Announcements p. 3
Special Reports p. 4
HFN Talks p. 10

Field Trips p. 11
Almanac p. 13
Hfx Tide Table: April - June p. 15

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

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

EMAIL <doug@fundymud.com> (Doug Linzey, FNSN secretary and Newsletter Editor)

WEBSITE <<http://chebucto.ns.ca/Environment/FNSN/hp-fnsn.html>>

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

EXECUTIVE	President	Bob McDonald	443-5051
2003-2004	Vice-President	Elliott Hayes	835-9819
	Treasurer	Janet Dalton	443-7617
	Secretary	Suzanne Borkowski	445-2922
	Past President	Ursula Grigg	455-8160

DIRECTORS Patricia Leader, Bernice Moores, Linda Payzant, Peter Payzant, Stephanie Robertson, Colin Stewart

COMMITTEES **Membership** Judi Hayes 835-9819

Programme

Talks & Trips	Jean Sawyer	445-4938
	Wendy McDonald	443-5051
	Jennifer McKeigan	883-9766
Layout Production	Stephanie Robertson	422-6326

Newsletter

Editor	Ursula Grigg	455-8160
Almanac	Patricia Chalmers	422-3970
Production	Stephanie Robertson	011-880-2-881-8292
Distribution	Bernice Moores	422-5292

Refreshments Regine Maass

Conservation Colin Stewart 466-7168

FNSN Representative Ursula Grigg 455-8160

ARTWORK All uncredited illustrations by H. Derbyshire or from copyright-free sources. Front Cover - Leslie Degner; pp. 8 & 9 - Sylvia Frattini; Halifax Tide Tables - Canadian Hydrographic Service, Fisheries and Oceans Canada. Back Cover - Gilles Delisle.



HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

The subject of deadline difficulties with the Halifax Field-Naturalist have been discussed once again and resolved by the Board of Directors with the Newsletter Committee. The Naturalist will appear quarterly, on both the spring and fall equinox, and both the summer and winter solstice; the 21st day of March, June, September, and December. The deadline for submissions to each issue is now the 21st day of the previous month.

The delayed December issue was completed by Stephanie Robertson and Board members. It is a fine edition, and will bring us some new writers. Many thanks to all who helped with or wrote for our newsletters.

Anyone with a nature tale to tell can send it to the Editor, at the Museum address, or by e-mail to umgrigg@chebucto.ns.ca, before the deadline.

Anything written in the body of an e-mail is universally readable, but attachments are not; from a PC, attachments should be in 'Text only with line breaks', and from a Mac, the format should be 'SimpleText' or 'AppleWorks'.

– Ursula Grigg

MAUDE C. GODFREY

Maud Godfrey was one of HFN's early members, and certainly one of the most enthusiastic. She was a Torontonion and a librarian, and came to Halifax in 1967 to head the reference services section of the N.S. Provincial Library, retiring in 1977.

She was a keen gardener, and this interest extended to Nova Scotian flora. Maud was part of Dr. Joe Harvey's team who listed the plants of the Halifax railway cutting in the 1980s.

She was always ready to talk Newsletter-shop (she was editor of the Griffin Newspaper of Heritage Trust Nova Scotia for a while), and was an enquiring presence at most of our meetings. In fact, Maud Godfrey was at HFN's September 2002 meeting, shortly before her death on 21 October.

We miss her.

– Ursula Grigg



FNSN AGM

The Cape Breton Natural History Society has agreed to host the 2003 FNSN AGM at the University College of Cape Breton, on the weekend of June 14th. Information and details of registration will be posted on the web as they become available. Website and webpage address:

<http://www.chebucto.ns.ca/Environment/FNSN/agm2003.html>

CANADIAN NATURE FEDERATION

The 2003 CNF National Conference & AGM will be held in Medicine Hat, Alberta, June 19-22. It will be hosted by the Medicine Hat Interpretive Program, a partnership between Grasslands Naturalists and the City of Medicine Hat.

The registration fee is *all inclusive* for a great value! It includes a social and reception, art shows, morning walks, a full day and a half day field trip, lunches, a banquet, sessions with keynote speakers, a BBQ, an Echo Dale Historic Farm trip, and lots of fun!

Pre- and post-conference field trips will help you to become more familiar with this special corner of Canada. For more information: call CNF at 1-800-267-4088, or go to: <http://www.natureline.info/cnf.htm>.



NATURE ON THE NET

Many of our members have access to the internet, either at home, work, or at a local cyber-site, often a public Library. During the cold days of winter, I found myself exploring internet sites that would be of interest to visit in the coming months, some far away, and some more local.

One such site, a joint effort of the Environmental Coalition of Prince Edward Island and the Sir Andrew Macphail Foundation, is: <http://www3.pei.sympatico.ca/~garyschneider/index.html>; or simply insert 'Macphail Woods' in your search engine. The Macphail Woods Ecological Forestry Project combines protection of the natural area along the streams with wildlife enhancement, forest stewardship, watershed protection, environmental education, and ecological research. This website takes you on a bird walk, wildflower trails, and of course, the nursery.

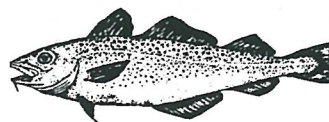
Native plants and shrubs are for sale during the spring and summer months. Photographs and some history make this an interesting site to explore. There is also a map to help you locate it in Orwell, PEI, not too far from the Wood Islands Ferry. Plan on a visit, either in person or on the net!

Share your favourite sites with members and let's make this a regular spot in our Newsletter.

– Wendy McDonald



NEW AND RETURNING



Brian Bartlett
Cameron Deacoff
Phyllis Gardiner
Harry & Inez Roberts

SPECIAL REPORTS

PRESIDENT'S REPORT

The Annual General Meeting gives the members of the executive and the Board of Directors an opportunity to reflect on the past year and to look forward to the year ahead. This AGM I look back on my second year as president of the HFN. What have we accomplished; where are we going?

Our key activities continue to be the arranging and coordinating of our monthly evening meetings and our field trips. The Programme Committee, headed by Patricia Leader and supported by Jean Sawyer, has again brought us a superb cast of informative and enthusiastic speakers and field trip leaders who have introduced us to a wide variety of topics and adventures. Pat is stepping down this year to focus her volunteer time on putting together an HFN display, but more about that later. Many thanks, Pat, for all your hard work on our behalf!

Another very important HFN activity, and one which I eagerly look forward to each quarter, is our newsletter, *The Naturalist*. Although occasionally plagued by production problems, the quality of our publication remains very high and the presentation eye-catching and attractive. Reports of meetings, field trips and other activities keep us up on events we may have missed or bring back (usually fond) memories of those in which we participated. The Museum continues to use our field trip species lists for their own records. I thank Ursula Grigg, Stephanie Robertson, Pat Chalmers, and Elliott and Judi Hayes for writing, compiling, editing, producing and distributing the newsletter and all contributors for their input. I hope all will continue their efforts for another year. We are, however, seeking an assistant editor and more contributors, especially those willing to report on monthly meetings or field trips.

One of the natural history highlights of the year is the annual Federation of Nova Scotia Naturalists conference. Held in 2002 in Halifax and hosted by the NS Bird Society, many HFN members helped in planning the event, leading field trips, and enjoying the conference activities. The 2003 FNSN conference will be held in Sydney the weekend of June 14-16 and will be hosted by the Cape Breton Natural History Society. Sounds like a wonderful time to spend a few days exploring a beautiful part of the province.

The Board met only four times during the year, continuing its tradition of doing much of its day-to-day business electronically. Janet Dalton, our Treasurer, continues to take good care of our financial affairs. Much of her work, preparing financial statements, banking and paying bills, goes unnoticed by most members, but is vitally important in maintaining our charitable status with CCRA and our Society status with the Registry of Joint Stock Companies. Many thanks, Janet!

I mentioned in last year's Report that we were actively involved in discussions with the Nature Conservancy and the NS Nature Trust, regarding how the HFN might support some land acquisition (and hence protection) within the HRM. This has now come to pass; a few months ago, HFN made a donation of \$5,000.00 to the NSNT to facilitate the transfer of title of a piece of privately-owned land to the NSNT. I cannot give you any details yet as to its location until the transfer is complete but I can promise that there will be an HFN field trip to visit it as soon as we can arrange it.

As previously mentioned, the Board authorized the purchase of a second-hand display unit which can be used to promote the HFN and its activities at conferences and exhibitions. Pat Leader has been collecting materials and photographs of field trips and other natural history subjects for the display. Anyone who can offer such items is invited to contact Pat.

Last year at this time I mentioned the passing of one of our valued members, Stephen Ward. Unfortunately, this year I must note another. Maud Godfrey, long-time member and friend of HFN, passed away in October. She had many friends among HFN members and participated in our activities; we will remember her fondly. Loyal to the end, Maud left a bequest to HFN which we have promised to use in a suitably worthwhile cause or activity.

As President, I have had the opportunity to represent HFN on several occasions; one of these was a Bird Studies Canada workshop in Sackville, NB, reported on elsewhere in this newsletter. I am continuing to lobby the HRM for the development of trails within the Mainland Common and have worked with local residents and my district councillor (Diana Whalen) to begin to formulate a management plan for the newly-named Belcher's Marsh Park on Parkland Drive in Clayton Park West. The HFN was the featured IP (information provider) on the Chebucto website in August 2002.

Finally, the Board is concerned about the escalating costs associated with holding our monthly meetings at the Museum. We are now being charged \$20 for each evening meeting and each of us who must drive here must pay considerably to park, that is if we can find a parking space. We have expressed our concerns to the Museum but they have indicated that their hands are tied.

To end, I wish to thank all members of the Board for their services throughout the year and for their support during my Presidency. I have enjoyed my two years as President very much and I have let my name stand for a third and final year. Thank you all.

– Bob McDonald,
President



**Halifax Field Naturalists
Financial Statement (Balance Sheet)
As At December 31, 2002**

		2002	2002	2001	2001	2000	2000
Assets							
Cash	Royal		\$2,981		\$3,352		\$3,006
	Equisure		\$427		\$693		\$477
Accounts Receivable and Accrued Income			\$59		\$303		\$276
Inventories and Prepaids			\$829		\$1,031		\$1,031
Investments			\$9,718		\$14,154		\$13,908
Fixed Assets			\$269		\$0		\$0
			<u>\$14,284</u>		<u>\$19,534</u>		<u>\$18,697</u>
Liabilities and Surplus							
Accounts Payable							
	General		\$50		\$50		\$340
	FNSN		\$290		\$295		\$335
Surplus							
	Restricted		\$5,673		\$10,196		\$10,061
	Unrestricted		\$8,271		\$8,993		\$7,961
		\$13,944		\$19,189		\$18,022	
			<u>\$14,284</u>		<u>\$19,534</u>		<u>\$18,697</u>

**Halifax Field Naturalists
Statement of Income and Surplus
Year Ended December 31, 2002**

		2,002 Actual	2001 Actual	2000 Actual
Revenues				
	Membership	\$1,925	\$2,325	\$2,585
	Product Sales	\$18	\$95	\$8
	GIC	\$4,599		
	Interest	\$202	\$343	\$517
	Donations	\$50	\$235	\$100
		<u>\$6,794</u>	<u>\$2,998</u>	<u>\$3,210</u>
Expenses				
	Special Projects	\$269	\$0	\$0
	Socials	\$21		
	Grants	\$5,225	\$175	\$0
	Insurance	\$85	\$85	\$75
	Meetings	\$229	\$308	\$137
	Memberships	\$463	\$305	\$380
	Miscellaneous	\$204	\$0	\$148
	Newsletters			
	Postage	\$421	\$501	\$618
	Production	\$551	\$409	\$495
	Office Supplies & Expenses	\$47	\$183	\$87
		<u>\$7,515</u>	<u>\$1,966</u>	<u>\$1,940</u>
Net Income		\$-722	\$1,032	\$1,270
Surplus, beginning of year		\$8,993	\$7,961	\$6,692
Surplus, end of year		<u>\$8,271</u>	<u>\$8,993</u>	<u>\$7,961</u>

MEMBERSHIP REPORT

Showing a continuing trend, total memberships were down again in 2002. However, new memberships were higher than in the last 2 years, indicating that we are attracting new members but not keeping them.

For 2002 we had a total of 128 members, down by 8% from 2001. As usual, members in the Individual Membership category make up the bulk of the numbers with 74 (58%) in this category. The Individual Category is also where we have lost membership, as the Family and Supporting Categories are holding almost steady at 39 and 15 respectively.

The following table shows the trends for the last 6 years:

	NEW	INDIV	(%)	FAM	SUPP	TOT.
1997	12	98	(66)	40	11	149
1998	26	97	(66)	33	16	146
1999	27	98	(71)	29	11	138
2000	13	90	(62)	40	15	145
2001	15	86	(62)	39	14	139
2002	21	74	(58)	39	15	128

– Linda Payzant,
Memberships



PROGRAMME REPORT

I am presenting this report on behalf of Jean Sawyer and myself.

During this year there have been ten lectures with only one being postponed due to bad weather. Topics have included the food intake of seals, salt marshes, global weather, weather impact on animals, urban green spaces, and the damselfly. Others have allowed us to travel vicariously in S.W. U.S.A. and Australia.

There have been 18 outings, some of which were co-sponsored with other organisations such as the Ecology Action Centre, the Sackville River Association, the N.S. Trails Federation, the Second Lake Regional Park Association, the N.S. Wild Flora Society, and the N.S. Lighthouse Preservation Society. Working with these groups has been very worthwhile for we have common goals in preserving and enhancing our natural resources.

All the outings have been rewarding and we were very fortunate to be one of the first groups to visit the new Irving Project at Acadia University. Director Don Hendricks and his wife gave us an extensive and very enjoyable tour of the research centre and its botanical gardens.

The annual canoe paddle was a delight as it fell on the first good spring day in 2002. Other highlights included a visit to Hope Swinimer's Wildlife Rescue

Centre. Hope has agreed to reschedule her talk in June.

The Sewer Stroll, Butterfly Trips, Public Gardens Tour, and Cranberry Pick – all old favourites – were well attended.

Members of the N.S. Wild Flora Society and HFN have compiled partial lists of wild flowers for the Sackville trail area, Sambro Island, and Second Lake, Sackville.

For the first time this calendar year, the December lecture was combined with a Christmas Social. It was a success, with over forty people in attendance. The Executive has agreed to repeat the social again.

In closing we would like to thank members and supporters who have given their time to speaking and leading outings, plus those who provided ideas for future programmes. We still have some ideas left but please continue to send suggestions.

– Patricia Leader,
Programme Chair



NEWSLETTER REPORT

The newsletter continues to be a joy to produce, despite all the problems, hitches, glitches, and other contingencies and unexpected happenings that occur behind the scenes with each issue. After having constructed the printer-ready hard copy of the Halifax Field Naturalist for approximately 15 years, using different methods and techniques, one realises that as in any creative endeavour, the unexpected is always – to be expected.

It is how these events are managed that enable our newsletter to be produced on schedule, for the most part, with timely reports and programme items. This is our 110th issue, and we have had very few late ones.

Access to computer resources; a willingness to 'hop around' at the last minute, be up at all hours towards the end of deadline for surprise setbacks, and to pitch-hit for others in the chain when life throws a curve ball; and an ability to deal with software, hardware and internet/web/ISP problems; – all help towards timely publication.

The printer-ready hard copy was originally hand-typed by Editor Doris Butters for many years, (remember typewriters?), with any pictures copied, cut, fitted, fiddled, and pasted/taped by hand on the page. The illustrations continued to be included in this way for a very long while, even when the text was computer generated, as there were no scanners or means of getting graphics 'into' the software when PCs were becoming more numerous in people's homes. This 'finished copy' was then delivered to a commercial

printer. The resulting two or three hundred copies of all the printed pages were picked up from the printer; collated then folded in half; stamped and addressed; taped shut; and then posted – all this coordinated with the inclusion of the programme sheet, renewal reminders, FNSN AGM event schedules, etc.

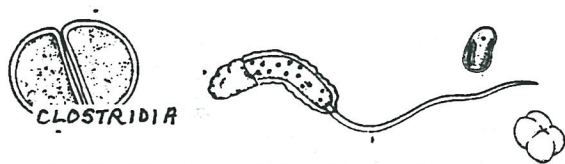
Now, graphics can be scanned and placed on the page in the computer, and the software Adobe Acrobat and Adobe PDF allows for easy transmission of the finished product around the world. Our present printer, the Dalhousie Print Shop, does the collating and folding for us, all mechanically. But, it still has to be picked up from there along with the printed programme sheets, which have to be inserted into each issue along with any other items. Then it is hand-folded, stamped, and taken to a mailing facility.

Some things won't change, despite technological advancements.

Your newsletter committee will always continue to seek further improvements in reproduction quality, cost, and timeliness. But *your timely* submissions, especially field trip write-ups, are the core of our newsletter – keep them coming and thank you!

My sincere appreciation goes out to Linda and Peter Payzant for taking over the 'to-the-printer-and-back' routine and other duties while I am in Dhaka; also to Patricia Chalmers for her always dependable Almanac.

– Stephanie Robertson,
Newsletter Layout and Production



CONSERVATION

A LITTLE MORE WILDERNESS, THANK YOU

Remember our 31 Wilderness Areas? Some of them have holes. These are private lands wholly surrounded by the Crown land which has been designated. The problem is that the owners have whatever rights of use and development they had before. Further, if the owners insist, the government will allow a road across the Wilderness for access.

Of course, if you're in the forest industry, you may also be less than keen on these inholdings. If you decided you wanted to log you'd likely be into protests pretty quickly. The best bet would be to swap for land of equivalent worth on the outside. Unfortunately, the Province doesn't seem inclined to such swaps these days. However, the Province does acknowledge a commitment to acquire the inholdings as they become available (subjects to funds being available, and the price being fair.)

So, early in February, there was a press conference to announce just such a result. Bowater-Mersey

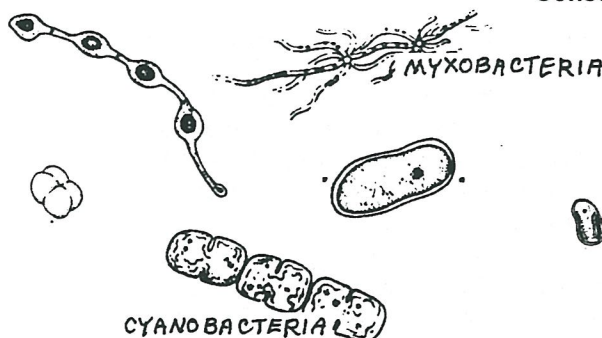
owned four parcels in three Wilderness areas totalling roughly 1,500 ha. Through negotiations with the Nature Conservancy of Canada (NCC) and the Department of Natural Resources a solution was reached. The accessed value of the solution is \$2.9 million. The two pieces in the Tobeatic Wilderness Area (Smith Lake in the south -185 ha - with rare plants and moose, and Frozen Ocean in the north - 169 ha) were sold to the Nature Conservancy for \$1.4 million. The other two properties were retained by Bowater-Mersey, but placed under conservation easements with the Nature Conservancy. One is a 240 ha hemlock and shoreline site on the west side of Lake Rossignol Wilderness Area. The other is a 948 ha woodland and wetland site, with Atlantic coastal plain species, in the Tidney River Wilderness Area (north of Shelburne).

As it happens, the Province and Nature Conservancy have a working arrangement. There is a fund which uses Provincial dollars to match NCC funds. This has just been topped up (the Conservancy having recently been involved in other successes). Of course, the Conservancy has to raise its half, and \$700,000 is not a small amount. (Yes, they are seeking donations.) In the end the properties donated to the Conservancy will be transferred to the province and added to the Tobeatic.

The properties which remain with Bowater-Mersey will be managed as wilderness areas. (The Wilderness Areas Protection Act allows their designation as part of the Wildernesses, but I forgot to ask whether this was part of the plan.) The conservation easements give the Nature Conservancy the legal right to ensure this.

The Province will achieve additions to the Wilderness for about a quarter of their value. NCC accomplishes another piece of its mandate. It may seem that Bowater is coming out ahead. They get money, some tax credit for the easements, and a plus for any certification they're seeking. But they no longer have that land (about .5% of their holdings, several months supply) as a timber source. Replacing that area, especially with land with mature trees, would be both expensive and, more critically, difficult. The cost is real. There is also a commitment to the future. Bowater, too, deserves thanks, congratulations, and encouragement.

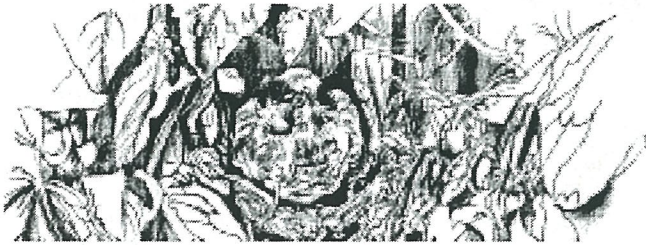
– Colin Stewart
Conservation



SPECIAL ARTICLES

BIRD STUDIES CANADA

Last fall, on the 16th November, I attended the first regional Maritime Consultation Meeting of Bird Studies Canada (BSC) as a representative of the HFN. Also in attendance were many others from Nova Scotia, including Suzanne Borkowski, Project FeederWatch Volunteer; Joan Czapalay, Federation of NS Naturalists; Andy Horn, Nova Scotia Bird Society; and Anna McCarron, NS Piping Plover Guardian Programme. Among the nearly 60 delegates, mostly volunteers, were BSC Board and National Council members and staff.



The meeting began with chair Arnold Boer, BSC Board member, speaking about the importance of volunteers and the role of volunteer-based organisations in wildlife conservation. He gave the threefold purpose of the meeting:

- 1) To outline what has been accomplished in the last few years by BSC Atlantic;
- 2) To promote effective partnering with other organisations in this region; and
- 3) To develop effective ways to promote dialogue amongst conservation organisations in Atlantic Canada.

Everyone attending introduced him/herself and spoke briefly about their interests in birds and bird conservation. Michael Bradstreet, BSC Director and Chief Executive Officer, gave a 10-minute introduction to Bird Studies Canada.

Following Michael was Becky Whittam, Atlantic Canada Programme Manager, who gave four presentations on BSC programmes in the Maritimes. These are: the Atlantic Canada Nocturnal Owl Survey; the NB Forest Hawk and Spring Woodpecker Survey; the High Elevation Land Bird Programme; and the Cape Breton Beached Bird Survey.

During lunch, participants mingled and viewed displays representing various regional conservation groups – the NS Bird Society; the Piping Plover Guardian Program; Nature Conservancy of Canada, Canadian Wildlife Service Species At Risk; NB Federation of Naturalists; ACAP Cape Breton; PEI Natural History Society, etc.

Following lunch, discussion began with Mike Leblanc and Joan Czapalay, as presidents of the NB Federation of Naturalists (NBFN) and Federation of NS Naturalists (FNSN) respectively, speaking about Canadian Nature Federation (CNF)'s 'Nature Power'

meeting in June, and plans for 'Future Search' in Atlantic Canada. The NBFN and FNSN hope to hold three meetings in 2003 of representatives from naturalists clubs and others across the Atlantic region to discuss how to improve communication amongst the 'Nature Network' through education (young naturalists); political influence; greening of society, etc.

Boer led the discussion based on three questions posed in the agenda, starting with:

1) How can BSC ensure that adequate liaisons are made and maintained with other important naturalist/bird research groups in the Maritimes? What is BSC's role in the 'Naturalist Network'? What are the greatest strengths that BSC has to offer to this network?

This discussion began with a question on existing liaisons between BSC and other national environmental organisations. Bradstreet responded by outlining the following relationships:

Canadian Nature Federation (CNF) – Canadian copartner in Birdlife International; the formal governance relationship between BSC & CNF (including exchange of board members). BSC does bird research, while CNF does advocacy and public outreach.

Nature Conservancy of Canada (NCC) – there is no formal relationship with BSC, but an informal relationship exists in that directors of both communicate regularly.

World Wildlife Fund (WWF) – BSC is completing the bird section of WWF's assessment of biodiversity in Canada.

Society of Canadian Ornithologists (SCO) – sits on BSC's National Council.

Canadian Wildlife Service (CWS) – represented on BSC's National Council, it provides office space and logistical support to four regional program managers, and it is represented on regional program management committees.

Provincial governments – relationships vary across the country.

A lively discussion ensued concerning volunteers paying fees to submit data to BSC and other groups. The discussion centred on Christmas Bird Counts (CBC) whereby each participant is asked to pay \$5 in order for counts to be submitted to the North American-wide BSC/Audubon count.

A number of participants disagreed with the idea that people should have to pay to 'volunteer'. Elliott Hayes pointed out that BSC now has one membership fee (\$25) that covers all programs (including CBC), such that BSC members who participate in CBC do not have to pay the \$5 fee. Elliot also noted that BSC and Audubon are working on a way to incorporate historical data (from counts which have not traditionally submitted their data to the wider

count) into the database, although this would probably first require the relevant counts to begin submitting their new data into the database, and paying the participant fee.

2) What would you like to see BSC do better? New program ideas? Enhanced communication of current programs? One participant noted that BSC could develop an email distribution list so that interested individuals and/or groups could receive updates on BSC activities by email. Bradstreet pointed out that the 'Latest News' section of BSC's website <<http://www.bsc-eoc.org/organization/bscnews.html>> could serve this purpose – the 'Latest News' is updated biweekly. BSC could create a distribution list consisting of people interested in receiving updates. Members and volunteers could be invited to subscribe to the list in an initial email.

Another participant asked about individual communication, suggesting that, since not everyone is a member of a naturalist group, BSC should be concentrating more on communicating to individuals (this particular participant only happened across Project FeederWatch by seeing a BSC poster in the CWS building in Sackville).

Bradstreet noted that BSC does fairly well at individual communication, but less well at group communication. It was pointed out that consultations might be required on a provincial, rather than a regional level, especially when promoting new programs. It was suggested that BSC's consultation meetings could perhaps link with the annual meetings of the provincial naturalist federations, with advance notice.

Discussion followed on items that BSC could do better. The underlying theme was that BSC could better facilitate gathering and exchanging of information.

3) How to facilitate dialogue amongst naturalist groups/other NGOs and Bird Studies Canada? It was generally agreed that annual (or so) BSC meetings such as this one were adequate in order to exchange ideas and could be considered something of a 'Nature Forum'.

BSC was encouraged to attend the AGMs of existing naturalist organisations in the region as a method of connecting with people on a provincial rather than regional level. BSC was encouraged to continue to send reports to federation newsletters.

Some discussion centred on the need for specific versus general meetings – e.g. the Atlantic Canada Owl Monitoring Workshop which was held in 2001, versus the general consultation meeting we were now attending. Horn noted that he felt that general meetings are probably better for as groups can provide more input.

It was also suggested that BSC could link with the Nature Network meetings that are being held between May 2003 and June 2004. For example, BSC could host specific workshops on owls/birds in forested landscapes just before or just after the official meeting. BSC could develop more ambassadors who could speak to clubs or be present at meetings or bring displays to events. PowerPoint presentations could be provided to clubs, thereby using volunteers to reach volunteers.

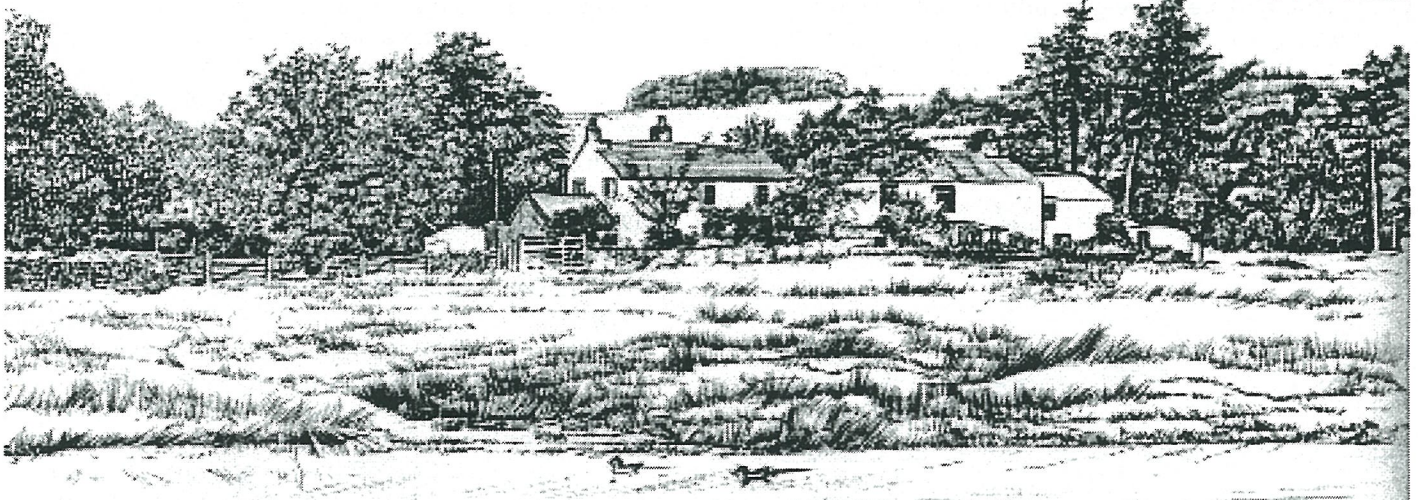
The conclusion to the discussion on regular regional/provincial meetings was that BSC should continue to hold one general regional meeting per year, plus attend provincial Annual General Meetings of naturalist federations.

It was suggested that BSC needs to improve its communication and consultation about Christmas Bird Counts in particular. There has been a lack of communication with individual compilers and organisations regarding the merging of CBC efforts. It was also suggested that BSC could develop a standardised program into which we can put CBC data for 'unregistered' counts.

The meeting adjourned with an understanding that a similar meeting would take place in fall 2003 or spring 2004.

HFN will continue to support the programmes of BSC and will keep its members aware of opportunities to participate in these. For further details regarding the above or other BSC initiatives, feel free to contact me.

– Bob McDonald



URBAN WILDERNESS 3 OCTOBER

Patricia Manuel, an environmental planner who teaches at Dalhousie, gave a thought-provoking presentation on the importance of preserving natural green spaces in urban areas. Too often we think of city living as the antithesis of living close to nature, because we are accustomed to think of 'nature' only as large-scale, pristine, wilderness. But nature can exist on any scale, and there may be inspiring experiences of the natural world on our very doorsteps.

Small neighbourhood green spaces are particularly valuable to children.

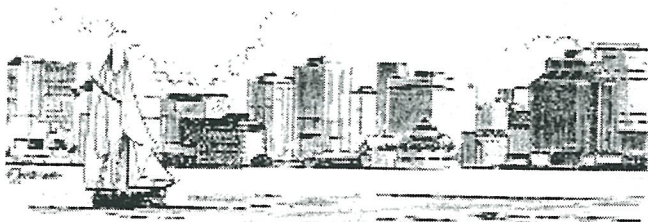
She asked us to cast our minds back to the weedy vacant lot, the swampy ditches, or the alder thicket behind the school, where we picked berries, caught tadpoles, or hunted for Mayflowers as children. Do those spots still exist? Probably not. Such places are too fragmented and ecologically compromised to receive protection as wildlife habitat. If they survive at all, it may be as a tidied-up 'park' with mown grass and playground equipment. But those frequently-visited ragged green patches may have contributed more to our education, our appreciation of nature, and our growing sense of self-reliance and adventure, than an occasional trip to a Provincial or National Park.

Patricia Manuel is particularly interested in how people use these spaces, where they persist. Though they may not be eligible for environmental protection, they still merit preservation. By carefully observing their use by humans we will appreciate their value, and see other reasons for their retention. In a series of slides of many small wetlands around Metro Halifax, we were shown the wide range of seasonal activities which take advantage of these wild spaces. In several cases the ponds have since been filled in, with a real loss to community life.

High density housing developments now usually begin by clearcutting and levelling the land to impose what Dr. Manuel calls 'the landscape of deprivation'. Such bland and sterile neighbourhoods offer no wild or unruly corners in which children may poke about and explore – they are left with 'the extinction of experience'.

We should all be vigilant to protect what still survives, and to ensure that new developments retain some wild green spaces.

– Patricia L. Chalmers



DAMSELFLIES 6 FEBRUARY

Paul Brunelle is recognised as the leading expert in dragonflies and damselflies in the Maritimes. He began work on them in 1986, after discovering a larval exuvium while he was fishing.

Amateurs are initially attracted to these insects due to their size and colour. The Odonata, or 'odes', are now one of the higher interest groups in the region, with lots of amateurs and professionals working on them. They are also attracting government interest because some of them may be endangered species.

The order Odonata has three suborders: the Anisoptera (dragonflies); the Zygoptera (damselflies); and the Anisozygoptera, which includes only two Asian species. There are about 140 species of odonates in our area, most of which are damselflies. The damselflies are generally smaller and more slender than dragonflies; the fore- and hindwings are similarly shaped (they are different in dragonflies); the eyes are well separated (they usually almost touch in dragonflies); and they usually hold their wings over the body when resting. The damselflies also have a more skewed thorax than the dragonflies.

The larvae of odes are stalkers, built for speed. They are consummate predators, feeding on other invertebrates in ponds and rivers. The larvae have fairly long legs, indicating that they move around quite a lot. After they have finished growing as larvae, they leave the water and wait for the adult to emerge from the larval skin. Some species travel quite far from the water as larvae; one species climbs trees up to at least 60 feet.

The adults are very vulnerable after they emerge, and they are at times attacked by ants, which bite through the veins at the base of the wings to prevent them from flying away. Other enemies of odes include spiders, birds, fish (notably Yellow Perch and Banded Killifish in our area), turtles, frogs, and other dragonflies. 95% of odonates only capture prey in flight, and are essentially defenceless on the ground. The male guards the female after mating to ensure that another male does not remove the sperm capsule and replace it with one of his own. All damselflies lay eggs within the tissue of plants; sometimes this is below the surface of the water. Some damselfly adults may be able to stay below the surface for up to twenty minutes. Dragonfly egg-laying varies; some puncture plants, some tap their tail on the surface of the water, and others stab into the substrate where it is covered with a thin layer of water.

As far as is known, none of our species overwinter as adults. They normally perish with the first frosts of autumn. The larvae often take more than one year to develop, and it's possible that larvae in cold, nutrient-poor ponds in the Cape Breton Highlands, for example, might take five to ten years to develop. Some

species, such as *Anax junius*, are thought to migrate in to our area in the spring. They have been found on Sable Island and on one occasion in Great Britain.

Paul showed some beautiful slides of these creatures, and had lots of interesting facts about individual species. For example, the smallest ode in our area is the 'Elfin Skimmer', *Nannothemis bella*. The female is a Batesian mimic – it looks like a wasp with yellow markings on a black ground. One of the Gomphid dragonflies is red-listed because of a lack of its suitable habitat here – oligotrophic water, poor in



plant nutrients. Another in the same family, paradoxically, is also threatened here because of insufficient eutrophic water (i.e. water with a dense plant population and low oxygen content).

In closing, Paul mentioned that he is teaching two courses on odes in Maine – one on appreciation of the Odonata, and the other on survey techniques. One hopes that he will consider offering these courses somewhere in Halifax.



– Peter Payzant



FIELD TRIPS

SEWER STROLL

DATE: 18 January, 2003

PLACE: Various locations around Halifax Harbour

WEATHER: Clear, high of -7° C

INTERPRETERS: Peter and Linda Payzant

PARTICIPANTS: 15

The Halifax Field Naturalists' annual 'Sewer Stroll' took place under pretty good conditions, considering the weather; it was -17° when we started at 9:15 a.m., with a high tide and copious arctic sea smoke. By the time we finished around 1:30 p.m., the temperature had risen to around -7°. Calm winds and bright sun helped make it pleasant.

At Fisherman's Cove in Eastern Passage we had the usual gulls, a few Red-Breasted Mergansers, and the first of many Black Guillemots. We added Iceland Gull and Common Loon at North Woodside, and we also took time to pay attention to the sounds of House Sparrows – recent discussion on the NatureNS internet mailing list making us more aware of them.

There was very little of interest at the foot of Old Ferry Road. Extending the sewer outfall out into the middle of the harbour was a disaster for this as a birding spot. About the only thing this place has going for it is a pretty good vista of much of central Halifax Harbour, with the possibility of something interesting fairly far out.

We stopped for refreshment and warming up at the market at the Dartmouth ferry terminal – a new stop for us this year. Very few birds, but lots more parking and better coffee than Tim's!

Sullivan's Pond had a pair of Cardinals, two Wood Ducks, a Pintail, and a Gadwall, in addition to the usual Black Ducks, Mallards, and gulls. Thanks to Fulton Lavender for locating the Wood Ducks and the Pintail. There were lots of Robins in evidence. We also got good looks at a stationary Black-headed Gull.

At Tufts Cove we saw perhaps five Barrow's Goldeneye among the many Common Goldeneye, several American Wigeon (no Eurasian), a few Buffleheads, lots of Black-headed Gulls, and a Northern Flicker. The outlet of the Sackville River in

Bedford was very iced in, and there was almost nothing of interest except the two Mute Swans.

At Mill Cove the Basin appeared to be almost empty. Overhead, we saw a Sharp-shinned Hawk being harassed by a crow, and there were a couple of (Harbour?) seals which had hauled themselves out on the ice.

– Peter Payzant

Sewer Stroll Species

Birds

Common Loon

Mute Swan

Wood Duck

Mallard

American Black Duck

Gadwall

American Wigeon

Northern Pintail

Scaup sp.

Common Goldeneye

Barrow's Goldeneye

Bufflehead

Red-breasted Merganser

Sharp-shinned Hawk

Black-headed Gull

Ring-billed Gull

Herring Gull

Iceland Gull

Great Black-backed Gull

Black Guillemot

Rock Dove

Northern Flicker

Blue Jay

American Crow

Black-capped Chickadee

American Robin

European Starling

Northern Cardinal

Common Grackle

House Sparrow

Mammals

Harbour(?) Seal



Gavia immer

Cygnus olor

Aix sponsa

Anas platyrhynchos

Anas rubripes

Anas strepera

Anas americana

Anas acuta

Aythya sp.

Bucephala clangula

Bucephala islandica

Bucephala albeola

Mergus serrator

Accipiter striatus

Larus ridibundus

Larus delawarensis

Larus argentatus

Larus glaucoideus

Larus marinus

Cephus grylle

Columba livia

Colaptes auratus

Cyanocitta cristata

Corvus brachyrhynchos

Poecile atricapilla

Turdus migratorius

Sturnus vulgaris

Cardinalis cardinalis

Quiscalus quisculus

Passer domesticus

Phoca vitulina concolor(?)



WALKING ON THE WATERS OF HALIFAX'S FRESHWATER BROOK

On December 1, 2002, I met with some enthusiastic people to explore the course of an old Halifax brook, now completely covered by concrete and drains. This intriguing walk was sponsored by the Urban Issues Committee of the Ecology Action Centre. It was led by architect Linda Douglas, whose thesis "The Recreation of Urban Water" (TUNS, 1997) had developed around the now-underground and mostly forgotten brook. Like the annual Halifax Explosion walk, a few of our walkers had interesting family anecdotes about some of the remaining features of the stream, which added to our enjoyment.

The Freshwater Brook, which ran from the marshy Halifax Common and entered the harbour between Barrington and Inglis Streets, was a significant factor in shaping our city. The brook ran through green recreational spaces, some of which remain, and provided water for both institutions and industry. As the city developed, the course of the brook was sometimes changed or else channeled through underground pipes to become the Freshwater Brook sewer. Today, a section of that sewer begins its 100 foot plunge downwards then seawards at the junction of Sackville Street and South Park.

Linda pointed out that the way we treated the brook reflected our attitude towards water — it could be managed, manipulated, and even made to disappear from both sight and memory. Opposite the CBC building, we stood approximately halfway along a series of unconnected green spaces which had been fed by the brook's water. In the northern section, these green spaces were the venue for military drills and competitive sports, and for leisure activities of generations of Haligonians.

We had a perfect example of citizens' use close by in the Public Gardens. Within this fine example of a Victorian garden, the old Griffin Pond, re-contoured as the present Duck Pond, is the largest tangible evidence of water from the brook.

Linda collected some of her research material in the Nova Scotia Archives. One particular source was Paul Erickson's article "Down by the Old Mill Stream", in the Chronicle-Herald (30 April, 1988). This is an excellent article and includes a photocopy of a painting, circa 1858, of cattle watering at the brook. Exploring the historical significance of the brook was intriguing, but Linda had another purpose for her walk, one firmly grounded in the future. As we walked we discussed ways in which this once vital water system could be acknowledged for future generations. Some of the ideas included sign posting the brook's historical course and producing a tourist map for hikers and bikers; installing a mural; diverting a part of the sewer through a solar aquatics greenhouse, or linking up with an institution such as the N. S. Museum of Natural History to educate the public on alternative water treatment technologies.

Linda cited one missed opportunity — the newly created Robbie Burns Park, set in close proximity to the brook, might have included a water feature.

Of course Halifax is not alone in diverting water sources as its city develops. However, we all know of cities which have given value to water in creative ways — fountains, miniature falls, reflecting pools — and added much to the charm and peace of city life.

Linda used the walk to open our minds to the possibilities of celebrating water in Halifax. On February 22, 2003, interested parties under the aegis of the EAC will be meeting to develop ideas for resurrecting the brook's history and related environmental aspects. The Halifax Field Naturalists could well play some role in acknowledging Freshwater Brook for future generations.

Some months after the walk, I found a charming reference concerning the brook in A Victorian Lady's Album — Kate Shannon's Halifax and Boston Diary of 1892, by Della Stanley (Halifax and Boston: Formac Publishing Co, 1994), p. 22. Kate, the daughter of the Hon. Judge Leonard Shannon, was an amateur botanist. She was a frequent visitor to the Public Gardens, Camp Hill, Point Pleasant Park, the Oakland and Maplewood Estates on the Northwest Arm, and the Freshwater Brook, where she collected botanical specimens.

On the cold but sunny day of March 28, 1892, Kate writes, "Then I went for a walk by myself: down to the end of South Park Street then down the road a little way as far as the brook...hoping to find some botanical specimens....". Although only 18 years old Kate was the corresponding member for the Halifax chapter of the Agassiz Association, named after the eminent Swiss-American naturalist, Louis Agassiz. During her short lifetime she prepared and illustrated articles on local plants for Popular Science News, based in Boston. I can imagine that Kate, with her sheltered Victorian life, would have been a keen member of the Halifax Field Naturalists if it had been in existence at that time.

I trust you enjoy hearing about the course of the old brook, which did indeed shape the early life of the city of Halifax. Hopefully it will stimulate your awareness of our urban environment, its original water courses, and its beauty. Directions for this walk will be in the next issue, #111.

Other books: MacKenzie, Shelagh and Robson Scott, eds., Halifax Street Names: An Illustrated Guide (Halifax: Formac Publishing Co., 2002); Maclean, Grant, Walk Historic Halifax (Halifax: Nimbus Publishing, 1996); Raddall, Thomas H. Halifax-Warden of the North (Toronto: McClelland & Stewart, 1948); Watts, Heather, On the Road from Freshwater Bridge: A History of the House at 5500 Inglis Street (Halifax: Universalist Unitarian Church, 1979).



— Pat Leader

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.

"We need spring. We need it desperately and, usually, we need it before God is willing to give it to us."

– Peter Gzowski, Spring Tonic, 1979

NATURAL EVENTS

- 18 Mar. Full Moon.
- 19 Mar. Perigean Spring Tides will be unusually large.
- 20 Mar. Vernal Equinox at 21:02 AST: Spring begins in the Northern hemisphere.
- 23 Mar. Daily average temperature above 0°C.
- 6 Apr. Daylight Savings Time begins at 2:00 AST: turn clocks ahead one hour.
- 16 Apr. The daily minimum temperature at Shearwater is above 0°C.
- 16 Apr. Full Moon.
- 17 Apr. Perigean Spring Tides will be unusually large.
- 22 Apr. Earth Day.
- 15 May Total Lunar Eclipse: the moon enters the dark umbra of the earth's shadow at 23:03 ADT and is clear of the umbra at 2:18 ADT.
- 15 May Perigean Spring Tides will be particularly large.
- 16 May Full Moon.
- 28 May The date of last spring frost in Halifax: Environment Canada says that there is only a 1:10 chance that a spring frost will occur after this date); look forward to 155 frost-free days.
- 12-19 Jun. The earliest mornings of the year: the sun rises at 5:28 ADT.
- 14 Jun. Full Moon.
- 21 Jun. Summer Solstice at 16:10 ADT: Summer begins in the Northern hemisphere. The longest day of the year, with 15 hours and 34 minutes of daylight at Halifax.
- 22 Jun.-1 Jul. The latest evenings of the year: the sun sets at 21:04 ADT.



– Sources: Atmospheric Env. Service, Climate Normals 1951-80 Hfx (Shearwater A) N.S.; BNS's 2003 Calendar.

SUNRISE AND SUNSET ON SPRING AND EARLY SUMMER SATURDAYS



1 Mar.	6:53	18:02	5 April	5:49	18:46
8 Mar.	6:40	18:11	12 April	6:36	19:55
15 Mar.	6:27	18:20	19 April	6:24	20:04
22 Mar.	6:15	18:29	26 April	6:13	20:13
29 Mar.	6:02	18:38			
3 May	6:02	20:21	7 June	5:30	20:57
10 May	5:53	20:30	14 June	5:28	21:01
17 May	5:45	20:38	21 June	5:29	21:03
24 May	5:38	20:45	28 June	5:31	21:04
31 May	5:33	20:52			

– 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, go to <<http://www.go.ednet.ns.ca/~bns/>>.

- 17 Mar. "Digiscoping Birds (i.e. photographing birds with a telescope and digital camera)", with Richard Stern.
- 15 Apr. "The Bees of Nova Scotia – Diversity of Groups and their Natural Histories", with Cory Sheffield, of the Kentville Agricultural Research Centre.
- 27 Apr. "Early Spring Birds of King's County", led by Jim Wolford, phone 542-9204.
- 19 May "Northern Bottlenose and Other Whales Inhabiting the Sable Gully and Other Marine Canyons on the Scotian Shelf" with Tonya Wimmer.
- 16 Jun. "Evening Tour of the Irving Project, the new Environmental Sciences Centre at Acadia University" led by Elaine & Don Hendricks.

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 pm between November 1 and March 30, and at either 9:00 pm or 10:00 pm (depending on when it gets dark) between April 1 and Oct. 31. For more info phone 496-8257; or go to <<http://apwww.stmarys.ca/bgo/>>.

Maritime Museum of the Atlantic: For more info phone 424-7490; or go to <<http://museum.gov.ns.ca/mma/>>.

- 25 Mar. "The Seabed of the Northwest Arm" with Gordon Fader, Geological Survey of Canada.

Nova Scotia Bird Society: Indoor meetings take place on the 4th Thursday of the month, October to May, at the NSMNH, 7:30 p.m. For more info phone Suzanne Borkowski, 445-2922; email <sborkowski@hfx.eastlink.ca>.

- 27 Mar. "Avian interactions with Wind Power Structures" with Becky Whittam, Bird Studies Canada.
- 29 Mar. "Baccaro and Blanche Peninsula", led by Donna Ensor, 875-4269; email <ensorg@auracom.com>.
- 12 Apr. "Martinique Beach", led by Ian McLaren, 429-7024; email <iamclar@is.dal.ca>.
- 24 Apr. "Warblers and Their Songs" with Cindy Staicer, Dalhousie University.
- 27 Apr. "Early Spring Birds of King's County", led by Jim Wolford, 542-9204; email <jww@ns.sympatico.ca>.
- 3 May "Cape Sable Island", led by Murray Newell, 745-3340; email <murcar@klis.com>.
- 4 May "Amherst Point Bird Sanctuary", led by Al Smith, 1-506-536-0164; email <alsmith@nbn.net.nb.ca>.
- 10 May "North American Migration Count", Judy Tufts, 542-7800; email <tandove@ns.sympatico.ca>.
- 16-19 May "Bon Portage Island", led by Claire Diggins, 825-6152; email <Claire_diggings@hotmail.com>.
- 17 May "Amherst Point Bird Sanctuary", led by Terry Paquet, 452-3622; email <terrypaquet@hotmail.com>.
- 18 May "Taylor Head Provincial Park", led by Karl Tay, 772-2287; email <swallowhollow2972@hotmail.com>.
- 19 May "Kejimikujik Seaside Adjunct", led by G. Hartlen and P. Davies, 354-7250 (Gary); email <garych@eastlink.ca>.
- 21 May "Halifax County Early Morning Warbler Walk", led by Fred Dobson, 852-3042; email <aseas@hfx.eastlink.ca>.
- 22 May "Parental Care and Paternity in Eastern Bluebirds", with Sue Meek.
- 24 May "Mountain & Marsh: Annapolis Royal/Belleisle", led by Sharon Hawboldt, 758-3265; email <s.hawboldt@ns.sympatico.ca>.
- 25 May "Shubenacadie Area", led by Roslyn McPhee, 758-3265.
- 31 May "Pennant Point", led by Hans Toom, 868-1862; email <htoom@hfx.eastlink.ca>.
- 31 May "Victoria County, Cape Breton", led by Bethsheila Kent, 295-1749; email <floydo@ns.sympatico.ca>.
- TBA June "Canso and Area", led by Randy Lauff, 867-2471; email <rlauff@stfx.ca>, and Steve Bushell.
- 7 June "Warbler Walk Cape Breton", led by David McCorquodale, 563-1260; <david_mccorquodale@uccb.ca>.
- 21 June "Dawn Chorus at Porters Lake", led by Cindy Staicer, 494-3533; email <cindy.staicer@dal.ca>.



Nova Scotia Museum of Natural History: For more info, 424-6099, 424-7353; or go to <<http://museum.gov.ns.ca/mnh/>>.

- 25 Mar. "Five Great Archaeological Mysteries", with David Christianson, NSMNH Archaeologist.
- 26 Mar. "The Beginning and End of the Dinosaurs", with Dr. Paul Olsen of Columbia University.
- 29 Mar. "Birds – From Beaks to Bellies", a Family Workshop with the Nova Scotia Bird Society.
- TBA Apr. "Annual Salamander Meander", led by John Gilhen. **Register by calling 424-3563, starting Mar. 20.**
- 2 Apr. "Dinner with the Corvids", with Patricia Cole of Dalhousie University. Co-sponsored by the N.S. Bird Society.
- 5 Apr.-8 Jun. "Magnesium: A Metal of the Future", An exhibit of a Quebec Mining and Mineralogical Museum.
- 9 Apr. "Ornamental Horticulture – Beautiful Gardens", with Alex Wilson, Manager of Interpretation at the NSMNH.
- 12-13 Apr. "Annual Orchid Show and Sale", presented by the Orchid Society of Nova Scotia.
- 16 Apr. "Rivers through Time: Earth's Ancient Landscapes", with geologist Dr. Martin Gibling, Dalhousie University.
- 23 Apr. "Diets and Birds: Their Ups and Downs", with David McCorquodale, UCCB. Co-sponsored by the N.S. Bird Society.
- 27 Apr. "A Gardener's Secret Weapon", with Phyllis Lasky and Glenn Munroe, New Ground Vermicomposting.
- 30 Apr. "Nutrition and Rehabilitating Baby Birds", with Hope Swinimer, Eastern Shore Wildlife Rehabilitation Centre.
- May-Sept. "Watercolours", an exhibition by Twila Robar-DeCoste, biologist-trained artist.
- 7 May "Mice on the Menu: ... Diets of Owls", with Randy Lauff. Co-sponsored by the Nova Scotia Bird Society.
- 11 May "Turtle Day", with the Blanding's Turtle Recovery Team Program.
- 17/18 May "Annual Rhododendron Show & Plant Sale", with the Rhododendron Society of Canada, Atlantic Region.
- 24/25 May "Nova Scotia Wildlife Carvers and Artists Association Competition and Show".
- 28 May " 'Tick' Talk: Bugs that 'Tick' You Off", with NSMNH zoologist Andrew Hebda.
- 1 Jun. "Happy Birthday to GUS", a garden party in honour of Gus, the Museum Turtle, who will be 81.
- 5 Jun.-Sept. "The Terrarium: an Interactive Installation", by textile artist Holly Carr.
- 7/8 Jun. "Museum Day Weekend".
- 7 Jun. "Reptile & Amphibian Annual Show and Tell", with the Nova Scotia Herpetoculture Society.
- 8 Jun. "Oceans Day".
- 11 Jun. "West Nile Virus – How to Protect Your Family", with Dr. Maureen Baikie, of the N. S. Department of Health.
- late Jun.-Sept. "The Butterfly Pavilion".



Nova Scotia Wild Flora Society: Meets 4th Monday of the month, September to May, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more info phone Marion Sensen, 422-8985, or go to <<http://www.chebucto.ns.ca/~nswfs/>>.

- 24 March "Spring Wildflowers".
- 28 April "Botanising in Newfoundland"; several members report on recent trips.

Photographic Guild of Nova Scotia: Meets 2nd Monday and 1st and 3rd Sundays of the month, at the NSMNH, 7:30 p.m. Shows are held at SMU, Theatre A, Burke Education Centre. For more info, go to <<http://www.chebucto.ns.ca/Recreation/PGNS/>>.

- 6 Apr. "N.S. Bird Society Competition", "Atlantic Geoscience Competition", followed by "Seminar: Waterfalls of Nova Scotia, with John William Webb".
- 26 Apr. Annual Spring Show.

Royal Astronomical Society of Canada (Halifax Chapter): Meets third Friday of each month at the NSMNH, 8:00 p.m. For more info, go to <<http://halifax.rasc.ca>> <<http://halifax.rasc.ca/>>.

– compiled by Patricia L. Chalmers

TIDE TABLE



April-avril

May-mai

June-juin

Day	Time	Feet	Metres	jour	heure	pieds	metres	Day	Time	Feet	Metres	jour	heure	pieds	metres	Day	Time	Feet	Metres	jour	heure	pieds	metres
1	0210	1.3	0.4	16	0140	0.3	0.1	1	0220	1.0	0.3	16	0210	-0.3	-0.1	1	0255	0.7	0.2	16	0335	0.0	0.0
TU	0755	5.6	1.7	WE	0730	6.2	1.9	TH	0810	5.2	1.6	FR	0800	5.9	1.8	SU	0905	5.2	1.6	MO	0930	5.9	1.8
MA	1420	1.0	0.3	ME	1355	0.3	0.1	TH	1420	1.3	0.4	FR	1425	0.7	0.2	SU	1500	2.0	0.6	MO	1600	1.3	0.4
	2015	5.9	1.8		1950	6.6	2.0	JE	2015	5.6	1.7	VE	2010	6.6	2.0	DI	2055	5.6	1.7	LU	2130	6.2	1.9
2	0245	1.0	0.3	17	0230	0.0	0.0	2	0250	1.0	0.3	17	0300	-0.3	-0.1	2	0330	0.7	0.2	17	0430	0.0	0.0
WE	0835	5.6	1.7	TH	0820	6.2	1.9	FR	0850	5.2	1.6	SA	0850	5.9	1.8	MO	0940	5.2	1.6	TU	1020	5.6	1.7
ME	1450	1.3	0.4	TH	1440	0.3	0.1	FR	1450	1.6	0.5	SA	1515	1.0	0.3	LU	1535	2.0	0.6	TU	1655	1.6	0.5
	2050	5.9	1.8	JE	2035	6.9	2.1	VE	2050	5.6	1.7	SA	2100	6.6	2.0		2135	5.6	1.7	MA	2225	5.9	1.8
3	0315	1.0	0.3	18	0320	0.0	0.0	3	0320	1.0	0.3	18	0355	-0.3	-0.1	3	0410	0.7	0.2	18	0520	0.3	0.1
TH	0910	5.6	1.7	FR	0910	6.2	1.9	SA	0925	5.2	1.6	SU	0945	5.9	1.8	TU	1020	5.2	1.6	WE	1110	5.6	1.7
JE	1515	1.3	0.4	FR	1535	0.7	0.2	SA	1515	1.6	0.5	SU	1615	1.3	0.4	MA	1620	2.0	0.6	WE	1755	1.6	0.5
	2120	5.9	1.8	VE	2120	6.6	2.0	SA	2120	5.6	1.7	DI	2150	6.2	1.9		2215	5.2	1.6	ME	2310	5.6	1.7
4	0345	1.0	0.3	19	0410	0.0	0.0	4	0350	1.0	0.3	19	0445	0.0	0.0	4	0455	1.0	0.3	19	0615	0.7	0.2
FR	0950	5.6	1.7	SA	0955	6.2	1.9	SU	1000	5.2	1.6	MO	1035	5.6	1.7	WE	1100	4.9	1.5	TH	1155	5.2	1.6
VE	1545	1.6	0.5	SA	1625	1.0	0.3	MO	1550	2.0	0.6	TU	1715	1.3	0.4	ME	1715	2.0	0.6	TH	1855	1.6	0.5
	2155	5.6	1.7	SA	2205	6.6	2.0	DI	2155	5.6	1.7	LU	2240	5.9	1.8		2255	5.2	1.6	JE			
5	0415	1.3	0.4	20	0505	0.3	0.1	5	0430	1.0	0.3	20	0545	0.3	0.1	5	0545	1.0	0.3	20	0000	5.2	1.6
SA	1025	5.2	1.6	SU	1045	5.9	1.8	MO	1040	4.9	1.5	TU	1125	5.6	1.7	TH	1140	4.9	1.5	FR	0705	1.0	0.3
SA	1610	1.6	0.5	SU	1730	1.3	0.4	MO	1630	2.0	0.6	LU	1820	1.6	0.5	JE	1815	2.0	0.6	FR	1245	5.2	1.6
	2225	5.6	1.7	DI	2255	6.2	1.9	LU	2230	5.2	1.6	MA	2330	5.6	1.7		2340	5.2	1.6	VE	1950	1.6	0.5
6	0450	1.3	0.4	21	0605	0.3	0.1	6	0510	1.3	0.4	21	0645	0.7	0.2	6	0640	1.0	0.3	21	0055	4.9	1.5
SU	1100	5.2	1.6	MO	1135	5.6	1.7	TU	1115	4.9	1.5	WE	1215	5.2	1.6	FR	1230	4.9	1.5	SA	0755	1.0	0.3
DI	1650	2.0	0.6	LU	1835	1.6	0.5	MA	1720	2.3	0.7	ME	1920	2.0	0.6	VE	1915	2.0	0.6	SA	1340	4.9	1.5
	2300	5.2	1.6		2345	5.6	1.7		2310	5.2	1.6								SA	2045	1.6	0.5	
7	0535	1.3	0.4	22	0705	0.7	0.2	7	0605	1.3	0.4	22	0020	5.2	1.6	7	0030	4.9	1.5	22	0150	4.6	1.4
MO	1135	4.9	1.5	TU	1230	5.2	1.6	WE	1200	4.9	1.5	TH	0740	1.0	0.3	SA	0735	1.0	0.3	22	0845	1.3	0.4
LU	1735	2.3	0.7	MA	1940	2.0	0.6	ME	1825	2.3	0.7	JE	1315	4.9	1.5	SA	1320	5.2	1.6	SU	1435	4.9	1.5
	2335	5.2	1.6						2355	4.9	1.5		2020	2.0	0.6		2015	1.6	0.5	DI	2135	1.6	0.5
8	0630	1.6	0.5	23	0040	5.2	1.6	8	0705	1.3	0.4	23	0120	4.9	1.5	8	0130	4.9	1.5	23	0255	4.6	1.4
TU	1220	4.6	1.4	WE	0805	1.0	0.3	TH	1245	4.6	1.4	FR	0835	1.0	0.3	SU	0825	1.0	0.3	23	0930	1.6	0.5
MA	1840	2.6	0.8	ME	1335	4.9	1.5	JE	1935	2.3	0.7	SA	1420	4.9	1.5	DI	1420	5.2	1.6	MO	1530	4.9	1.5
					2045	2.0	0.6					VE	2120	2.0	0.6		2115	1.3	0.4	LU	2225	1.6	0.5
9	0020	4.9	1.5	24	0145	4.9	1.5	9	0045	4.9	1.5	24	0230	4.6	1.4	9	0235	4.9	1.5	24	0405	4.6	1.4
WE	0730	1.6	0.5	TH	0905	1.0	0.3	FR	0800	1.3	0.4	SA	0930	1.3	0.4	MO	0920	1.0	0.3	24	1020	1.6	0.5
ME	1310	4.6	1.4	TH	1455	4.9	1.5	SA	1350	4.9	1.5	SA	1530	4.9	1.5	LU	1525	5.6	1.7	TU	1625	4.9	1.5
	1950	2.6	0.8	ME	2145	2.0	0.6	VE	2035	2.3	0.7	SA	2215	1.6	0.5		2210	1.0	0.3	MA	2310	1.3	0.4
10	0110	4.9	1.5	25	0300	4.6	1.4	10	0150	4.9	1.5	25	0345	4.6	1.4	10	0350	4.9	1.5	25	0505	4.6	1.4
TH	0830	1.6	0.5	FR	1005	1.3	0.4	SA	0855	1.3	0.4	SA	1020	1.3	0.4	TU	1015	1.0	0.3	25	1110	2.0	0.6
JE	1415	4.6	1.4	FR	1615	4.9	1.5	SA	1500	4.9	1.5	SU	1625	5.2	1.6	MA	1620	5.9	1.8	WE	1710	5.2	1.6
	2055	2.3	0.7	VE	2245	2.0	0.6	SA	2135	2.0	0.6	DI	2305	1.6	0.5		2305	0.7	0.2	ME	2355	1.3	0.4
11	0220	4.9	1.5	26	0420	4.9	1.5	11	0305	4.9	1.5	26	0450	4.6	1.4	11	0455	5.2	1.6	26	0555	4.6	1.4
FR	0930	1.3	0.4	SA	1100	1.3	0.4	SU	0950	1.0	0.3	MO	1110	1.3	0.4	WE	1115	1.0	0.3	26	1200	2.0	0.6
VE	1535	4.6	1.4	SA	1715	5.2	1.6	SA	1605	5.2	1.6	LU	1715	5.2	1.6	ME	1715	6.2	1.9	TH	1755	5.2	1.6
	2200	2.3	0.7	SA	2340	1.6	0.5	DI	2235	1.3	0.4	MA	2355	1.3	0.4					JE			
12	0335	4.9	1.5	27	0525	4.9	1.5	12	0420	4.9	1.5	27	0540	4.9	1.5	12	0005	0.3	0.1	27	0040	1.0	0.3
SA	1025	1.3	0.4	SU	1150	1.3	0.4	MO	1045	1.0	0.3	TU	1155	1.6	0.5	TH	0555	5.2	1.6	27	0640	4.9	1.5
SA	1645	4.9	1.5	SU	1755	5.2	1.6	MO	1700	5.6	1.7	MA	1755	5.2	1.6	SA	1215	1.0	0.3	FR	1245	2.0	0.6
	2300	1.6	0.5	DI				LU	2330	1.0	0.3					JE	1805	6.2	1.9	VE	1835	5.2	1.6
13	0450	5.2	1.6	28	0025	1.3	0.4	13	0520	5.2	1.6	28	0035	1.0	0.3	13	0100	0.0	0.0	28	0120	1.0	0.3
SU	1120	1.0	0.3	MO	0610	5.2	1.6	TU	1140	0.7	0.2	WE	0625	4.9	1.5	FR	0650	5.6	1.7	28	0720	4.9	1.5
DI	1735	5.6	1.7	LU	1235	1.3	0.4	MA	1745	6.2	1.9	ME	1240	1.6	0.5	SA	1315	1.0	0.3	SA	1325	2.0	0.6
	2355	1.3	0.4		1835	5.6	1.7					VE	1830	5.6	1.7		1900	6.2	1.9	SA	1915	5.6	1.7
14	0550	5.6	1.7	29	0110	1.3	0.4	14	0025	0.3	0.1	29	0115	1.0	0.3	14	0155	-0.3	-0.1	29	0155	0.7	0.2
MO	1215	0.7	0.2	TU	0655	5.2	1.6	WE	0615	5.6	1.7	TH	0705	4.9	1.5	SA	0745	5.6	1.7	29	0800	4.9	1.5
LU	1820	5.9	1.8	TU	1315	1.3	0.4	ME	1235	0.7	0.2	SA	1315	1.6	0.5	SA	1410	1.0	0.3	SU	1400	2.0	0.6
				MA	1910	5.6	1.																



Nature Notes

From 6 February Meeting:

Ursula Grigg comments that she saw the footprints of a leaping rat which was inspecting her bird feeder.

Joan Czapalay replied that there must be a new 'rat city' at the end of South Street – she has seen four dead rats at the corner of South and Oxford streets since Christmas.

Regine Maass has seen a Bald Eagle flying over the Northwest Arm in the morning.

Pat Chalmers says that her parents still have Northern Flying Squirrels at their feeders – they feed after dark.

Peter Payzant reported up to 50 Common Goldeneye in Rocky Lake, between Bedford and Waverley. On sunny warm days in the past month, he has seen what he takes to be Winter Crane Flies flying around.

Bob McDonald has deer coming to his bird feeders. They apparently like black oil sunflower seed. Linda Payzant has deer eating the buds off her azaleas.

! NEXT DEADLINE !

**21 May for June Issue
contributions to the Editor, HFN
c/o NS Museum of Natural History**