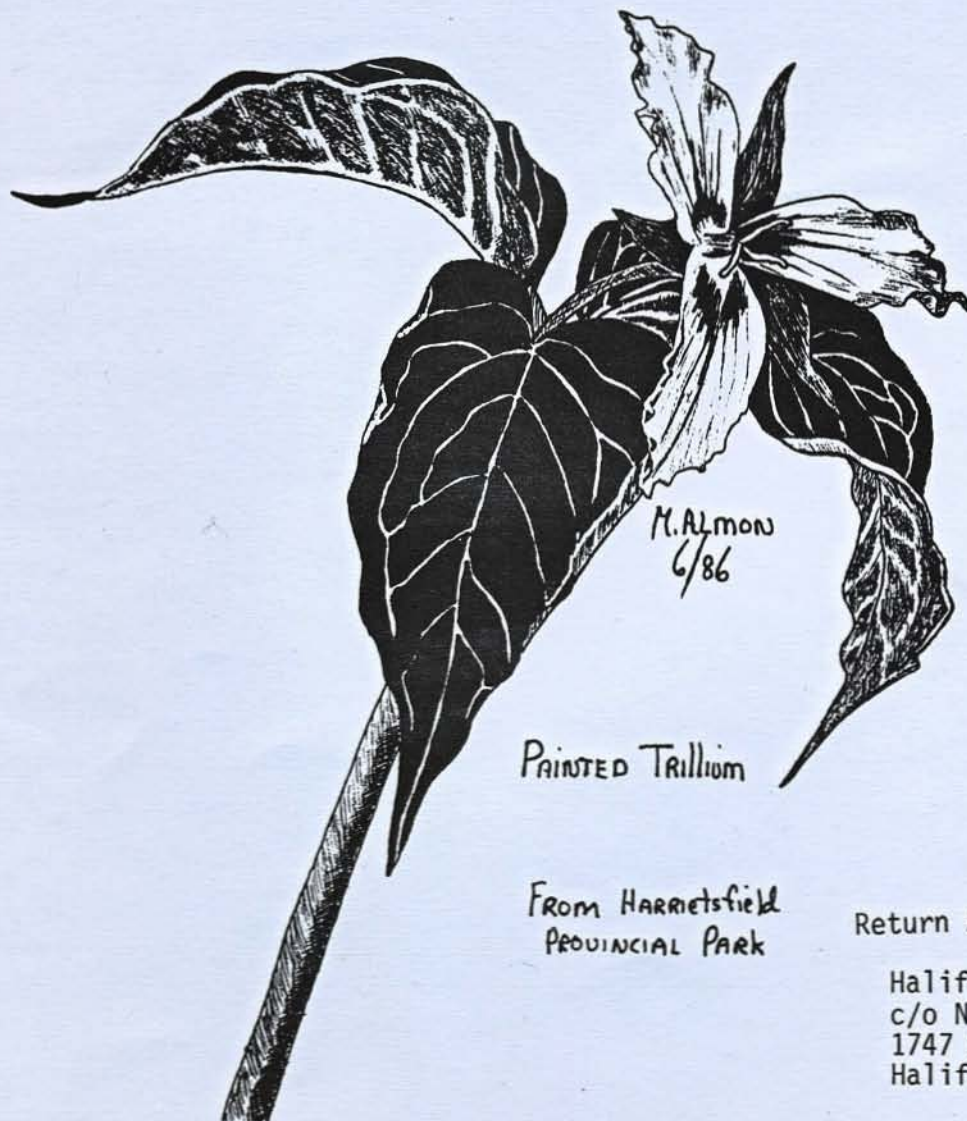


Halifax Field Naturalists Newsletter

MARCH-APRIL-MAY, 1987

No. 47



PAINTED TRILLIUM

FROM HARRIETSFIELD
PROVINCIAL PARK

Return Address:

Halifax Field Naturalists
c/o N.S. Museum
1747 Summer Street
Halifax, N.S., B3H 3A6

Halifax Field Naturalists

MARCH-APRIL-MAY, 1987.

No. 47

OBJECTIVES: 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: First THURSDAY of every month at 8.00 pm in the Auditorium of the Nova Scotia Museum, 1747 Summer Street, Halifax.

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.

MEMBERSHIP: Open to anyone interested in the natural history of Nova Scotia. Memberships are available at any meeting of the Society, or by writing to: MEMBERSHIP CHAIRMAN, HALIFAX FIELD NATURALISTS, c/o N.S. MUSEUM. Individual memberships ... \$7.00 per year
Family " ... \$10.00 " "
Sustaining " ... \$15.00 " "
This covers HFN fiscal year ... JANUARY 1 to DECEMBER 31.

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

EXECUTIVE
1986: President Michael Downing 823-2081
Treasurer Bernice Moores 422-5292
Secretary Leigh Mazany 455-8592
Past President . . . John van der Meer 455-1029
Membership John van der Meer 455-1029

DIRECTORS: Chris Corkett, Connie Eaton, Ursula Grigg, Stephanie Robertson,
1986: Clarence Stevens, Colin Stewart, John Strong, Judith Kennedy.

MAILING
ADDRESS: Halifax Field Naturalists,
c/o Nova Scotia Museum
1747 Summer Street, Halifax, N.S., B3H 3A6.

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John Strong

HFN NEWSLETTER is produced by courtesy of the Nova Scotia Museum
HFN is incorporated under the Nova Scotia Societies Act.
HFN is a member organisation of the Canadian Nature Federation.

Halifax Field Naturalists
Statement of Receipts and Expenditures
For the Year Ended December 31, 1986

	<u>1986</u>	<u>1985</u>
Receipts:		
Membership dues	\$ 1,475.00	\$ 1,233.00
Interest income	132.24	120.93
	<u>\$ 1,607.24</u>	<u>\$ 1,353.93</u>
Expenditures:		
Meeting expenses	\$ 105.03	\$ 180.53
Publications and stationery	254.84	214.38
Postage	660.06	472.46
Dues - Canadian Nature Federation	30.00	25.00
Donation - Canadian Nature Federation	25.00	25.00
Donation - Save South Moresby Fund	100.00	- -
Bank charges	63.30	48.88
Science Fair project	47.00	47.90
Framing gift to Filip Volckaert	45.93	- -
	<u>\$ 1,331.16</u>	<u>\$ 1,014.15</u>
Excess of receipts over disbursements	\$ 276.08	\$ 339.78
Surplus account balance at beginning of year	2,286.43	1,946.65
Surplus account balance at end of year	<u>\$ 2,562.51</u>	<u>\$ 2,286.43</u>
Consisting of:		
Petty cash	\$ 25.00	\$ 25.00
Cash in bank, December 31		
Current account	232.81	88.97
Savings account	2,304.70	2,172.46
	<u>\$ 2,562.51</u>	<u>\$ 2,286.43</u>

Signed *Barbara G. Keenan*
Treasurer

Accountant's Comments

I have prepared, with audit, the above Statement of Receipts and Disbursements of Halifax Field Naturalists for the year ended December 31, 1986 from the records of the Society and other information supplied to me by the Treasurer.

Chartered Accountant

Halifax, Nova Scotia
February 20, 1987

hfn news



REGIONAL HIGH SCHOOL SCIENCE FAIR ; WINNERS OF 1987 HFN PRIZES -

MARY JANE BURRIS, Gr.7, Musquodoboit Jr. High School for her project on The Den Stage of the Red Fox;

BEVERLEY HATTIE, J.H. Ilesley High School for her work on Cattails and Their Uses.

Both these young ladies have been invited to to make a short presentation of their project at an HFN monthly meeting; Beverley arranged to offer hers on May 7. Hopefully Mary Jane will also give a presentation a little later in the season.

HFN congratulates them both for their enterprising and interesting efforts.



WELCOME TO NEW AND RETURNING MEMBERS -

Heath Stone
D. & A. MacDougall
J. & S. Lynds
Megan Ardyche
Suzanne Young
Nancy Kariel
Karen J. Pett
Josee M. Donahoe
Susan Langille
Alan Millward
Sue Murdoch
Don Oxorn
Doris Balch
Lars Osberg
Mary E. Carr
Meredith Anderson
Joan Currie
Eleanor O'Donnell
Douglas Bowes
Helen L. Doolittle
Chris Medwell
Gordon Kent

POACHING -

Elsewhere in this newsletter is an item from Elaine Wallace on the subject of poaching in national parks.

Concern about poaching is not restricted to Cape Breton parks. Nova Scotia's Department of Lands and Forests is also concerned about fish and wildlife violations to the extent of calling for public help in reporting details of any Game Law violations witnessed.

The orange-coloured card enclosed with this newsletter shows how to make a helpful report. Should you wish to keep a few of these cards handy, they are available from John Strong, 477-1351, or an office of the Department of Lands and Forests.

BIRD BODIES -

Nova Scotia Museum's Education programs need new bird specimens to be mounted or prepared as study skins for school programs. Should you encounter cat or window kills, in reasonable shape, please pop them in a plastic bag in the freezer and drop them off at the NSM or to your nearest Museum to hold. Debby Burlison says that common birds are especially needed - the NSM has a pileated woodpecker but not a downy or hairy; neither do they have robin, chickadee or grosbeak. They are also in constant need of bird nests, owl pellets and other bird and animal artifacts.

OUR ANNUAL MEMORY-JOG -

This issue will be the last one sent to members who have not yet paid their dues for 1987; if you forgot to send in your cheque, DO IT NOW! Many thanks.

Bernice, our Treasurer, tells me that some enthusiasts have paid TWICE for 1987! If you are not sure whether or not you owe dues, check the upper right hand corner of the address label - it shows the latest paid-up year.

TRAILS FOR TOMORROW
C O N F E R E N C E

held in Halifax on
April 10,11,12,1987

with the assistance of: Department
of Lands and Forests and Department
of Culture, Recreation and Fitness.



by MICHAEL DOWNING - President, Halifax Field
Naturalists.

As president I represented the Halifax Field Naturalists at the recent Trails for Tomorrow conference, preparing a position paper and giving a short talk on the club's behalf. I feel I should report briefly on this to the membership. The position taken was as follows:

Our interest in the conference is three-fold. First, the central issue which must be addressed if there is to be an extensive network of public trails in the province is the same one which must be addressed if natural areas are to be widely preserved and kept open to the public, and indeed if land use in general is going to be guided by sound environmental principles - and that issue is our philosophy of private land ownership. Second, we want to protect our access to the trails we now use on our outings, and possibly get access to some more. Third, we want to ensure that trail development and management, now and in the future, does not in itself become a threat to the environment.

We feel that proclamation of the Trails Act, which provides a framework within which citizen groups could work out agreements with landowners to establish trails, would be a positive step in a good direction. We feel that most of Nova Scotia can carry pedestrian travel on trails without environmental degradation, if people are careful. We are concerned about higher impact modes of travel, especially power vehicles which leave wide noise swaths and chew up all but the hardest trail surfaces. Our greatest concern is the same as that of many landowners - the irresponsible and uncaring trail user, whatever his mode of travel.

In some cases we might go as far as to oppose the establishment of trails through particularly rare or sensitive environments to protect them from abuse. The HFN would be willing to participate as one of a number of groups in a wide-based movement to improve the trail situation in the province.

I pushed the above concern very hard, harder than some people wanted it pushed, because it is the fly which raises its head above the surface of the ointment whenever co-operative public use of any recreational resource is attempted. It goes without saying that public education is essential, but experience has shown that we also need effective ways of dealing with the people who won't respond to it. We've got to take an early interest in the inadequate policing problem, fines which are too low to make up the cost of obtaining convictions, financial responsibility of adults for the actions of their children, the campaign to outlaw non-returnable beverage containers, and the whole gamut of issues involved in the problem of effective enforcement of environmental responsibility.

I made a point of meeting with representatives of the Snowmobile Association of Nova Scotia during the conference, and found their attitude reasonable and co-operative. They claim to have succeeded in eliminating much of the irresponsible behaviour from their sport, but I have heard conversations among farmers and tree planters which would imply that they still have a long way to go. In any event, if there is a word to the wise to be heard

in their camp it is this: they have accomplished a great deal, and I am talking about a province-wide network of trails which will soon be completely interconnected, because they have mobilized much, much more organised volunteer effort than have the naturalists. Or the hikers. Or the canoeists. Or the skiers.....

I also offer the following very brief 'bottom line' report:

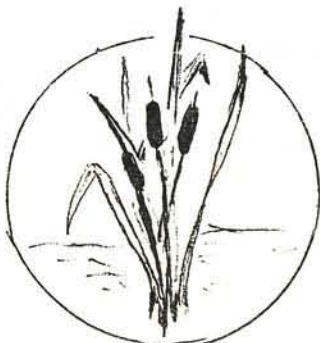
The Deputy Minister of Lands and Forests used the conference as a platform from which to announce a proposed review, pending cabinet approval, of provincial parks and recreational policy and legislation. This would include the Parks Act and the Trails Act.

The conference concluded with a series of structured discussions in small groups through which an attempt was made to generate a good list of problems and concerns associated with trails in Nova Scotia. A general feeling was expressed that the current situation is not satisfactory, and some sort of organised effort is needed to improve it.

The steering committee plans to invite all participants to attend a final meeting in several months. Proceedings of the conference will also be prepared and mailed out. It will then be up to that meeting to decide what, if anything, will be done next, and the steering committee will be dissolved.

Trails for Tomorrow attracted 75 paying participants. This met, but did not exceed expectations. The turnout of people who were not officers in some organisation directly involved with the conference was disappointing. We are in the black financially, with enough money left over to cover the cost of publishing the Proceedings and setting up the final meeting.

M.D.



by NANCY WITHERSPOON - a representative of Canadian Youth Hostelling and Nordic Ski associations of Nova Scotia

AWARENESS, EDUCATION & SELF-REGULATION were the values emphasized at the Trails for Tomorrow Conference held in Halifax from April 10-12, and sponsored by the Canadian Youth Hostelling Association-N.S., Nordic Ski - N.S., and the Halifax Field Naturalists

The Friday evening format included presentations by twelve government, non-government and private enterprise groups interested in trail development, and management. These groups represented skiers, hikers, canoeists, cyclists, trail riders, snowmobilers, landowners, park developers and lumber companies. Information on each group, their involvement in trails and their requirements and concerns were presented.

On Saturday morning the Provincial Department of Lands and Forests gave sessions describing the natural history of Nova Scotia; present-day trails and future developments and history; and an update of the Provincial Trails Act passed in 1978, but not yet proclaimed.

The afternoon included a wide range of presentations on specific trail developments and preservation issues. Cape Split is over-utilized and slowly being degraded. The abandoned railway lines in southwest Nova Scotia could be developed into a long-distance multi-use trail and a boost for local economies. The trail network adjacent to the hostel at Wentworth could be increased in extent; a user-pay system might help defray the costs. The snowmobile Association of Nova Scotia is interested in promoting the responsible nature of its members and the economic spin-off of their activities to local communities.

The two evening speakers were Mr. John Mullally, Deputy Minister of the N.S. Department of Lands and Forests and Mr. Doug Robertson, Executive Director of the Bruce Trail Association in Ontario. The former reassured the gathering that before

the fall his government would take steps to identify what was necessary to proceed towards proclamation of the Trails Act. The other speaker emphasized the importance of the co-operative community concept involving government, landowners and volunteers, in development and maintenance of trail systems such as the Bruce Trail. He also emphasized the importance of trail development as a more cost-effective type of recreational facility than the development of huge, expensive sports buildings.

The Sunday morning workshop session gave everyone the opportunity to voice opinions within groups. The first part divided participants into ski-ing, hiking, canoeing and mechanised user groups to describe the ideal trail for their particular individual activity and the feasible one for Nova Scotia. The second part sectioned people into issue groups including environment, government, legislation, conflicting use, lack of co-ordination, funding, promotion/education and use of private land. Each group was to identify problems and their solutions to having trail development become a reality, and what sort of organization could best deal with this process.

The conference showed participants the many similarities in their needs in terms of trail development, the benefits of working together in joint projects and the multiple use potential of most trails. Also that the problem area to be worked on included liability, protection for landowners, education of all trail users, particularly drivers of ATV's and 4-wheel drive vehicles, who - if careless - can give all users a bad name; and the passage of the Trails Act with its ensuing government support.

N.W.



NORDIC SKI
NOVA SCOTIA



CANADIAN
HOSTELLING
ASSOCIATION

by DOUG ROBERTSON - Exec. Director, Bruce Trail Association. Special guest speaker.

While dealing seriously with his topic, Doug delivered his address with a light and entertaining touch. Sharing his experiences and thoughts with us, he has offered us food for thought when dealing locally with our own NS trails system development problems.

Doug admits to "an incurable need to explore pathways" whenever encountered in rambles afield or in "endless shuffling" through his map collection -

"Although I'm from Ontario I hope you won't hold that against me...I hope you won't label me an 'expert' or some such thing. I am simply a naturalist, a Canadian who loves to ramble and experience the sights, sounds and smells of the cultural and natural history that lies waiting to be discovered all around me - to explore what has to be the most beautiful country in the world, in the best way imaginable: on foot. Moreover, I find that following trails wherever they may lead - and planning and building new trails so that others may share the experience - is just plain fun...

"I believe that trails do not - should not - exist simply for the purpose of getting from point 'A' to point 'B'. That's what roads and railways are for and...is what the earliest pathways in Canada were: means for early native peoples and pioneers to travel from village to village or to obtain food and trade goods. Today trails have other purposes, other ends.

"My own Bruce Trail in Ontario, winding some 700km between Niagara and Tobermory, for instance, was not built so people could simply walk from Brock's Monument to the tip of the Bruce Peninsula. There are plenty of very scenic roads for that. No, the Bruce Trail was built in response to an upwelling of public need - a need to preserve a part of southern Ontario's remnant natural landscape that was rapidly disappearing under the chain saw, plough and bulldozer.

"People of all ages, occupations and interests need personal contact with nature. We may not all need wilderness but we do need to feel with our own senses things other than concrete, steel and asphalt.

We need to seek out our natural roots, to follow the threads that tie...us to the soil, water and air - and fellow inhabitants of this earth. This is not a recreational matter, it is a deeply spiritual one, and I know that even the most hardened industrialist...the most dedicated urbanite, harbours this need. Scratch a logger or a fisherman, too, and I think you will find such a need, although the idea of hiking a trail to satisfy it may seem laughable...

"Another need for trails - the need to explore our land, to see things you've only seen in books or on television... In Ontario and B.C., trails are rapidly becoming a formal part of the tourist economy as travelling Canadians - and many others (from elsewhere) seek new ways to spend their vacations - and their money. Since most people are not hardened backpackers, they want places to eat, places to spend the night, and so on.

For example "along the Bruce Trail and ...other major trails in Ontario, totalling some 2100km, many local businesses have come to rely heavily on the hiking market, and a growing network of bed-and-breakfast establishments has sprung up - catering almost entirely to people exploring the trails. Local, regional and provincial tourism agencies now actively promote trails as part of their tourism programs.

"Yet another clear need for trails arises from the growing interest among all Canadians in better personal health and fitness. Survey after survey reveals that of all physical activities, walking is No.1 in benefit and popularity by a long shot. People walk: around the block, around the neighbourhood park and, increasingly, out along their favourite trail. There can be no disputing the value to individuals and society of having the best possible trail opportunities for the pursuit and encouragement of this very positive trend. The reductions in health care costs alone could, in the long term, be very substantial indeed.

"A final need for trails that I want to touch on concerns the concept of community...Many of you here are active volunteers in community groups of various

kinds...(which) all have one thing in common: they are an integral part of and reflect community values and goals. I have seen trail groups that are very much a part of this community fabric in their integration of trail building, management and use with many other community activities (i.e., scout/guide programs, school curricula, etc.). For such groups, establishing a trail and nurturing it over the years can provide the tangible, practical focus, the 'glue' that holds the group together, keeping it alive and successful.

"I hope this all convinces you that there are some clearly identifiable reasons for building a good trail system here in Nova Scotia. For many years, politicians and budget-makers have tended to see trails - nature trails, hiking trails, cross-country ski trails, horse trails, R.V. trails - as the lowest of priorities for purposes of funding assistance. Such views of trails as 'frills' have been rapidly changing in B.C. and Ontario, where trails and recreational corridors have been given official recognition in the B.C. Recreational Corridors System Plan of 1985, and Ontario's Niagara Escarpment Plan. In the latter, the Ontario government has been granting over \$50,000/yr to the Bruce Trail Association since 1980, and is about to increase the allocation of funds for land acquisition for the Bruce Trail from \$300,000/yr to something close to \$1,000,000 per year. That's what I call political commitment!

"Even in Nova Scotia...there is a strong case, business-wise, to be made for a strong provincial government involvement in developing a good trail system for the province.

"And building such a trail system needn't cost a lot of money...compared with the costs of building a new arena or other recreational complex, the price of a new trail to taxpayers is a very small investment. As for the comparative ongoing operation costs of such facilities vs. trails, well, there is simply no comparison.

"Trails can be dirt cheap to run and I'll tell you how: PARTNERSHIP IS THE KEY.

"As a volunteer group you can't do everything alone. Band together with

other groups of similar purpose and your strengths will be amplified, your weaknesses diminished...

"If volunteer groups are building trails for public use then governments, on behalf of the public, must have a role to play as well. In these times of tight money...even the most visionary of governments may be hard-pressed to allocate new money for trails, but...where there is a political will, there's a political way, and in Ontario we have spent a great deal of time developing sound, practical relationships with government officials and politicians at all levels and with other groups. We now have proven that good, cost-effective, and workable trail projects can be undertaken using the volunteer skills and labour of our trail groups and the organizational and planning structures of government with money provided by both parties...Business has a role to play, too. Many a footbridge, boardwalk, or overnight shelter has been built on the Bruce Trail using pressure-treated lumber donated by local businesses (in exchange for a tax receipt), brought to the site by government trucks driven by government staffers, and assembled by eager teams of volunteers. Everyone gets involved, everyone gets good publicity, everyone feels good.

"In the village of Tobermory...we will soon be establishing a summer office for the trail - located in a Parks Canada office (the building is owned by the local township council), employing a summer student whose wages will be paid by a summer employment program, with the assistance of Bruce Trail volunteers. Now, that's partnership.

..."Trails for Tomorrow concerns far more than footpaths though...if my comments a moment ago about partnership mean anything.

"What I said..about the need for trails applies to all kinds of trails and 'linear recreational facilities' (What a phrase!) People's demands for hiking, snowshoeing, skiing, canoeing, horseback riding, snowmobiling, trail biking and so on may suggest different interests and recreational values - but I believe they reflect the

the same fundamental needs I outlined earlier.

"A trail system for Nova Scotia...must be a reflection of this diversity in expression and particular community interests, yet...answer the basic needs I identified earlier. It must be achieved through the combined and co-operative efforts of all interest groups, of government and of business. To do otherwise - as I have seen in such efforts elsewhere in Canada will probably result in very slow progress and may even invite failure.

"Of all the partners in the trails game LANDOWNERS ARE...THE SINGLE MOST IMPORTANT GROUP. Without the support of landowners - and without giving them the support they need - not an inch of trail will be built on private land. And unless you have enough contiguous public land to assemble a good trail system a great deal of attention must be paid to this matter.

"In the Bruce Trail Association, a tremendous effort has gone into landowner relations. For the association landowners are crucial to the continued existence of the Trail - a fact that is reflected in the landowners being treated as 'family', virtually as a special class of member. Each landowner is recorded in the computerized membership files and each receives complimentary newsletter mailings, a free calendar, invitations to special landowner appreciation events, and so on. The Association's executive committee has a special post - Landowner Relations Director - and each of the nine Bruce Trail Clubs has at least one official responsible for maintaining frequent personal contact with local landowners.

" Believe me, it pays off, in terms of avoiding or correcting problems, keeping the Trail in good condition and keeping hikers happy.

"...legal...steps have been taken to address landowner concerns about liability. In Ontario, the Trespass to Property Act and Occupiers' Liability Act were passed in 1980, specifically to address this question. Now, a landowner who allows certain non-paying recreational activities on his land is afforded protection (subject to defined duties of care) in

the event that a 'recreationist' is injured while on the property. Now, the onus for safe conduct and proper behaviour has been shifted, appropriately enough, to the shoulders of those who walk, ski, or pursue other such recreation on private land.

"Trails for Tomorrow is proving to be a great start, a great FIRST STEP, toward a trail system for Nova Scotia. I hope what I have said here this evening has shown that you have NOT bitten off more than you can chew; what you propose to do has been done, and done successfully, elsewhere in Canada. And you can do it here too.

"I am one who believes that if you want something badly enough, if you honestly believe in the merits of your cause, you will succeed. If those among you who possess the requisite leadership skills now seize the opportunities opening before you, I have no doubt that you will see things begin to happen. Once the initial steps (the hardest ones) are behind you, the rest becomes easier. In fact, I find that a good idea, well executed, begins to develop a momentum all its own.

"You have much to look forward to and I wish you the best of luck. Thank you."

D.R.



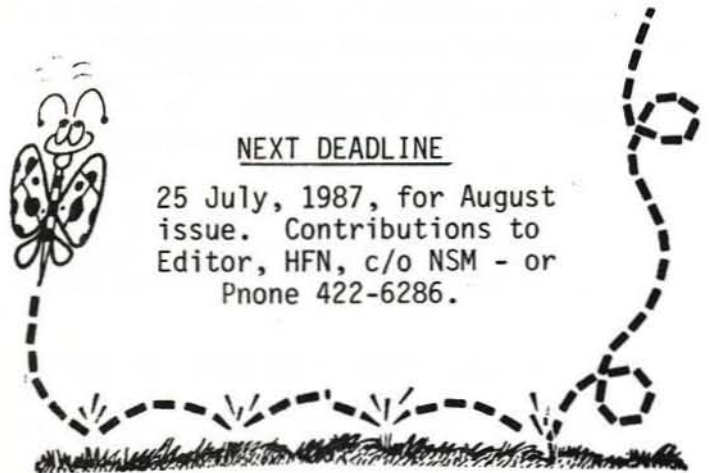
A Final Comment from the Editor - HFN
Newsletter -

Trails for Tomorrow proved successful - a weekend of hard work and application to the issues involved. We covered many aspects of trail development and also came away with a better idea of 'the other fellow's point of view'.

Many persons were involved in the organizing of the conference but a special Vote of Thanks should go to the staff members of the Departments of Lands and Forests and of Culture, Recreation and Fitness, whose expertise, hard work and tireless efforts did so much to ensure the success of the conference.

But now what? Not the time to rest on our laurels or keep patting ourselves on the back - now we have to get moving and work at solving the problems, coping with setbacks, sticking with it and so on..... Co-operatively.

D.E.B.



NEXT DEADLINE

25 July, 1987, for August issue. Contributions to Editor, HFN, c/o NSM - or Phone 422-6286.

notices



WILDLIFE '87 - GAINING MOMENTUM -

Participation in Wildlife '87 is gaining momentum all across the country. A year to acknowledge not only current and past endeavours but to promote conservation for the future, by working together to focus attention on wildlife and its habitats and protect our wildlife heritage.

The 16th Annual Canadian Nature Federation Conference is holding a special celebration this year, to take place at the University of Saskatchewan from June 5-8. Details available from:

CN Conference 1987, P.O. box 5094
Saskatoon, Sask., S7K 4E4.

Prince Edward Island has a very extensive program planned for the whole year. Details from: Judith Kennedy, N.S.-Museum. (phone: 429-4610).

Nova Scotia has some programs in place, others in the planning stage. They range from the ILLUSTRATED BIRD EXHIBIT, in the Museum foyer until May 31, to special events to take place in Environment Week. Highlights include the declaration of the TUSKET RIVER SITE as the first area designated under the Special Places Act of NS., and release of the newly produced NATURAL HISTORY ROAD MAP of significant natural areas around the province and giving general information on the natural history composition of the province. Both these events are planned to take place during Environment Week, at the N.S. Museum on Summer Street.

Other events planned for this year include: WILDLIFE INFORMATION CARDS in N.B. and N.S., for use by school kids. Produced jointly by N.B. Dept. of Natural Resources & Energy and N.S. Dept. of Lands & Forest and Education..... DECLARATION OF PROVINCIAL BIRD FOR N.S. - N.S. Bird Society is urging Lands & Forests to use Wildlife '87 to make this declaration..... HFN and the Bird Society to conduct BIOLOGICAL INVENTORIES OF CANDIDATE SPECIAL PLACE SITES, to assist the preliminary work required to officially declare them..... SALE OF BIRDSEED and FEEDERS to raise money for the Maritime Breeding Bird Atlas; a joint effort by HFN and the Bird Society (September??)..... Production of a BROCHURE ON BIRDWATCHING IN N.S., to attract out-of-province birders and increase awareness of N.S. residents of our avifauna..... NATURE BADGE WORKSHOP for Guides and Scouts; a chance for all troops and packs in the area to receive instruction in elements relating to their nature badges, from members of the HFN - COMPREHENSIVE PROTECTION PLAN for BREEDING PIPING PLOVERS at Conrad's Beach, Hfx., Co., (in conjunction with National Piping Plover Recovery Plan).. Establishment of an ANNUAL SCHOLARSHIP by the N.S. BIRD SOCIETY..... Running a WEEKLY SERIES OF "NATURE NOTES" in major newspapers, possibly on the children's page, following the example of PEI..... To raise public awareness, display on THREE ENDANGERED SPECIES found in NS., NSM, June 1987..... TELEVISION SHOW on the Maritime Breeding Bird Atlas on a local nature show - "Land and Sea".

For greater detail on any of the foregoing, call Judith Kennedy at the NSM, 429-4610.

ENVIRONMENT WEEK - May 30/June 6, 1987 -

Nova Scotia Museum has planned a varied program of events for Environment Week this year. Mark your calendar:-

7 pm. Wed. May 27 - City Rock Walk - a team of geologists from the Dept. of Mines and Surveys will show how nature's materials have contributed to the beauty of Downtown Halifax (note: "Been there; done that" - and found it a surprisingly informative and unusual walk - Ed.).

2 pm. Sun., May 31 - Meet Donald Curley, wilderness artist whose work is included in the foyer exhibit "The Illustrated Bird in Canada"; Mr. Curley will be in the foyer from 2-3 pm, then give a brief slide show on aspects of his work, and sign prints of the very limited number of his painting of a Canada goose which will be on sale on that day only.

7 pm. Mon., June 1 - Explore Urban Nature in Shubie Park.

7 pm. Tues. June 2 - spend an evening with Alex Wilson on an intriguing walk through "The Dingle".

7 pm. Wed. June 3 - Derek Davis, chief curator of NSM's Natural History Section, will lead a walk to Point Pleasant Park to explore plants, animals, flotsam and jetsam.

7 pm. Thurs. June 4 - join Joe Harvey to take a closer look at the fascinating mixture of woodland plants which have persisted along the Southend Railway Cutting.

4 pm - Fri. June 5 - Official Unveiling of the "Natural History Map of N.S.". This map is the result of the most complex and far-reaching natural history project ever undertaken by the NSM.; it will be an essential environmental tool for anyone interested in exploring the natural world of Nova Scotia; authored by Dr. Derek Davis, Chief Curator of NSM's Natural History Section.

7 pm. - Fri. June 5 - Pierre Taschereau will lead an interpretive walk along Hemlock Ravine.

7 am (note A.m.) - Sat. June 6 - Join Bob Dickie of the NS Bird Society for an early morning tramp through Warbler country.

10 am - Sat. June 6 - Bring the whole family and join Debbie Burleson, Chief Curator of NSM's Education Section, for an exploration of the seashore at Point Pleasant Park.

10 am to 4pm - Sat. June 6 - an all-day hike in Shubie Park - an urban wilderness setting

For complete information on the above ENVIRONMENT WEEK activities, please call Nova Scotia Museum No. 429-4610.

AROUND THE HIGHLANDS -

Crack-down on Poaching. No, nothing to do with eggs. This is an effort by government to deter game poaching especially in national parks. Previously the maximum fine of \$500 was no deterrent to the dedicated poacher who hunts in a national park to profit from easily obtainable game - or to see if he can 'get away with it'. In western parks where for example, a trophy bighorn sheep fetches \$50,000 on the black market, the \$500 fine is little more than a licence to poach.

In Nova Scotia poaching is mainly for meat rather than trophy-related, but remains a threat to wildlife in our parks.

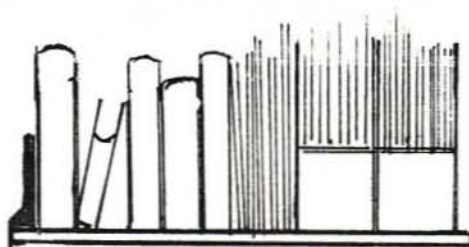
Changes underway in the National Park Act aim at giving Canada some of the world's toughest poaching laws. Fines for poaching most animals, including deer, hare and moose, would increase to a maximum of \$2000 per conviction. For specific trophy and endangered species, Environment Minister Tom McMillan proposes a maximum fine of \$150,000 with the option of imprisonment for up to six months. In the Atlantic Provinces the higher fine applies to two endangered birds..... the PEREGRINE FALCON and the PIPING PLOVER. Check the information table on HFN night for full details.

Elaine Wallace
Parks Canada, C.B.

Thinking of taking a fishing trip in Breton? The angling season for trout opened in Cape Breton Highlands National Park on April 15; The North Aspy and Cheticamp Rivers open for fly-fishing only, on May 17, and the Clyburn on June 14 - again, flyfishing only. To ensure adequate fish stocks, fishing in national parks is strictly regulated. Make sure you have your \$10 permit and a list of the rules. There is a copy of these rules on HFN's Library Shelf. Other Tit-bits from Cape Breton Post may be found on the information table at monthly HFN meetings, along with certain magazines, incoming newsletters and government 'bumph'. Please help yourself.

PLANNING TO GO TO P.E.I. THIS SUMMER?

Among programs laid on for this year in PEI provincial parks are two which sound interesting..... glass-covered bee-hives in small buildings at Cabot and Mill River parks, where one can observe bees in safety.....a Wildflower Garden Trail at Brudenell River park, with the services of a naturalist who conducts tours over the trail Wednesday through Sunday every week.



on the shelf

ON THE SHELF -

World Wildlife Fund 1986 Annual Report has been received and is on our library shelf in the NSM foyer. Very informative and beautifully illustrated.

Island Naturalist - surprising article on the PEI environmentalists' concerns about the degradation taking place in the Island woods, rivers, estuaries, agricultural land etc., and how they are working to develop a Conservation Strategy to reverse the damage.

St. John Naturalist Club requests that we 'enjoy loons at a distance' during breeding times; noise interferes with the delicate breeding cycle.

Blomidon Naturalists Society - a feature on the arctic breeding peregrine falcon, now at risk in its winter location due to the pesticides used in South America.

Catherine Traill Naturalists n/1 has much of interest ranging from the Far East to B.C.; decline of maples in Quebec due to acid rain; a Workshop on Toads; a digest on the life of Catherine Parr Trail the hardy pioneer who came to Canada in 1832 and while roughing it, raised a family and recorded her impressions of her new homeland.

Prince Edward Island: Island Naturalist - for those interested in wild edibles, the May-June 1986, #88, newsletter (just surfaced; I've no idea where it's been!) has an extensive article on "Imported Edibles" - roadside plants, native to other countries but which now grow wild in Canada.

ALL the incoming newsletters contain much of value and interest, and are well worth reading. Check at the NSM desk in the foyer.

field trips



BEGINNER'S BIRD WORKSHOP

Date: Saturday, March 21, 1987
Place: Nova Scotia Museum Auditorium
Weather: Rainy - out!
Leaders: Linda and Peter Payzant

Participants: 30 or so
 (sorry, I forgot to
 count. - K.K.)

This workshop was a wonderful review and continuation of last year's event. We are grateful to Linda and Peter for once again sharing with us their knowledge and time.

Content this year covered bird topography, a discussion of bird identification and then practise in our observation skills and memory for birds seen overhead on the screen.

We learned about the structure of field guides and found out that the listing of birds from beginning to end follows from the most primitive birds to the modern end of the spectrum. We practised with slides, identifying the birds by family (starting with four and building up to eight families) and then by species..... Did you know that the most common bird in Nova Scotia is the red-eyed vireo?

Towards the end there was a review of birding equipment. The National Geographic Society's Field Guide to the Birds of North America was recommended as the No. 1 guide available, followed by Roger Tory Peterson's Field Guide to the Birds East of the Rockies. Binoculars and telescopes were discussed briefly. A most valuable item for birders to carry is a basic notepad. It can be very helpful for jotting down the features noted in your bird encounter, prior to looking for it in the field guide. In addition you can keep a record of what birds you have seen.

Finally, we were encouraged to be active participants in assisting with the gathering of data for the Maritime Breeding Bird Atlas during the next four years.

Hope to see you in Lunenburg.
 Karen Kingston.



AN AFTERNOON ON McNAB'S ISLAND

Date: Sunday, February 8, 1987 Participants: 50!
Place: McNab's Island, Halifax Harbour
Weather: Cold, damp, overcast. (7° to -4.5°C; humidity 82/100%)
Leader: Murray Cunningham

Well, there we were, standing among the ten foot high snow banks, shifting from foot to foot, desperately making conversation in small, huddled groups, trying to keep warm. Would the ferry come? Had Captain John forgotten? Interesting field studies proliferated, such as 'beard-counting'. What relationship was there between the percentage of beards (there were 11/50) and the type of group we were?

The ferry did arrive, all freshly shovelled of its recent heavy load of ice and snow. Aboard we all clattered with cross-country skis, poles, binocs, some snowshoes, and hot drinks and food. A lot stayed in the cabin during the trip. They missed the great cormorants diving in the harbour.

However, closer in to McNab's, everyone emerged when four or five harbour seals were seen near a small cove. Two young seals were basking on the rocks, the adults diving and fishing nearby. Off we all clattered again, when the ferry docked. Along the wharf and up to the hut where we stored our various impedimenta.

The bird watchers hiked off to the light house. Roger Pocklington later reported having seen great black-backed, herring, ring-billed, 'white-wing' (Icelandic) and glaucous gulls. Eider ducks, three species of scoter, mergansers, loons and grebes were spotted just off the beach. Inland, both boreal and black-capped chickadees were seen. There were blue jays, but no greys.

The cross-country skiers and snowshoers soon parted into small groups and singles, according to speed of donning equipment, experience, and route taken. The main road to St. Ive's Fort was well-ploughed and rocky, and I winced every time I scraped forward on my son's fairly new skis. A necessary trip into the deep

undergrowth revealed snowshoe hare tracks and scat and an indignant blue jay. On and up to the fort, passing red squirrels looking for handouts, and avoiding sharp rocks whenever possible. Opposite problem at the fort! Snowshoes would have been ideal here!. Skis off for lunch, we slowly panted and stumped our way through the dense thigh-high snow to the top of the fort and a magnificent, if somewhat misty, view of the harbour and diving great cormorants.

It was here I discovered I had forgotten the hot drinks.

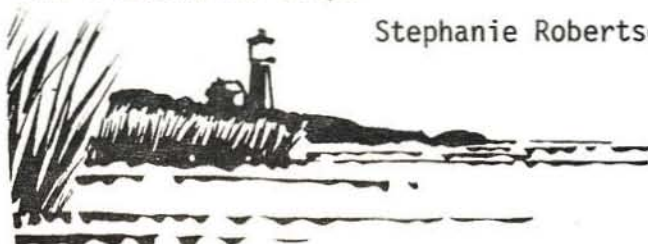
We donned skis again and poled our way inland through alder stands, past the old Lynch home, and through beautiful snow-clad woodland to Captain John's hand-built, granite and slate tearoom. On the way, in the old orchard below, was spotted one, alive, mosquito flitting about on the snow.

In the tearoom was a lovely hot fire and a steaming kettle, where we warmed our insides with hot tea, and steamed our hands and bottoms dry (there had been a few falls) by the wood-stove. Ten or twenty of the group finally made it here - one in a rather dramatic fashion. Skiing down to the tearoom through the bit of steep, wooded hill behind it, across the outside deck, he was stopped dead by a small snow-bank and catapulted straight forward on his nose, as if hinged to his skis at the toes. Luckily no harm was done and we all joined in the ensuing hysterical laughter.

Braving our way down a very steep road on our skis, we returned to the ferry and home.

Thank you from all of us HFNers, John for a wonderful trip.

Stephanie Robertson.



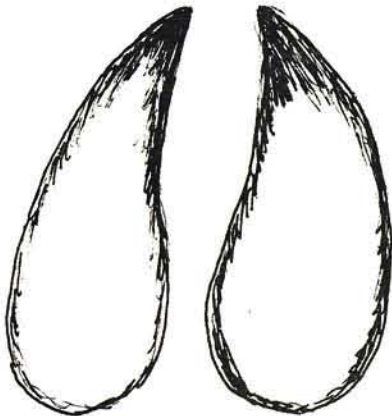
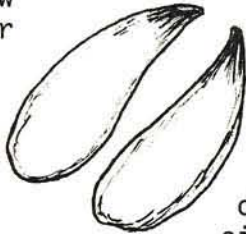
EXPLORING THE HARRIETSFIELD WOODSDate: Saturday, February 21, 1987Place: Harrietsfield, just outside HalifaxWeather: Sunny, -3°C.Leader: Ed ClaridgeParticipants: 13 adults
2 children

It was a perfect winter day, sunny, brisk and with lots of snow. Fortunately for most of us Regina Maass supplied snow shoes. I had never been on snow shoes before and enjoyed the experience very much.

The walk was arranged to instruct anyone interested in the identification of animal tracks and sign in the winter woods. Mr. Claridge, of the Nova Scotia Museum, not only gave us a great deal of information about the wildlife in the area, but much interesting information on the area itself.

The walk followed a triangular shaped course from the parking area, downhill through the wood to a river called the Ocean Run, along the river and back up to the parking area again.

The first tracks we saw were those of mice. The greatest number of tracks seen were those of deer and snowshoe hare. Mr. Claridge told us that snowshoe hare grow extra fur between their toes



during the winter.

They spread their toes when travelling over the snow, using the hind feet like a snowshoe and leaving a similar imprint.

When feeding from the young shoots of trees, the hare slices the branches off at a 45 degree angle, whereas deer grind the branches off bluntly. We saw how the snowshoe hare had eaten the bark from the lower branches and trunks of the bushes.

Higher up we saw where porcupines had, in several places, stripped the bark from the trunks of trees.

As we came upon the river we could see the tracks of a deer where it had crossed the snow-covered ice to the other side. Mr. Claridge pointed out how the hoof prints in the snow indicated the direction in which the animal was moving. He told us the tracks were fresh as indicated by snow the animal kicked up in passing, snow that was still lying on the surface surrounding the tracks, still not blown away by the wind.

Along the river we saw the tracks of mink and squirrels. There was also evidence of a woodpecker in the area. Flakes of bark littering the snow around the trees and the square shape of the holes in the tree trunks told the expert bird watchers with us that it was probably the black-backed, three-toed woodpecker. Indeed, a few members of the group who were alert and quick of foot were fortunate enough to see the woodpecker.

A short distance along the river it was time to stop for lunch. It was wonderful to sit in the sun, on top of the frozen river, and enjoy the fresh air and quiet beauty of our surroundings. Mr. Claridge lit a small fire for those wishing to warm their food or their toes. Before leaving the lunch site an Osprey nest was discovered in a nearby tree.

Starting off again the tracks of moose were found crossing the river. The size of the tracks and the depth to which they sank in the snow was quite amazing. With the eye of an expert, Mr. Claridge picked up several moose hairs which had fallen into the tracks.

A short distance after leaving the river, on the last part of our journey we crossed a fairly open area, covered with

brush more than trees. We were going uphill at this point and despite the low temperature it seemed quite warm.

We were soon back into the woods, where before long the path widened into what was once a highway. This highway had at one time, in the late 1800's, led to a farm. Along this old highway we saw the tracks of grouse in several places, and someone discovered what appeared to be a chickadee's nest in the trunk of a tree.

We had now arrived back at our starting point, having spent a very enjoyable three and a half hours in the woods behind Harrietsfield.

Madelyn Ruhloff.



A GEOLOGY WALK AT CHEBUCTO HEAD

Date: Sunday, March 8, 1987.

Place: The granite area at Chebucto Head, nr. Halifax.

Weather: Sunny, cold.

Leader: Geoffrey Chinn

Participants: 18 including 2 children.

On March 8th, Geoffrey Chinn led us to the granite area of rocks at Chebucto Head. There were two agile little boys in the group but for the most part the rocks were a little daunting for us older ones. There is a road to the cliff face about 1km south of the lighthouse beside the magnificent cliff-edge houses.

Granite is the underlying layer for much of this part of Nova Scotia. Dull, you might think, but no, it is fascinating, and very beautiful in the late winter sunshine.

At Chebucto Head the rocks consist of large slabs that show many features which tell of its molten pasta billion or so years ago. We presume it was the hot

centre of large mountains and the slow flow of this once-molten material shows many fascinating features. Xenoliths are islands, say, of slate buried in the granite. Joints are where two slabs of granite meet and fuse. Dykes are where one molten stream appears to have poured between fissures in another slab of granite. We saw flow branding where the liquid magma shows a settling of heavier elements as streaks of dark and light rock have separated. One such large feature I likened to a fossilized snake. There were phenocrysts (larger crystals of feldspar) that looked quite dramatic in the sunshine.

At this point we rested on a large flat rock and drank our tea, and out came the

binoculars. We spotted ducks - diving, floating and flying - but no whales. Our list is as follows, but its accuracy may be in some doubt despite a shared copy of Roger Tory Peterson..... Eider, cormorant, crow, herring gull, great black-backed gull, merganser, Canada goose, loon in winter plumage, and 2 bald eagles in Duncan's Cove.

Contributor Unknown.

On the March 8 geology walk to Duncan's Cove, one lone sea gooseberry was spotted in a tiny bay. It was alive because after being picked up to be shown to everyone, the heat from my hand really stimulated its five rows of cilia to move very rapidly. It looked like a grape made of window glass.

I thought at first that it was a salp, similar to those I saw about 12 years ago while I was scuba diving off Crystal Crescent Beach in early fall. There were thousands, some typically clumped together in a four-strand rope, some floating singly. These, though, had a purple area in their centre. The ones that clump are of the order Pyrosomida, of which there is but one genus, Pyrosoma, which inhabit warm tropical seas and are always colonial.

Derek Davis of the Nova Scotia Museum said they had been brought in by warm southern ocean current seaweed clumps, and that if we had looked more closely we might have seen tiny seahorses as well.

Stephanie Robertson.



sea gooseberry

HALIFAX FIELD NATURALISTS REPORT:
WORKSHOP IN P.R. & PROMOTION -

What is unique about the Halifax Field Naturalists?

What are the benefits of the HFN to you?

What are the Strengths and Weaknesses of HFN? What are the Threats to HFN?

MARKETING!! You may well ask - as I did myself - What has Marketing to do with the HFN?

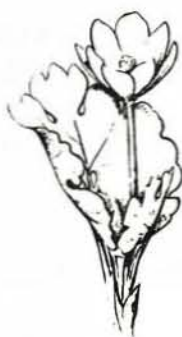
We became so absorbed and interested in the workshop, that it was over all too soon and most of us wished we could spend more time on the subject. We must now give some thought to finding answers to questions such as why are some programs more successful than others?..... what kind of things affect the success of our programs? what our competition has to offer and much, much more.

Trying to find answers to these and other questions concerning our organization is what seven members of HFN set out to do on Saturday, February 7, in the comfortable setting of the Board Room of the N.S. Museum. Together with R.A.N.S. instructor Bruce Holmes, our group spent three interesting and stimulating hours, discussing these and other issues to do with Membership, Publicity and Planning for the Future, in a workshop entitled "Promoting Your Group."

One thing upon which we were all in agreement was that the HFN does provide QUALITY programs. We do not necessarily need to change the programs, but we do need to look periodically at the changing requirements of potential and future users of what we have to offer. And this is one of the aspects of successful marketing - I think!?

Connie Eaton.

nature notes



.....On Easter Saturday (April 18), Mayflowers were spotted at Lesley Butters' cottage on the Medway River - one spray was in full bloom, masses of others in bud, showing pinky white tips; the Daphne shrub was also in bloom, and very fragrant - and after a shower of mild soft rain we heard a massed chorus of spring peepers.

.....Edna Staples saw the first bloodroot of the season near Smiley's Intervale on April 25.

Sanguinaria canadensis (Bloodroot)

BRIER ISLAND OCEAN STUDY UPDATE -

In July 1986 a party of 30 HFN'ers visited Brier Island and ventured out on a 'whale watch' run by Brier Island Whale and Seabird Cruises organized by Carl Haycock. Carl is also director of Brier Island Ocean Study (B.I.O.S), which is responsible for the scientific research on whales off Brier. A short report below outlines some recent research carried out by BIOS:

"Our 1986 field season was a major success in collecting research data from several species of cetaceans (whales, dolphins and porpoises) compiling more data than 1984 and 1985 put together. Our extended field season was a major contributing factor, and this was due mainly to the major success of the Brier Island Whale and Seabird Cruises - an attempt to accommodate the public on research and education-oriented safaris.

Due to much public interest we plan to continue our cruises, possibly expanding to three trips a day. We have also applied for non-profit, charitable status for BIOS so that the cruises will not have to totally support our research programs. This will also mean we will be more eligible for grants and private donations.

Our work has focused primarily on the seasonally returning populations of Finback, Humpback and Right whales. Through the identification of individual whales we conduct detailed studies of the demography, behaviour and social organization of this important part of the North American population. Our work with Humpback whales has proved to be instrumental in the coordination of studies of this species in the North Atlantic, especially in the Gulf of Maine (Cape Sable, N.S., to Cape Cod, Mass.) I am currently writing up a three-year compiled report on our findings on Humpbacks, which will be presented at the Western North Atlantic Marine Mammal Association Conference in March.

In summary, it is becoming increasingly apparent that the Brier Island area is a major feeding ground for Humpback whales in the Gulf of Maine substock. We have collected a catalogue of over 75 individuals, identified from fluke photographs. On many days in the month of August of '86 our data suggests that there was over 100 Humpbacks utilizing the area. Many individuals returned for the third consecutive year since we began collecting fluke data.

We have also recorded ten mother/calf pairs (Istar is the name of one female we observed in '85 and '86. She returned with her fifth documented calf in ten years). In all three years, August and September has been noted for large increases in Humpbacks, coinciding with the arrival of juvenile and spawn herring. Through fluke analysis we know that these animals are from Stellwagen Bank and Jeffrey's Ledge in the southern Gulf of Maine. This has led us to think that the Gulf stock does more late season foraging than was previously believed.

Humpback whales have survived for ten million years, overcoming changes in the climate and whaling, which has brought them close to extinction. In the last 20 years our involvement with Humpbacks has changed dramatically, from slaughtering them to benign scientific research.

During the last ten years we have learned much about Humpbacks and have answered many questions about their lives in the sea, but there are still many mysteries to be solved. Through field identification of individuals and patient observation we can strive to understand their lives and ensure their survival as a species.

For information on the Brier Island Ocean Study and whale and seabird cruises, contact:

Carl Haycock, Westport,
Digby Co., N.S., BOV 1H0

Ph.: 839-2995.

Cruises will begin on July 1st (possibly sooner) and run into October. "

Carl Haycock.

AROUND THE HIGHLANDS with ELAINE WALLACE

A Winter Visitor -

During the past winter the Cape Breton Highlands National Park staff working in the Operations Office adjacent to North Bay Beach in Ingonish had an unexpected visitor. She was seen daily, usually in the late afternoon, but sometimes in the early morning, particularly when the sun was shining. Tracks showed that she spent her nights in one of several small soft-wood thickets. There she was protected from the wind. Her daily ventures outside the thickets were to replenish her energy supply. That's when she was seen: browsing on apple, maple and birch trees around the park building. The visitor was a large female moose.

Last winter, many local residents in the communities down North had moose in their yards. Driven off the Highlands by deep snow and lack of food, they moved to the valleys and coastal areas. Even down there life is still a struggle and a challenge for these large magnificent animals. Park staffer Tim Reynolds wrote that the moose gave the parks staff an opportunity to watch how these animals survive winter's challenges.....



"It is quite remarkable to see the small area she is living in, but it has all the essential ingredients - good cover, plenty of food and not too much snow. Moose need these ingredients all contained within a small area in order to survive the winter months.

"Environmental factors are not the only elements important for moose survival. The animals themselves undergo major changes in the way they behave. Our moose demonstrates these clearly. She doesn't move around very much and when she does her movements are slow, methodical and with a purpose, such as to obtain food or find a sunny spot to lie in. Her metabolic rate has slowed down considerably from the much more active summer and fall periods. Her tolerance of humans is much greater - she is living within a community - something she would never do during the other parts of the year. All these factors ensure that the animal will not use up all its energy reserves.

"Although moose are able to store some energy in the form of fat, they must continue to acquire energy throughout the winter in order to survive. In Banfield's Mammals of Canada, the stated food requirements for these animals is approximately five pounds of browse per one hundredweight of animal. For 'our moose' this corresponds to a large number of apple, birch and maple branches. In addition, these animals also acquire energy directly from the sun, much the same way we do sunbathing.

"Significant human contact or being chased by dogs can disturb the moose and tip the animal's energy balance against it, thus it is important not to disturb these animals. Although it may be unsettling for many of us to share our community with them, they require the space as much as we do to survive. As spring arrives and the snow disappears they will wander back up into the Highlands.

Tim Reynolds

The Windiest Place -

It's one thing to brag about 200 km/hr winds to tourists - it's quite another to live with them.

Every fall and early winter, gale force winds shake the western Cape Breton coast. Blowing from the southeast, these 'suetes' are warm winds which often bring rain and thawing temperatures. Curtains of water are lifted from the Gulf and slapped down hundreds of metres further along. Snow from drifts dances all over the road, blinding vehicle drivers.

The storm path covers the lowland coast between Margaree and Pleasant Bay, as well as the plateau itself. The villages of Grand Etang and St. Joseph du Moine suffer particularly badly. Trees on the plateau are stunted.

Twice last winter (1986-87) such windstorms struck the Cheticamp area. During the first, 200 km/hr winds tore down one of my neighbour's barns. A friend's pickup truck lifted from the road and flipped into the ditch. During the second, houses shook and cars swayed, but damages were less extensive.



Why do these winds strike the western coast of Cape Breton but not the east? Air pressure and temperature differences (gradients) cause moderate winds arriving via Ross Ferry-Baddeck to gather force over the highlands and to pour down onto the western coastal lowlands. You can hear the wind roaring in the mountains even before you can feel it.

Every resident has his own personal tale: the satellite dish that blew down; the snow porch that detached from the house; the window that shattered.

At the turn of the century about 200 telephone poles were knocked over. A number of years ago school children were delighted to find part of the old Cheticamp school roof in the harbour.

People 'from away' might have trouble imagining living where at times you can't walk outside or open the door; where siding and shingles rip off houses; and where cars flip off the road.

But for the people of the area, it's an accepted part of life. As a storm approaches, people hurry home. During the fiercest winds you just stay put. Houses are built more sturdily, larger windows don't face the southeast. Camper trailers are stored in the lee of your house. Otherwise - life just goes on.

THE TUSKET RIVER VALLEY ENDANGERED

FLORA

All-terrain vehicles (ATVs) might have a promising future in Nova Scotia but their unrestricted use is threatening rare and endangered plant species in the Tusket River Valley on the province's southwest coast.

The Pink coreopsis and the Plymouth gentian, found in Canada only on the Atlantic coastal plain, are among a number of plants which have taken a beating from these recreational vehicles.

With funds from the World Wildlife Fund and the Canadian National Sportsmen's Shows, Dr. Paul Keddy, a biologist with the University of Ottawa*, is investigating whether these endangered plants are able to regenerate themselves from buried seed reserves following their destruction by ATVs.

Located on the shores of lakes found in the Tusket River Valley, the plants are highly susceptible to damage from human trampling and ATV use. "The soil on these lakes is very infertile which makes it difficult for the damaged plants to recover because of their slow rate of growth," Paul says. Unlike most other Nova Scotia lakeshores, those of the Tusket River Valley are largely composed of sand or gravel and free of heavy organic deposits.

Destruction from ATV use is not the only problem facing coastal plain plant species. Cottage and hydro-electric developments also pose a serious threat. Plants such as the Plymouth gentian and Pink coreopsis depend on natural water level patterns for their survival. Hydro-electric projects change the seasonal water levels of the inland lakes in the Tusket River Valley destroying the shoreline vegetation.

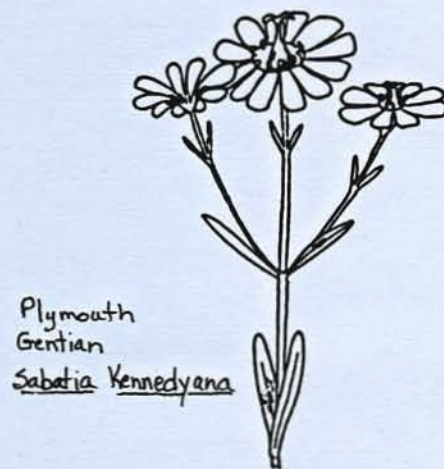
Cottage developments have led to the bulldozing and levelling of much of the habitats of the endangered plants.

*Paul Keddy, PhD, was a founding member of Halifax Field Naturalists, and always a 'nature nut'. He did his graduate work in biology at Dalhousie University.

"Increased awareness of the coastal plain flora would make cottagers more likely to use conservation techniques when building," says Paul. "This would minimize damage to the natural environment."

The Tusket River Valley has been referred to as "Canada's Cape Cod" because of its similarities to the famous coastal area in the United States. Nova Scotia's coastal plains are unique to Canada and steps must be taken to protect them from further environmental damage. This region is a picturesque area of Ice Age glacial deposits tens of thousands of years old and of marshy inland lakes with rocky shorelines which together make it an ideal environment for certain species of wild flowers. For the Pink coreopsis and the Plymouth gentian it is the only environment in all of Canada that will support them.

(Abstracted from a news article by Dave Ardhill, World Wildlife Fund).



A new fact which has emerged as a result of Paul's study is the Plymouth gentian's evergreen characteristic. Looking more like a tropical or a delicate garden flower than a needled shrub, the Plymouth gentian nevertheless is an evergreen, a fact which Paul's assistant, graduate student Irene Wisheu, discovered on an early spring field trip to the area when she spotted small but strong and green foliage poking its way out of the melting snow.