HALIFAX FIELD NATURALISTS' NEWSLETTER

March to May 1994

No. 74





Return address: Halifax Field Naturalists c/o Nova Scotia Museum 1747 Summer Street Halifax, NS B3H 3A6

HALIFAX • FIELD • NATURALISTS

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. On the first Thursday of every month at 8:00 pm in the auditorium of the Nova Scotia Museum of Natural History, 1747 Meetings Summer Street, Halifax. Are held at least once a month, and it is appreciated if those travelling in someone else's car share the cost **Field Trips** of the gas. 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 September 1 will be valid until the end of the following membership year. The regular membership year is from January 1 to December 31. Members receive the HFN Newsletter and notices of all meetings, field trips, and special programmes. The fees are as follows: Individual\$10.00 per year Family\$15.00 per year Supporting\$20.00 per year FNSN (opt.).....\$5.00 per year Executive 1994 Directors Patricia Chalmers, Ursula Grigg, Bob McDonald, Bernice Moores, John Newbery, Mary Primrose, Bonnie Saxton, Cathy Strugnell Mailing Halifax Field Naturalists Address c/o Nova Scotia Museum of Natural History 1747 Summer St., Halifax Nova Scotia **B3H 3A6** Committees Charlotte Lundgren Cathy Strugnell Newsletter Patricia Chalmers422-3970 HFN is incorporated under the Nova Scotia Societies Act and is a member organization of the Federation of Nova /scotia Naturalists

and of the Canadian Nature Federation. It is registered for federal income tax purposes. Official receipts will be issued for individual and corporate gifts.

This Issue (No. 74): p. 11 - tide table courtesy Dept. of Transport;; other illustrations from copyright-free sources. Illustrations



HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

HFN has a new President, Roy John. So Colin Stewart becomes Past President, and former Past President Michael Downing has retired from the Board, but promises to go on helping to sell HFN pins and Hastinotes! The new list of Officers and Directors is on page 2.

This is an historic change for several reasons. Colin is one of the few early members of the Halifax Field Naturalists to remain in Nova Scotia. Always active in the Club, but leaning towards conservation as much as to plant ecology, he has shown us, who were happily occupied with looking at wildlife, how close we are to losing our natural world.

Colin and Michael led the initiative to establish the Federation of Nova Scotia Naturalists, which gives a formal voice to clubs and individuals in dealing with governments, and promotes communication between regional associations of naturalists. Michael is currently President of FNSN, while Colin is involved in the national Endangered Spaces campaign.

The change-over comes at a time when the Federation is maturing, and HFN is returning to its natural history bent. And our new President Roy John comes from the Ottawa Field-Naturalists Club, traditionally dedicated to field work. He is an active and enthusiastic general-purpose naturalist, however much his feathers may have misled us!

So a heart-felt "Thank you!" to Colin and Michael, (thank goodness they will still be around to consult), and "Welcome!" to Roy John.

Thanks to everyone who has contributed to this Newsletter, as authors and otherwise, and please keep on writing!

Ursula Grigg

FNSN ANNUAL GENERAL MEETING: Dates: 17-19 June Place: Antigonish

Hosts: Eastern Mainland Naturalists Exciting programme, mostly outdoors Contact: Colin Stewart, 466-7168

1994 DUES - REMINDER!

1994 dues are past due! The money can be sent to the Membership Secretary, Shirley van Nostrand, at the Museum, or given to her at meetings. Thanks to members who have already renewed!

VOLUNTEERS, QUICKLY!

Would you like to:

Watch lakes and skies for loons? Phone Roy John, 466-7168

Monitor Spring Peepers? Phone 424-3563, leave a message at the sound of the peep

Help with the CNF conference? Phone Brian Yates, 429-0410

Protect Piping Plovers? Phone Cathy Strugnell, 835-8289

WELCOME TO NEW AND RETURNING MEMBERS

Philip and Necia Amys Harry and Lily Beach Gregory and Sandy Crosby Giselle D'Entremont Barbara Glover John and Cathy Grantmyre Marjory Hanson Kelly Kristin Eleanor Lindsay John and Sophie McKay Minga O'Brien Barry and Jean Sawyer Donna Smith Donald H. Stewart Linda van Vulpen



CONTENTS

Special Reportsp.	4
Special Articlesp.	6
Almanacp.	9
Tide Table: January to Marchp.	11

SPECIAL REPORTS:

THE 1993 PIPING PLOVER GUARDIAN PROGRAMME

1993's Piping Plover Guardian Programme was a mixed success. It started late, and suffered from misunderstandings. Finally, however, we had a strong, well trained volunteer corps working with the public to protect plover nesting sites on beaches in all four Atlantic provinces.

The programme was again supported by the the Environmental Partners Fund, which included money for a part-time administrative assistant. I was appointed, for a variety of tasks including budgeting, and supplying materials, resources and newsletters.to the various teams. I also had to keep in touch with all levels of volunteers and administrators, talk to the media, collect and keep records, and mail out letters and Christmas cards. I must say I enjoyed the position, especially getting to know so many people involved with the programme!

We provided uniforms and signs for the beach teams (signs in both English and French for New Brunswick this year), and paid mailing charges, and costs of a volunteer newsletter edited by Etta Parker. The newsletter was heartily received by all, and Etta deserves an accolade for a job well done, sometimes under difficulties!

Media coverage was extensive in all four provinces. We gained national coverage when a pair of plovers nesting in Summerville, Nova Scotia, decided that a parking lot was to their liking. Sadly, we lost all four chicks from that nest, but all of Canada was touched by their story.

Volunteers were trained in various places; Colin Stewart and Stephen Flemming held one session at the Nova Scotia Museum of Natural History, others were led by local Department of Natural Resources people.

We had 56 beach volunteers, on 29 Nova Scotia beaches, of which only 14 had breeding plovers, with a total of 25 nests and 35 chicks fledging - a ratio of 1.4 chicks per pair, down from the previous year's ratio of 1.6. Many nests were washed out all over the province by storms, but the main cause of chick loss was predation. The patrolled Nova Scotia beaches with nesting plovers were: Clam Harbour, Conrads Island, Bowen Island, Big Island, Roaring Bull Point, Mahoney's Beach, Pomquet, Glace Bay Bar, Cherry Hill, Summerville, Beach Meadows, Ragged Harbour, Port Jolie, and Sandy Bay.

In addition, several students hired by DNR checked out beaches in Pictou and Antigonish Counties, and Carina Gjerdrum, a student, did a survey on several beaches in the counties of Queens and Lunenberg, on plover feeding behaviour. Kedji Adjunct also had 3 nests ; 1 chick fledged. Carter's Beach, Lunenburg County, unprotected because of its private ownership, had 1 nesting pair; 3 eggs hatched and all 3 chicks fledged! Hmmm...

In PEI, 18 volunteers covered 10 beaches, of which 4 had a total of 6 pairs; 3 chicks fledged. PEI National Park had several pairs nesting, and a few fledgelings. Rachel Gautreau, a student under Stephen, studied plovers on PEI. Late spring storms washed out many nestsl.

We protected 3 beaches in New Brunswick, 2 of them in National Parks. Unfortunately, we lost one adult bird to an avian predator, presumably a Peregrine Falcon, so Waterside Beach had no pairs nesting. Kouchibouguac Park had 17 nesting pairs but only 4 fledgelings, (0.25 per pair). However, Escuminac Beach had 2 pairs and a superb number of 6 chicks. In this province there were 15 volunteers working with the National Park employees.

Newfoundland joined the programme in 1993, protecting 3 beaches near Burgeo and Port Aux Basques. 11 volunteers counted 5 nesting pairs and 5 chicks fledging. Plans are under way to extend the programme in Newfoundland in 1994, and to improve public awareness of this tiny special bird.

The 1994 programme will have an early start, and as always, is looking for volunteers. Many people already with us are members of naturalist groups throughout Atlantic Canada, and several Nova Scotia Bird Society members are active in this province.



I encourage the membership of HFN to consider volunteering in 1994, and to recruit friends and relatives as well. All we ask is 20 hours of your time on the beach, plus some training and travel time. You will receive a beautiful T-shirt and cap, and resource material for distribution to the public.

Give Colin (466-7168) or me (835-8289) a call; we need you to help preserve this endangered shorebird! Thanks to all who were involved in 1993 and let's keep up the good work we are doing, in 1994!

Catherine Strugnell, January 1994



THE CANADIAN NATURE FEDERATION ANNUAL CONFERENCE

It has been twenty years since the Canadian Nature Federation held its Annual Conference in Nova Scotia, and there are some of you who were involved in hosting and planning that Conference. Now the plans for the 23rd Conference, to be hosted by the Halifax Field Naturalists, are coming together. The dates are August 4-7, 1994, and the venue will be Mount Saint Vincent University.

The organising committee, composed of members of the HFN, the N. S. Bird Society and the N.S. Wild Flora Society, has been busy on many fronts. A two-day symposium has been arranged around our theme "A Journey from Forest to Sea," highlighting the Cape Breton Highlands, the Acadian forest, the Atlantic Coastal Plain flora, the seashore and our offshore islands. There is also a one day meeting on national conservation issues, an innovation. Our field trips committee has been particularly busy; 22 field trips have been arranged including 4day tours around south-west Nova Scotia (preconference) and Cape Breton (post-conference), and shorter trips to Brier Island for birds, whales and rare plants, the Fundy shore for shorebirds and Pearl Island for pelagic birds.

Social events have not been forgotten. A Thursday evening wine and cheese reception, a Friday evening seafood feast and harbour cruise and the traditional Saturday evening CNF awards banquet are all being planned. We anticipate having several special guests present at these functions!

Several of the planning committee attended the 1993 conference at Vernon, B.C., partly to advertise the Halifax conference. From the enthusiastic reception we received, we anticipate having lots of delegates from Western Canada and Ontario. However, the success of the Conference will hinge on local participation, so we invite all HFN members to register. Whatever your special interests, we have an excellent selection of trips to many of Nova Scotia's wealth of natural habitats, which should add species to your life lists.

We still need more volunteers willing to give their services to ensure the success of the Conference; leaders, drivers and helpers are all required to help with the various programmes, pick up and deliver registrants travelling by air, work at the registration tables, collect tickets and so on. Any and all offers of assistance will be gratefully accepted - please contact me at 443-5051 (h), or 457-6263 (w).

For further information about the Conference, please contact Peter Payzant, Conference Registrar, P.O.Box 2, Waverley, N.S., BON 2S0; phone: 861-1607. A registration kit is included with this newsletter. See you at the Conference!

> Bob McDonald CNF '94 Conference Committee



SPECIAL ARTICLES

THE ABC'S OF COMPOSTING FOR GARDENS

Compost can be described as ANY organic material that has decomposed as a result of bacterial action. Gardeners usually control this process by placing the material either in a 'bin' or a 'pile' and mixing the organics. Mixing adds air and sunlight to an aerobic (with air) compost. An anaerobic compost is simply described as "without air."

We will deal with aerobic.

Compost piles can be either 'hot' or 'cold.' Cold are generally in the shade, not too big and are mixed infrequently. Biodynamic gardeners use this method. Hot aerobic piles or bins will steam when opened up. The heat is caused by the activity of the bacteria and temperatures internally should reach 140 to 170 degrees F. If it steams good and is hot to the touch, I consider it working well.

Any organic will compost. Some faster than others; squashed strawberries in a few days and pineknots in a hundred years. The best mix probably would contain one part high Nitrogen, such as fresh lawn clippings, 'just pulled' weeds, spoiled tomatoes, peelings or fresh barnyard manure, to 30 parts high Carbon such as old hay, leaves (dry), dry plant stems, sawdust or shredded newspapers. Moisture must be evident. Too dry and your bacteria just won't work, too wet and the anaerobic guys will make up the workforce.

Most composters don't use meat or fish in their composts. This is because usually they 'read' it somewhere or somebody said you can't. Well you can!!! In fact, meat and fish are a great source of Nitrogen. The problem, if you consider it a problem, is that some larger forms of 'bacteria' want to get in on the act. Resourceful gardeners can handle these 'problems.' I found that chickens ate any flies that hatched and any fish tails that I didn't get covered. The rooster chased away any crows looking for a lunch, and the owl was on duty at night for rats! Compost is a soil amendment and if you feed your soil a good compost, it in turn will feed your plants.

Jim Purdy (From TREPA, Spring 1994)

THE ELECTRICITY - WHO NEEDS IT?

The incinerator is called a "waste-to-energy" facility. That is, it will burn garbage to generate electricity. This makes no sense. In the first place, more energy can be saved by recycling materials than can be generated by burning them. In the second place, the reason can't be to add to electricity supply. Nova Scotia Power already has an excess of power supply. We have more capacity to generate electricity than we need in Nova Scotia, and there is virtually no growth in demand. This has been acknowledged by Nova Scotia Power and by the Utility and Review Board, which regulates NS Power. The Metropolitan Authority claims that its plant will "replace electricity generated by fossil fuel" but is that really the case? Nova Scotia Power has not announced plans to close any other plants to make room for the incinerator. If such plans exist, we will be burning garbage to put coal miners in Cape Breton out of work. Burning fossil fuel is certainly an environmental problem, but making a choice like that has to be the subject of public debate, not decided just by implication. This incinerator doesn't solve a problem, it creates one.

(Thanks to TREPA, which found it first.)

"Wasting Opportunities," January 1994



THE FROG

What a wonderful bird the frog are -When he sit, he stand almost; When he hop, he fly almost. He ain't got no sense hardly; He ain't got no tail hardly either. When he sit, he sit on what he ain't got - almost.

MORE ABOUT FEATHERS

Last time I wrote about the colours of feathers and how they are formed. This time I want to start with feathers that really do not have much colour at all, the down feathers.

All feathers are built on the same pattern: there is the rachis, the stiff spine down the centre, and the barbules, which stick out of each side of it. In flight feathers and the contour feathers which cover the bird's body, the barbules are stiff and interlock, but in the down feathers, the barbules are separate, very soft, pliable and - well - downy. These barbules spring out to trap air and provide excellent insulation.

The most famous down feathers come from the Common Eider Duck. Many of us wear warm parkas filled with eider down. This material is collected at the early stages of nesting. The duck replaces the lost down with little inconvenience to herself and no loss to her chicks. Old coats often develop leaks and give us an opportunity to see these wonderful feathers. Take a handful and squeeze it to the mallest possible size - as big as a pea? Let it go and it will bounce back to its original size.

Some down feathers have an even more remarkable property; they give off "talcum powder." The powder is actually keratin cells, the stuff that finger nails are made of, that flake off and appear to be used as a feather dressing. Powder-down feathers are located in special areas on some birds' bodies.

Filoplumes are like wispy down feathers on the ends of long stalks. They are found all over the body, and may act as vibration sensors. Sometimes filoplumes are exposed, as in the white marks on cormorants' chins.

There are bristles too, similar to filoplumes. Each composed of a stiff, tapered rachis, they are mostly found on the head and neck. They seem to act like our nostril hairs and eye lashes to keep out dirt. On some birds they may be sensors, or even a way of keeping gory remnants off the heads of vultures and night hawks.

The feathers we see most easily are the contour leathers. These have down at the base but the top barbs are stiff and lock together to give a small scale-like plate. Each contour feather overlaps its neighbours to cover the body completely and encapsulate the down feathers. At the extremities the feathers become larger and stronger. The contour feathers of the tail are typically long and straight while those of the wing get progressively bigger towards the tip; the primary flight feathers are the biggest.

The feathers are not distributed evenly over the body, except on a few flightless birds, but are laid in rows, each row with its own scientific name. This complex arrangement gives us the birds we see, and more important for most birds, it allows them to fly.

Roy John



THIS WORM LEARNS TO TURN...

Canadian scientists have been studying one of the smallest creatures on earth in hopes of learning more about learning.

The animal, a soil roundworm called *Caenorhabditis elegans*, is about one millimetre long when fully grown. *C. elegans* contains 302 nerve cells, or less than 100-millionth of the number found in the human brain.

Despite its modest endowment of neurons, the worm is not a dunce. It is capable of at least two kinds of simple learning. It can 'habituate'; that is, modify certain reflexes on the basis of past experiences. And. like Pavlov's dog, it can learn to associate food with an unrelated stimullus.

These talents are being analysed at the level of individual cells and molecules - research which might one day shed light on how learning occurs in humans.

Dr. Catherine Rankin and her colleagues in the Department of Psychology, University of B.C. in Vancouver, have been focusing on *C. elegans*' reflexes. They put the worm in a Petrie dish in which it could manoeuvre, and tickled its tail with an eyelash, which made it move forward. On the other hand, when the dish is tapped in front of it, the worm backs away. But touching the tail before tapping the dish caused inhibition of the latter reflex; even when the dish was tapped afterwards, the worm maintained its forward momentum.

With practice however, C. elegans can override this inhibition. If its tail is tickled enough times, the animal eventually learns to ignore the dominant stimulus - it no longer moves forward. A gentle tap on the dish will then send it wriggling in the opposite direction.

Having proved that the worm can habituate, the research team tried to determine how each nerve cell figures in the process. Previous researchers counted a grand total of 85 neurons in the nerve network that governs reflex movement. Using a laser, Dr. Rankin's team systematically killed some of these cells and then examined the effect on *C. elegans'* learning curve. Normally, it takes 10 to 20 stimuli for a worm to become habituated.

Meanwhile, Norm Kumar, a University of Toronto graduate student, was investigating the molecular basis of learning. In a previous study, he fed *C. elegans* a meal of bacteria mixed with either sodium or chloride ions, the two ions found in table salt. Later, the worms were placed midway between sources of these two ions. They invariably swam towards the one that had accompanied dinner.

Kumar has continued these experiments on mutant strains of the worm. The idea is to find strains that are incapable of associating bacteria with either chemical. By comparing worms that can't learn with those that can, it might be possible to identify the proteins and genes involved in learning and memory.

Such discoveries might extend to humans: it's quite possible that roundworms store memory the same way humans do.

From an article by John Eberlee in Canadian Science, Vol. 10, No. 12, 1991.



BOOK REVIEW AS GOOD AS GOULD

Take a bead on John Gould, obsessive ornithologist, first curator of the Zoological Society of London, discoverer of the budgerigar, and a man who knew how to make a bob or two. They could use him down at Regent's Park now. He is famous as the creator and printer of many of the world's finest volumes of bird illustrations, drawn, not from life, but from death by gunshot - the way of bird men before binoculars.

When Gould's effects were sold after his death in 1881, the then new Natural HIstory Museum bought his meticulous collection of over 12,000 specimens, including more than 5,000 brilliantly coloured hummingbirds which were, without doubt, his favourites.

Odd, then, that Gould was the first to warn the world of possible extinctions through human predation, especially the imminent but narrowly avoided demise of the Great Crested Grebe. He was the first to describe the amazingly strong scellular structure, light as a feather, of the huge bills of the toucans, and over a period of about 40 years produced more than 300 scientific papers on avian physiology, habits and taxonomy.

Most were published by the Zoological Society and by the Royal Society, of which he became a fellow at the age of 39. Many of his classifications still stand. Not bad for a gardener's son without formal education. But Gould was special, even in an age of giants.

Notions of evolution were shimmering, driving the still-formative Linnean taxonomy. Gould's mind held an encyclopaedia of ornithological detail and he could spot the genus of unfamiliar or exotic birds at a glance. This is why Darwin employed him to identify and classify species discovered during the voyages of The Beagle, and why the finished products of his own lithographic artists are outstanding. In them the whole bird, the colour, the minute detail and the scientific description form a balanmced and exacting unity, as precisely tailored as any bird's feathering. Nobody else achieved this.

So he reaches across a century and a half, still larger than life, in thousands of notes, letters and detailed preparatory drawings of which over 3,000 emerged as magnificent colour plates. Grasp the scale. Most of Gould's great productions are in Imperial Folio, a format whose volumes (in Gould language) are about a yard across when open almost a metre in newspeak. Critics say that Gould worked his wife to death; that he stole Edward Lear's ideas; that he couldn't draw, was illiterate, and that his real skills lay in making money. How sour do you want your grapes?

He was a brilliant, colourful, driving impressario of birds, with enormous energy, great organising ability and all the skills, including call mimicry so accurate that he could whistle birds out of the trees. Too bright, too rough perhaps, to grasp in our drab age, especially with the drawing scattered and the plates mainly locked away in the great libraries.

But you can get closer to him, now, at the hand of his great-great-granddaughter Maureen Lambourne, who... has gathered text and about 400 plates into a single volume. Not Imperial Folio and very gentle, but good colour and writ large enough to define the scale and skill of their source of inspiration. Gould would approve.

Birds Of The World, by Maureen Lambourne (Studio Editions, 35 pounds)

Anthony Tucker, in the Guardian Weekly, 20 December, 1992



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 and so forth. Please suggest other suitable items.

"Winter for reading and study; summer for loafing and dreaming and getting near to nature; spring and autumn for joyous and active production. The mind does not mount readily to the higher exertions during the severity of our winter season."

Archibald Lampman, 6 February 1892

Natural events

<u>mid-Feb</u>: Chickadees begin their spring song: "sweet spring" or "phoebe"

late Feb/March: Barred and Saw-Whet Owls calling, prior to their nesting season

<u>mid-March/April</u>: sap starts running in the Sugar Maples

20 March: Vernal Equinox

<u>22 March</u>: return of migrant Robins (some have wintered here)

last week March: first tentative peeps of awakening Northern Spring Peepers heard in Halifax County; pussy willows appear

<u>27 March</u>: Fox Sparrows appear, "a common transient sight in Spring"

<u>3 April</u>: Daylight Saving Time begins - turn clocks ahead one hour

<u>5 April</u>: return of Piping Plover and Osprey <u>15 April</u>: return of Hermit Thrush, our finest

songster

mid-April/May: Mayflowers in bloom

22 April: Lyrid meteor shower

23 April: Barn Swallows return

late April/early May: Halifax Public Gardens reopen one day when you aren't looking

<u>1 May/mid-June</u>: Gaspereau (alewives) ascend rivers to spawn in their headwaters

<u>1 May-15 May</u>: many species of Warblers return <u>7-14 May</u>: the first chorus (full mating call) of Northern Spring Peepers heard in Halifax County

<u>10 May</u>: annular eclipse of the sun; Halifax lies near the centre-line of the path of annularity. Protect your eyes when viewing! <u>12 May</u>: return of Ruby-throated Hummingbirds mid/late May: many spring ephemeral wildflowers in bloom; Spring Beauties, Dutchman's Breeches, Red Trillium

<u>24 May</u>: partial lunar eclipse; the entire eclipse will be visible in Halifax

<u>28 May</u>: last spring frost in Halifax (that is, Environment Canada says that there is only a 1 in 10 chance that the last spring frost will occur after this date); look forward to 155 frost-free days

Sources: Blomidon Naturalists Society, <u>A</u> Natural History of King's County, 1992; Sue Brown, Frogwatch '94; Colombo's <u>Canadian Global Almanac</u>, 1994; <u>Corpus Almanac and Canadian Sourcebook</u>, 1994; Gibson's <u>Winter Nature Notes for Nova</u> <u>Scotians</u>, 1980; Tufts' <u>Birds of Nova Scotia</u>, 1986; personal observation

Sunrise and Sunset on late Winter and early Spring Saturdays:

19	March	6:20	18:26
26	March	6:07	18:34
2	April	5:54	18:43
9	April	6:41	19:52
16	April	6:29	20:00
23	April	6:17	20:09
30	April	6:06	20:18
7	May	5:56	20:26
14	May	5:48	20:34
21	May	5:40	20:42
28	May	5:35	20:49

courtesy of David Lane, Burke-Gaffney Observatory, St. Mary's University

ORGANISATIONAL EVENTS:

Nova Scotia Bird Society, meets at the N.S. Museum of Natural History, 8 p.m.:

28 April Andy Horne on Bird Songs, their design and function

Our birding friends hold many field trips. Enquire at the meetings.

<u>Wild Flora Society</u>, meets at the N.S. Museum of Natural History, 7:30 p.m.:

28 March Dr. David Richardson on "Fungi, friends and foes"

<u>Royal Nova Scotia Historical Society</u>, this meeting at the Fairbanks Centre, 7:30 p.m.:

26 April Michael Parker on "Hunting and Fishing Guides in N. S., 1860-1960"

Nova Scotia Museum of Natural History: 10 April Barry Sabean on "Coyotes -Everything you wanted to know" at 2 p.m. Maritime Museum of the Atlantic, all programmes at 7:30 p.m.

15 March Dr. Paul Brodie on "Whales, whales, whales"

26 April Dr. Scott Cunningham on seakayaking around Newfoundland

The Friends of McNabs Island, 7 to 10 p.m., at the Nova Scotia Museum

13 April "Spring Thaw" Social Mixer and Lecture, Mike Crowell and Earl Hickey on "A Natural History Survey of McNabs Island." Requires preregistration; call Cathy McCarthy at 434-2254 by April 10, and try to take something for the Metro Food Bank.

AND A FINAL WORD ON SNOW:

My late friend Helen Roby Buley once told me that her Annapolis Valley-born grandmother used to have names for what she called "the last three Snows of Spring": these snowfalls come after you think you've seen the last of it. To a child dismayed by the sight of snow after the warmth of an April day, she would say, reassuringly, "Don't worry. It won't last. It's only Robin Snow." My friend couldn't remember the names of the other two late snowfalls. Gaspereau Snow? Maple Sugar Snow? Is anyone else familiar with this bit of Nova Scotian folklore?

compiled by Patricia L. Chalmers

Ha, Snow

Ha, snow Upon the crags! How slow The winter lags! Ha, little lamb upon the crags, How fearlessly you go! Take care Up there, You little woolly atom! On and on He goes . . . 'tis steep . . . Hillo, My friend is gone!

T. E. BROWN (Extrac.



1994

	APRIL-AVRIL						MAY-MAI								JUNE–JUIN								
Day	Time	Ht./ft.	Ht./m	Jour	Heure	H./pi	H./m	Day	Time	Ht./ft.	Ht./m	Jour	Heure	H./pi	H./m	Day	Time	Ht./ft.	Ht./m	Jour	Heure	H./pi	H./m
1 FR VE	0620 1150 1850	.6 5.6 1.4	.2 1.7 .4	16 SA SA	0515 1125 1730 2325	1.1 5.1 2.0 5.2	.3 1.6 .6 1.6	1 SU DI	0700 1230 1940	.6 5.4 1.6	.2 1.6 .5	16 MO LU	0545 1145 1810 2345	1.0 5.2 2.1 5.2	.3 1.6 .6 1.6	1 WE ME	0115 0815 1355 2100	5.0 1.1 5.3 1.5	1.5 .3 1.6 .5	16 TH JE	0015 0710 1300 2000	5.2 1.0 5.6 1.6	1.6 .3 1.7 .5
2 SA SA	0005 0725 1245 1955	5.7 .8 5.3 1.7	1.7 .2 1.6 .5	17 SU DI	0610 1205 1830	1.3 5.0 2.2	.4 1.5 .7	2 MO LU	0040 0800 1330 2035	5.3 .8 5.2 1.7	1.6 .2 1.6 .5	17 TU MA	0640 1230 1915	1.1 5.3 2.1	.3 1.6 .6	2 TH JE	0215 0905 1450 2150	4.8 1.4 5.2 1.5	1.5 .4 1.6 .5	17 FR VE	0110 0805 1355 2055	5.0 1.1 5.6 1.4	1.5 .3 1.7 .4
3 SU DI	0100 0825 1355 2100	5.3 .9 5.0 1.7	1.6 .3 1.5 .5	18 MO LU	0005 0710 1255 1935	5.1 1.4 4.9 2.2	1.6 .4 1.5 .7	3 TU MA	0145 0850 1435 2135	5.0 1.0 5.2 1.7	1.5 .3 1.6 .5	18 WE ME	0035 0735 1325 2020	5.1 1.1 5.3 1.9	1.6 .3 1.6 .6	3 FR VE	0320 0950 1545 2240	4.7 1.6 5.2 1.4	1.4 .5 1.6 .4	18 SA SA	0220 0900 1500 2200	4.9 1.2 5.7 1.2	1.5 .4 1.7 .4
4 MO LU	0210 0925 1515 2200	5.0 1.1 5.0 1.7	1.5 .3 1.5 .5	19 TU MA	0055 0805 1350 2040	5.0 1.4 4.9 2.2	1.5 .4 1.5 .7	4 WE ME	0255 0945 1545 2230	4.8 1.2 5.2 1.6	1.5 .4 1.6 .5	19 TH JE	0130 0830 1425 2115	5.0 1.1 5.4 1.7	1.5 .3 1.6 .5	4 SA SA	0425 1040 1640 2325	4.7 1.7 5.3 1.2	1.4 .5 1.6 .4	19 SU DI	0330 1005 1605 2305	4.9 1.2 5.8 .8	1.5 .4 1.8 .2
5 TU MA	0330 1020 1630 2300	5.0 1.1 5.1 1.6	1.5 .3 1.6 .5	20 WE ME	0200 0900 1500 2140	4.9 1.3 5.1 1.9	1.5 .4 1.6 .6	5 TH JE	0405 1035 1640 2320	4.8 1.4 5.4 1.4	1.5 .4 1.6 .4	20 FR VE	0240 0925 1530 2215	4.9 1.1 5.6 1.4	1.5 .3 1.7 .4	5 SU DI	0520 1130 1725	4.8 1.8 5.4	1.5 .5 1.6	20 MO LU	0445 1110 1705	5.1 1.2 6.0	1.6 .4 1.8
6 WE ME	0445 1115 1725 2350	5.1 1.1 5.4 1.4	1.6 .3 1.6 .4	21 TH JE	0315 1000 1610 2240	5.0 1.2 5.4 1.6	1.5 .4 1.6 .5	6 FR VE	0505 1125 1725	5.0 1.5 5.5	1.5 .5 1.7	21 SA SA	0355 1025 1635 2320	5.0 1.1 5.9 1.0	1.5 .3 1.8 .3	6 MO LU	0010 0605 1215 1805	1.0 4.9 1.8 5.5	.3 1.5 .5 1.7	21 TU MA	0005 0550 1215 1805	.5 5.3 1.1 6.2	.2 1.6 .3 1.9
7	0540 1210 1805	5.3 1.1 5.6	1.6 .3 1.7	22 FR VE	0425 1055 1710 2340	5.2 1.0 5.9 1.2	1.6 .3 1.8 .4	7 SA SA	0010 0555 1215 1805	1.2 5.1 1.5 5.7	.4 1.6 .5 1.7	22 SU DI	0505 1130 1730	5.3 1.0 6.2	1.6 .3 1.9	7 TU MA	0055 0650 1255 1850	.8 5.0 1.7 5.6	.2 1.5 .5 1.7	22 WE ME	0100 0645 1315 1855	.1 5.5 .9 6.3	.0 1.7 .3 1.9
8 FR VE	0040 0625 1255 1845	1.2 5.5 1.1 5.8	.4 1.7 .3 1.8	23 SA SA	0530 1155 1800	5.5 .8 6.3	1.7 .2 1.9	8 SU DI	0050 0640 1255 1845	1.0 5.2 1.5 5.8	.3 1.6 .5 1.8	23 MO LU	0020 0605 1230 1825	.5 5.5 .8 6.5	.2 1.7 .2 2.0	8 WE ME	0130 0730 1335 1930	.7 5.1 1.6 5.6	.2 1.6 .5 1.7	23 TH JE	0150 0740 1410 1950	0.1 5.8 .8 6.3	.0 1.8 .2 1.9
9 SA SA	0120 0705 1330 1920	1.0 5.6 1.2 5.9	.3 1.7 .4 1.8	24 SU DI	0035 0625 1250 1850	.7 5.8 .6 6.6	.2 1.8 .2 2.0	9 MO LU	0125 0720 1330 1920	.8 5.3 1.5 5.8	.2 1.6 .5 1.8	24 TU MA	0115 0700 1325 1915	.1 5.8 .7 6.6	.0 1.8 .2 2.0	9 TH JE	0205 0810 1410 2010	.6 5.2 1.5 5.6	.2 1.6 .5 1.7	24 FR VE	0240 0835 1500 2040	-0.2 5.9 .8 6.3	-0.1 1.8 .2 1.9
10 SU DI	0155 0745 1405 1955	.8 5.7 1.2 6.0	.2 1.7 .4 1.8	25 MO LU	0130 0720 1345 1935	.3 6.0 .5 6.8	.1 1.8 .2 2.1	10 TU MA	0200 0755 1405 1955	.7 5.3 1.5 5.8	.2 1.6 .5 1.8	25 WE ME	0205 0755 1420 2005	-0.1 5.9 .7 6.6	.0 1.8 .2 2.0	10 FR VE	0240 0845 1445 2045	.6 5.3 1.5 5.6	.2 1.6 .5 1.7	25 SA SA	0330 0925 1550 2130	-0.1 6.0 .9 6.2	.0 1.8 .3 1.9
11 MO LU	0225 0820 1435 2025	.7 5.7 1.3 5.9	.2 1.7 .4 1.8	26 TU MA	0220 0810 1435 2025	.0 6.2 .5 6.8	.0 1.9 .2 2.1	11 WE ME	0230 0835 1435 2035	.6 5.3 1.5 5.7	.2 1.6 .5 1.7	26 TH JE	0255 0845 1515 2055	-0.3 6.0 .8 6.5	-0.1 1.8 .2 2.0	11 SA SA	0315 0925 1525 2125	.6 5.3 1.5 5.6	.2 1.6 .5 1.7	26 SU DI	0420 1010 1645 2220	.0 6.0 1.1 6.0	.0 1.8 .3 1.8
, 12 TU MA	0255 0900 1500 2100	.7 5.6 1.4 5.8	.2 1.7 .4 1.8	27 WE ME	0315 0900 1530 2115	-0.1 6.2 .6 6.6	.0 1.9 .2 2.0	12 TH JE	0300 0910 1505 2110	.6 5.3 1.6 5.6	.2 1.6 .5 1.7	27 FR VE	0350 0940 1610 2150	-0.2 6.0 1.0 6.3	0.1 1.8 .3 1.9	12 SU DI	0355 1005 1605 2205	.6 5.4 1.6 5.5	.2 1.6 .5 1.7	27 MO LU	0510 1055 1740 2305	.3 5.9 1.3 5.7	.1 1.8 .4 1.7
13 WE ME	0325 0935 1530 2135	.7 5.5 1.5 5.7	.2 1.7 .5 1.7	28 TH JE	0405 0950 1625 2205	-0.1 6.1 .9 6.4	.0 1.9 .3 2.0	13 FR VE	0335 0950 1540 2145	.7 5.3 1.7 5.5	.2 1.6 .5 1.7	28 SA SA	0440 1030 1710 2240	.0 5.9 1.2 6.0	.0 1.8 .4 1.8	13 MO LU	0435 1045 1655 2245	.7 5.5 1.7 5.5	.2 1.7 .5 1.7	28 TU MA	0600 1140 1835 2355	.6 5.7 1.4 5.4	.2 1.7 .4 1.6
14 TH JE	0355 1010 1605 2210	.8 5.3 1.7 5.5	.2 1.6 .5 1.7	29 FR VE	0500 1045 1725 2255	.1 5.9 1.2 6.0	.0 1.8 .4 1.8	14 SA SA	0415 1025 1620 2225	.8 5.3 1.8 5.4	.2 1.6 .5 1.6	29 SU DI	0535 1120 1810 2330	.3 5.8 1.4 5.7	.1 1.8 .4 1.7	14 TU MA	0525 1125 1755 2330	.8 5.6 1.8 5.4	.2 1.7 .5 1.6	29 WE ME	0650 1225 1925	1.0 5.5 1.4	.3 1.7 .4
⊢R VE	0435 1045 1640 2245	1.0 5.2 1.9 5.4	.3 1.6 .6 1.6	30 SA SA	0600 1135 1835 2345	3 5.7 1.5 5.7	.1 1.7 .5 1.7	15 SU DI	0455 1105 1710 2300	.9 5.2 1.9 5.3	.3 1.6 .6 1.6	30 MO LU	0635 1210 1910	.6 5.6 1.5	.2 1.7 .5	15 WE ME	0615 1210 1900	.9 5.6 1.7	.3 1.7 .5	30 TH JE	0040 0735 1310 2015	5.1 1.3 5.4 1.4	1.6 .4 1.6 .4
•									(a) -			31 TU MA	0020 0725 1300 2005	5.3 .8 5.4 1.6	1.6 .2 1.6 .5								

Join us in Nova Scotia





23rd Canadian Nature Federation Annual Conference

Mount St. Vincent University Halifax, Nova Scotia. August 4-7 1994

Hosted by the Halifax Field Naturalists

Nova Scotia has a diversity of landscapes and habitats not found in other areas of comparable size in Canada. Humans have used the rich resources of the area since native people hunted caribou more than 11,000 years ago. Nova Scotia's rich and sometimes rare flora and fauna have been influenced geography and climate. The province is tilted southwest to northeast so there's a cool end to suit northern species and a warmer end for those that like it that way. Nova Scotia is almost an island so most species have only had one way on, or off. As well as regular migrating birds, eastward flowing weather systems often bring rare species to delight listers.

Come and enjoy this very special place.

There will be pre and post conference tours, day trips, birding and other natural history walks, lectures, exhibits, children's program and social events for everyone.

New this year: National Issues Day, August 4th

So bring the whole family and enjoy some down east hospitality.

Registration Kit available Jan. 15, 1994 from: Peter Payzant CNF Conference Registrar P.O.Box 2 Waverley, Nova Scotia. BON 2S0 Tel. 902-861-1607 (Call before 10pm, AST/ADT)





