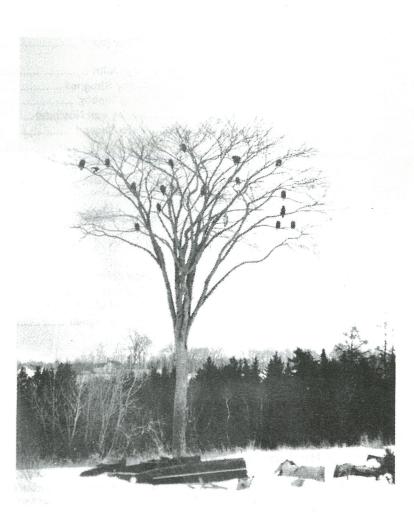
HALIFAX FIELD NATURALISTS' NEWSLETTER

June to August 1994

No. 75



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



Eagle Tree
Brian Yates photo

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.

Meetings On the first Thursday of every month at 8:00 pm in the auditorium of the Nova Scotia Museum of Natural History, 1747

Summer Street, Halifax. Meetings are open to the public.

Field Trips Are held at least once a month, and it is appreciated if those travelling in someone else's car share the cost

of the gas. Everyone, member or not, is welcome to take part in field trips.

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

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 835-8289

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 Greg Crosby
 422-4650

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 835-3673

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Cathy Strugnell

Mailing Halifax Field Naturalists

Address c/o Nova Scotia Museum of Natural History

1747 Summer St., Halifax Nova Scotia B3H 3A6

Committees ProgrammeRoy John......868-2373

Charlotte Lundgren

Jennifer MacKeigan......883-9766 Cathy Strugnell......835-8289

Newsletter

Editor455-8160

MembershipShirley van Nostrand......835-3673

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.

Illustrations This Issue (No. 75): p. 15 — tide table courtesy Dept. of Transport;; other illustrations from copyright-free sources.

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HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

So it's summer again, and the skies may be rainy or blue. It's time for tents and walking shoes, fishing rods and field guides, listening for owls in the night, and looking at pale, fragrant plants in the moonlight. It's also time for the CNF Conference at the end of July - a wonderful chance to explore Nova Scotia in the best of company.

We are asked to watch for turtles this summer, especially for Blanding's Turtle, which some claim is near the end of its evolutionary run, but we don't want to lose it before we must.

Ursula Grigg

THANKS TO:

All the people who have contributed to this issue of the Newsletter, and especially -

Frances Barry, N.S. Museum

David Bessonnette

Pat Chalmers

Roy John

Connie Mack

John Malv

Steve Saunders

Diane Switzer and others at St Mary's University

Computer Centre

Shirley van Nostrand

SPRING BEAR HUNTING

We havethe responsibility to be aware of what is going on in the Province and to tell our elected representatives what they're doing wrong and especially what they are doing right! In this vein, the Board of Directors asks members to tell Minister of Natural Resources Don Downe that a spring bear hunt is not needed. Hunting over bait is not a challenging sport, and spring hunting endangers both bears and innocent naturalists stooping over their finds in the forests. The Minister is seeking public opinion, a step in the right direction!

His address is: Box 698, Halifax, N.S., B3J 2T9

A CHALLENGE: THE NEWSLETTER NEEDS

someone to tell us where our many illustrations should appear, and maybe make more when necessary.

Can you draw basking turtles looking like a stack of pancakes, but still looking like painted turtles, not Blanding's? If you can, tell the editor - Ursula Grigg, 455-8160. (Yes, we asked Larsen; he preferred to stay On the Far Side...)

777

INFORMATION NEEDED:

Blanding's Turtle in Nova Scotia is now on the Threatened List; Acadia University is asking for any information on this species. Sightings are important, as there may be some groups still to be found. Any other observations on the habits of this turtle will help in planning a rescue attempt, which will consist of identifying the favoured habitat and trying to protect it.

Please give information to Roy John, at 453-5555 (w) or 868-2373 (h).

WELCOME TO NEW AND RETURNING MEMBERS

Peter Eaton
Rhea McGarva
Larry Smith
Michael Seary
Agnes Bruhm
Joan Waldron
M.R. Sylvester
Lorraine Parkin
Anthony Pitt
Carter Cox
Andrea Spurr
Janet McGinity
Lillian and Cary Risley

Carl Munden



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SPECIAL REPORTS

HFN members are sometimes asked to take part in school or other youth activities, and occasionally they write reports on these visits, which always seem to leave the visitor in awe of our children's abilities and the dedication of their teachers.

Two such reports have turned up recently, hidden behind icons on a Mac disc, and here's the first of them! - Editor

OUR FUTURE IS IN OUR HANDS

"Our Future is in Our Hands" - the logo on the T-shirts worn by the staff at Prospect Road Elementary School. Environmental awareness begins with our children and this school is a remarkable example of this. Last spring two of our Halifax Field Naturalists were asked to do a presentation at the school's Environmental Conference. We were amazed and very favourably impressed with the activities and knowledge imparted throughout the school year. All students and staff are actively involved, on a day to day basis: with an increasing awareness of environmental issues spreading to the community.

Each class had a different topic to study and to get involved in. These included: the Rainforest, the Ozone Layer, Help Save the Planet, Recycling, Global Warming, Insect Food Chain in the Pond, and Composting.

A litterless lunch is one way awareness of reducing waste, of recycling and of composting has been put into effect. The amount of disposable garbage created by each class is recorded on a chart in the hall. This has encouraged the use of reusable lunch bags and reusable food containers, and the composting of apple cores and other food waste. The school has a central open courtyard where the composting is done; worms do their composting. The composted soil is then used for the garden which includes flowers and pumpkins. A Garden of Donations greets one on entering the school. These included: a maple tree, rhododendrons. yellow twig dogwood, three rosebushes, flower seeds and most importantly - soil.

This Environmental Day, with speakers representing both the government and the private sector, was expected to broaden the student's knowledge; however, Mary and I, and the other visitors, were favourably impressed with the year

round interest and involvement throughout the school and spreading into the community.

After our litterless lunch, we were entertained by an interesting and original Fashion Show. This featured such participants as: Reta Recycle, Rebecca Re-use, Barbie Beach-Sweep, Greta Gardner, Sammy Sewer Slug, Lucy Litterbug, Ernie Earthkeeper, Polly Pollution, Olive Ozone, Carlton Compost, Angie Acid Rain, Rudy Rainforest, Davy Water Drip, Suzy Green Shopper and Edith Endangered Species Queen.

The Grade Four Class who studied the Rainforest collected one hundred dollars, throughout the school year. This enabled them to buy four acres of Rain Forest at twenty-five dollars per acre.

Just before we left, we eavesdropped on some students being interviewed by a local radio station. One young girl said "We don't want the world to go to waste." When asked if they'd have another conference, she quickly said "Oh yes," as the principal looked on obviously feeling rather overwhelmed by the time and great effort this one had taken!

Mary reports seeing something in the paper recently regarding ongoing environmental activities at Prospect Road Elementary School. Keep up the good work and let's hope this rural school's example will spread much further into our province. Let's hope it makes a big difference for all of us.

Shirley van Nostrand, Summer 1992

THE BUTTERFLY

The butterfly, a cabbage-white, (his honest idiocy of flight)
Will never now, it is too late,
Master the art of flying straight,
Yet has - who knows so well as I? A just sense of how not to fly:
He lurches here and there by guess
And God and hope and hopelessness.
Even the aerobatic swift
Has not his flying-crooked gift.

Robert Graves

PROJECTS IN PARTNERSHIP AT THE NOVA SCOTIA MUSEUM OF NATURAL HISTORY

Three recent projects at the Museum of Natural History were made possible through partnerships, which seem to be the current trend.

SPECIES STATUS SHEETS

In 1991, the Museum started a series of informative pages on species which are rare or endangered here. Each provides concise information on one species and a list of references to be consulted for more. In addition to answering enquiries from the public, these sheets will increase awareness of our flora and fauna, and provide the knowledge needed for making informed decisions on environmental action.

Another 50 status sheets were started in September 1993; these include pests (earwigs, lice), introductions (Purple Loosestrife, the Giant Slug), and species of public interest (Little Brown Bat, Bloodroot). This series will also be produced in a simpler format for use by schools.

The partners here are the Environmental Partners Fund, sponsored by the Blomidon Naturalists Society and supported by the Centre for Wildlife and Conservation Biology in Wolfville, the Nova Scotia Museum of Natural History, and the Canadian Wildlife Service.

NATURAL HISTORY OF NOVA SCOTIA

The Natural History of Nova Scotia, a two volume set describing the province's natural processes, species, habitats and landscapes, was first published in 1984 as a park planning manual. It was so popular with a variety of people that it was reprinted in 1989.

In 1990, the Museum and Provincial Parks staff agreed that update was needed, incorporating information provided by naturalists and others since the first publication. New subjects include an introduction to cultural landscapes, and there is increased emphasis on the offshore. It is hoped that users appreciate the changes and will continue to contribute opinions and information.

The book will have a new appearance and should be ready for distribution in late spring, in the Museum and at the Government Bookstore.

The revision was funded under the Canada/Nova Scotia Cooperation Agreement on Sustainable Economic Development.





FROGWATCH '94

Frogwatch '94 is a study of Spring Peepers in Halifax County. It is a joint effort of The Clean Nova Scotia Foundation, the Nova Scotia Museum of Natural History, and Windsor-based Envirosphere Consultants Ltd. and is funded under the federal Environmental Partners Fund.

It is a pilot project designed to increase interest in natural change by encouraging schools and youth groups to observe, record and enjoy their environment. It actually reflects one of the first phenological studies conducted in Nova Scotia, by A. H. McKay, Superintendant of Schools at the turn of the century. This inspired gentleman organised a province-wide programme of natural history observations in the schools. For several decades, teachers and students watched and recorded changes in plant and animal life, weather, and other natural phenomena throughout the year.

One of the things these early observers noted was the "piping of frogs" - the Spring Peeper. The timing of the peeper was one of the signs of spring. Linked as it is to temperature, it has become a means of assessing the climate today, when we are so concerned with declining amphibian populations and the possibility of global warming.

The project team wants to involve students and youth groups in a more extensive survey in 1995, because they have both the necessary enthusiasm and the interest in environmental issues. However, Nova Scotians of all ages have shown interest in Frogwatch '94.

The project makes science fun and accessible, while contributing population and distribution data to what is already known. A report should be ready by June.

Frances Barry, The Nova Scotia Museum of Natural History

SOME TURTLE!

When the world's largest turtle species is seen up close in the South Shore of Nova Scotia one exclamation is heard time after time - "That's some turtle!". On August 10, 1993 Walter Flowers, an inshore fisherman from Blue Rocks, brought in a large Atlantic Leatherback Sea Turtle, Dermochelys corlacea corlacea, that was apparently caught in an inshore gill net not far from Lunenburg. It measured 7 feet 5 inches from nose to tail and its carapace (shell)I was 5 feet 2 1/2 inches in length, 3 feet 6 inches wide. National Sea Products, Lunenburg, kindly consented to freezing the animal until authorities could examine it.

This is a most unusual species. All turtles have a two part shell - carapace above and plastron below. But the Leatherback Turtle "shell' is one continuous leather-like skin. Its shell is heart shaped and very streamlined increasing its hydrodynamic efficiency. With this stream-lined profile it rarely stops swimming, ranging the open ocean. It propels itself with its huge front flippers (the forward arm on this specimen was 2 feet 7 inches long).

The Leatherback Turtle is considered endangered both by the United Nations and Canada's COSEWIC. Leatherback turtles are exploited for meat, eggs and oil in some areas of the world. Mining of beaches and oil pollution threaten their nesting grounds. Mortality at sea can occur when the animals become entangled in drift nets, but a more insidious hazard has been left by man - plastic bags.

The young are preyed upon by all matter of predators but adults are so large not much will tackle them. However this specimen was missing half its rear right flipper. Jeannot Smith of the Nova Scotia Stranding Network said that this was probably a shark bite. Up to 50 percent of the specimens he's examined have had such bites.

Unlike most other sea turtles, which are coastal bottom feeders with a mainly crustacean diet, the diet of the leather back turtle is mainly jellyfish. The throat has many backward pointing spines - an adaptation to this diet which prevents the prey - or plastic bag - from being regurgitated. When plastic bags are swallowed in mistake for food, death may occur by choking or blockage of the digestive tract.

What is the world's largest turtle doing in cold Nova Scotia waters? As this species nests on beaches from Florida and the Caribbean Islands to half-way down the coast of Brazil, it was originally thought that animals found off our coast were strays. It's now believed that the turtle migrates north chasing the annual bloom of giant orange-red medusae, the jellyfish known as Lion's Mane (*Cyanea capillata*). We sometimes find this jellyfish washed up on our beaches in the summer. (The commoner bluish-purple jellyfish which plagues children's swimming lessons is the Moon Jelly, Aurelia aurita. The Lion's Mane is quite venomous and should be handled with caution. Editor)

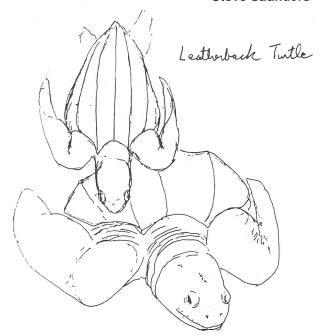
Reptiles are generally considered cold blooded (ectothermal). But how does a cold blooded animal migrate all that distance and survive in the cold North Atlantic?. Scientists have studied this dilemma... not only to understand the physiology of this turtle but also as a possible model for "migrating" dinosaurs! It turns out that the turtle may not be warm blooded (endothermal), but has some capacity to maintain its temperature by a process known as giantothermy. Giantothermy is the tendency of large animals and objects to hold their temperature as a result of their large bulk.

The frozen turtle was displayed at the Lunenburg Fisheries Exhibition to thousands of people.

Afterwards, the NS Marine Stranding Network and Department of Fisheries and Oceans Canada took the animal for necropsy, and considered preserving it for museum display in Halifax or Lunenburg. However the unusual leather-like carapace of this species is full of oil; according to Jeannot Smith, a specimen preserved at the Smithsonian Institute in Washington, DC, is still dripping oil after 100 years. Perhaps the skeleton of ours will be displayed.

That's some turtle!

Steve Saunders



SPECIAL ARTICLES

FLIGHT

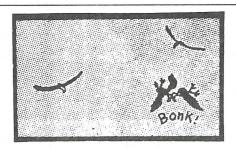
It is mid-morning. A vulture sits on top of a rocky outcrop on a cliff face. The bird leaps in space, using the muscular energy in its feet to propel it away from the cliff. Gravity pulls on the bird's body, accelerating it towards the ground. The vulture spreads its wings and the air rushing past gives it lift and the bird arcs up and away from the ground. It can do this because the cross-sectional shape of the wing to flow differently over the top surface compared with the flow across the bottom. This creates a difference in air pressure above and below the wing, resulting in pushing the bird upward.

This is gliding, the simplest form of flight; the energy for motion comes from gravity's pull. The lift given by the airflow over the wing will slow, but not stop, the descent to the ground. To be able to glide, the bird must start off high on a cliff or tree.

To gain height, the vulture swings back toward the cliff face and begins to soar. The bird waited until midmorning to allow the sun's rays to heat up the cliff face. The hot rock surface in turn warms the air in front. Hot air is less dense than cold, so will float upward. The vulture moves into this column of hot, rising air, which pushes against the bird's broad wings, moving it upward. By alternately gliding downward into the bases of these hot air columns (or thermals) and then floating upward, the vulture can cover a vast territory.

An albatross is a soaring oceanic bird, but it uses differences in wind speed to gain height. When flying into the wind, an albatross will come in on a long, low glide. It keeps close to the waves, where friction slows the winds, and gains momentum. It banks upwards, using this momentum to gain height into the faster moving air above. As it loses momentum, the winds will begin to push the bird backwards, and at this point it plummets downwards, regaining its momentum and enabling it to repeat its long glide and start the whole process again. Seabirds travelling this way perform a series of loops joined by long glides.

The majority of birds get around by using flapping flight. The advantage of this is that the bird has full control over where it goes and when. The vulture must wait for the thermals, and it may have to stay put in bad weather. An albatross will be grounded (can you be 'grounded' on the ocean?) in a calm.

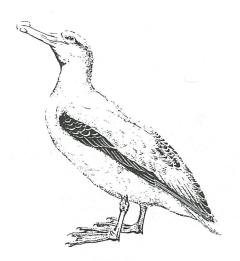


The disadvantage of flapping flight is that it takes a lot of energy, all supplied by muscles. The muscles in turn must be charged up with food, the collecting of which takes a lot of energy.

To fly, a bird leaps, again using muscular energy to give it a start, and thrusts its wings forward. As it swings its wings backward it pulls itself forward through the air. At the same time the the air moves over the wing surface, creating lift. If a bird wants to hover, then it swivels its wings so that the forward and backward sweeps are equal, maintaining lift while preventing thrust.

This is a very simple explanation of a complex process. A detailed account would have to include the problems of take-off, landing, turbulence, drag, wing loadings and aspect ratios. However, the complexities of the physics can never detract from the exciting performance that even a humble sparrow displays when it does what no human can do - fly.

Roy John



Wandering Albatross Careless gliding

BLANDING'S TURTLE IN NOVA SCOTIA ON THE THREATENED LIST

There are four species of fresh water turtle in Nova Scotia, and the local population of one of them, Blanding's Turtle (*Emydoidea blandingi*), was placed on COSEWIC's threatened species list in 1993. It is now the subject of a recovery process under the National Committee for the Recovery of Endangered Wildlife in Canada (RENEW).

The other three turtles are the Snapping Turtle (Chelydra serpentina serpentina), Wood Turtle (Clemmys insculpta) and Eastern Painted Turtle (Chrysemys picta picta). They are all found more or less commonly in waters with vegetation in the south and west of the province, probably being limited by long cold winters.

All our turtles hibernate at the bottom of water too deep to freeze. They emerge in spring, and the females leave the water in early summer to make nests in sand or gravel, or sometimes soil. Turtle eggs usually hatch in the fall, though snappers and painted turtle young may overwinter in the egg and dig out when the weather warms up.

Snappers spend their time in the water, and are carnivorous, catching invertebrate or vertebrate prey according to opportunity and the size of the turtle. A snapper grows to more than 30 cm long (carapace length), has a row of large spines along the top of its long tail, and presents a knobby, spiky appearance with a strongly hooked beak. It looks, and is, short-tempered.

The other three turtles are smaller, and like to bask on logs and tussocks. Wood turtles have a keel down the middle of the carapace and the shields form low sculptured pyramids. They live in slow meandering streams, which they explore upstream in the spring, returning to the lower reaches and deeper water in the fall. They are about 20 cm long and are omniverous.

Painted turtles are pond, lake and stream dwellers, 13 to 17 cm long. They are dark and flattish; the red colour on the front of the carapace and front legs and the yellow edges of the shields are good field marks if visible. Painted turtles bask on logs and stones, sometimes stacked up like pancakes; their diet is mostly aquatic invertebrates.

especially snails. The farm pond beside Hennigar's roadside stand between Wolfville and New Minas is an excellent place to 'learn' this species.

Blanding's Turtle was first identified in Nova Scotia by Sherman Bleakney, then Herpetologist at the National Museum of Canada, Ottawa. He found an adult female at the mouth of Grafton Brook in 1953 and found several others thereafter. Kejimkujik National Park was established in 1967, and in 1969 Park Naturalist Ross Dobson began to record observations of nesting turtles, and marked some of them for future recognition.

This turtle is recognised by its domed carapace, some 18-20 cm long when mature, liberally spotted and dashed with yellow. The yellow throat is also easy to see. Ross Dobson's and others' observations have established a patchy range for Blanding's Turtle restricted to the coves and bogs of Kejimkujik and Grafton Lakes, the West, Little and Mersey Rivers and their headwaters, all in the famed tea-coloured waters of this region.

In an article in The Blomidon Naturalists' Society Newsletter, Terry Power discusses possible reasons for the distribution of Blanding's Turtle, which appears to be a relict population at its climatic limit in Nova Scotia, but how is it restricted to these few river systems? A lot more needs to be discovered, starting with finding other populations, if they are out there.

The availability of food (aquatic insects, snails and carrion), suitable nesting beaches and hibernation sites, logs and rocks for basking in the sun, and freedom from predation are all important for survival. Apparently raccoons raid turtle nests for the eggs - and the large local raccoon population in the region is related to increasing human presence.

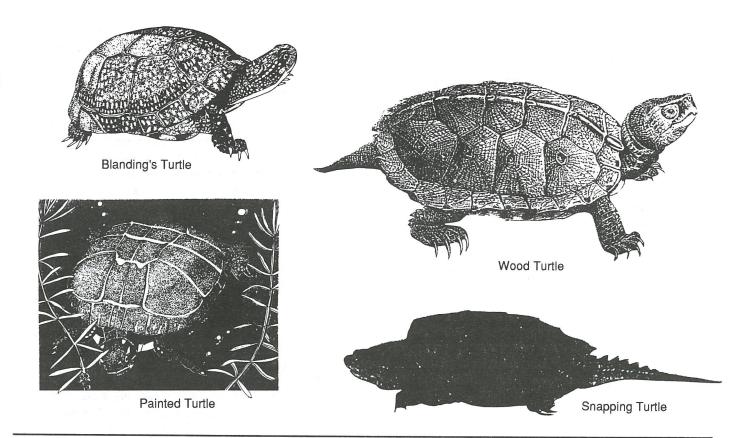
Since human occupation is probably hastening the extinction of Blanding's Turtle in Nova Scotia, it seems appropriate for a human recovery team to protect it. Acadia University is collecting sightings and observations of these turtles, hoping to prepare and implement a recovery plan, so that Nova Scotia's fourth turtle can be taken off the threatened list.

Please report any information to Roy John, at 453-5555 (w) or 868-2373 (h).

References:

Gilhen, John: Amphibians and Reptiles of Nova Scotia. 1984

Power, Terry: Blanding's Turtle - Nova Scotia's Threatened Terrapin. Blomidon Naturalists Society Newsletter, Spring 1994, p26



FIELD TRIPS

CHEBUCTO HEAD FLORA AND FAUNA

DATE: SUNDAY 27 JUNE 1993

WEATHER: BEGAN IN FOG, WITH A COOL

BREEZE; ENDED IN HOT SUN

LEADERS: ANDREA MCIVOR, ROY JOHN

PARTICIPANTS: 13 ADULTS

Andrea McIvor and Roy John led this walk through an area usually dismissed as "The Barrens." We explored several different habitats, each rich in bird and plant life. A trail near the highway, well beaten down by ATVs, led through damp alder thickets and spruce trees. Bunchberries, Starflowers, blueberries, Labrador Tea, Sarsaparilla, Witherod and a few late Rhodora were all in bloom, and Cinnamon Fern and Ground Junipers were abundant. We stopped to listen and look for Savannah Sparrows, White-throated Sparrows, Palm Warblers and a Common Yellow-throat.

We had a good look at a couple of singing Hermit Thrushes beside a pond, which was surrounded by a damp, ferny, deciduous wood. Roundleaved Sundews were on the pond shores. Here in the shady, low-lying hollows the mosquitoes found us.

The ground rose over ridges of greywacke (slaty rock) to the grassy, craggy barrens, where only a few larches and windblown spruces stood up above the ground-hugging vegetation: Crowberries, Foxberries, Cranberries, Lambkill and Potentilla were in bloom among the mosses and Deer Grass. We heard a variety of warblers: Chestnut-sided, Palm, and Common Yellowthroat.

The sunny, open bogs which which dotted the heath were home to Labrador Tea, Pitcher Plants, Cotton Grass and many lovely pink orchids, all in bloom. After some study the orchids were identified as *Arethusa bulbosa*, (Swamp Pink or Dragon's Mouth) and *Pogonia ophioglossoides* (Rose Pogonia).

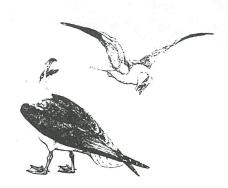
The trail led over the rocky headlands, with spectacular views along the coast. We had seen a pair of Black Guillemots from the [arking lot at the lighthouse before we set out, and we kept our eyes open for other seabirds.

Beach Pea and Wild Iris bloomed among the granite outcroppings, and the Bayberry was abundant, though it had evidently suffered a lot of winterkill. The rocks were strewn with broken crab.

Blue Mussel, and Sea Urchin shells, and the Herring and Black-backed Gulls were busy below us, picking at more. in a sunny sheltered cove we sat on the rocks and watched a Yellow-rumped Warbler. We held our breaths when a Merlin took off from a cliff high above us, but it flew, with pointed sweeping wings, over the water, showing no interest in the warbler. An Osprey hovered over the cove. As we neared the lighthouse and the end of our trail we lay on the heath and basked in the warm sun, the strong wind above our heads keeping the mosquitoes away, and we listened to the crash of the waves on the rocks below.

Thanks to Andrea and Roy for a lovely outing, and to Peter Payzant, who helped to identify some of the birds.

Patricia Chalmers



EARLY WINTER BIRDS SATURDAY 16 OCTOBER 1993

DATE: SATURDAY 16 OCTOBER 1994 WEATHER: COOL AND SUNNY, GROWING

WARMER AS DAY PROGRESSED LEADER: JAMES W. TAYLOR

ATTENDANCE: 2 HFNERS, + ABOUT 10 OTHERS

WHO JOINED US FOR BRIEF PERIODS

BIRDS: 39 SPECIES

There was a frosty rime on the grass as we left the Nova Scotia Museum at 8 a.m. to visit two of Metro's birding "hot spots". Our first stop was the Fairview Cemetery on the edge of the Halifax peninsula, where there had been exciting reports of two rare vagrants the day before. This city burial ground has mature evergreen and deciduous trees, many non-native species, and a variety of fruit and nut-producing ornamentals attractive to birds: rose

bushes, hawthorn and apple trees, raspberry canes, and white and red oak trees cover its steep, south-facing bank.

Four carsfull of "twitchers" were already scouring the grounds when we arrived, but it was our leader, Jim Taylor, who found the Yellow-throated Warbler flitting about high in the branches of a spruce on the sunny hill-top in Baron de Hirsch Cemetery. The beautiful Yellow-throated Warbler (not to be confused with the Common Yellowthroat, another warbler) is a rare vagrant in Nova Scotia - it does not breed further north than New Jersey, and it winters in the deep South, from the Carolinas to Costa Rica.

We also saw Blue Jays, American Crows, an American Robin, House Sparrows, a Common Grackle (rather late - most have already left for the winter), and Song Sparrows. We were about to leave, but decided to investigate the Song Sparrows, who were singing in a dense tangle of raspberry canes; we then spotted the other rarity of the day, a White-throated Vireo, lurking in a hawthorn. Our bird was an immature one, so its eyes were still dark, but it had the distinctive yellow "spectacles" of the species. This bird's northern limit is central New England, and like the Yellow-throated Warbler, it should have been on its way to the Gulf States or further south. These two birds may have been suffering from reverse migration (heading in the wrong direction) or they may have been blown up to Nova Scotia in the gales of the preceding week.

We then headed off to Hartlen Point, together with Fulton Lavendar and a few others. Here we stopped at three different sites:

The first site was a grassy meadow leading down to a gravel beach. Devil's Island lav ahead. The meadow had drifts of asters, Curly Dock, Toadflax, and Seaside Goldenrod in bloom, and ripe cranberries in damp pockets of sphagnum moss. Savannah Sparrows were thick in the alders, and a noisy flock of Water Pipits and Horned Larks flew high overhead. Herring, Ring-billed and Greater Black-backed Gulls wheeled above us. In the water was a Common Loon, and running about on the gravel sand-bar were Semi-palmated and Blackbellied Plovers, Greater Yellowlegs, a Ruddy Turnstone, Sanderlings, Semi-palmated and Whiterumped Sandpipers, and Dunlin. A flock of Doublecrested Cormorants flew over the water in characteristic V formation. As we left the area, we saw a Sharp-shinned Hawk perched on a power post, surveying the meadow.

The next site was reached by driving through the golf-course, and we stopped near the thickets of mixed spruce, birch and alder which line the dirt road. Here we found more crab-apple trees and Canada Holly, with fruit ripe for birds. We saw a female Downy Woodpecker who was at work in a birch tree, and we saw crows, Black-capped and Boreal Chickadees, a Brown Creeper, a Hermit Thrush, European Starlings, Yellow-rumped, Blackpoll and Palm Warblers, and Dark-eyed Juncos. A Golden-crowned Kinglet was heard but not seen. Monarch and Sulphur Butterflies were common along the roadside.

Our final site was at Back Cove, a grassy salt-water marsh, with muddy flats and gravel ledges beyond. Here were growing more Seaside Goldenrod, and lots of Slender Glasswort, which had turned from green to rosy pink with the recent frost. Kelp and dulse were flung up on the shore. A Great Blue Heron, Greater and Lesser Yellowlegs, and a rather late Stilt Sandpiper waded about in the shallow waters.

We parted in bright noonday sunshine, having seen nearly forty species of birds. Jim was very patient and obliging in answering our novice questions, and we thank him for sharing his knowledge and enthusiasm with us. A lovely day!

Patricia L. Chalmers

OBSERVING BALD EAGLES

DATE: SUNDAY, FEB 13, 1994 -WEATHER: -12 0 C AT 8 AM LEADER: ROY JOHN

We're a group of 22 travelling in a Zinck Line bus to Wolfville. There we eventually team up with our local guide, Jim Wolford, at Tim Horton's. Jim is a biologist at Acadia University in Wolfville and an authority on eagle and hawk matters.

Already at Windsor someone has spotted a Redtailed Hawk up in a tree - suddenly we're more awake trying to see this bird - where, where?? (Could have been anything at this time of the morning). With Jim on board the bus now, we head towards Port Williams, turning left there at the first intersection. Jim explains that Red-tailed Hawks are the most common birds of prey seen in this area next to eagles during the winter months. There are plenty of American Crows and Common Ravens all the time. He promises us bonus points if we see a Redshouldered Hawk.

But now, we better start keeping our eyes open -

there, look, that tree on the right - three big ravens and three eagles! Wow... Eagles are pirates and scavengers in the winter, during the warmer time of the year they hunt and fish. We are now passing through the Canard Valley, which is part of the Annapolis Valley. Both valleys are framed by the North Mountains (basalt) and the South Mountains (granite). The North Mountain ridge stretches from Cape Blomidon to Brier Island, a distance of about 160 km. At the intersection at Road 341 we stop to view some Horned Larks and Snow Buntings in the bushes and, when looking high up into a big tree at the roadside, we meet a grim-looking sentry - a real big Bald Eagle. Jim and Roy set up their scopes and we have a really good view of this great bird. There were some other adult eagles and one immature one besides some White-throated Sparrows, Tree Sparrows and Brown-headed Cowbirds. In a Scots Pine we see an old crow's nest. The question arises how to recognise a Scots Pine... you look at the bark which is the color of a good Scotch whiskey.

At Sheffield Mills are the best feeding and viewing places for eagles and other birds of prey because of the turkey and chicken farms there. We stop at one farm (the Kennedy's) at Middle Dyke Rd where we see 21 eagles in one tree. There are adults, 1-3 and 2-4 year olds. A big white-breasted eagle really stands out of the crowd. Two immature Red-tailed Hawks in a tree nearby are wondering what is going on - why is this bunch of funny looking creatures staring at us?

At the Eagle Valley Farm we observe another eight eagles perched high up in an elm tree. They prefer elms for their look-outs, but unfortunately many of these trees are dying of Dutch elm disease. Jim tells us that most of the eagles winter over in this area from late November to as late as mid March, when they leave for the Bras d'Or lakes in Cape Breton for mating and then nest by about mid April. Some eagles stay at the farms year round - why go hunting when you can be spoon fed for life? Jim also showed us a spot near Bans Road where the eagles congregate for the night. They are very sociable birds and have favourite spots for their evening gatherings.

We head back towards Canning and spot another tree with seven eagles in it; one is flying ahead of the bus; someone spots a Red-tailed Hawk in the distance. An immature eagle with a light face is out on a surveillance flight; two more eagles are seen at Woodside. Beside a shed in a field close to the road three eagles are cruising low above the ground, another one is on the ground busy with a piece of prey. Ravens are watching so as not to miss out on anything. Now two young eagles are landing near the

action and an adult is following - must be lunchtime. We stop and watch, but they don't care for our company and fly off to the edge of the woods from where they keep a sharp eye on us.

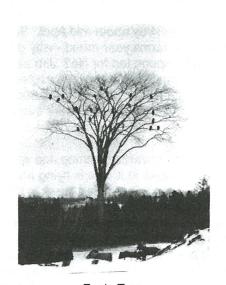
Jim tells us how an eagle count is done: people are sent out for one hour in various directions to record every eagle they see. This was done in early February this year. In order to come up with a fairly accurate count, the adding up is done over a hot cup of coffee and a doughnut in a warm place to reactivate the mind and frozen limbs. This year's count totalled 408 Bald Eagles.

At J. Fuller's farm, we walk down a lane to open fields which look like battlefields - turkey skeletons and bones strewn about, one skeleton even hanging in the bushes right by the path. In the thicket, Jim spots a Snowshoe Hare - a big, good-looking fellow with one ear cocked up like an antenna, the other one down to pick up sounds from the ground. It eventually crosses our path right in front of us, not appearing to be in a big hurry.

Well, we all get a bit chilly and hungry by now, and Jim invites us to have our lunch in the biology department at Acadia. It is an appropriate feeding place for us among stuffed, grim-looking birds of prey hanging and standing all around us.

We start our trip back as the forecasted snowstorm is starting, and, except for a broken windshield wiper at the driver's side of the bus, have a safe trip back to town.

Your novice eagle watcher, Connie Mack



Eagle Tree

SPRING ON THE MUSQUODOBOIT RIVER: TWO REPORTS!

DATE: 9 APRIL 1994

WEATHER: SUNNY; AIR TEMPERATURE +5 C;

WATER TEMPERATURE, +2 C

PARTICIPANTS: 14, IN 6 CANOES AND 1 KAYAK

LEADER: DAVID BESSONETTE

Everyone met at 9 a.m. at the Micmac Mall parking lot in Dartmouth for introductions and instruction. We went on to Elderbank on the Musquodoboit River, and parked some vehicles down the river for our eventual return. En route, a Northern Harrier was spotted behind the airport

We put the boats in the water at Elderbank, for a journey of 11 km. altogether. The river was very high, which allowed us to paddle over some farmers' fields.

Some signs of spring spotted on the way: A Beaver, and beaver choppings Black Ducks, Canada Geese, Robin, chickadees, nuthatch, sparrows Ground Hog Pussy Willows, Coltsfoot

We stopped on the river bank halfway down for lunch and made a campfire for a wiener roast. We had a very enjoyable lunch in the sunshine, then continued on and stopped at the old wheat mill on Dollar Lake Brook. It was a very scenic waterfall area, in a limestone setting in contrast to the clay/ slate setting of Musquodoboit River. We saw the site of the old mill, where the granite millstones can still be seen. We also saw an unusual container which seemed to be sifting sediment from the brook.

We continued down the river to Meaghers Grant, where we took the boats out of the water; the voyagers were driven back to Elderbank to pick up their cars and depart after a very enjoyable day.

Special thanks to Ron Carter, my assistant, for his help in organising the trip.

David Bessonette

At 9.00 a.m. on a lazy Saturday morning in early April, slowly but surely fourteen people assembled in a corner of the Micmac Mall parking lot. They obviously weren't there to visit "the biggest indoor shopping centre in Atlantic Canada" No, something else was afoot.

After a short briefing from their leader the group scrambled into their vehicles and left the lot in convoy, heading off to the wilds of Elderbank. Not since the fall had such an assemblage been seen in these parts. This was the first spring sighting of the subspecies *Homo sapiens canoeous*. A missive sent out by their leader had roused this group from hibernation and they were now on their way for......LUNCH!!!

Well, actually they were going canoeing (and in one case kayaking), but a quick analysis of the conversation showed that food was the main topic of this group's interest.

The canoe trip that David Bessonette had arranged on the Musquodoboit River from Elderbank to Meagher's Grant is ideal for a canoe outing because it allows about 10 km. of canoeing with less than 5 km. of shuttle driving. The river heads off into the 'wilds' of the Musquodoboit River valley, makes a sharp left turn and comes back.

Since the river was very full, and therefore paddling was not strenuous, food - and particularly how far to the lunch stop - became the topic of choice. Cookies and fruit were soon being passed around and people warmed as the sun rose higher in the sky.

Lunch was enjoyed around an open fire and people shared veggie wieners, and regular hot dogs, as well as cookies and other goodies. This was obviously a great group to canoe with! Afterwards, silliness set in, and several of us tried canoeing backwards, sideways and various other angles.

In order to make room for even more cookies, David took us on a walk up Dollar Lake Brook to the remains of an old mill and wonderful waterfalls. The large granite millstones seemed curiously out of place so far back in the woods.

A further short paddle down the river (with some short cuts across flooded fields) brought us to the take out spot and our waiting cars. We hadn't seen much wildlife, but we'd sure had a great time.

Here it was mid-April, and our canoes had not only been relieved of their winter clutter in our basements and garages, they had actually been used for a marvellous day outdoors.

As we tied our canoes on the tops of our cars for the trip back to the city, we realised that there was only one thing left to do.....stop in Musquodoboit Harbour for an ice cream.

John Maly

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.

"In summer it was green, raw greens all in a tangle; in autumn it flamed with red and gold; in winter it was wrapped in a blanket of dazzling snow, and in the spring it roared with running waters and surged with new life, and our artists were advised to go to Europe and paint *smelly canals*."

A.Y. Jackson, "Canadian art", 1925.

Natural Events:

late May late May/early June last week May late May - late June 3 June

early-mid June
21 June
late June
late June - early July
July and August
early July
2nd week July
mid-July

Apple trees bloom

Polyphemus, Modesta and Luna moths emerge

Ram's Head Lady's Slipper blooms

Pink Lady's Slipper blooms

Spare a thought for the Great Auk. The last known pair were killed

in Iceland on this day in 1844. Yellow Lady's Slipper blooms Summer Solstice: Summer begins

Arethusa blooms

Showy Lady's Slipper blooms

Water Lilies bloom Calopogon blooms

Chanterelle mushroom harvest begins

shorebirds begin to reappear, after nesting in their arctic breeding grounds - migration continues for several months

mid-July Rose Pogonia blooms

3rd week July Lindens (aka Limes) bloom along Halifax streets

late July

Cicadas start their buzzing trills
mid-August

migration of shorebirds peaks

12-14 August Atlantic Waterfowl Celebration in Sackville, N.B.

12 August Perseid meteor shower peaks: expected to be good this year! late Aug. - early Oct. Perseid meteor shower peaks: expected to be good this year! most species of warblers leaving - waves of migrants may be seen

1 September Saturn in opposition: rises at sunset and visible all night

September the busiest month for most fall migrating birds

23 September Autumnal Equinox: Fall begins

Sources: Blomidon Naturalists Society, <u>A Natural History of King's County</u>, 1992; Colombo's <u>Canadian Global Almanac</u>, 1994; <u>Corpus Almanac and Canadian Sourcebook</u>, 1994; <u>Tufts' Birds of Nova Scotia</u>, 1986; the personal observations of Carl Munden, Gordon Yeadon and the compiler.

Sunrise and Sunset on late Spring and Summer Saturdays:

4 June	5:31	20:55	6 August	6:06	20:34
11 June	5:29	21:00	13 August	6:14	20:23
18 June	5:28	21:03	20 August	6:22	20:12
25 June	5:30	21:04	27 August	6:31	20:00
2 July 9 July 16 July 23 July 31 July	5:33 5:38 5:44 5:51 5:58	21:03 21:01 20:56 20:50 20:43	3 Sept.10 Sept.17 Sept.24 Sept.	6:39 6:47 6:55 7:04	19:49 19:35 19:22 19:08

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

Organizational events:

Nova Scotia Bird Society:

Phone the N.S.B.S. Bird Information Line at 852-CHAT (i.e. 2428) to hear news of what birds are around, provincewide, and any other Society news of note - field trips, meetings, etc. This line is usually updated at least twice a week. Their next meeting is 22 Sept., 8 p.m., at the Nova Scotia Museum of Natural History.

Blomidon Field Naturalists:

20 July Blomidon Provincial Park - Life in the Muds of Blomidon with Sherman

Boates. Meet at the Park at 7:00 p.m.

Friends of McNab's Island: For more information call 434-2254 or 422-1045

23 July Annual Picnic

20/21 August Weekend Overnight Camp-out

25 Sept. Beach Sweep

Halifax-Westmoor Garden Club:

17-19 June Halifax Flower Festival at Public Gardens and Wanderers' Grounds

16 July 40th Provincial Rose Show at Spring Garden Place 26-27 August Halifax Flower Show at the Halifax Shopping Centre

Shubenacadie Canal Commission: For more information call 462-1826

9 July "Canoe to the Sea" Canoe Race

Wild Flora Society:

9 July Taylor's Head Provincial Park - Flora with Carl Munden. Meet at the N.S.

Museum at 8:15, or at the Park at 10 a.m.

6 Aug. Martinique Beach - Flora with Deannie Sullivan-Fraser. Meet at the N.S.

Museum at 8:45, or at the Park at 10 a.m.

17 Sept. Bissett Lake Park, Cole Harbour - Flora with Bill Graham. Meet at the N.S.

Museum at 9:15, or at the Park at 10 a.m.

compiled by Patricia L. Chalmers

1994

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o	SU DI	0950	4.5 1.9 5.1 1.3	1.4 .6 1.6 .4		0955 1540	4.8 1.4 5.6	.4 1.7	WE	1050 1700	2.0		18 TH JE	1155 1740	1.3	1.6 .4 1.7	SA SA	1200 1805	5.2 1.6 5.5	1.6 .5 1.7	18 SU DI	0100 0655 1325 1905	5.9 1.0 5.9	.2 1.8 .3 1.8
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A Journey from Forest to Sea



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at
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Halifax, Nova Scotia. August 4-7 1994

Hosted by the Halifax Field Naturalists

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! NEXT DEADLINE!
5 August for September Issue
Contributions to the Editor, HEN

Contributions to the Editor, HFN c/o NS Museum or phone 455-8160