THE HALIFAX FIELD NATURALIST



News & Announcements p. 3	Field Trips pp. 6 - 11
Talks	Natural History p. 12
Articles p. 5	Halifax Tide Table: Jan Mar p. 11
Almanac	pp. 13 & 14

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



- OBJECTIVES are to encourage a greater appreciation and understanding of Nova Scotia's natural history, both within the membership of HFN and in the public at large. To represent the interests of naturalists by encouraging the conservation of Nova Scotia's natural resources.
 - MEETINGS are held, except for July and August, on the first Thursday of every month at 7:30 p.m. in the auditorium of the Nova Scotia Museum of Natural History, 1747 Summer Street, Halifax. Meetings are open to the public.
- FIELD TRIPS are held at least once a month, and it is appreciated if those travelling in someone else's car share the cost of the gas. All participants in HFN activities are responsible for their own safety. Everyone, member or not, is welcome to take part in field trips.
 - HFN POST Halifax Field Naturalists
 - c/o Nova Scotia Museum of Natural History, 1747 Summer St., Halifax, Nova Scotia, B3H 3A6
 - EMAIL hfnexec@chebucto.ns.ca
 - WEBSITE http://chebucto.ns.ca/Recreation/FieldNaturalists/fieldnat.html
- FNSN POST Federation of Nova Scotia Naturalists

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

- EMAIL nstn0308@fox.nstn.ca (Doug Linzey, FNSN Newsletter Editor)
- MEMBERSHIP is open to anyone interested in the natural history of Nova Scotia. Memberships are available at any meeting of the society, or by writing to: Membership Secretary, Halifax Field Naturalists, c/o NS Museum of Natural History. New memberships starting from 1 September will be valid until the end of the following membership year. The regular membership year is from 1 January to 31 December. Members receive the HFN Newsletter and notices of all meetings, field trips, and special programmes. The fees are as follows:

Individual	\$15.00 per year
Family	\$20.00 per year
Supporting	\$25.00 per year
FNSN (opt.)	\$ 5.00 per year

EXECUTIVE	President	Ursula Grigg	455-8160
1999-2000	Vice-President	Bernice Moores	422-5292
2000	Treasurer	Tony MacKay	462-1179
	Secretary	Linda Pavzant	861-1607
	Past President	Peter Pavzant	422-6326

DIRECTORS Harry Beach, Bob MacDonald, Linda MacKay, Shirley McIntyre, Marie Moverley, Stephanie Robertson, Colin Stewart

COMMITTEES	Programme	Marie Moverley Bernice Moores	420-9488 422-5292
	Refreshments	Regina Maass	
	Membership	Shirley McIntyre	835-3673
	Newsletter		
	Editor	Ursula Grigg	455-8160
	Production	Stephanie Robertson	422-6326
	Almanac	Patricia Chalmers	422-3970
	Distribution	Shirley McIntvre	835-3673
		Doris Young	457-2827
		Carol Klar	443-3385
	Conservation	Colin Stewart	466-7168

ARTWORK All uncredited illustrations by H. Derbyshire or from copyright-free sources. Halifax Tide Tables - Canadian Hydrographic Service, Fisheries and Oceans Canada. This issue (No. 97): P. 5 – Pheasants, Twila Robar DeCoste, Merritt Gibson's <u>Nature Notes for Nova Scotians</u>; Loon, Joan Dunning, <u>The Loon, Voice of the Wilderness</u>; Leatherback courtesy Center for Marine Conservation, Wash., DC. p. 6, 7, & 8 – Asters and Goldenrods courtesy Ray Fielding; Fungi, Colour Treasury of Mushrooms & Toadstools, Crescent Books. Back Cover – halftone scan of 'Raggedy Friends', Zoltan Szabo, 1979.

PRINTED ON RECYCLED PAPER - PLEASE RECYCLE

HFN NEWS AND ANNOUNCEMENTS 🏶

EDITORIAL 💥

You may think the cat's among the pigeons when you read Barry Sawyer's opinions on page 4! He's only partly right, for we're all guilty of bargain hunting in our choices of places to visit. Barry's comments emphasise the importance of walking the same streets often, and visiting parks at all times of year.

The destruction of part of Hemlock Ravine also warns us to stay aware of what is happening around usl

Thanks to the many people who have willingly and energetically contributed to this Newsletter, and best wishes for the coming year to all HFNers out there.

🔆 – Ursula Grigg

HFN POTLUCK SPRING SOCIAL 💥

Mark your calendars for the first Sunday in May – May 7, 2000. The Halifax Field Naturalists cordially invite all their members, friends, relatives, and neighbours to their first 'Potluck Spring Social'. This special event will take place in Mount Uniacke. We're planning organised hikes in the afternoon at Mount Uniacke Estate and a potluck supper in a local hall. This is your opportunity to meet your fellow naturalists and encourage others to join the club. We're looking forward to this special event and will have more details for you in the next newsletter.

HFN PROGRAMME NOTES 🌺

Our 1999 programme included 23 field trips! We enjoyed a diversity of interests ranging from spiders, amphibians, butterflies, and shorebirds, to wild flowers, mushrooms, cranberries, and bogs & barrens. Our lectures covered various topics such as rocks and minerals, insects, flora and fauna, and the ocean ecosystem, to name a few.

We're working on an exciting programme for the millennium which will include a couple of trips to new locations. Here's a sneak preview of what's in store.

In the winter we'll learn about bottlenose whales, observe the Annapolis Valley eagles, and meet with a falconer who'll explain his role at the Shearwater Air Force Base. We'll be introduced to the world of lichens in the spring and enjoy a potluck supper at Mount Uniacke where you'll meet fellow HFN members at the 'spring social'.

Did you know that Nova Scotia has more than three dozen waterfalls? On July 1 you can join us for a camping weekend in Cumberland County where we'll explore Five Islands Provincial Park, hike the moderate trails of Wards Falls and Economy Falls, and explore the geology of the Minas Basin.

Who says you have to travel to Grand Manan, N.B. to see Atlantic Puffins? Sometime in July we're planning a trip from Lunenburg with a tour boat operator to go out to Pearl Island to see puffins, razorbills, murres, guillemots, dovekies, and northern gannets. And along the way, we should see whales and dolphins.

We haven't planned the fall trips yet, more to follow in the next newsletter. Thanks to all of you who contributed to the programme with your ideas and suggestions for trips and lectures. Your suggestions are always welcome. Nova Scotia has so much to offer. Be adventurous! Come, explore with us, and enjoy the rich natural and cultural heritage of our province.

🗱 – Marie Moverley

CNF AGM 🎇

The Canadian Nature Federation and the Natural History Society of Newfoundland and Labrador are holding a joint annual general meeting in 2000. The joint AGM, hosted by the Humber Naturalists, will be held in Corner Brook, Newfoundland from July 12-16, 2000. For more information, contact the organising committee, CNF 2000, Humber Natural History Society, 2A 4th Avenue, Pasadena, NF, AOL 1K0. On the web – <hnhs2000@beothuk.swgc.mun.ca>.

HFN hosted the CNF in Halifax in 1994, and many of our members also attended the CNF in Sackville, N.B., in 1998. These conferences offer talks and field trips led by local experts. The Newfoundland gathering promises to be a wonderful opportunity to see and learn about the natural wonders of this spectacular province, in the company of many fellow naturalists. Mark your calendars now!

🔆 – Pat Chalmers

MUSEUM RESEARCH 💥

On Saturday, 5 February 2000, The Nova Scotia Museum of Natural History will hold a gathering of its Research Associates, to celebrate independent research that is being carried out in the Museum. The afternoon session will be held in the public auditorium, from 2:00 to 4:00 p.m., and anyone who wants to attend will be welcome.

HEMLOCK RAVINE 💥

As many of you are aware, a piece of land perceived to be a part of Hemlock Ravine Park has been clear-cut. This area borders the most sensitive area of the park, the ravine itself. The clear-cut also occured in the area with the highest density of Eastern Hemlock. In response to this tragedy, we have formed a society, the Friends of Hemlock Ravine, to respond to this issue and to address the protection of the park in the future.

If you are interested in becoming a member of our society, want to know more about our actions and progress, or want to know more about how this happened, below are our Listserv address and our Website.

🗱 – Scott Yetman

as809@chebucto.ns.caListserv: hemlock@chebucto.ns.ca Send a message to <majordomo@chebucto.ns.ca> with the message in the body of the letter saying 'subscribe hemlock'.

Website: www.chebucto.ns.ca/Environment/CPAWS/FHR

*** NEW AND RETURNING**

Danielle Bellefleur Donna isabelle Grace Kendali Pat Leader Ione and Holly MacDonald Ian A. McLaren Ann Sutherland Keith Vaughan James and Loretta White



*

**

HFN TALKS *

On a cool October evening, Anne Mills led us on an illustrated hike through sunny Monaco and up the hills overlooking the sea. This tiny principality on the Mediterranean coast, originally forested by oak and later planted with citrus and olive groves, is now wholly built over, so that there is no wild country or cultivated farmland, although there are some notable botanical gardens. To reach open country, one must cross the border with France, and enter a countryside of "perched villages" and clifftop castles. Anne's husband Eric spent a sabbatical year at the Musée Océanographique de Monaco, and during that time they gradually explored this border country together.

Anne has a particular interest in terrestrial diversity, and she noted that the Mediterranean area was not glaciated during the last ice age, and so endemics there continued to evolve. Three plants in particular, the Olive, the Carob and the Judas Tree, are noteworthy. There are three types of vegetation: the Mediterranean forest, of which almost nothing remains due to farming; the Maquis, consisting of shrubs and short trees crowding the ground thickly; and the Garrigue, excessively-grazed, sparse dry scrubland. The wildlife is not abundant, and birds of all types are scarce and notably wary, as they are regularly caught in mist-nets and eaten. Heavy air pollution, which drifts down from the industrial areas of northern Europe, leaves a smoky atmosphere which is only dispelled by heavy winter rains and the winds of the Mistral.

In an area so long inhabitated by humans there has thus been a substantial impact on the environment, although Anne was able to find and share with us glimpses of the natural beauty remaining. In her presentation we gradually climbed up and outside Monaco, crossed over into France, and ascended the steep dry slopes. The vegetation varied with the elevation, and during her talk we climbed from just 60 meters above sea-level to see alpine plants at more than 1200 metres. We paused often in this climb, though, to enjoy the spectacular views of Cap Martin, the vibrant colours of Spanish Gorse, Saffron Crocus, and Bee Orchids, and the evocative scents of warm sun on Lavender, Rosemary, and Thyme.

- Pat Chalmers

CORAL REEFS



Nobody knew about the cold water corals which have always existed along Nova Scotia's coasts and in the gullies of the fishing banks, until they were nearly lost to the offshore fishing fieet. Nobody, that is, except the inshore fishermen. Derek Jones, from the Canadian Ocean Habitat Protection Society, comes from a fishing family, whose generations have fished with hook and line, knowing that shoals of fish swam just above the coral canopy, but that snagging hooks in the sturdy trunks would result in broken gear. Fishermen also knew that the corals, as much as one hundred feet tall and anchored on the sea floor, formed understories and canopies similar to those of forests on land, with a rich fauna of invertebrates and the juveniles of many commercial fish and crustacean species. Therefore, the inshore fishing fleets protected the reefs for hundreds of years and did not exploit them. Some small patches of coral remain today, but the draggers are coming further inshore all the time, using fish-finders to locate anything still swimming.

Derek brought in many kinds of coral skeletons; these are formed by colonial polyps, which resemble sea anemones; corals may be coloured red, orange, cream or black, and some can be made into jewellery, as tropical coral is. Derek picks it up from the smash left by the draggers, and it is clear, even when lying loose on the bottom, that corals continue to grow and will restore their forests in time if left alone. He is on a crusade to make these beautiful things known and to persuade governments to enact protection for them.

As a small contribution, Derek suggests consumers ask at the fish counter how the catch was made, for hook and line fishing is not only protective of coral beds but provides a sustainable fishery.

Ursula Grigg

TURTLE RESEARCH

Some of us heard Michael James speak at the FNSN meeting in Antigonish last year; he was well into a PhD study of Leatherback Turtles in the North Atlantic. With the help of enthusiastic fishing captains, he has now compiled records which show that these big ancient creatures have a regular summer migration up to Greenland or even near Baffin Island, and then turn east and south and travel fast back to the Caribbean or the African coast in fall. The attraction seems to be our wealth of jellyfish and salps, which may seem lacking in nutrition but must make up for it in volume. The turtles are equipped with very large pineal glands exposed to light on the tops of their heads; this may explain their competence in navigation, for their brains are about the size of a human thumb.

Leatherbacks are unusual among sea turtles, and are unrelated to the hard-shell species seen here. They are threatened, especially in the Pacific Ocean; though the population nesting in Trinidad is increasing a little. They are preyed on by poachers and orcas, and are endangered by fast ships. Females nest every second year, and do not necessarily return to the same beach each time. The habits of males, and the whereabouts of growing juveniles, are not known. Leatherbacks are hard to follow as they lose tags attached to their skins or flippers, but small chips with barcodes, embedded in their shoulders, are proving successful with nesting females. Satellite tags can also be used, provided the researcher can hold a turtle still long enough to fit the harness. Females are docile while laying, but heavy! A harness was fastened at sea this summer on a male named Sherman; the job was tricky, but Sherman was tracked for eight weeks, providing the first information on a travelling male.

4

v۴

٩

Mike James's work is producing a great deal of information, much of it no secret to the fishing fleets; the crews like leatherbacks and are very willing to report sightings, to bring in dead ones, and to help with necropsies on their boat decks – a great convenience with such large animals. They also free turtles entangled in fishing gear. Added to what is known of leatherbacks elsewhere, this is an exciting and important piece of research, and Mike James is clearly enjoying it!

– Ursula Grigg

SPECIALARTICLES *

SOME THOUGHTS ON BIRDING IN NOVA SCOTIA

The week of the November meeting of the Halifax Field Naturalists, I logged on to NatureNS to find a batch of messages regarding Snow Bunting sightings. Frankly, I don't read very much of the birding material which dominates their listserve's postings. However, as we had been surprised to see a flock of 50+ birds which I believed (alas, no binocs handy) might be Snow Buntings so early in Kejimkujik the previous Sunday, I read this batch. This caused a number of thoughts about birding, and the behaviour of birders in this province, to coalesce. Some thoughts were positive, but some were not.

Here are some of the observations I made about this particular batch of messages:

1. All the reported sightings but one were made within sight of salt water.

2. No birder walked more than a few yards from the car.

3. At least two birders remarked on the preference of Snow Buntings for coastal habitat.

And here are the thoughts these observations catalysed:

First, as a generalist, whose knowledge of birds I confess is rather poor, I continue to be amazed at the level of interest and knowledge of birders, and the time they devote to the hobby of birding. Membership in the N.S. Bird Society rivals, perhaps exceeds, that of all other naturalists' groups in the province. This should make birders the most important force for conservation in the province, but – it doesn't. Why not ?



I think the clues to this question are in the observations above, but before revealing them, I'd like to make a couple more. At the last meeting but one of the board of the Federation of N.S. Naturalists, about 4 hours were devoted to reviewing, with CWS staff, candidate Important Bird Areas in N.S. Despite the fact that the designation criteria cover more habitat factors than simply bird residency (breeding or passing), the initial cut did not address these. It turned out that pretty well all of the coastline and coastal islands, divided into more or less geographically homogeneous chunks, were proposed as IBAs, and no interior areas. This reflects neither habitat variety, nor ecological complexity, nor immediate threats to the environment in N.S. attraction of birders to the coastal environment. Now, the fact that they don't have to get out of their cars may be a reason for this, but not perhaps the major one; I asked a notable local birder why this is so, and his response was that these are "the most productive areas". Clue #1: the conclusion I draw from this remark is that birders are essentially collectors. By analogy, if birders were primarily interested in, say, china, the questions that would arise might be,

"How many Meissen figures do you own ?" The answer might be "I saw 50 Snow Buntings"; or "I saw 200"; "Well, I saw 1000!". Numbers are important.

"How many different Meissen figures do you own ?"

"I have 732 on my life list." Variety is important.

"How many decorated by Kaendler?" Rarity is important.

There's nothing to criticise about collecting as a hobby, whether bird records or china figures, but neither activity per se has much to do with an expression of genuine interest in the natural world.

Even so, one activity is surely a lot closer than the other. Clue #2: this is why it concerns me that more birders don't put down their binoculars and look at the whole environment in which the birds they seek out are to be found. This is why it concerns me that collecting sightings is the primary interest, rather than observation of birds as one of many related elements in any environment.

Like most collectors, birders like to communicate with each other; they may like to be first to snap up that rare bird, but they're happy to steer others to a view. Now, if they'd just (Clue #3) leave the coastal china shop, they might discover that delights are to be found elsewhere as well; for instance, there are Snow Buntings in Keji, too, if anyone would bother to look.

Birders have the potential to be an enormous force for habitat conservation. Many birders are already generalists, and a few Bird Society members do belong to, e.g., the N.S. Wild Flora Society (which has only 50 members) and the Halifax Field Naturalists (which has about 150). The Bird Society has, I understand, about 600 members. There is change in the wind, as the Bird Society has now joined the FNSN. But I think a wholesale attitude change is needed if, in the long term, the habitat to ensure future diversity of N.S. bird life is to be preserved.

The reason for this result clearly lies in the

FIELD TRIPS *

CASTLE ROCK

DATE: Sunday, 19 September PLACE: East River, Lunenburg County WEATHER: Sunny and hot! INTREPRETER: Ray Fielding PARTICIPANTS: 16



On a sunny Sunday morning, sixteen enthusiastic participants gathered across from the East River General Store at 9:30 a.m. to begin a venture sponsored jointly by the Halifax Field Naturalists and the Wild Flora Society. Not only did our participation enrich us but our leader also felt a sense of satisfaction, when he noticed a tuft of *Hudsonia tomentosa*, a rare plant in this region.

Our guide for the day, Ray Fielding, a retired teacher and former principal from Pleasantville near Bridgewater, offered us insights into the natural wonders around us – plants, animals, and rocks. He distributed an insert of Errata to those present who had copies of his recent book <u>Shrubs of Nova Scotia</u>, and pointed out the spot where he photographed shrubs to illustrate his book cover.

Many of you from the Wild Flora Society may remember the tour of Ray's premises on the LaHave River in which he displayed an impressive collection of more than 400 woody plants. But Ray's expertise goes beyond these. His knowledge of geology is worthy of note. He certainly was a gneiss guide for our field trip, and the excursion to the rock on the topographical map labelled Labrador Castle was not to be taken for granite. In fact, when Ray was asked how he was able to identify a certain rock, he replied, "Sedimentary, my dear Watson", and proceeded to describe the characteristics of the sample which placed it in a certain category.

We began our hike near the Hardboard Plant in East River. The original owners from India actually had an Asian elephant shackled to a pole outside the facility, perhaps as a reminder of home. Some in the group recalled that this magnificent beast died from infection as a result of this style of confinement, and the remains are buried somewhere on the property. In any case, that was the first that I'd ever heard of this exotic resident of Nova Scotia.

We turned off route 3 to follow the old railway line inland a distance before proceeding to a private Christmas tree lot, ascending the woods road to our ultimate destination, Labrador Castle. Ray's handout showed our route as well as illustrations of common Asters and Goldenrods that we would encounter along the trail. On the way, we observed a wide variety of plants and shrubs, including evidence of the naturally occurring hybridisation between not only the Red, Black, and possibly White varieties of Spruce, but also the White Birch, Grey, or Wire, Birch, and Heart-shaped Leafed Birch.

It was noted that often plants will flower abundantly and early if they are under stress, for example, in excessively dry conditions. The result of this behaviour is to propagate the species and ensure its survival if the plant's own life is in danger. However, the second consecutive dry summer did not seem to have forced a great production of spruce cones this year.

Several bog plants, including Cotton Grass, Leather Leaf, Labrador Tea, and Royal Fern were sighted. Plants were compared and categorised. Some native and medicinal uses were noted by some of the participants, several of whom are also very knowledgeable. Carl Munden, Janet McGinity, and Barry Sawyer all made valuable contributions.

Some zoological sightings of note included a caterpillar, Leopard Frog, Green Snake, dragonfly, butterfly, and green grasshopper. Some of the more unusual botanical observations included a budding Violet as well as blooming Bunchberry and Lambskill. However, the most unusual find of the day was a blue and black variegated *Shirtus castoffis*.

Our path took us through a wet section, the result of Hurricane Floyd's torrential rains during the previous few days. This was a mycologist's delight as we were able to identify a number of different mushrooms, including *Clavaria*, or Coral Mushroom. It was generally agreed that the best edible varieties are those available at the produce counter of Sobeys. That source of these delectable little morsels would most likely ensure that you would walk away from the dinner table and not end up on a slab at the Poison Control Center.

The continued talk of weather turned to the oncoming storm Gert and prompted the question, "What is the difference between a male and a female hurricane?" Someone replied, "A hurricane is female. If it were male, it would be called a 'himicane'". But one true naturalist in the crowd added, "Check its genus (jean-us)!"

After close to two and a half hours, we reached the pinnacle of our trek – Labrador Castle. It afforded us a splendid panoramic view of the East River Bay with its numerous islands; our starting point – the Hardboard Plant; a distant crane in Halifax Harbour; a bog called Johnny's Meadow on the topographical map; a communication tower; highway 3; and an inukshuk on a ledge just below where we stood.

The light and dark hues of the expansive verdant forest added a touch of majesty to the scene before us. Ray unfolded a piece of paper and read a poem written by a 16-year old previous visitor to this same spot. We listened in appreciative silence, deeply moved by his message. It was the final touch which made an already impressive scene that much more spectacular.

There is, however, one unanswered question of the day. How can we explain John Maly's disappearance from the group and reappearance at Labrador Castle? He says that he took the 'Mainway' but this is not an Irving property. Can the unidentified mushroom with the bite out of it and John's membership in the Natural Law Party and reference to levitation explain his tireless ascension to the mount? Or will this remain forever a mystery?







CASTLE ROCK

Everything less than now flooding the wells of my imagination is dwarfed by this wonder, yet nothing is less.

The beauty here did not happen by chance, but by the meticulous planning of the wind and rain and by the earth herself.

From my view the trees dwindle to little more than a vast green flat on which clouds draw the shadows of themselves in dark threads along the evergreens.

There is no wind here, there is the land itself breathing.

I am calmed now like I've rarely known, and there is no fog on my thoughts...

I love it here, and if you're reading this, I hope you do, too.

– Jonathan Mulle (16)

Violet

Labrador Castle Species Flowering plants

Baisam Fir White Spruce Red Spruce Black Spruce Hackmatack White pine Red Pine Common Juniper Small Pussy Willow Trembling Aspen Large-toothed Poplar Sweet Gale Bayberry Sweet-fern Yellow Birch Gray or Wire Birch Paper Birch Heart-leafed Birch Downy Alder Speckled Alder Red Oak American Elm Knotweed Cow-lily Witch-hazel Black Chokeberry Mountain Ash Wild Strawberry 3-toothed Cinquefoil Canada Cinquefoil Wild Raspberry Trailing Blackberry Blackberry Wild Rose **Pin-cherry** Choke-cherry Yellow Wood-sorrel Broom-crowberry Canada Holly False Holly Mountain Maple **Red Maple** St. John's-wort Woolly Hudsonia

Abies balsamea Picea glauca P. rubens P. mariana Larix laricina Pinus strobus P. resinosa Juniperus communis Salix discolor Populus tremuloides P. grandidentata Myrica gale M. pensylvanica Comptonia peregrina Betula alleghaniensis B. populifolia B. papyrifera B. cordifolia Alnus crispa A. rugosa Quercus rubra Ulmus americana Polygonum cilinode Nuphar variegatum Hamamelis virginiana Aronia melanocarpa Sorbus americana Fragaria virginiana Potentilla tridentata P. canadensis Rubus strigosus R. hispidus R. allegheniensis Rosa virginiana Prunus pensylvanica P. virginiana Oxalis stricta Corema conradii llex verticillata Nemopanthus mucronata Acer spicatum A. rubrum Hypericum perforatum Hudsonia tomentosa !

Evening-primrose **Bristly Aralia** Bunchberry Lambkill Leather Leaf Mayflower Teaberry Snowberry Huckleberry Canada Blueberry Blueberry Spreading Dogbane Swamp-milkweed Common Mullein Toadflax **Bush-honevsuckle** Hobblebush Witherod White Goldenrod Old-field Goldenrod Rough Goldenrod Narrow-leaved Goldenrod New England Aster Calico Aster Aster Tall White Aster **Daisy Fleabane Pearly Everlasting** Fall-dandelion **Clubmosses and Ferns** Clubmoss **Royal Fern** Interrupted Fern Cinnamon Fern Havscented Fern Bracken Fungi Coral Mushroom Various Basidiomycetes 🖀 Animals 📽 Leopard Frog Green Snake

Viola sp. Oenothera biennis Aralia hispida Cornus canadensis Kalmia angustifolia Chamaedaphne calyculata Epigaea repens Gaultheria procumbens G. hispidula Gaylussacia baccata Vaccinium myrtilloides V. angustifolium Apocynum androsaemifolium Asclepias incarnata Verbascum thapsus Linaria vulgaris Diervilla Ionicera Viburnum alnifolium V. cassinoides Solidago bicolor S. nemoralis S. rugosa S. graminifolia Aster novae-angliae A. lateriflorus A. novi-belaii A. umbellatus Erigeron strigosus Anaphalis margaritacea Leontodon autumnalis Lycopodium clavatum and L. digitatum Osmunda regalis

O. claytoniana O. cinnamomea Dennstaedtia punctilobula Pteridium aquilinum

Clavulina cristata

Rana pipiens Ophiodrys vernalis

- Ray Fielding

MUSHROOM MEANDER

DATE: Saturday, 3 October PLACE: Kentville Ravine WEATHER: Warm and sunny INTERPRETER: Marian Zinck PARTICIPANTS: 24





What do the Destroying Angel, Varnish Shelf, Witches' Butter and Wolf's Milk Slime all have in common? Indeed, they are all fanciful names for fungi. They are also some of the wonderfully diverse species seen on the Mushroom Meander at Kentville Ravine. It was a warm fall day, and 24 people from three counties met at the Research Station parking lot. Armed with baskets, paper, and enthusiasm, we set out for a four-hour forage.

The Kentville Ravine is a remnant of old-growth Hemlock and Pines surrounding a meandering stream. Mushroom diversity was high, but we were also amazed to see some of the spring wildflowers in bloom again, such as Forget-me-nots.

The lush floodplain of the brook held few surprises, but plenty of ghostly Coral Fungi (*Ramariopsis* sp. and *Clavulina* sp.) in dark corners. Several small, False Puffballs (*Scleroderma* sp.) were also kicked about. These resemble small footballs, and are very common. The greatest variety was found in the Russulas; at least four species were identified. The Amanitas were plentiful, with several lovely but deadly Destroying Angels collected.

One fully developed Caesar's Mushroom was also brought to the table. Other mushroom-producing fungi seen were the Milkys (*Lactarius* sp.), Waxy Caps (*Hygrophorus* sp.), the Corts (*Cortinarius* sp.), a single Chanterelle, and several Boletes.

Certainly the highlights for me were the small and unusual. Bird's Nest Fungi (Cyathus sp.) were found nestled along a small twig. These cup-shaped fungi belong to the same group as the Puffballs. The spore sacs resemble small eggs at the bottom. They are attached by a thin cord, and await a raindrop to splash them out of the sac. Eyelash fungi were also found by our Hants County foragers. These reddishbrown cups are fringed by dark stiff hairs resembling eyelashes. While common, their size makes them difficult to spot on wet and decaying wood. A neat discovery was a small cluster of Wolf's Milk Slime. These grayish spheres when touched release a raspberry coloured mass. They were found on a twig, and each measured about one cm across. The most coincidental find was of a Lobster Mushroom by ... a lobster biologist! The Hypomyces are moulds which parasitise other fungi. In this case the host was probably a Milky. The mould forms a bumpy orange covering, which renders a distorted shape to the host.

Kentville Ravine has an historic precedent for mushroom scavenging. The late Dr. Ken Harrison, a well-known local mycologist, favoured this park for his annual fall mushroom walk. I am proud and humbled to have been invited to walk it with such a lively and enthusiastic group.

Mushroom Meander species

Sacs, Cups and Clubs Lobster Mushroom (on *Lactaria* sp.?) Eyelash Cup Witches' Butter Coral Mushrooms

Chanterelle Mushrooms with pores Boletes Hemlock Varnish Shelf Bracket fungi

Mushrooms with gills

Coincap Waxy Caps Tallowgills Funnelcap Oyster Mushroom Caesar's Amanita False Deathcap Destroying Angel Corts (Webcaps?) Russulas



Hypomyces lactifluorum

Scutellinia scutellata Tremella mesenterica Ramanopsis sp. Clavulina sp. Cantharellus cibarius

Boletus spp. Ganoderma tsugae Fomes fomentarius Fomitopsis sp.

Collybia tuberosa Hygrophorus spp. Laccaria proxima Clytocybe candida Pleurotus ostreatus Amanita caesarea A. citrina A. virosa Cortinarius spp. Russula fragilis, R. emetica, R. subfragiliformis Lactarius spp.

Scleroderma sp.
Cyathus stercoreus

Myosotis scorpioides



MCNABS FALL FOLIAGE FORAY

DATE: Sunday, 17 October PLACE: McNabs Island WEATHER: Perfect, breezy and warm INTERPRETERS: Mike Crowell, Dan Conlin, Tim Hall PARTICIPANTS: 135

The annual Fall Foliage Foray sponsored by friends of McNabs Island attracted visitors of all ages, from toddlers to octogenarians; one hundred and thirty-five people ventured from Halifax and Eastern Passage to McNabs for a day of island meandering! The weather was perfect, with strong, southerly breezes and warm temperatures. It seemed more like late August than late October. The warm weather even coaxed a Garter Snake (*Thamnophis sirtalis*) out onto the warm rocks for sunbathing.

The island adventure included guided lighthouse, nature, and history walks. Visitors participated in a combination of tours that included historic homes and lighthouse. Dan Conlin and Tim Hall of the Nova Scotia Lighthouse Preservation Society guided visitors through the Maughers Beach Lighthouse, and recounted the history of the island's lights. The view of the island, harbour, and shores of Purcells Cove from the top of Maughers Light is one of the best views anywhere in Nova Scotia.

Biologist Mike Crowell led those interested in the island's natural history on a tour around McNabs Pond to Strawberry Battery and then to Fort McNab. The group observed the effects of autumn storms that had moved tons of eel grass up onto Maughers Beach. Many visitors stopped along the way to gather a few hips from the salt-sprayed roses.

Island historian Barry Edwards distributed 'tar-baby' licorice, which has its origins as a child's treat handed out during public hangings centuries ago! Barry told visitors of the macabre history of Hangmans Beach and the British Admiralty's policy on the punishment of those who refused to follow orders. Barry's history walk travelled to the north-end of the island, past the abandoned Teahouse and the Findlay Farm. Eventually the walk reached the historic island houses that were once part of the McNabs Island community. Visitors were able to tour the insides of the Davis/ Conrad and Matthew Lynch houses. These properties, once part of the Conrad/Lynch estate, were bought by the province in 1986 and have been maintained by Natural Resources ever since. The Friends of McNabs Island and other groups have long supported conversion of these houses into an outdoor education or interpretation centre. For now, they remain empty and unused.

The Fall Foliage Foray could not have been successful without the support of the many volunteers who donated their time, enthusiasm, and energy to our favourite island. Thanks to Judy Campbell and Victor Dingle for 'house-sitting' the Conrad and Lynch houses for the afternoon. Thanks also to our tour leaders, Dan Conlin, Tim Hall, Mike Crowell, and Barry Edwards for introducing the island to old and new friends; to Murphy's on the Water for providing free passage for our tour leaders; and to Jillian Craig of Bell & Grant Insurance for arranging our insurance coverage on the Natural Resources-owned houses for the day. And a special thank you goes to our cosponsoring organisations and their volunteers, in particular Kathy Brown of the Nova Scotia Lighthouse Preservation Society and Marie Moverley of the Halifax Field Naturalists. We look forward to a continued partnership with the many organisations that share our interest in McNabs Island Provincial Park.

- Catherine McCarthy





ANNUAL CRANBERRY PICK

DATE: Sunday, 24 October PLACE: Clam Harbour Beach Provincial Park WEATHER: Sunny, windy, and warm (12° to 14°) INTERPRETER: Bernice Moores PARTICIPANTS: 14

The intent of the Ciam Harbour walk, organised by the Nova Scotia Field Naturalists, was to pick cranberries. I myself did not come for the berries. I came to visit the beach. Halifax had an autumn storm on Saturday, so on the Sunday rain date I gathered my belongings: lunch, extra socks, boots, hat, mittens, and a warm sweater. There were six of us to share two cars on the way to the Eastern Shore.

When we got to Clam Harbour we immediately felt the cool wind's full strength. Four other people met us at the entrance to the beach; they had come with large buckets for picking cranberries. When we were all geared up we got a demonstration on how cranberry leaves look flat green compared with the shinier fox berry leaves. We looked like children as we walked together in a pack down to the beach.

Then the sight of the sea hit me. The waves were full of voices and sounds. There were tall golden grassy fields on the outer edges of the beach. I walked along the flat sand and the wind filled every part of me. The ocean was strong and challenging in the continuous way the waves hurled themselves up on the sand. The sky was cast with various blue and violet hues. I chose to walk the Barrens. This walking trail was an extravaganza of seaweed smells, earth, wet bog, woods, and blowing winds. I encountered rocks and bleached white trees that dared to exist so near the sea. An occasional seagull or cloud dotted the sky line. I found walking difficult in places where the imposing waves rolled seaweed in hard against the rocks.

Walking back to the beach I came upon a woman who had found some cranberries along a ridge very near the water. I began to pick some berries with her. Soon other people began to return to the beach. We sat together to eat our food in an area sheltered from the wind. Our talk over lunch mixed with the sounds of the waves and everywhere the wind pushed at the sand.

After lunch I walked the open beach. I shall never forget the roaring loud sounds the wind and the sea made together. Every wave was active and breaking violently out on the horizon. I witnessed how the waves impressed the sand in a moment of permanence. Then I came upon milky, bubbly foam that rolled in soft from the tip of every wave. The beach grass was gold, the waves were silver-white and light, and the sand was brown. There were pine woods that bordered the beach, and moss hung from some trees alongside the boardwalk on the way back to the car.

The last sight I saw was the far off crashing waves. Walking on Clam Harbour beach was like being lost: in a good way.

Cranberry Pick Birds

Herring Gull Ring-billed Gull Sanderling (15) Black-capped Chickadee Boreal Chickadee Larus argentatus L. delawarensis Calidris alba Parus atricapillus P. hudsonicus

- Karen Lorraine

PROSPECT BOGS AND BARRENS

DATE: Sunday, 7 November PLACE: Indian Point and along Shad Bay WEATHER: Windy and partly cloudy, -5° INTERPRETER: Janet McGinity PARTICIPANTS: 13



On a blustery fall day, 13 well-bundled-up -Kallnaturalists met in the picturesque village of Prospect to visit the barrens covering this long, narrow peninsula southwest of Halifax. We moved on to Indian Point Road, the starting point of a trail that meanders for about 5 km along the coastline of Shad Bay.

The trail crossed a tidal brook lined with yellowgreen rockweed, and continued over the barrens. Here, it seemed as though the glacier melted away only yesterday. On our way, we passed huge granite outcrops rising out of nearly bare ground, with a thin scattering of soil mostly composed of granite pebbles. Glacial erratics littered the landscape. These large, lichen-covered boulders were dropped 10,000 years ago as the mountain of ice melted.

Our first stop was to look at some of the barrens vegetation. Only a few species can survive in the exposed windy conditions. Typical ones are Black Crowberry, Common Juniper, Creeping Juniper and Small Cranberry, which form vast ground-hugging mats. Like most barrens plants, and those in bogs as well, these have waxy or leathery leaves that keep them from drying out. Scattered within the mats were dwarfed Bog-laurel shrubs, only four or five inches tall.

We climbed a short distance uphill on the barrens, where stands of Black Spruce and Tamarack find a bit more soil to root in. We stopped to investigate a Black Spruce in the middle of a circle of younger trees. In poor conditions, Black Spruce can spread by layering. Branches weighted down by snow in the winter take root and grow into another tree. Thus, the 'mother tree' ends up being surrounded by the next generation of young trees. Because of the shortage of nutrients, the trees grow slowly. A tree whose trunk is only half an inch thick may be 50 years old.

On the higher regions of the Prospect barrens, farther from the sea, pockets of sphagnum moss filled the hollows. Janet picked up a handful of damp sphagnum and squeezed, letting a surprising amount of water pour out; sphagnum can hold many times its own weight in water. Its absorbency made it the choice of Native people for disposable diapers. The moss has also been used for wound dressings; and in its dried form – peat – to lighten garden soil. Compressed and half-fossilised, it is used in Scotland and Ireland for fuel in homes and electricitygenerating plants.

Growing within these tiny bogs were Pitcher Plants. These plants are a botanical oddity, which get scarce nutrients such as nitrogen by catching insects. However, they are passive carnivores; an insect lands on the edge of the pitcher plant's lip, and slides down slippery, downward-pointing hairs that line the inside of the pitcher, to land in a pool of liquid at the bottom. This liquid is filled with enzymes which digest the insect.

We walked closer to the shore, to a large outcrop split in half. Within the outcrop, someone had painted the graffiti "HMS Fantome, 18-gun brig, sank near here, November 1814". The crew of the brig were luckier than most shipwreck victims; when the vessel rammed into rocks in the shallow water, all escaped unharmed into the lifeboats and made it safely to the shore of Shad Bay.

Farther along the trail, we stopped to pick a few late cranberries. In drier spots nearby, patches of Bog-laurel were mixed in with Labrador Tea and Wintergreen, with its purplish leaves and bright-red berries. We nibbled a few leaves of Wintergreen, whose refreshing flavor is reminiscent of toothpaste and chewing gum. Commercial wintergreen flavor is a synthetic version of its oil. Labrador Tea is another typical bog plant, whose leaves can be steeped to make a mild tea. It is easy to identify, with its leathery leaves with curled edges and with an underside covered with whitish fluff, turning rustcoloured when older.

As we hiked along the edge of Shad Bay, the trail followed the tops of low cliffs lining the shore. Barrens gave way to forest edge. This is a beautiful area, with views across the bay towards East Dover and the outermost Mahone Bay islands.

Our last stop was at a glacial erratic covered with vines of Bearberry. This cranberry-like plant has mealy berries and small, glossy green leaves in pairs. The leaves have been used medicinally for urinary problems. Native people call this plant Kinnikinnick. It is sometimes included with other herbs in the smoking mixture used in medicine pipes during spiritual ceremonies.

As we hiked back to the village of Prospect, the

wind was at our backs, a welcome respite from the chilly breeze that accompanied our visit to the barrens.

- Janet McGinity

Bogs and Barrens Species

Small Cranberry
Common Juniper
Creeping Juniper
Black SpruceVaccin
Juniper
Juniper
Duniper
Er
Vaccin
Juniper
Er
Vaccin
Vaccin
Sarra
Bog-laurel
Wintergreen
Labrador Tea
Bearberry
Tamarack or Larch
Sphagnum MossVaccin
Juniper
Er
Vaccin
Sarra
Gaulthe
Ledum
Arctosta

Vaccinium oxycoccus Juniperus communis Juniperus horizontalis Picea mariana Empetrum nigrum Vaccinium vitis-idaea Sarracenia purpurea Kalmia polifolia Gaultheria procumbens Ledum groenlandicum Arctostaphylos uva-ursi Larix laricina Sphagnum sp.



POINT PLEASANT PARK

DATE: Sunday, 5 December INTERPRETER: WEATHER: Overcast, 6°, no wind PARTICIPANTS: 20

This field trip was to have been led by Dr. Henrietta Mann, a biogeochemist at DalTech, who has been studying soil preservation and the regeneration of vegetation in the Park. In recent years there has been public controversy about the extensive cutting of trees in the Park, the removal of wood and natural debris, and the absence of new growth, and we were looking forward to learning from a scientist how these questions of forest 'management' are being addressed. Regrettably, our leader failed to appear.

Rich Peckham nobly stepped into the breach, and outlined some of these concerns, and their recent history. We agreed to proceed with our walk in the park, with those who could identify plants or birds, or comment on current practices, helping out. We began by reading the new sign near the entrance to the park, which reports that only dead which endanger paths are being cut. Logs are now to be allowed to lie on the ground, while branches will be chipped and spread over the soil. The intent is to return organic matter and nutrients to the earth, while the logs can be a home for wildlife, until they wholly decay. While these practises are a good start, it seemed to us to be excessively 'tidy'. Fallen logs alone do provide cover for salamanders and other reptiles and amphibians, whose numbers in the park are reported to have dropped alarmingly. But bushy fallen logs with many branches would, for instance, also offer much better cover to nesting songbirds, such as juncos and sparrows. Furthermore they would deter off-trail traffic, which compacts the soil

around shallow tree roots.

The comparatively bare ground under some big trees, and the dense undergrowth in other areas, raised questions about soil depletion, forest succession, and the needs of young trees which could not always be answered by our group. Certainly in some areas, such as on the Cable Road, there has been a spurt of hardwood growth in the last few years. I noticed this beginning several years ago, before the large dead spruces were felled. Where more sun reaches the forest floor some species have shot up quickly.

The abundant Witchhazel along the Cable Road was an unfamiliar shrub to some of our party, and we were pleased to find a few still had fresh blooms. A noisy female Hairy Woodpecker flew in to work over a dead limb nearby, and neat rows of Yellow-bellied Sapsucker holes were found in a Linden tree. We were reminded that many creatures depend on standing dead trees for food, shelter, and nesting cavities.

The many introduced species in the park posed a challenge for identification, particularly the various conifers: Red Pine was distinguished from Austrian Pine, and Norway Spruce from our native species. The various gulls congregating at the sewer outfall below Chain Rock presented a different problem, but we did identify several Iceland Gulls among the usual residents, the first of these winter arrivals I have seen this fall. Later in the afternoon Jim Wolford reported seeing another northern species, the larger Glaucous Gull.

Our participants gradually broke up into smaller, informal parties, and pursued their own paths and interests. Some of us happily fed the Black-capped Chickadees and Red-breasted Nuthatches, which come readily to hands holding out sunflower seeds. while Nelson Poirier, a visitor from Moncton, tried to capture them on film. I led a few people into an area off the Heather Road that still feels 'wild' to me; here there are big dead old spruce trees, some still standing, while others have fallen on their own without being cut up into neat sawlogs. I usually see woodpeckers here, and Boreal Chickadees, and once saw a Broad-winged Hawk. Nelson commented on the abundance of fungi on the thick trunks -- "What wonderful stuff fungi is, to recycle all of this! Without it where would we be!"

As we walked out of the Park on the Cambridge Road, our Moncton visitor marvelled again at the great variety of dogs, mingling companionably offleash, and at their dutiful owners, armed with plastic bags. He had not seen such a well-used, well-kept 'dog-walking' park before, and thought it was much to Halifax's credit. I hope we will be able to have another field trip to the Park soon, to learn more about how humans can continue to enjoy this marvellous natural area, without seeing it jeopardized by our activities.

– Patricia L. Chalmers

NATURAL HISTORY *

GOD TALKING TO ST. FRANCIS

"Frank, you know all about gardens and nature. What in the world is going on down there in the Midwest? What happened to the dandelions, violets, thistle and stuff I started eons ago? I had a perfect no-maintenance garden plan. Those plants grow in any type of soil, withstand drought and multiply with abandon. The nectar from the long-lasting blossoms attracted butterflies, honey bees, and flocks of songbirds. I expected to see a vast garden of colors by now. But all I see are these green rectangles."

"It's the tribes that settled there, Lord. The Suburbanites. They started calling your flowers 'weeds' and went to great extent to kill them and replace them with grass."

"Grass? But it's so boring! It's not colourful. It doesn't attract butterflies, birds, and bees; only grubs and sod worms. It's temperamental with temperatures. Do these Suburbanites really want all that grass growing there?"

"Apparently so, Lord. They go to great pains to grow it and keep it green. They begin each spring by fertilizing grass and poisoning any other plant that crops up in the lawn."

"The spring rains and cool weather probably make grass grow really fast. That must make the Suburbanites happy."

"Apparently not, Lord. As soon as it grows a little, they cut it, sometimes twice a week."

"They cut it? Do they then bale it like hay?"

"Not exactly, Lord. Most of them rake it up and put it in bags." "They bag it? Why? Is it a cash crop? Do they sell it?"

"No, sir. Just the opposite. They pay to throw it away."

"Now let me get this straight. They fertilise grass so it will grow. And when it does grow, they cut it off and pay to throw it away ?"

"Yes, sir,"

"These Suburbanites must be relieved in the summer when we cut back on the rain and turn up the heat. That surely slows the growth and saves them a lot of work."

"You aren't going believe this, Lord. When the grass stops growing so fast, they drag out hoses and pay more money to water it so they can continue to mow it and pay to get rid of it."

"What nonsense!

At least they kept some of the trees. That was a sheer stroke of genius, if I do say so myself. The trees grow leaves in the spring to provide beauty and shade in the summer. In the autumn they fall to the ground and form a natural blanket to keep moisture in the soil and protect the trees and bushes. Plus, as they rot, the leaves form compost to enhance the soil. It's a natural circle of life."

"You better sit down, Lord. The Suburbanites have drawn a new circle. As soon as the leaves fall, they rake them into great piles and have them hauled away."

"No! What do they do to protect the shrub and tree roots in the winter and keep the soil moist and loose?"

"After throwing away your leaves, they go out and buy something they call mulch. They haul it home and spread it around in place of the leaves."

"And where do they get this mulch?"

"They cut down trees and grind them up."

"Enough! I don't want to think about this anymore. Saint Catherine, you're in charge of the arts, what movie have you scheduled for us tonight?"

"Dumb and Dumber', Lord. It's a real stupid movie about..."

"Never mind, I think I just heard the whole story." - Lesley Butters



"Viewed from the distance of the Moon, the astonishing thing about the Earth... is that it is alive...

Aloft, floating free beneath the moist, gleaming membrane of bright blue sky, is the rising Earth, the only exuberant thing in this part of the cosmos... It has the organised, self-contained look of a live creature, full of information, marvelously skilled in handling the Sun."

> — Lewis Thomas, <u>The Lives of a Cell</u>, 1974





This almanac is for the dates of events which are not found in our programme – for field trips or lectures which members might like to attend, or natural happenings to watch for, such as eclipses, comets, average migration dates, expected blooming seasons etc. Please suggest other suitable items.

One of the most beautiful appearances of nature is what is called in Newfoundland, the 'Silver Thaw' ..., it is produced by a shower of rain falling during a frost, and freezing the instant it reaches the earth, or comes in contact with any object. A most magnificent scene is thus produced, every object is clad in a silver robe, every twig and tree is bedecked with glittering pearls, and the whole surface of the snow becomes a beautiful mirror. But this crystal sheen is short-lived; a sudden breeze of wind ends its reign; great damage is done to the trees by the weight of ice encrusting them.





- NATURAL EVENTS
 - 22 Dec. Full moon this is the 'Cold Moon'.
 - **22 Dec.** Winter Solstice (Sun reaches most southerly declination) at 3:44 a.m. AST. Winter begins in the Northern Hemisphere, but tomorrow the sun rises a little higher and a little longer.
 - 23-25 Dec. Very large tides will occur, especially in the Minas Basin.
 - 24/25 Dec. Annual nocturnal circumglobal migration of Arctic Reindeer (Rangifer tarandus).
 - **7 Jan.** Daily maximum temperature at Shearwater goes below 0°.
 - 13-24 Jan. 'January Thaw' (the temperature stops falling, and the average actually rises 0.2°).
 - 20/21 Jan. Total lunar eclipse, visible in Nova Scotia from 11:01 p.m. until 2:26 a.m. The best time to watch is around midnight.
 - 21 Jan. Full Moon the 'Wolf Moon'.
 - 29/30 Jan. 'Eagle Days' in Sheffield Mills, King's County.
 - 6-8 Feb. Coldest days of winter (average daily minimum -9.4°).9 Feb. Average temperatures start increasing.
 - **10-15 Feb.** Mercury appears low in the western sky at twilight.

19 Feb. Full Moon – the 'Snow Moon'.

- **19 Feb.** Full would the Show would :
- 22 Feb. Daily maximum temperature above 0°
- late Feb./ear.Mar. Snow fleas appear above the snow, where they mate.
- early March Winter stoneflies (family Taeniopterygidae) emerge near open water to mate and lay eggs.
 - mid-March Sap starts running in the Sugar Maples.
 - 20 March Vernal Equinox at 3:35 AST. Spring begins in the Northern hemisphere.
 - 20 March Full Moon the 'Worm Moon'.
 - 23 March Daily average temperature above 0°.

SUN

- early April Daphne and Beaked Hazel are among our earliest flowering shrubs.
- early April Red Maple blossoms appear. Early season butterflies often nectar on these.
 - 2 April Daylight Savings Time begins at 2:00 a.m. Turn clocks ahead one hour.

— Sources: Atmospheric Environment Service, Climate Normals 1951-80 Halifax (Shearwater A) N.S.; Colombo's Canadian Global Almanac, 1997, 2000; Randy Lauff, Sherman Williams, and Jim Wolford (on NatureNS); David Christie, Brian Dalzell, Frank Kelly, and Kathy Popma (on NatureNB); and the personal observations of the compiler.



L.	

~AXX	

Ж

- Philip Tocque: Newfoundland: as it was, and as it is in 1877, (1878)

IRISE AND	SUNSET	ON LATE	E AUTUMN AN	VD WINTER	SATUF	IDAYS
	4 Dee	7:24	10.05	f lan	7.54	40.44

	DCC.	1.04	10.30		uan.	1.51	10,44
11	Dec.	7:41	16:34	8	Jan.	7:51	16:51
18	Dec.	7:46	16:35	15	Jan.	7:48	16:59
25 I	Dec.	7:50	16:39	22	Jan.	7:44	17:08
				29	Jan.	7:37	17:18
5 1	Feb.	7:29	17:28	4	Mar.	6:46	18:07
12	Feb.	7:20	17:38	11	Mar.	6:33	18:16
19	Feb.	7:09	17:48	18	Mar.	6:21	18:25
2 6 I	Feb.	6:58	17:57	25	Mar.	6:08	18:34
	11 18 25 5 12 19 26	11 Dec. 18 Dec. 25 Dec. 5 Feb. 12 Feb. 19 Feb. 26 Feb.	11 Dec. 7:34 18 Dec. 7:46 25 Dec. 7:50 5 Feb. 7:29 12 Feb. 7:20 19 Feb. 7:09 26 Feb. 6:58	11 Dec. 7:34 10:35 11 Dec. 7:41 16:34 18 Dec. 7:46 16:35 25 Dec. 7:50 16:39 5 Feb. 7:29 17:28 12 Feb. 7:20 17:38 19 Feb. 7:09 17:48 26 Feb. 6:58 17:57	11 Dec. 7:41 16:35 1 11 Dec. 7:41 16:35 1 18 Dec. 7:46 16:35 15 25 Dec. 7:50 16:39 22 5 Feb. 7:29 17:28 4 12 Feb. 7:09 17:48 18 26 Feb. 6:58 17:57 25	11 Dec. 7:41 16:35 1 Jan. 11 Dec. 7:41 16:34 8 Jan. 18 Dec. 7:46 16:35 15 Jan. 25 Dec. 7:50 16:39 22 Jan. 29 Jan. 29 Jan. 11 Mar. 12 Feb. 7:20 17:38 11 Mar. 19 Feb. 7:09 17:48 18 Mar. 26 Feb. 6:58 17:57 25 Mar.	11 Dec. 7:41 16:35 1 Jan. 7:51 18 Dec. 7:46 16:35 15 Jan. 7:48 25 Dec. 7:50 16:39 22 Jan. 7:44 29 Jan. 7:37 7:37 5 Feb. 7:29 17:28 4 Mar. 6:46 12 Feb. 7:20 17:38 11 Mar. 6:33 19 Feb. 7:09 17:48 18 Mar. 6:21 26 Feb. 6:58 17:57 25 Mar. 6:08

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

ORGANISATIONAL EVENTS

Blomidon Naturalists Society: Indoor meetings take place on the third Monday of the month at Room 241 in the Beveridge Arts Centre, Acadia University, 7:30 p.m. Field trips usually depart from the Robie Tufts Nature Centre, Front St., Wolfville. For more information http://www.go.ednet.ns.ca/~bns/home.htm

17 Jan. "Good Gnus - Bad Gnus: A Serengeti Safari 'Ecotour' in East Africa", with Jim Wolford.

Burke-Gaffney Observatory: Public shows at the Burke-Gaffney Observatory at Saint Mary's University are held on the 1st and 3rd Saturday of each month, except from June through September when they are held every Saturday. Tours begin at 7:00 p.m. between November 1 and March 30, and at either 9:00 p.m. or 10:00 p.m. (depending on when it gets dark) between April 1 and October 31. For more information phone 496-8257; or <http:// apwww.stmarys.ca/bgo/>. 🗱

Friends of McNabs Island: For more information call Dusan Soudek, 422-1045; or Mike Tilley, 465-4563; or http:// chebucto.ns.ca/Environment/FOMIS/>.

Nova Scotia Bird Society: Indoor meetings take place on the fourth Thursday of the month, October to April, at the Nova Scotia Museum of Natural History, 7:30 p.m. (Note new meeting time!) For more information phone 852-2428 (recording), or Fulton Lavender, 455-4966; or http://www.chebucto.ns.ca/Recreation/NS-BirdSoc/.

- 19 Dec. "Halifax Christmas Bird Count"
 - 2 Jan. "Bedford-Sackville Christmas Bird Count"
 - 8 Jan. "Sewer Stroll I, Halifax/Dartmouth Area", with Fulton Lavender.
 - 27 Jan. "Members' Slide Night"
- 举 5 Feb. "Sewer Stroll II, Halifax/Dartmouth area", with Fulton Lavender.
 - 24 Feb. "Whales and Seabirds in the Bay of Fundy", with Carl Haycock.
 - "Owl Prowl, Pictou and Antigonish Counties", with Calvin Brennan, 923-2780. 13 Mar.
 - 23 Mar. "Birding Adventures in Arizona", with Joan Czapalay.
 - 1 Apr. "Baccaro and Blanche Peninsula", with Donna Ensor, 875-4269.

Nova Scotia Museum of Natural History: For more information about programmes phone 424-6099, or 424-7353; or <http://www.ednet.ns.ca/educ/museum/mnh/>.

- 22 Jan.-18 June "Millenium Bugs", an exhibit with many related programmes.
 - 1 Feb. "Releasing Home-Raised Bugs", with Glen Sampson.
 - 2 Feb. "Flying Dragons, Graceful Damsels, All About Dragonflies", with Paul Brunelle.
 - "Meet Our Research Associates Day: MNH Research Presentations" 5 Feb.
 - "Spraying Lawns and Laws", with Helen Lofgren. 8 Feb.
 - 15 Feb. "The Aquaculture Dilemma", with Inka Milewski.
 - "Tracking Sherman, the Leatherback Turtle", with Mike James. 16 Feb.
 - "Whales and Seabirds of the Bay of Fundy", with Carl Haycock. 23 Feb.
 - 1 March "Seabirds of the North Atlantic: An Overview", with Tony Lock.
 - 8 March "Murres: A Circumpolar Perspective", with John Chardine.
 - 22 March "Terns and Their Survival", with Andrew Boyne.
 - 29 March "Cormorants: Black, Bad Birds", with Randy Milton.
 - 2 April "The Nature of Hummingbirds", a book launch with Harry Thurston.
 - **5 April** "Eiders and Gulls: Can They Live Together?", with Kim Mawhinney.

Nova Scotia Wild Flora Society: Meets fourth Monday of the month, September to May, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information phone Heather Drope, 423-7032. Å

24 Jan. "Members' Slide Night".

- 28 Feb. TBA
- 27 Mar. "Spring Flora", with Carl Munden.

24 Apr. "Photographing Wild Flowers", with Charlie Cron.

Photographic Guild of Nova Scotia: Meets second Monday of the month, as well as the first and third Sundays of the month, at the Nova Scotia Museum of Natural History, 7:30 p.m. Shows are held at Saint Mary's University, Theatre A, Burke Education Centre. For more information phone Kenneth Moore, 826-1121; or http:// chebucto.ns.ca/Recreation/PGNS PGNS.html>

13 Mar. "Participating in Wildlife Photography", seminar with Lorris Keizer.

₩

Royal Astronomical Society of Canada (Halifax Chapter): Meets third Friday of each month at the Nova Scotia Museum of Natural History, 8:00 p.m. For more information, http://halifax.rasc.ca. Public shows at the Planetarium in the Sir James Dunn Building, Dalhousie University, have been discontinued.

🔆 — compiled by Patricia L. Chaimers



Ж



*

₩

*

HALIFAX TIDE TABLE



		Janua	ry-	-jan	vier			February-février							Μ	arch	-ma	irs					
Day	Time	Feet Meta	res	jour	heure	pieds	metres	Day	Time	Feet 1	Metres	још	heure	pieds	metres	Day	Time	Feet N	Aetres	jour	heure	pieds r	netres
1 SA SA	0355 1055 1635 2300	5.2 1 1.6 0 4.9 1 2.0 0	.6 .5 .5	16 SU DI	0250 0950 1525 2200	5.6 1.3 5.2 1.6	1.7 0.4 1.6 0.5	1 TU MA	0505 1155 1755	5.2 1.6 4.9	1.6 0.5 1.5	16 WE ME	0435 1135 1730	5.9 0.7 5.6	1.8 0.2 1.7	1 WE ME	0425 1110 1725 2330	4.9 1.6 4.9 2.3	1.5 0.5 1.5 0.7	16 тн је	0425 1120 1720 2350	5.6 0.7 5.6 1.3	1.7 0.2 1.7 0.4
2 SU D1	0450 1145 1730 2355	5.6 1 1.6 0 4.9 1 2.0 0	.7 .5 .5	17 мо LU	0355 1055 1635 2305	5.9 1.0 5.2 1.6	1.8 0.3 1.6 0.5	2 WE ME	0005 0555 1240 1840	2.3 5.6 1.3 5.2	0.7 1.7 0.4 1.6	17 TH JE	0000 0540 1235 1830	1.3 6.2 0.3 5.9	0.4 1.9 0.1 1.8	2 TH JE	0525 1200 1810	5.2 1.6 4.9	1.6 0.5 1.5	17 FR VE	0535 1220 1820	5.9 0.7 5.9	1.8 0.2 1.8
3 MO LU	0540 1230 1820	5.6 1 1.3 0 5.2 1	.7 .4 .6	18 TU MA	0455 1155 1740	6.2 0.7 5.6	1.9 0.2 1.7	3 TH JE	0045 0640 1320 1920	2.0 5.6 1.3 5.2	0.6 1.7 0.4 1.6	18 FR VE	0055 0640 1330 1925	1.3 6.2 0.3 6.2	0.4 1.9 0.1 1.9	3 FR VE	0015 0615 1245 1855	2.0 5.6 1.3 5.2	0.6 1.7 0.4 1.6	18 SA SA	0045 0630 1310 1905	1.0 5.9 0.3 5.9	0.3 1.8 0.1 1.8
4 TU MA	0040 0620 1310 1900	2.0 0 5.9 1 1.3 0 5.2 1	.6 .8 .4 .6	19 we me	0005 0555 1250 1840	1.3 6.6 0.3 5.9	0.4 2.0 0.1 1.8	4 FR VE	0125 0720 1355 2000	2.0 5.9 1.0 5.6	0.6 1.8 0.3 1.7	19 SA SA	0150 0735 1420 2015	1.0 6.6 0.0 6.2	0.3 2.0 0.0 1.9	4 SA SA	0055 0655 1320 1930	2.0 5.6 1.0 5.6	0.6 1.7 0.3 1.7	19 SU DI	0140 0720 1400 1950	1.0 6.2 0.3 6.2	0.3 1.9 0.1 1.9
5 WE ME	0115 0705 1345 1945	2.0 0. 5.9 1. 1.0 0 5.2 1	.6 .8 .3 .6	20 TH JE	0105 0650 1345 1935	1.3 6.6 0.0 6.2	0.4 2.0 0.0 1.9	5 SA SA	0200 0800 1430 2035	2.0 5.9 1.0 5.6	0.6 1.8 0.3 1.7	20 SU DI	0240 0825 1505 2100	1.0 6.6 0.0 6.2	0.3 2.0 0.0 1.9	5 SU DI	0135 0735 1400 2005	1.6 5.9 1.0 5.9	0.5 1.8 0.3 1.8	20 мо LU	0225 0810 1445 2035	0.7 6.2 0.3 6.2	0.2 1.9 0.1 1.9
6 TH JE	0150 0745 1420 2020	2.00.5.91.1.005.61	.6 .8 .3 .7	21 FR VE	0200 0745 1435 2030	1.0 6.9 0.0 6.2	0.3 2.1 0.0 1.9	6 SU DI	0235 0835 1500 2110	1.6 5.9 0.7 5.9	0.5 1.8 0.2 1.8	21 мо LU	0330 0910 1550 2140	1.0 6.6 0.3 6.2	0.3 2.0 0.1 1.9	б мо LU	0215 0815 1435 2040	1.3 5.9 0.7 5.9	0.4 1.8 0.2 1.8	21 TU MA	0310 0850 1525 2110	0.7 6.2 0.7 6.2	0.2 1.9 0.2 1.9
7 FR VE	0225 0820 1450 2100	2.005.911.005.61	.6 .8 .3 .7	22 SA SA	0255 0840 1525 2120	1.0 6.9 0.0 6.6	0.3 2.1 0.0 2.0	7 мо LU	0315 0915 1540 2145	1.6 5.9 0.7 5.9	0.5 1.8 0.2 1.8	22 TU MA	0415 0955 1635 2220	1.0 6.2 0.7 6.2	0.3 1.9 0.2 1.9	7 TU MA	0255 0850 1510 2115	1.0 5.9 0.7 6.2	0.3 1.8 0.2 1.9	22 WE ME	0350 0935 1605 2150	0.7 5.9 1.0 6.2	0.2 1.8 0.3 1.9
8 SA SA	0255 0900 1525 2135	2.005.911.005.61	.6 .8 .3 .7	23 SU DI	0350 0930 1615 2205	1.0 6.6 0.3 6.2	0.3 2.0 0.1 1.9	8 TU MA	0355 0950 1615 2220	1.6 5.9 1.0 5.9	0.5 1.8 0.3 1.8	23 WE ME	0505 1040 1720 2300	1.3 5.9 1.0 5.9	0.4 1.8 0.3 1.8	8 WE ME	0335 0930 1550 2155	1.0 5.9 0.7 6.2	0.3 1.8 0.2 1.9	23 TH JE	0430 1015 1640 2230	1.0 5.9 1.3 5.9	0.3 1.8 0.4 1.8
9 SU DI	0330 0935 1600 2215	2.0 0. -5.9 1 1.0 0 5.6 1	.6 .8 .3 .7	24 мо LU	0440 1015 1705 2250	1.3 6.6 0.7 6.2	0.4 2.0 0.2 1.9	9 WE ME	0435 1030 1655 2300	1.6 5.9 1.0 5.9	0.5 1.8 0.3 1.8	24 TH JE	0555 1120 1805 2340	1.3 5.6 1.6 5.6	0.4 1.7 0.5 1.7	9 TH JE	0420 1010 1635 2230	1.0 5.9 1.0 6.2	0.3 1.8 0.3 1.9	24 FR VE	0510 1055 1720 2305	1.3 5.6 1.6 5.6	0.4 1.7 0.5 1.7
10 MO LU	0410 1010 1640 2250	2.0 0 5.9 1 1.0 0 5.6 1	.6 .8 .3 .7	25 TU MA	0540 1100 1800 2335	1.3 6.2 1.0 5.9	0.4 1.9 0.3 1.8	10 TH JE	0530 1110 1745 2335	1.6 5.6 1.3 5.9	0.5 1.7 0.4 1.8	25 FR VE	0645 1205 1855	1.6 5.2 2.0	0.5 1.6 0.6	10 FR VE	0510 1055 1720 2310	1.0 5.9 1.3 6.2	0.3 1.8 0.4 1.9	25 SA SA	0555 1135 1805 2350	1.3 5.2 2.0 5.2	0.4 1.6 0.6 1.6
11 TU MA	0500 1050 1725 2325	2.0 0 5.6 1 1.3 0 5.6 1	.6 .7 .4 .7	26 WE ME	0635 1150 1850	1.6 5.6 1.3	0.5 1.7 0.4	11 FR VE	0625 1155 1835	1.6 5.6 1.3	0.5 1.7 0.4	26 SA SA	0025 0735 1255 1945	5.6 1.6 4.9 2.3	1.7 0.5 1.5 0.7	11 SA SA	0605 1140 1820 2355	1.0 5.6 1.6 5.9	0.3 1.7 0.5 1.8	26 SU DI	0640 1220 1900	1.6 4.9 2.3	0.5 1.5 0.7
12 WE ME	0555 1130 1815	2.0 0. 5.6 1. 1.3 0	.6 .7 .4	27 TH JE	0020 0730 1235 1940	5.6 1.6 5.2 1.6	1.7 0.5 1.6 0.5	12 SA SA	0020 0725 1245 1935	5.9 1.6 5.2 1.6	1.8 0.5 1.6 0.5	27 SU DI	0115 0830 1350 2040	5.2 2.0 4.6 2.3	1.6 0.6 1.4 0.7	12 SU DI	0705 1230 1925	1.3 5.2 1.6	0.4 1.6 0.5	27 мо LU	0030 0735 1315 1955	5.2 1.6 4.6 2.6	1.6 0.5 1.4 0.8
13 TH JE	0005 0650 1215 1905	5.6 1. 2.0 0. 5.2 1 1.3 0	.7 .6 .6	28 FR VE	0110 0825 1330 2035	5.6 2.0 4.9 2.0	1.7 0.6 1.5 0.6	13 SU DI	0115 0830 1345 2040	5.6 1.6 5.2 1.6	1.7 0.5 1.6 0.5	28 мо LU	0210 0925 1500 2140	4.9 2.0 4.6 2.3	1.5 0.6 1.4 0.7	13 мо LU	0050 0810 1330 2030	5.6 1.3 5.2 2.0	1.7 0.4 1.6 0.6	28 TU MA	0125 0830 1415 2055	4.9 2.0 4.6 2.6	1.5 0.6 1.4 0.8
14 FR VE	0055 0750 1310 2000	5.6 1 2.0 0 5.2 1 1.6 0	.7 .6 .6	29 SA SA	0200 0920 1435 2125	5.2 2.0 4.6 2.0	1.6 0.6 1.4 0.6	14 мо LU	0215 0930 1500 2145	5.6 1.3 4.9 1.6	1.7 0.4 1.5 0.5	29 ти ма	0315 1020 1620 2235	4.9 2.0 4.6 2.3	1.5 0.6 1.4 0.7	14 ти ма	0150 0915 1445 2140	5.6 1.0 4.9 2.0	1.7 0.3 1.5 0.6	29 WE ME	0225 0925 1535 2155	4.6 2.0 4.6 2.3	1.4 0.6 1.4 0.7
15 SA SA	0145 0850 1410 2055	5.6 1. 1.6 0. 4.9 1 1.6 0	.7	30 SU DI	0305 1015 1550 2225	5.2 2.0 4.6 2.3	1.6 0.6 1.4 0.7	15 TU MA	0325 1035 1620 2255	5.6 1.0 5.2 1.6	1.7 0.3 1.6 0.5					15 we	0305 1020 1610 2250	5.6 1.0 5.2 1.6	1.7 0.3 1.6 0.5	30 TH JE	0340 1020 1645 2250	4.6 1.6 4.6 2.3	1.4 0.5 1.4 0.7
	(F			31 мо LU	0405 1105 1655 2315	5.2 1.6 4.6 2.3	1.6 0.5 1.4 0.7		and a						Ţ	R		~		31 FR VE	0450 1110 1735 2340	4.9 1.6 4.9 2.0	1.5 0.5 1.5 0.6

Cold dash of waves at the ferrywharf, posh and ice in the river, half-frozen mud in the streets. A gray discouraged sky overhead, the short last daylight of December... – Walt Whitman, from <u>To Think of Time</u>

NATURE NOTES Eearliest Sunset, Latest Sunrise

Dec. 10 is, according to my sky simulation program, the earliest sunset of the year, being about 4:33 p.m. Latest sunrise is not until Jan 2, 2000, being about 7:57 a.m. As I understand it, the difference involves the angle at which the solar disk, on its apparent path (the ecliptic), cuts the horizon relative to one's latitude. As Earth rotates, the geometry plays out a little differently for the rising Sun than it does for the setting Sun. It is interesting to note that after the 10th we begin to gain daylight at the sunset end of the day while we continue to lose a greater amount of it at the sunrise end. An overall daylight gain begins once more following the solstice (Dec. 22) and gains at *both* ends of the day following Jan 2nd, 2000.

> – Sherman Williams NatureNS

! HUNTING SEASON IS UPON US !

Ruffed Grouse season White-tail Deer season Snowshoe Hare season 1 Oct. - 31 Dec. 29 Oct. - 4 Dec. 15 Nov. - 15 Feb.

Hunters are abroad from 14 Sept. to 15 Feb. Remember – dress to be seen in the woods!

! NEXT DEADLINE !

1 MARCH FOR MARCH ISSUE

contributions to the Editor, HFN c/o NS Museum of Natural History Please phone 455-8160 to alert the Editor