

THE HALIFAX FIELD NATURALIST



No. 121
December, 2005 to February, 2006



Susie's Lake

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



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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.

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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

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HFN NEWS AND ANNOUNCEMENTS



EDITORIAL

We have some excellent Talk and Trip reports this issue. See especially Lillian Risley's account of Barbara O'Shea's Antarctica Talk (p. 7), and Dave Patriquin's Pennant Point and Blue Mountain Trip reports (pp. 9 & 11). The Ecology Action Centre's Acadian Forest insert included here reached us too late for our Summer Issue; it is an important topic for maritime naturalists, and was the theme of this year's FNSN AGM in Truro. 


Because of a bird species enquiry, Suzanne Borkowski of the N.S. Bird Society shared the latest, taxonomically correct 2004 U.S. Ornithologists Checklist, after I realised my references were out of date (my Peterson's is 25 years old — time for a new one). For instance, the Oldsquaw is now named the Long-tailed Duck, and the taxonomic bird list order has changed as well. All this reinforced Ursula Grigg's emphasis on the importance of keeping up with the latest taxonomic progress. And speaking of the importance of taxonomy, after his excellent Orchid Talk, Bernard Forsythe shared a comprehensive compilation of Nova Scotia wild orchids. With his permission, this will be printed in the Spring #122 Issue, for those who have an interest and would like to copy it for reference. 


Having the good fortune to 'inherit' a reflecting telescope recently, we have seen very clearly Mars in the eastern sky at dusk, and the moon's craters making its edge crenallated rather than smooth. Wonderful! 


Merry Christmas to all, 

 — Stephanie Robertson, Editor

POINT PLEASANT PARK

People felt the five short-listed competitive designs for Point Pleasant Park were inappropriately 'busy', with more buildings, parking lots, and formal activities. None reflected the tranquility of the quiet urban forest we all knew — a place of refreshment and renewal. 


A residents' petition and feedback was conveyed to the contestants and the competition judges, and the final five designs were much more appropriate. The judges recommended combining the submissions from NIP paysage of Montreal (for physical design) and Ekistics Planning & Design from Dartmouth (for implementation management). Both see Point Pleasant as a natural, forested park providing a high quality passive recreation experience (www.pointpleasantpark.ca). 


On December 7th, HRM Council approved the committee's recommendation that HRM staff work with the two firms to develop a master plan and to specify immediate remedial work on the Park. 

 — Allan Robertson 



DAVID LAWLEY, NATURALIST & FORMER HFN BOARD MEMBER

Dave Lawley, an interpretive naturalist who worked in Kejimikujik and Cape Breton Highlands National Parks, died on September 15, 2005, in Margaree. 

Born in Vanport, Oregon, he came to Canada after serving in the U.S. Navy during the Vietnam War. He was a hiker, writer, botanist, and storyteller. When his partner, Elaine Wallace, came to Halifax to pursue graduate studies at Dalhousie, both became active members of the Halifax Field Naturalists, and Dave served on the Board in 1985/86. In the 1990's Dave became a board member for the Federation of Nova Scotia Naturalists. 


Dave led several field trips for us in the 1980's, and both Dave and Elaine wrote for our newsletter, even after they moved to Cape Breton. His increasing interest in writing about nature and the environment led him to help found Shunpiking Magazine. These earlier writing efforts grew into two major publications, A Nature and Hiking Guide to Cape Breton's Cabot Trail (Nimbus, 1994), and A Guide to Whale Watching in the Maritimes (Nimbus, 1997).


Dave was a fine all-round naturalist who will be remembered by anyone who ever had the pleasure of his company in the field. Peter Hope, formerly Chief Park Interpreter at Kejimikujik, wrote of him, "He was a very good botanist but more importantly had an infectious personality that got everyone enthused. He was well liked by all staff and the public as well and certainly helped many of our staff to learn more about unusual plants."

An extended tribute to Dave Lawley appeared in the October issue of Shunpiking, and may be found at <http://www.shunpiking.com/>. He will be missed. 

— Pat Chalmers

YOUTH GROUP PROPOSAL

Karen McKendry, a graduate student in environmental studies at Dalhousie, wants to initiate a Halifax Junior Field Naturalists' Club for children in HRM with HFN support. It would be based on the model of the Ottawa Macoun Field Club <http://macoun.zone12.com>, with which she has been involved for many years. 

Anyone with enthusiasm, time, and/or ideas for this important project should contact Karen, 431-7636; or email karenmckendry@wildmail.com. 

NEW & RETURNING MEMBERS

 Mary E. Joyce
 Sterling & Josette Levy
Elizabeth Mills 

SPECIAL REPORTS

HRM 2005 NORTH AMERICAN MIGRATION COUNT

The 2005 North American Migration Count (NAMC) was held on May 14th, the latest possible day for the NAMC (it is always held on the second Saturday in May).

In my first HRM count report in issue #117 of *The Halifax Field Naturalist*, I gave an overview of what the NAMC aims to accomplish. In brief, it gives a snapshot of how bird migration is progressing across North America. In Nova Scotia, however, even May 14th is rather early in the spring migration season, so only the earliest-arriving passerines such as the Blue-headed Vireo, Tree and Barn Swallows, Ruby-crowned Kinglet, American Robin, and a couple of the warbler species, are well represented.

This year May 14th dawned cool (sub-zero in some inland locations), with snow flurries making visibility difficult. Although the day gradually cleared and warmed nicely to double digits in the afternoon, the cool northwest winds continued all day. HRM coverage, as judged by party hours and distance, remained as high as last year; the 131 species observed and the 12,785 individuals counted were very similar to the 2004 results.

The regularly occurring common species were observed in average to above-average numbers (see, for example, the entries for Double-crested Cormorant, American Black Duck, and Willet). Very few trends are discernable to my eyes — are the lower counts of Herring and Great Black-backed Gulls indicative of real declines or not?

Thinking that Hurricane Juan may have had a negative effect on woodland species due to habitat loss, I looked more closely at the numbers for woodpeckers, chickadees, and nuthatches. I observed no appreciable decline in any of these species.

Nineteen species have not been seen/counted for the last three years and so have been removed from this list. They are: Pied-billed Grebe, Eurasian Wigeon, Long-tailed Duck, Bufflehead, Sora, Whimbrel, Red Knot, Black-headed Gull, Least Tern, Long-eared Owl, Yellow-billed Cuckoo, Whip-poor-will, Common Nighthawk, Scissor-tailed Flycatcher, Gray Catbird, Black-throated Blue Warbler, Bay-breasted Warbler, Bobolink, and Vesper Sparrow. On the other hand, five species (indicated in bold on the listing) — Semipalmated and White-rumped Sandpiper, Orange crowned and Cape May Warbler, and Indigo Bunting — are new to the HRM count this year, increasing our five-year NAMC cumulative total to a remarkable 180 species.

For the past four years, Suzanne Borkowski has coordinated HRM's NAMC. This involves contacting field and feeder counters, informing them of the day, assigning territories to cover, and distributing tally

sheets. As count compiler, my job is to receive the tally sheets, compile the results, and report them to the Provincial Coordinator. Suzanne has done a fantastic job, which is why our coverage is so thorough. However, Suzanne has just begun her second year as President of the N.S. Bird Society, a position that is very demanding of her time. So, she has indicated that she is stepping down as Count Coordinator and we are looking for a replacement.

If anyone out there is interested in the success of HRM's NAMC, and has time to send out some emails and make some phone calls in April 2006, please do not hesitate to contact either Suzanne, 445-2922, email <suzanneborkowski@yahoo.ca>; or me, 443-5051, email <bobathome@hfx.eastlink.ca> for further information.

— Bob McDonald

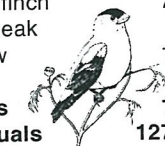


SPECIES	2005	2004	2003
Red-throated Loon	0	4	0
Common Loon	47	31	39
Red-necked Grebe	1	3	1
Northern Gannet	30	64	61
Double-Crested Cormorant	627	317	406
Great Cormorant	4	4	6
American Bittern	1	2	2
Great Blue Heron	52	45	45
Great Egret	1	1	0
Snowy Egret	0	1	0
Turkey Vulture	1	1	0
Snow Goose	0	1	0
Canada Goose	25	17	17
Wood Duck	2	2	0
Gadwall	3	1	0
American Wigeon	4	12	5
American Black Duck	343	425	400
Mallard	108	121	73
Blue-winged Teal	3	4	0
Northern Shoveler	0	2	0
Northern Pintail	0	4	1
Green-winged Teal	13	11	24
Ring-necked Duck	39	37	30
Greater Scaup	0	4	0
Common Eider	506	490	247
Surf Scoter	13	2	7
White-winged Scoter	57	50	55
Black Scoter	14	57	1
Hooded Merganser	0	0	3
Common Merganser	31	66	38
Red-breasted Merganser	25	21	18
Osprey	53	67	38
Bald Eagle	19	15	12
Northern Harrier	4	0	3
Sharp-shinned Hawk	11	11	6

Northern Goshawk	1	0	2
Broad-winged Hawk	1	1	2
Red-tailed Hawk	3	6	2
American Kestrel	0	5	2
Merlin	10	5	3
Peregrine Falcon	0	2	0
Ring-necked Pheasant	27	20	11
Ruffed Grouse	11	14	19
Spruce Grouse	2	1	2
Black-bellied Plover	0	0	6
American Golden Plover	0	1	0
Piping Plover	5	6	3
Killdeer	2	0	0
Greater Yellowlegs	17	28	151
Lesser Yellowlegs	5	0	7
Willet	141	57	151
Spotted Sandpiper	2	0	0
Sanderling	8	0	0
Semipalmated Sandpiper	38	0	0
Least Sandpiper	2	5	4
White-rumped Sandpiper	1	0	0
Wilson's Snipe	1	3	0
American Woodcock	2	2	11
Wilson's Phalarope	0	0	2
Bonaparte's Gull	0	0	1
Ring-billed Gull	33	22	15
Herring Gull	1387	1924	2066
Iceland Gull	2	4	6
Glaucous Gull	1	1	1
Greater Black-backed Gull	267	337	433
Caspian Tern	0	1	1
Common Tern	30	7	33
Arctic Tern	2	2	4
Black Guillemot	0	1	3
Rock Pigeon	331	312	414
Mourning Dove	171	172	100
Great Horned Owl	4	2	0
Barred Owl	3	1	0
Northern Saw-whet Owl	1	2	1
Chimney Swift	0	2	0
Ruby-throated Hummingbird	0	5	1
Belted Kingfisher	25	23	18
Red-bellied Woodpecker	2	1	0
Yellow-bellied Sapsucker	0	1	1
Downy Woodpecker	64	57	26
Hairy Woodpecker	27	18	15
Black-backed Woodpecker	3	2	0
Northern Flicker	66	96	64
Pileated Woodpecker	1	2	1
Least Flycatcher	3	5	0
Eastern Kingbird	1	3	1
Blue-headed Vireo	52	39	12
Red-eyed Vireo	3	0	0
Gray Jay	18	6	5
Blue Jay	312	248	213
American Crow	959	938	721
Common Raven	56	59	26
Horned Lark	0	1	0
Tree Swallow	512	357	96
Bank Swallow	15	2	2
Cliff Swallow	36	4	0
Barn Swallow	197	54	51
Black-capped Chickadee	510	639	408
Boreal Chickadee	19	10	18
Red-breasted Nuthatch	69	54	11
White-breasted Nuthatch	10	0	1
Brown Creeper	5	5	4
Winter Wren	55	11	10



Golden-crowned Kinglet	51	9	11
Ruby-crowned Kinglet	97	63	47
Veery	1	0	0
Swainson's Thrush	1	0	0
Hermit Thrush	90	24	35
American Robin	506	588	391
Northern Mockingbird	0	0	1
European Starling	467	700	809
Cedar Waxwing	0	0	1
Tennessee Warbler	0	0	1
Orange-crowned Warbler	1	0	0
Nashville Warbler	13	4	2
Northern Parula	27	5	2
Yellow Warbler	7	1	0
Chestnut-sided Warbler	0	1	0
Magnolia Warbler	4	7	0
Cape May Warbler	1	0	0
Yellow-rumped Warbler	498	362	238
Black-throated Green Warbler	50	14	6
Blackburnian Warbler	5	0	0
Palm Warbler	63	20	55
Blackpoll Warbler	8	0	1
Black-and-White Warbler	57	25	12
American Redstart	3	1	0
Ovenbird	4	0	0
Northern Waterthrush	5	3	3
Common Yellowthroat	1	0	0
Wilson's Warbler	1	2	1
Summer Tanager	0	0	1
Scarlet Tanager	0	1	0
Chipping Sparrow	5	12	1
Savannah Sparrow	15	19	50
Ipswich Sparrow	0	4	1
Fox Sparrow	1	1	1
Song Sparrow	346	346	347
Lincoln's Sparrow	3	1	0
Swamp Sparrow	15	4	12
White-throated Sparrow	317	172	138
White-crowned Sparrow	0	6	0
Dark-eyed Junco	435	559	442
Northern Cardinal	4	5	3
Rose-breasted Grosbeak	1	1	0
Indigo Bunting	1	0	0
Red-winged Blackbird	157	101	76
Rusty Blackbird	4	5	0
Common Grackle	548	468	538
Brown-headed Cowbird	2	3	0
Baltimore Oriole	0	1	0
Pine Grosbeak	1	2	8
Purple Finch	177	173	78
House Finch	5	16	3
Red Crossbill	8	6	0
White-winged Crossbill	0	3	0
Common Redpoll	0	1	0
Pine Siskin	290	86	22
American Goldfinch	708	431	365
Evening Grosbeak	17	3	12
House Sparrow	188	178	223
No. of Species	131	134	112
No. of Individuals	12785	12034	11420
Party hours (on foot/by car)	134/60	134/62	99/73
Party km (on foot/by car)	202/1034	206/1207	177/1359
No. of Field counters	61	48	55
No. of Feeder counters	24	16	27



— Bob McDonald

HFN TALKS

STARGAZING

6 OCTOBER

George Hoskins worked for Environment Canada for over 25 years. Now retired, his chief delight is observing 'naked-eye' celestial objects, with or without binoculars and telescope. He had hoped, if the weather had co-operated after the talk, that we could have a 'hands-on', quick celestial run-down outside of the museum, but it was not to be.

In our night sky we can see the moon, the planets, stars, star clusters, nebulae, galaxies, meteors, comets, auroras, and man-made satellites. The word planet comes from the Greek for 'wanderer'. The ancients believed the planets to be stars that could appear in different areas of the sky, and that they moved in relation to the other stars.

Stars themselves can be single, double, or variable.

Star clusters can be 'open', such as the Pleiades, the Hyades in Taurus, and the Beehive in Cancer (this last requires a very dark sky to see clearly), or 'globular'. Star clusters number in the millions and are very far away.

Nebulae are great clouds of glowing gases, and for the dark nebula, such as the Horsehead in Orion, you need a telescope.

Galaxies contain billions of stars; two of these are the large and small Magellanic clouds, and also M31 — the great Andromeda galaxy which contains 100 billion stars. Andromeda is the sister of our Milky way galaxy, which also has 100 billion stars, but unaided we can see only three to six thousand of them, depending on local night time visibility.

Practically, for enjoyable stargazing, you'll need warm layers of clothing; star charts and/or a planisphere; a notebook and a pencil; a red-filtered flashlight; comfortable seating of some kind; and you might want some favourite music (earphones please!).

Three important tips if you are a beginner: using a planisphere (a circular, seasonal star/constellation chart of the night sky), start from a known location such as the Big Dipper and star hop from there; you can also use the brightest star as an orienting point of reference (there are only 15 in the Northern hemisphere and usually only eight are visible depending upon the season); also, start in a higher light area working toward the darker places. There are commercial slides of stars available; these can help too.

George outlined the Big Bang theory of the origin of the universe, which proposes that it all began some 12 to 20 billion years ago. From this giant explosion, a bright opaque fog trillions of degrees centigrade was produced. Only protons, neutrons, and electrons existed within it. Over a period of approximately 100,000 to 1,000,000 years, expanding and cooling to about 3000°C, gas clouds began to form out of this fog.

Gravitationally unstable, these gas clouds began to condense into clumps. These were the first protogalaxies which produced the first stars. These protogalaxies gradually formed into the galaxies which we know today, in clusters and superclusters of themselves, and they are believed to be the largest structures in the universe.

One corroboration of this theory: two scientists taking readings using a radio telescope noticed what they assumed to be static or interference in the signals. Constant retesting of the equipment and even checking to ensure droppings from resident pigeons were not responsible, they realised that the interference was actually uniform background electromagnetic radiation that signified an ambient universal temperature of roughly 3°C — the 'embers' of the big bang.

Next in George's presentation, and with orienting instructions for each following celestial phenomenon, George briefly outlined the sometimes convoluted but interesting Greek myths that gave rise to the constellations' names.

The circumpolar constellations which are visible year-round only in the northern sky are Ursa Major (big bear), or the Big Dipper; Cassiopeia (the queen); Cephus (the king); and Ursa Minor (little bear).

The winter constellations to look for are Orion (the mighty hunter); Canis Major (big dog); Canis Minor (little dog); Gemini (the twins); Auriga (the charioteer); and Taurus (the bull).

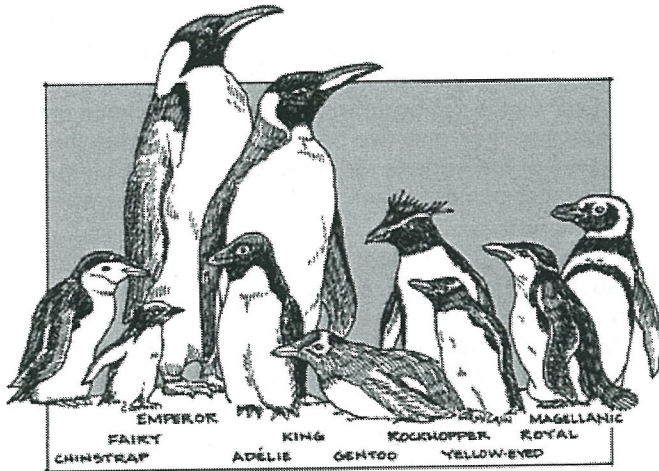
Summer constellations to view are the whole of our Milky Way galaxy across the night sky; Bootes (the herdsman); Corona Borealis (northern crown); Hercules; Lyra (the lyre); Cygnus (the swan); Aquila (the eagle); Andromeda (chained princess); Pegasus (the winged horse); and Perseus.

To put our mere selves in perspective in all this immensity, George used his slides to take us on a visual space trip starting at Mercury and finishing near Proxima Centauri, our nearest star neighbour.

We watched, from a viewpoint just off the moon, away from oxygen, trees, water, and life as we know it on our home planet, as our small and fragile earth glowed in the sun. Our space trip then saw the sun shrink to a mere small yellow star, and earth and all our planets gradually completely disappeared as we sped out into the immensity of the universe.

— Stephanie Robertson





Barbara O'Shea provided us with a travelogue/field trip report from the voyage she and Pat Leader made to Antarctica. The trip took them to three continents, three oceans, and five countries. Temperatures ranged from 2°C at the 'The Gates' outdoor art exhibit in New York, to 31° C in Buenos Aires.

After a short time to experience the historic nature of Buenos Aires, with its broad avenues and shops in renovated brick warehouses and the beauty of its flowering trees, they were off by air the length of Argentina to Ushuaia, the most southerly city in the world and the jumping off point for Antarctica (12°C).

Their ship sailed out of the Beagle Channel, past Cape Horn, and on 600 km to Antarctica. The route carried them by the Shetland Islands and Deception Island to stops along Antarctica's Palmer Peninsula (Neko Harbour, Weinke Island, Paradise Bay), then on to the South Georgias, the Falklands, and back to Buenos Aires (in total, 4079 nautical miles, taking 18 days). It was a Norwegian ship, the food was good, and the passengers represented 15 countries. Resource people included a biologist, an ornithologist, and a historian.

The seas were high off Cape Horn as the ship crossed the 10 km wide Pacific/Atlantic/Southern Antarctic Convergence, and the Shetland Islands were ice and snow-covered (in keeping with the 97% of Antarctica covered by ice). It stopped at Deception Island and landed passengers in Whalers Bay. Chinstrap penguins were the residents here. At Neko Harbour on the Palmer Peninsula, there were fur seals and Gentoo penguins. The young ones had grey furry coats and the adults were moulting. These are 'brush tail' penguins; they use their fanlike tails for support, balance, and as rudders when swimming. They showed more curiosity than wariness.

The Gentoo, Chinstrap, and Adele penguins are in a group that have solid bones, short curved feathers covering their whole bodies, and are flightless and aquatic. The Gentoo is the largest at 86 cm, followed by the Chinstrap at 60 cm, and the Adele, the smallest, at 26 cm.

The King, Emperor, and Ringed are the diving penguins. They can live for 25-30 years and mate for life at three to five years of age. They lay one or two eggs, but only one is raised. They are extremely fast under water and have been known to travel 300 km in 36 hours and dive to depths of 36 metres. They eat krill and fish and, because there is no source of liquid fresh water, they eat snow to meet this need. The Leopard Seal is the principal predator for the penguins. One unfamiliar seal observed was the Crabeater Seal, which has a face like a dog and no ears.

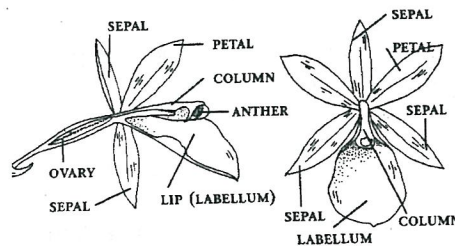
While at the Almirente Brown Station on Paradise Bay, Barbara and Pat were able to observe the Aretowski's Halo around the sun.

The most southerly point of travel was the Lemaire Channel. A stop in Port Lockroy on Wiencke Island provided an opportunity to visit a research station, a museum, and the post office, and to enjoy sightings of Minke and Humpback whales in the surrounding waters. In the Falkland Islands the local penguin was the Rock Hopper, which, true to its name, travels by hopping rather than walking.

The Falklands war is still fresh in the memories of both Falkland Islanders and Argentineans, and there are still areas of the Falklands where landmines remain. On South Georgia, there were two old whaling stations to visit. Local plans have been made to refurbish these sites to be an improved tourist attraction. Income from tourism is very important to the current Falkland Islands economy.

An Antarctic Treaty is in place which came about as a response to the tendency of explorers to claim various areas for their own countries. This treaty oversees scientific activities, organises tourism, and protects the environment. There are 34 signatories, all of whom must have significant scientific presence/activity in the area.

— Lillian Risley



NS ORCHIDS

1 DECEMBER

Nova Scotia's preeminent native orchid specialist Bernard Forsythe gave us this informative talk on our approximately 40 species of wild orchids, with a plethora of beautiful slides illustrating all the different details of their many different forms, colours, aberrations, and habitats. Following are some brief highlights.

Where would one start to begin a study of our provincial endemic orchids? When Bernard began looking for Nova Scotia orchids, he chose to look specifically for all their different forms, and concentrated upon that aspect.

Our first slide was of a bog with lots and lots of orchids; then came a beautiful close-up of our Pink Ladyslipper. All orchids are pollinated by insects; but a few are both self-pollinating and insect-pollinated. During the presentation we saw a good few slides of 'siamese twin' orchid flower phenomena, and quite a few albino plants as well.

There was a slide of a Yellow Ladyslipper; there are two varieties in Nova Scotia, a small one and a large one. Orchids will hybridise, so sometimes it can be difficult to categorise them. In orchids, the pistils and stamens have evolved into one organ — the stamenoid. They have three sepals, two of which are fused, and three petals, two of which (the ones that stick out at the sides of the flower) are sometimes 'curly'.

We saw a colony of hundreds of Showy Ladyslippers at Smiley's Provincial Park. They are on the rise due to decreasing competitive vegetation. Sometimes they have one flower per stalk, sometimes two.

There are many small, pale green orchids in our province; Bernard calls them 'LGTs', or 'little green things'. One of these is the Heart-leaved Twayblade, very common, and very small. The Southern Twayblade has a different flower shape and was discovered in the 70s. In the 80s, he himself found this species in Cape Breton in Mud Lake Bog, and in



Sheffield Lake, Kings County, there is a colony of 50 - 60 of them.

Bernard told us an encouraging tale of a runway having to be diverted at the Halifax International Airport due to a colony of endangered orchids.

Leaf variations occur in orchids. For instance the *Liparis* sp. has only two basal leaves, whereas the leaves of the Adder's Mouth wrap around its stem. The latter comes in both green and white; the white one is rare.

There is a Coral Root Orchid, and a Spotted Coral Root; the Spotted has many colour forms. The early blooming Spotted Coral Root is white with dark pink spots with a very round petal lip; the late blooming one has fewer blossoms per stem and has a distinctive notched lip.

Many have tried to transplant orchids to their gardens, or in similar habitats in order to protect them. Sometimes they will bloom next season, but they do not survive past that first, rare success.

Bernard's wonderful slides gave us a fascinating run-down of all the characteristics, different forms, variations, and habitats of all of the other Nova Scotia native orchids, most of them very small and specialised and therefore unknown to most people.

A list of these will be published in the Spring Issue #122. Thank you Bernard, for sharing your expertise, field work, and beautiful orchids with us.

— Stephanie Robertson



FIELD TRIPS

SUSIE'S LAKE

DATE: Saturday, 8 June

PLACE: Behind Bayers Lake Industrial Park

WEATHER: Intermittent rain; 16°C

INTERPRETER: Christine Anne Smith

PARTICIPANTS: 8



Woke up Saturday morning with rain pounding on the doorstep. No, I don't like wet field trips, but I knew that our field trip leader Christine would go anyway, rain or shine.

The forecast on the weather channel called for dismal, heavy rain for the entire day. At the HFN meeting on the previous Thursday someone asked if there was a rain date; the reply from Christine told me she was going regardless of the weather! The only decision I had to make was, "Do I want to get wet or not?". Yes, it would be a 'warm wet', and that would be ok.

Christine had a very good point at the meeting, that wet vegetation is often very striking; she was proved right and I was not disappointed. By 10:00 a.m. the rain was heavy but by 12:00 noon it had stopped, brightened, and I was elated that the tap had been turned off.

We met at the lower parking lot of Kent Building Supplies, Bayers Lake, at 1:00 p.m. No rain! But

that did not last — just as we were checking the map and planning our route, the rain started again and continued for the rest of the afternoon varying from heavy downpour to light showers.

A total of eight hardy souls (or fools to some, especially my wife) started out on the path to Susie's Lake. Rain gear helped but nothing could stop the steady downpours from soaking in through the seams, nor the internal moisture due to perspiration. The path was still single file, but was a little wider than I remembered from last year; also, some judicious cutting had made the trail much easier to traverse.

We stopped at a gently sloping rock surface to examine some interesting glacial erratics covered with lichens. They were estimated to be at least 10,000 years old, having grown very slowly on the rocks after the last glaciation. Most were, I believe, crustose lichen, sporting grey colouration arranged in a roundish, sometimes bull's eye like fashion. Some brown-greenish foliose lichens (Rock Tripe), fruticose, miniature shrub-like Reindeer Moss, and Beard Lichens (*Usnea* sp.) were also seen further along the trail.



— Charles Cron

SUSIE'S LAKE SPECIES

Plants

Red Maple	<i>Acer rubrum</i>
Speckled Alder	<i>Alnus incana</i>
Indian Pear	<i>Amelanchier sp.</i>
Sarsaparilla	<i>Aralia nudicaulis</i>
Mountain Sandwort (in bloom)	<i>Arenaria groenlandica</i>
Aster	<i>Aster sp.</i>
Paper Birch	<i>Betula papyrifera</i>
Bluebead Lily	<i>Clintonia borealis</i>
Broom Crowberry	<i>Corema conradii</i>
Bunchberry	<i>Cornus canadensis</i>
Pink Ladyslipper	<i>Cypripedium acaule</i>
Trailing Arbutus/Mayflower	<i>Epigaea repens</i>
Pipewort	<i>Eriocaulon aquaticum</i>
Snowberry	<i>Gaultheria hispidula</i>
Black Huckleberry	<i>Gaylussacia baccata</i>
Bog Huckleberry	<i>Gaylussacia dumosa</i>
Witch Hazel (in bloom)	<i>Hamamelis virginiana</i>
Club-moss	<i>Lycopodium sp.</i>
Mountain Holly	<i>Nemopanthus mucronata</i>
Sensitive Fern	<i>Onoclea sensibilis</i>
Black Spruce	<i>Picea mariana</i>
Spruce (Red or White?)	<i>Picea sp.</i>
Jack Pine	<i>Pinus banksiana</i>
White Pine	<i>Pinus strobus</i>
Schreber's Moss	<i>Pleurozium schreberi</i>
Rock Polypody	<i>Polypodium virginianum</i>
Large-toothed Aspen	<i>Populus grandidentata</i>
Bracken Fern	<i>Pteridium aquilinum</i>
Goldenrod	<i>Solidago sp.</i>
Blueberry	<i>Vaccinium sp.</i>
Large Cranberry	<i>Vaccinium macrocarpon</i>
Wild Raisin	<i>Viburnum nudum</i>



Vertebrates

Spring Peeper (heard only)	<i>Hyla crucifer</i>
Black-capped Chickadee	<i>Parus atricapillus</i>
Spruce Grouse (heard only)	<i>Canachites canadensis</i>



PENNANT POINT

DATE: Saturday, 22 October

PLACE: Pennant Point

WEATHER: Sunny, 17°C

INTERPRETER: Robert Raffelock

PARTICIPANTS: 6

The Crystal Crescent/Pennant Point Trail is well known and used locally, although most visitors don't venture much beyond the beaches on the east side, and fewer still visit the west side of the peninsula.

Robert took us to Pennant Point via a not-well-known trail on the west side of the peninsula, beginning near the end of Crystalwood Drive off East Pennant Road. Once at Pennant Point we followed the well established trail up the east side towards the beaches, but, just before Crystal Crescent Beach, we cut across 'the spine' to go back to the west side, a total distance of approximately 15 km.

Robert is a frequent visitor to the west side trail, a trail which is not maintained by park staff. He has marked it with red flagging tape and cleared many obstructions. He has also marked a trail across the spine of the peninsula which comes out (or begins) above Crystal Crescent beach; a blue rope tied around a spruce tree marks the point of departure of the spine trail from the west side trail.

For about the first two thirds of the way towards Pennant Point, the west side trail goes through moist, Black Spruce-Fir-Red Maple forest and runs parallel to, and about 10 to 50 metres back from, the exposed granite and rock rubble that border Pennant Bay. There is a lot of blowdown from Hurricane Juan on this side of the peninsula. Bunchberry, Black Crowberry, Wild Sarsaparilla, Wood Aster, and Mayflower are common understory species. Where the trail opens onto the shoreline of Pennant Bay, Juniper, Broom Crowberry, Teaberry, Bayberry, and Huckleberry make up most of the groundcover, and individual trees or groves of White Spruce are common. Reference to Google's satellite coverage (enter 'Google Earth' in the 'search' field) show the forest cover extending 200 to 300 metres inland. Towards the south, it ends in the vicinity of Duck's Head Cove.

Ray Staszko accompanied us to that point; he often walks this trail to look for wildlife bones. Ray showed us a bird skull he had seen earlier in the year which he believed to be that of a Booby or Gannet; a few brown feathers were present when he found it. I showed a photo of it to three birdwatchers. They concurred that it had belonged to a young Northern Gannet (*Morus bassanus*). Ray stayed at Duck's Head Cove to deal with a Harbour Seal carcass that he had sunk in the backwater in the spring to speed decomposition. When we returned to the car at the end of the hike, he was waiting for us with a collection of mostly clean bones.

Beyond Duck's Head Cove, we moved through a burned-out section of the coastal forest, the standing dead trunks of spruce now bleached and ghost-like, then out onto open hillsides covered with a carpet of crowberry (both Broom and Black Crowberry) with some juniper and clumps of Bayberry, and in lower, wetter areas, Cranberries, Cotton Grass, Beak Rush, and Pitcher Plants.

The high granite promontories of Pennant Big Head afforded some spectacular seaside vistas; this is a staging or stopover area for waterbird migrations, but we were too late in the season to see any. Burkhard Plache spotted a Mink scurrying down the rocks, and later on we encountered another only a few yards away; it disappeared quickly into the rock crevices. Mink eat sea urchins, crabs, and other sea life in these habitats.

The eastern trail is more sheltered and the vegetation more heterogeneous than on the western trail. Groves of White Spruce and granite barrens vegetation occur on higher ground. Where there is some sand or soil accumulation closer to the water, dune or seaside vegetation is found; common species include

Marram Grass, Beach Pea, Yarrow, New York Aster, Seaside Goldenrod, Seashore Plantain, Raspberry, and occasional patches of Cordgrass or rushes in wetter areas. We passed by another stand of burned-out and bleached spruce trunks; the ground vegetation, dominated by Huckleberry, formed a crimson red carpet that extended upwards and outwards onto the berry barrens.

Species characteristic of regularly disturbed habitat appeared and became more prominent as the beaches were approached, e.g., fall Dandelion (still in flower) and Knapweed. There was a large clump of Japanese Knotweed by the trail, unfortunately not eradicated before it became so large.

As we approached the south end of Crystal Crescent Beach, we took the trail that leads upwards and inland, passing by several clumps of Winterberry Holly bearing abundant bright red berries. Finally we connected with a trail that took us across the spine back to the west side trail and through the berry barrens that cover most of the central part of the peninsula. The more common species along the path were Huckleberry, Bayberry (some with waxy white fruits), Sheep Laurel (still with fully green leaves), Labrador Tea, Witherod, Downy Alder, and isolated clumps of Red Maple, White Pine, and White Spruce.

This walk illustrated three types of disturbance which have important influences on plant community structure: strong winds which cause tree blowdown creating gaps in the forest canopy; fires which are probably necessary for the berry barrens to be maintained over long periods (decades to centuries); and the more recent recreational activities (including ours) which are responsible for the occurrence of weedy species on the east side trail and which were notably absent on the not-very-frequented west side trail. Most of the weedy species are not native but came here with settlers long ago. They are generally restricted to habitats which are regularly disturbed by human activities. They are important soil stabilisers, and also food for insects and birds.




The occurrence of a large clump of Japanese Knotweed by the eastern side trail, however, is a different story, as it can completely suppress native vegetation in relatively undisturbed habitat and is of little value to wildlife. Japanese Knotweed, of Asian origin, is considered to be the most pernicious weed in the U.K., where it was introduced in the mid 1800s. It came to North America in the late 1800s as an ornamental and spread rapidly, growing under a wide range of moisture, light, and pH conditions. Propagation is vegetative except in its native range; rhizome propagules are distributed mainly by water and humans. Once established, it can require drastic action to get rid of it, causing further environmental damage. With a little vigilance, Japanese Knotweed could be kept out of areas where it is not now widely established. It seems important to monitor this species, and other 'environmental weeds', especially in parks that are set up to conserve natural areas and provide lots of recreational access.

Many thanks to Robert for sharing some of his special places with us.

— David Patriquin

PENNANT POINT SPECIES

Plants

Bayberry		<i>Myrica pensylvanica</i>
Beach Pea		<i>Lathyrus japonicus</i>
Beak Rush		<i>Rhynchospora alba</i>
Black Crowberry		<i>Empetrum nigrum</i>
Black Spruce		<i>Picea mariana</i>
Broom Crowberry		<i>Corema conradii</i>
Bunchberry		<i>Cornus canadensis</i>
Cordgrass		<i>Spartina alterniflora</i>
Cotton Grass		<i>Eriophorum</i> sp.
Cranberry		<i>Vaccinium macrocarpon</i>
Downy Alder		<i>Alnus viridis</i>
Fall Dandelion		<i>Leontodon autumnalis</i>
Huckleberry		<i>Gaylussacia baccata</i>
Japanese Knotweed		<i>Polygonum cuspidatum</i>
Juniper		<i>Juniperus communis</i>
Knapweed		<i>Centaurea nigra</i>
Labrador Tea		<i>Ledum groenlandicum</i>
Marram Grass		<i>Ammophila breviligulata</i>
Mayflower		<i>Epigaea repens</i>
New York Aster		<i>Aster novi-belgi</i>
Pitcher Plant		<i>Sarracenia purpurea</i>
Raspberry		<i>Rubus strigosus</i>
Red Maple		<i>Acer rubrum</i>
rushes		<i>Juncus</i> spp.
Seashore Plantain		<i>Plantago maritima</i>
Seaside Goldenrod		<i>Solidago sempervirens</i>
Teaberry		<i>Gaultheria procumbens</i>
White Pine		<i>Pinus strobus</i>
White Spruce		<i>Picea glauca</i>
Wild Raisin		<i>Viburnum nudum</i>
Wild Sarsaparilla		<i>Aralia nudicaulis</i>
Winterberry Holly		<i>Ilex verticillata</i>
Wood Aster		<i>Aster acuminatus</i>
Witherod		<i>Viburnum nudum</i>
Yarrow		<i>Achillea millefolium</i>

Mammals

Mink	<i>Mustela vison</i>
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CRANBERRY PICK

DATE: Saturday, 29 October

PLACE: Taylor Head Provincial Park

WEATHER: Intermittent rain; 16°C

INTERPRETER: Scott Yetman

PARTICIPANTS: 12

We met Scott Yetman at the gate to Taylor Head Provincial Park at 10:00 a.m. There were a total of 12 people in five cars. Scott had opened the gate 30 minutes before to admit three early cars. We never found out if those people happened to be there by chance or if they knew of the event. They were somewhere in the park, but we never met during the whole field trip!

Two knowledgeable birders, Verna Higgins and her sister-in-law Ellen, mentioned that a Yellow-billed Cuckoo had crossed the road in front of them, and that flocks of swallows and other small birds, swept northward by the recent hurricane, Wilma, were desperately feeding on the last flying insects. We noticed them all along the coast. It was mild, so there was at least a chance for them on this day.

People were soon spreading out to fill cans and bags with Cranberries. The low areas between the last parking lot and the beach at Psyche Cove proved to be a sure bet. Along the western shore of the peninsula, Cranberries were sometimes patchy but rarely abundant.

After three hours of picking and enjoying the beauty of Taylor Head, a first group headed out around 1:00 p.m. We ourselves left around 3:30 p.m., with Scott staying behind for the last group.

Scott has been leading this trip for HFN for at least five years. There is always the problem of people wanting to leave before others, and in order to accommodate them he has to shuttle back and forth to the gate to unlock it and then lock it again.

It was suggested that either the duration of the trip should be shortened, and/or HFN should specify on our Programme that there will be only *one* opening of the gate before the pick is over.

— Burkhard Plache



CRANBERRY TRIP SPECIES

1 Red-throated Loon	<i>Gavia stellata</i>
2 Common Loon	<i>G. immer</i>
2 Red-necked Grebes	<i>Podiceps grisegena</i>
10+ Horned Grebes	<i>P. auritus</i>
3 Double-crested Cormorant	<i>Phalacrocorax auritus</i>
2 Great Blue Heron	<i>Ardea herodias</i>
several Surf Scoters	<i>Melanitta deglandi</i>
10+ Long-tailed Ducks	<i>Clangula hyemalis</i>
2 Common Mergansers	<i>Mergus merganser</i>
2 Blackbellied Plover	<i>Pluvialis squatarola</i>
2 Semipalmated Plover	<i>Charadrius semipalmatus</i>
2 Sanderling	<i>Calidris alba</i>
heard; Yellowlegs (probably lesser?)	<i>Tringa sp.</i>
Ring-billed Gulls	<i>Larus delawarensis</i>
Herring Gulls	<i>L. argentatus</i>
Gr. Black-backed Gull	<i>L. fuscus</i>
1 Lesser Black-backed Gull	<i>L. marinus</i>
8 Laughing Gull	<i>L. atricilla</i>
several Black Guillemot	<i>Cephus grylle</i>
1 Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
2 Gray Jay	<i>Perisoreus canadensis</i>
2 Tree Swallows	<i>Iridoprocne bicolor</i>
5 Barn Swallows	<i>Hirundo rustica</i>
1 Boreal Chickadee	<i>Parus hudsonicus</i>
1 Gray Catbird	<i>Dumetella carolinensis</i>
2 Snow Bunting	<i>Plectrophenax nivalis</i>

BLUE MOUNTAIN



DATE: Sunday, 13 November

PLACE: Lewis Lake Drive

WEATHER: Sunny; 7°C

INTERPRETERS: Bob McDonald, Chris Miller

PARTICIPANTS: ±30

This was a short hike through clear-cuts and remnant old growth forest to the highest point in HRM and a magnificent vista of the Blue Mountain/Birch Cove Lakes wilderness area.

The trail to Blue Mountain is accessed via an old logging road which leads from Lewis Lake Drive in Kingswood subdivision off the Hammonds Plains Road. Close to its beginning, we passed through an 'urban clearcut' (in this case cut, but not yet cleared) which Chris described as a step in the irreversible loss of wilderness areas close to Halifax. When crown (publicly owned) land is involved, the first step is trading of such land with developers. (For instance in the 90's, 240 acres of crown-owned land in the Blue Mountain-Birch Cove wilderness area were given to developers in exchange for another plot in the city proper.) Then roads are built into the wilderness area allowing it to be clear-cut and, finally, 'developed'.

From the clear-cut, we began a climb upwards, first on a gentle slope through older clear-cuts now grown in with White Birch. Then we moved into fairly steep terrain with granite outcrops and glacially deposited boulders supporting old growth Red Spruce, also Yellow Birch, Hemlock, and White Pine. As with most other remaining old growth stands in N.S., this one has been spared from harvest because of the difficult terrain.

Finally, we arrived on the granite barrens plateau which sits atop the 500 foot high 'mountain'. Broom Crowberry and lichens were common on exposed rock, with dense stands of Lambkill, which retain most of their leaves into winter, and Huckleberry, still with a few crimson red leaves, on the periphery.

The plateau provides a 360° view of the wilderness area, the developments that now partially enclose it (Kingswood to the North, Bayers Lake to the east, Timberlea to the southwest), and, in the distance, Bedford Basin, Halifax, and the Chebucto peninsula.

This wilderness area encompasses 22 lakes with Keji-like canoeing opportunities: the headwaters for the Nine Mile River and Kearney Lake; Paper Mill Lake watersheds; and a variety of wetlands in a rugged forested landscape that is not pockmarked by huge clearcuts. It is important as a habitat and wilderness corridor for many wildlife species.

The mainland Moose is possibly the most notable amongst those species, and its use of this area is a major reason it should be conserved in as near an undisturbed state as possible. The mainland Moose is Nova Scotia's only true extant, endemic member of the deer family. (White-tailed Deer were not present in recent historical times; the current residents are descendants of animals that immigrated from New

Brunswick in the late 1800s. The Cape Breton Moose population was completely extirpated in the 1920s and Moose were reintroduced there from Alberta in the 1940s.)

The mainland Moose population is estimated to have been approximately 7000 in the mid-1920's, and perhaps 15,000 in pre-European times. The current population is estimated as 1000-1200 province-wide with the largest concentration, about 600, in the Cobequid region. Nine other small concentrations of 15 to 50 animals have been identified, two of which are in Halifax County in the Chebucto peninsula (30 animals) and the Ship Harbour region (20 animals). The Blue Mountain-Birch Cove wilderness area is an important corridor and habitat for these local Moose.

Harry Parker, author of a recent status report on the mainland Moose (and the source of these numbers) comments that the "historical uniqueness of the eastern Moose to the Nova Scotia landscape emphasises its special significance, a recognition which justified special efforts to ensure its continued occurrence as a noble endemic to the provincial fauna." He considers the small Halifax Co. concentrations to be 'vulnerable'.

Our interpreters, Chris and Bob, talked about the threats to this wilderness area and passed around a petition to have it declared protected under the Nova Scotia Wilderness Area Protection Act.

Aside from urban sprawl, a proposed four-lane highway that would cut through the middle of the wilderness area is a large and imminent threat to Moose and to the integrity of the wilderness as a whole. This proposal would connect highways 102 and 103, saving eight(!) minutes in travel time. Such habitat fragmentation and associated further intrusions could be the death knell for the local Moose concentrations, highways being a decidedly negative factor in habitat suitability for moose.

Coincidentally (supposedly), the proposed new highway is 9.9 km, just a hair under the minimum distance required (10 km) for a new road to undergo full environmental review. The matter now apparently is under review by the Dept. of Transportation, with a report due soon, when public comment will be invited and a final decision made on whether it will require a full environmental assessment (see The Halifax Field Naturalist, Issue #117, p. 4).

How many cities in North America even have the option of saving a diverse wilderness area in their immediate vicinity? We need to stay tuned to this one. If you have not yet signed the petition to have it declared a protected wilderness area please do so (and circulate it) — a copy is available at <<http://www.publicland.ca/takeaction/index.html>>.

Lichen specialist David Richardson of Saint Mary's University came on the walk and talked briefly at the top of Blue Mountain about the lichens he had seen, and showed us specimens he had gathered. Some of the species he pointed out to me in our rather hurried hike (we didn't have time to stray from the beaten path or to spend much time at individual sites

en route to the top) are listed below.

We were told that the Lungwort Lichens, the first in the species list, contain cyanobacteria which fix nitrogen from the air (this is a very important source of nitrogen in northern forests). They occur on trees with base-rich bark, notably Red Maple in our region, and are therefore quite sensitive to acid rain. Red Maples are commonly the most lichen-rich trees in our area; we did not see many on this hike.

— David Patriquin



BLUE MOUNTAIN SPECIES

On Red Maples (base-rich bark)

Lungwort, or Lung Lichen	<i>Lobaria pulmonaria</i>
Textured Lungwort	<i>Lobaria scrobiculata</i>
Smooth Lungwort	<i>Lobaria quercizans</i>
Shield Lichens	<i>Melanelia</i> sp.
Common Greenshield Lichen	<i>Flavoparmelia caperata</i>

On Young Birches (acid bark)

Varied Rag Lichen	<i>Platismatia glauca</i>
Crumpled Rag Lichen	<i>Platismatia tuckermanii</i>
Monk's Hood Lichen	<i>Hypogymnia physodes</i>
Powder-headed Tube Lichen	<i>Hypogymnia tubulosa</i>

On Conifers (acid bark)

Horsehair Lichens	<i>Bryoria</i> sp.
Salted Starburst Lichen	<i>Imshaugia aleurites</i>
Eastern Ragged-rim Lichen	<i>Loxospora ochrophaea</i>
Beard Lichens	<i>Usnea</i> sp.

On a standing dead trunk; these lichens are characteristic of older growth forests.

Stubble lichens	<i>Chænotheca</i> spp.
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Ground-covering Lichens

Brown-beret Lichen	<i>Baeomyces rufus</i>
Grey Reindeer Lichen	<i>Cladonia rangiferina</i>
Green Reindeer Lichen	<i>Cladonia mitis</i>
N. Reindeer or Cauliflower Lichen	<i>Cladonia stellaris</i>
Thorn Cladonia	<i>Cladonia uncialis</i>
Fishnet Lichen	<i>Cladonia boryi</i>
Pink Earth Lichen	<i>Dibaeis baeomyces</i>

These were not heavily trampled — a good sign.

On Old Logs

Common Powderhorn Lichen	<i>Cladonia coniocraëea</i>
British Soldiers	<i>Cladonia cristatella</i>
Dragon Funnel Lichen	<i>Cladonia squamosa</i>

On Boulders

Concentric Ring Lichen	<i>Arctoparmelia centrifuga</i>
Common Toadskin Lichen	<i>Lasallia papulosa</i>
Disk or Tile Lichens	<i>Lecidea</i> sp.
Powdery Saucer Lichen	<i>Ochrolechia andogyna</i>
Plated Rock Tripe	<i>Umbilicaria muehlenbergii</i>

On Soil Between Boulders

Spiked or Staghorn Lichen	<i>Cladonia uncialis</i>
Giant Cladonia	<i>Cladonia maxima</i>
Olive Cladonia	<i>Cladonia strepsilis</i>

ALMANAC

This almanac is for the dates of events which are not found in our HFN 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.

“Few winters pass without a “January thaw” when the wind comes in off the sea, wet and cold but not of freezing temperature. Atlantic rollers march in from the grey horizon and break ranks with a continuous roar; low clouds scud across the island and are followed by a fog that can hide the lighthouse from the dwelling a hundred yards away. But the air is warmer than it was; chickadees and nuthatches come into sight among near trees, a robin scratches about the garden and our few song sparrows find voice.”

— Evelyn Richardson, “The north wind doth blow”, in Living island, 1965

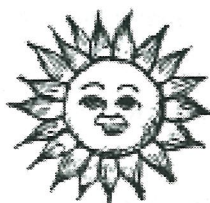


NATURAL EVENTS

- 14 Dec. -5 Jan. Audubon Christmas Bird Count Period.
- 15 Dec. Full Moon. Moon rises at 16:11 AST.
- 21 Dec. Winter Solstice at 14:35 AST: Winter begins in the Northern Hemisphere. But though the temperature drops, the days begin to lengthen.
- 24 Dec. Annual nocturnal circumpolar migration of *Rangifer tarandus* (Linn.).
- 27 Dec. -31 Dec. Latest sunrise of the year at 7:51 AST.
- 7 Jan. Daily maximum temperature at Shearwater goes below 0°C.
- 13 Jan. -24 Jan. ‘January Thaw’ (the temperature stops falling, and the average actually rises 0.2°C).
- 14 Jan. Full Moon. Moonrise at 17:03 AST.
- 28 Jan. -5 Feb. ‘Eagle Days’ in Sheffield Mills, King’s County; two weekends of organised events.
- 6-8 Feb. Coldest days of winter (average daily minimum -9.4°C).
- 9 Feb. Average temperatures start increasing.
- 12 Feb. -22 Feb. Mercury will be visible in the west at twilight.
- 13 Feb. Full Moon. Moonrise at 18:11 AST.
- 19 Feb. Second anniversary of ‘White Juan’, the record-breaking snowfall.
- 22 Feb. Daily maximum temperature rises above 0°C.
- 28 Feb. -2 Mar. Large tides.
- 14 Mar. Penumbral lunar eclipse, visible from moonrise at 18:13 AST until 21:30 AST.
- 14 Mar. Full Moon. Moonrise at 18:10 AST.
- 20 Mar. Vernal Equinox at 14:23 AST : Spring begins in the Northern hemisphere.
- 23 Mar. Daily average temperature rises above 0°C.
- 2 Apr. Daylight Savings Time begins at 2:00 AST: turn clocks ahead one hour.

— Sources: Atmospheric Environment Service, Climate Normals 1951-80 Halifax (Shearwater A) N.S.; Blomidon Naturalists Society’s 2006 Calendar; Burke-Gaffney Observatory, Saint Mary’s University.

SUNRISE AND SUNSET ON WINTER AND EARLY SPRING SATURDAYS



3 Dec.	7:34	16:35	7 Jan.	7:51	16:51
10 Dec.	7:41	16:34	14 Jan.	7:49	16:59
17 Dec.	7:46	16:36	21 Jan.	7:44	17:08
24 Dec.	7:50	16:39	28 Jan.	7:38	17:18
31 Dec.	7:51	16:44			
4 Feb.	7:30	17:28	4 Mar.	6:47	18:06
11 Feb.	7:21	17:38	11 Mar.	6:35	18:16
18 Feb.	7:10	17:47	18 Mar.	6:22	18:24
25 Feb.	6:59	17:57	25 Mar.	6:09	18:33

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

ORGANISATIONAL EVENTS



Blomidon Naturalists Society: Indoor meetings take place on the 3rd Monday of the month, in the auditorium of The K. C. Irving Environmental Science Centre on University Avenue, Wolfville, at 7:30 p.m. Field trips usually depart from the Wolfville Waterfront, Front St., Wolfville. For more information, go to <http://www.go.ednet.ns.ca/~bns/>.

14 Jan. "Minerals: a tour of beauty, symmetry and science", led by Dr. Rob Raeside at Acadia U.; 542-7767.

16 Jan. "New Mexico and its Natural History", with Larry and Alison Bogan.

21 Jan. Alternate date 28 Jan. "Cross Country Ski from Greenfield", led by David Dermott, 542-2387.

28/29 Jan. "Eagle Watch Weekend I at The Sheffield Mills Community Hall"; Richard Hennigar, 582-3044.

29 Jan. Alternate date 5 Feb. "Winter on Snowshoes", led by Soren Bondrup-Neilsen, 582-3971. 

4/5 Feb. "Eagle Watch Weekend II at The Sheffield Mills Community Hall"; Richard Hennigar, 582-3044.

20 Feb. "Annual Show and Tell Night".

20 Mar. "Stamping Out Nature - Nature Themes on Postage Stamps", with Patrick Kelly.

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 1st and October 31st. For more information phone 496-8257; or go to <http://www.stmarys.ca/bgo/>.

Nova Scotia Bird Society: Indoor meetings take place on the 4th Thursday of the month, September to May, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information phone Suzanne Borkowski, 445-2922; or go to <http://www.chebucto.ns.ca/Recreation/NS-BirdSoc/>.

7 Jan. "Sewer Stroll 1 - Halifax/Dartmouth Area"; leader Bob McDonald, 443-5051; bobathome@hfx.eastlink.ca.

26 Jan. "Members' Slide Night" and "Skills Workshop: Recognising Accipiters", with Fulton Lavender.

18 Feb. "Sewer Stroll 2 - Halifax/Dartmouth Area"; leader Fulton Lavender, 455-4966.

23 Feb. "The Second Maritime Breeding Bird Atlas", with Karel Allard, coordinator of the forthcoming MBBA.

18 Mar. "Along the Fundy Shore"; leader Jim Wolford, 542-9204; jimwolford@eastlink.ca.

23 Mar. "Where are the Birds?", with Blake Maybank, author of *Birding Sites of Nova Scotia*.

1 Apr. "Baccaro and Blanche Peninsula"; leader James Hirtle, 640-2173; jrhbirder@hotmail.com.

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

10 Jan. -17 Apr. "Bug World", with giant robotic insects. 

22 Feb. "Flying Dragons and Graceful Damsels", with Paul Brunelle. 

2 Mar. "Bug Pests: Fungi as a Natural Pest Control", with Debbie Moreau, PhD candidate. 

22 Mar. "Gateway to Canada: ...Halifax Harbour"; Gordon Fader/Charles Doucet. Cosponsor — Atlantic Geoscience Society.

28 Mar. "A Walk in the Park: Point Pleasant Park after Hurricane Juan", with Fred and Lynne Schwarz.

Nova Scotia Wild Flora Society: Meets 4th Monday of the month, September to May, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information phone Barry Sawyer, 449-4938; or go to <http://www.chebucto.ns.ca/~nswfs/>.

23 Jan. "Members' Slide (or Digital Image) Night"

28 Feb. To be announced.  

Nova Scotian Institute of Science: Meets 1st Monday of the month, September to April, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information, go to <http://www.chebucto.ns.ca/Science/NSIS/index.html>.

6 Mar. "Integrating industrial and natural ecosystems: the possibilities", with Ray Côté, School for Resource and Environmental Studies, Dalhousie University.

Royal Astronomical Society of Canada (Halifax Chapter): Meets 3rd Friday of each month in Room L176 of the Loyola Academic Building at Saint Mary's University, 8:00 p.m. For more information, go to <http://halifax.rasc.ca/general.html>.



— compiled by Patricia L. Chalmers

TIDE TABLE



HALIFAX

January-janvier

February-février

March-mars

January-janvier				February-février				March-mars							
Day	Time	Feet	Meters	Day	Time	Feet	Meters	Day	Time	Feet	Meters	Day	Time	Feet	Meters
1	0236	1.3	0.4	1	0418	1.0	0.3	1	0303	0.7	0.2	1	0251	1.3	0.4
	0826	6.6	2.0		0955	6.2	1.9		0848	6.2	1.9		0854	5.6	1.7
	1520	0.0	0.0		1637	0.0	0.0		1520	0.0	0.0		1459	1.3	0.4
	2117	5.6	1.7		2234	6.2	1.9		2120	6.6	2.0		2110	5.6	1.7
2	0333	1.3	0.4	2	0517	1.0	0.3	2	0358	0.3	0.1	2	0324	1.3	0.4
	0918	6.2	1.9		1045	5.9	1.8		0937	6.2	1.9		0929	5.6	1.7
	1611	0.0	0.0		1730	0.3	0.1		1609	0.0	0.0		1527	1.3	0.4
	2207	5.9	1.8		2319	6.2	1.9		2205	6.6	2.0		2140	5.9	1.8
3	0433	1.3	0.4	3	0616	1.0	0.3	3	0453	0.3	0.1	3	0359	1.3	0.4
	1009	6.2	1.9		1135	5.6	1.7		1026	5.9	1.8		1004	5.2	1.6
	1703	0.0	0.0		1826	0.7	0.2		1702	0.7	0.2		1557	1.6	0.5
	2257	5.9	1.8		1925	1.0	0.3		2249	6.2	1.9		2211	5.6	1.7
4	0536	1.3	0.4	4	0005	5.9	1.8	4	0549	0.7	0.2	4	0440	1.3	0.4
	1100	5.9	1.8		0715	1.0	0.3		1114	5.6	1.7		1040	5.2	1.6
	1757	0.3	0.1		1227	5.2	1.6		1759	5.0	1.4		1635	2.0	0.6
	2346	5.9	1.8		1925	1.0	0.3		2333	5.9	1.8		2246	5.6	1.7
5	0639	1.3	0.4	5	0052	5.6	1.7	5	0647	1.0	0.3	5	0527	1.3	0.4
	1153	5.6	1.7		0814	1.0	0.3		1202	5.2	1.6		1119	5.2	1.6
	1853	0.7	0.2		1323	4.9	1.5		1901	1.6	0.5		1724	2.3	0.7
6	0035	5.9	1.8	6	0145	5.2	1.6	6	0019	5.6	1.7	6	0625	1.6	0.5
	0740	1.3	0.4		0912	1.0	0.3		0745	1.0	0.3		1202	4.9	1.5
	1249	5.2	1.6		1428	4.6	1.4		1255	4.9	1.5		1831	2.3	0.7
	1950	1.0	0.3		2128	1.6	0.5		2004	2.0	0.6		2050	2.3	0.7
7	0127	5.6	1.7	7	0247	5.2	1.6	7	0110	5.2	1.6	7	0009	5.6	1.7
	0839	1.3	0.4		1009	1.3	0.4		0844	1.3	0.4		0729	1.6	0.5
	1351	4.9	1.5		1548	4.6	1.4		1358	4.6	1.4		1253	4.9	1.5
	2048	1.3	0.4		2229	2.0	0.6		2107	2.0	0.6		1943	2.6	0.8
8	0223	5.6	1.7	8	0358	4.9	1.5	8	0214	4.9	1.5	8	0103	5.2	1.6
	0936	1.0	0.3		1106	1.3	0.4		0942	1.6	0.5		0835	1.6	0.5
	1459	4.9	1.5		1705	4.6	1.4		1523	4.6	1.4		1400	4.6	1.4
	2147	1.6	0.5		2329	2.0	0.6		2209	2.3	0.7		2050	2.3	0.7
9	0323	5.6	1.7	9	0505	5.2	1.6	9	0334	4.9	1.5	9	0212	5.2	1.6
	1033	1.0	0.3		1200	1.3	0.4		1040	1.6	0.5		0938	1.3	0.4
	1613	4.9	1.5		1804	4.9	1.5		1650	4.6	1.4		1529	4.6	1.4
	2247	1.6	0.5		2311	2.0	0.6		2308	2.3	0.7		2155	2.3	0.7
10	0423	5.2	1.6	10	0023	2.0	0.6	10	0450	4.9	1.5	10	0335	5.6	1.7
	1128	1.0	0.3		0601	5.2	1.6		1134	1.6	0.5		1038	1.0	0.3
	1719	4.9	1.5		1250	1.0	0.3		1746	4.9	1.5		1648	5.2	1.6
	2346	1.6	0.5		1852	5.2	1.6		2359	2.0	0.6		2258	2.0	0.6
11	0520	5.6	1.7	11	0109	2.0	0.6	11	0545	5.2	1.6	11	0451	5.9	1.8
	1221	1.0	0.3		0648	5.6	1.7		1223	1.3	0.4		1135	0.7	0.2
	1815	4.9	1.5		1333	1.0	0.3		1829	5.2	1.6		1745	5.6	1.7
12	0040	2.0	0.6	12	0148	2.0	0.6	12	0628	5.6	1.7	12	0553	5.9	1.8
	0612	5.6	1.7		0730	5.6	1.7		0628	5.6	1.7		1228	5.9	1.8
	1309	5.0	1.4		1411	1.0	0.3		1305	1.3	0.4		1834	6.2	1.9
	1905	5.2	1.6		2010	5.6	1.7		1905	5.2	1.6		2359	1.3	0.4
13	0129	2.0	0.6	13	0221	2.0	0.6	13	0707	5.6	1.7	13	0648	6.2	1.9
	0700	5.6	1.7		0809	5.9	1.8		0757	6.6	2.0		0648	6.2	1.9
	1354	1.0	0.3		1443	1.0	0.3		1433	-0.3	-0.1		1318	0.3	0.1
	1931	5.2	1.6		2045	5.6	1.7		2035	6.6	2.0		1920	6.6	2.0
14	0212	2.0	0.6	14	0251	2.0	0.6	14	0151	1.6	0.5	14	0153	0.3	0.1
	0745	5.6	1.7		0846	5.9	1.8		0743	5.6	1.7		0739	6.2	1.9
	1434	1.0	0.3		1511	1.0	0.3		1409	1.0	0.3		1406	0.0	0.0
	2033	5.6	1.7		2117	5.6	1.7		2010	5.6	1.7		2005	6.9	2.1
15	0249	2.0	0.6	15	0320	1.6	0.5	15	0220	1.6	0.5	15	0245	0.3	0.1
	0828	5.9	1.8		0922	5.9	1.8		0819	5.6	1.7		0829	6.2	1.9
	1511	1.0	0.3		1536	1.3	0.4		1434	1.0	0.3		1455	0.3	0.1
	2112	5.6	1.7		2149	5.6	1.7		2040	5.6	1.7		2050	6.9	2.1
31	0320	1.0	0.3	31	0905	6.6	2.0	31	0337	0.0	0.0	31	0337	0.0	0.0
	0905	6.6	2.0		1548	-0.3	-0.1		0918	5.9	1.8		0918	5.9	1.8
	1548	-0.3	-0.1		2148	6.2	1.9		1544	6.7	2.0		1544	6.7	2.0
	2148	6.2	1.9					2134	6.6	2.0		2134	6.6	2.0	



Nature Notes from HFN Monthly Meetings

October Meeting

Stephanie Robertson saw a **Monarch Butterfly** on Sunday, Oct. 2nd at Peggy's Cove, and Joan Czapalay reported many mushrooms at Hartlen's Point and on the Dal campus — **Shaggy Mane** and **Bolitus sp.** among others.

On Friday, Sept. 30th, Doug Linzey saw a **Barred Owl** sitting on a fence near a green bin in North Mountain, near Canning, and Shirley McIntyre saw **Monarchs** at Taylor Head. Bob McDonald reported seeing a lot of **Painted Ladies** around HRM, while Jean Timpson reported to Peter Payzant a **White Admiral** sighting in the valley.

Bob McDonald also saw a **Mourning Cloak** at Back Cove (they overwinter), while Pat Chalmers put out a call for biota sightings for a survey in Shubie Park. **Water Hyacinth** has been spotted there, it is labelled a noxious weed in New York State. The seeds are highly viable, but it is a good pollution control plant.

As of this meeting, Thursday, Oct. 6th, Christine-Anne Smith noted that the leaves in and around HRM still had not changed colour!

November Meeting

On Monday, October 31st, Peter Webster saw **Bald Eagles** around Hwy 103's Exit 4.

Bob McDonald reported that hurricane Wilma blew in a lot of species; **Black Skimmer** (should be in Florida now), **Shearwater**, many terns including the **Royal Terns**, and **Gannets** were seen in the Keji Adjunct. Many **Chimney Swifts** were seen at St. Alban's church chimney in Dartmouth; these should have been in Florida as well. There were also many **swallows** and **Cave Swallows** blown in; they had all migrated 1 1/2 months before this sighting! There were also hundreds of **Yellow-billed Cuckoos**.

Patricia Chalmers reported 1/2 dozen **Chimney Swifts** in Point Pleasant Park between Fort Ogilvie and Black Rock Beach; also a flock of 20 or more flew in at higher altitude from Dartmouth; on these she observed a successful hit by a **hawk**. She worried about them surviving, as at this time of year, there are not many or no insects for the swifts, and if they enter chimneys when people have their furnaces on, they are asphyxiated. She also reported hearing **crickets** in Point Pleasant Park on November 1st.

Leslie Butters reported that 'her' regular **Great Blue Heron** at the Waegwoltic on the Northwest Arm disappeared after hurricane Wilma. She reported an unusual phenomenon that occurred during Wilma, — there was no low tide; it stayed high for 12 hours! She saw **no Crane Flies** this year. She reminded us to watch for Mars in the eastern sky, very visible after Venus drops down in the western sky, and just to the left, with binoculars, the Pleiades.

Peter Payzant saw a **Garter Snake** in Shubie Park; the **Black Knapweed** there was still in bloom.

Someone noted that there were very late sightings of **snakes** this year (the latest ever), and that there was a great abundance of **mushrooms**.

December Meeting

Carl Munden saw a **Crow** carrying food in its beak which it subsequently buried. After the crow departed, a flock of gulls landed, dug up the food and flew off with it. Carl also watched some Crows mobbing an eagle.

Jackie Warkentin discovered a finger-sized, lizard-like creature; possibly a **salamander(?)** in her orchid when she was bringing in plants for the winter. It has settled happily into its new home — a flower pot. People suggested to Jackie that she put the pot in a cool place since salamanders spend the winter months in a dormant state under the mud.

Peter Payzant commented that there were still some **swallows** to be seen in the aftermath of Hurricane Wilma, and Phyllis Bryson saw eight or nine **Chimney Swifts** in Point Pleasant Park.

Clarence Stevens and Cindy Creighton saw **Chimney Swifts** in River John, Cumberland County. They also saw a **Leopard Frog** and a **Wood Frog** at that location. At home, in Beaverbank, they had a **Field Sparrow**, a **Winter Wren**, and three **Pine Warblers** at their feeder.

Leslie Butters saw **dandelions** in bloom, and a beech tree at the Waegwoltic Club that has not produced nuts for the first time in many years. The tree is a **European Copper Beech** and seemingly healthy.

Regina Maas saw gulls doing a 'tap dance' on a lawn to trick earthworms into thinking it's raining so they would come to the surface.

Suzanne Borkowski passed along a recent report by Andy Horn of a **Cape May Warbler** in Point Pleasant Park, and Patricia Chalmers had a **Baltimore Oriole** at her feeder on Elm Street.

! NEXT DEADLINE !

21st February for the March Issue

**Contributions to the 'Newsletter', c/o NS Museum of Natural History;
or email submissions to sdhaythorn@ns.sympatico.ca.**