# THE HALIFAX FIELD NATURALIST



No. 156 September to November, 2014



In This Issue2	Talks
News & Announcements3	Field Trips10
Nature Notes 3	Almanac 13
Special Reports4	Hfx Tide Table: April to June15

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

is incorporated under the Nova Scotia Societies Act and holds Registered Charity status with the Canada Reve-

nue Agency. Tax-creditable receipts will be issued for individual and corporate gifts. HFN is an affiliate of Nature Canada and an organisational member of Nature Nova Scotia, the provincial umbrella association for naturalist groups. 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, and 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; they are open to the public. Field Trips are held at least once a month; it is appreciated if those travelling in someone else's car share the cost of the gas. Participants in HFN activities are responsible for their own safety. Everyone. member or not, is welcome to take part in field trips. Memberships are open to anyone interested in the natural history of Nova Scotia. Forms are available at any meeting of the society, or by writing to: Membership Secretary, Halifax Field Naturalists, c/o N.S. Museum of Natural History. Members receive The Halifax Field Naturalist, along with its included Programme, quarterly. Our membership year is from January 1st to December 31st, and new memberships received from September 1st to December 31st of any year are valid until the end of the following membership year.



#### HFN ADDRESS

Halifax Field Naturalists, c/o N.S. Museum of Natural History, 1747 Summer St., Hfx, N.S., B3H 3A6 Email: hfninfo@yahoo.ca Website: halifaxfieldnaturalists.ca

# IN THIS ISSUE ⇔

HFN News and Announcements	3
HFN's 40th! - take part; share your favourites	3
NSNT – pristine island archipelago saved	3
BMBCL Wilderness – keep posted!	3
New Members – six more	3
Nature Notes - turtles; a gannet; fox; whales; more	4
In Memoriam - Milton Gregg; Barry Sawyer	4
HFN Talks	5
E. African savannah – conclusion	5
Native Wild Bees - how to ID and protect	5
HFN Field Trips	6
Sackville River Walk - SRA still going strong	
McIntosh Run – flora regeneration	
Prospect Coast – seaside wonders	



















Halifax Tide Table – Oct. to Dec.; all times AST!. 15





GRAPHICS All uncredited illustrations are by H. Derbyshire or from copyright-free sources. Front Cover - Lesser Yellowlegs, Little Harbour, Melmerby Prov Park, Pictou Co., and Back Cover - Roy's Island, Melmerby Prov. Park, Pictou Co., both Judy Keating; Tide Table - Cdn. Hydrographic Service, Fisheries & Oceans Canada.

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

NNS ADDRESS

Email: doug@fundymud.com (Doug Linzey, NNS Secretary and Newsletter Editor) Website: naturens.ca

, , , , , , , , , , , , , , , , , , , ,		
EXECUTIVE President Vice-President Treasurer Secretary Past President Directors	2014 Janet Dalton Clarence Stevens Ingrid Plache Michael Bradfield Allan Robertson Burkhard Plache, Lillian Risley, Step	864-0802 475-1129 423-7706 422-6326
COMMITTEES Membership Programme	2014 Lillian Risley	.422-8652
Talks/Trips  Design	Richard & Grace Beazley Rachelle Watts Elliott Hayes Burkhard Plache Gillian Webster Stephanie Robertson	423-7787 835-9819 475-1129 453-9244
Noweletter		

Newsletter		
Editor & Design	Stephanie Robertson	422-6326
Almanac	Patricia Chalmers	422-3970
Taxonomy	Ursula Grigg	681-1264
Distribution	Bernice Moores	422-5292
Labels	Doug Linzey	582-7176
Refreshments	Regine Maass	
Conservation	Bob McDonald	
	David Patriquin	423-5716

Clare Robinson ......446-6603

NNS Rep.	Burkhard Plache	475-1129
YNC Rep.	David Patriquin	423-5716
PSAs	Gillian Webster	453-9244
Webmaster	David Patriquin	423-5716
CSC Award	Doug Linzey	582-7176
	David Patriguin	423-5716

FEES	2014
Student	\$15.00 per year
Individual	\$20.00 per year
Family	\$25.00 per year
	\$30.00 per year

# HFN NEWS AND ANNOUNCEMENTS

# HFN's 40TH ANNIVERSARY ! CALLING ALL HFN MEMBERS!

HFN's 40th Anniversary Committee invites you to take up pen and paper, or to turn on your computer, to compose a 250-300 word description of, or a poem about, your favourite Nova Scotia natural place or wild species, whether it be animal, plant, or mineral. Or – write about any exciting nature encounter or exceptional discovery you may have had. Be sure to include the exact location of the place or species seen. With these 'pieces' you'll be contributing thereby to the celebration of HFN's 40th year!

Submit your write-ups to Stephanie Robertson, HFN Newsletter Editor; they will be published in the Winter 2014 and Spring 2015 issues. **The deadline for submissions is November 21st, 2014**.

By email – sdhaythorn@ns. sympatico.ca; by mail – Stephanie Robertson, Editor, HFN, c/o N.S. Museum of Natural History, 1747 Summer St., Halifax, N.S., B3H 3A6.

## ! JANUARY MEETING CHANGED!

The Nova Museum of Natural History is unable to host our meeting on our usual Thursday spot this coming January. It has been rescheduled to Wednesday, January 7th. Please note this change on your calendars!



On October 23rd, 2014, the spacious Cunard Centre, 961 Marginal Road, will host the Nova Scotia Nature Trust's 17th Annual Dinner and Auction, celebrating 20 years of conservation in Nova Scotia! This is one of Halifax's most exciting environmental events; guests have the opportunity to network with like-minded individuals, to hear stories and experiences of conservation efforts taking place in Nova Scotia, and to help raise critical funds for the NSNT to continue saving unique and outstanding places across our province.

It will be a celebration of twenty years of conservation successes (displayed with gorgeous photography, stories, and more), with nationally-known speaker, Environment Canada's senior climatologist David Phillips. There will also be the usual fun and action-packed silent auction and games of chance. The host and MC this year will be CBC's Louise Renault. Doors open and the silent auction begins at 5:30 p.m.

Tickets are as follows: \$150 (a single ticket); \$1,500 (a table of 10); and \$2,000 (a Conservation Table) which includes company recognition in the event programme, unique table signage, recognition by the evening's host, and preferred seating. Ticket order forms are downloadable from the NSNT website.



# BLUE MOUNTAIN-BIRCH COVE LAKES WILDERNESS AREA

- Wendy McDonald, Halifax North West Trails Association

The BMBCL Wilderness Area is right here on our urban doorstep, yet most have not been able to explore it yet. Three local community groups – Maskwa Aquatic Club, Canadian Parks and Wilderness Society, and Halifax North West Trails Association – hope to change that with community support and input.

Watch for dates when they will host a Community Engagement session to gather local knowledge from users, young and old, new and former, to inform future trail development and use, both front and back country, in the Wilderness Area. This includes the paddling community who describe the eight-lake loop to be "a mini-Keji experience". New trails will be planned, old ones may be closed if deemed unsuitable, and maps and signage will be a part of this long term plan. It will take several years depending on fund raising to phase in the many outdoor adventure opportunities. The N.S. Departments of Environment and Natural Resources will be very much involved in next steps.

Unfortunately there are still very few safe public access points into the Wilderness Area. We are going to have to be patient and wait until Halifax moves ahead with the acquisition of the land around Susies, Quarry and Fox Lakes for incorporation into its Blue Mountain-Birch Cove Lakes Regional Park vision. Meanwhile, Halifax North West Trails has organised a series of fall hikes, a couple of which explore this Wilderness Area. Please go to www.halifaxnorthwesttrails.ca to check them out and to register.

#### **NEW & RETURNING**



Cathy Dawes
Eleanor and William Gill
Michael Goodfellow
Judy Keating
Nick and Margo Mattison
Melanie McDonald

#### IN MEMORIAM

#### **MILTON GREGG**

I first met Milton Gregg at HFN's monthly meetings, and from the Spring of 1988 to the Spring of 1989, Milton, along with his lovely wife Norma and I, formed HFN's Programme Committee.

Milton was a retired Canadian Army Lieutenant Colonel with a long and very distinguished military career. He brought reliable commitment, tight organisation, and wonderful ideas to the table for both our talks and our field trips. Both Milton and Norma were very enthusiastic and committed people to work with, and they led one or two canoe trips for HFN; indeed, I think they canoed just about everywhere possible in Nova Scotia!

At the end of his military career, Milton pursued his goal to become an economist. He obtained his B.A. and M.A. from Dalhousie, then joined the Nova Scotia Department of Development as an economist for the next ten years. Military retirement allowed Milton to pursue his many interests such as membership in the Halifax Field Naturalists, the Wild Flora Society, the Photographic Guild of Nova Scotia, and outdoor activities such as cross-country skiing, canoeing, kayaking, and trout and salmon fishing.

#### **BARRY SAWYER**

Long time HFN member, Barry Sawyer, philosopher (Master's Degree in Philosophy from King's College), muscian, naturalist, and avid canoeist (he had more than one!) passed away this past June.

Barry worked for the Canadian Coastguard and was an avid supporter of the arts, regularly playing clarinet in the Tupper Medical Band and the Sackville Community Band; he also played piano and cello!

He was an expert on many subjects with a particular interest in the natural sciences. Barry loved to read, to travel, and to share his wealth of knowledge with anyone willing to listen. His beloved wife Jean, also a member of HFN, predeceased him several years ago. He and Jean made annual trips to their favourite Milford House Wilderness Resort in South Milford, and they would conduct nature hikes for and with their friends whenever possible, especially in the valley.

Barry and Jean loved Keji. In the 70s they began volunteer work there helping with the Loon surveys; twice a year they both took part in this count and they especially liked to do the more distant ponds. Barry himself continued to do so until about two years ago, when health issues became problematic.

Barry and Jean made regular trips throughout the season to see Bloodroot, Canada Lillies, Yellow and Pink Showy Lillies, etc., as they came into bloom. One of their many excursions was an extensive trip to New Zealand; Barry gave a talk about that trip to HRM. He was a keen photographer and liked to work with 35 mm film, as well as digital; his preference was for wildflowers, and he was a member of the Wild Flora Society, serving on the executive.

One of his beautiful, lighter canoes had been specially commissioned and made for him by one of the Park Staff. Good friend Peter Hope, Keji Chief Park Interpreter for 29 years, said that he once met Barry and Jean at a backcountry campsite at Kejimkujik. Happening to mention to them a special plant growing nearby, they went to see it with him; they were knowledgeable enough to correct its previous identification – it was a rarer species than park staff had realised! "There were always nature sightings to discuss with Barry and his enthusiasm was fantastic. His friendship and help over the years were greatly appreciated. I speak for many park staff who knew him when I say, he will be missed".





### **NATURE NOTES**

- Gillian Webster

#### **SEPTEMBER**

From her Medway River cottage Lesley Jane Butters said she saw the strangest looking beast floating in the water. It turned out to be a Snapping Turtle with its limbs all stretched out; she figured it must have been about three feet in length. The water all around the turtle was bubbling – perhaps it had laid eggs.

Lesley also saw a Blandings Turtle in Kejimkujik National Park by the side of the road. It had laid eggs and they were under protection within a wire covered frame; it looked to her as if the eggs would hatch very shortly!

Pat Leader saw a lone white Gannet in the Bedford Basin, probably flying south on its migration route.

Clarence Stevens Senior saw three black Foxes in the Lunenburg area. He also had a chance to watch Northern Flying Squirrels, with their enormous eyes. In fact, he often has the chance not only to observe them but also to feed them!

Brian Ferguson went whale watching recently off Long Island, Nova Scotia where he saw four whales. Two were definitely Humpbacks and one of them had a calf swimming alongside its mother. They were swimming very close to the boat and even swam under it.



"To see a world in a grain of sand And a heaven in a wildflower, Hold Infinity in the palm of your hand And Eternity in an hour."

William Blake

# **HFN TALKS**

#### E. AFRICAN SAVANNAH 3 APR.

- S. Robertson, (cont'd from the Summer, 2014 Issue).

On the third morning of Peter and Gillian Webster's trip to the Serengeti In June, 2013, in a simple Tanzanian campground, Gillian was photographed next to a tree with the sign "Caution! Do Not Get out Of the Campsite Animal May Attack Human Being." Gillian was looking very skeptical in this photo, having remembered how she had made two trips to the outhouse the previous night, which was two hundred feet away in the dark. The skies were lovely, since the campground was in total darkness, but that meant stepping carefully over the narrow path to and from the outhouse, with only a small beam from a flashlight. Finding the right tent was also a highlight of these night-time expeditions, and tripping over the stoop of the tent entrance was memorable – but helped to ensure that Gillian found the right occupant in the next cot, by waking Peter up!

Another set of photographs showed a daring raid on the campsite cookhouse by a family of Mongooses. Photos showed them being them being repulsed by the cook staff, (but – of course – they would be back!).

The Ngorongoro Conservation Area is a UNESCO World Heritage Site located 180 km (110 mi) west of Arusha in the Crater Highlands area of Tanzania. The famous Oldovai Gorge is under its protection, and in 2005 the Gorge was re-named back to "Oldupai" since that is the Maasai word for the wild sisal plant which grows in the gorge. The gorge itself is 30 metres deep and 30 kilometers long, and was formed from many, many ancient layers of volcanic ash. Due to a mix-up, Peter and Gillian were not able to go down into it, but they stopped for a good while there, and experienced the awe which this important paleoanthropological site engendered for them.

The Ngorongoro Crater, a large volcanic caldera within the Conservation Area, is recognised by one private organisation as one of the Seven Natural Wonders of Africa. It is the world's largest inactive, intact, and unfilled volcanic caldera and it looked huge in the photo we saw. The crater, which formed when a large volcano exploded and collapsed on itself two to three million years ago, is 610 metres deep and its floor covers 260 square kilometres. Estimates of the height of the original volcano range from 4,500 to 5,800 metres! The crater floor itself is 1,800 metres above sea level, and is mostly open grassland with two small wooded areas dominated by the ever-present Acacia xanthophloea. There is also a picnic site here open to tourists, and a huge swamp fed by a spring. This area is inhabited by Hippos, Elephants, Lions, and many others. Lots more small springs can be found around the crater's floor, and they are important water supplies for both the animals and the local Masai, especially during times of drought. They saw Wildebeest, beautiful Goldencrowned Cranes, and Warthogs. Down in the crater there were 28 white Rhinoceros, and they were lucky enough to see two, far in the distance, after the jeep followed as near as it dared to a government inspection vehicle, which was 'off road', checking up on the rhino population. Tourist vehicles are not normally allowed off road, in order to give

the animals a respectful distance.

At the end of the presentation Peter spoke a little about their experience of Kenyan and Tanzanian societies.

He noted that he was surprised to find that, particularly in Kenya, the most popular sport is rugby, rather than soccer, and all school children are keen on it. Compared to its neighbours, Kenya has a well-developed social and physical infrastructure. It is considered the main alternative location to South Africa for those major corporations seeking entry into the African continent. As of March 2014, economic prospects are positive, with above 5% GDP growth expected, largely because of expansions in tourism, telecommunications, transport, construction, and a recovery in agriculture.

By contrast, in Tanzania, adding to the already hard farming lives of its people is the fact that rainfall cycles have changed – there has been 42% less rain in the last fourteen years. Also, there have been persistent power shortages caused by that low rainfall in the catchment areas, compounded by years of neglect and bad management at the state-controlled electric company.

What wonderful experiences Peter and Gillian had in such a famous and significant world site; our sincere thanks to both of them for their interesting joint presentation.



## NATIVE WILD BEES

4 SEPT.

- Janet Dalton

Andony Melathopoulos is a PhD candidate at Dalhousie University, studying bees. Andony began his talk with questions about native wild bees, "Who they are, what do they do, and how do we keep them happy?" We were then shown four bees or bee-like images. The surprise was that the fourth bee-like picture was actually a fly! Sometimes flies and bees are difficult to tell apart, but here are differences to watch for:

- A). Their antennae are very different; bees have long, thin antennae, while flies have short, thick ones.
- B). Their eyes are positioned differently; bees have large eyes at the sides of their heads while flies have eyes in the front.
- C) The wings are different; bees have four wings, flies have two; bees are able to fold their wings in close to the abdomen, while a fly's wing position is at right angles to its body.
- D) The body of a bee is usually hairy, while flies have few if no hairs on their bodies.
- E) Pollen is carried in great abundance by bees, especially on their back legs; flies carry very little pollen.

There are many species of wild bees. Seventy different species have been found on wild Blueberries in PEI. Most wild bees function as individuals and are not part of a colony like the honey bee. They live in hollow stalks or twigs, crevices, and in the ground. They live for one season and emerge as early as April. They live as







5

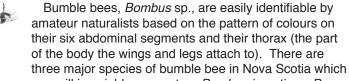
a larva or adult during the winter, and feed on the nectar and pollen of willows and maples. Bees which appear in the summer rely on fireweed and clovers; later bees forage on goldenrod and asters. All these bee foragers suck the nectar from 'nectaries' at the base of the flowers, and in doing so they bump or rub against the pollen located on the blossom's anthers.

Honey bees are unique in our area in that the whole colony goes through the winter. The races of honeybees which our beekeepers now use were originally imported from Italy to North America in the 19th Century. There are two other bees that have been domesticated – leafcutter bees and a few species of bumble bee. Leafcutter bees live in peculiar arrangements of Styrofoam tubes which mimic their natural home in hollowed out stems.

The oldest fossilised bee/wasp was found in amber in Burma; it was about 100 to 110 million years old. Bees developed from wasps about the same time as flowers appeared on the earth.

There are many colours of wild bees – red, blue, green, and these colours sport a metallic shine. One of the most spectacular wild bees we were shown was an emerald green orchid bee, a Euglossine type, from Belize. The strange life history of these bees reveals that when the male travels to orchids to collect resins on their uniquely shaped hind legs, these orchid resins attract the females for mating. In the process, an orchid's pollen sack becomes attached to the male, which then gets

deposited on the next orchid the bee visits.



one will invariably encounter; *Bombus impatiens, Bombus tenarius*, and *Bombus vegans*. There is also a fine book, available free online, with which to identify these bees – Bumble Bees of Eastern North America.

In Europe, in the 1950's after WWI, the populations of wild bees were at their lowest, but they have stabilised more recently. The largest threats appear to be bumble bees, and loss of habitat. Some bees can forage as far away as 2,500 metres, while others travel only 50 metres, therefore a strategy for preserving broad habitats is needed. Restoration has begun – by promoting meadows instead of farm production, by developing 'buffers' such as bogs, and by creating 'shelter belts' of evergreen trees to stop chemical over spray from drifting. Another method of restoration is forest clearing, in order to encourage more diversity in plant communities.

At the end of September, Dalhousie will be holding a two day workshop to teach people how to carry out wild bee habitat restoration.



# HFN FIELD TRIPS

#### SACKVILLE RIVER WALK

- Brian Ferguson & Richard Beazley

Date: Saturday, May 24th

Place: Bedford/Sackville Connector Greenway

Weather: Cloudy/Cool Breeze, 10°C

Leaders: Damon Conrad

Participants: 16, of whom 11 were HFN members

Damon Conrad, Coordinator of the Sackville Rivers Association (SRA), led this 3-km morning walk along the Sackville River. The walk was a follow-up to the "Sackville River Talk" by Walter Regan on May 1st (see its report in The Halifax Field Naturalist, No. 155). An environmental engineer by profession, Damon has been Coordinator of the SRA for three years, and a member for five. Members of SRA have worked arduously for 26 years to preserve what remains of the pristine nature of the Sackville Rivers' watershed and to restore damaged areas.

As we walked downstream toward Bedford, Damon stopped at several sites, occasionally with information boards, to talk about the river's history. We heard and read that the river, which empties into the Bedford Basin, is in a valley created when glaciers, about 13,000 years ago, left elongated hills composed of a loose mix of clay, sand, and gravel, all held together by surrounding forest. But, over the past two centuries, building dams to power sawmills, straightening the river to make log drives more

efficient, removing tons of rocks from the river bed to build highways, and removing forest vegetation for housing and commercial development has caused erosion of the river banks, silting of the river bed, and pollution of the river itself.

We learned that the river used to be a major route for spawning fish, but not any more, due to faster flowing water, fewer pools for fish to rest in during their migration upstream, and low pH levels (increased acidity). There are few salmon left now despite efforts to re-introduce them into the river system. Speckled Trout are more successful in adapting to the more acidic river, but the only species that migrates in large numbers now are the Gaspereau in the Spring. Gaspereau prefer light, sunny weather when they migrate, so we did not see any of them on this day.

Damon told us about the work of the SRA, particularly about its restoration projects. He reminded us that the Sackville River, in its natural state, once meandered, which slowed the flow of the current and created riffles, pools, and backwaters in which Atlantic Salmon, American Eel, Banded Killfish, Gaspereau, Speckled Trout, and White Sucker could rest and breed. To increase the river meandering, SRA members have replaced improperly installed culverts and have built log and rock barriers, or sills, across the river at 30-degree angles. Also, they have planted Goutweed and other vigorous plants

B

along the river's banks to help prevent erosion and to redistribute river silt to alleviate clog-ups. In addition, large willows thrive along parts of the river, thanks to beavers who leave branches and shoots along wet river banks where they take root and grow into even more trees.

Damon mentioned some other tidbits of information as well. The first of them was that the most natural remaining part of the river is out-of-bounds because it runs through Department of National Defense property, which includes a rifle range. People who trespass face the real possibility of having bullets whizzing over head! The second – groups of children from local schools have in-class talks and outdoor outings along the river. Evidence of their presence along the Greenway is a display of their artistic abilities in a pictorial history of the area in the tunnel leading to the playing fields. It is a colourful mural and a tribute to their collective talents. The third - down by the sport fields lies the river flood plain. The path here consists of compacted silt as hard as concrete as a result of past flooding, and also spots where the Greenway is washed out by retreating flood water. The fourth – this year the river's water level is unusually low. thus it is warmer which is detrimental to fish. The fifth - a troublesome happening for the future of species of fish in the river is the introduction of invasive species like Small-mouth Bass and Pickerel. And the sixth - members of the SRA want to establish a new walking/biking trail from Beaver Bank along the Little Sackville River to where it joins the Sackville River. By building trails and encouraging the people in the area to use them, members of SRS are hopeful that users will appreciate the river and its natural environment and will help to

Thanks to the work of SRA members, the Sackville River will be retained to some degree as a natural resource for years to come. Their work is very important in educating people in the Halifax Regional Municipality to be aware of and to help out in preserving the river because it is part of their natural inheritance.

Time passed quickly, as Damon, sometimes having to speak very loudly over the roar of nearby highway traffic, led us along the trail, and we thank him for a very informative lecture/walk.



## HIKE McINTOSH RUN

- Burkhard Plache

Date: Saturday, June 7th

Place: McIntosh Run, off the Herring Cove Road

Weather: Sunnv Leader: Ingrid Plache Participants: 4

Four hikers met at the end of Princeton Avenue, off the Herring Cove Road, and initially we followed the large trail at the end of Princeton. After some ten minutes we reached a rocky ledge which cuts across McIntosh Run, and over this ran water in a fairly wide section of

the stream. Upriver, the water forms a long and wide pool, while the rapids downriver are heavily overgrown by alder (Alnus sp.). One entry to the trail leading to the bridge across McIntosh Run begins approximately half the way back to the starting point, on the left hand side. (Another entry point is close to the starting point near Princeton Avenue).

This trail is narrow and traverses an area which was burned some years ago, with many dead trees still standing. Shrubs like Wild Raisin, Viburnum nudum, and blackberry, Rebus sp., as well as trees such as spruce, Picea sp., Balsam Fir, Abies balsamea, birch, Betula sp., Red Maple, Acer rubrum, were quickly filling the empty spaces. Even after only moderate rain, this section of the trail was quite wet.

On the other side of the McIntosh Run, the trail continues on the old road to York Redoubt. We followed that road – a short uphill stretch – before turning left onto a mountainbike trail which zigzagged over many narrow, barren stretches of granite, until we finally reached a high point overlooking Flat Lake. Here, the fire had destroyed a spruce forest, interspersed with some Jack Pine. Regrowth was predominantly Huckleberry, Gaylussacia baccata, Blueberry, Vaccinium angustifolium, and Bracken, Pteridium aquilinium, in line with a well drained barren type landscape. One of our party decided to return to Purcell's Cove by circling Flat Lake. and then walking across the Captain Arnell and Napier Family Conservation Lands (Nova Scotia Nature Trust).

The remainder of our small troupe retraced our steps back to Princeton Avenue.

### MCINTOSH RUN PLANTS (in bloom)

Rhodora Black Huckleberry Bunchberry Chokeberry Corn Lily/Blue-bead Lily Rhododendron canadense Gaylussacia baccata Cornus canadensis Aronia sp. Clintonia borealis









## PROSPECT COASTAL HIKE

- Gillian Webster

Date: Saturday, July 12th

Place: Inner Gulf Island, Prospect

Weather: Sunny, slight breeze (very welcome!), 22°C

Leader: Peter Webster and David Patriquin

Participants: 14

This coastal hike began at 10.30 a.m., ended at 2.30 p.m., and was a joint field trip with the Nova Scotia Wild Flora Society. Peter Webster and David Patriquin led this scenic hike which started and finished at the Inner Gull Island not far from Prospect. Participants began the trail on an easy-to-follow path through woods for a short distance, before reaching the open sea shoreline where there is a wonderful view of Inner Gull Island and Shad Bay. Some say the proper spelling is 'Gulf Island', but as it is covered with gulls and cormorants, it is more



likely the former.

The Nature Conservancy of Canada is said to own about 80 per cent of this shoreline. Many participants had car-pooled and this was helpful, partly because this area is well known for mackerel, and we did see a number of people fishing. When we arrived on the shoreline, several men had buckets full of fish and were already heading home!

The trail with its number of small footpaths meanders over granite ridges, through mixed flora, and around wetlands toward Prospect. We found Bearberry and Crowberries; some looked to be from last year! There were also some pink flowers of Cranberries. Because the weather was so warm, the paths were for the most part very dry. There was predominantly Cinnamon Fern around, and we noticed a lot of Fern Bracken with spores but the plants were dark brown and looked dead already. Some spruce tree tips were scorched brown as well, probably as a result of post-tropical storm Arthur which had brought salt washing over the shores early on Saturday, July 5th. There were a few Blue Fags left in flower, but most had shrivelled up, perhaps partly due to the wind storm conditions and the salt spray, and also, perhaps they were past their peak.

On a more positive note, there were many small blue butterflies and there was still some heavily perfumed Beach Rose left. Anne Mills pointed out a plant called Three-toothed Cinquefoil, Potentilla tridenta – so named because each leaf looks like a tooth. It is a compact groundcover which prefers dry acidic soil and has loose clusters of dainty white flowers and glossy evergreen leaves. It is also found in the Arctic and Anne said she had seen it there. Anne also pointed out Sickle Moss, Drepanocladus uncinatus, with tiny stems 2-5 cm long, and tiny long and narrow leaves all turned in the same direction, almost curled around in a crescent moon shape. Again, this plant is commonly found in wet to fairly dry sites, from gravel bars to peat lands, especially fens and swamps.

In the marshy area between the rock pools and the higher bracken covered ground, Anne pointed out some small succulent plants, each approx six inches high, that are also found in Arctic tundra. They had juicy stems and rounded succulent leaves. While unidentified, Anne pointed out that the environmental conditions here along the rocky coastline approximate those of the Arctic, but that our more southerly siting allows the Nova Scotia varieties to flower a few weeks earlier than those up north. The plant reminded Gillian of Portulaca or Moss Rose.

Nova Scotia has three different types of pink bog orchids and they are said to be relatively common compared to the many other orchids that grow in the Province. We found one type of pink orchid, perhaps the Dragon's Mouth orchid, Arethusa bulbosa.

Needless to say, there were lots of gulls, in addition to many Double-breasted Cormorants. We found good places to scramble on the rocky headlands and so came across splatters of berry-coloured droppings and little dollops of crab shell which had been regurgitated from the birds' crops and then excreted. We also saw several dragonglies (unidentified).

The walk was very rocky in some places of course, and people found the tide pools interesting. There was a lot of algal bloom and the water in the pools was quite warm. Stickleback type fish darted about in the fronds. The glass green and slimy strands of Enteromorpha (division Chlorophyta) held sway in many of the pools. It is a genus of macroscopic green algae in which the thallus consists of elongated, hollow, tubular fronds with walls only one cell thick. Along the shoreline we also saw lots of seaweed fronds typical of Nova Scotia such as Ascophyllum nodosum, which has long fronds with large egg-shaped air-bladders. It is also known as Rockweed, Norwegian Kelp, Knotted Kelp, Knotted Wrack, or Egg Wrack.

Doug Guptill and David Patriquin went for a cold swim, while the majority of participants walked on briefly and took the opportunity to sit on a dry soft spot overlooking the water to take a lunch break. Several eagles were seen circling over the sea nearby and also over the shore area. In the distance, with the aid of binoculars. back on Inner Gull Island we could see an adolescent eagle on a dead tree and it looked like it was eating something.

There were lots of comments about how refreshing the cool breeze was and how we knew it would be a lot warmer inland or in the city. (It was about 22°C on the coast and at the same time, 28°C in Halifax – without the breeze!)

Nick Mattison, Peter Webster, and a couple of other people continued on towards the halfway point where Prospect Village comes into view. After the rest of the group had lunch, we spotted Doug and David talking with two people back on the shoreline towards our starting point. It turned out that two HFN members had arrived a half hour after the main group had set off. When we caught up to them, they joined us and we returned altogether to the main parking area. When we finished the return hike to Hages Lane and the cars, IWK summer intern Mira Furgoch set up her telescope and we each took a turn watching the same young eagle as before, still perched on a tree, clearly eating a cormorant!

Participants headed back to their cars with big bags of garbage collected along the way. Many people said they had hiked from Prospect towards Inner Gulf Island point, but none had made the walk the other way, as we did today.



## EASTERN SHORE PADDLE

- Burkhard Plache

Date: Sunday, August 10th

Place: Little Harbour to Owl's Head, Halifax County Weather: Sunny with scattered heavy showers

Leader: Burkhard Plache

Participants: Six HFN members, in two canoes and two kayaks



Starting at Little Harbour, our route took us first eastward along the coast, where at mid-tide even a fair distance from shore the paddle would touch the sandy bottom. The area features numerous rocky ledges that break the force of the waves and allow sand and silt to accumulate, in some areas providing the foundation for extensive beds of eel-grass, which in turn serve as nursing grounds for a number of fish species.

Our first stop was a sandy beach, backed by dunes covered by Marram Grass, *Ammophila arenaria*, and in some parts by spruce trees. Another section of the beach is backed by a marsh, a prime breeding ground for mosquitoes. After lunch and a walk along the beach, we decided to venture further eastward, towards the headland named Owl's Head. The tide was close to its lowest point, and we made it over the shallows with the boats barely above the sand.

Ahead of us was one of many islands that form an archipelago of islands reaching up to Taylor Head, many of which the Nova Scotia Nature Trust hopes to protect. These rocky islands vary significantly in size. The larger islands may extend for a few kilometres and are generally covered by coastal spruce and fir forests, with sections of barrens on the seaward sides of some islands. While some of the smaller islands are covered by trees, on others only dead trees remain giving testimony to the subsiding land and the onslaught of the ocean.

Due to the favourable wind conditions, we decided to paddle around a large outermost island. Half way around, dark clouds were approaching, and a sudden heavy shower brought whitecaps. It was a struggle to return to the beach where we had had our lunch.

Fortunately, the wind blew from the shore; thus, the waves diminished the closer we got to land. As we arrived, the rain stopped, and we explored the beach a bit more. Marram Grass, *Ammophila breviligulata*, Beach Pea, *Lathyrus maritimus*, Beach Wormwood (Dusty Miller), *Artemisia stelleriana*, and Seaside Goldenrod, *Solidago sempervirens*, were everywhere, and in the marsh behind the beach we saw a dozen Purple Fringed Orchids, *Platanthera psycodes* or *P. grandiflora*, in bloom.

A highlight was watching a mink that was running back and forth between the shoreline and the dunes. It was very successful in catching small fish between the rocks at the water's edge, and obviously feeding its young (we did not attempt to find them).

Two of our party decided to don snorkels to observe the underwater life (algae, fish, starfish, and crabs), before we returned to Little Harbour. Heavy downpours were visible in the distance, but we were spared another shower and made it safely back to the cars. An exciting and interesting outing!



### COMMON ROOTS URBAN FARM

- Candace MacDonald



Date: Saturday, August 23rd

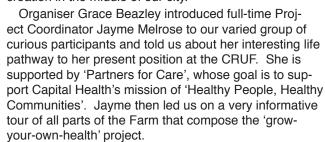
Place: Corner of Robie Street and Bell Road in Halifax

Weather: Sunny with few clouds, about 18°C

**Leader:** Jayme Melrose **Participants:** 10

The participants for this trip included six HFNers and four non-members (one of the latter was an English PhD student doing research at the Nova Scotia Archives, and one a new Dalhousie law student).

Sitting close by one of the busiest intersections in Halifax is the very interesting and inspiring Common Roots Urban Farm (CRUF). Though glimpses of the site can be seen as one drives or walks past, to venture up and have a closer look reveals a multi-faceted agricultural creation in the middle of our city.



CRUF is on the previous site of the Queen Elizabeth High School (part of the Halifax Common). Capital Health now owns this 1.4 hectares/3.5 acres of land which it obtained from HRM in exchange for the old Halifax Infirmary property (now the new Halifax Central Library. Capital Health was looking for an interim use for this new land for the next 5-12 years while it decides whether to build an expansion on it or the current Infirmary building; citizen feedback indicated a parking lot was undesirable. An urban farm was chosen, which fit the goals of healthy living and sustainable food. It opened in June, 2012. The first year, a layer of topsoil was laid on top of the crushed concrete debris from the old high school; more soil was added later, thereby transforming a former demolition site into lush gardens.

In answer to a question from several members of the group about increased Tomato Blight seen this year in home gardens, Jayme agreed that it was bad this year, and because it is an airborne fungus, most probably it was blown here by Hurricane Arthur. CRUF plans to plant only blight-defiant strains of tomatoes next year.

She also made the recommendation that tomatoes not be planted in soil that previously had Fusarium, a soil borne fungus. She said also that the powdery mildew found sometimes on home-grown cucumbers can be treated successfully with baking soda and milk.

Common Roots Urban Farm has three main areas. The first area, started in 2012, contains the Community Plots, developed by participant groups and aided by the core team and volunteers. There are several different types of plot users: in 2012, only groups and organisations; and in 2013, individuals and families (with some grandparent/grandchild teams), were added. Plots are 4 ft x 12 ft and cost \$30 per year. There are 157 plots,







which use a total of about 250 labor-hours per week and there is a waiting list for plots at present. Raised bed plots have varied frames of wood, straw, or brick. Pathways are wide enough for wheelchair access. This year two straw-stuffed people hang out at one plot, waiting for passers-by to stop and chat!

The second area toured was the Market Garden, which has full-time farmer Sara Burgess as a Coordinator for this pilot project. A variety of fresh vegetables is grown and harvested in season, and about 4-6 boxes of this healthy, fresh food are delivered weekly, by bike, to the Kynock Parker Street Food Bank, using a Community Supported Agriculture or CSA model. Food bank clients are encouraged to come help in the garden, and can be subsidised to have a plot of their own, if desired. Hospital patients undergoing therapy also help in the garden, as do volunteers. The Market Garden helps those who require a healthier diet but cannot afford it. Seats are scattered all around the Urban Farm for those who want to rest and/or reflect.

Workers also come through the 'Deep Roots' programme, a 6-month job skills programme which partners with ISIS (Immigrant Settlement & Integration Services) to help people wanting to develop their employability. There are six participants at CRUF this season and they are part of the large community of Bhutanese refugees that live in the Fairview-Clayton Park area. They each work three days a week in the garden, often they contributing helpful tips and gardening knowledge brought from their homelands. The program is getting great feedback, and one benefit is that some participants may find employment with farmers in our province.

Jayme mentioned that Nova Scotia produces only 8% of its food, down from about 60% previously. One symptom of this complicated problem is a lack of young farmers. The Market Garden was created partly to encourage appreciation of Nova Scotia farming and fresh food, and perhaps also to encourage more young people to become farmers. Also, youth and school groups are encouraged to work in the garden in exchange for education. Some of the Market Garden produce will potentially also be sold at on-site market stands and to local businesses to help fund projects.

The ends of the garden beds are planted with perennial flowers and medicinal herbs. We were told one of our group, HFN member Bernice Moores, has contributed plants to this project and we were very proud of her. Jayme said that more plant or seed donations will be very welcome as the farm is expanded further. Attention was directed to the wonderful sight of a very large number of native bees snacking on a 5-ft-high yellowflowered plant, which several participants thought was a type of goldenrod.

The Nova Scotia College of Art and Design had asked for a project and decided to build a pollinator condo; it was delivered the last week of August. Jayme mentioned an upcoming talk about native pollinators on Friday, August 29th, another example of what happens at CRUF! A family of crows was spotted eating blueberries off the tall bushes. Jayme pointed out that cardboard, covered with wood chips or straw, was used

for natural mulch between the beds, and that the crows often made a mess by digging underneath for treats! A small amount of human vandalism and food theft occurs at the wide open Urban Farm, and sometimes there is evidence of late night partying, but no serious damage is done.

There is a new greenhouse provided in partnership with a local business, Halifax Seed, and it is a model wherein food could be grown for a family of four. Currently it houses kale and a cover crop of buckwheat, planted to 'settle the soil in', a method used in other areas of the farm as well. The greenhouse will be used in the spring as a nursery, along with a nearby cold frame plot, for growing plants for seeds to use in the Market Garden and to sell if there is enough.

The third and last area is the 'Edible Landscape' or 'Green Space'. Anyone on site can wander along the rows of visually pleasing fruit crops and perennial foods such as herbs and edible flowers, and nibble and taste plants in this section. Several of us tasted daylily flowers and learned not to eat asiatic lilies. We also learned the identity of a very tall airy plant with small white flowers; it's called Marshmallow Herb! One group member said parts of the plant were used to make marshmallows years ago. A young woman in our group told us that the leaves and roots were used medicinally, for soothing sore throats and upset digestion. Jayme mentioned an upcoming programme, as another example of what happens at CRUF – there will be a talk about herbs on Friday, September 13th at 4:00 p.m.

Our tour continued to other, smaller areas. The new Flower Farm plot was planted this year by Jayme and contains perennial flowers and a few annuals. The goal is to eventually have colour-coded floral areas. Jayme has been making about \$100 a week selling flowers, generating much needed project revenue.

The composting area was designed and set up by a core volunteer, Dr. Jason Hoffman. Nicknamed the 'Compostmeister', he manages all aspects of this area. Only on-site garden debris goes into the grey compost bins, and all gardeners are encouraged to do this. This year a separate bin was set up for the Tomato Blight debris.

A question was asked about one compost section which had a solitary, short-stemmed sunflower growing out of it and Jayme told us that it was where the only livestock raised on the farm was kept; she called them 'mini-cows' (thousands of worms). An annual event held at CRUF is the Pumpkin Smash, which takes place on the first Saturday following Halloween. The public is invited to bring their carved Halloween pumpkins to the farm where they will be smashed and added to the compost bins.

The Bell Road side of the farm has several new and interesting areas. The 'Art Space' has a large straw bale sculpture of an owl looking out towards the Commons; it was created by Jayme! There is a vertical Earth Loom on which weaving is done with dried stems and flowers and strands of yarn. Other art dots the slope. There is the Children's Garden with lots of colourful flowers, including a milkweed in full bloom. Jayme said that









they had seen a few Monarch butterflies around but no caterpillars this year. There is also a sandbox with toys beside the garden and we saw a man and boy quietly enjoying this peaceful spot.

Our tour ended at the 'Food Forest' which is located near the corner of Robie Street and Bell Road. Modelled on permaculture techniques used in other countries like Australia, the Food Forest mimics what happens in the wild. Fruit and nut trees are planted with a circle of other plants around them, such as shrubs, herbs, flowers, and perennials – both native and non-native plants. The Urban Farm Food Forest is in its early stages; some trees now planted include peach, plum, cherry, and chestnut, with pecan, pawpaw, persimmon, and hazelnut planned for spring 2015.

This 'field trip' tour of the Common Roots Urban Farm was great. Jayme was a very enthusiastic, educative, and pleasant guide. More information about CRUF can be found on its website, **partnersforcare.ca/urban\_farm**. Hosts are available every day from 3:00-6:00 p.m. to answer questions and share knowledge. Anyone can show up on Fridays from 2:00-5:00 p.m. and be put to work. Also, interesting talks are often given on Fridays at 4:00 p.m. Volunteers are welcome!



### MELMERBY WEEKEND

Lesley Jane Butters

**Date:** Weekend of September 5th, 6th, and 7th **Place:** Melmerby Beach Prov. Park, Pictou County **Weather:** Mostly sunny and mild; except Sat. night

Leaders: All participants

Participants 9

In late September 1890, the ship Melmerby set sail from Quebec, carrying a load of timber. Sailing down the Northumberland Strait near Pictou she encountered severe weather. Attempts to jettison the heavy, precarious cargo failed, the wood got out of control, and three of the ship's four lifeboats were destroyed. Sixteen seamenboarded the fourth and got ashore, but the Melmerby itself overturned in the fierce storm. All but one person remaining on board drowned. The wreck of the Melmerby remained visible for so long that finally, the beach was named after the ship; thus the name – Melmerby Beach (65 years ago, her ribs could still be seen – but no longer).

Think twice before cancelling any field trip because of local weather reports, as you might miss out on "Marvelous, Miraculous, and Memorable!", just a few words to describe this wonderful Halifax Field Naturalist's field trip, to Stephanie and Allan Robertson's summer cottages at Melmerby Beach, on the North Shore of Nova Scotia.

We left 'hectic' (student week) Halifax early Friday afternoon under brilliant sunny skies and extremely warm

temperatures. After months of excited anticipation, my passengers and I were delighted the field trip was not cancelled due to an uncertain weather forecast earlier in the week. We drove along the highway in no time, without a break, directions in hand, excited to know what sorts of adventures lay before us.

Stephanie's road directions were methodically written to a tee; we arrived to see a pod of houses on a beautiful sunny, seaside landscape. Stepping out of the car, we were hit by a wall of late summer heat. Absolutely beautiful! What more could one ask for at this time of year.

Stephanie escorted us to the 'back cottage' across the lawn from the main cottage facing the seashore. Inside was a large, airy room with plenty of windows, a fully equipped kitchen and water closet. Upstairs beautiful, shiny pine wood floors with four roomy bedrooms and windows that opened wide to let in the sights and sounds of nature.

Melmerby Beach was calm and peaceful on Friday evening and the water oh so delightfully warm at approximately +22°C. The beach is rather shallow at low tide off the Robertson's section of shoreline, and because of that they are warmer and safer waters than is usual around other Nova Scotia shorelines. With a seablue sky, very warm temperatures, and a light offshore breeze, it was really difficult to believe that we were still in Nova Scotia. The whole scene that evening felt like being in the Bahamas! Oh what a field trip!

Gradually, we all weaned our way out of the water and back to the cottage for pre-supper socialising and then a potluck of fine homemade foods. The evening air at suppertime was peaceful and magically warm with a true Zen feeling.

Looking out over the calm waters was a neighbour on his paddle board subtly gliding along, a sail boat in the distance, and people strolling along the beach. A brilliant and pinkish-red sunset silhouetted between the spruce trees was worth many pictures. Shortly after sunset, the mosquitoes came out to play their part but soon disappeared after an hour or so; too few yummy souls to feast upon. We retreated indoors for more socialising so as not to be further mosquito prey. Before settling in for the night, some of us went out for an evening walk to admire the moon and stars; the latter were a bit difficult to see because the moon was so brilliantly bright! We also caught a glance of two deers' eyes in the brush along the side of the cottages' lane way. Back at our allotted cottage, a gentle, very warm breeze blew through the windows, while the sounds of the sea-surf gently soothed us into sleep, the end of a perfect summer's evening.

Saturday morning was a bit fresher but still very beautiful; I was up at 6:00 a.m. to meet the dawn and the sunrise. At 7:00 a.m. all the naturalists went west for a stroll to Roy's Island (not an island, but a very small peninsula) along the Melmerby Beach Provincial Park spit road, only metres away from the cottages. On our way, we observed a mature Bald Eagle high in the deep blue sky with some (now forming) fine weather clouds. The wind shifted to the northwest, a welcome morning



breeze, as we hiked along the Park road 'spit' between Little Harbour and the ocean off Melmerby Beach. In a small Little Harbour-side wetland area we observed what looked to be four Lesser Yellow Legs, busily pecking amonst the bladder wrack, other seaweeds, and Marram Grass for their morning breakfast. One of the naturalists heard, then saw, a Kingfisher followed by another a short while later. Along the beach road we observed a variety of late summer blooming wildflowers: small White Aster; Goldenrod; Butter and Eggs; thistle; a lone Harebell; and also a variety of beach grasses, with lots of small conifers, Alders, and many Bayberry bushes.

We left the spit to enter a cleared but grassy road through the woods of the Roy's Island peninsula. It was still cool but as the sun started to penetrated in betwixt the trees so did the mosquitoes, out for an early morning feast. Some of the group spotted two separate mounds of animal scat comprised of small bone fragments and much fur; might have been Coyote, but we were not sure (perhaps a Red Fox? – Ed.).

We didn't continue on to the further shore of the penin sula because of the mosquitos. Turning back, some chose to walk back along the beautiful fine sand beach (with some small pebbly areas), where we could listen to the subtle ocean waves creep in along the shoreline, rather than the spit road. Barefooted, we enjoyed the warm waters as we walked along collecting beach treasures, be it bird feathers, pebbles, seashells, or bits of driftwood. Our special treasures from the sea!

The clouds became more predominant as the morning wore on, with an onshore breeze, slightly cooler than the previous day. We had another refreshing swim before a second breakfast, and some naturalists went for separate strolls around the area before our afternoon hike east along the shoreline to King's Head (once a lighthouse, now a home) and the entrance to Merigomish Harbour.

Once the time was right (1:30 p.m., an hour before low tide), Stephanie and Allan led the way along the beach which, further along and closer to the lighthouse, turned into a slightly slippery rocky shore line at the base of a very steep, eroding, drumlin-like hill with red soil, boulders, and falling trees. Out came the cameras to capture lots of fossils at its base, mainly fragments of tree twigs, bark, and bits of unknowns, but nevertheless, still quite fascinating. A chunk or two of what looked like petrified wood became treasured finds. Much of this section of the beach was dominated by large, smooth, flat grey stones (could have been sandstone, siltstone, or perhaps mudstone) which resembled the colour and texture of elephant skin. Many of those and other rocks had interesting forms and markings, some with stratus layers - those with cameras were in awe. The highest point of the cliff was at the lighthouse-home itself, where the Sobey owners had placed tons of brought-in rocks and gravel to protect it from storms and more erosion.

When the tide was on the turn we bee-lined it back west to the wide, sandy, deeper part of the the beach, so as not to get caught by the incoming tide which would have left us all in deep water next, to the cliff, with no escape route. It was here we observed a small, lone

Piping Plover, desultorily pecking among the higher reaches of the beach amidst the Marram Grass, looking uncertain and lonely. When we arrived back at the cottages, we had a leisurely swim before our potluck supper and more socialising. The ocean was a bit rougher than the night before, but still as warm as bathtub water. Just before supper two Northern Gannets were seen a short distance offshore from the cottage, diving for fish – beautiful birds to watch.

After our enjoyable meal, relatives of the Robertson's popped in for a visit. They introduced us to the card game 'Spoons'; none of us had ever heard of this partricular game. We sure know the game now, exhilarating and exhausting but lots of fun! After this, the group played a less invigorating game of Charades, and fun was had by all.

The almost full moon gradually disappeared behind a thick wall of cloud and the wind blew a bit stronger making for a pounding surf along the beach; nice to listen to through the open window up until heavy rains in the night forced us to shut out the sounds of the raging sea.

By early morning the rain had ceased and the sun slightly peeked through the dark gray clouds. After breakfast, it seemed nice enough to visit Park's Falls, a 15 km drive from Melmerby. There was some water flowing but not as much as there would have be in early spring. We could see the extent of spring waters' reach by the breadth of the gravel layed down, about twice the width of the present stream. It was still very interesting; below the falls themselves were two lovely deep pools (one below the other like steps) of crystal clear water which are beautiful for swimming – oh so inviting but none of us had our swim gear, plus the sky was still overcast and the air rather chilly. One intrepid HFNer scaled the rocky precipice beside the falls as we all watched a bit nervously. Some walked down further along (or in, with boots) the rocky shallow stream; the other side of which, steep and dark with many trees, boasted some giants almost horizontally hanging over the shallow water.



Back to cottage for a farewell lunch. A graceful, mature Bald Eagle flew very close to the ground just above the front lawn and past the cottage deck, as if giving us a good-bye salute. Chickadees and Goldfinches were very busy at the birdfeeders and a lone female Hummingbird came to visit the sugar-water feeder. Lots to view as we ate our last meal.

A couple of us stayed behind to take in one last walk along the beach. The tide was quite low, another good opportunity to revisit the interesting geological and fossil-laden eastern end. There were lots more photos taken and lots more sightings of interesting rock formations.

Finally, the clouds gave way to the sun as we packed our cars and bid the Robertsons farewell; thank you for a spectacular and invigorating weekend!







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.

"When the long, corn-yellow days of Indian Summer had disappeared and the wet, glowering days of gray November had arrived, the people of the Island got ready for winter, the way a city in wartime might prepare for a long siege. Like an invading, alien force, the pitiless cold encroached. This was one enemy you couldn't keep out of your community, or even out of your house."

- David Weale, from the essay "In bed with a brick" in Them Times (1992)

#### NATURAL EVENTS

- 8 Sept. Full Moon. Moonrise at 19:14 ADT.
- 8 Sept. Moon at close perigee. Large tides follow for next few days.
- 22 Sept. Autumnal Equinox at 23:29 ADT. Fall begins in the Northern Hemisphere.
- 28 Sept. Eleventh anniversary of Hurricane Juan.
- **30 Sept.** Average date for first frost in Halifax (only a 1:10 chance we'll have frost before this date Env. Canada) Look forward to 210 days of frosty weather.
  - 8 Oct. Full Moon. Moonrise at 18:53 ADT.
  - 2 Nov. Daylight Saving Time ends (clocks are set back one hour) and Atlantic Standard Time begins at 2:00 a.m.
  - 6 Nov. Full Moon. Moonrise at 17:02 AST.
- **22 Nov.** Daily minimum temperature goes below 0°C.
- 5-14 Dec. Earliest Sunset of the year at 16:34 AST.
  - 6 Dec. Full Moon. Moonrise at 17:09 AST.
  - **7 Dec.** Daily average temperature goes below 0°C.
- 13/14 Dec. Geminid Meteor Shower.
  - 14 Dec. -5 Jan. Audubon Christmas Bird Count Period.
  - **21 Dec.** Winter Solstice at 19:03 AST: Winter begins in the Northern Hemisphere: But though the temperature drops, the days begin to lengthen.
  - 27 Dec. -31 Dec. Latest Sunrise of the Year at 07:51 AST.
    - Sources: Atmospheric Environment Service, Climate Normals 1951-80 Halifax (Shearwater A) N.S.; Blomidon Naturalists Society 2014 Calendar; United States Naval Observatory Data Services.

## SUNRISE AND SUNSET ON FALL AND EARLY WINTER SATURDAYS FOR HALIFAX: 44 39 N, 063 36 W



	_					,
Sept.	06:43	19:42	4	Oct.	07:16	18:50
Sept.	06:51	19:29	11	Oct.	07:25	18:37
Sept.	06:59	19:16	18	Oct.	07:34	18:25
Sept.	07:07	19:03	25	Oct.	07:43	18:14
Nov.	07:52	18:03	6	Dec.	07:37	16.34
Nov.	07:02	16:54	13	Dec.	07:43	16:34
Nov.	07:11	16:47	20	Dec.	07:48	16:36
Nov.	07:20	16:41	27	Dec.	07:51	16:41
Nov.	07:29	16:36				
	Sept. Sept. Sept. Nov. Nov. Nov.	Nov. 07:02 Nov. 07:11 Nov. 07:20	Sept.       06:51       19:29         Sept.       06:59       19:16         Sept.       07:07       19:03         Nov.       07:52       18:03         Nov.       07:02       16:54         Nov.       07:11       16:47         Nov.       07:20       16:41	Sept.       06:51       19:29       11         Sept.       06:59       19:16       18         Sept.       07:07       19:03       25         Nov.       07:52       18:03       6         Nov.       07:02       16:54       13         Nov.       07:11       16:47       20         Nov.       07:20       16:41       27	Sept.       06:51       19:29       11 Oct.         Sept.       06:59       19:16       18 Oct.         Sept.       07:07       19:03       25 Oct.         Nov.       07:52       18:03       6 Dec.         Nov.       07:02       16:54       13 Dec.         Nov.       07:11       16:47       20 Dec.         Nov.       07:20       16:41       27 Dec.	Sept.       06:51       19:29       11 Oct.       07:25         Sept.       06:59       19:16       18 Oct.       07:34         Sept.       07:07       19:03       25 Oct.       07:43         Nov.       07:52       18:03       6 Dec.       07:37         Nov.       07:02       16:54       13 Dec.       07:43         Nov.       07:11       16:47       20 Dec.       07:48         Nov.       07:20       16:41       27 Dec.       07:51

#### **ORGANISATIONAL EVENTS**

**Blomidon Naturalists Society:** Indoor meetings are held on the 3rd Monday of the month, in Room BAC241 of the Beveridge Arts Centre, Acadia University, 7:30 p.m. Field trips usually depart from the Wolfville Waterfront, Front Street, Wolfville. For more information, go to http://www.blomidonnaturalists.ca/.

- 11 Oct. "Kingsport Mudflat Critters", with leader Jim Wolford, 542-9204.
- 11 Oct. "Astronomical Observing Session at Grand Pré", with leaders Roy Bishop et al.
- 19 Oct. "Wallbrook Fall Colours, Late Wildflowers, and a Beautiful View", with leader George Forsyth, 542-7116.
- 20 Oct. "Wicked Plants a Halloween Special", with speaker Twila Robar-deCoste.
- 1 Nov. "Blomidon Trail Hike" with leaders Colin and Ellen Darlington, 445-5447.
- 17 Nov. "Four Decades of Adventures", with speaker Bernard Forsythe.
- **8 Dec.** "Big Meadow Blues and the Road to Recover one of Canada's Rarest: The Endangered Eastern Mountain Avens" .with speaker Nicholas Hill.
- 21 Dec. "Winter Solstice Family Frolic", with leaders Charlane Bishop, 542-2217, and Harold Forsyth, 542-5983.
- **17 Jan.** "Winter on Snowshoes", with leader Soren Bondrup-Nielsen, 582-3971.
- 19 Jan. TBA, with speaker Michael Stokesbury.

**Burke-Gaffney Observatory:** Public shows at the Burke-Gaffney Observatory at Saint Mary's University are held on the 2nd and 4th Friday of each month, except from June through September when they are held every Friday. Tours begin at 7:00 p.m. between November 1st and March 30th, 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, 496-8257; or go to <a href="http://www.smu.ca/academics/departments/astronomy-physics-burke-gaffney-observatory.html#tours">http://www.smu.ca/academics/departments/astronomy-physics-burke-gaffney-observatory.html#tours</a>.

Friends of McNab's Island Contact Faye Power, 443-1749, or go to http://www.mcnabsisland.ca/.

**Nova Scotia Bird Society:** Indoor meetings usually take place on the 4th Thursday of the month, September to April, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information phone Kate Steele, 476-2883, or email fieldtrip-coordinator@nsbirdsociety.ca,This email address is being protected from spambots. You need JavaScript enabled to view it. or email the trip leader, or http://www.nsbirdsociety.ca/

- 4 Oct. "Cole Harbour Salt Marsh Trail then to Atlantic View Trail", with leaders Lou-Anne Bidal, I.bidal@yahoo.ca, and Donna MacNeil.
- 19 Oct. "Late Fall Migrants, Taylor Head", with leader Jim Cameron, 885-2970, jim.cameron@ns.sympatico.ca.
- 23 Nov. "Winter Birds, Taylor Head", with leader Jim Cameron, 885-2970, jim.cameron@ns.sympatico.ca.
- 3 Jan. "Sewer Stroll I", with leader Dennis Hippern 435-5363 (h), 476-8639 (cell), dhippern@hotmail.com.

**Nova Scotia Department of Natural Resources:** Many outings which will take place in Provincial Parks are listed in the "Parks are for People" Programme, available at museums, parks, and tourist bureaus, and on the web at **http://www.novascotiaparks.ca/**.

Nova Scotia Museum of Natural History: For more information, 424-6099, 424-7353; http://naturalhistory.novascotia.ca. 6 Jun. -13 Oct. "Roberto Dutesco: The Wild Horses of Sable Island"

Nova Scotia Nature Trust: For more information, 425-5263, or http://www.nsnt.ca.

23 Oct. "17th Annual Dinner and Auction", with speaker David Phillips of Environment Canada.

**Nova Scotia Wild Flora Society:** Meets the fourth Monday of the month, September to May, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information, email **nswildflora@yahoo.ca**, or go to **http://www.nswildflora.ca**.

- 18 Oct. "Point Pleasant Park", with leader Peter Duinker.
- 27 Oct. "The Atlantic Coast Jack Pine/Broom Crowberry Barrens", with speaker David Patriquin.
- 1 Nov. "Jack Pine/Broom Crowberry Barrens", a field trip to the Barrens with more details to be announced.
- **24 Nov.** "Plant Identification of Forest Flora in the Field", with Norris Whiston.

**Nova Scotian Institute of Science:** Meets the first Monday of the month, September to April, usually at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information go to **http://nsis.chebucto.org/**.

- 6 Oct. "Earthquake Hazard in Atlantic Canada: Of Concern or Not?", with Alan Ruffman, Geomarine Associates Ltd.
- **3 Nov.** "Changing Sea Levels in Atlantic Canada Past, Present, and Future" with Dr. John Shaw, Geological Survey of Canada.
- 1 Dec. "A New Wave of Exploration of the Arctic Ocean", with Dr. David C. Mosher, Geological Survey of Canada.
- 5 Jan. "Methane from Northern Permafrost A Cause for Concern?" with Dr. Rachel Chang, Dalhousie University.

**Royal Astronomical Society of Canada (Halifax Chapter)**: Meets the third Friday of each month, (except July and August) in Room AT101 of the Loyola Atrium Building at Saint Mary's University, 8:00 p.m. For more information, go to http://halifax.rasc.ca/.

**Young Naturalists' Club:** A fun, free nature club for children seven to 12 years. Meetings take place every 3rd Saturday of the month (excepting July and August), at the Museum of Natural History, 1747 Summer St., from 10:30 - 11:30 a.m. Field trips take place every fourth Sunday, at 1:00 p.m. For more information, Karen McKendry, 404-9902, **ynchalifax@yahoo.ca**; or, go to **http://nature1st.net/ync**.

- Sept. 28 12:00 am, Salt Marsh Field Trip.
- Oct. 11 10:00 am 12:00 p.m., Mushroom ID with Ken Harrison & Bill Shaw, Kentville Ravine.
- Oct. 18 10:30 am 12:00 pm, October meeting, topic TBA, Museum of Natural History.
- Nov. 15 10:30 am 12:00 pm, November meeting, topic TBA, Museum of Natural History.



# HALIFAX TIDE TABLE

