

THE HALIFAX FIELD NATURALIST



No. 152
September to November, 2013



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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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FEES	2013/2014
Student	\$15.00 per year
Individual	\$20.00 per year
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Supporting	\$30.00 per year

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GRAPHICS All uncredited illustrations are by H. Derbyshire or from copyright-free sources. **Front Cover** - Autumn in Kejii Provincial Park, Elliott & Judi Hayes; **Back Cover** - Fall leaves in the Halifax Public Gardens, Roland Marek; **Tide Table** - Canadian Hydrographic Service, Fisheries & Oceans Canada.

HFN NEWS AND ANNOUNCEMENTS

EDITORIAL



Another summer has passed, and Pictou County cottage weather was balanced with just the right amount of rain and sun. Even better, (at least for human swimmers) not one stinging jellyfish was sighted or experienced in the water at Melmerby Beach. In Halifax this year, our apple tree (a Spy) produced its apples over-abundantly, with clear skin and large, firm fruit.

EAC's 'Off the Hook' sustainable, long-line fishing programme is taking off in leaps and bounds – from a first subscription in 2010 of 83 people with three pick-up locations, to 223 people with 12 pick-up locations in 2013! (Dr. Boris Worm told us he is helping try to solve the problem of sharks getting caught on their lines; see "Marine Biodiversity", p. 5.)

ERRATA



In April's Nature Notes of the Summer, 2013 Issue (p. 12), it was reported that the Crested Caracara, which was discovered March 30th, 2013 at Lawrencetown Beach, "...sometimes turns up in New England, New Brunswick, and Nova Scotia." It was pointed out by Bernice Moores that this is incorrect; this particular sighting was a first for Nova Scotia.

NATURE NOTES



SEPTEMBER

– *Stephanie Robertson*

Clarence Stevens, on the last weekend in August, was picking apples when he noticed they were covered in very small black spots; when he looked closer, he thought they were **black Crab Spiders**, but then, one of them flew away! He knows Crab Spiders to be yellow, pink, or white – not black – and of course, spiders don't fly. Along the coast he has seen **Long-Fin Squid** 'boiling the waters' (marked by very visible disturbances on the ocean's surface), thereby attracting birds and other animals which like to feed on them. Clarence has eaten this kind of squid in chowder. Rather flavourless on its own, it is delicious prepared this way because like tofu it readily absorbs other flavours, especially that of lobster. He saw a plethora of **Snowshoe Hares** this summer in Richmond and Colchester Counties, and therefore their **Bobcat** predators have been sighted as well.

Stephanie and Allan Robertson have seen **no Hares** at all this year at their cottage at Melmerby Beach, Pictou County, whereas usually in the past they always came around in the early mornings; but they had sighted **one small bat** there. Clarence mentioned that all bats in N.S. hibernate in one cave in Rawdon, where a fatal disease has been decimating their numbers.

Bob McDonald has seen **no Monarchs** this year; neither has Stephanie Robertson for two or three years; Clarence Stevens reported seeing quite a few Monarchs, even though there have been only two 2013 N.S. reports to the Maritime Butterfly Atlas project.

David Patriquin saw **Buttonbush** at the lower marsh area in Point Pleasant Park (just down from the old

lodge on Pt. Pleasant Drive). Was it natural, an escape, or did someone plant it? Jim Wolford had previously emailed that he had also seen the plant there.

Ron Cosper talked about seeing very dirty golf balls at a local course; on closer inspection, they were fallen **apples with black spots**.

Regine Maass reported seeing a **Spring Peeper**; Clarence said they are found in many different and also unusual places at this time of year.

During Dr. Boris Worm's September's talk, "Marine Biodiversity Conservation", the subject of **jellyfish** was broached, Stephanie Robertson mentioning that there was not one jellyfish seen at Melmerby Beach this summer (to her grandchildren's delight); they are usually very numerous there in July. Dr. Worm suggested it is probably because of ocean warming; jellyfish prefer colder waters.



CALL FOR NOMINATIONS

The Halifax Field Naturalists are once again calling for nominations for our annual Colin Stewart Conservation Award. Established in 2004 in memory of long-time HFNER and ardent conservationist Colin Stewart (who was the first recipient), it goes to a person, persons, or group who have dedicated their time to conserving Nova Scotia's green spaces. Colin served on our Board for over twenty years and was essentially our one-person Conservation Committee, instrumental in getting The Halifax Public Gardens' significant trees identified and signed; and also establishing the Piping Plover Guardian Program, the Nova Scotia Trails Federation, and the Federation of Nova Scotia Naturalists (now Nature Nova Scotia). Colin was also the WWF Endangered Spaces Coordinator for the Province, and helped to set aside 31 new Protected Areas in Nova Scotia. He developed management plans for several parks and other natural areas, and was a founding member of the Nova Scotia Nature Trust. Colin was a very effective and passionate spokesperson for the naturalist community, especially when required to get onside and on board the various levels of government necessary for effective change.

Go to halifaxfieldnaturalists.ca, and click on 'Conservation' on the left hand side of the page. Then click on "Colin Stewart Conservation Award" under 'Subpages for Conservation' in the right hand column. There you will find both the outline of the criteria for eligibility and the nomination form. The deadline for nominations is November 30th, 2013.



NEW AND RETURNING



Anne Desneiges
James & Julie Gregg
Joan Manual
Candace MacDonald
Helen Verbanz & Carrey Normand

SPECIAL REPORTS

SACKVILLE RIVER ASSOCIATION FISH FRIENDS END-OF-PROGRAMME REPORT

– *Walter Scott, Sackville Rivers Association*
June 13, 2013



Fish Friends (FF) 2013 started out with 12 classes approved for sponsorship by the Sackville Rivers Association. During January, aquariums, with chillers and insulation, were set up in the ten schools involved. Each aquarium needed to be able to maintain a constant water temperature in the 3°-5°C range.

Unsurprisingly, there were now 15 classes (plus 12 students from a 16th – a Grade 4-5 split class in one school) involved. By the time the programme ended, Mike Mackasey and I were engaged with 20 classes – either in complete support of the Fish Friends programme, or to a significant extent of it.

PowerPoint introductory sessions took place in each class. These featured some history of the Sackville River as it relates to population changes in the Atlantic salmon; the work of the Sackville Rivers Association in restoring a salmon population to the river; the source of the salmon eggs that would be used in the programme; and some sneak-peeks of what might be expected in the Fish Friends programme in general. Seven of the teachers involved were rookies who had not had previous experience with FF's programmes.

'Eyed' salmon eggs from the Coldbrook Biodiversity Station were delivered to each aquarium on March 1st, which was almost a month later than usual; we also delivered salmon eggs to two other schools in Halifax.

In the meantime, Mike had taken the lead in three 'bonus' classes, as well as St. Catherines School in Halifax. He was also providing guidance to another Halifax school which had been orphaned when the Atlantic Salmon Federation ceased to support the FF programme in October, 2011.

I had my own side-project with a class from Winding River Consolidated in Stewiacke, where trout eggs were used in place of salmon eggs. Aside from the borrowing of a surplus aquarium and chiller, all expenses for materials and travel were carried by me. A lot of Mike's work with the bonus schools was also not invoiced to the Sackville River Association.

Observations of the eyed salmon eggs took place in all classrooms. Pairs of students were provided with a petri dish for an egg and a magnifying lens, and they drew and labelled large-scale drawings of what they saw. Once the eggs hatched, another similar alevin (a newly hatched fish) observation took place with all students.

When it came time for the salmon fry observation, we introduced a new approach – instead of petri dishes, (where the fish could only be viewed from above, and where the fry occasionally lived up to their salmon heritage by leaping from the dishes...!) we were now using clear cylindrical containers (Dollar Store – 2 for \$1.25) and these worked extremely well.

Fry-release field trips took place between May 22nd and June 20th. A basic field trip started with a visit to the

fish ladder (both top and bottom ends), and a look at the fish trap (which in almost every case held at least one fish (mainly gaspereau or white suckers)).

We used a ball field on the Little Sackville River behind the Lower Sackville SuperStore as a safe location to release the fry, and, conditions permitting, to play two salmon fry simulation games – 'Fry Versus Predator', and 'Fry Food'.

There were ten field trips; three of these represented classes that had to cancel their original date (due to weather conditions). Also, three other field trip sessions were cancelled and were not rescheduled. I also provided a guided tour for two classes of students where their school volunteer decided to release the fry first, and then finish up at the fish ladder.

The 2013 FF Support Staff are co-leader Mike Mackasey, available for five of the field trips; Joel Scott, co-leader for all ten field trips; Stephen Davidson, support for three field trips; and Emily Barrett, SRA summer employee, four field trips. The student numbers in the programme overall were 488!

Field trip related numbers were: 15 teachers; 92 parents/grandparents; and one other teacher, who conducted two classes on separate days, showing up with 11 adults for one field trip, and 19 for the second. Also, some adults simply showed up, not in support of students, but because they had attended a previous field trip and simply wanted to go to another. One of these brought a son who was taken out of his school so he could participate!. There were also two education programme assistants (there in support of special needs students; both students thoroughly enjoyed a totally positive experience); and two bus drivers (who started off curious, and ended up as excited as the students and other adults). There were 250 trout fry released (exact count); and 2140 salmon fry released (estimated due to the fact that the fish were released as a lot, and not individually by the students).

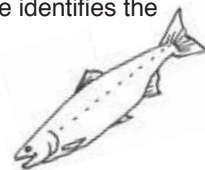
Here is our (annoying, frustrating, embarrassing, boring, and obnoxious) 'Marching Song' which started out as the brainchild of Ron Duggan, who four or five years ago made up a student marching song as they moved from one learning station to another in the Fall River Rangers programme. As I have no shame in stealing new and interesting ideas, I began writing my own; it has now become a permanent part of every walk to the fish ladder.

The format is a 'call-and-response' chant, known as a 'jodie' when it is employed in marches by the US Marine Corps troops at Boot Camp. The first verse identifies the school, for example –

"Armbræ Academy, we are proud
Armbræ Academy, we are proud
And we're not ashamed to say it loud!
And we're not ashamed to say it loud!"

There was usually a weather commentary as well –

"It shouldn't be so rainy in the month of May
It shouldn't be so rainy In the month of May
We blame it all on Cindy Day.
We blame it all on Cindy Day."



HFN TALKS

MARINE BIODIVERSITY 5 SEPT. – Janet Dalton

This presentation by Dr. Boris Worm, of Dalhousie University's Biology Department, was divided into two parts, "Conservation of Marine Biodiversity" and "Conservation of Sharks". For this particular monthly meeting, due to unusual circumstances, we were very fortunate to have our presentation in the Museum's Marine Room amongst all the hanging models of the world's largest ocean species; very apt! An interesting example of these was the Mola Mola, or Sunfish. Seen in Nova Scotian waters, it is the heaviest bony fish in the world, able to reach a weight of one and a half tons! Its diet is almost exclusively jellyfish, (and the females can produce more eggs than any other vertebrate - Ed.).

As a child growing up in Germany, Dr. Worm liked to explore nature. Like all boys, he was interested in the 'big' things, and since the biggest living things are found in the oceans – the oceans became his subject.

Our planet is mostly water and the life found there can be very diverse and strange. Beyond the oceanic continental shelves is the 'true' ocean – those deep waters not affected by the land. Here occur the large tunicates, giant clams, and other strange deepwater species.

CONSERVATION OF MARINE BIODIVERSITY

There are an estimated 2.2 million different species in all of earth's ocean areas – but only 9% have been identified; this leaves 91% ocean species still unknown! Their extreme diversity ranges from microscopic krill and plankton to those magnificent giants – the whales. The greatest oceanic animal populations occur around areas east of Australia, the South China Sea, and also just south of the Mozambique Channel. Life forms in these coastal oceans are far greater than those in open oceans. In the mid-Pacific for example there are only about 24 different species, ranging from sea lions to seaweeds. Over recent years, the mapping and surveying of coastal oceans has revealed 'hopping hot spots' of diverse marine populations which have changed and/or geographically shifted over time (such as has been seen from the Mediterranean Sea to the Red Sea). About 11,000 species were surveyed, most of them living around the Phillipine Islands.

Species diversity and richness diminished by 50% from 1960 to 1990, and many species' populations shifted northward. This general movement to the north has been studied through research on such fish as Albacore, Bigeye, and Bluefin Tuna. Other species such as Blue Marlin, Sailfish, Southern Bluefin, and Skipjack Tuna have shifted southerly. These changes are believed to be due to our oceans' now warmer waters.

In past times, coastal fishing mostly meant catching enormous-sized cod, while open ocean fishing resulted in catching, besides other species, giant tuna and sharks. Reduction of some species creates new ecosystems. For instance, if there are fewer cod to produce eggs, then the small fish who feed on these eggs have

less food and this reduces the success of those hatchlings. Less food also means smaller fish.

Presently, the balance of the oceans' ecosystems has been drastically upset by overfishing. The result is a very sad and uncertain future for some species. Solving this serious problem means that the amounts of species fished must be such that the natural ecosystem is not put out of balance.

CONSERVATION OF SHARKS

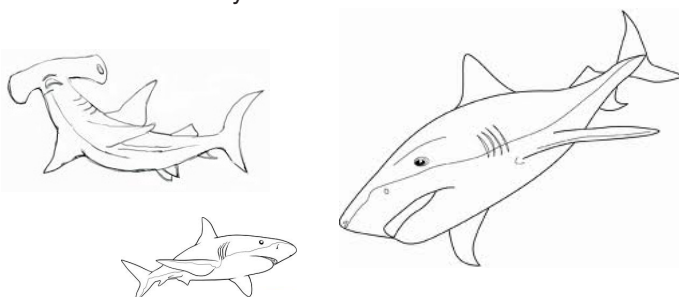
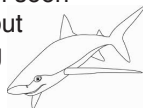
People have a great fear of sharks as a result of exaggerated publicity – from movies like "Jaws" and from overly sensational news stories. There are 100 million sharks killed each year; sharks, on the other hand, kill about five people a year! Most sharks do *not* come to shore – they are open-ocean species. Marine students at Dalhousie University have gone swimming with sharks and found that they behave like puppies.

Sharks have survived five major extinctions and are the oldest predators on earth. Sharks which are caught for their fins have them cut off, after which they are thrown back into the water where they slowly die. Shark fins are used in medicines, cosmetics, and for sharkfin soup.

There are 20 species of shark in Atlantic Canada – Porbeagle, Spiny, Basking, and Greenland are just some of them. But, sharks in the Atlantic (and the Mediterranean Sea) are declining at such a rate that they are about to become extinct. At the same time, smaller marine predators, once preyed themselves by sharks, are rapidly increasing.

Despite these alarming statistics and trends, we *can* turn things around. Promote to friends and others the DVD "Sharkwater" so that people may gain a better understanding of sharks and their lives. Do not purchase cosmetics that contain squalene, which is an oil obtained from shark livers, or supplements which contain shark cartilage. Vociferously question the wisdom of restaurants which serve shark products such as sharkfin soup. Always remember, sharks are worth more alive than they are dead. And – do as the Dalhousie Shark Class has done; get closer to the species by going diving with sharks!

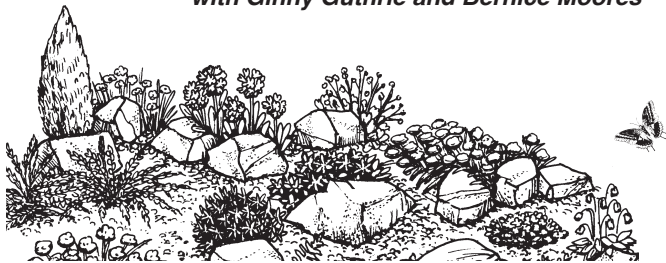
Sadly, at this point, Dr. Worm told us that during the length of his presentation, more than 10,000 sharks had been killed globally. For more information, Dr. Boris Worm can be seen in the movie, "Revolution" and also in the documentary "Sharkwater".



FIELD TRIPS

SILVER GARDEN WALK

– Gillian Webster;
with Ginny Guthrie and Bernice Moores



Date: Saturday, July 6th

Place: The Silvers' garden, off Prospect Bay Road

Weather: Warm and breezy

Leaders: Donna and John Silver

Participants: ±30

Donna and John Silver, owners of 'Silver Garden' at Prospect Bay, invited HFN members for a walk-about on their property. It was a very hot morning in Metro, so to go off to breezy Prospect Bay was wonderful. Carpooling had been arranged, and this made the trip more fun.

Donna and John were extremely friendly and knowledgeable. Their eight-acre property has grown from a modest garden started in the early 1970s to one which now covers the whole side of the hill behind their house. Over the years, as grandchildren came along, extra pathways were built and named for each of them. Little reminders of each child were found throughout – for example – a miniature bench.

Two large ponds and meandering waterways were filled with frogs and lily pads, and gardens on either side of the pond were linked by bridges. The ponds were created early on in the landscaping design, in spots which were already wet, and they therefore have easily remained full of water. A small garden off the back of the house featured a BBQ with colourful deck chairs that overlooked the ponds. All sorts of sculptures were tucked into the sides of paths, whimsical reminders of the owners' wonderful sense of humour, and delight in their home.

Their property features many attractions: arbours covered with roses, clematis, honeysuckle, grape vines, and wisteria; flower beds that overflow with a wide variety of perennials, annuals, and bulbs; a collection of many rhododendrons, azaleas, shrubs, and specialty trees; and pathways with bridges that lead to an island garden surrounded by aquatic plants, and to a hilltop with a wonderful view. No matter where we were within the garden, we were surrounded by woodlands with spruce, fir, white birch, and Red Maple. Most of the plants and trees were labelled, yet the whole hillside seemed like a stroll through natural woods. One of the group said, "The thing I enjoyed was how natural and effortless everything looked – the trees, the ferns, the paths, the pools. Yet, as a small scale gardener myself, I realise what a huge amount of effort is required to create an 'effortless and natural' look."

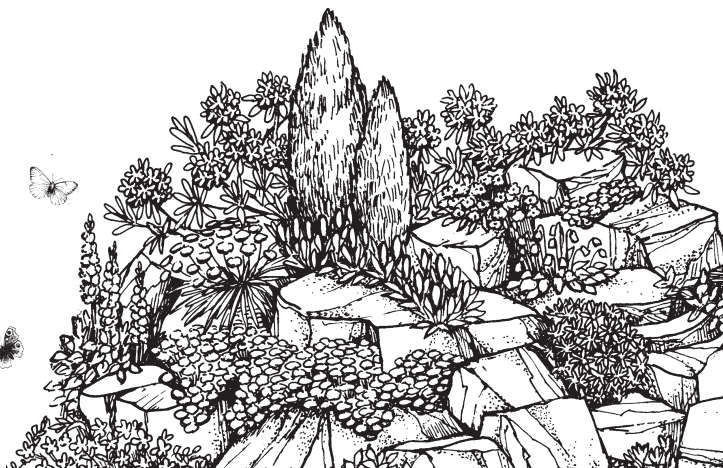
For those of us who share interests in the plantings of Mother Nature and also those of human gardeners, a visit to the Silvers' garden was sheer delight.

Twinflower, *Linnaea borealis*, was very plentiful on many parts of the hillside, reminding one of a carpet 'not to be walked on'. Twinflower is a member of the Honeysuckle Family; the nodding pink flowers are fragrant and it is found in boreal regions all around the world. It's named for Carl Linné, and is said to be one of his favourites (Roland's *Flora of Nova Scotia*, revised by Marian Zinck).

A striking Magnolia, *Magnolia sieboldii*, was obviously one of Donna Silver's favourites and created much interest within the group of observers. Flowers in bud and in bloom were on display on the large, spreading tree. Both were sparkling white, the flowers large, cup-shaped, and sporting crimson stamens; the foliage was dark green. In autumn the cone-like fruit is reddish – a beauty indeed! These are just two of the many beautiful plants the Silvers shared with HFN members and their guests on a most pleasant summer day.

One of the latest additions to their property, at the top of the hill, is a deer-proof vegetable garden. It thrives in rows of thick loam, enriched by local seaweed. The Scarlet Runner Beans were about six feet high and the garden was nicely shaded all around by trees, but with sunshine beaming down on the plot, which looked about 30 feet by 50 feet to me. The Silvers said they were not planning to supply water to it, and hoped plants would grow naturally. But someone was clearly tending it with a lot of care, since there wasn't a weed in sight.

We had all packed a lunch and the Silvers provided a water cooler filled with iced tea. Some of us lunched in front of a one-roomed cottage that featured a deck with generous shade. The Silvers joined us in our picnic, at another set of chairs which were set up nearby in more shade provided by some small trees. Some of us got to sit on the Silvers' private beach and take a long look around on their wharf. One intrepid member even went swimming!



MEANDER RIVER BIOTA SURVEY

– Bob and Wendy McDonald

Date: Saturday, July 27th

Place: Meander River, Hants County, N.S.

Weather: A perfect day!

Leaders: Bob and Wendy McDonald; MRCE Property Guardian Richard Beazley

Participants: 28 (aged 10 to 75+)



The Meander River Conservation Easement Biota Survey True to its name, the hardwood floodplain of the Meander River Conservation Easement (MRCE) was wet and muddy after all the rains of spring and summer. This did not deter the participants in the first biota survey of the property.

Interested in contributing to this natural species inventory, naturalists travelled from Digby, Pictou, Lunenburg Counties, and parts in between to contribute their expertise. Others were along to explore a natural environment and to learn more about the two groups participating in this event: the Halifax Field Naturalists (HFN), and the Nova Scotia Nature Trust (NSNT). This is the second NSNT property that HFN has 'adopted', the first being the Purcell's Cove Conservation Lands.

The survey began soon after the group met at the trailhead at 10:00 a.m., after Richard had given us a brief description of the history and extent of the property, and Bob had briefly outlined what we hoped to achieve during the survey – as complete an inventory of the flora and fauna as we could achieve in our four- to five-hour venture.



There is never enough time to document all species – large or small. The birders heard and saw several new species to add to the lists already recorded on the 'e-bird'* outings of previous years. The botanists were able to document the flora of mid-summer, and the lichen experts moved slowly, filling a large gap in the property records. Other experts recorded mosses, ferns, and mushrooms – all lovers of the damp woods. There was no insect expert along although most of us noted that the mosquitoes were plentiful!

This past spring on other exploratory visits to MRCE, the leaders had observed Bloodroot and Nodding Trilliums in bloom even before the trees had leafed out. This time, not a lot of bloom was present in the heavy shade of the woodland, but the river edge had a few flora species. Goldenrods and asters will be plentiful as fall approaches, and this will be a great spot to see the leaves turn – a true Canadian woodland!

Property Guardians Richard and Grace Beazley and Jon Davies were excited to share their knowledge of this area, a conservation easement for over ten years. This example of an intervale hardwood floodplain is situated across the Clayton McKay Road from Smiley's Provincial Park, with which it shares the Meander River. The nearly 20-acre MRCE has two seasonal and one year-round brook, and is of a linear configuration one km long by 100 m to 150 m wide. The steep wooded slopes of mixed mature tree species (Sugar Maple, Red Oak, White Ash, Yellow Birch, Eastern Hemlock, and American Beech) provide great habitat for a variety of bird



species – including woodpeckers and warblers, which were unfortunately mostly absent (or very quiet) on our visit! There are also a couple of gypsum outcrops.

Annual spring flooding changes the configuration of the property edge, scouring the riverbank and floodplain. Often it delivers unwanted garbage such as old tires and woody debris, keeping the Property Guardians busy. As guardians, they have found that each visit brings a surprise – such as trees blown down across the trails – but they continue to enjoy the challenges of keeping the property protected, and safely accessible, to the public. Its trails and its marked northern border make for a strenuous and interesting hike, and one will not get lost by always keeping the river in mind.

While there, three kayakers paddled past, enjoying the river's unseasonably high water. Mary Ellen Donovan, a new member of the NSNT Board of Directors, participated in the survey; she now has an on-the-ground idea of what happens when people with expertise and interest band together to more thoroughly identify and understand the assets of a NSNT property. Although small, this property is important in the inventory of Nova Scotia's protected areas, because of its intervale floodplain habitat.

At the end of the day, lists were gathered and the smiles of satisfaction indicated that the biota survey was a great success. Compilation of all species lists is in progress and will be housed with the Nature Trust.

Many thanks from HFN and NSNT to all participants for contributing your expertise and/or interest in this endeavour. It was a wonderful day in the woods!

(*e-bird – To participate in citizen science as a birder, register and log in your sightings in your neighbourhood, local 'patch', or perhaps another Nature Trust property, go to <http://www.ebird.org/> and/or www.ebird.org/.)



URBAN ECOLOGY WALK

– Peter Webster

Date: Saturday, August 3rd

Place: Camphill Cemetery, Halifax

Weather: ±24°C; warm, but breezy

Leaders: Local ecologist Christopher Majka

Participants: 20



Noted ecologist, entomologist, and historian Christopher Majka met 20 enthusiastic naturalists at the Summer Street entrance to the Camp Hill Cemetery in the heart of Halifax (another entrance is on Robie Street). It was a warm but breezy summer Saturday afternoon.

Chris shared his remarkable range of knowledge, covering his special areas of expertise – beetles – as well as other insects, particularly the tree dwellers. But he also drew our attention to many plants, from common, unassuming lawn-dwelling weeds, to large and venerable trees.

Camp Hill Cemetery was established in 1844. It features the graves of a number of famous Nova Scotians including that of Abraham Pineo Gesner (1797-1864), an early oil industrialist and the inventor of kerosene. Alexander Keith (1795-1873), of Keith's brewery fame is also buried here, as is Robert Stanfield (1914-2003), once Premier of Nova Scotia and also the Federal Opposition Leader.

Camp Hill Cemetery features trees and shrubs which were planted over 150 years ago. It is an excellent place to explore a concentration of the many non-native plant species introduced to Nova Scotia over the years. So one of the main themes of the trip was discussing and examining those introduced species. Chris told us about many of the plants' histories – going back beyond their introduction into North America, back to the records of them in ancient Europe. He also shared the medicinal and culinary properties of the plants we encountered.

Chris began our walk by noting the Broadleaf Plantain, *Plantago major*, and the ever present Dandelion, *Taraxacum officinale*, growing in the rocky verges of the lawns alongside the cemetery's roads. Both are European, introduced species – and also common edible plants. Plantain has been used as a medicine for wound-healing and pain relief since Roman times. Chris later pointed out Veronica, which is the largest genus in the flowering plant family Plantaginaceae, with about 500 species. It is also known as Speedwell and has long spikes of small petals in purple, blue, pink, or white. We also examined a similar looking plant, Heal-all, which measures approximately 15-30 cm. in height, and is best identified by its spike of small purple to blue flowers. Both are common lawn and verge plants used medicinally as itch remedies, or made into tea to reduce fevers.

Chris spoke about local biologist Jeremy Lundholm's theory that many of our common introduced plants are originally cliff and rocky outcrop dwellers. This is why they have taken well to Nova Scotia's rocky coastal areas, and why they thrive along the gravelly edges of our roadways and in cemeteries – sometimes on the tombstones themselves.

We spent some time looking at one of the mature European Beeches, in this case, the Weeping European Beech, *Fagus sylvatica pendula*. Chris was able to shake some Beech Flea Weevils into his large insect net. He spoke about the infestation of these weevils, which has developed very quickly in the Halifax area in the last few years. This weevil is one of a number of invasive insect species affecting local trees. Chris spoke about his well known work on the Brown Spruce Longhorn beetle (BSLB), *Tetropium fuscum*. He also discussed the debate over how recently this particular beetle made its appearance in Nova Scotia. Many scientists date the introduction of this forest insect to the 1980s, in cargo ships from Europe. But others believe that it has been here for a much longer time.

We stopped to admire one of the many beautiful Linden trees, *Tilia Americana*. They are a common introduced urban tree in Halifax; known as Lime Trees in England, and Basswood in the U.S. Chris pointed out that Linden flowers are commonly used for tea and

are good for treating colds and fevers because of their antioxidant and anti-spasmodic properties. The fragrant white flowers also produce a lot of nectar, so it is sometimes called the 'Bee Tree' because of its attraction to bees and the fact that their honey can include Linden nectar.

American Elm trees, *Ulmus Americana*, also drew our attention. Chris discussed the advance of Dutch Elm Disease (DED), which has destroyed these lovely trees in many parts of North America and in some parts of Nova Scotia. Chris also pointed out the towering Horse Chestnut trees, *Aesculus hippocastanum*, which are prominent along the cemetery's sides. They are known for their beautiful flowers in early summer, and their abundant 'conkers' (chestnuts), in early fall.

We also admired a stand of Devil's Walking Stick, *Aralia spinosa*, a native to the Southern United States, and which is somewhat rare in more Northern climes.

We took a moment to look at a variety of lichens growing on several of the tombstones. Here we learned that because the year when each tombstone was installed is precisely known, and because there are many examples of tombstones which are hundreds of years old, they are an invaluable tool for tracking the growth rate of many kinds of lichens.

Next, Chris described Common Glow-worm Beetles, *Lampyrus noctiluca*. It is the females which glow most noticeably; the larvae and adult males produce only a faint glow. They are rare in Nova Scotia, but have recently been discovered in cemeteries in Halifax, including Camp Hill and Holy Cross Cemeteries. This gave us all a reason for a return night visit to one of these cemeteries, searching for these rare bio-luminescent creatures.

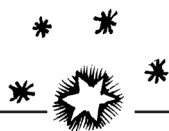
Chris finished our tour by talking about British Naval history, which has played a role in the presence of many of the introduced plant and insect species we looked at on our walk. In Nova Scotia, since the Napoleonic Wars, British ships have left behind their ballast debris (stones and soil from their holds) before returning to Europe laden with cargo. Insect species of English origin have been identified at what are believed to be these ballast dump sites.

In many parts of the world, cemeteries are important islands of natural space in otherwise urban landscapes. Our Camp Hill Cemetery is one such place, even though it is largely an introduced environment and not a native one.

During this enjoyable walk we were reminded how lucky we are in Halifax to have many places of particular natural beauty and historical interest.



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.

All the hills blush; I think that autumn must be the best season to journey over even the Green Mountains. You frequently exclaim to yourself, What red maples!

– Henry David Thoreau, in *A Yankee in Canada* (1853).

NATURAL EVENTS

- 19 Sept.** Full Moon. Moonrise at 19:10 ADT.
- 22 Sept.** Autumnal Equinox at 17:44 ADT: Fall begins in the Northern Hemisphere.
- 28 Sept.** Tenth anniversary of Hurricane Juan.
- 30 Sept.** Average date for first frost in Halifax (i.e. Env. Canada says there is only a 1:10 chance we will have frost before this date). Look forward to 210 days of frosty weather.
- 18 Oct.** Full Moon. Moonrise at 18:11 ADT.
- 18 Oct.** Penumbral lunar eclipse.
- 3 Nov.** Daylight Saving Time ends; set clocks back one hour (from Atlantic Daylight Time to Atlantic Standard Time) at 2:00 a.m.
- 3 Nov.** Partial solar eclipse.
- 17 Nov.** Full Moon. Moonrise at 16:58 AST.
- 22 Nov.** Daily minimum temperature goes below 0°C.
- 7 Dec.** Daily average temperature goes below 0°C.
- 5-13 Dec.** Earliest sunset of the year at 16:34 AST.
- 13/14 Dec.** Geminid Meteor Shower.
- 14 Dec.** -5 Jan. Audubon Christmas Bird Count period.
- 17 Dec.** Full Moon. Moonrise at 17:14 AST.
- 21 Dec.** Winter Solstice at 13:11 AST: Winter begins in the Northern Hemisphere. Though the temperature drops, the days begin to lengthen.
- 27 Dec.** -31 Dec. Latest sunrise of the year at 7:51 AST.



– Sources: Atmospheric Environment Service, Climate Normals 1951-80 Halifax (Shearwater A) N.S.; Blomidon Naturalists Society Calendar, 2013; United States Naval Observatory Data Services.

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



7 Sept.	6:44	19:40	5 Oct.	7:17	18:47
14 Sept.	6:52	19:27	12 Oct.	7:26	18:35
21 Sept.	7:01	19:13	19 Oct.	7:35	18:23
28 Sept.	7:09	19:00	26 Oct.	7:44	18:12
2 Nov.	7:54	18:02	7 Dec.	7:38	16:34
9 Nov.	7:03	16:53	14 Dec.	7:44	16:34
16 Nov.	7:13	16:45	21 Dec.	7:48	16:37
23 Nov.	7:22	16:40	28 Dec.	7:51	16:41
30 Nov.	7:36	16:36			

ORGANISATIONAL EVENTS

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

- 19 Oct.** "Big Trees In Nova Scotia"; leaders Ed Sulis, Larry Bogan, Doug Twohig; 678-4609, edmasulis@ns.sympatico.ca.
- 21 Oct.** "The Reality of Invasives", a panel discussion between George Alliston, Graham Daborn (Acadia), and Mark Elderkin (DNR), Beveridge Arts Centre, Room 244.
- 26 Oct.** **Rain Date 27 Oct.** "Little Split Cove Beach Rockhounding", with leaders David and Chris Sheppard.
- 2 Nov.** "Blomidon Park Hike", with the Chebucto Hiking Club. Contact Blain, 405-6365; chebuctohiking@hotmail.com; www.chc.chebucto.org.
- 16 Nov.** "Blomidon Park Hike", with the Valley Trekkers Volkssport Club. Contact Bert Currie, 765-4051.
- 18 Nov.** "Acoustic Monitoring of Nocturnal Migrant Songbirds", with speaker John Kearney.

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 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 <http://www.smu.ca/academic/science/ap/>.

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. Contact Chris Pepper, 829-3478, cpepper@ymail.com; or email the trip leader; or go to <http://nsbs.chebucto.org/>.

26 Sept. "Birds of Costa Rica", with speaker George Mitchell, with refreshments after the talk.

20 Oct. "Taylor Head Provincial Park – Late Fall Migrants", with leaders Jim Cameron, 885-2970, jim.cameron@ns.sympatico.ca, and Warren Parsons, 772-2207, rosalieeast@ns.sympatico.ca.

20 Oct. "Lawrencetown", with leaders Chris Pepper, 483-6693, and Kate Steele, 476-2883, katefsteele@gmail.com.

24 Nov. "Taylor Head Provincial Park Winter Birds", with leaders Jim Cameron, 885-2970, jim.cameron@ns.sympatico.ca, and Warren Parsons, 772-2207, rosalieeast@ns.sympatico.ca.

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://museum.gov.ns.ca/mnhnew/>.

8 Jun. -Sept. "ECHOES IN THE ICE: History, Mystery, & Frozen Corpses"; an exhibit on Arctic exploration, the North west Passage, and the Franklin Expedition.

Nova Scotia Nature Trust: NSNT has trips to a number of its protected properties. For more information, 425-5263, or go to www.nsnt.ca.

24 Oct. "16th Annual Dinner and Auction", this year featuring novelist, poet, educator, and surfer Lesley Choyce.

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, Heather Drope, 423-7032; or go to <http://www.nswildflora.ca/>.

23 Sept. "Wallace River Hotspot", with speaker Mary Macaulay.

28 Oct. "Old Growth Forests", with speaker Jamie Simpson, author of Restoring the Acadian Forest.

Royal Astronomical Society of Canada (Halifax Chapter): Meets the third 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/>.

Young Naturalists' Club: A fun, free nature club for children seven to 12 years. Meetings take place every third 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, Zoë Nudell, 209-2531, yncns@yahoo.ca; or, go to <http://nature1st.net/ync>.

21 Sept. "Wild McNab's Island", 10:30-11:30 a.m., Museum of Natural History.

29 Sept. "McNabs Island!", a boat trip to McNab's (*now full*).

19 Oct. October monthly meeting, Museum of Natural History; theme TBA.

16 Nov. November monthly meeting, Museum of Natural History; theme TBA.



– compiled by Patricia L. Chalmers



**! IT'S HUNTING SEASON !
! REMEMBER TO DRESS TO BE SEEN IN THE WOODS !**

DEER

9 Sept.-14 Dec. Excludes Sunday

BEAR

9 Sept.-7 Dec. Excludes Sundays

RUFFED GROUSE

1 Oct. to 31 Dec. Excludes Sundays

RING-NECKED PHEASANT

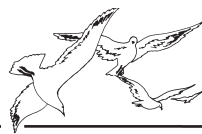
1 Oct.-15 Dec. Excludes Sundays

SNOWSHOE HARE

1 Nov.-28 Feb. Excludes Sunday



HALIFAX TIDE TABLE

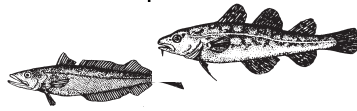


October-octobre

November-novembre

December-décembre

Day	Time	Feet	Metres	jour	heure	pieds	mètres	Day	Time	Feet	Metres	jour	heure	pieds	mètres	Day	Time	Feet	Metres	jour	heure	pieds	mètres
1	0518 1125 TU 1726 MA 2340	5.2 2.0 5.2 1.3	1.6 0.6 1.6 0.4	16	0530 1208 WE 1754 ME	5.9 1.0 5.6	1.8 0.3 1.7	1	0551 1220 FR 1820 VE	5.9 1.0 5.2	1.8 0.3 1.6	16	0058 0634 SA 1328 SA 1912	1.3 5.9 0.7 5.6	0.4 1.8 0.2 1.7	1	0554 1241 SU 1837 DI	6.2 0.3 5.6	1.9 0.1 1.7	16	0124 0654 MO 1348 LU 1939	1.6 5.6 0.7 5.6	0.5 1.7 0.2 1.7
2	0558 1208 WE 1810 ME	5.6 1.6 5.6	1.7 0.5 1.7	17	0027 0617 TH 1300 JE 1843	1.0 6.2 0.7 5.9	0.3 1.9 0.2 1.8	2	0026 0630 SA 1306 SA 1904	1.3 5.9 0.7 5.6	0.4 1.8 0.2 1.7	17	0144 0716 SU 1410 DI 1956	1.3 5.9 0.7 5.6	0.4 1.8 0.2 1.7	2	0045 0642 MO 1332 LU 1927	1.3 6.2 0.0 5.6	0.4 1.9 0.0 1.7	17	0205 0737 TU 1426 MA 2021	1.6 5.9 0.7 5.6	0.5 1.8 0.2 1.7
3	0023 0634 TH 1250 JE 1851	1.3 5.6 1.3 5.6	0.4 1.7 0.4 1.7	18	0117 0701 FR 1348 VE 1930	1.0 6.2 0.7 5.9	0.3 1.9 0.2 1.8	3	0112 0711 SU 1353 DI 1948	1.0 6.2 0.3 5.6	0.3 1.9 0.1 1.7	18	0226 0758 MO 1449 LU 2039	1.6 5.9 0.7 5.6	0.5 1.8 0.2 1.7	3	0138 0731 TU 1423 MA 2017	1.0 6.6 0.0 5.9	0.3 2.0 0.0 1.8	18	0241 0818 WE 1501 ME 2101	2.0 5.9 1.0 5.6	0.6 1.8 0.3 1.7
4	0104 0709 FR 1332 VE 1931	1.0 5.9 1.0 5.6	0.3 1.8 0.3 1.7	19	0203 0743 SA 1432 SA 2015	1.0 6.2 0.7 5.9	0.3 1.9 0.2 1.8	4	0159 0755 MO 1440 LU 2034	1.0 6.2 0.0 5.6	0.3 1.9 0.0 1.7	19	0304 0839 TU 1526 MA 2121	1.6 5.9 1.0 5.6	0.5 1.8 0.3 1.7	4	0233 0822 WE 1515 ME 2108	1.0 6.6 -0.3 5.9	0.3 2.0 -0.1 1.8	19	0313 0858 TH 1533 JE 2138	2.0 5.9 1.0 5.6	0.6 1.8 0.3 1.7
5	0143 0746 SA 1415 SA 2011	1.0 5.9 0.7 5.6	0.3 1.8 0.2 1.7	20	0246 0824 SU 1514 DI 2058	1.0 6.2 0.7 5.9	0.3 1.9 0.2 1.8	5	0248 0840 TU 1530 MA 2121	1.0 6.2 0.0 5.9	0.3 1.9 0.0 1.8	20	0339 0919 WE 1600 ME 2201	2.0 5.9 1.0 5.6	0.6 1.8 0.3 1.7	5	0331 0914 TH 1609 JE 2159	1.0 6.6 0.0 6.2	0.3 2.0 0.0 1.9	20	0345 0937 FR 1605 VE 2215	2.3 5.9 1.3 5.6	0.7 1.8 0.4 1.7
6	0224 0824 SU 1459 DI 2053	0.7 6.2 0.3 5.6	0.2 1.9 0.1 1.7	21	0327 0905 MO 1553 LU 2140	1.3 5.9 0.7 5.6	0.4 1.8 0.2 1.7	6	0341 0928 WE 1623 ME 2209	1.0 6.2 0.0 5.9	0.3 1.9 0.0 1.8	21	0414 1000 TH 1635 JE 2240	2.3 5.6 1.3 5.6	0.7 1.7 0.4 1.7	6	0433 1006 FR 1705 VE 2250	1.0 6.2 0.0 6.2	0.3 1.9 0.0 1.9	21	0420 1015 SA 1638 SA 2251	2.3 5.6 1.3 5.6	0.7 1.7 0.4 1.7
7	0306 0904 MO 1545 LU 2135	1.0 6.2 0.3 5.6	0.3 1.9 0.1 1.7	22	0405 0945 TU 1632 MA 2222	1.6 5.9 1.0 5.6	0.5 1.8 0.3 1.7	7	0442 1017 TH 1720 JE 2300	1.3 6.2 0.3 5.9	0.4 1.9 0.1 1.8	22	0454 1040 FR 1713 VE 2319	2.3 5.6 1.6 5.6	0.7 1.7 0.5 1.7	7	0538 1059 SA 1803 SA 2342	1.3 6.2 0.3 5.9	0.4 1.9 0.1 1.8	22	0503 1053 SU 1716 DI 2328	2.3 5.6 1.6 5.6	0.7 1.7 0.5 1.7
8	0353 0946 TU 1636 MA 2220	1.0 6.2 0.3 5.6	0.3 1.9 0.1 1.7	23	0445 1026 WE 1712 ME 2303	2.0 5.6 1.3 5.6	0.6 1.7 0.4 1.7	8	0548 1108 FR 1820 VE 2353	1.3 5.9 0.7 5.6	0.4 1.8 0.2 1.7	23	0541 1121 SA 1754 SA	2.6 5.2 2.0	0.8 1.6 0.6	8	0642 1153 SU 1901 DI	1.3 5.9 0.7	0.4 1.8 0.2	23	0551 1131 MO 1758 LU	2.3 5.2 1.6 0.5	0.7 1.6 0.5
9	0448 1031 WE 1733 ME 2308	1.3 5.9 0.7 5.6	0.4 1.8 0.2 1.7	24	0530 1108 TH 1755 JE 2346	2.3 5.6 1.6 5.2	0.7 1.7 0.5 1.6	9	0655 1203 SA 1921 SA	1.6 5.9 0.7	0.5 1.8 0.2	24	0001 0634 SU 1204 DI 1840	5.6 2.6 5.2 2.0	1.7 0.8 1.6 0.6	9	0035 0745 MO 1250 LU 1959	5.9 1.3 5.6 1.0	1.8 0.4 1.7 0.3	24	0007 0644 TU 1213 MA 1846	5.6 2.3 5.2 1.6	1.7 0.7 1.6 0.5
10	0552 1119 TH 1834 JE 2359	1.6 5.9 0.7 5.2	0.5 1.8 0.2 1.6	25	0623 1152 FR 1841 VE	2.6 5.2 2.0	0.8 1.6 0.6	10	0050 0759 SU 1304 DI 2020	5.6 1.6 5.6 1.0	1.7 0.5 1.7 0.3	25	0046 0728 MO 1250 LU 1929	5.2 2.6 4.9 2.0	1.6 0.8 1.5 0.6	10	0132 0844 TU 1354 MA 2057	5.6 1.3 5.2 1.0	1.7 0.4 1.6 0.3	25	0049 0738 WE 1301 ME 1937	5.6 2.3 4.9 2.0	1.7 0.7 1.5 0.6
11	0700 1212 FR 1936 VE	1.6 5.6 1.0	0.5 1.7 0.3	26	0032 0718 SA 1240 SA 1930	5.2 2.6 4.9 2.0	1.6 0.8 1.5 0.6	11	0155 0901 MO 1414 LU 2119	5.6 1.6 5.2 1.0	1.7 0.5 1.6 0.3	26	0136 0821 TU 1346 MA 2020	5.2 2.3 4.9 2.0	1.6 0.7 1.5 0.6	11	0233 0942 WE 1505 ME 2155	5.6 1.3 4.9 1.3	1.7 0.4 1.5 0.4	26	0136 0833 TH 1358 JE 2031	5.6 2.0 4.9 2.0	1.7 0.6 1.5 0.6
12	0057 0806 SA 1313 SA 2037	5.2 1.6 5.6 1.0	1.6 0.5 1.7 0.3	27	0126 0813 SU 1335 DI 2020	5.2 2.6 4.9 2.0	1.6 0.8 1.5 0.6	12	0304 1001 TU 1531 MA 2217	5.6 1.3 5.2 1.0	1.7 0.4 1.6 0.3	27	0232 0914 WE 1450 ME 2112	5.2 2.0 4.9 2.0	1.6 0.6 1.5 0.6	12	0336 1038 TH 1615 JE 2252	5.6 1.0 4.9 1.3	1.7 0.3 1.5 0.4	27	0229 0928 FR 1505 VE 2127	5.6 1.6 4.9 2.0	1.7 0.5 1.5 0.6
13	0207 0910 SU 1426 DI 2137	5.2 1.6 5.2 1.0	1.6 0.5 1.6 0.3	28	0229 0906 MO 1441 LU 2111	5.2 2.6 4.9 2.0	1.6 0.8 1.5 0.6	13	0409 1058 WE 1640 ME 2313	5.6 1.0 5.2 1.3	1.7 0.3 1.6 0.4	28	0327 1006 TH 1557 JE 2205	5.6 1.6 4.9 1.6	1.7 0.5 1.5 0.5	13	0433 1131 FR 1716 VE 2347	5.6 1.0 4.9 1.6	1.7 0.3 1.5 0.5	28	0327 1024 SA 1614 SA 2225	5.6 1.3 4.9 1.6	1.7 0.4 1.5 0.5
14	0326 1012 MO 1546 LU 2236	5.2 1.6 5.6 1.0	1.6 0.5 1.7 0.3	29	0334 0956 TU 1548 MA 2201	5.2 2.3 4.9 1.6	1.6 0.7 1.5 0.5	14	0503 1152 TH 1737 JE	5.9 1.0 5.2	1.8 0.3 1.6	29	0419 1058 FR 1656 VE 2258	5.6 1.3 4.9 1.6	1.7 0.4 1.5 0.5	14	0524 1221 SA 1808 SA	5.6 1.0 5.2	1.7 0.3 1.6	29	0426 1121 SU 1716 DI 2324	5.9 0.7 5.2 1.6	1.8 0.2 1.6 0.5
15	0435 1112 TU 1657 MA 2333	5.6 1.3 5.6 1.0	1.7 0.4 1.7 0.3	30	0427 1045 WE 1645 ME 2250	5.2 2.0 4.9 1.6	1.6 0.6 1.5 0.5	15	0007 0550 FR 1242 VE 1826	1.3 5.9 0.7 5.6	0.4 1.8 0.2 1.7	30	0507 1149 SA 1748 SA 2351	5.9 0.7 5.2 1.3	1.8 0.2 1.6 0.4	15	0038 0611 SU 1307 DI 1855	1.6 5.6 0.7 5.2	0.5 1.7 0.2 1.6	30	0523 1217 MO 1813 LU	6.2 0.3 5.6	1.9 0.1 1.7
				31	0511 1133 TH 1734 JE 2339	5.6 1.3 5.2 1.3	1.7 0.4 1.6 0.4	ALL TIMES ARE AST												31	0024 0619 TU 1312 MA 1907	1.3 6.6 0.0 5.6	0.4 2.0 0.0 1.7





NEXT DEADLINE

21st of November for the December, 2013 Issue
Send submissions to 'Newsletter', c/o NS Museum of Natural History,
or by email to sdhaythorn@ns.sympatico.ca