

THE HALIFAX FIELD NATURALIST



No. 149

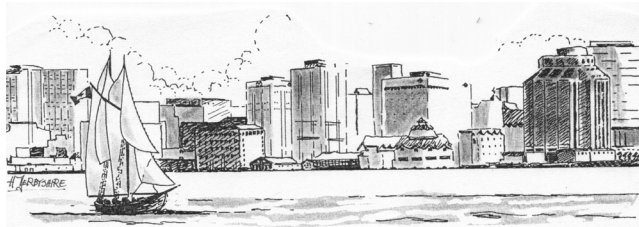
December, 2012 to February, 2013



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HFN NEWS AND ANNOUNCEMENTS

FROM THE EDITOR

– *Stephanie Robertson*

Punctuation, etymology, and deadlines are just a very, very few of the important things an editor/publication has to take into account when putting together a newsletter, annual, book, or paper. Almost every regularly-published work has an 'editorial policy', and for The Halifax Field Naturalist, this has been discussed and decided upon by me, Patricia Chalmers (Assistant Librarian, King's College Library), and biologist Ursula Grigg (a previous Halifax Field Naturalist editor, and formerly on staff of the old Daily News newspaper). I'll touch upon just a very few items for this article.

First, punctuation and apostrophes – (for a more erudite work on the subject, see the excellent and very humorous, not 'humorous', take note!, Eats, Shoots and Leaves, by Lynne Truss, Gotham Books, 2003). Mostly, apostrophes denote either possession (Don's car, Carol's plant), or the indication of a missing letter/letters (cannot – can't; is not – isn't, etc.). For possessive apostrophes, we decided to keep them in possessive place names; Peggy's Cove and McNab's Island for instance, instead of Peggys Cove and McNabs Island, regardless of the present usage of no apostrophes on most present maps. Historically, apostrophes were used for place names because of ownership – a cove named after Peggy (her cove); an Island named after a McNab (his island). We feel that the probable reason for their cartographic passing does not justify their eradication – people sometimes making mistakes by forgetting to include them, or merely being unsure if they should be there and why, just because the teaching of the particulars of grammar and punctuation have gradually been dropped by the wayside over the past 30 years or so in public schools.

Commas – we have decided to use the 'Oxford comma'; we don't let 'and' replace the last comma in a list, we put that comma in – right there, before the 'and' (red, white, and blue); this is just one small instance of comma use.

Second, etymology – this relates to the history, meaning, and spelling of words, showing which languages they derive from, and how their spelling and meaning have evolved and changed over time. For our species lists, we consult Roland's Flora of Nova Scotia, revised by Marion Zinck, Nimbus Publishing and the Nova Scotia Museum, 1998, of which I myself have this first edition. As with our newsletter, there were mistakes – even in such a worthy tome – and they were corrected at first with a published addenda, and then in a second edition (with even more corrections).

Before the use of 'Witch-hazel' (as spelled in Marion Zinck's first edition, with a hyphen and no capital 'h'), the lay name for *Hammamelis virginiana* L. was spelled Wych Hazel, derived from the Middle English 'wych', from Anglo-Saxon 'wice', from Teutonic 'wik' (from which stems our word 'weak'), a term applied to various trees and shrubs having pliant, easily manipulated branches. Wikipedia states that one can only speculate as to the relationship of 'wice' to 'wicce' – Anglo-Saxon for witch or sorceress – and the fact that pliant branches are preferred by many practitioners of dowsing, an art regarded by some superstitious people as witchcraft. Early American settlers did use branches of the shrub for so-called 'water witching'.

With a nod to history and our shared English backgrounds, Ursula and I prefer 'Wych Hazel' for this publica-

tion, at the same time acknowledging that Roland's Flora of Nova Scotia uses 'Witch-hazel'. (Interestingly, Gary Saunders Trees of Nova Scotia spells it as one word – Witch-hazel). We also use 'programme' rather than 'program'; this goes along with our use of 'centre', 'metre', and 'colour', rather than 'center', 'meter', and 'color'. We also prefer 's' to 'z' in such words as 'analyse' and 'criticise'. (The word 'fertilizer', and probably a few others, only has one spelling – with a 'z'.)

Third – deadlines, which are intimately related to our volunteers' time and availability. Timeliness of submissions, degrees of expertise, levels of sustainable commitment – these all effect the time of 'getting it to the printer' for our quarterly newsletter. We aim for the two equinoxes and the two solstices.

A lot of our members love to travel; should they have to arrange their trips around production deadlines? In the end, it is up to them of course; they are indeed volunteering their time, and so get to choose how much time and effort they want to devote. Final proofing is always last minute, as things constantly get changed during reading and re-reading, editing and re-editing, and making things 'fit'. Doug Linzey has pointed out that usually, the Editor and the Copy Editor (proofer) are two separate people, something that is hard to find in a volunteer organisation, and most especially because it is needed at the last minute as well as during the issues' beginning stages.

ERRATA

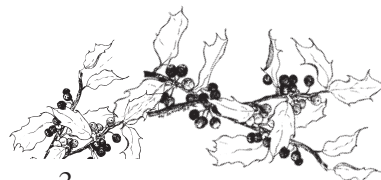
In the September Nature Notes of Issue #148, Regine's last name should have been spelled Maass; also, she is reported to have seen a Titmouse. Bob McDonald pointed out that this species, presumably referring to a Tufted Titmouse, has not been reported in N.S. for many years, with only a very small number of previous records. He feels that this report should have been discussed with the observers before being published. Bob also wondered why Witch-hazel, the spelling used in the Flora of N.S., is spelled Wych Hazel in paragraph two (*see editorial, left*).

Nelson Pourier was reported as having seeing Giant Swallowtails (not seen in Nova Scotia) with no indication given as to where they were seen; also, Michael Downing's name is mis-spelled in the last paragraph. In the June Nature Notes, Issue #147, Bob also points out that his last name is mis-spelled in paragraph two (it should be 'McDonald', not MacDonald), and that reference is made to a Blue-backed Warbler. There is no such creature in North America, and he is not sure what species is being referred to; he feels it should be clarified. Dennis Hippern's last name was also mis-spelled.

In the May Nature Notes of the same Issue, Bob (and Wendy's) last name is mis-spelled again, and the last word in paragraph one should be 'Leatherwood', not 'Leatherwort'.

NEW AND RETURNING

Richard Hatch
Fulton Lavender
Leslie & Penny MacDonald
Ray & Bertha Provencher
Clarence Stevens Sr.



SPECIAL REPORTS

IAN McLAREN HONOURED

Ludlow Griscom (1890-1959) was a specialist in Neotropical birds at the New York American Museum of Natural History, and for a long time he was with the Museum of Comparative Zoology at Harvard in Cambridge, Massachusetts. He is best known to birders as the first really influential exponent of bird field identification which did not necessarily involve collecting – responsible more than any other for changing its main tool from the shotgun to binoculars. From the 1920s into the 1950s he was regarded as one of the most skilful field birders in North America, and his influence on many others, notably Roger Tory Peterson, resulted in the publication of the first edition of Peterson's A Field Guide to the Birds in 1934 – arguably the most important advance in field birding ever and the inspiration for all the wonderful bird guides that have followed. Our modern approach to birding owes an enormous amount to Griscom.

The Griscom Award is given by the American Bird Association (ABA) to individuals who have dramatically advanced the state of ornithological knowledge for a particular region through their long-time contributions, and also through the force of their personality, teaching, and inspiration.

The previous recipients include Roger Tory Peterson, O.S. Pettingill, Chandler Robbins, Guy McCaskie, Ken Kaufman, and Earl Godfrey.

On September 27th at the Nova Scotia Museum of Natural History, at a joint event of the ABA and the Nova Scotia Bird Society, the Ludlow Griscom Award was presented to Ian McLaren by Lou Morrell, ABA chairman of the board. The event also launched Ian's wonderful new book, All the Birds of Nova Scotia, published by Gaspereau Press.

Ian's book is about every single bird species that has occurred in Nova Scotia. It not only covers the status of all the recorded species; its original and very important contribution will be to place the identification of our provincial (and regional) birds on a higher plane. As he says in his preface, "I hope the information in this book on the status and fine points of identification and variability of birds will also encourage birders in Nova Scotia to observe and record more critically, to beyond mere 'ticking' species on their day, year, or life lists, and to think about the evolution, geography, meteorology, and human history embodied in the birds they find."

The publication of Ian's book by Gaspereau Press, www.gaspereau.com/2012SpringCat.pdf, noted for its production of beautiful books, means that this will be a very special book about our Nova Scotia birds – to read, to savour, and to enjoy for a very long time.



SPECIAL ARTICLES

2012 FALL BIRD MIGRATION

– Clarence Stevens II

In Nova Scotia we are fortunate to have opportunities to experience an extended fall migration which, in most years, begins during the first week of July and continues until roughly mid-November. The following is a summary of some of the more interesting birding opportunities that took place in October and November of this year.

Feeder Watchers For feeder watchers it was an exciting fall, as higher than normal numbers of winter species began to show up throughout October and November. These included many members of the finch family – Red & White-winged Crossbills, Common Redpolls, Pine Grosbeaks, Pine Siskins, Purple Finches, and Evening Grosbeaks. Many reported the highest number of Evening Grosbeaks they've observed in over a decade.

Other non-feeder, winter species passing through the province in increased numbers, especially in October, included Horned Larks and Lapland Longspurs.

It was a good breeding season for three feeder favourites – American Goldfinches, Hairy Woodpeckers, and Black-capped Chickadees. Frequent travellers with the chickadees this fall have been lots of Golden-crowned Kinglets, a



fair number of Orange-crowned Warblers, and a few Pine Warblers.

This winter, feeder watchers should be keeping their eyes open for a few extra visitors. Sparrow migration this fall was on the weak side except for one notable exception – it was an incredible fall for seeing Field Sparrows, and also the colourful Lark Sparrow; even the very rare Lark Bunting was photographed on Digby Neck. It will be interesting to see if either of these sparrows are reported at feeders this winter. The Field Sparrow might easily be overlooked, as looks similar to the American Tree Sparrow and the Chipping Sparrow; but watch for its bright pink bill which easily separates it from the other two. The Lark Sparrow, with its striking face pattern, is a snap to identify. Another ground feeding bird that is expected to put in a showing at feeders this winter due to a heightened fall migration is the colourful Eastern Towhee.

Backyard Berry Bushes Berry bushes everywhere in the province were a good place to find birds, especially if those bushes were the Multiflora Rose. In particular it was a good fall for seeing two members of the Mimic Thrushes family – Northern Mockingbirds and Gray Catbirds. The real show stealer however was the shy but colourful Yellow-breasted Chat.

Range Expansions Once again Northern Cardinals showed an impressive growth in numbers, with the highest densities being reported from the Greater Halifax area, all of the Annapolis Valley, and large portions of Digby, Yarmouth, and Shelburne Counties. In the Annapolis Valley now one can hardly go anywhere near Multiflora Rose bushes without hearing or seeing cardinals. Also, for the second year in a row, it was an excellent fall for seeing Red-bellied Woodpeckers. As of late November they had been reported from Annapolis, Cape Breton, Cumberland, Digby, Halifax, Hants, Kings, Lunenburg, Pictou, Queens, and Shelburne Counties. As more feeders become active going into winter, it's expected that this woodpecker will be reported from all counties.

Another non-feeder bird seen this fall was the comical American Coot. In recent falls each year we spot a few more around the province but this year Cape Breton had outdone itself – an incredible 32 American Coots were observed in late November at the Beacon Street Dam in Glace Bay. Another hot spot for this bird was Bisset Lake Park in Dartmouth, where anywhere from five to 15 birds can be seen daily right up to the time the lake freezes. A single American Coot at the Halifax Public Gardens has been catching the attention of many non-birders with its huge green feet, its chalky white bill, and its endearing bobbing head.

Other Fall Highlights This fall was one of the best ever for Cattle Egret sightings, with reports pouring in from all over the province. There was at least one each from Annapolis and Pictou Counties; two each for Cumberland, Hants, and Kings Counties; four for Guysborough County; and a whopping 15 for Halifax County.

In addition to all the Cattle Egrets, a few Snowy Egrets and Great Egrets were reported from Antigonish, Cumberland, Halifax, Guysborough, Shelburne, and Yarmouth Counties.

Once more the Windsor and Truro areas produced the greatest assortment of geese. As of mid-November, single Snow Geese were observed feeding with flocks of Canada Geese in both areas, and a Cackling Goose was a frequent visitor to the farm fields of College Road, Windsor. The rarest goose thus far was a Greater White-fronted Goose observed near Truro. In the past, these same areas have produced even rarer species of geese including Pink-footed, Greylag, and a Barnacle Goose. Single Snow Geese were also reported from Pictou and Shelburne Counties.

A very cooperative Marsh Wren at Miner's Marsh in Kentville was a big hit this fall. Normally, fall migrating Marsh Wrens are rather secretive birds that prefer to stay hidden amongst the cattails. However, this atypical individual spent a good portion of November entertaining nature lovers with its gurgling song and providing some spectacular views. Other water-loving birds that stopped by Mine's March this fall included several Wilson's Snipes, Gadwall, two Northern Shovellers, Northern Pintail, Green-winged Teal, American Coot, and interesting land birds included the Northern Mockingbird, Wilson's Warbler, and the Great-crested Flycatcher.

One of the rarest birds of the fall would have likely gone unnoticed in the province were it not for the efforts of the banding team on Bon Portage Island, who on October 18th captured and banded a Dusky Flycatcher from the west coast. Even the most serious birders in the province are lucky to have seen one of these birds in Nova Scotia.



In October, Northern Lapwings from Europe were sighted in Newfoundland and the eastern seaboard of the United States, with an unprecedented three birds showing up in Massachusetts. Lying between these two locations, Nova Scotia likely also had Northern Lapwings visit here in October; but none were reported until November. The first showed up at Sandy Point Road in Shelburne County on November 11th. Two days later another was discovered at almost the other end of the province in the town of Canso, Guysborough County.

In Canso (famous for late fall/early winter rarities), sightings included: House Wren, Pine Warbler, Orange-crowned Warbler, Cattle Egret, Clay-coloured Sparrow, Grasshopper Sparrow, White-crowned Sparrow, Indigo Bunting, Rose-breasted Grosbeak, Yellow-billed and Black-billed Cuckoos, Baltimore Oriole, Prairie Warbler, Great Egret, Snowy Egret, Common Gallinule, Vesper Sparrow, Northern Wheatear, Grey-cheeked Thrush, Ruddy Duck, Field Sparrow, Turkey Vulture, Coopers Hawk, Blue Grosbeak, and as usual, Dickcissels. Though rare elsewhere in the province, the Dickcissels were a dime a dozen in Canso.

This brief fall migration summary provides only a sampling of the exciting experiences from this past fall, and also provides an inking of what adventures one can look for as we slip into early winter.

WINTER FEEDER FORECAST

Bird-wise, here in Nova Scotia, we never have two identical winters. New arrivals in October and November can lead to a lot of fun (and often accurate) speculation of the winter to come, but the best picture of any particular winter really begins to form in December.

Traditional Patterns The first hints of what a winter may be like, when it comes to the birds, can be found in the pattern of bird movements in the late fall. In October, we see the very first northern species showing up. These birds are bound for regions to the south of us, but their variety and numbers give us a peek into what might be to come.

In November, in addition to enjoying the last of the fall migrants, we also witness the first of our winter birds arriving from the north. These are birds that specifically come to Nova Scotia for the possibility of a winter vacation, and these new arrivals provide us with additional insights of what our winter might have in store for us.

Fall and Winter 2012/2013 This October took birders by surprise, due to the sheer volume of 'winter birds' pouring southward through the province. This is generally an indicator of what is happening with bird populations and their natural food sources to the north of us.

Ontario wildlife experts reported that this fall, softwood cone crops and hardwood seed crops are down over most of central and north-eastern Canada, with only small pockets of tree-seeds available there. The best seed crops in Canada are occurring in the Hudson Bay lowlands and in the northwest from western Ontario to the Yukon. This means that more birds than normal will likely winter in western Canada. Tree-seed-eating species will also be pushing southward though eastern Canada in search of food. This big push was easy to observe during the months of October and November as various members of the finch family showed up in higher than normal numbers.

Here in Nova Scotia, like much of the East, our tree-seed crops are low in many parts of the province. However, due to our more southerly position along Canada's eastern seaboard, we still could have some of those birds which are

streaming down from the north decide to stay here. It is still a little too early to tell what could happen, but it seems clear that due to the decrease in tree-seeds, birdfeeder contributions will play an important role for those birds that do decide to tough it out.

Throughout December, as species start to settle down and choose exactly where they hope to spend the winter, steady food sources such as feeders often play an important role in this selection process, (but of course, the availability of natural food sources is still the biggest determining factor as to where those birds end up).

In mid-December, as the Christmas Bird Count data begins to roll in, the situation becomes easier to decipher; by the end of the count, in early January, we often have a very clear picture of where the birds are in the province, right across Canada and even well into the United States.

Free Audubon Christmas Bird Counts The Audubon Christmas Bird Counts take place each year from December 14th to January 5th. This year, the 113th Audubon Count begins on a Friday and ends on a Saturday, giving birders a few extra weekend days to take part in counts. In addition, for the first time ever, all Audubon Counts will be free. The National Audubon Society hopes that the elimination of the five dollar fee will increase the number of participants in its Christmas Counts, and hope also that it will also encourage the many participants in the free, non-Audubon Counts to send their data to Audubon.

Dynamic Feeder Changes, November to March Our Nova Scotian winters are very dynamic, not only in how they differ from each other from year to year, but also in reference to how the birds move around during the winter months.

In November, the first winter arrivals are most easily attracted to feeders that already have local birds visiting on a daily basis. And, some of the rarest and most exciting birds of the year are seen in November and December. Often, these birds are first discovered by feeder watchers.

As December progresses, many species are still pouring in from the north and are busy checking out the best locations for winter residency. For feeder watchers this is a very important time, as our efforts right now to attract birds will often pay big dividends for the entire winter. That is why so many feeder owners make sure their feeders are well-stocked with a variety of foods in late November, even if they are not seeing a lot of birds then.



By early January, winter bird populations are usually at their high point, as most of the winter birds have now arrived in the province and the worst of the weather has yet to start taking its toll.

Once February arrives, most birds have already chosen where they will tough it out. However, as the cold weather settles in, bird mortality rises and bird feeders often determine the difference between the life or death of many individuals. In February, feeder watchers see a change in both bird numbers and variety, as they gravitate towards warmer local areas and yards that offer more protective cover from both the weather and the increasingly hungrier birds of prey.

In March, another change is registered, as the hardest species begin to drift northward again. At feeders, some birds may disappear at this time, but frequently, feeder owners will see new arrivals as well, as the first of our spring birds begin to show up. While the exact timing, number, and variety of species varies each March, during its last two weeks, new birds begin to appear in backyards beginning in the southern portions and then spreading northward.

How rapidly this spread takes place is strongly weather dependent. Typically, within a couple of days of the very first birds arriving in the southwest counties, individuals are travelling up the Annapolis Valley and then funnelling into the southern portion of Halifax County. Within two weeks of that time the vanguard of spring migrants are being reported from all parts of the province. The earliest are often members of the Blackbird Family – either Red-winged Blackbirds or Common Grackles. The American Robins arrive hot on their heels, with their northward movement generally being preceded by the warming of surface soil temperatures to one degree Celsius.

In March and early April feeders play a crucial role in bird survival rates, as natural winter foods are depleted to their lowest levels and, frequently, very little spring food has begun to emerge as yet. Also, having a feeder 'up-and-running' and recording its weekly changes is an exciting way to experience the world of nature. It can provide one with a vital connection to the rhythms of the natural world that are so easily lost in the modern lifestyles of mankind.



HFN TALKS

CLIMATE CHANGE... 4 OCT. – Stephanie Robertson

“From Greenland to Here: Climate change and its Impact on Atlantic Canada” Our presenter, Carl Duivenvoorden, was born in Belledune, Bay of Chaleur, northern New Brunswick; his parents immigrated from the Netherlands in 1952. Personally trained by Al Gore in 2007, he has presented Mr. Gore’s “An Inconvenient Truth” 250 times since – to businesses, governments, schools, church groups, and now – to HFN. He shared some very sobering information about the exponential increases in global warming, and gave us all pause for thought about our unthinking, everyday, deleterious activities.

In Belledune, Carl’s school was right on the grounds of

a large smelter operation, and he experienced its effects every day of his life there, sometimes having to stay indoors because the plant’s emissions were so overwhelming. Economically, Belldune was sustained by the smelter and a fertilizer plant. As a child he would ask, “Where does all that stuff from the smokestacks go?”; he always received the same answer – “away”, knowing, even as a child, that this was just plain wrong.

Carl pointed out that our earth and its atmosphere can be compared to a closed garage; if you leave your car engine on with its tail pipe emitting noxious chemicals, anything alive in that space will soon be dead from lack of oxygen.

The consumption of oil, coal, and natural gas has increased exponentially since 1973. North America has

become addicted to fossil fuels for vehicles, industry, agriculture, and plastics, and 1,000 tonnes of CO₂ are being released every second. However, during the last few years, China has forged ahead of North America in fossil fuel consumption, and is now the leading polluter of the planet.

As for global warming, NASA reports that the last twelve years in succession have been the hottest on record, with the months of 2012 setting even higher record temperatures. In Nova Scotia alone, during the period from September to December, 2010, there were three new low temperature records – but 46 new highs; so far, in 2012, there have been 122 new high temperature records!

Earth's Ice Caps The lowest Arctic ice cap on record was observed in September, 2011, and once again, during this past September, another new low record of ice was set. To put it in graphic perspective, this year it lost an area 55 times the size of Nova Scotia (one million km²); Carl showed us a picture illustrating its rapidly shrinking size. This ice cap is one of our world's air conditioners, and we need it in order to keep our planet cool. We were also told about the shrinking Antarctic Pine Island Glacier, which is a large ice stream flowing west-northwest along the south side of the Hudson Mountains into Pine Island Bay on the Amundsen Sea. It recently cracked apart, and a piece the size of PEI (about 800 km²) broke away.

The effects of land-ice changes are different from those of sea-ice. The former will make the oceans rise; the latter won't (think of ice cubes melting in a glass).

"24 Hours of Reality" In September of this year, 24 concurrent presentations of Carl's talk were given around the world by 24 people, in 24 different time zones, in 13 languages. Carl created his own three-minute video presentation from Ilulisaat (69° N), Greenland. We saw beautiful shots of ice floes, fiords, and of Ilulisaat itself. While there, he took a day-flight to see icebergs and the Eqip glacier, which is melting at a rate of 30 metres per day, twice as fast as 30 years ago. This July was much hotter than usual in Ilulisaat, and the lands around the Watson River suffered a tremendous torrential flood due to the resulting increased ice melt.

Our Atlantic Coastline The Maritimes' coastlines will continue to be affected in the future by global warming, rising sea levels, and increasingly severe storm surges. We saw photos of the extent of ocean rise which occurred recently along the Halifax boardwalk waterfront area (which will grow worse every year), and maps of the coastlines of PEI, New Brunswick, and Nova Scotia, showing us the areas that will be most affected.

The Positive Feedback Loop Phenomena "But wait, there's more!" This 'positive feedback loop phenomena', refers to a situation where some harmful effects cause even more of the very same, and so on, exponentially increasing them. A system undergoing this exponential positive feedback is very unstable; it will tend to spiral out of control as the deleterious effects amplify themselves. Some examples:

1) The reflectivity of ice and snow (which keep earth cool) – as our polar ice disappears, the darker ocean absorbs the sun's rays rather than reflecting it thereby heating it up even more, which then melts even more of the ice cover. Polar bears are being increasingly stressed by their inability to hunt seals from the earth's rapidly dwindling sea ice.

2) Methane – billions of tons of it are locked under the sea ice (who knew?). Now that this ice is melting, it is all

being released. This was video-demonstrated with a match being held to bubbling ice holes – whoom!

3) Changing water-cycle effects – there is now 4% more H₂O in the air over the oceans than 30 years ago because increased air temperatures hold more water. This higher humidity will be one of the causes of even more extreme and more numerous weather events (which have increased from an average of 20 in 1930-39 to 130 in 1990-99).

4) Biodiversity – species losses are continuing to increase at an unprecedented rate.

5) World crops such as corn, wheat, and rice are being negatively affected; pollination is a temperature- and moisture-sensitive process, and these are changing with global warming.

6) By 2050, it is estimated that 250 million refugees will be fleeing flooded coastal areas for higher, inland places.

Critical Numbers American environmentalist Bill McKibble's recent article in *Time* and *Rolling Stones* magazine stated that there were three critical numbers to watch:

1) 2% – the maximum amount the average earth temperature can continue to rise before it becomes unstable. Beyond that – there seems to be no turning back.

2) 565 gigatonnes – there is only room left in the atmosphere for this amount of CO₂.

3) 2,795 gigatonnes – left of oil, coal, and natural gas.

Climate change will not go away; our oceans and seas could rise 1.6 metres by 2100. What's needed? – a collection of many small changes– in buildings for instance (make them more energy efficient); in power sources (increase the use of windmills, solar, and photovoltaic heat). We need a global power-use reduction; all in all, nothing less than a global epiphany. And, we definitely need better and enforceable regulations.

Reduce, Reuse, Recycle This is needed now more than ever. There also needs to be a tax on polluters (South Africa is set to have one in 2013). We must 'pay now' or our children will have pay later.

The two key priorities for big, long-term reductions in our carbon footprint are: make our homes more efficient, (visit www.conservns.ca, 424-0790); and drive energy efficient vehicles (check vehicle ratings at (www.oee.nrcan.gc.ca)).

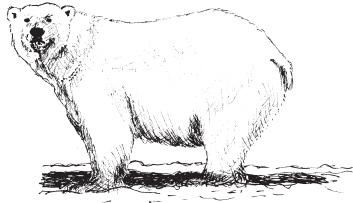
Drive smarter; tread lightly on gas and brake. Drive less; carpool; make fewer but better-planned trips. Use less air conditioning at home (and in your car by lowering the window).

Fifteen simple things you can commit to today: –

- 1) **Adopt a zero-idle policy**
- 2) **Compost**
- 3) **Choose locally grown food**
- 4) **Avoid drive-throughs**
- 5) **Reduce/reuse/recycle**
- 6) **Use a clothesline**
- 7) **Check tire pressure monthly**
- 8) **Install compact fluorescent bulbs**
- 9) **Plant a tree**
- 10) **Turn off computers/lights when not needed**
- 11) **Install low-flow showerheads**
- 12) **Telecommute; work from home**
- 13) **Avoid car starters**
- 14) **Wash clothes in cold water**
- 15) **Write your elected representatives**

Carl researches and writes about environmental issues. His bi-weekly column "Green Ideas" is available by email at info.changeyourcorner.com.

You can't change the whole world, but you *can* change your corner of it; be the change which you would like to see happen.



ST. MARY'S RIVER

1 NOV.
– *Jenny Medill*

"St. Mary's River; a River of Green". Karen McKendry of the Nova Scotia Nature Trust presented an overview of their work to protect this important 'river of green', and its significance in the conservation of one of Nova Scotia's most scenic rivers.

The St. Mary's River has its headwaters in three counties – Pictou, Antigonish, and Guysborough. It is 250 km long and has four branches, with 130 lakes feeding into it. Karen's talk focused on the West Branch of the river, in Guysborough County. Historically, the river was originally named 'Riviere Isle Verte' by Samuel de Champlain, meaning 'river of the green island', and the area was a favourite Mi'kmaq hunting place for moose. Later on, it was renamed after the fort at the mouth of the river – Fort Saint Marie.

The forestry industry took off in the early 1800's, and settlements spread upriver from Sherbrooke, the flood plains were cleared for farming, and nineteen gold mining companies existed in the area. St. Mary's was a renowned salmon fishing river where many fly fishermen came to try their luck. The salmon were very plentiful due to the river's many spring-fed pools which provided not only the exact temperature for salmon to survive, but also contained many pebble shoals for spawning. Soon, however, the lumber mills started to have an impact on the salmon numbers. Because of this, the Nova Scotia government was one of the first provinces to develop nature conservation. Recreational salmon fishing has been closed there for the last four years; its heyday was in the mid to late 1800's.

As well as being a critical habitat for the endangered Atlantic salmon, St. Mary's River is ecologically unique as a forested floodplain, and is one of the least disturbed examples of Acadian floodplain forest remaining. Regular flooding provides nutrients to the environment, supporting such species as Black Cherry, Ironwood, Hop Hornbeam, Maples, and Canada Lily. This riparian zone is never quite dry, but neither is it totally wet. The trees provide overhanging shade for Wood Turtles, frogs, and over 20 species of fish. It's a critical habitat for the Wood Turtle (a species at risk both provincially and nationally), providing its ideal habitat – the right kind of shores for egg-laying, the right muddiness and temperature for hibernation, and the right environment for feeding. There are beautiful remnants of old-growth Hemlock forest and steep-sided forest along St. Mary's River as well.

There are four properties currently being protected by NSNT – the donation of the A.M. Sandy Cameron conservation lands being the first of these. It consists of two parcels of 36 hectares, containing some of the last remaining old-growth floodplain forests and habitat important for

the survival of Wood Turtles and Atlantic Salmon. Then, in 2008, NSNT acquired the second property – Hemlock Falls Nature Reserve on the West Branch of the river, with three km of shoreline and a significant stand of old-growth Hemlock and Red Spruce. It too is a protected and ideal habitat for both the Wood Turtles and Salmon. It's an isolated and difficult terrain to get into, so seeing the falls is a treat for the lucky few. Another parcel at the junction of the East and West branches is adjacent to the Hemlock Falls property. These are the G. W. Anderson lands near Sherbrooke which have 111 acres of forest frequented by eagles.

Now, any lands that have been farmed in the past are left to grow in naturally until they revert to forest once again. Forest recovery passes through stages of forest succession: cleared (natural or clear-cut) containing grasses, shrubs, and first-tree species; this is succeeded by Alder, then Red Oak, Black Cherry; then finally, old growth of Red Maples, Beech, and Hemlock.

Community stewardship and outreach from NSNT is important in maintaining these protected lands along the St. Mary's River, because they prohibit tree-cutting, road-making, and formal trails, in order to maintain their biodiversity. Guided walks are conducted periodically, both to inform the public of the importance of protecting these lands forever, and also to enjoy the area's natural beauty. This threatened watershed must be protected while some of its most significant features and natural processes are still intact.



CONSERVATION'S EVOLUTION

6 DEC.

– *Stephanie Robertson*

Dr. Peter Wells, our presenter for the evening, is a 'semi-retired Environment Canada aquatic scientist'. He obtained his Biology BSc at McGill, his Zoology MSc from Toronto U., and his Zoology PhD at the University of Guelph. He currently holds three positions at Dal – as Adjunct Professor at both the School for Resource and Environmental Studies and the Marine Affairs Programme in the Faculty of Management, and as a Senior Research Fellow at the International Ocean Institute.

His presentation "The Evolution of Conservation – a Western, North American, and Personal Perspective" covered the historical beginnings of conservation, highlighting the most influential conservationists' views of nature and the earth; their basic philosophies and their land and ocean ethics; and their influence on how our society (in part) now views the environment circa 2012.

What is conservation? This depends upon the different fields of research, but for this talk, conservation was defined as "The planned protection, maintenance, management, sustainable use, and restoration of natural resources and the environment." Conservation differs from preservation because of its emphasis on positive, forward-looking management; it is not simply a prevention of present, deleterious environmental changes. "Conservation embraces the rational use of all types of natural resources". Peter also considered the viewpoint of native Americans, and cited Chief Seattle's famous words, "The earth does not belong

to us. We belong to the earth.”

The history and evolution of ecological ideas and their contributions to the conservation movement. Before 1920, the theories and practices of conservation were dominated by the progressive ideology of utilitarianism. But after 1945, conservation became much more amenable to a preservation policy based on ecology. Between these periods a transition took place – a time of debate, introspection, and personal conversion.

Peter highlighted those who most influenced him, and these were just some of many. The most notable Americans in land conservation were Henry Thoreau, John Muir, Aldo Leopold, Roger Tory Peterson, Stewart Udall, Rene Dubos, and E.O. Wilson. Those most notable in ocean conservation were Ed Ricketts, Rachel Carson, and Sylvia Earle. The most notable Canadians in land conservation were James Harkin, Stan Rowe, Doug Pimlott, Robert Bate-man, Robert Harrington, and Monte Hummel; those for the coasts and oceans – Jon Lien and Birgit Braune.

The conservation movement began in both England and North America in the 18th and 19th centuries – by collectors, recorders, and illustrators – as they all developed a more scientific interest in gardens, plants, and birds. **Gilbert White's** *The Illustrated Natural History of Selborne* (1789) was one example; White was regarded by many as England's first ecologist and one of the founders of the modern 'respect for nature'. An ornithologist and artist, **John James Audubon's** (1785-1851) *Birds of America* was another tremendous influence. In his journals, Audubon prophetically warned of the dangers that threatened the enormous flocks of his time, including over-hunting and loss of habitat. In 1905, the National Audubon Society was incorporated and named in his honour. Its mission is to conserve and restore natural ecosystems (focusing on birds) and other wildlife and their habitats, for the benefit of humanity and the earth's biological diversity. We saw beautiful slides of herons, the second one being a Great Blue.

James B. Harkin was very influential in changing the face of Canadian conservation. As the first Commissioner of the National Parks of Canada (1911-36), Harkin is known to many as 'the Father of National Parks'. He developed the idea of conservation in Canada, established standards for preservation, created a centralised agency to administer the parks, and helped draft the National Parks Act of 1930. He built a system of protected areas that touched almost every province in Canada, creating 13 new protected areas. His model of what a national park should be attracted emis-saries from abroad to study his methods.

Ed Ricketts (1897-1948), was a marine (intertidal) ecologist, writer, and philosopher, and was immortalised in *Cannery Row* by his friend John Steinbeck. Known for his *Between Pacific Tides*, a pioneering, habitat-oriented, ecological guide to intertidal life, he documented sardine harvests, described sardine ecology, and noted that harvests were declining as fishing intensity increased. When the sardines became depleted and the industry was destroyed, Ricketts explained what had happened to the sardines – “They're in cans!” He surveyed the intertidal life of Vancouver Island and other parts of the B.C. coastline for species and ecologies (see Tamm's book – *Beyond the Outer Shores*).

Aldo Leopold was another 'conservation thinker' considered by many to have been the most influential conservationist of the 20th century. Leopold's legacy spans the disciplines of forestry, wildlife management, conservation

biology, sustainable agriculture, restoration ecology, private land management, environmental history, literature, education, esthetics, and ethics. He's most widely known as the author of *A Sand County Almanac* (1949), one of the most respected books about the environment ever published. Its Forward states “Conservation is getting nowhere because it is incompatible with our Abrahamic concept of land. We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanised man, nor for us to reap from it the esthetic harvest that it is capable, under science, of contributing to culture”. “That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics”. He also wrote the *The Round River* (1953), which says, “Conservation is a state of harmony between men and land. By land is meant all of the things on, over, or in the earth. Harmony with land is like harmony with a friend; you cannot cherish his right hand and chop off his left. That is to say, you cannot love game and hate predators; you cannot conserve the waters and waste the ranges; you cannot build the forest and mine the farm. The land is one organism. Its parts, like our own parts, compete with each other and cooperate with each other.”, (p. 190, Ballantyne Edition of *Sand County Almanac*).

We Nova Scotia naturalists are all familiar with **Roger Tory Peterson** – ornithologist, artist, naturalist, and author. “The philosophy that I have worked under most of my life is that the serious study of natural history is an activity which has far-reaching effects in every aspect of a person's life. It ultimately makes people protective of the environment in a very committed way. It is my opinion that the study of natural history should be the primary avenue for creating environmentalists...”. “No one has done more to promote an interest in living creatures than Roger Tory Peterson, the inventor of the modern field guide. His greatest contribution to the preservation of biological diversity has been in getting tens of millions of people outdoors with Peterson Field Guides in their pockets.” – Paul Erlich, author of *The Birder's Handbook* and *The Limits to Growth*. At this point Peter showed slides of various parks, emphasising their importance, along with preserves, and reserves, etc., for wildlife conservation.

J. Stan Rowe, (1918-2004) was a well-known western Canadian ecologist, teacher, and writer. He was also a mentor to many searching for a world-view that recognised the beauty and surpassing value of the Earth. He wrote the *Home Place; Essays on Ecology*, and a pioneering article on *The level of integration concept in ecology*. (Journal of Ecology, 1961). It changed forever the way ecologists thought about landscape. He said “The reality of the world is not people and separate 'other things'. Nor is the Earth a machine whose secrets lie in its fragmented parts. It is beyond all understanding – an integrated Ecosphere of marvelous creativity.”

Rachel Carson cared for the sea and the environment and is regarded by many as the godmother of the environmental movement. Her book, *Silent Spring*, sowed the seeds of passion for environmental protection. She wrote it in 1962, years before the concept of 'saving the earth' was brought into mainstream consciousness. She said, “It is a curious situation that the sea, from which life first arose, should now be threatened by the activities of one form of



that life. But the sea, though changed in a sinister way, will continue to exist; the threat is rather to life itself.”

Rene Dubos, microbiologist, environmentalist, and humanist, is author of the popular maxim “Think Globally, Act Locally” – the argument that global environmental problems can be solved only by first considering the ecological, economic, and cultural differences of our own local surroundings. This phrase evolved while he was an advisor to the United Nations Conference on the Human Environment in 1972, and it was in 1979 that Dubos suggested that ecological consciousness should begin at home. He also authored Reason Awake: Science for Man.

Douglas H. Pimlott, U. of T. wildlife biologist, ecologist, and conservationist, believed that all parts of the environment were important in their own right, and moreover that many were quite possibly critical for the survival of mankind itself. Like other naturalist philosophers, he felt that the land and the environment provided not only material things but also gave a basis to aesthetic, cultural, and moral values, and that mankind had to come to terms with the environment.

Conservationist and politician **Stewart Udall** was “a giant in the wilderness”. He served as Secretary of State for eight years (1961-1969) under Presidents Kennedy and Johnson, during which time he successfully pressed for landmark environmental legislation, including the Clean Air Act, the Wilderness Act, the Land and Water Conservation Fund Act, and the Wild and Scenic Rivers Act. Under his watch, the National Park Service added over 2.4 million acres to its holdings, including four new national parks, six national seashores, and five national recreation areas.

Sylvia Earle (born in 1935) was a marine explorer, diver, environmental scientist, author, and an American oceanographer. She was chief scientist for the U.S. National Oceanic and Atmospheric Administration from 1990-1992, and also is a National Geographic Explorer-in-Residence, sometimes called ‘Her Deepness’, or ‘The Sturgeon General’. She wrote Defying Ocean’s End: An Agenda For Action and Sea Change: a Message for the Oceans. In 2003, when Peter asked her if she ate fish, she replied, “I do not eat my friends!”. Her Sea Change, A Message for the Oceans (1995), states “If I had to name the single most frightening and dangerous threat to the health of the oceans, the one that stands alone yet is at the base of all the others is IGNORANCE: lack of understanding, a failure to relate our destiny to that of the sea, or to make the connection between the health of coral reefs and our own health, between the fate of great whales and the future of humankind...”. “The best place to begin is by recognizing the magnitude of our ignorance, and by not destroying species and natural systems that we cannot re-create or effectively restore once they are gone”.

E. O. Wilson was an eminent scientist, naturalist, writer, and environmentalist who was concerned with human-induced environmental degradation and loss of biodiversity on Earth. He was a prolific writer of numerous articles and books: for instance The Future of Life, 2002; The Diversity of Life, 1992; Biodiversity, 1988; The Naturalist; and many others. Biodiversity introduced the term itself and brought worldwide attention to the topic. He’s considered by many to be ‘the father of biodiversity’ and devotes much of his efforts towards conservation initiatives.

Robert Bateman, famous wildlife artist, environmentalist, and author “...can’t conceive of anything being more

varied and rich and handsome than the planet Earth. And its crowning beauty is the natural world, I want to soak it up, to understand it..., to absorb it..., and express it in my painting”.

Monte Hummel, World Wildlife Fund conservationist, helped downlist over 30 wildlife species from Canada’s official Species at Risk list, and through WWF’s Endangered Spaces campaign, many new parks and wilderness areas were designated, doubling the amount of protected area in Canada. He remains active on the organisation’s boreal forest and Arctic conservation files, and in June 2001, he was awarded the J.B. Harkin Medal by the Canadian Parks and Wilderness Society “in recognition of over thirty years of dedicated service to the conservation of Canada’s wilderness and wildlife”.

Birgit Braune, a role model for women in wildlife and conservation science, and a research scientist with EC’s Wildlife Toxicology and Disease Division, studied the impacts of contaminants on Arctic wildlife, especially seabirds. Her approach is to make scientific information and scientists themselves as accessible as possible by giving university and public lectures to stimulate young people’s interest in science, technology, and the environment in general. For Birgit, it’s all about breaking down the barriers between the public and the scientific community, sharing knowledge, and making information understandable. “You become a real person to them, and not just a scientist.”, she says.

Jon Lien was a whale researcher, conservationist, and author. He received the Order of Canada and the Order of Newfoundland and Labrador as well as countless other accolades for decades of work as an advocate for both whales and fishermen. Lien saved hundreds of whales from fishing gear, sometimes driving hours to outport communities and then helping fishermen pull their catches afterwards. The Whale Research Group he founded has trained hundred of students and developed techniques that are now copied around the world. This important and influential conservationist passed away in 2010 at age 71.

Since European colonisation of North America, our views about the conservation and protection of landscapes, wilderness, wildlife, and oceans have changed dramatically. This has been driven by observations of, and responses to, our impacts on wildlife and their habitats, and by the changing ethics and concerns of modern society.

But – we still have a long way to go to conserve and protect species, habitats, and ecosystems in Canada – witness the recent downturn of government support for science and sustainable development!



FIELD TRIPS

BLUE BEACH FOSSIL TRIP

— Matt & Jean Salisbury

Date: Sunday, October 21st

Place: Blue Beach Fossil Museum, Hantsport

Weather: Very warm; just a little rain

Interpreter: Richard Beazley

Participants: ± 24



About two dozen HFN members met at the Blue Beach Fossil Museum near Hantsport on the Avon River. There we were treated by Chris Mansky, the museum's founder, to a discussion about the museum and its remarkable collection of early Carboniferous tetrapod, fish, and trace fossils, and then afterwards, a tour of the beach itself.

Blue Beach displays cliffs of sandy siltstone deposited as sediment in shallow brackish water about 350m years ago during the Lower Carboniferous, when the tetrapods, one of the first groups of amphibians, first appear in the fossil record. Rapid erosion by the Fundy tides continuously exposes new rocks and fossils, making this one of the prime fossil collecting locations in the province. As explained by Chris, who has collected at Blue Beach for 17 years, it is one of the earliest and richest amphibian sites in the world. The museum has thousands of tetrapod footprints and numerous fish and tetrapod bone fragments from 'Romer's gap', a critical time period straddling the first appearance of lungfish and reptiles, making this a pilgrimage site for paleontologists from around the world. The fish fossils include lungfish which had both gills and lungs. Although numerous tetrapod bones have been found, and the tracks at the site suggest the presence of at least five species, it has not been possible to reconstruct them, or even to match the tracks and bones with certainty, because the bones are disarticulated.

Interestingly, Blue Beach is as famous for its trace fossils as it is for its bone fragments. Trace fossils include fossil footprints, raindrops, ripple marks, mudcracks, worm tubes, arthropod burrows, drag marks from branches, and the carbonised molds and casts of the branches themselves. Due to excellent preservation, the fossil tracks range from delicate footprints left by marine arthropods skittering along the bottom of ponds, to coarse tracks left by amphibians and lobe-finned lungfish plodding through mud. In many instances the causes of the tracks are unknown. The numerous plant fossils found on the beach include the roots, stems, bark, and fruiting bodies of plants found elsewhere in coal seams, suggesting that the setting was marshy.

After visiting the museum, we spent the rest of the balmy, fall afternoon on the beach at low tide looking for fossils. With over two dozen eyes engaged, we found just about everything advertised, including fish bones, teeth, and a spectacular set of tetrapod tracks!

CRANBERRY HIKE

— Janet Dalton

Date: Saturday, November 3rd

Place: Taylor Head Provincial Park, Spry Bay

Weather: Cloudy, with local showers

Leaders: Janet Dalton

Participants: 4 (with perhaps more who arrived in the rain but then left)



We left Halifax at 8:30 a.m. with no sign of the sun. It was warm, even though overcast, and the hope was that the sun might appear from time to time. After meeting at Lakeland Plant World, and waiting until 9:30 a.m. for any more people to arrive, we travelled on to Taylor Head. As we approached Spry Bay it began to rain and we were held up by a road crew who had decided to stop work for the day. They were in the process of pulling all of their cumbersome paving machinery off the highway; thus, we waited in line for almost thirty minutes as they moved all of their equipment to a public parking lot, making us late for our arrival at Taylor Head Park.

On arrival we met up with Warren Parson, from the Friends of Taylor Head Association, who informed us that we had just missed a party of Field Naturalists who had left due to the rain, and also perhaps due to the apparent lack of other participants. The rain stopped for about half an hour so we explored the beach where there was a lot of seaweed. They were very fresh, and the colours were extremely vivid – from light green to a beautiful, deep maroon. We felt that all this fresh seaweed might have been a result of the high winds from hurricane Sandy. We identified them as Irish Moss, *Chondrus crispus*, which was purplish green; Dulse, *Palmaria palmate*, with its rosy red blades; Bladder Wrack, *Fucus vesiculosus*, with its bladders that are always fun to 'pop'; the Kelp *Laminaria saccharina*, which is often called Sugar Kelp because a sweet tasting powder forms on the blades as they dry out; and Sea Lettuce, *Ulva lactuca*. This was the weed that was so bright in colour – a fresh, light green, looking exactly like salad lettuce.

The rain continued after about 25 minutes so we decided to leave the park. There seemed to be a lot of cranberries everywhere, even though Warren told us the berries were well picked over. But, we were no longer interested in picking berries, as it was so wet. (The funny thing was that when we arrived home it was obvious that it had not rained in Halifax, as the streets were dry.)

Instead, we took a side tour, deciding to travel on to Sheet Harbour which was about a five minute drive beyond Taylor Head Provincial Park. When we arrived, there was a museum immediately on the right. We discovered a boardwalk that starts at the back of this museum, and it took us down along the gorge formed by the East River meeting the West River. It was about a kilometre long and went across a bridge over the gorge. On the other side there was another short boardwalk and from this point one got a spectacular view of the gorge 'face on' so to speak.

As we walked further along we saw the thick stone foundations of lumber mills of long ago. Around the museum there are large plaques with information about the area's history, and about industries such as salmon fishing, logging, and lumber mills. Below the gorge the river widens and flows out to sea. At the lower part of the river there was a large wood chip mill where an ocean tanker was being loaded with wood chips for Japan.

Sheet Harbour has a lot of interesting places to visit, especially in the summer. There are many kiosks, although closed for the winter months, which sell ice cream and other treats as well as fish and chips. This town and its museum and boardwalk are well worth a visit.

NATURE NOTES

October

– *Stephanie Robertson*

Dennis Hippert has noticed a **lack of Crane Flies** this year and wanted to know if anyone else had noted the same thing. Stephanie Robertson reported in the affirmative.

David Patriquin has attended mushroom workshops and is now an avid mushroom hunter. On September 26th he spotted three **Chicken of the Woods**, *Laetiporus sulphureus*, on a large oak in the south end. Edible and delicious, he also reported that there are only two there now!?! David's pictures of these beautiful and incredible fungi are posted on our HFN website, along with two **Bondarzewia berkeleyi** at the base of another oak on Robie St. (July, 2012), and some **Hen of the Woods**, *Grifola frondosa* (November 13th, 2011), also associated with oaks.

Nancy Covington, one or two days ago at Kingsburg Beach, saw **six Monarchs** and **several others** at other times.

Lesley Jane Butters saw the same '**painted turtle**' in Point Pleasant Quarry Pond as Stephanie Robertson had reported in our May Nature Notes. "It is really an exotic **Red Slider**, probably released 'into-the-wild' after being no longer wanted as a pet", said John Gilhen, herpetologist with the NSMNH. John also noted that people who just 'release' their pets are a real problem in the Halifax/Dartmouth area. He also let us know that Ring-neck Snakes were on display in the nature section of the foyer in the museum. In order to help with their conservation, the museum collects them so that they may lay their eggs in a protected place. After hatching, they are released – when large enough to have good chances for survival. One of these hatchlings had turned out to be an albino!

Peter Wells went to Brier Island two weekends ago and saw **Fin Whales, Humpbacks, and Porpoises**; it "was spectacular" he said. The two Humpbacks were a mother and her young one. Recently, he also went on a mountain hiking trip out west (Alberta and B.C.). There he saw Grizzlies (at a distance!), Elk, goats, and sheep. He also visited the famous 505 million-year old Burgess shale fossil site with its exquisitely preserved Cambrian animals.



November

– *Jenny Medill*

Peter Wells commented about the outstanding fall we have experienced this year – on both its wonderful length, and the intensity of its lovely colours.

Lesley Jane Butters thought the field trip to the St. Mary's River Conservation area was most informative. She also was discovering **Lady Beetles** in the most peculiar places while doing fall cleanup in the garden, and also noted that the **crows were fewer in number** this year at The Dingle.

Bob McDonald mentioned that our native **Hammamelis virginiana L. was blooming** in his garden (Bob prefers the spelling **Witch-hazel**, as found in Roland's Flora of Nova Scotia; see Editorial, page three). He said that the bright yellow of the fall leaves hid the lovely yellow blossoms, but when the leaves dropped, the long-lasting blooms would be visible. He also commented on **crows** and said to look for them at 'The Mount' as they seem to congregate there in large numbers.

Mary MacCauley made an unhappy observation regarding **two Elm trees dying** from Dutch Elm disease in her

area of south Halifax.

Jim Medill had a question – "What are the **white flies** that look like a tiny balls of fluff?" One person referred to them as 'snow flies'. The recorder did a Google search and found out that they are commonly known as **Woolly Aphids**, of the Erisoma family.

Dennis Hippert spotted a **Brown Thrasher** in downtown Halifax – a rare sighting.

Clarence Stevens noted that the past three months have seen a **poor shorebird migration and a poor sparrow count**. A lot of the winter birds left earlier than usual this fall, and the numbers were down as well. He suggested we put out our bird feeders, to add oranges and grapes to attract Baltimore Orioles and Cardinals, and to be on the lookout for Scarlet Tanagers, warblers, chats, and waterfowl around our ponds and lakes.



December

– *Stephanie Robertson*

Richard Beazley shared a slide of a **dead Sunfish, Mola mola**, on a Big Island beach, Pictou Co. – the heaviest bony fish in the world at a whopping 1,000 kg. It was eight feet long and six feet wide! Peter Wells reported he had seen a dead one at Hall's Harbour, which had been taken back to Acadia to study for any toxins it may have accumulated over its lifetime (the results of this have not been completed). Sunfish are 'jelly feeders' (jellyfish, salps, jelly-tunicates) which the Gulf Stream brings north; they usually can't withstand our frigid waters, and perish from the cold. They've been reported in the Bay of Fundy too.

Janet Dalton had a **pair of Cardinals** in her back garden for the last two weeks. They were taking turns at her feeder; the male would feed while she watched, then they switched and she would feed while he watched. Peter Wells went to the valley recently where he saw a plethora of **flocks of geese** flying down the Annapolis River.

Two weekends ago Lesley-Jane Butters spotted a **male Cardinal** on Ridge Road in Wolfville. At her cottage in Albany New, she saw **41 Hooded Mergansers** on the river. They were all male except for three females. Dennis Hippert saw a **male Cardinal** for two days in a row in Cole Harbour. Two or three years ago he himself also saw a **Sunfish** – in Halifax Harbour.

Last summer, birder Clarence Stevens saw a **Sunfish** up against the boardwalk in Bedford. He also reported seeing **16 Snow Geese** in Holbrook, and later saw even larger flocks. He said they are also becoming more and more common in the Arctic.

Stephanie Robertson saw **many little brown moths** around her front door on Wednesday evening, Dec. 5th. Clarence and Raymond Provencher have been seeing them around as well. Lesley-Jane also has seen very many while gardening; Pat Chalmers said they were a 'Winter Moth', of which there is more than one species. They are seen in early winter, particularly after a warm spell. Apparently, they have a kind of antifreeze in their system.

Pat Leader saw a **seal** in the Bedford Basin last weekend (December 1st/2nd), and also reported seeing **four young deer** which have been feeding regularly in a Bedford garden near Larry Uteck Drive.



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.

I come from a land that is harsh and unforgiving
 Winter snows can kill you, and the summer burn you dry
 When a change in the weather makes a difference to your living
 You keep one eye on the banker and another on the sky.

– chorus of “Harsh and Unforgiving”, by Connie Kaldor (1992)

NATURAL EVENTS

- 14 Dec. -5 Jan. Audubon Christmas Bird Count Period.
- 21 Dec. Winter Solstice at 7:12 AST; Winter begins in the Northern Hemisphere, but though the temperature drops, the days begin to lengthen.
- 25 Dec. Jupiter above Moon.
- 27 Dec. -31 Dec. Latest Sunrise of the year at 7:51 AST.
- 28 Dec. Full Moon. Moonrise at 17:17 AST.
- 27 Dec. -8 Jan. Latest Sunrise of the year at 7:51 AST.
- 7 Jan. Daily maximum temperature at Shearwater goes below 0°C.
- 13 Jan. -24 Jan. ‘January Thaw’; the temperature stops falling, and the average actually rises 0.2°C.
- 26/27 Jan. & 2/3 Feb. ‘Eagle Days’ in Sheffield Mills, King’s County; two weekends of organised events.
- 27 Jan. Full Moon. Moonrise at 18:11 AST.
- 6-8 Feb. Coldest days of winter; the average daily minimum is -9.4°C.
- 9 Feb. Average temperatures start increasing.
- 19 Feb. Ninth anniversary of ‘White Juan’, the record-breaking snowfall.
- 25 Feb. Full Moon. Moonrise at 19:15 AST.
- 28 Feb. Daily maximum temperature rises above 0°C.
- 10 Mar. Daylight Saving Time begins at 2:00 AST; turn clocks ahead one hour.
- 20 Mar. Vernal Equinox at 11:02 GMT; Spring begins in the Northern hemisphere.
- 27 Mar. Full Moon rises at 20:17 ADT.

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

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



1 Dec.	7:32	16:35	5 Jan.	7:51	16:49
8 Dec.	7:39	16:34	12 Jan.	7:49	16:57
15 Dec.	7:45	16:35	19 Jan.	7:45	17:06
22 Dec.	7:49	16:38	26 Jan.	7:39	17:15
29 Dec.	7:51	16:42			
2 Feb.	7:32	17:25	2 Mar.	6:50	18:04
9 Feb.	7:23	17:35	9 Mar.	6:37	18:13
16 Feb.	7:13	17:45	16 Mar.	7:25	19:22
23 Feb.	7:02	17:54	23 Mar.	7:12	19:31
			30 Mar.	6:59	19:40

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/>.

- 21 Dec. “Winter Solstice Family Frolic”, with leaders Charlane Bishop, 542-2217, and Harold Forsyth, 542-5983.
- 22 Dec. “Kingston Christmas Bird Count”; contact Wayne Neily **ASAP**, 765-2455, neilyornis@hotmail.com, to be included.
- 30 Dec. “W. Hants Christmas Bird Count; contact Patrick Kelly **ASAP**, 472-2322, patrick.kelly@dal.ca, to be included.
- 26/27 Jan. “Eagle Watch Weekend 1”, Sheffield Mills. Pancake/sausage breakfast, displays, and eagle sighting info. Go to www.eaglens.ca; Richard Hennigar, 582-3044, hennigar@xcountry.tv.
- 2-3 Feb. “Eagle Watch Weekend, II”, Sheffield Mills. See above.
- 2 Feb. “Winter on Snowshoes”, with leader Soren Bondrup-Nielsen, 582-3971.

Blomidon Naturalists Society: (continued from page 13)

16 Feb. "Orchid Display/Sale", Valley Orchid Group at the K.C. Irving Env. Science Centre, Acadia.

18 Feb. "Annual Show and Tell Night". Contact Patrick Kelly, 472-2322, patrick.kelly@dal.ca.

18 Mar. "The Big Eclipse Gamble", with speaker Mary Lou Whitehorne, Royal Astronomical Society of Canada.

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/>.

Friends of McNab's Island: <http://www.mcnabsisland.ca/>, or contact Carolyn, 477-0187, or Cathy, 434-2254.

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 Chris Pepper, 829-3478, cpepper@gmail.com, or email the trip leader, or <http://nsbs.chebucto.org/>.

12 Jan. "Sewer Stroll I; Halifax/Dartmouth", with leader Suzanne Borkowski, 445-2922, suzanneborkowski@yahoo.ca

10 Mar. "Valley Birding", with leader Patrick Kelly, 472-2322, patrick.kelly@dal.ca.

Nova Scotia Department of Natural Resources: Many outings that 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.novas-cotiaparks.ca/>.

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

15 Sept. -13 Jan. "Illegal Killer Trade: the Illegal Trade of Animals Throughout the World".

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, <http://www.nswildflora.ca/>.

28 Jan. "Members' Slide Night".

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, <http://www.chebucto.ns.ca/Science/NSIS/index.html>.

7 Jan. "Seachange in the Ocean: What do We Know? How do We Know It?"; speaker Dr. Doug Wallace, Dalhousie U.

4 Feb. "Seeing the Universe in X-rays", with speaker Dr. Luigi Gallo, Saint Mary's University.

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 - 12:00 a.m. Field trips take place every fourth Sunday, at 1:00 p.m. For more info, Zoë Nudell, 209-2531, yncns@yahoo.ca; <http://nature1st.net/ync>.

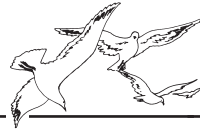
19 Jan. Sat., MNH, 10:30-11:30 a.m. "Is Anyone Out There?", with Paul Heath, Royal Astronomical Society of Canada.

27 Jan. A follow-up visit to Dalhousie's Planetarium.

– compiled by Patricia L. Chalmers



HALIFAX TIDE TABLE



January-janvier

February-février

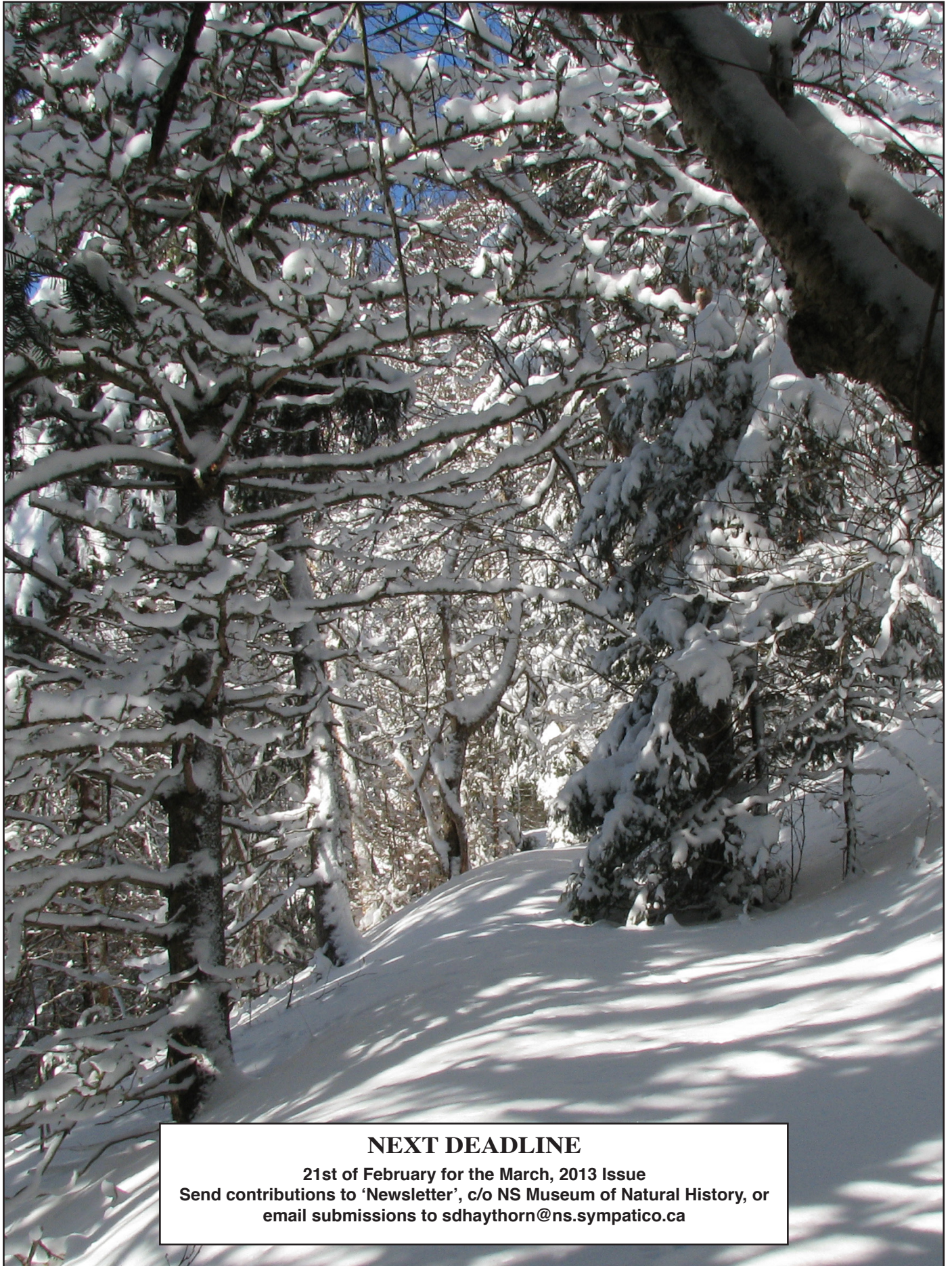
March-mars

January-janvier				February-février				March-mars								
Day	Time	Feet	Metres	jour	heure	pieds	mètres	Day	Time	Feet	Metres	jour	heure	pieds	mètres	
1	0422	2.0	0.6	16	0554	1.3	0.4	1	0539	1.3	0.4	16	0658	1.6	0.5	
	1013	5.9	1.8		1111	5.9	1.8		1114	5.6	1.7		1213	4.9	1.5	
TU	1644	1.0	0.3	WE	1804	1.0	0.3	FR	1748	1.3	0.4	SA	1901	2.0	0.6	
MA	2250	5.6	1.7	ME	2341	5.9	1.8	VE	2339	5.9	1.8	SA				
2	0511	2.0	0.6	17	0649	1.3	0.4	2	0636	1.3	0.4	17	0033	5.6	1.7	
	1052	5.6	1.7		1158	5.2	1.6		1201	5.2	1.6		0749	1.6	0.5	
WE	1726	1.3	0.4	TH	1855	1.3	0.4	SA	1843	1.3	0.4	SU	1303	4.9	1.5	
ME	2327	5.6	1.7	JE				SA				DI	1956	2.3	0.7	
3	0604	2.0	0.6	18	0026	5.9	1.8	3	0025	5.9	1.8	18	0124	5.2	1.6	
	1134	5.6	1.7		0743	1.6	0.5		0736	1.3	0.4		0840	2.0	0.6	
TH	1813	1.3	0.4	FR	1248	4.9	1.5	SU	1253	5.2	1.6	MO	1402	4.6	1.4	
JE				VE	1947	1.6	0.5	DI	1945	1.6	0.5	LU	2052	2.3	0.7	
4	0007	5.6	1.7	19	0115	5.6	1.7	4	0117	5.6	1.7	19	0223	4.9	1.5	
	0700	1.6	0.5		0836	1.6	0.5		0838	1.3	0.4		0931	2.0	0.6	
FR	1221	5.2	1.6	SA	1343	4.6	1.4	MO	1355	4.9	1.5	TU	1515	4.6	1.4	
VE	1905	1.6	0.5	SA	2041	2.0	0.6	LU	2049	1.6	0.5	MA	2148	2.3	0.7	
5	0053	5.6	1.7	20	0209	5.2	1.6	5	0220	5.6	1.7	20	0331	4.9	1.5	
	0758	1.6	0.5		0928	1.6	0.5		0941	1.0	0.3		1022	1.6	0.5	
SA	1316	5.2	1.6	SU	1448	4.6	1.4	TU	1511	4.9	1.5	WE	1630	4.6	1.4	
SA	2001	1.6	0.5	DI	2136	2.0	0.6	MA	2154	1.6	0.5	ME	2241	2.3	0.7	
6	0145	5.6	1.7	21	0310	5.2	1.6	6	0332	5.9	1.8	21	0435	4.9	1.5	
	0857	1.3	0.4		1019	1.6	0.5		1043	1.0	0.3		1111	1.6	0.5	
SU	1420	4.9	1.5	MO	1601	4.6	1.4	WE	1631	5.2	1.6	TH	1727	4.9	1.5	
DI	2100	1.6	0.5	LU	2231	2.3	0.7	ME	2259	1.6	0.5	JE	2328	2.3	0.7	
7	0246	5.9	1.8	22	0413	5.2	1.6	7	0445	5.9	1.8	22	0527	5.2	1.6	
	0957	1.0	0.3		1108	1.6	0.5		1144	0.7	0.2		1157	1.3	0.4	
MO	1534	4.9	1.5	TU	1706	4.6	1.4	TH	1740	5.6	1.7	FR	1812	5.2	1.6	
LU	2203	1.6	0.5	MA	2323	2.3	0.7	JE				VE				
8	0353	5.9	1.8	23	0508	5.2	1.6	8	0003	1.3	0.4	23	0011	2.0	0.6	
	1059	0.7	0.2		1154	1.3	0.4		0551	6.2	1.9		0611	5.6	1.7	
TU	1646	5.2	1.6	WE	1759	4.9	1.5	FR	1242	0.3	0.1	SA	1239	1.0	0.3	
MA	2307	1.3	0.4	ME				VE	1838	5.9	1.8	SA	1851	5.2	1.6	
9	0459	6.2	1.9	24	0008	2.0	0.6	9	0102	1.0	0.3	24	0052	1.6	0.5	
	1159	0.3	0.1		0556	5.2	1.6		0648	6.2	1.9		0652	5.9	1.8	
WE	1752	5.6	1.7	TH	1237	1.3	0.4	SA	1335	0.3	0.1	SU	1319	1.0	0.3	
ME				JE	1843	5.2	1.6	SA	1930	6.2	1.9	DI	1927	5.6	1.7	
10	0011	1.3	0.4	25	0048	2.0	0.6	10	0158	1.0	0.3	25	0132	1.3	0.4	
	0601	6.6	2.0		0639	5.6	1.7		0741	6.6	2.0		0732	5.9	1.8	
TH	1257	0.0	0.0	FR	1316	1.0	0.3	SU	1425	0.0	0.0	MO	1357	0.7	0.2	
JE	1851	5.9	1.8	VE	1923	5.2	1.6	DI	2018	6.2	1.9	LU	2002	5.6	1.7	
11	0112	1.0	0.3	26	0124	2.0	0.6	11	0250	1.0	0.3	26	0213	1.0	0.3	
	0659	6.6	2.0		0719	5.9	1.8		0830	6.6	2.0		0811	5.9	1.8	
FR	1352	0.0	0.0	SA	1353	1.0	0.3	MO	1512	0.3	0.1	TU	1434	0.7	0.2	
VE	1946	6.2	1.9	SA	1959	5.6	1.7	LU	2103	6.6	2.0	MA	2038	5.9	1.8	
12	0211	1.0	0.3	27	0159	1.6	0.5	12	0340	1.0	0.3	27	0255	1.0	0.3	
	0754	6.6	2.0		0757	5.9	1.8		0916	6.2	1.9		0850	5.9	1.8	
SA	1444	0.0	0.0	SU	1428	0.7	0.2	TU	1557	0.3	0.1	WE	1512	0.7	0.2	
SA	2038	6.2	1.9	DI	2035	5.6	1.7	MA	2145	6.2	1.9	ME	2115	5.9	1.8	
13	0308	1.0	0.3	28	0237	1.6	0.5	13	0429	1.0	0.3	28	0340	0.7	0.2	
	0847	6.6	2.0		0835	5.9	1.8		1001	5.9	1.8		0931	5.9	1.8	
SU	1534	0.0	0.0	MO	1504	0.7	0.2	WE	1641	1.0	0.3	TH	1552	0.7	0.2	
DI	2127	6.2	1.9	LU	2110	5.6	1.7	ME	2226	6.2	1.9	JE	2153	5.9	1.8	
14	0404	1.0	0.3	29	0317	1.3	0.4	14	0518	1.3	0.4	14	0358	1.0	0.3	
	0937	6.2	1.9		0913	5.9	1.8		1045	5.9	1.8		0937	5.9	1.8	
MO	1624	0.3	0.1	TU	1540	0.7	0.2	TH	1725	1.3	0.4	TH	1607	1.3	0.4	
LU	2214	6.2	1.9	MA	2146	5.9	1.8	JE	2307	5.9	1.8	JE	2153	6.2	1.9	
15	0459	1.3	0.4	30	0400	1.3	0.4	15	0607	1.3	0.4	15	0440	1.0	0.3	
	1025	6.2	1.9		0952	5.9	1.8		1128	5.2	1.6		1019	5.6	1.7	
TU	1714	0.7	0.2	WE	1618	0.7	0.2	FR	1811	1.6	0.5	FR	1645	1.6	0.5	
MA	2258	6.2	1.9	ME	2221	5.9	1.8	VE	2349	5.9	1.8	VE	2232	5.9	1.8	
				31	0447	1.3	0.4					31	0507	0.3	0.1	
					1031	5.6	1.7						1044	5.6	1.7	
					1659	1.0	0.3						SU	1722	1.3	0.4
					2259	5.9	1.8						DI	2258	5.9	1.8



ALL TIMES ARE AST





NEXT DEADLINE

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