THE HALIFAX FIELD NATURALIST



No. 115 June to August, 2004



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

is incorporated under the Nova Scotia Societies Act and holds Registered Charity status with Revenue Canada. Tax-creditable receipts will be issued for individual and corporate gifts. It is an affiliate of the Canadian Nature Federation and an organisational member of the Federation of Nova Scotia Naturalists, the provincial umbrella association for naturalist groups in Nova Scotia.

OBJECTIVES are to encourage a greater appreciation and understanding of Nova Scotia's natural history, both within the membership of HFN and in the public at large. To represent the interests of naturalists by encouraging the conservation of Nova Scotia's natural resources.

MEETINGS are held, except for July and August, on the first Thursday of every month at 7:30 p.m. in the auditorium of the Nova Scotia Museum of Natural History, 1747 Summer Street, Halifax. Meetings are open to the public.

FIELD TRIPS are held at least once a month, and it is appreciated if those travelling in someone else's car share the cost of the gas. All participants in HFN activities are responsible for their own safety. Everyone, member or not, is welcome to take part in field trips.

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

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

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HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

I imagine that all of us joined HFN because of our love of nature – the sun dappling through leaves; canoeing rivers on foggy mornings; the birds, butterflies, and insects; and the many other living things in our magnificent, natural environment that keep us sane from our crowded urban communities. It's more fun to share this cornucopia with other like-minded souls – on field trips, in our talks and slide presentations, and in this newsletter. Communication, preservation, and appreciation of our natural surroundings is important, not only to our own well-being, but for the well-being of those who'll follow.

HFN trip and talk write-ups are enjoyed by those who can't attend them. Those write-ups more in the enthusiastic 'praise of nature' vein are just as welcome as the more elaborate jottings and species records of our excursions. They are a refreshing and needed contrast, (not only to write but also to read), to the longer submissions, with their more detailed lists of field observations. But, these latter are important to provide data for measuring the presence of flora and fauna under increasing human encroachment. Therefore, copies of our newsletter go both to the Nova Scotia Museum of Natural History, and also to the National Library in Ottawa.

On June 8, an overcast morning denied us observing Venus's transit across the sun; but we will have another chance to see it eight years from now. Last quarter, in the March dusk, I missed the planetary grouping of the Moon, Mercury, Venus, Mars, Jupiter, and Saturn; but, at the turn of this year, the same grouping will be visible just before sunrise. In the coming months, I'll make sure that no matter what duties call, weather permitting, I'll look for both the Perseid showers in August, and then the crescent moon with Venus and Saturn in the pre-dawn sky on the 10th to the 12th of September (Almanac – p. 17).

In this issue there's all you ever wanted to know about beetles (Talks, p. 10); a wonderful story of the annual Crane Migration (Field Trips, p. 14); two timely reviews on weather/gardening books (Natural History, p. 16); and lots more.

- Stephanie Robertson

HFN DRAGONFLY FIELD CHECKLIST PUBLISHED

At our May monthly meeting, Peter Payzant announced the publication of the field checklist, <u>Dragonflies of Nova Scotia</u>, and had also brought a goodly supply to sell to that meetings' participants and HFN members. Listed are 33 damselfly species, and 88 dragonfly species! This is a companion publication to our <u>Butterflies of Nova Scotia Field Checklist</u> published several years ago.

Thanks and kudos go to Paul Brunelle for his many, many seasons of original dragon/damsel-fly field research, and to the valuable data of the Atlantic dragonfly Inventory Program (ADIP).

The price is the same for both lists, 50 cents, and they will be available at our next several monthly meetings, or at the front desk of the Nova Scotia Museum of Natural History. The butterfly list is yellow; the dragonfly list is green.

They are easy to carry around with field guides and are a useful addition to any field pack.

- Stephanie Robertson



'ROLAND'S' EARLY EDITIONS

There are still some copies left of the 1966-69 edition of The Flora of NS by A.E. Roland and E.C. Smith at the Nova Scotian Institute of Science. This two-volume older edition is compact, transportable, and a bargain at \$15.00. This will be our last announcement for these valuable books.

Details are on the Nova Scotian Institute of Science's website, http://www.chebucto.ns.ca/
Science/NSIS/Home.html>. In addition to the above, there are more publications available from NSIS, c/o the Killam Library. The address is: NSIS, c/o Science Services, Killam Library, Dalhousie University, Halifax, N.S., B3H 4H8; or telephone 494-1101; or email <slongard@is.dal.ca>.

- Stephanie Robertson



PARKS ARE FOR PEOPLE

The 2004 'Parks are for People' Summer Programme is now available; it outlines all of their approximately 90 events from May to October; there are sure to be one or more you'd like to join in.

The centre spread has a very useful map showing the most popular provincial parks to visit.

For more information and to obtain a brochure of all of our provincial parks, phone 902-662-3030.

NEW AND RETURNING



Kyoko and George Archibald
Milton & Norma Gregg
Richard Hartland-Rowe
Dr. Jeremy Lundholm
Heather MacLeod
Nancy Meinertzhagen
Helen Smith

SPECIAL REPORTS

PRESIDENT'S MESSAGE

"We come and go but the land is always there and the people who love and understand it are the people to whom it belongs for a little while."

- Willa Cather

As we move forward into our new HFN year the above words are thought-provoking. They push us to a sense of urgency in encouraging a greater appreciation and understanding of Nova Scotia's natural history.

We are blessed with a great biotic diversity – from sand dunes to salt marshes, cliffs to hardwood forests, lakes to the ocean. There is an abundance of life forms yet few among us are equipped to recognise or adequately appreciate this diversity.

It is interesting to review the history of HFN and to appreciate the values and the tenacity of the founding members and those who have been such a driving force through the years since the early 1970s.

Here's a quote from the "History of the Halifax Field Naturalists", Issue #80, Sept-Nov, 1985:

"The seventies were years of growing public awareness of dangers to the environment: over-development; acid rain; deforestation; toxic waste; and chemical pollution. HFN played a small part in educating the public through lectures, field trips, and submissions on these problems." (I guess these issues haven't gone away, have they?)

Our newsletter and quarterly activity programmes reflect our continuing interest and work committment, but we need your support in providing suggestions for programmes and in encouraging your friends and neighbours to join us at HFN. We want to expand our membership as we continue to play our part at a time when our natural world seems under attack from many sides.

We look forward to seeing you and your friends at our meetings and field trips. Have a wonderful summer.

- Elliott Hayes



A TRIBUTE TO COLIN STEWART

On March 15, 2004, Nova Scotia lost a champion for nature conservation when Colin Stewart passed away, less than one year after having been diagnosed with pancreatic cancer. He was 50.

Born in Ottawa and raised in Toronto and Winnipeg, Colin and his parents moved to Halifax when he was still a teenager. After graduating from Dalhousie University with an Honours B.Sc. degree in Biology with a focus on ecology, he worked with Fisheries Research in St. Andrews, N.B. before pursuing a career in environmental research and consulting.

Colin was best known for his service as Nova Scotia Coordinator for the World Wildlife Fund's Endangered Spaces Campaign. During his tenure, Colin was instrumental in the securement of 31 Protected Wilderness Areas encompassing over 287,000 hectares and representing many Nova Scotian ecosystems. He worked tirelessly and passionately towards this goal, lobbying politicians and bureaucrats for the protection of these special areas.

Many of Colin's accomplishments came about through his passion and respect for nature and his love of the outdoors. His recreational activities included hiking, cycling, canoeing, and cross-country skiing. Colin and his wife Betty loved to travel, often back-packing and camping in remote locations in Canada, the U.S., and overseas, then sharing these memories with friends and fellow naturalists.

Colin spearheaded the establishment of the Piping Plover Guardian Program in Atlantic Canada; chaired the 'Trails for Tomorrow' conference which gave birth to the Nova Scotia Trails Federation; and also played a lead role in the formation of the Federation of Nova Scotia Naturalists, the Nova Scotia Nature Trust (a land trust), and the Atlantic Chapter for CPAWS.

Colin had a special gift for bringing diverse interests together to work for common goals. His was the clear voice for the protection of natural areas, and he was able to communicate this effectively to others who had differing points-of-view through a dialogue of mutual respect and trust. Colin sought solutions based on science and truth, not confrontation.

As president of the Friends of Hemlock Ravine, Colin negotiated with the developer of an adjoining sub-division to avoid altering drainage patterns into the ravine. During the process, he was able to secure an additional piece of woodland! Colin also worked on management plans for several other HRM parks including Long Lake Provincial Park, McNabs and Lawlors Islands, and Point Pleasant Park.

In a chapter of the book <u>Protecting Canada's Endangered Spaces</u>, Colin wrote: "As a consequence of the fisheries' collapse, those of us living on the shore of 'the sea without fish' now appreciate the need to help the ocean replenish itself. Have we learned the same lesson for the land?"

In November 2003, Monte Hummel, president of

World Wildlife Fund Canada and long-time friend and colleague of Colin, was the keynote speaker at the Nova Scotia Nature Trust annual dinner. They had walked together earlier on that day, examining the hurricane damage at Point Pleasant Park. Later, at the Trust's dinner, Monte recalled, "There was a touching slide presentation, and in the reflected light I saw Colin leaning against the wall watching the fabulous images of Nova Scotia wilderness. I felt very privileged and honoured to be in that room at that moment."

Colin received a number of honours and awards over the past year – the prestigious Douglas H. Pimlott Conservation Award from the Canadian Nature Federation, the Colin Stewart Award for Conservation in Nova Scotia (created by the Halifax Field Naturalists to commemorate his 20+ years of conservation work on behalf of HFN and the province), and other special awards from the Eastern Canada Piping Plover Recovery Team and the Friends of McNabs Island.

Long-time friend and fellow conservationist Raymond Plourde, Wilderness Coordinator for the Halifax-based Ecology Action Centre, noted, "Nova Scotia has lost a giant in conservation...but we certainly haven't lost the evidence of what he did."

Even though severely weakened by his illness, Colin continued to work on what was to be his last major challenge – the remediation and restoration of hurricane Juan-devastated Point Pleasant Park.

- Bob McDonald



2004 CNF CONFERENCE

The Club d'Ornithologie du Madawaska hosted two execllent meetings; both the New Brunswick Federation of Naturalists' (NBFN-FNNB), and the Canadian Nature Federation's (CNF-FCN) conferences and AGMs.

Motions for name changes were passed on Friday, May 28, when the NBFN's AGM took place from 2:00 to 4:00 p.m., and the CNF's AGM from 7:00 to 9:00 p.m. A wonderful BBQ was enjoyed by all between the two events.

With so many field trips and slide presentations it was a busy few days! The group was extremely well

organised, and kept all the comings and goings running smoothly, with the main emphasis being on hosting enjoyable and informative events.

I attended as many field trips as time allowed. I loved all of them, especially the botany trips to spots along the Saint John River on two different days. Having New Brunswick experts such as Sean Blaney, Jim Goltz, Gart Bishop, and Nelson Poirier, and our own Jean and Barry Sawyer along, ensured complete botany experiences.

As part of the post-conference, yours truly climbed to the top (yes, the top) of Mount Carleton. Eight began the climb – three went all the way to the rocky summit. The trails of Mount Carleton Park will eventually be linked to the Appalachian Trail by means of a spur off the main trail.

About three quarters of the way along the Mount Carleton path, a very sick thrush was found. Pierrette Mercier, one of the trip leaders and a veterinarian, placed it carefully off the path, supported it with soft vegetation, and placed a bottle cap of water within it's reach. When we returned, the bird's condition had worsened greatly. It was decided it should be taken back and sent to Becky Whitman, CWS's Bicknell's Thrush person. We were fortunate in having Roy Lapointe as a leader. As a volunteer Roy works with Becky on Bicknell's Thrush surveys. Since Graycheeked Thrush is only sometimes seen in New Brunswick during migration, it's possible our group of eight is among the very, very few who've seen a Bicknell's 'in the hand'. The bird was a female with no formed eggs, and was 'fat'. Pierrette said it was suffering from convulsions. Among the possible causes mentioned was the dreaded 'West Nile'. Much hand washing followed our Bicknell's Thrush experience!

On the banquet evening, everyone's attention was focused on the posthumous presentation of The Douglas H. Pimlott Award to Colin Stewart. You could have heard a pin drop! Many of Colin's accomplishments were listed, and the tributes were glowing. In her acceptance speech, Colin's wife, Betty Hodgson-Stewart, mentioned Colin's modest attitude, which stayed with him to the end. For example, when the awards were coming in he often said to Betty, "Why? I really didn't do anything." That was Colin.

Martin Willison and Gart Bishop were chosen for Nature Canada's very special Volunteer Awards for 2004. Martin's dedication and effectiveness in his many endeavours for the good of Nova Scotia were lauded. Gart Bishop's special interest is botany and he devotes a great deal of effort to work both in the field and in education.

In his conference speech, a Parks Canada person mentioned that, beginning next year, Parks Canada will make \$5,000 available to naturalist groups to take people into Canada's National Parks. How about Pacific Rim? Gros Morne? Point Pelée? One of the far north parks? Lots of exciting possibilities here!

A final note – the Club d'Ornithologie du Madawaska has a membership roster of 49, and they hosted 130 conference attendees!

- Bernice Moores

TALKS

HFN

AGM & SLIDES



4 MARCH

As usual, Members' Slide Night followed upon our Annual General Meeting. This is often an occasion to enjoy vicariously the trips made by some of our members. Three people showed slides, but more participation would be welcome!

Patricia Chalmers began with an account of her journey to the southeast coast of Labrador last summer on a week-long field expedition with the Wildflower Society of Newfoundland and Labrador. The highlight of the trip was visiting the island outport of Battle Harbour; here the group found a number of lovely sub-arctic and alpine species in a rugged landscape.

Keith Vaughan followed with some superb pictorial and landscape shots from his travels in the American southwest, as well as from Europe. Keith is a fine photographer and his shows are always an inspiration to those of us who try to capture the beauty of the natural world.

Finally, Shirley McIntyre showed some older photographs taken by Mary Primrose, a longtime member of HFN who passed away in 1998. These slides were all taken on HFN field trips, and we had fun identifying the participants (some of whom have changed in appearance over the years) as well as the locations. We were particularly touched by one shot of Colin Stewart, in a characteristic pose as he stood atop a huge glacial erratic.

When you are out and about this summer, do plan to take some slides to share with fellow members next winter.





CRABAPPLE PROJECT 1 APRIL

Carolyn Mont and Marjorie Willison gave an interesting and animated presentation about a 'CRABapple Mapping Project'.

Carolyn is a retired junior high school teacher with an active interest in using community resources as an educational tool; Marjorie, known to many as the 'garden lady' on CBC Radio, has a strong interest in community development in Spryfield. Together, the two of them are a force behind development of this project, an initiative which uses community assets to entertain and to educate children and adults in their own local natural history, thereby fostering vital environmental awareness and stewardship.

This project in Spryfield is community-based, and, no, it isn't about crab apples, nor the location of crab apple trees within the community.

The project began with a United Way 'asset map-

ping' workshop to locate and describe community assets in and around Spryfield. CRAB is an acronym for "Creating Roots and Branches" (throughout the community); 'Apple' is there because it seems to fit – and also – it links the programme to nature.

The project's initial foray was a series of maps in the local mall showing the community's assets. Public reception was very positive, with comments such as "Spryfield is so friendly", and "the community's access to nature is outstanding".

This was followed by the production of a quilt which illustrated the many things that make the community special. Each child in Elizabeth Sutherland Junior High School created one of the quilt squares on paper, and the squares were later translated into fabric quilt pieces and stitched together. Many young people in Spryfield have to cope with the 'grass is greener' syndrome and the natural fascination that youth everywhere have with things 'away'. Asking the junior high school students to contribute to the quilt was an attempt to show them, and other residents, that their own community is a great place to live and to explore. The quilt now hangs in the Captain William Spry Community Centre.

Another project idea was to encourage nature walks throughout the community by producing a number of brochures on local trails. Unfortunately, insurance problems forced distribution to stop, as folks might hurt themselves on the trails and then sue the project. Can you imagine?

One of the most popular initiatives of the CRABapple Mapping Project was evident on the tables at the front of the auditorium as Carolyn and Marjorie presented their thoughts to us – four or five backpacks filled with 'neat stuff'. Their idea was to help people explore nature and the Spryfield community in a way that wasn't totally structured, but that presented ideas and activities that would be truly interesting.

The backpacks were the answer to the proverbial city slicker's question – "Well, here we are on a nature walk, so what do we do now?"

The main item in each backpack was a loose-leaf binder filled with acitivities and ideas such as what items to bring along (many of these suggested items were included in the backpack itself – binoculars, a magnifying glass, a collecting jar, a dip net, etc.); what to look for in a treasure hunt; descriptions and pictures of critters relevant to the nature area (ants, frogs, turtles, birds, and so on); puzzle word searches; animal signatures (including tracking information); how to do leaf rubbings; memory card games; food chain descriptions; information on edible and poisonous plants; jigsaw puzzles; how to press leaves; drawings of plants; and – well, you get the idea.

There are eight different types of backpacks (assuming I counted correctly) for different nature walks

and things to do in barrens, old fields, forests, ocean shores, ponds, bogs, rivers and streams, and backyards and streets.

The backpack kits can be borrowed from the library and some schools. In fact, they are so popular that 20 kits are being provided to each school in the Spryfield area, courtesy of funding from the Chebucto South Community Health Board.

Thanks to Carolyn and Marjorie for an interesting evening, and for great ideas that those of us who entertain little ones can use. Each home should have a few such kits!

- Allan Robertson



NS NATURE TRUST

6 MAY

Our speaker in May was Jennifer Pinks of the Nova Scotia Nature Trust.

Ten years ago, a group of conservationists founded the Trust, with the mission to protect significant natural areas on private land. This was in response to the concern that some 70 percent of Nova Scotia was privately held and subject to development. Only Prince Edward Island has a greater proportion of its land in private hands, at 95 percent.

In Nova Scotia, most of the crown land is in forestry leases, with only 27 percent protected in one way or another. This means that it is important to protect privately held land, and this is just what the Nature Trust is doing.

In the past ten years, they have acquired twelve conservation properties comprisinging 2,500 acres (1100 Ha). These 12 properties include three acres of tidal salt marsh, and also the 590 acres of the Gold River Lake Conservation Lands near Bridgewater. They also have acquired some coastal islands – property which is fast rising in price.

The Nature Trust uses three methods to acquire property: outright purchase; donation; and conservation easements. Selection decisions of properties to acquire is not taken lightly. The Trust has to be very careful, because selection and acquisition is the beginning of a long-term commitment. An ecological ranking system is used to decide whether a given property is desirable, and recommendations are reviewed by several committees and individuals before a decision is made to proceed.

Purchasing a property means that the Trust buys it outright, after raising the necessary funds. Donations are gifts of land to the Trust, following which the Trust takes ownership. The first of these were the Brothers Islands near Parrsboro; the most recent is the Captain Arnell Conservation Lands in Purcell's Cove, an attractive green space inside the Halifax Regional Municipality.

Conservation easements, the third way that the Trust protects land, are an agreement between the owner and the Trust. The owner retains their ownership, but legal agreements place permanent limits on the types of use that can be made of the land in order to protect its conservation values. The agreement becomes part of the property deed. There is an impact on the value of the land, but there may be partial compensation in reduced property taxes. This is a lengthy process which can take several years to conclude. Examples of lands protected in this way include the Ship Rock Islands Conservation Lands near Murphy Cove on the Eastern Shore (38 acres), and Sight Point near the town of Inverness (275 acres).

The Trust has three projects under way at the moment:

Conservation without Borders – this is designed to protect priority sites on land owned by Americans. The Trust is working on a tool kit to facilitate cross-border gifts of land.

Plants on the Edge – this second project attempts to educate landowners on how to minimize threats to the 64 Coastal Plain plant species in Nova Scotia. These include plants such as the endangered Pink Coreopsis, which in Canada only occurs in Yarmouth County.

Coastal Conservation Project – this project works on preserving Nova Scotia's coastline. At the moment, less than five percent of our shoreline is protected. There is a real urgency here, given escalating land prices. The first year of this project concluded with two properties being protected; one at Musquodoboit Harbour (including some coastal islands), and the other at Chedabucto Bay.

Finally, the Trust is operating an outreach programme with the goal of raising awareness among both landowners and the general public. The Trust is trying to encourage landowners to take an active role in stewardship, particularly in coastal plain areas. They have contacted more than 900 landowners in the last ten years. Non-binding Stewardship Agreements are awarded to landowners who agree to protect the natural area of interest, to notify the Trust if they plan to sell, and to notify the Nature Trust if the use of the property (or surrounding lands) changes in such a way as to negatively affect the natural area.

The Nova Scotia Nature Trust is taking an active role in preserving what is left of the wild areas of the province, and for this they deserve the support of all of us.

Jennifer Pinks reminded us once again just how effective their work is, and I believe that the audience was both impressed and grateful.

- Peter Payzant



APPALACHIAN TRAIL 3 JUNE

Gordon Warnica gave a spirited and humorous presentation at our June meeting about hiking the Appalachian Trail last year. Gordon is an Industrial Engineer in his mid-fifties who ascribes to Forrest Gump's outlook... "At least I didn't lead no humdrum life". And, judging by the sound of his chat about the Trail, Gordon doesn't. He presented an entertaining, comical, and beautiful slide and music show of hikers, scenery (fantastic mountain view shots), animals, flora, memorable outhouses, and much more.

The Appalachian Trail starts in Springer Mountain in Georgia, travels through 14 states, and ends in Katahdin, Maine. Although people travel the Trail in both directions, Gordon and his group hiked it from South to North in order to follow the Spring as the season unfolded. The Trail traverses high country; impassable during winter months, it opens in early Spring and closes in October, before winter sets in.

He had two companions – each, like Gordon, 'of an age' – but in very good shape. And if they weren't in good shape when they started, they surely were when they finished. Gordon weighed 178 pounds before the hike in March, 2003, and by the time he finished in September, he had walked almost 2,200 miles and his weight had dropped to 138 pounds! Also, Gordon says he used to be a bit of a 'Type A' personality, but with all that constant walking and physical exertion, he lost that characteristic. He told us that about 2,000 people start the Trail each year, but only about 350 finish it. Roughly 20% drop out within the first three days as they realise that a hike of that magnitude is not for them, at least not that year.

Trail hikers come from all over the world. Most, (about 65%), are young – under the age of 30. The 30- to 50-year age range is quite under-represented, at only about 10%, and the remaining 25% are over 50. The split as to gender is about 55% male, 45% female. Many young women travel alone or in groups, and experience no harassment or danger.

Walking the Appalachian Trail is not like camping; his group averaged 13 miles a day of hiking, usually with packs on their backs. On a typical day they hiked from about 7:00 in the morning until midafternoon. They had originally planned for a 180-day hike, but it took them only 161 days, with a two-week home-break in mid-May. Some hikers move very quickly indeed – the record is 46 days from start to finish. One couple in their 70s that they met had averaged eight miles a day.



Much of the Trail was established in the 1930s, some if it the recipient of 'make work' projects during the depression, when those without jobs learned a trade while producing something worthwhile. There are bridges of all types and sizes on the Trail, ranging from simple wooden A-frames over small gorges, to million dollar pedways passing over four-lane highways. There are also a plethora of imaginative outhouses ranging from the very basic 'do it here behind this barrier' utility, to luxurious structures offering solar-powered ventilation fans.

From year to year Trail managers introduce jogs in some spots to reduce erosion, as the consequence of thousands of boots walking along a given path up a hill can be significant enough to turn it into a new stream bed.

There are frequent white blazes marked on trees, rocks, and signs – perhaps one every minute or so of hiking – so getting lost is not a problem unless one works at it. Some sections of the Trail contain stiles to keep animals from passing through farmers' fields, but they allow access to people (with a bit of climbing over the stile).

Much of the Trail is at 5,000 feet or more as it traverses along the Appalachian Mountains, and since most major roads cross the mountains in low-level passes, crossing them usually means a descent and an ascent. And, since many towns are near low-altitude rivers, when hikers visit towns to buy supplies or eat in a restaurant in unaccustomed splendour, it invariably means more descents at day-end and then re-ascents back to the 5,000 foot level after breakfast – a great way to start the day!

Planning for the hike was critical, and Gordon used the internet extensively. There are a number of websites about the Trail, and lots of advice and guidance is available from those who have hiked it previously (some hikers do the Trail every year). He had to arrange for food drops (mailing food parcels ahead) to minimise the amount of food they had to carry, and he developed a detailed spreadsheet to ensure that bad planning wouldn't result in the group going hungry.

Their Trail clothes were made from very light and serviceable material, and they took only one change of clothing in order to keep pack weight to an absolute minimum. Gordon showed us his trail jacket (Frogg Toggs – you can check it out on the website of the same name) that weighed less than a pound. It was water-proof, wind-proof, and reportedly very warm. In the first 70 days of their hike, they experienced rain for 56 of them! As an interesting aside under the discussion of weather, Gordon saw one person hiking in bare feet in 0°C!

He himself used good, high-top sneakers at the start of the hike, and when those gave up the ghost he transferred to standard sneakers (which he was still proudly wearing as he spoke to us).

Their packs held about 50 pounds at the start of the hike, and had been cut down to about 35 by the end, as they learned how to minimise their requirements.

Reducing pack weight meant some folks went to extreme lengths – like sawing off or drilling holes in the handles of their toothbrushes! At the start of a typical hiking section, a pack would contain enough food for five or six days which would last until a store or a food-drop was reached. A favourite strategy was to 'slack-pack', where an arrangement was made with a driver to take their packs by car to the next stop. Gordon said slack-packing was wonderful – like taking a day off.

Breakfast would consist of oatmeal, dried eggs, bagels, butter, and perhaps cheese. Rice, potatoes, or pasta, along with meat (dried turkey was a favourite) and other vegetables, was typical dinner fare. Snacks of nuts, fruits, and chocolate were always welcome. One-third of an apple was considered a treat, but it was only a third, of course, because apples are very heavy to carry. Gordon pointed out that hikers can eat huge amounts of virtually anything they please, and they're almost guaranteed to burn it off as they travel. He learned not to take tea at dinner, however, as it usually meant night-time 'journeys' that weren't necessary if he took hot chocolate instead.

The hikers either had to take their water with them, or bring chemicals to treat the water they found on the Trail. Since powdered chemicals weigh a lot less than water, the choice was obvious. The only time they didn't use chemicals to ensure their water was safe was when they used water to cook, since the cooking process took care of any possible nasties.

Shelters on the Trail consisted of hostels, lean-tos, tents, and occasionally hotels or motels. The hostels sometimes were characteristic of the location; log cabins or raw oak plank cabins were not uncommon. Tents were only used where there was no space in hostels or shelters, as one of the nice things about hostels is that they protect hikers from bears. When Gordon and his group occasionally arrived at shelters that were full; threats of bears (real or imagined) made sleeping in tents beside the shelters seem a bit adventurous. There are 240 shelters on the Trail, with the distance between them ranging from two to perhaps 15 miles. Most have journals for hikers to enter observations, advice, warnings, and other bits of wisdom.

Gordon and his companions used all four types of shelters: hostels for about 20% of the time; shelters for about 30%; tents for another 30%; and hotels for the remaining 20%. They preferred hotels if available (not very!) as splitting an inexpensive \$40 hotel room three ways was cheaper (and a lot more comfortable) than a \$15 hostel charge for each member of the party.

Gordon had beautiful slides of the flora that they saw – Trilliums, Hobble Bushes, Orchids, Jacks-in-the-Pulpit, May Apples, Mountain Laurels, many types of mushrooms, Spring Beauties, Rhododendrons, and an old oak tree 28 feet in circumference (that makes it about nine feet in diameter, by the way – a huge tree). He also showed us pictures of trees like

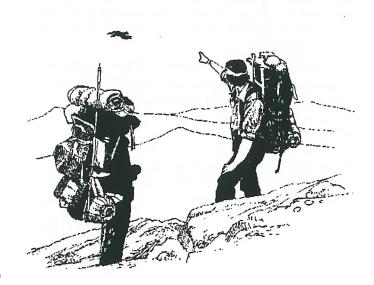
Charlie Brown's kite-eating tree – trees that had eaten wire signs, wooden signs, fence wire, and even other trees, as they had grown around them during their lifespans.

Animals they saw on the Trail included bear, beaver, snakes, fox, deer, lots of birds, and even wild horses. They didn't see *too* many rattlers, although the one that they *did* see they came upon quickly. It gave a warning rattle perhaps 15 feet away, giving them time to back away. Gordon then approached carefully and managed an excellent picture that he shared with us.

There are 'Trail Days' on the Appalachian trail – an event where for one day, locals celebrate the Trail with a festival of entertainment and good fun. Gordon and his companions were fortunate enough to be able to share in these celebrations and showed some pictures of the good fun.

Another welcome element of the Trail experience was something most of us had never heard of - 'Trail Magic'. And what, you ask, could that be? Well, Trail Magic is the name given to a programme of serendipitous occasions when generous folks leave gifts of food, drinks, firewood, and even dog food, in different spots along the Trail. For a tired, thirsty, and hungry hiker to come across these gifts - well - it is indeed like magic. Many drivers stop and offer rides to tired hikers even without being asked, and some carry extra water and rations to give to hikers when they come across them (more Trail Magic!). Local residents take Trail Magic quite seriously; one person who gave them food and water said he'd spent \$8,000 on supplying Trail Magic that year. In fact, Gordon and his companions were so taken with the concept themselves that they travelled by car to parts of the Trail the following year to provide some of their own Trail Magic to hikers.

- Allan Robertson



NSMNH

BEETLEMANIA

14 APRIL

NSMNH research associate Christopher Majka gave an in-depth talk on beetles – the Coleoptera – for a regular NSMNH Wednesday evening programme. Chris showed many very beautiful and colourful slides of beetles, all the while sharing both species specific and pandemic beetle information.

Fossil records show that beetles evolved in the early Permian age, about 230,000,000 years ago. They were a sort of proto-colepotera and were highly flattened. By the Triassic period they had mostly evolved, and by the early Jurassic there were even more species. But, during the Cretaceous period, there was an absolute explosion of different species because of the evolution of flowering plants. Beetles are still, to this day, important flower pollinators.

25% of all the world's animals, and 20% of all living things, are beetles! They are the earth's most successful life form because over millions and millions of years, as they spread out from settled habitats, they have adapted themselves perfectly to their every environment – even the smallest of specialised ecological niches – in the most efficient way. This is called adaptive radiation. For this reason they are a fascinating subject for ecologists, and the population numbers of these animals are tremendous, with very, very many species.

Beetles are extremely responsive to their environment, and their presence can provide us with valuable information about it. They have short generation times (three to four weeks or more), and any environmental changes, whether global or local, affect beetles quickly. These are the most salient reasons that it is important to collect, preserve, and catalogue beetle species. It has been recorded that somewhere in the world, on one species of tree alone, 1,200 species of beetles were found, and 160 of those were specific to that type of tree!

There are 2,000± beetle species in Nova Scotia.

Beetles' metamorphose like most other insects. The stages are egg, larva, various numbers of instars, and then adult. They are sexually dimorphic, the males being usually smaller than the females but sporting larger antennae, important for finding females by detecting pheromones. The many different antennae shapes are diagnostic features of beetle species.



There are many diverse and showy modifications in beetle morphology; it is usually the male which is most colourful because it is an essential element of sexual competition for the females.

Beetle bodies have three main parts as other insects do, but those three parts consist of a head with its pronatum, a meso- and a meta-thorax, and an abdomen. They have complicated mouth parts, including teeth and jaws, but unlike our jaws, theirs move from side to side. They breathe through spiracles, small pinholes in their outer shells or exoskeletons, which allow air to pass in and out. They have many hearts, and an open circulation system; the blood is not enclosed in veins or arteries.

Beetles are unique insects in that their forewings have evolved into hard, but moveable, protective covers, or elytra, for their hind wings. They are diverse and colourful and are often used for jewellry; we viewed a beautiful slide of a Peruvian necklace decorated with stiff beetle wing covers and bat skulls. Many beetles carry different kinds of mites; they are hitching rides to suitable habitats.

Beetles use different strategies for protection, defence, and offence. One of these strategies is mimicry, and there are different kinds: cryptic mimicry – looking like something else such as leaves, bark, or fæces; Batesian mimicry – looking like something else which is recognised as dangerous by other insects and animals, such as a wasp; and Müllerian Mimicry – many different species displaying a similar pattern which potential predators have learned to avoid.

Beetles can also sport aposematic colouration – a warning sign of a bad taste to predators, (a good example of this is the colouring of the blister beetle, which produces cantharides, or Spanish fly, an intensely burning chemical); disruptive colouration – which makes the beetle look like something else other than a beetle; and startling colouration – which is frightening enough to scare away predators.

As for specific species and some tidbits of their behaviour, we were first shown a few distinctive, long-nosed weevils (one of my favourites), of which there are 100± species in Nova Scotia. Weevils are the second most abundant beetle species in the world.

Then there were the scarab beetles, including the flower chafers which we have here in Nova Scotia. Our June-beetle, or June-bug, is a scarab.

We also saw some beautiful, Chilean stag beetles with their large horn-like front appendages. These fierce looking horns are used in jousting matches to win females.

The click beetles are an interesting family; we have *Pseudanostrius* sp. here in N.S. There is a beautiful one, *Ctenucera kendalli*, with a black head, long yellow body stripes, and black-tipped elytra. It had very feathery antennae. Click beetles are so-called because they have a small, muscled chest spur, which, when the beetle lands on its back by mistake, can be used to flip it over again, and it makes a clicking sound as it does so.

Jewel beetles (Bupestridae) are very diverse and sport a wide range of beautiful metallic colours. There are many of them in Nova Scotia; they like decaying wood.

The biggest beetle species, Titanus giganteus, a long-horned beetle, is 25 - 28 cm in length and weighs in at an impressive 8 - 10 ounces! The smallest is Acrotichis sp.; one of them is about 1 mm in length. There are about 15 species of these latter beetles in Nova Scotia, and their wings look like feathers. The smallest is Cylindrosiloides dybasi - the adults are only 6 mm long x 0.25 mm wide! They also have feathery wings, and are small enough to live in the polyphores of treebracket fungi. As an example of the many diverse beetle shapes, we saw a Javan fiddle beetle. It has a flat body for hiding under bark. This flat shape is the most ancient of beetle forms, and it evolved 230,000,000 million years ago, in the Permian Age.

Whirligig beetles live on the surface of water and can also dive under it. They are predators, opportunistic scavengers, and are very specialised. For instance, because of the different refractive indices of air and water, these beetles have evolved 'split' eyes – each section has a separate index of refraction to enable it to spot predators both in air and in water. There are two genera of these in Nova Scotia; one has four species and the other has 12±.

We saw a lumpy looking, black *Bolitotherus* cornutus. It is a very long-lived beetle (four to five years), and is one of the forked fungus-beetles that lives in various bracket fungi in the Maritimes. Then there was the predacious diving beetle, *Cybister fimbriolatus*, which lives in the water. It has evolved adaptive, specialised pads on its front feet for hanging on to things underwater.





The rove beetles, Staphylinidae, the most diverse beetles, have dispensed with the usual long beetle elytera. They are therefore extremely flexible and nimble, and are the most complicated and least known of all the beetles. Some live with ants; the ants feed the beetles. There are 400 of them in Nova Scotia. They are found under bark, leaf litter, and with decomposing fungi.

Fireflies (Lampiridae) are beetles. They have specialised glands on their abdomens which produce luciferase, a chemical which gives off a cold light when mixed with another, luciferin. Each species has a particular flashing pattern, and there are approximately 12 - 14 species in Nova Scotia. They are very voracious, carniverous, and cannibalistic. Females of certain species imitate the flashing patterns of other species, in order to attract the males for a meal. Some click beetles glow in the dark as well.

Rhipiporid beetles parasitise bees, and live in their nests. There are some in this province.

Carrion beetles will team up together to excavate and then bury a small dead mammal; they then lay their eggs in the carcass for their hatching young to eat.

Dung beetles shape dung into balls, and then lay their eggs on them. In Australia, where there is a lot of domestic animal dung, the fact that the dung beetles there bury the fruits of their labours is very important. Without them, there would be a huge, fly-laden environmental problem of faeces everywhere! The behaviour of the dung beetles really impressed the ancient Egyptians. They saw a similarity between it and the sun rolling across the heavens. Thus the scarab, which is a dung beetle, became an important, highly memorable member of their pantheon. Like the rove beetles, some scarabs live with ants; they secrete substances which pacify the ants so that they can live together; there are some of these in Nova Scotia.

We saw boll weevils, which live in cotton boles; and lots of lady beetles, or ladybugs, of which we have both native and introduced species here. We also saw some tiger beetles, which are predators of sand insects; we have some of these as well.

Chris brought a very small sampling of some of his very large beetle collection, and re-iterated the important reasons that insects should be collected, preserved, and catalogued.

FIELD TRIPS

TREE IDENTIFICATION

Date: Saturday, March 27

Place: Frog Pond, Purcell's Cove Road

Weather: 2°C, damp, slippery, a few drops of rain

Participants: 29

Interpreter: Pierre Taschereau

Arriving a bit late, we joined Pierre and the other participants in the middle of a discussion about two very good publications for identifying trees in winter – Winter Keys to Woody Plants in Maine, U. of Maine Press; and New Brunswick Trees in Winter, A Field Guide, Government of Canada. Pierre was particularly fond of the drawings which illustrated the different significant characteristics of winter trees and shrubs in the former booklet, as they made winter recognition much easier.

Salient parts for winter tree/shrub/plant identification are the **buds** (shape, colour, placement on stem, texture); the **bark** (texture, colour, smell); **leaf scars** (placement, shape); whether there are any **remaining leaves/fruits/flowers** from the previous summer/fall; **habitat**; and especially for the conifers, **needle shape and numbers**, **tree shape**, **cones**, and **smell**.

Starting out along the very slippery semi-frozen inclines of the trail (so slippery that someone fell and cut their cheek), we bemused many of the local dog walkers with our numbers.

Pierre shared with us the difficulty of identifying the many stands of birches that we saw, as they will hybridise easily. Slight damage from Hurricane Juan was noted here and there along the wooded trail; the wind had opened up some areas of the woods to the light. Pierre said that the existing lichens on tree bark would now die in these areas, as there was no shade from any surrounding tree cover remaining for them, which they need.

He identified the stalks of the twining Bittersweet Nightshade (Solonaceae family – the same as tomatoes and potatoes), and Speckled Alder, recognised by the female buds and the remaining withered fruits.

We found a young Ash. The Ashes have diamond-shaped patterns on their bark and are very rough. Their buds, which are powdery on the outside, grow opposite one another on the twigs and leave a differently shaped leaf-scar than the Maples. The terminal bud on its twigs is also flat-sided, rather than round. On Red Maples, the bark is rough at the bottom and smoother towards the top of the tree, as we saw.

Winter beeches have distinctive, light-coloured, long and pointy buds, and we found a delightful and attractive very young stand of it. We also saw nearby a small copse of Japanese Barberry, a well-established domestic exotic for N.S. Having had a large hedge of this in our residence in Dartmouth many years ago, and seeing how its abundant berries attracted so many flocks of Bohemian Waxwings and other birds in the fall, I was not surprised to find that it had spread into this little park from the houses so close all around.

There were many wet areas along the trail around the pond, and in one of them, we found Canada Holly (it likes wet areas). There is also a True Holly, and a False

Holly. The latter is distinguished by its berry having a stalk with which it is attached to its stem. It was here, in a large area of open water near the shore (the pond was frozen enough to support a dog chasing ducks), that there were dried stiff stands of bulrushes among the other brown water shrubs, and a fairly large flock of Mallards and Black Ducks were frolicking and scrapping there amongst the weeds.

We saw White Pine (five needles per bundle), and distinguished a Balsam Fir from a Hemlock by its distinctive smell, and also by the lack of a little stem left on its small flat needles when they are pulled from its twig (Hemlocks do have a stem). Pierre mentioned the propensity for the Black and Red Spruces to hybridise, as well as the birches.

We saw Rhodora, Nova Scotia's native Rhododendron, on a damp area near shore (buds, distinctive flower remains); Leatherleaf, with its remaining, brown, leathery leaves; Bayberry, (small buds, distinctive bayberry smell); and Viburnum, or Witherod, with its last season's fruit remains, and the identifying mealy coating on its buds. Here we found another plant that likes damp conditions – Meadowsweet, or Spirea. This can become very dense in a favoured habitat. Sweet Gale, a relative of Bayberry, has alternate, not opposite leaves. We found False Holly by its remnant berries and overlapping bud scales with little white hairs, also, its distinctive stipule scar.

There were Red Oaks, distinct not only because of remaining leaves from the previous summer, but also because of their shape. Their leaves have sharplooking, pointed lobes rather than rounded lobes. Pierre cut some dead Red Oak stem pieces to show us how the xylem tubes in flowering trees become dry and hollow when dead. Air can be felt coming through by blowing, or one can immerse twigs in water and see bubbles being blown out. We also saw another identifying characteristic of the Oaks – large galls on the stems and twigs, the woody, round, protuberant growths that grow and harbour the larvae of ichneumon wasps after this insect lays its eggs there.

Yellow Birch was identified by scraping the bark of a recently dead twig, and smelling oil of wintergreen, the same smell as from Nova Scotia's teaberry plant. Also, Yellow Birch bark, as compared with the Paper Birch, does not come off in sheets. It has another interesting characteristic – very condensed rings on its tiny spur branches which look rather like little caterpillars!

We crossed a picturesque bridge where Pierre knew there were dense patches of Poison Ivy under the snow. Further along we found a young Hemlock, (and then spied a huge one further into the forest), by the presence of its distinctive little needle stem after pulling it from its twig.

We did see Indian Pear (aka Service Berry, Saskatoon Berry, and other names), of the genus Amelanchier. It will hybridise readily and has a distinctive ridge of white hairs on the edge of its bud scales. If one crushes an Amelanchier bud in the fingers, after a few minutes the smell of Oil of Almonds, or benzaldehyde, will be faintly detected. I've had these trees in several of our various

gardens, and have seen flocks of drunken Starlings in the late fall, after having feasted on the frozen, melted, and then fermented berries! These are one of my favourite berries (in the fresh state). We did not see any Poplars.

But we did find some Witch Hazel. Its buds are not opposite on the twig but alternate instead. The buds are naked, or smooth, and there are always dried remnants of the distinctive little 'exploded' flower shapes.

Just before the end of the trail reached Purcell's Cove Road again, sharp eyes spotted a very large Red Pine, deeper in off the trail, with its distinctive flopped-over top. Upon closer inspection, it was re-confirmed by its two-needle bundle, as opposed to the five-needle bundle of the White Pine.

Our trip lasted approximately two hours and serendipitously ended just as the rain began. Pierre's experienced knowledge, stories, and enthusiasm made it enjoyable despite the grey, the slippery icy sections, and the damp cold.

Thank you, Pierre, for this and many, many past informative trips.

- Stephanie Robertson

TREE IDENTIFICATION SPECIES

Plants

Bittersweet Nightshade Solanum dulcamara Speckled Alder Alnus rugosa Ash Fraxinus sp. Red Maple Acer rubrum Beech Fagus grandifolia Japanese Barberry Berberis sp. Canada Holly Illex verticillata True Holly llex sp. False Holly Nemopanthus mucronata White Pine Pinus strobus Red Pine P. resinosa Bayberry Myrica pensylvanica Leatherleaf Chamaedaphne calyculata Viburnum Viburnum cassinoides Sweet Gale Myrica gale Rhodora Rhododendron canadense Meadowsweet Spirea latifolia Red Oak Quercus borealis Yellow Birch Betula alleghaniensis Hemlock Tsuga canadensis Indian Pear Amelanchier sp. Witch Hazel Hamamelis virginiana

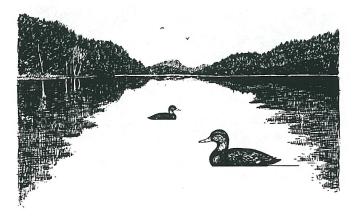
Birds

American Black Duck

Mallard Duck

Anas rubripes

A. platyrhynchos



CAPE SPLIT SPRING FLOWERS

Date: Sunday, March 30 Place: Cape Split

Weather: 2°, damp and rainy, a bit cold; windy!

Participants: 17

Interpreter: Leslie Butters

Those who braved the unseasonable weather to hike Cape Split this year were well-rewarded – with the most magnificent and copious drifts of wildflowers I have ever seen there. The forest floor was awash in myriads upon myriads of white Spring Beauty, the Red Trilliums were in great abundance, as were the Sarsaparilla. The trail itself was in fairly good shape considering the recent rains, with only a few mucky and slippery bits that were easily skirted.

We started out from the Museum with the people who'd met there to begin the trip, and although we waited at the Cape Split parking lot until nearly 10:30 for two of the signers-up (more joined us there for a total of 17 actual participants), we had to assume they had lost their way; we left instructions on one of the windshields, and hoped for the best. (In the end, at June's Thursday meeting, we learned from them they had turned back in their car and had not driven on to Cape Split.)

We had some new participants, as well as the old regulars, and all of us along the trail had to dust off our plant identification lore! I hadn't been there for several years, and it seemed that some new crevasses had been added to the breathtaking heights at the end of the Split.

There was a Peregrine Falcon floating in the wind near the nests and young of Black-backed Gulls on the separated island column at the end of the Split. There were about five or six downy but fairly large young nestlings over there, visible with binoculars. There were some fairly extensive shoots of immature Horsetail on this side of the point.

After more exploration of this magnificent and lofty promontory with its dangerous abysses, we trecked back a short way to the south side of the point, out of the wind and into the shelter of large conifers to eat our hard-earned lunch. As we sat down, a Black-throated Green Warbler alighted on a branch about three feet away from us!

On the hike back, most opted to descend on a very steep 'side trip' to the beach, to look for agates and amethysts; someone returned with a lovely piece of jasper. The two of us who waited up above were blessed with a Ruby-throated Hummingbird sighting. We also saw some Honeysuckle in that area.

It was an exhilarating and worthwhile trip. More plants and birds are listed below, along with Hans Toom's observations posted on Nature NS (with permission).

- Stephanie Robertson

Laura and I joined HFN for the Cape Split Spring Flowers hike. This 16-km trek, with intermittent showers and slippery trails, tested my commitment – but Laura kept me on course.

This first-time-for-us route was more diverse bird-wise than I expected. Warblers present were; Nashville, Parula, Magnolia, Black-throated Blue, Yellow-rumped,

Black-throated Green, Blackburnian, Bay-Breasted, Black and White, Redstart, and Ovenbird.

Vireos present were Blue-headed and Red-eyed. A White-winged Crossbill chattered briefly. At the split itself a Peregrine Falcon soared overhead. It seemed to emanate from a steep bluff on the south face nearest the split, suggesting perhaps a nest site. On the sea were a number of Black Guillemots, a Common Loon still in winter plumage, and a single Black Scoter. As a neophyte to wildflowers it was mostly new to me but on route were Spring Beauty, Saxifrage, Dutchman's Breeches, Red Trillium and Solomon's Seal, plus other stuff I surely missed.

Photographs from the trip are on my website; go to http://www.hanstoom.com/. The Peregrine Falcon silhouette is on the bird page, and the aforementioned wildflowers are the last four listed on the wild flower page.

> - Hans Toom **Nature NS**

CAPE SPLIT SPECIES

Plants

Maianthemum canadense Wild Lily-of-the-Valley Smilacina racemosa False Solomon's Seal Aralia nudicaulis Sarsaparilla Clavtonia caroliniana Spring Beauty Trillium erectum Red Trillium Thalictrum dioicum Early Meadow-rue Cornus canadensis Bunchberry Taraxacum officinale Dandelion Clintonia borealis Blue-bead Lily Gaultheria procumbens Teaberry Trientalis borealis Star Flower **Dutchman's Breeches** Dicenta cucullaria Mayflower Epigea repens Viola papilionacea Common Blue Violet Equisetum sp. Horsetail Lonicera canadensis American Fly-honeysuckle Cratægus sp. Hawthorn Chrysosplenium americanum Northern Saxifrage

Birds

Ruby-throated Hummingbird American Redstart Ovenbird Black and White Warbler Northern Parula Warbler Nashville Warbler Black-throated Green Warbler Black-throated Blue Warbler Magnolia Warbler Yellow-rumped Warbler Blackburnian Warbler Bay-breasted Warbler Blue-headed Vireo Red-eyed Vireo White-winged Crossbill Black-backed Gull **Black Guillemots** Common Loon Black Scoter

Peregrine Falcon

Setophaga ruticilla Seiurus aurocapillus Mniotilta varia Parula americana Vermivora ruficapilla Dendroica virens D. cærulescens D. magnolia D. coronata D. fusta D. castanea Vireo solitarius Vireo olivaceus Loxia leucoptera Larus sp. Cepphus grille Gavia immer Melanitta nigra Falco peregrinus

Archilochus colubris

BUTTERFLIES I

DATE: Saturday, June 12, 2004 PLACE: Uniacke Estate Museum Park

WEATHER: Cloudy; sunny breaks, 14°C, windy INTERPRETERS: Peter and Linda Payzant

PARTICIPANTS: 9

A cool, windy, and mostly cloudy day was our lot for this trip. It was cold enough that we had to actually flush the butterflies into flight most times, although some did take to the air on their own during extended sunny periods. It was far from ideal weather, and the results show it, but nevertheless we had fun.

In the field where the whale bones lie bleaching we got our first butterflies of the trip: a Spring Azure and several Silvery Blues. We had good looks at them both on the ground and in the hand, and the differences between these two species were noted by all. We talked a little about why each species was found where it was mainly due to larval food-plant specificity - and the means that the females use to make certain that they are laying eggs on the right food-plant. We also observed a couple of moth species and reviewed some of the differences between moths and butterflies.

Terry Paquet's quick eyes and even quicker reflexes allowed him to net a Brown Elfin - rather late for this tiny butterfly, which is so hard to see due to its colouration and erratic flight.

In the drumlin field we found our first Clouded Sulphur of the day. Unfortunately this one had a poorly-expanded hindwing and was a poor flier, but perhaps that made her easier to catch. We were able to see the tiny diagnostic spots which help separate this species from the scarcer Pink-edged Sulphur.

We then got in the cars and drove to the Pockwock Road. Here there were almost no butterflies at all, due to the wind and low temperatures, but we did get a good look at a Bee Fly and several Chalk-fronted Corporals. Predictably, as we were leaving, the clouds thinned significantly, but the wind didn't diminish!

We'll hope for better conditions on the Butterflies II trip.

— Peter Payzant

BUTTERFLIES I SPECIES

Bee Fly, family Bombyliidae

Lepidoptera Clouded Sulphur Brown Elfin Spring Azure

Silvery Blue **Dragonflies** Chalk-fronted Corporal

Colias philodice Incisalia augustinus Celastrina argiolus Glaucopsyche lygdamus

Libellula julia



Joan Czapalay, Marie Moverley, Linda Payzant, Wendy and Bob McDonald. It looks chilly!

SANDHILL CRANE SPRING MIGRATION

We all know that birders keep wish lists. 4

Some watch for a rare species to arrive in their area, some hope to visit exotic birding destinations, while others hope to witness a particular spectacle in the world of birds.

During early April of this year one of my wishes was realised when I travelled to Nebraska to view a migration stopover of the Sandhill Crane, *Grus canadensis*. This is one of North America's two largest wildlife migration spectacles (the other is caribou migration in the far north).

The crane spectacle has a long history; fossils found in Nebraska indicate Sandhill Cranes may have been around for six million years, making them the longest lived of the birds now on earth. But seven of the world's fifteen crane species are endangered, and an additional four may soon be added to the list.

Two crane species occur in Canada: the Whooping Crane, the most endangered; and the Sandhill, the most numerous. Sandhill Cranes stand about four feet tall and have a wingspan of six to seven feet, long legs, a long neck, and a bustle. They have a bare red patch on the forehead and crown, and their feathers are slaty gray in colour with blackish wingtips. They are indeed statuesque!

There are six subspecies of the Sandhill Crane. Mississippi, Florida, and Cuban Sandhills are non-migratory. But almost all of the 600,000 or so Greater, Canadian, and Lesser Sandhills do migrate, spending about six weeks on an eighty-mile section of the Platte River near Kearney, Nebraska where first arrivals are spotted in late February.

Migrating Sandhill Cranes winter in most of the southern United States and in northern Mexico. The majority breed in the northern states, Canada from Ontario to British Columbia and the territories, Alaska, and eastern Siberia. Their migration routes take the shape of an hourglass, the narrowest part being near Kearney.

I was part of a group of 29 led by Dr. George Archibald, a native of Sherbrooke, Nova Scotia, cofounder of the International Crane Foundation, and a world leader in the preservation of the cranes of the world and their habitats. Viewing took place at Audubon Nebraska's Rowe Sanctuary that provides an enclosed wooden blind near the river's edge with lots of room for 36 viewers. Field trips took place on two successive evenings beginning at 5:00 p.m., and on the morning between beginning at 5:00 a.m. The evening sights and sounds of tens of thousands of Sandhill Cranes landing in the shallow waters and on sandbars, as beautiful prairie sunsets filled the background, are unforgettable. The air was filled with clouds of cranes and their calls. After landing, many performed unison calls, as well as their elegant and graceful dances. Equally unforgettable was the morning visit, when the cranes' voices again filled the air as we arrived in the dark. But now the sounds were soft and coo-like, and their subtly different colours stunning as the light of day strengthened.

Strict rules to ensure the cranes would not be disturbed had been mailed to participants. These were

reinforced just before we were led to the blind – there was to be whispering only; no cell phones on; no flash cameras; no heads or pointing hands out the windows; and – only the Audubon person had permission to close and open the door. We were required to stay in the blind for two to three hours each time.

Roosting in the Platte's shallow waters, the birds feel safe from predators. Days are spent feeding on leftover corn, as well as invertebrates and small vertebrates in the surrounding cornfields. During their time here Sandhills increase their body weight by about 40%, renew pair bonds, and establish new ones. During preening they paint their feathers with the local reddish soil, providing effective nesting camouflage. This colouration lasts through the breeding season and was particularly noticeable to me on the morning trip.

From their Platte River stopover they fan out using different routes, completing 'the hourglass'. It is interesting that groups from each wintering ground choose particular nesting destinations. For example, those wintering in southern Florida nest in the Great Lakes states, while those from Texas nest in Ontario, Manitoba, and Baffin Island. One group winters in California, migrates through Oregon and Washington, and nests in northern British Columbia and southern Alaska. Those from northern Mexico fly to the Northwest and Yukon Territories, northern Alaska, and eastern Siberia, the last being a round trip in excess of 10,000 miles!

Threats to the Sandhill Cranes include conversion of land for agriculture and other developments, and changes to wetlands in their wintering, breeding, and migration habitats. Hunting is permitted in two provinces, twelve states, and Mexico. The most critical threat facing Sandhill Cranes, however, is steady reduction of the Platte River habitat. The Platte, a braided river originating in the mountains of Colorado, is historically described as being "a mile wide and an inch deep".

But the river is no longer "a mile wide".

Nearly three quarters of its water is used for town and city water supplies and irrigation, critically reducing migration habitat. And a continuing drought, now in its fourth year, has further reduced the river's water. The section used by the cranes in spring dried up completely last summer. One result is that the birds are much more concentrated during this stopover, increasing the danger of disease problems that could be catastrophic.

The International Crane Foundation and other non-government, as well as government, groups in Canada and the United States devote a great deal of effort and resources to the protection, restoration, and conservation of crane habitats, especially wetlands. Their methods include captive breeding and release, and education directed toward the general public – especially landowners, including farmers.

Let's hope that these initiatives, together with ongoing research by these groups, soon reduce and eventually remove man-made threats to these special birds.

My wish list continues to be rather lengthy and the wonders of migration one of my fascinations. While Sandhill Crane migration can now be removed from the list, Whooping Crane migration using ultra-light aircraft is making a strong pitch to take its place.

- Bernice Moores

NATURAL HISTORY

BOOK REVIEWS

WEATHERWISE

<u>Weatherwise</u> is a bi-monthly hobby magazine which is "informative, entertaining, and written for regular people, not scientists, although the information is top-notch" (Sally Roth).

It discusses unusual weather events and adventures, and summarises recent weather in different parts of the continent. It publishes photographs of weather phenomena and runs an annual photographic contest; past winners are on-line. Each edition runs a puzzle – a weather map to be read and interpreted – which is very good practice. (The answer is included.)

<u>Weatherwise</u>, a Heldref publication, is stocked by Atlantic News, Morris Street at Queen. For more information, go to <www.weatherwise.org>.

THE GARDENER'S WEATHER BIBLE

The Gardener's Weather Bible: How to Predict and Prepare for Garden Success in any Kind of Weather. This book is by Sally Roth and is illustrated by Michael Gellatly. It was published by Rodale Press in 2002, and has 305 pages (ISBN 0-87596-887-2).

Sally Roth is the author of <u>The Backyard Bird Feeder's Bible: the A-Z Guide to Feeders, Seed Mixes, Projects, and Treats</u>, which also contains gardening information, and which I reviewed in a previous issue of the Halifax Field Naturalist.

The Weather Bible, from its acknowledgements and introduction – "Oh boy! It's raining!" – to its reading and resources lists, ties gardening closely to the weather, and leads the gardener to become the chief interpreter and a local naturalist.

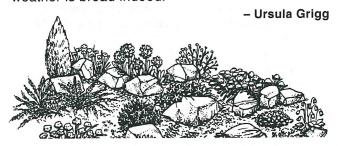
The book begins by describing the climate of North America. Canada is rather far north, but it fits naturally in this scheme. Then come ways of measuring and estimating conditions out of doors – from the modern aneroid barometer to the elegant old weather glass, and the self-emptying computerised rain gauge to the inscribed jam-pot. It's well illustrated, and sprinkled with bits of weather lore and sage advice presented with a grain of salt. It includes the Beaufort Wind Scale (pp. 38, 39), which is a 200-year old way of estimating wind speed from observation.

Having built up a small weather station for the reader, Sally Roth discusses forecasting with it. She provides plenty of 'science and common sense' (reads <u>Weatherwise</u> after all!), explains how to read the sky by day and night (with an illustrated table of cloud types on pp. 72-75), and tells how to forecast frost.

After this come four chapters on the seasons, with their presiding constellations, and lists of appropriate gardening jobs.

It ends with the behaviour patterns of birds and mammals, and butterflies and bugs, in relation to the weather.

This book is an entertaining read, packed with useful data, and well indexed (fortunately). It is a good companion to <u>The Backyard Bird Feeder's Bible</u>. The complex masses of information are well organised, but my copy soon had a row of bookmarks keeping track of topics – the science of weather is broad indeed.



The Beaufort Scale

/ind force	Wind name	Wind speed nph	Wind speed tm/h	Effects on surroundings
0	Calm air	0-1	0-1	Smoke rises vertically
1	Light air	2-3	2-5	Smoke is slightly bent
2	Light breeze	4-7	6-11	Leaves start to rustle
3	Gentle breeze	8-12	12-19	Leaves start to move
4	Moderate breeze	13-18	20-29	Small branches move
5	Fresh breeze	19-24	30-38	Small trees bend
6	Strong breeze .	25-31	39-49	Large branches move
7	Moderate gale	32-38	50-60	Large trees bend
8	Fresh gale	39-46	61-74	Twigs start to break
9	Strong gale	47-54	75-86	Roofs suffer damage
10	Whole gale	55-63	87-100	Trees are uprooted
11	Storm	64-75	101-120	Damage is widespread
12	Hurricane C)ver 75	Over 120	Severe destruction occurs

WIND-CHILL FACTOR CHART

		Air temp	erature in	Fahrenhei	t degrees		
		-20°	-10°	0°	10°	20°	305
	0	-20	-10	0	10		30
	5	-26	-15	-5	6		27
Wind	10						
Speed	15	-58	- 45	-36	-18		9
in	20	-67	-53	-39	-25		4
Miles	25	-74	-59	-44	-29		0
per	30	-79	-63	-48	-33		-2
Hour	35	-82	-67	-49	-35		-4
	40	-85	-69	-53	-37		-6



This almanac is for the dates re 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.

"Pity the poor creatures in warmer countries where the seasons never change, where summer is eternal and they never know the pain of waiting and the joy at last when summer comes."

- Ray Guy, "Catching Connors", in That Far Greater Bay, 1976.

NATURAL EVENTS

10-20 June The earliest mornings of the year; the sun rises at 5:29 ADT.

20 June Summer Solstice at 21:56 ADT; Summer begins in the Northern hemisphere. The longest day of the year, with 15 hours and 34 minutes of daylight at Halifax.

22-30 June The latest evenings of the year; the sun sets at 21:04 ADT.

2 July Full moon, and the Perigean spring tides will be very large.

17 July Canada's 'Parks Day' - look for events at local parks.

31 July Full Moon.

5-12 Aug. Average dates of the hottest days of summer (average daily maximum is 22.5° C.)

11-12 Aug. Perseid Meteor showers peak; the highlight will be the evening of August 11, before moonrise.

13 Aug. Average date for temperatures to start decreasing.

29 Aug. Full moon.

10-12 Sept. Pre-dawn sky features a crescent Moon, Venus, and Saturn.

22 Sept. Autumnal Equinox at 13:29 ADT; Fall begins in the Northern Hemisphere.

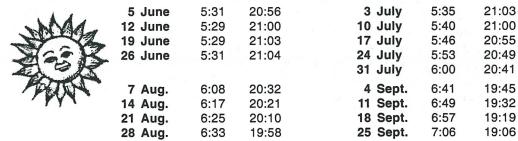
28 Sept. Full moon – this is the 'Harvest Moon'.

28 Sept. First anniversary of 'Hurricane Juan'.

30 Sept. Average date for first frost in Halifax (Environment Canada says that there is only a one in ten chance that we will have frost before this date). Look forward to 210 days of frosty weather.

 Sources: Atmospheric Environment Service, Climate Normals 1951-80 Halifax (Shearwater A) N.S.; Blomidon Naturalists Society's 2004 Calendar; Burke-Gaffney Observatory, Saint Mary's University.

SUNRISE AND SUNSET ON SUMMER AND EARLY FALL SATURDAYS



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

ORGANISATIONAL EVENTS

Blomidon Naturalists Society: Indoor meetings take place on the 3rd Monday of the month, Room 241, Beveridge Arts Centre, Acadia U., at 7:30 p.m. Field trips usually depart from the Robie Tufts Nature Centre, Front St., Wolfville. For more information, go to http://www.go.ednet.ns.ca/~bns/>.

21 June "Diversity beneath a Cold Ocean: Marine Life in the North Atlantic", with photographer Scott Leslie.

10 July "Early Summer Butterflies", with leader Jean Timpa, 542-5678.

11 July "BNS 30th Anniversary Celebration", with a BBQ (register at 542-2095), and a nature walk with Ruth Newell.

18 July "Rare Plants up the Gaspereau River", with leader Bernard Forsythe, 542-2427.

24 July "Dragonflies", with leader Tom Herman, 678-0383.

20 Sept. "Nature Conservancy of Canada".

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

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

- 19 June "Cumberland County", with leader Fulton Lavender, 455-4966. Rain date 20 June.
- 26 June "Lewis Lake Provincial Park Warbler Walk", with leader Hans Toom, 868-1862, httoom@hfx.eastlink.ca.
- 27 June "Eastern Shore", with leader Bob Lindsay, 434-3438, <rhlindsay@accesswave.ca>.
- 3 July "Cape Chignecto Birds and Botany Walk", with leader Joan Czapalay, 348-2803, <joancz@ns.sympatico.ca>.
- 11 July "Wallace Bay", with leader Paul MacDonald, 627-2568, com>.
- 24 July "Pictou County", with leader Ken McKenna, 752-7644(h), 752-0044(w), <kenmcken@north.nsis.com>.
- 1 Aug. "Mahone Bay", with leader James Hirtle, 640-2173, <jrhbirder@hotmail.com>.
- 7 Aug. "Taylor Head Prov. Park", with leader Karl Tay, 772-2287, <swallowhollow2972@hotmail.com>. Rain date 8 Aug.
- 21 Aug. "Point Michaud, Cape Breton", with leaders George and Sharon Digout, 535-3516, <george.digout@ns.sympatico.ca>.

 Rain date 22 Aug.
- 22 Aug. "Cherry Hill Beach", with leader Eric Mills, 766-4606, <E.Mills@dal.ca>.
- 28 Aug. "The Hawk, Cape Sable Island", with leader Murray Newell, 745-3340, <murcar@klis.com>.
- 3-6 Sept. "Bon Portage Island", with leader Joan Czapalay, 422-6858 (before Aug. 26), <joancz@ns.sympatico.ca>.

 Pre-Registration is necessary!
- 4 Sept. "Yarmouth County", with leader Murray Newell, 745-3340, <murcar@klis.com>. Rain date 5 Sept.
- 11 Sept. "Hartlen Point", with leader Bob Lindsay, 434-3438, <rhlindsay@accesswave.ca>. Rain date 12 Sept.
- 18 Sept. "Sandy Lake, Tantallon", with leader Suzanne Borkowski, 445-2922, <sborkowski@hfx.eastlink.ca>.

 Rain date 19 Sept.

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 free from the NSDNR, 424-4321; and at many museums; parks; and tourist bureaus; and on the web at http://parks.gov.ns.ca/programs.asp.

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

- 28 May-11 Oct. "Five Crows Silver". Five NS artists; their responses to crows and their close relatives; supplemented with research and specimens of the Corvid family, and their role in monitoring West Nile Virus.
- 1 June-31 Oct. "Sable Island Exhibit".
- 1 July-Sept. The Butterfly Pavilion reopens!
 - 1 Jul. "Canada Day Butterfly Social".
- 1 July-26 Sept. "Giants of the Sea: Leatherback Turtles", an exhibit by the Vancouver Aquarium Marine Science Centre.
 - 10-11 Jul. "The 50th Annual Provincial Rose Show", hosted by the Halifax-Westmoor Horticultural Society.
 - 14 Jul. "Botanical Ramble through the Public Gardens", with Museum botanist Alex Wilson. Pre-register, 424-3563.
 - 17 Jul. "Bat Walk" at Smiley's Provincial Park, with Museum zoologist Andrew Hebda. Pre-register: 424-3563.
 - 31 Jul. "Stream Saunter" at Smiley's Provincial Park, with Museum zoologist Andrew Hebda.
 - 7 Aug. "Lichen Hike" at St. Margaret's Bay, with research associate Frances Anderson. Pre-register: 424-3563.
 - **10 Aug.** "Family Butterfly/Dragonfly Hike" Uniacke Museum Estate Park, with research associate Derek Bridgehouse. **Pre-register, 424-3563.**

Nova Scotia Nature Trust: A series of walks looking at Coastal Plain Flora will be offered. For more info, 425-5263. Pre-register for each trip, 425-5263; or at <nature@nsnt.ca>; or with the leader listed below:

- 14 Aug. "Swaine's Road Bog, Shelburne Co.", with leader Dave McKinnon, 424-2027, <mackinds@gov.ns.ca>.
- 15 Aug. "Quinn's Meadow, Shelburne Co.", with leader Dave McKinnon, 424-2027, <mackinds@gov.ns.ca>.
- 21 Aug. "Gillfillan Lake Nature Reserve, Yarmouth County".

Nova Scotia Wild Flora Society: Meets 4th Monday of the month, Sept. to May, at the Nova Scotia Museum of Natural History, at 7:30 p.m. For more info, Carl Munden, 469-1856; or go to http://www.chebucto.ns.ca/~nswfs/>.

- 28 Jun. "Herring Cove Look-off, Halifax County." Contact Heather Drope, 423-7032
- 24 Jul. "Aylesford Mountain: N.S. Nature Trust", with leader George Alliston. Contact Barry Sawyer, 445-4938.

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

20-22 Aug. "Nova East 2004, Atlantic Canada's Longest Running Star Party", at Smiley's Provincial Park, Hants Co.

TIDE TABLE

151		J	uly-j	uill	et		· •	/ \ \ -	August-août								September-septembre						
Day	Time	Feet M	Metres	jour	heure	pieds	metres	Day	Time	Feet	Metres	jour	heure	pieds 1	metres	Day	Time	Feet	Metres	jour	heure	pieds	metres
1 TH JE	0050 0640 1255 1845	0.3 5.6 1.3 6.6	0.1 1.7 0.4 2.0		0130 0735 1345 1925	1.0 5.2 2.3 5.6	0.3 1.6 0.7 1.7		0225 0820 1445 2025	0.0 5.9 1.0 6.6	0.0 1.8 0.3 2.0	MO LU	0215 0825 1420 2020	0.7 5.2 1.6 5.9	0.2 1.6 0.5 1.8	WE ME	0335 0925 1605 2145	0.3 6.2 1.0 5.9	0.1 1.9 0.3 1.8	16 TH JE	0250 0855 1520 2115	0.7 5.9 0.7 5.6	0.2 1.8 0.2 1.7
2 FR VE	0145 0740 1355 1945	0.0 5.6 1.3 6.6	0.0 1.7 0.4 2.0	17 SA SA	0210 0815 1415 2005	1.0 5.2 2.0 5.6	0.3 1.6 0.6 1.7	MO LU	0315 0910 1540 2120	0.0 6.2 1.0 6.2	0.0 1.9 0.3 1.9	17 TU MA	0250 0900 1500 2100	0.7 5.6 1.6 5.9	0.2 1.7 0.5 1.8	2 TH JE	0415 1005 1655 2225	0.7 6.2 1.0 5.6	0.2 1.9 0.3 1.7	17 FR VE	0325 0930 1605 2155	0.7 5.9 0.7 5.6	0.2 1.8 0.2 1.7
3 SA SA	0240 0835 1455 2040	0.0 5.9 1.3 6.6	0.0 1.8 0.4 2.0		0245 0850 1445 2045	1.0 5.2 2.0 5.9	0.3 1.6 0.6 1.8	3 TU MA	0400 0955 1635 2205	0.0 6.2 1.3 6.2	0.0 1.9 0.4 1.9	18 WE ME	0325 0930 1540 2135	0.7 5.6 1.3 5.9	0.2 1.7 0.4 1.8	3 FR VE	0455 1045 1740 2310	1.3 5.9 1.3 5.2	0.4 1.8 0.4 1.6	18 SA SA	0405 1010 1650 2235	1.0 5.9 0.7 5.6	0.3 1.8 0.2 1.7
	0335 0930 1555 2130	0.0 5.9 1.3 6.2	0.0 1.8 0.4 1.9	МО	0320 0930 1520 2120	1.0 5.2 2.0 5.9	0.3 1.6 0.6 1.8	4 WE ME	0450 1040 1730 2250	0.3 6.2 1.3 5.9	0.1 1.9 0.4 1.8	19 TH JE	0400 1005 1625 2215	0.7 5.9 1.3 5.6	0.2 1.8 0.4 1.7	4 SA SA		1.6 5.9 1.3 4.9	0.5 1.8 0.4 1.5	19 SU DI	0455 1050 1745 2325	1.3 5.9 1.0 5.2	0.4 1.3 0.3 1.6
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9 FR VE	0100 0800 1335 2050	4.9 1.3 5.6 1.6	1.5 0.4 1.7 0.5	24 SA SA	0000 0635 1230 1930	5.2 1.3 5.6 1.6	1.6 0.4 1.7 0.5	9 MO LU	0215 0905 1435 2155	4.6 2.3 5.2 1.6	1.4 0.7 1.6 0.5	24 TU MA	0125 0815 1345 2110	4.9 2.0 5.6 1.3	1.5 0.6 1.7 0.4	9 TH JE	0410 1025 1610 2250	4.6 2.6 4.9 2.0	1.4 0.8 1.5 0.6	24 FR VE	0405 1030 1610 2305	4.9 2.0 5.6 1.0	1. 0. 1. 0.
	0155 0855 1430 2145	4.6 1.6 5.2 1.6	1.4 0.5 1.6 0.5	25 SU DI	0050 0730 1320 2030	5.2 1.6 5.6 1.3	1.6 0.5 1.7 0.4	10 TU MA	0330 1005 1540 2245	4.6 2.3 4.9 1.6	1.4 0.7 1.5 0.5	25 WE ME	0235 0925 1455 2215	4.9 2.0 5.6 1.0	1.5 0.6 1.7 0.3	10 FR VE	0515 1115 1710 2340	4.9 2.6 4.9 1.6	1.5 0.8 1.5 0.5	25 SA SA	0515 1135 1720	5.2 1.6 5.6	1. 0. 1.
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Nature Notes from HFN Monthly Meetings

June

- On May 13th, two Painted Trilliums, and one Red Trillium were spotted in bloom.
- Lesley Butters saw a jet-black shiny moth in Burnside. She also suffered some nighthawks diving and attacking her open flowery umbrella (did they think the flowers were insects?). On June 2, Lesley observed an unusually long-duration high tide; it lasted for a whole hour.
 - Nighthawks were observed over the Frog Pond.
 - An Osprey was seen getting fish in the Gaspereau River.
 - In bloom Amelanchier, Pin Cherry, Hobblebush, and Redberry elder.
- Stephanie Robertson reported myriads of blooming spring Beauty, Red Trilliums, and a Peregrine Falcon from the Cape Split trip.
 - Someone observed that we had had two weeks of sub-normal temperatures.
 - Birds reported being seen were Hooded Mergansers, eagles, and hummingbirds.
 - Despite the recent unseasonably cold weather, someone saw an Inchworm Moth!

- Lindsey Day

May

- Peter Payzant saw the first Red-throated Hummingbird in Waverley on May 6; also seen were a Yellow-rumped Warbler, a Tortoiseshell Butterfly, and Spring Azures.
 - Regina Maass reported the first wasp sting, and has a Song Sparrow nest in her garden.
 - Four Coyotes were seen in Keji two were juveniles; the January snow lay deep.
- On May 6, in Hemlock Ravine, a Red Fox was seen; also large bumblebees! At this point everyone agreed that spring was finally 'springing' at last! Mayflowers were also reported.
- There was a full chorus of Spring Peepers heard everywhere. Pat Chalmers reported hearing them at Frog Pond. Also, a Black and White Warbler, a Palm Warbler, and Hermit Thrush were seen, and birch trees were 'sapping'.

- Ursula Grigg

