THE HALIFAX FIELD NATURALIST

No. 123
June, 2006 to August, 2006

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

HFN is incorporated under the Nova Scotia Societies Act and holds Registered Charity status with Canada Revenue Agency. Tax-creditable receipts will be issued for individual and corporate gifts. HFN is an affiliate of Nature Canada and an organisational member of Nature NS (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.

HFN ADDRESS Halifax Field Naturalists
c/o Nova Scotia Museum of Natural History, 1747 Summer St., Halifax, Nova Scotia, B3H 3A6
EMAIL **<hfnexec@chebucto.ns.ca>**
WEBSITE **<hfn.chebucto.org>**

NNS ADDRESS Nature Nova Scotia
c/o Nova Scotia Museum of Natural History, 1747 Summer St., Halifax, Nova Scotia, B3H 3A6
EMAIL **<doug@fundymud.com>** (Doug Linzey, FNSN secretary and Newsletter Editor)
WEBSITE **<naturens.ca>**

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 received from September 1 to December 31 of any year 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
Nature NS (opt.)	$ 5.00 per year

EXECUTIVE 2006-2007

President	Allan Robertson	422-6326
Vice-President	Peter Webster	453-9244
Treasurer	Janet Dalton	443-7617
Secretary	Peter Payzant	861-1607
Past President	Bob McDonald	443-5051

DIRECTORS Brian Bartlett, Betty Hodgson, Burkhard Plache, Ingrid Plache, Stephanie Robertson, Jim Wolford.

COMMITTEES

Membership	Linda Payzant	861-1607
Programme		
Talks & Trips	Burkhard & Ingrid Plache	475-1129
	Allan Robertson	422-6326
Design/Production	Stephanie Robertson	422-6326
Newsletter		
Editor	Stephanie Robertson	422-6326
Design/Production	Stephanie Robertson	422-6326
Almanac	Patricia Chalmers	422-3970
Distribution	Bernice Moores	422-5292
Mailing Labels	Doug Linzey	582-7176
Refreshments	Regine Maass	
Conservation	Peter Webster	453-9244
	Suzanne Borkowski	445-2922
	Bob McDonald	443-5051
Nature NS Representative	Peter Webster	453-9244

ARTWORK All uncredited illustrations are by H. Derbyshire or from copyright-free sources. Front cover Bunchberry photo in the rain courtesy Keith Vaughan; p. 7 - Coyote, P. Dodge; p. 11 - Hfx. skyline, Burkhard Plache; p. 16, Red Squirrel, Kathy Colavitti; Tide Tables - Canadian Hydrographic Service, Fisheries and Oceans Canada.

PRINTED ON RECYCLED PAPER — PLEASE RECYCLE

HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

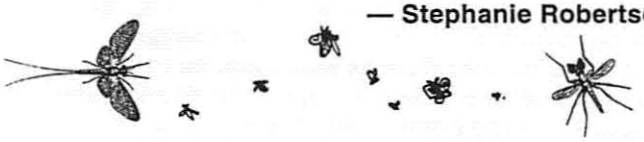
There is a large swampy area in Point Pleasant Park just down from the historic, stone caretaker's house. The very heavy rains have filled this depression to almost overflowing, and it is now bigger than the park's skating pond.

Happily, a very large turtle has been seen more than once sunning on a submerged log there, and the deep 'plunks' and 'gronks' of very many Bull Frogs can be heard calling back and forth around the water's edge. Water irises are growing, and the Black Ducks seem to be enjoying it as well.

The turtle is a mystery. How did it get there? Has someone brought it in; has it been there since it was small?

More good news about the park can be found in "Conservation", on p. 6.

— Stephanie Robertson



YNC OPEN HOUSE

The Young Naturalists Club got off to a great start this past Saturday, despite soggy but typically Nova Scotian weather.

The morning portion of the day went off without a hitch, and the displays were a hit — from the bird specimens to the live plants and crawly things, and to the colourful and informative books. I saw many happy kids exploring, asking questions, and absorbing everything the engaging naturalists there had to say. Thanks to Dave, Stephanie, Bob, Troy, Charles, Jim, Suzanne, Brian, and Martha for their displays, and Allan and Aktar for their help. We had over 50 people pass through, and over a dozen families sign up to be in the club!

The heavy rainfall warning kept many families away from the afternoon hike, but two families showed up, along with six naturalists! Everyone had a great time, despite the rain and small crowd. We saw lots of lichens, Lady's Slippers, slime molds (very pretty!), and Balsam Fir. We learned how Goldthread got its name, and young Chelsea (eight years old) learned what 'fruiting bodies' are (the sexual reproduction structures of lichens). Cups of tea and hot chocolate warmed us at the nearby teahouse afterwards.

Thanks to Jim, Bob, Oliver, Wolfgang, Troy, and Aktar for sharing their natural history knowledge with the group. Despite the weather, the Open House was a definite success. A *big* thank you to everyone who has been so supportive along the way. The YNC is off to a great start, in part thanks to you!

Stay tuned to **<www.naturens.ca>** for updates to the Young Naturalists portion of the website.

— Karen MacKendry

NNS 2006 AGM

A wonderful and encouraging NNS Conference and AGM took place on the weekend of May 26 - 28. The weather was perfect in the Annapolis Valley, with its unique natural beauty and flora and fauna. The theme for this year's conference was the natural history of the Acadian/Annapolis Valley area, and how it has been affected since Europeans settlers came in in the 1600s.

There were some exciting and positive presentations about new conservation work; such as one on a Blandings Turtle recovery programme, and another on wildlife corridors for Nova Scotia, with studies of focal species to monitor.

You will find a few other highlights of the weekend on p. 4.

— Stephanie Robertson

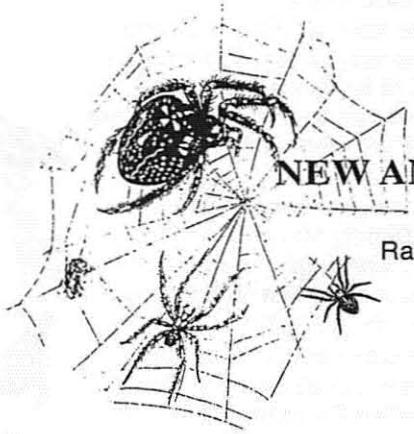
POINT PLEASANT PARK

In December, 2005, the winning plans for renewal of PPP were accepted by HRM as the basis for the Park's regeneration. The plans recognised Point Pleasant as a natural, forested park that provides a high quality, *passive* recreation experience as opposed to programmed sport and recreation parks such as the Halifax Commons. However, in February, 2006, HRM Council asked staff to reduce budgets by 5%; meaning effective elimination of park-renewal personnel. Nothing was being done.

But the Point Pleasant Park Advisory Committee (PPPAC) was re-staffed in April, and it has had four meetings to date. Members' enthusiasm and energy are encouraging, and the loss of momentum after Council's budget cuts has been halted.

To help with the effort, the Friends of Point Pleasant Park (FPPP) have proposed sponsoring, organising, and operating a volunteer task force, under the auspices and direction of the PPPAC. For more information, see p. 5.

— Allan Robertson



NEW AND RETURNING

Katherine Huang
Ralph and Jeanette Fleming
Launa Lunn
Heather MacLeod
Chris Maple
Marcus Redman
Karen Woolhouse

SPECIAL REPORTS

NNS 2006 AGM

What a glorious weekend! A wee bit of fog on one or two occasions, but mostly sunny with a minimum of wind; not too hot and not too cold; brilliant blue skies; and all the green and blooming beauty of the Annapolis Valley (two weeks ahead of Halifax).

Most encouraging to see — some new faces — a number of passionate, dedicated, and intelligent young scientists gave presentations on fighting to preserve our natural history.

Perhaps we'll have some more reports in our next issue, but following are some highlights from the weekend's activities:

Friday evening, 26 May

Jon Percy, President of the Annapolis Field Naturalists, (the hosts for this AGM), gave us a warm welcome, presenting a special ceremonial gift of tobacco to Agnes Potter, from the Bear River First Nations. He then read an excerpt from a well-known local naturalist's book entitled "Dancing on the Shore: A Celebration of Life at Annapolis Basin", by Harold Horwood. (Jon read several exerpts from this book throughout the weekend activities.)

Friday evening's opening ceremonies and following talks were historical, starting with the perspective of the Mi'qmak by Agnes Potter, resplendant in a beautifully beaded and fringed doeskin outfit and mocassins, and then followed by 'Samuel de Champlain', also in authentic period costume, sporting a large, white lace-edged collar, cut-work silk doublet and pants, and high black leather boots with a plumed, cornered hat made from felted beaver skin. Agnes officially opened the Conference for us by reciting the Miq'mak seven Sacred Prayers, then sang a beautiful Eagle Song accompanied by her drum; the song hauntingly mimicked the eagle's high-pitched cries.

Wayne Melanson as Champlain told us of 'his' adventures and first explorations around the Bay of Fundy in 1604, honouring the Mi'qmaks' vital assistance and advice. He was commissioned to settle and set up a monopoly on the fur trade, and Port Mouton was his first landing; there were lots of rabbits there! He told of his travels along the Annapolis shore, the many animals they encountered, and other places he named such as Cape Forchou. From Le Port Royale, they took canoes across the Bay of Fundy. There was a cornucopia of fish, mussels, and lobster for food; pristine, thick and large trees for buildings; river clay deposits for making bake ovens; wide expanses of fertile meadows for planting wheat, rye, oats, and barley; and an abundance of mollusc shells which were crushed for lime and mortar.

Then Peter Newton, Warden of Annapolis County, welcomed us also, and the Deputy Mayor of Annapolis gave her history of the town, with a list of awards and recognition. Annapolis achieved the first 'Waste-free' recycling programme in Canada in 2003!

AFN floral expert Ginny Proulx introduced our first speaker — naturalist and retired DNR biologist **Bob Bancroft**, with his talk **"Acadian Forests and Wildlife — the Past 400 Years of Habitat Removal".**

In 1764 ship-building began in earnest; the very large pines were taken first. They went very quickly, and were mostly gone by 1774, having been coveted for masts and spars. Bob explained that the North American Eastern seaboard boasts hardwood forests in Maine, Acadian forests here in the Atlantic provinces, and boreal forests in Newfoundland. Rivers became the highways for lumber transportation; when the logs became jammed, explosives were used, and this created a lot of habitat destruction. The scale of removal was amazing considering that only hand tools were available at that time. There were sawmills on *all* of the rivers, and they interfered with fish habitat and spawning grounds; the copious amounts of sawdust also degraded the waterways. Sea Trout for instance, which were very abundant historically, are almost extinct now.

Farming also wrecked the Nova Scotian forests. Trees and their roots hold riverbanks like steel reinforcing rods, but all the trees were cleared out in order to create agricultural fields. Flood plains and wetlands were drained for agriculture as well. Now, we have many private feller-bunchers for tree-removal, and clear-cutting is still taking place. In the Acadian forest, the best trees grow up in the shade; with clear-cutting practices, there are no trees selectively left to create this necessary shade for those species.

Bob believes forestry can be changed. He mentioned a book he feels is particularly pertinent and timely — E. O. Wilson's The Future of Life, which explores the modern 'illusion' of preservation.

On his own land, he has brought in many acorns to his property; he now has a lot of young oak trees growing there. He encourages Snowshoe Hares by creating deep brush piles, Pileated Woodpeckers by leaving standing dead trees, and Barred Owls by building nest boxes for them. For Fishers, little pools in the forest, made from naturally-downed trees partially blocking river flow, are needed because they provide good spawning habitat for fish.

Saturday morning, 27 May

AFN's Peter Hope chaired and MC'd these morning sessions, and Jon Percy shared with us that Keji is second only to Jasper Park for ecological research; that good things are now happening at the Tobeatic; and that there are all sorts of effective local groups now that are fighting to save the natural enviroment.

Our first speaker was **Heather McLeod**, with **"Early Perspectives on the Fundy Environment"**. She highlighted three centuries of local history, beginning with the Port Royal Habitation in 1605. Heather's research and talk utilised historical writings, historical descriptions, and old pictures and photos to show the history of degradation of the Annapolis Valley environment by Europeans; this valuable research is extensively used as an important resource for understanding the natural history of the Fundy area.

Heather said that older written accounts and narratives present us with a picture of an amazing biotic abundance in the ecosystems of the time. The greatest economic activity and the first interest of the settlers was

fishing, especially for cod. In 1611, large sturgeon and shad spawning runs were noted. In 1850, it was recorded that cod "sometimes attained a weight of 79 - 80 pounds, and were six fingers thick". Mackerel were so abundant that living masses of these obstructed the passage of boats; the halibut were huge, and lobsters were taken "as big as little children". Scallops and oysters were also very large, and "the sea is paved with salmon; 3-feet long is the smallest".

Meadows were very important to the settlers; this was stressed in writings. But, it was also the preferred dwelling places for the for Mi'Kmaq and the Malaseet. The watersheds were important also, especially for the fur trade which was intense for both First Nations and the colonists.

The Acadian forest of Nova Scotia was mixed, with great diversity, and there were some stands of very, very large trees. The inland micro-climates were better of course for growing these larger trees, and also, the inland stands were more open and park-like, which proffered better moose habitat and hunting.

Around the Bay of Fundy, there were rich marshlands with a great abundance of life; waterfowl, birds, and literally clouds of the now extinct Passenger Pigeons. The Acadian settlers turned these into agricultural lands by dyking, in order to block the salt sea tides inundating these lands. This greatly affected and changed the ecology of the wetlands, especially the running of the fish up rivers for spawning.

In clearing the land, the settlers were surprised that the same trees did not grow back; they did not know about forest succession back then, and the divesity of Acadian Forest trees required shade in order for them to grow successfully. Titus Smith in 1835 was the first to know and write about this phenomenon. Fires were also deliberately set, which caused siltation of streams and serious microclimate changes.

By the mid-1800s, there were 1400 saw mills In New Brunswick and they were cutting a million board-feet per year. All the sawdust created environmental problems in the streams, air, and rivers. We were shown an 1888 picture of a giant raft of logs that weighed 12,000 tons! In 1851, all the dams had caused widespread destruction of fish habitat and spawning migration routes, e.g. the Mackerel had completely disappeared from Grand Manaan by 1839.

In the late 19th century, Moses Perley wrote about the effects of forestry on fishing. He made eight recommendations to save the fish, and this was the beginning of fish science. Also, early studies of the Fundy area's natural history were beginning to be carried out.

By the end of the 19th century there were beginning to be general concerns about conservation.

The third speaker was **Amanda Lavers**, Director of the Mersey Tobeatic Research Institute (MTRI), on **"Landscape Connectivity"**. She explored the loss of habitat that has occurred due to destruction, degradation, disturbance, and fragmentation. 'Connectivity', or loss of it, can help or hinder bio-movement in Nova Scotia through space and time; presently, there are resource patches only, and wildlife populations are in danger of becoming stranded and cut-off from other areas without connecting corridors of suitable habitat.

MTRI's goal is to work toward maintaining landscape connectivity. Their objectives are to research this connectivity for certain focal species by monitoring and managing connectivity changes for them between protected areas. The chosen species are American Moose, Fisher/Marten, Brook Trout, Eastern Hemlock, Red Maple, Atlantic coastal plain flora, dragonflies, the Pipistrelle Bat, and the Southern and Northern Flying Squirrels. Both squirrel species are heavily tied to treed landscapes. They will be measuring landscape change, because forest loss is increasing. For instance the Sissiboo area alone has lost 20% of its forest cover in the last 20 years alone.

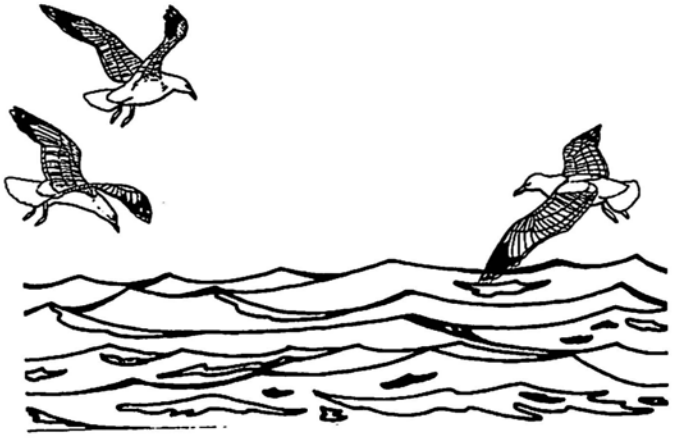
In one project, the MTRI erected shelves with live traps on trees to catch squirrels; the traps were baited with peanut butter and apples. We saw an unusual and opportunistic video of a long diurnal flying leap after a trapped squirrel had been released in the daytime (they are usually nocturnal, so their 'jumps' are rarely seen). They also attached microchips to the necks of the trapped squirrels, tagging equal numbers of S. and N. Flying Squirrels. Five of them kept coming back to baited traps for more of the free goodies!

The MTRI is learning that the Pipistrelle Bat needs mature spruce forest with a particular temperature; it also needs water bodies (brooks, pools, lakes, etc.) in its territory, and a particular range of night temperatures as well.

Our fourth Saturday morning speaker **Dave Colville** of the Lawrencetown Centre of Geographic Sciences (COGS), talked on **"Monitoring the Changing Landscape of Southwest Nova Scotia"**. This group gathers spacial data that represents or describes the Nova Scotian landscape. They can do base-mapping, forest and soil inventory, topographic patterns, and eco-landscapes, etc.

They rely heavily upon a Landsat Thematic Mapper, a satellite 700 km above earth which comes 'round every 16 days. It has an image resolution of 30 metres to one pixel. Dave showed us many uses of their data synthesis, such as graphs of softwood and hardwood clearcuts, among other things. The use of aerial photography is sometimes better, as it is cheaper, has better resolution, and one can control one's capture times and seasons. They do ground-based meteorological monitoring as well, which is integrated with the Landsat data for a fuller picture. This is useful because Environment Canada's SW Nova Scotia's monitoring stations are much fewer now; they used to have 50; now there are only eight.

— Stephanie Robertson



CONSERVATION

POINT PLEASANT PARK

The Background – In December, 2005, HRM Council received and accepted a final report from the Steering Committee which oversaw the International Design Competition. The report endorsed the competition-winning submissions of the recommended teams, NIP paysage and Ekistics Planning and Design, and recommended that Council contract the companies for the first phase of park restoration.

The winning plans appear to be supported by most residents. The plans recognise Point Pleasant as a natural, forested park that provides a high quality, *passive* recreation experience as opposed to programmed sport and recreation parks like the Halifax Commons. The plans do not recommend radical changes to the park, but are focused on enhancing its existing attributes and former character.

The first step in implementing the plans was to realign the role and membership of the Point Pleasant Park Advisory Committee (PPPAC): to provide continuity with the international design competition; to ensure access to specialists in relevant fields (ecology, soils, archaeology, among others); and to ensure strong public input into restoration and management of the park.

The second step was to have the firms prepare a master plan to provide a framework for guiding the park's renewal. They would also prepare a management plan and an operational plan to provide additional detail for the renewal and for general park operations. The plans would formalise a comprehensive, ecologically sustainable vision for the park over the next 50 years.

The most immediate priority and the first phase of work would be forest restoration and protection, followed by attention to the cultural resources found within the park. Improvements to entrances, parking lots, and other amenities were to have followed over the course of the restoration. Each of these elements would be subject to PPPAC approval before submission to Council.

The Reality – In February, 2006, HRM Council asked staff to reduce budgets by 5%. This meant effective elimination of the personnel to oversee the park's renewal, at least in the short term. The project manager who had overseen the International Design Competition obtained a position in another department. Nothing was being done.

The PPPAC was realigned and re-staffed in April, however, and it has had four meetings to date. The tightness of members' focus and the extent of their energy are encouraging. The loss of momentum after Council's budget cuts has been halted. By late May, staff had received assurance that the position of Point Pleasant Park Project Manager would be reinstated, and a temporary manager was identified until a permanent replacement could be identified. In early June the PPPAC and staff agreed to establish maintenance measures to deal with problems in road surfaces, drainage, erosion control, and other issues until the master plan is completed. The temporary Project Manager begins work in mid-June, and the consulting firms will begin their work on the master plan this summer.

Mirroring these efforts to get things moving again, board members of the Friends of Point Pleasant Park (FPPP) have proposed sponsoring, organising, and operating a volunteer task force, under the auspices and direction of the PPPAC. FPPP members will be asked to support the initiative at the 2006 AGM later in June. The proposal is that volunteers would assist with interim protective measures, help with benchmark bio-physical surveys (in association with past bio-surveys and a master plan), and assist with appropriate initiatives once the master plan has been completed. The approach would entail a stewardship concept, with at least a year's commitment to a particular 'plot' by volunteers. Their work would be directed by appropriate subject matter specialists (any HFN volunteers?) and carried out in concert with Park maintenance personnel. This is an encouraging approach, and best of all, it is strongly supported by the PPPAC and by HRM staff.

— Allan Robertson

HFN's 30TH ANNIVERSARY

Following is another reminiscence from an early HFN member. Joe was indeed generous in his contributions to HFN, among them serving for several years as president, coordinating and completing "The Railway Cutting Area Study", and organising and leading numerous field trips. Many members have memories of happy and educational hours spent in the field with Joe.

JOE HARVEY

I played no direct role in founding the HFN, since during that year, I was away on sabbatical leave at Kew Gardens in London in the U.K. What I *can* do is give an account of the events leading up to its founding, and my own experience of the state of natural history in Halifax in the preceding years.

In the fall of 1963, I had been recruited to the then very small Dalhousie Biology Department. Born in England, I had for many years been a member of the Northumberland and Durham Natural History and Philosophical Society, which was based in the Hancock Museum in Newcastle-upon-Tyne, Yorkshire. I was also an occasional attendee of the Yorkshire Naturalists meetings based in Leeds. Both these were probably founded in the mid-nineteenth century, and both held regular indoor meetings and field trips, also sponsoring publications. When I arrived in Halifax I anticipated there would be some similar group, but nothing existed that quite filled that niche.

There were the bird watchers whose aim seemed to be to get up early in the morning and collect life lists. And then there were the wildlife groups keen on preserving habitats, but I soon found that their interests seemed to be restricted to animals that could be fried or roasted. Neither of these associations was quite what I was interested in.

Most of the field work in the province had been conducted out of Acadia University or Truro, mainly with the aim of finding out what existed — hence, it was basically taxonomic. I wanted to take it to the next level and study habitats and competition mechanisms. Dalhousie, it struck me, was proud to be serious and

laboratory-oriented. This was possibly based on the Scottish Presbyterian ethic that if you enjoyed something, such as going out on field work, it couldn't be serious work.

There existed at the time an attitude to the outdoors that it was a good place to fish, get your deer in the fall and, in December cut a Christmas tree along the then newly-built Bicentennial Drive. I remember my surprise in October 1963 when going into the Dominion Store (then the largest retail grocery chain in eastern Canada) on Spring Garden Road and finding that the enterprising local manager had a couple of dozen second-hand shotguns for sale on a table at the end of an aisle. They were $9.99 each as I recall. The sale was in preparation for the start of deer hunting season and I was warned not to go into the woods during that time.

Our National Parks each had naturalists whose task was to record and preserve the flora, fauna, and geology — and these people were begging the public to visit their national treasures. But visitor attendance was fairly low, the attitude being that there was no point since we were surrounded by wilderness anyway. I also remember that walks round Point Pleasant Park were the best way of meeting expatriot Germans, Hungarians, Yugoslavs, and English.

At Dal in October 1963 I was replacing Ken Greenwich, a forester, who had left for St. F.X. in Antigonish, Nova Scotia. The Dalhousie Calendar, printed long before my arrival, specified that I would teach a class on 'Plant Geography', about which I knew a little but not sufficient for the whole year. (At the time, A and B half-classes had not been instituted). So, I turned the class into an exploration of plant ecology including field trips. With no apparatus, no tradition, and no mentor, I was thrown on my own resources which resulted in a very intense learning period for me and, looking back, this was a formative period of my life. This was also the first undergraduate ecology class taught at Dalhousie and the next year I co-opted a zoological member of the faculty to add the necessary animal component.

I should add, that to someone from the British Isles, with its millennia of drastic human modification (there is for instance really no original woodland left) the initial impression of Nova Scotia was that there was a vast expanse of pristine, woodland, bog, marsh, and shoreline. I only gradually learned about the early European settlers cutting much of the original forest and burning the rest.

As an illustration of how little scientific ideas had penetrated the general public's lore as late as 1970, I was being interviewed by a journalist and had mentioned the importance of ecology, and he interrupted me with a request to "Please spell that word."!

As mentioned earlier, I was surprised that there was no natural history society in Halifax, so when I became more established and knew my way around, I took to leading informal hikes on weekends, but never on a Sunday morning because people had to have the chance to go to church I was told. We went to see the flowering Daphne shrubs along the old Annapolis Trail, did the shorelines of Pennant Point and Cape Split, as well as camping trips to Cheticamp. Years later I have had people come up to me, including in British Columbia where I now live, to say how much they enjoyed those outings.

Startled at the lack of any tradition of such outings I decided to create instant tradition and as an internal joke to myself I titled all hikes "The First Annual Traditional Hike to...". However, what I failed to do was set up any organisation. I would simply put up notices around Dalhousie announcing when and where the next hike would be, and waited to see who turned up. There was no president, no secretary, nor any fees. This could be called the anarchist model!

When Paul and Cathy Keddy arrived to do post-graduate work at Dalhousie they went the whole corporate model of president, secretary, treasurer, newsletter, monthly meetings (initially at Dal but soon moving to the Nova Scotia Museum) and incorporation under the N.S. Societies Act with a formal constitution. The Field Naturalists grew from this point on.

I congratulate the members in its continued existence. I *almost* helped to found it!

— M.J. Harvey
18/03/06

HFN TALKS

WILDLIFE CONFLICTS 6 APRIL

Tony Nette, Manager of Wildlife Resources in DNR's Wildlife Division, and Jenny Costello, a DNR Wildlife technician, gave a presentation on dealing with Nova Scotian wildlife such as Moose, White-tailed Deer, Black Bear, and Coyotes within the province, but also particularly within the HRM area.

By the late 1800s, the Moose population was completely lost in Cape Breton and was very low on the mainland, although there was still at that time a very small group (±30) on the Halifax Peninsula.

Not a lot is known about Moose in and around HRM. DNR attached GPS collars to four to six of them, in order to discover what they prefer in terms of food, habitat, and what corridors they use for travel. (The main problem is how to maintain these wildlife corridors in the midst of uncontrolled and rampant development.) Two of the collared moose died; one possibly from the brain parasite *P. tennuis* (from White-tailed Deer), and the other, unfortunately, was in calf. They are also frequently killed on provincial highways. In New Brunswick, the highways are constructed with underpasses for them, and in Alberta they have chosen the overpass solution.

There are as yet no formal plans for highway help for N.S. Moose. However, there is an N.S. Provincial Moose Recovery Plan, and there was an increase in the population from 2002 to 2005, but this may be only because of increased sightings.

In the 1600s, White-tailed Deer were found in natural grasslands and river deltas, and human clearing activity increased White-tailed Deer habitat. There was a general population movement of the Deer into Nova Scotia pre- and post-1894, and in 1916 the first open

White-tailed Deer hunting season was declared. In 1931 about 400 were recorded killed, and there are accurate kill records from the 40s up until 2004. A 1983-2005 inventory showed a population peak in the 80s. There are many accidents with car and Deer on the highways; they jump at the cars and it is dangerous. The 1999 Wildlife Incident Reports (WIRs) recorded 2,825 Deer road deaths.

Comparisons of population zones show that Deer are not evenly distributed in Nova Scotia. Cape Breton used to have a high population but recent hard winters there have cut the numbers down. The South Shore and Lunenburg have ideal Deer habitat, but then fences and fenced gardens arrived, and from 1999 to 2005, 953 road kills were reported. Lyme disease and Deer Ticks are also a problem for both the Deer and people.

There is a large population of Black Bear in western Nova Scotia. They live well near humans, and WIRs show them to be a problem in Sheet Harbour. In Haliburton Hills, a subdivision on Highway #103 near Tantallon, Bears pose problems around green bins. This behaviour is highest among juveniles coming out of hibernation in early summer. They also pose problems around beehives (to get the honey) and blueberry fields (they eat the berries). Bird feeders also attract bears; electric fences are one solution.

The 2002 to 2005 WIRs show that bears are increasing in the province while decreasing in and around HRM. Jenny shared some of her experiences with public calls about nuisance bears and other wildlife. Bears can 'home' well she said, and are very intelligent. They even have been reported in the Dingle!

Following are some of the other types of complaints DNR receives; for instance, there are a lot of calls about Racoons being present in houses, sheds, and attics (DNR officers live-trap and relocate them). We saw a picture of an unfortunate one that had been electrocuted on an electric tower in Halifax. Racoons can carry distemper and WIRs show that they are on the rise again. Squirrels also do lots of damage in people's attics, and chew electric wiring causing power outages and possible electrical fires.

Skunks, Beaver, Porcupine, and Red Foxes generate a lot of calls to DNR (one Porcupine report was from downtown Dartmouth). Interestingly, when Porcupine numbers are low due to distemper, Red Fox populations rise. Presently, the presence of mange in these animals is low. Coyotes are nocturnal, but beware, they like to eat housecats! Bobcats have been reported in Shearwater.

Only a few calls are received about Nova Scotia's Brown Bat, but large Starling and Pigeon populations generate many calls to DNR, and there is a major winter roost for Crows near the Motherhouse at Mt. St. Vincent, which is a great nuisance to some. Canada Goose attacks are deterred with black flags on stakes.

Woodpeckers can be a problem for cedar-home owners, and Sharp-shinned Hawks can be a nuisance predating bird feeders. Snapping turtles are found on roads travelling to lay eggs, and there are also reports to DNR regarding snakes in yards and basements.

— Stephanie Robertson

CLIMATE CHANGE 4 MAY

Trecia Schell, Post Doctoral Fellow in Dalhousie's Department of Earth Sciences, presented her multi-media "Reaching for the Beaufort Sea on Canada's...Research Icebreaker NGCC Amundsen". It combined beautiful photos of the north's natural history, videos from helicoptors and boats, and slides, accompanied by equally beautiful music.

Global climate warming was the main theme, specifically that the environmental, socio-economic and geopolitical consequences of a reduction in Arctic sea ice will be tremendous. Marine ecosystems will be replaced, a new ocean will be opened to exploitation, climate warming may accelerate, global ocean circlation may be modified, and traditional use of the north will change. Since Canada will be the first to be affected, it is only natural that it should lead the international Canadian Arctic Shelf Exchange Study Research network (CASES), begun in 2001. The CASES network includes 42 Canadian Arctic researchers and over 30 Arctic specialists from the U.S.A., Japan, the U.K., Denmark, Poland, Russia, Norway, Belgium, and Spain.

The 2004 CASES expedition in the Northwest Passage focused on: **1.** the effect of climate change on sea-ice; **2.** sovereignty; **3.** charting and navigation; **4.** environmental impediments to hydrocarbon development; and **5.** benthic habitat mapping.

Effects from the changing times of sea-ice formation are already being seen — Polar Bears have to hang around longer on land waiting for the ice to freeze, which can be dangerous; there are recent reports of them killing dogs tied up on the beach. However, for now, the bear population is over 10,000 — still relatively healthy.

Nights are less dark due to warmer air reflecting more sunlight from the south, and southern animal species are now being seen in the far north, including mosquitos.

The entire life of the Inuit is based on the cold. A rapid increase in temperatures could be cataclysmic as prey disappears and ice becomes treacherous. Also, warmer temperatures are increasing air moisture content which means more storms, more snowfall, and much more rain in the summer.

In December 2005, the Inuit Circumpolar Conference (ICC), which represents all northern aboriginals, launched a legal petition against the U.S., claiming that its greenhouse gas emissions harmed Inuit human rights (the U.S. pulled out of the Kyoto accord on climate change in 2001). Some predict that Arctic waterways would be ice-free by 2015; this would severely curb the Inuit's hunting abilities.

The permafrost is being affected also. In Tuktoyaktuk on the Arctic Ocean, buildings are crumbling into the sea as the permafrost dissolves. Remote communities are in distress and becoming cut off because winter ice roads are turning to water.

In Resolute Bay, where 250 people live in Canada's most northerly town, the winds are warmer. The mean temperature there in March 2006 was -25.2°C compared with the average of -31.2°C from 1947 to 1991, a change of +6°C, reports Wayne Davidson, who runs the local weather monitoring station and has been a resident since 1985. He said also that weather there used to be brutal, probably the most brutal on earth, but now, there

have been tremendous changes and it is a lot warmer.

U.S. scientists note that the Arctic ice coverage is now the smallest it has been for a century, driven by rising temperatures linked to greenhouse gas emissions by humans. Presently, as the dark ground and seas are esposed to the sun's rays, they are absorbing heat faster than the previous reflective snow and ice.

ICC chair Sheila Watt-Clouthier said the Inuit would continue to urge the world to cut greenhouse gas emissions. "We're not going to be powerless victims of climate change... science indicates that we still have a 10- to 15-year window of opportunity to reverse things." The U.S. administration, for now, has shifted its position, and it agrees that human activity worsens climate change. Wayne Davidson says, "When I hear people say there is no such thing as global warming, I find them totally appalling."

CASES encourages an active chidren's programme called "Schools on Board — Bridging Arctic Research and Education". Its 2005 field programme on the icebreaker included six students and three teachers from seven different schools in northern and western Canada.

From the teachers' perspectives, "Schools on Board... is an excellent opportunity for students and teaches to engage in experiential learning outside of the traditional classroom. It was exciting to see the passion that scientists express about their research. These scientists are excellent role models for our students", said teacher Dave Shoesmith from Winnipeg.

"This experience has been a once-in-a-lifetime opportunity which has enhanced each of us as teachers.", said Tanya Connors from Kugluktuk High School in Nunavut.

As for the students, they too have benefitted. "This whole trip has been an amazing experience; it's made me think of what I can do for the world and what I can do with science. It's been a life-changing experience for me.", reported a student from Winnipeg.

— Stephanie Robertson from Trecia's notes

PACIFIC COAST TRAIL 1 JUNE

Cobequid Naturalists Club member Janet Roberts gave a very entertaining slide show of her six-and-a-half month journey hiking the Pacific Crest Trail (PCT) in 2003. She crossed southern California and followed the trail north through the Sierra Nevada Range, then the volcanoes of the Cascade mountain range, finishing up on the Canadian border.

Janet is an accomplished photographer and was a student in Keith Vaughan's photography courses. She is a native of Nova Scotia, and presently lives in Onslow Mountain, Colchester County, where, among other things, she grows organic vegetables and sells produce and baked goods at the Tatamagouche Farmer's Market. She leads tours for Scott Walking Adventures, and is one of the few people who have hiked the entire Appalachian Trail (2160 miles) and the Pacific Crest Trail (2650 miles).

Janet spent from February until April packing — although much longer planning the trip. She set off in mid-April and completed the trail on November 2nd. While Janet left Canada alone, she met up with someone in Boston and they flew to San Diego together and kept each other company for the first month.

The PCT was completed in 1993, and was declared a 'National Scenic Trail'. Most people hike the trail south to north, because then there is more time to travel. A few people do hike north to south, but spring starts much later in Canada than California of course, so that north-to-south through-hikers have less time to complete the trail. Many hikers start out together on the same day after celebrating their arrival at the 'trailhead' with a festival, complete with a big meal, of course. Everyone soon picked up nicknames, and Janet's was 'Shutterbug' due to her fondness for taking photos!

As it turned out, Janet's trip sounded pretty arduous, with extreme variations in climate and geography. She experienced, mostly in company with others, everything from searing hot days in California carrying eight litres of water a day, to shivering at night in a thin tent and sleeping bag in the mountains. Many hikers suffered from bad water and/or blisters; Janet wore New Balance sneakers, like many others, and wore out two pairs on the PCT. She wore Tevas in the desert.

Janet stayed relatively healthy and happy through the whole trip, partly attributing this to her love of nature, her contentment with the simplicity of the daily routine, and her previous experience completing the Appalachian Trail in 1998.

While she watched as some of her new friends went home (and in some cases, returned), she and her current companions took turns looking after each other's feet — the crucial body part on the PCT. Still, despite the hardships, eighty per cent of hikers complete the trail. It seems that 'trail angels' exist on all major hiking trails, and Janet found many 'angels' who would offer food, showers, a warm bed, shelter, and even laundry service — not to mention the benefit of finding the unexpected 'trail magic' offerings from the company of kind hosts, and other hikers with stories to share.

Once a week on the PCT, Janet and her hiking companions would find a fast food restaurant and share a motel room. Getting cleaned up was a real pleasure, since most carried the bare minimum with them, even, in Janet's case, making their own stoves out of cat food tins! In addition, while in many towns, Janet could visit Internet cafes or libraries to send and receive email, which kept her in touch with home. Somehow, with everything else going on, she managed to spend one hour after supper every night, although bone-tired after an average of twenty miles per day, keeping a journal.

Questions from the audience ranged from, "How much did it all cost?" ($6,000), to "How did you get your regular food?" (Janet pre-packed food boxes and arranged for her sister in Truro to send them to particular locations). Much of her travelling money went for slide film and she has made many presentations since her return.

Janet finished her main slide show with another, shorter slideshow set to music. It was clear to the audience that she is an amazing photographer as well as hiker, and she said she would go back in a minute, she loved the whole experience so much.

— Jill Webster

FIELD TRIPS

COLPITT LAKE

Date: March 18, 2006
Place: Colpitt Lake to Williams Lake
Region: 451a: Granite Uplands; South Mountain
Weather: Cloudy but dry, -3°C;
Participants: 13
Duration: 3.5 hrs
Interpreter: Burkhard Plache

The hike began near the end of Oceanview Drive off Purcell's Cove Road. Within a few minutes we were on a granite plateau from which we could see in the distance the port cranes at Point Pleasant around to the Dutch Village Road area and bits of Dartmouth behind. Further along, looking northwest, we could see Cowie Hill and surroundings. In between were large stretches of mostly deciduous forest, with patches of evergreens, currently uninterrupted by housing or even logging roads — but with encroaching development at the edges. The tree vegetation through most of the walk, until we got close to Williams Lake, was dominated by early successional, fire-tolerant or fire-stimulated species. Jack Pine, White Birch, Large-toothed Aspen, Lambkill (which retains most of its green to rouge-red leaves through winter), and Huckleberry (all leaves had dropped; the new twig growth had the characteristic pink to reddish tinge) were prominent in the understory.

Jack Pines were especially numerous and picturesque on the plateau. Broom-crowberry, Rock-tripe, and other lichens were abundant on barren rock, and also Reindeer Lichens where some soil had accumulated.

We walked to another plateau where we could look southeast across Long Lake and the Captain Arnell lands, and then moved to the ruins of an air defense structure, built in anticipation of a possible German attack in World War II. A photographer in the group pointed out the interesting patterns on the ruin's walls associated with extrusion of lime from the cement. In the late 1700s/1800s there had been a large quarry nearby and part of the trail we took to the ruins apparently ran along an old trolley bed.

From the ruins we proceeded downwards to Colpitt Lake, meeting it close to its eastern extremity, and then walked westward just above the shoreline. Wind blowing onto thin ice where it met the water made unusual, almost musical sounds. Leatherleaf, which keeps its rusty colored leaves through winter, was abundant at the lake's edge, and there were also patches of Inkberry (a member of the holly family) with evergreen leaves. About midway along the lake, we turned onto a trail that would take us to the outflow area of Williams Lake. There were many outcrops, boulders, and high spots along the way. Once we moved away from the plateau, the rocks were rusty, weathering, dark-layered Halifax slates (sometimes called 'ironstone'). This is a region of contact between these slates and the coarse-grained, grey to white granite which outcrops over much of southwest Nova Scotia. Marion Sensen pointed out a nice Ring Lichen which she estimated was about 150 years old, based on a growth rate of 2 mm/year.

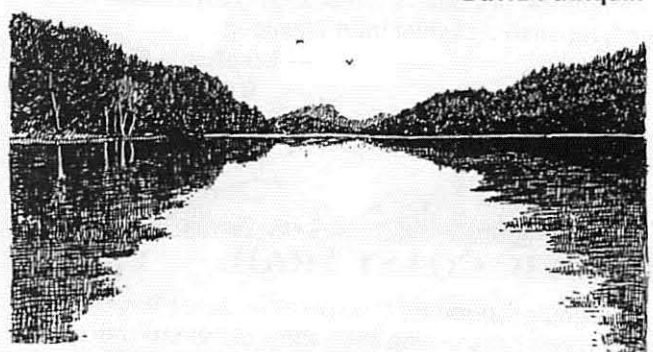
We descended into some Leatherleaf-dominated boggy areas as we approached Williams Lake. With some large cranberries providing a snack, we then climbed upwards into the oak/White Pine/Red Spruce woodland that borders Williams Lake, and then down through a ravine as we approached the outflow area. Evergreen fronds of the fern Rock Polypody covered some of the ravine boulders, and we could hear water rushing in the ground below us. Other boulders and rock faces were covered with Plume Moss. Old fire scars could be seen at the bases of some of the large White Pines where post-fire growth had not completely encircled the fire-scarred tissues. (Fire scars revealed in stumps of white pine are commonly used in conjunction with the counting of annual rings to indicate historical frequencies and dates of fires in forested areas.)

Finally, we negotiated our way through the hurricane-blowdown that now obstructs the path leading from a popular Williams Lake swimming area to Herring Cove Road, where we had left some vehicles.

Like other local hikes, this one reminded us of all the beautiful natural treasures we have close by. For a while, we could well have imagined we were hundreds of miles away from 'civilization', instead of the few kilometres that we were. Interestingly, there was not much overt evidence of the military and economic activity that had taken place in this area in years past, and Colpitt Lake today is pretty well pristine. Unfortunately, with the now approved development of the Kimberley-Lloyd property between Colpitt Lake and MacIntosh Run, it is unlikely to remain that way.

Thanks to Pat Chalmers for contributing a detailed species list.

— David Patriquin



REGION 451a — GRANITE UPLANDS, S. MOUNTAIN

Soils — Gibralter soils derived from granite: coarse-textured, well-drained, and gravelly; shallow, heavily leached, and very acidic, with scattered areas of exposed rock; when unforested, a tendency to form hardpans.

Flora — Red Spruce, Eastern Hemlock, White Pine, Balsam Fir, Red Maple; scattered Red Oak. Fire has played a prominent role.

Fauna — Second-growth mixed forests support only sparse wildlife. Small mammal diversity low to moderate; high populations of White-tailed Deer. Aquatic environments are acidic with low-productivity and support few waterfowl; substantial populations of Smallmouth Bass.

Halifax from the plateau; from a photo by Burkhard Plache

COLPITT LAKE SPECIES

Lichens	
Ring Lichen	*Arctoparmelia centrifuga*
Reindeer Lichen	*Cladina* sp.
Rock Tripe Lichen	*Umbilicaria* sp.
Mosses, Ferns, and Allies	
Plume Moss	*Ptilium crista-castrensis*
Clubmoss	*Lycopodium sp.*
Rock Polypody	*Polypodium virginianum*
Bracken	*Pteridium aquilinum*
Gymnosperms	
Balsam Fir	*Abies balsamea*
Common Juniper	*Juniperus communis*
White Spruce	*Picea glauca*
Black Spruce	*P. mariana*
Red Spruce	*P. rubens*
Jack Pine	*Pinus banksiana*
White Pine	*P. strobus*
Scotch Pine	*P. sylvestris*
Hemlock	*Tsuga canadensis*
Angiosperms	
Striped Maple	*Acer pensylvanicum*
Red Maple	*A. rubrum*
Downy Alder	*Alnus crispus*
Specked Alder	*A. incana*
Shadbush	*Amelanchier* sp.
White birch	*Betula papyrifera*
Wire Birch	*B. populifolia*
Leatherleaf	*Chamaedaphne calyculata*
Bunchberry	*Cornus canadensis*
Broom-crowberry	*Corema conradii*
Gold-thread	*Coptis trifolia*
Mayflower	*Epigæa repens*
Teaberry	*Gaultheria procumbens*
Black Huckleberry	*Gaylussacia baccata*
Witch-hazel	*Hamamelis virginiana*
Inkberry	*Ilex glabra*
Canada Holly	*Ilex verticillata*
Lambkill	*Kalmia angustifolia*
Partridgeberry	*Mitchella repens*
Sweet Gale	*Myrica gale*
Bayberry	*M. pensylvanica*
False Holly	*Nemopanthus mucronata*
Largetooth Aspen	*Populus grandidentata*
Red Oak	*Quercus borealis*
Rhodora	*Rhododendron canadense*
Cranberry	*Vaccinium macrocarpon*
Witherod	*Viburnum cassinoides*
Blueberry	*Vaccinium* sp.
Birds	
Black Duck	*Anas rubripes*
Herring Gull	*Larus argentatus*
Black-capped Chickadee	*Parus atricapillus*
Common Grackle	*Quiscalus quiscula*
White-winged Crossbill	*Loxia leucoptera*
Mammals	
Eastern Coyote	*Canis latrans* (scat?)
Snow-shoe Hare	*Lepus americanus* (scat)

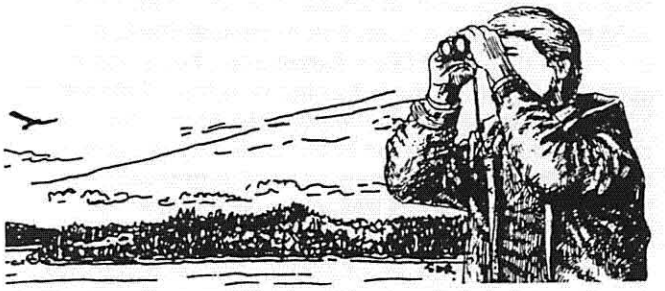
ADMIRAL'S COVE PARK

Date: Sunday, 23 April
Place: Admiral's Cove Park, Bedford
Region: 413a: Quartzite Barrens; Halifax
Weather: 25°C, sunny and clear
Participants: 12
Interpreter: Patricia Leader

With the thermometer at a barmy 25°C in late April, 12 people set off to explore a little known woodland gem at the far or northern edge of the Bedford Basin – unknown perhaps to most people unless you own a dog or a mountain bike; prefer to rappel down from the cliff face; or in the last few years, have acquired a Global Positioning System. For some years, the recreation department has been running an introductory one-day clinic on rock climbing and rappeling from Eagle's Nest, a rocky outcrop that marks the top edge of Admiral's Cove Park. 'Geo-caching' enthusiasts aren't necessarily looking for foot and handholds but rather some crevice where like-minded devotees have cached a box with notables like plastic toys, souvenir buttons, and a sign-in book. The GSP leads them to within three metres of the cache's location and then, having signed in and perhaps exchanged some trinkets, it's time to move on to another cache. The coordinates of each cache can be copied from a web page which specifies the areas one wants to explore.

Admiral's Cove Park consists of 90 acres of relatively untouched woodland which tumbles from Eagle's Nest down to a series of small beaches along the Bedford Basin. Halfway down is another rocky ridge which offers spectacuar views of the Basin, including the western and northern shores of Bedford, the eastern shores of Darmouth, and south to beyond the MacKay bridge. If one is leaving Halifax and driving along the Bedford Highway, the property and Admiral's Cove land is the last remaining woodland area on the Bedford Basin. Two years ago, Bedford boasted a similar area on the western side of the Basin but rapid development has resulted in concrete grey instead of emerald green as the colour of choice.

Admiral's Cove Park can be accessed from two points; from Snowy Owl Drive in Eaglewood subdivision off the Dartmouth Road, (Route 7), or from near the end of Shore Drive on the eastern side of Bedford Basin. There are a series of trails once one ventures beyond the official signboard on Shore Drive. Going slightly left then on an ascending path which eventually veers left, then up again, one can eventually reach the Eagle's Nest area where a graffiti aficionado has decorated a large rock with the Canadian flag emblem. An alternative path can be accessed by turning right after the



signboard. This one descends to the edge of the Basin, where, turning left, one can pass several small beaches before coming to the property. Depending on the tide, one might have to forage inland in order to get to the next adjoining beach. Despite being an area close to the city centre, one can often have the beach to oneself, but the drawback is the amount of flotsam and jetsam, particularly plastic and styrofoam, that washes up on the shores and is supplemented by the additional litter from beach parties.

Having whetted your appetite for the beauty of this city park I can now describe how we ourselves fared on the outing.

Just before we began the hike, a group of people emerged from the woods following a leader glued to his GPS unit. They crossed the road but as far as I could see they never located the cache. Previous groups had been also unlucky. The upward route is not for the faint-hearted, as the last section requires a good head for heights and a chance to go it on all fours. We therefore took the first half of the path which would provide us with some excellent views but which would also eventually lead to the beach. As we walked upwards, we could see that this section had been hit by hurricane Juan. Earlier in the year park staff had still been removing debris. A thick blanket of chipped wood covered the area. While soft on the feet, we wondered if this would allow any future generation of smaller plant life between the numerous tree roots. Soon we were on the edge of the lower rocky outcrop and able to see a partially-obscured view of the Basin.

There were three other viewing points after that, each with a successively better view. A naval ship was moored at this end of the Basin, an annual event that presumably gives those on board a touch of the sea. Last week, when 60 kph winds sent unaccustomed white waves roaring along the Basin, the ship had been secured by three very long lines to the buoys. I learned that, later in the week, the ship had sailed to the bluer waters of Bermuda. Over on the Bedford side where infilling has been in progress for some eight years, we could see several boats at the end of a large floating pipe. The pipe will eventually be installed as part of HRM's 'Harbour Solution'. Last year a similar pipe was installed via the casino area water ramp and eventually out into the Basin.

Leaving the outcrop, we took a path to the right and went gently downwards to the Basin. One could hardly believe that in the middle of these mixed woods we were on city property. The weather and the surrounding perfumes of nature reminded us that we had survived what CBC had termed the 'winter that wasn't'. Also despite the Easter-week wet weather, spring was showing. We passed an erratic rock where another artist had arranged a collection of mussel shells and driftwood. It seemed like a pagan altar, but it was a good marker for turning left at the next trail. I marvelled how soon I had forgotten the nuances of the various paths although I had been in the area only the previous month. David Fowler, a new convert to geo-caching, had luckily recorded the trail in his GPS unit which confirmed that it was the correct one.

Arriving at the edge of the beach, Shirley McIntyre, Jean Sawyer, and Bernice Moores attacked the litter that had blown inland from it; the rest of us explored the waters' edge, and — more litter. Dave quickly spotted the head of a seal which promptly sunk below the waves. Then a seabird was sighted. Was it a cormorant? — it could very well have been, as across the Basin there had been a group of rocks frequented by quite a few of them. Binoculars, however, identified the bird as a loon. (For years, shore walkers, families on yachts and sailboats, and lone kayakers passed the cormorants as they air-dried their wings on the rocks. Now these offshore rocks have all but been engulfed by the infilling at Mill Cove, and it has almost engulfed the little Crosby Island and the surrounding mussel-beds. It is in this area where we can expect the proposed commuter ferry to dock.)

Having gathered up four bags of litter we then returned by a coastal path, viewing the nearby 'Chicken Rocks', then went uphill and back to our original starting point. Several people asked about the park's name; which Admiral did it commemorate? Suggestions were Admiral DeWolfe or the 'French one' (presumably referring to Duc d'Anville whose armada had finished dramatically in Birch Cove).

After a little research, however, I found the correct answer in Elsie Tolson's book, The Captain, the Colonel and Me. She described how an old Chelsea pensioner, Darius Pace, settled in Bedford in the late 1700s. He was a fanatic about Horatio Nelson and besides celebrating Trafalgar Day each year, named a few local landmarks after his hero. Eagle Rock was formerly Trafalgar Rock, and the 'Admiral' is Admiral Nelson.

Although this was early in the spring, we did encounter Crowberry, Wintergreen, Mayflower, Lambkill, wild raisin, Witch Hazel, Hobble Bushes, two Red Squirrels, Black-capped Chickadees, periwinkles, mussels, crabs, and rockweed.

— Patricia Leader

REGION 413A— QUARTZITE BARRENS, HALIFAX

Soils — Halifax soils developed on till from quartzite; well-drained, stony, sandy loams; low-relief areas poorly drained; some peat; scattered drumlins.

Flora — Higher ridges capped with American Beech, Yellow Birch, Red Maple, Sugar Maple; fringed by Balsam Fir, Eastern Hemlock, White Spruce. In depressions — Black Spruce, Larch; some White Pine in sandy areas. Bogs include grasses, bulrushes, and low ericaceous shrubs.

Fauna — Good browse for Deer and Snowshoe Hare; the latter support a population of Bobcats. Small-mammal diversity moderately high in mixed forests, especially along streams; White and Yellow Perch, White Sucker, Brown Bullhead, Brook Trout, Banded Killifish, sticklebacks, Golden Shiner, Lake Trout, American Eel.

CAPE SPLIT HIKE

Date: Sunday, 28 May
Place: Cape Split, Blomidon
Region: 720: Fundy Coast; Basalt Ridge
Weather: Clear; +20°C; very dry underfoot
Participants: 11
Interpreter: Lesley Jane Butters

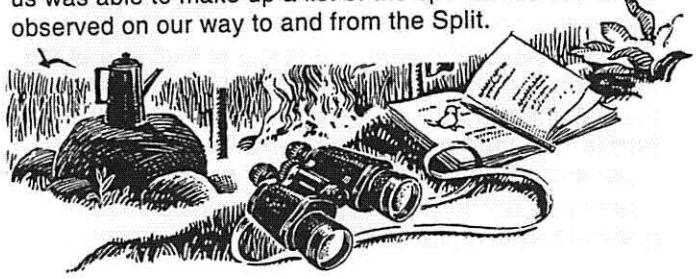
Three participants met me at the Nova Scotia Museum, and the morning was lovely after days of moist weather. On our drive to Blomidon, the highway look very beautiful as the foliage on the forest trees was beginning to show signs of life. The many shades of acid green and silvery silvers against a soft blue morning sky made for a gorgeous watercolour painting.

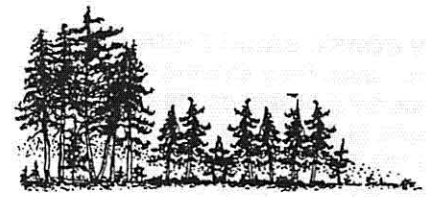
At the Blomidon look-off our carload was met by another fascinating phenomenon — an elongated, low, perfectly flat cloud with lower wispy sections closer to the farmer's fields. This strange cloud must have been early morning fog off the Minas Basin which had retreated when it hit the very warm air mass on all three sides. It was a strange, three-dimensional sensation, as if we were in small plane flying above the cloud but yet we could still see a large section of the valley and the farmers busily at work. Unfortunately, we had only a few minutes to stare, as there were others waiting for us at the Cape Split parking lot.

Practically speaking, all the participants were non-HFNers who had come for one purpose in mind — to *hike* out to Cape Split. I was left with three naturalists but they too seemed as if they had to rush along in order to keep up to the fast-paced walkers. The field trip was a little disappointing, as I could only picture the earlier years out to The Split with a much slower-paced group who had come on the field trip to identify the natural environment around us, not to see who gets to the end first.

There was a constant stream of people and pets on the trail; some who were serious walkers and others who had no idea what was ahead or behind them, and still others who had come out in their 'bedroom slippers' with neither water nor nourishment, thinking that the spectacular view was just a few metres away from the parking lot. Many had small children who seemed quite frustrated that they had walked and walked and still there was nothing to see. I suggested they go back to the tourist agent, and on their way perhaps they could look up into the trees and look down on the forest floor for there was so much beauty to observe, and that the bird songs were incredibly cheerful. Many families thanked me, though they were very disappointed.

The struggle with flora and fauna names was frustrating, especially to one very keen naturalist. I could have used Tim Randall's expertise at that point though the naturalist was extremely patient. Eventually, the pair of us was able to make up a list of the species which we observed on our way to and from the Split.





The beginning of the path through the coniferous forest has changed traumatically and it now almost resembles the 101 highway. Many plant species have succumbed to the extremely heavy foot and vehicle traffic. Even the wetter, lower areas on the path have been disturbed and no plants are visible these days. The path itself is a mass of exposed rock and deeply raised tree roots. Erosion is visible everywhere, though as hikers, we all contribute to the assault on this precious eco-system. New side paths have been beaten down along this main trail; they lead further into the forest and are probably intended to be short cuts.

Entering into the deciduous forest was slightly disappointing this year. Most of the early spring flowers were past their prime and the ferns were well advanced making a thick canopy over the forest floor. The 'Ol' Boot Tree' has vanished completely. Hikers in the past may recall using this tree to cache their rubber boots for retrieval on the return journey. Various ferns, grass species, and leafing trees replace the hillside that is usually covered in white Spring Beauty and Red Trilliums. The further we climbed the hillside into the open forest, the narrower the trail became, resembling how the whole trail system once looked. To my dismay, I did not see any clumps of Dutchman's breeches in their usual spots. Perhaps our open winter had killed them off.

The tide was on the ebb as we arrived at the Split, which was just as beautiful as ever. Nesting Gulls and Cormorants covered the grassy area of the main rock pinnacle, and they did not seemed disturbed by our presence. There was little activity; perhaps the numbers of humans flocking to and from the Split had mesmerised them. A cold wind was coming off the basin so my small group descended down the hillside through the flowering wild Strawberry and violets, to a more sheltered spot on the south side overlooking the basin from a different angle. A large flock of Chickadees shared our picnic spot along with a couple of butterflies and nests of red ants. Surprisingly, there were very few black flies and only a few pesky mosquitoes during the whole field outing.

Despite the amount of rain that had fallen before the field outing, the trail down to the beach was quite dry and passable though much steeper than I can remember from previous descents. The tide was still high and the water refreshingly *cold*. Rock hounding was not eventful this year. On the return to the parking lot much of the natural beauty was quickly passed by.

Our driver back to Halifax wanted to take in a lecture at Acadia University on the subject of willows in Nova Scotia. We too thought it would finish off the field trip with some extra interest. The lecture was informative but a little heavy for the non-naturalists. As in the past, we did not return home to Halifax until 10:00 pm. A full day of natural discovery!

— Lesley Butters

REGION — 720: FUNDY COAST, BASALT RIDGE

Soils — Mainly Rossway soils, fairly shallow, well-drained silt loam from underlying basalt; on the crest of the ridge are Glenmont soils (a fine sandy loam from basalt), and red Wolfville till. The area is unusual for copious earthworms which have incorporated the surface 'mull' into the mineral soil below.

Flora — A much-disturbed coastal forest of spruce, pine, fir; shade-tolerant hardwoods at higher elevations; Red Spruce more common here than Atlantic coast. Cape Split/Blomidon — rare Arctic/Alpine and uncommon Alleghenian plant species.

Fauna — Dense populations of White-tailed Deer in forest habitats; few Black Bear or Bobcat; the ridge is a funnel for migratory birds to Brier Island, particularly hawks and owls, and also migratory bats. Good intertidal habitat with large tidepools.

CAPE SPLIT SPECIES

Plants

Non-flowering

Lichens on mature deciduous trees	
Horsetail	*Equisetum* sp.

Ferns

Interrupted Fern	*Osmunda claytoniana*
Cinnamon Fern	*O. cinnamomea*
Beech Fern	*Phagopteris connectilis*

Flowering

Meadowrue	*Thalictrum pubescens*
Common Buttercup	*Ranunculus acris*
Goldthread	*Coptis trifolia*
Baneberry (no flower)	*Actæa* sp.
Stinging nettle	*Urtica dioica*
Red Oak (flowering)	*Quercus rubra*
Yellow Birch (flowering)	*Betula alleghaniensis*
White Birch	*B. papyifera*
Spring Beauty	*Claytonia caroliniana*
Common Blue Violet	*Viola cucullata*
Common White Wood Violet	*Viola* sp.
Teaberry	*Gaultheria procumbens*
Trailing Arbutus	*Epigæa repens*
Wintergreen	*Pyrolus* sp.
Starflower	*Trientalis borealis*
Bristly Black Currant	*Ribes lacustre*
Blackberry	*Rubus alleghaniensis*
Raspberry	*R. idæus*
Choke Cherry (flowering)	*Prunus virginiana*
Pin Cherry (flowering)	*P. pensylvanica*
Indian Pear Tree (flowering)	*Amelanchier* sp.
Hawthorn	*Crætagus* sp.
Cinquefoil	*Potentilla* sp.
Wild Strawberry	*Fragaria virginiana*
Bunchberry	*Cornus canadensis*
Sugar Maple	*Acer saccharum*
Striped Maple	*A. pensylvanicum*
(very old trees with unique sprawling old branches)	
Yellow Wood Sorrel	*Oxalis stricta*
Wild Sarsaparilla	*Aralia nudicaulis*
Field Forget-me-not	*Myostis* sp.
Ground Ivy	*Glechoma hederacea*
Heal-All	*Prunella vulgaris*
Bedstraw	*Galium* sp.
Bluets	*Hedyotis cærulea*
Elderberry	*Sambucus canadensis*
Common Yarrow	*Achillea millefolium*
Dandelion	*Taraxacum officinale*
Twisted-stalk	*Streptopus* sp.
Blue-bead Lily	*Clintonia borealis*
Red Trillium	*Trillium erectum*
Wild Lily-of-the-Valley	*Maianthemum canadense*
False Solomon's Seal	*Smilacena racemosa*

Fauna

Birds

Cormorant	*Phalacrocorax* sp.
Red-tailed Hawk	*Buteo jamaicensis*
Bald Eagle	*Haliæetus leucocephalus*
Peregrine Falcon	*Falco peregrinus*
Great Black-backed Gull	*Larus marinus*
Ruby-throated Hummingbird	*Archilochus colubris*
Hairy Woodpecker	*Picoides villosus*
Northern Flicker	*Colaptes auratus*
Vireo	*Vireo* sp.
Crow	*Corvus brachyrhynchos*
Chickadee	*Poecile* sp.
Nuthatch	*Sita* sp.
American Robin	*Turdus migratorius*
Yellow Warbler	*Dendroica petechia*
Yellow-rumped Warbler	*D. coronata*
Black-and-White Warbler	*Minotilta varia*
Ovenbird	*Seiurus aurocapillus*
many other warblers	

Mammals

3 Chipmunks (mating calls)	*Tamias striatus*
Red Squirrels (many)	*Tamiasciurus hudsonicus*
1 Star-nosed Mole	*Condylura cristata*

Reptiles/Amphibians

1 small Garter Snake	*Thamnophis sirtalis pallidula*
4 Wood Toads	*Bufo americanus*

Butterflies

ite butterflies (at a distance)	*Pieris rapae*?

CAPTAIN ARNELL LANDS

Date: Sunday, 4 June
Place: Arnell Lands, Purcell's Cove uplands
Region: 833: Eastern Coast Beaches
Weather: Cloudy, cool, rainy
Interpreter: Louise Ritchie, NSNT
Participants: 5

The field trip to the Captain Arnell Lands, which are managed by the Nova Scotia Nature Trust, was meant to survey the property and to begin an inventory of the Flora and Fauna of the area. Due to the forecast of rain, and the heavy rain on the previous day, the systematic survey was postponed.

Nevertheless, four participants met at 9:00 a.m. at the trailhead, and another person arrived later and joined the rest of the group. Under the guidance of Louise Ritchie from the Nova Scotia Nature Trust, we set out under a cloudy sky, hoping the weather would keep.

After crossing the former gravel pit, where some material had been removed in the summer of 2005, we

reached the little brook that runs down from Purcell's Pond. This stretch of land along the brook, which is not part of the Nature Trust Lands, is in a small ravine, slightly protected from the sun and has a hardwood-dominated flora.

The major trees in the area were Red Maple, White Birch, Grey Birch, Yellow Birch, and White Spruce. Smaller trees and shrubs identified were Balsam Fir, Mountain Maple, Indian Pear, Hobblebush, Cherry, Mountain Ash, and Witch Hazel.

The understory was in some areas dominated by a variety of ferns — Cinnamon Fern, Wood Fern and New York Fern — and in other areas by Blueberry and/or False Lily-of-the-Valley. Also present, but in lesser numbers, were Bunchberry, Starflower, Pink Lady's-Slipper, Mayflower, Twinberry, and Sarsaparilla. A fair number of mosses were present, as well as lichens (e.g. Rock Tripe on exposed bolders).

Upon reaching Purcell's Pond and with it the Captain Arnell Lands, the vegetation changed. The trees were mostly White Spruce, with the occasional deciduous tree — Maple, Birch, and rare Red Oak. There was also one well-sized Hemlock tree on the trail along Purcell's Pond. Along the shore of the pond, a variety of shrubs — Rhodora, Mountain Laurel/Kalmia, and Bayberry were found. Here, the ground vegetation contained also Bracken Fern and Claytonia.

We saw three Black Ducks on some rocks in Purcell's Pond, and heard a Blue Jay and a lonely Spring Peeper. During the whole walk, we were accompanied by mosquitoes. On the pond, a rhizome of Bullhead or Cow Lily had washed ashore which was approximately two metres long and at its strongest ten cm thick, with many five cm long roots extending along its length.

Our plan of continuing to Flat Lake was cut short by the onset of some light rain that continued to strengthen. The participants agreed it had been a short but interesting walk, which should be repeated under fairer weather.

— Burkhard Plache

ARNELL LANDS SPECIES

Rock Tripe	*Umbilicaria* sp. or *Gyrophora* sp.
Mosses	unspecified
Ferns	
Bracken Fern	*Pteridium aquilinum*
Cinnamon Fern	*Osmunda cinnamomea*
New York Fern	*Thelypteris noveboracensis*
Wood Fern	*Dryopteris* sp.
Flowering Plants	
White Spruce	*Picea glauca*
Balsam Fir	*Abies balsamea*
Cow Lily	*Nuphar variegata*
Witch Hazel	*Hamamelis virginiana*
Bayberry	*Myrica pensylvanica*
Red Oak	*Quercus rubra*
Grey Birch	*Betula populifolia*
Yellow Birch	*B. alleghaniensis*
White Birch	*B. papyrifera*
Claytonia	*Claytonia caroliniana*
Rhodora	*Rhodora canadense*
Mountain Laurel	*Kalmia angustifolia*
Mayflower	*Epigaea repens*
Blueberry	*Vaccinium myrtiloides*
Starflower	*Trientalis borealis*
Cherry	*Prunus* sp.
Indian Pear	*Amelanchier* sp.
Mountain-Ash	*Sorbus americana*
Bunchberry	*Cornus canadensis*
Red Maple	*Acer rubrum*
Mountain Maple	*A. spicatum*
Sarsaparilla	*Aralia hispida*
Twinberry/Partridge Berry	*Mitchella repens*
Hobblebush	*Viburnum alnifolium*
Witherod	*Viburnum nudum*
False Lily-of-the-Valley	*Maianthemum canadense*
Pink Lady's Slipper	*Cypripedium acaule*
Birds	
Black Duck	*Anas rubripes*
Blue Jay	*Cyanocitta cristata*

REGION 833 — EASTERN SHORE BEACHES

Soils — The Halifax Peninsula, which is underlain by slate except in the extreme north end, has mostly Bridgewater soils. Wolfville drumlin soils are common in Cole Harbour.

Flora — Coastal White Spruce and Balsam Fir forest with maple and birch predominant; on drumlins, pure stands of White Spruce; further back — spruce, fir, and pine.

Fauna — Fresh and salt water areas for migration, winter, and breeding habitat for waterfowl; freshwater fish include White Sucker, shiners, sticklebacks, perch, Banded Killifish, and Brook Trout.

NATURE PHOTOGRAPHY

Date: Saturday, 3 June
Place: Frog Pond, Jollimore
Region: 833: Eastern Shore Beaches
Weather: Rainy and cool
Participants: 6
Interpreter: Keith Vaughan

A beautiful, slim little tabby cat dominated the drizzly scene at the Frog Pond parking lot, where we waited for more participants next to a crowded line-up of film-making trailers. Hopping in and out of our cars, rubbing against legs, I was tempted to take him home.

Keith explained, as Mary Primrose used to do, that overcast conditions were perfect for nature photography as it intensified colours. Keith has taken photos of 150 native Nova Scotia flowers. He's making more and more use of digital photography lately (as opposed to film), but, even here, where the camera shows a 'what-you-see-is-what-you-get' image on its small viewscreen, he finds that using a hand-held light meter to supplement the camera's readings is still good practice, particularly in situations where the light is changing quickly.

Launching off towards the trail, we stopped to watch Keith set up his tripod with digital camera, cable release, and 160mm macro zoom lens to take close-ups of the white flowers of a large and spreading umbelliferous plant, growing just before and to the left of the trailhead. (When not 'shooting', he covered the camera with a plastic bag, as the mist was fast becoming a warm drizzle.) He explained the function of depth of field (or focal length) lens aperture settings (i.e. F8), and the results different settings would produce in a picture. In short, a wide lens aperture setting produces a shallow depth of field (i.e. perhaps only one or two inches depth or less will be in focus), while a smaller lens aperture setting will give a greater depth of field (i.e. perhaps one to two feet depth or more will be in focus). The former lets in lots of light, so a faster shutter speed may be required to lessen this for good results. The latter may need a slower shutter speed to admit more light through the small lens opening; this presents difficulties if the flowers are blowing about as the slower speed will record the movement as a blur! One has to experiment to get familiar with different results from different combinations. Also, it is important to take note of the angle of the camera to the subject, i.e., with the umbels of the plant, it is good to have the camera lens on the same plane as that of the flowerheads.

Further in, he set up to take photos of a bed of Bunchberry *(front cover).* For this shot, he was farther away so that he could include all the flowers and some of the forest floor, and so he used a 28/135 zoom lens. The rain had started to increase, and umbrellas were needed to protect him and the camera.

We gathered gear and ourselves up again, and went further into the woods to take a Lady's Slipper portrait at a site that Keith had pre-prepared by cleaning away some dead branches. Because he wanted a straight-on view, the tripod legs were shortened and angled straight out to the sides, so that Keith had to kneel down to get the shots at F2.8 (shallow), F8, F11, and F16 (deep) with a 100mm macro lens. By this time, three umbrellas were up over the equipment, and rivulets of rain from them were soaking him and threatening the camera as well.

Ingrid & Burkhard graciously invited us to their place nearby for a hot cup of tea and cookies. There we were able to warm up and dry off somewhat, while Keith downloaded the photos he had taken into his laptop for our viewing. It graphically demonstrated the various results from all three locations with different combinations of focal lengths and shutter speeds.

— Stephanie Robertson

REGION 833 — EASTERN SHORE BEACHES

Soils — The Halifax Peninsula, which is underlain by slate except in the extreme north end, has mostly Bridgewater soils. Wolfville drumlin soils are common in Cole Harbour.

Flora — Coastal White Spruce and Balsam Fir forest with maple and birch predominates; on drumlins, pure stands of White Spruce; further back — spruce, fir, and pine.

Fauna — Fresh and salt water areas for migrating, winter, and breeding habitats for waterfowl; freshwater fish include White Sucker, shiners, sticklebacks, Perch, Banded Killifish, and Brook Trout.

A 'FIELD NOTES' RAMBLE

May 1, 2006, and it was the Public Gardens unprecedently-early Spring opening. While walking under the 'weeping trees' near the military fountain, seeing them lit by the morning sun and without their foliage, I was aware for the first time of the grotesquerie created by the tortuous limbs and gnarled trunks of this fantastic copse.

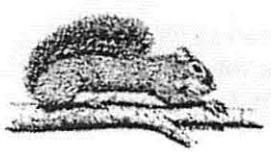
One particular tree with a topmost branch at a sharp right angle to the trunk and drooping branches, is sharply outlined against the sky at this time of year. Last spring, while the gardens were still closed and I was walking past, a crow on the grassy verge was hunting around for nesting material. Finally finding a suitable piece, a foot-long twig, the bird flew up to the straight branch and tried several ways to get the darn stick to stay put, while from a nearby branch, the mate (or mother?) kept up a running natter of advice or admonition, until finally the stick fell off the branch and dropped to the ground, and our discomfited friend flew to a nearby elm to repair his shattered ego.

The diminutive resident squirrel in the Gardens who lives near the main gate, and which I have seen popping up out of the snow on occasion, was out in February sitting on the base of the fence near the Gate. He quizzed me, darted back into the garden and into the bottom of a bush. Then he popped out of his refuge to sit farther along on the bottom of the iron railing with a beady eye on me, and then once again darted back into another bush. He repeated this manœuvre twice more, darting away as I came slowly nearer. Finally, either courage or hunger took precedence, and in one move he darted out from among the bush stems through the railings, (how do they do that at speed without knocking themselves out?) across the sidewalk, and up to the top of one of the Brunswick Cherry Trees at the roadside, where he sat literally gobbling the berries still on the tree.

Then there was that sunny day at Lesley's cottage when I was sitting on a shallow deck she had contrived from wooden pallets, gazing at the river while Lesley mowed the lawn. Suddenly aware of a lot of activity round my feet I noticed a number of busy little ants taking shreds of debris and grass which had dropped onto the wood and disappearing with them down a crack in the boards. One little fellow was struggling manfully with a stiff, two-inch long grass stem which he was carrying by one end. Suddenly the forward end dropped, caught in the rough wood, and our little worker shot aloft at his end of the stem to be left with legs flailing — until he fell off and scurried away without his prize!

A month or so ago while there was still snow on the ground, on my way home I noticed two of the largest, blackest crows huddled shoulder to shoulder to one side atop an old, white, weather-worn headstone just inside the Cemetery Gate. A slightly Gothic touch?

— Doris Butters



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.

"Come [to an alder swamp] in summertime to look and listen. As your eyes grow accustomed to the bottle-green light under the leafy canopy you may catch a glimpse of the olive-sided flycatcher darting afer a mosquito and calling its loud Quick Three Beers. Or you may see a yellow warbler flash like a sunray among the branches. And if there's a brook nearby, you may spot a speckled trout lazing in the cool shade while turquoise-and-jade dragonflies rattle their wings in pursuit of gnats.

— Gary Saunders, "Alder Music", In Alder Music: A Celebration of Our Environment (1989)

NATURAL EVENTS

21 Jun. Summer Solstice at 9:27 ADT. Summer begins in the Northern hemisphere. The longest day of the year, with 15 hours and 33 minutes of daylight at Halifax.
22 Jun. -30 Jun. The latest evenings of the year: sun sets at 21:04 ADT.
10 Jul. Full Moon rises at 21:19 ADT.
15 Jul. Canada's "Parks Day" — look for events at local parks.
5 Aug. -12 Aug. Average dates of the hottest days of summer (average daily maximum is 22.5°C).
9 Aug. Full Moon rises at 20:59 ADT.
12 Aug. Perseid Meteor showers peak.
13 Aug. Average date for temperatures to start decreasing.
7 Sept. Full Moon rises at 19:46 ADT. There will be large tides on this and the next two days.
23 Sept. Autumnal Equinox at 1:04 ADT: Fall begins in the Northern Hemisphere.
28 Sept. Third anniversary of Hurricane Juan.
30 Sept. Average date for first frost in Halifax (i.e. Environment Canada says that there is only a 1:10 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 2006 Calendar; Burke-Gaffney Observatory, Saint Mary's University.

SUNRISE AND SUNSET ON SPRING AND EARLY SUMMER SATURDAYS

3 Jun.	5:32	20:54	**1 Jul.**	5:33	21:03
10 Jun.	5:29	20:59	**8 Jul.**	5:38	21:01
17 Jun.	5:29	21:02	**15 Jul.**	5:44	20:57
24 Jun.	5:30	21:04	**22 Jul.**	5:50	20:51
			29 Jul.	5:58	20:44
5 Aug.	6:06	20:35	**2 Sept.**	6:38	19:50
12 Aug.	6:14	20:25	**9 Sept.**	6:46	19:37
19 Aug.	6:22	20:14	**16 Sept.**	6:55	19:24
26 Aug.	6:30	20:02	**23 Sept.**	7:03	19:10
			30 Sept.	7:11	18:57

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

ORGANISATIONAL EVENTS

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

28 Jun. "Smiley's Provincial Park", with leaders Ruth & Reg Newell, 542-2095.
11 Jul. "Acadia University Woodland Trails", with leaders Ruth & Reg Newell, 542-2095.
30 Jul. "Aylesford Mountain Nature and Historical Walk", with leaders George Alliston and Duncan Bayne of the Nova Scotia Nature Trust, 425-5263; **<duncan@nsnt.ca>**.
5 Aug. "Gaspereau River Trail", with leader Bernard Forsythe.
19 Aug. "Shorebirds of the Minas Basin", with leader Jim Wolford, 542-9204.
10 Sept. "Kingsport Intertidal Mud Flats Fauna and Flora", with leader Jim Wolford, 542-9204.

Burke-Gaffney Observatory: Public shows at Burke-Gaffney Observatory at Saint Mary's University are held on the 1st and 3rd Saturday of each month, but not June through September, when they are held every Saturday. Tours begin at 7:00 p.m. from November 1st to March 30th; and either 9:00 p.m. or 10:00 p.m. (depending on when it gets dark) from April 1st to October 31st. For more information, 496-8257; or go to **<http://apwww.stmarys.ca/bgo/>**.

Nova Scotia Bird Society: Indoor meetings take place on the 4th Thursday of the month, September to May, at the NSMNH, 7:30 p.m. For more information, Suzanne Borkowski, 445-2922; or go to **<http://nsbs.chebucto.org/>**.

24 Jun. **Rain date: 25 Jun.** "Cape Chignecto", with leader Joan Czapalay, 348-2803; **<joancz@ns.sympatico.ca>**. **Pre-Register for this trip!**

25 Jun. "Pockwock Watershed", with leader Suzanne Borkowski, 445-2922; **<sborkowski@hfx.eastlink.ca>**. **Pre-Register for this trip!**

8 Jul. "Bird Islands in Cape Breton", with leader Maureen Cameron-MacMillan, 727-2733; **<maureen_cameron@excite.com>**.

16 Jul. "Wallace Bay", with leader Paul MacDonald, 627-2568; **<paulrita2001@yahoo.com>**.

29 Jul. "Pictou County", with leader Ken McKenna, 752-7644(h), 752-0044(w); **<kenmcken@pchg.net>**.

5 Aug. "Mahone Bay", with leader James Hirtle 640-2173; **<jrhbirder@hotmail.com>**.

12 Aug. "Taylor Head Provincial Park", with leader Karl Tay, 772-2287.

19 Aug. "Point Michaud", with leaders Billy Digout, 535-2513; and George and Sharon Digout, 535-3516.

27 Aug. "Cherry Hill Beach", with leader Eric Mills, 766-4606; **<e.mills@dal.ca>**.

1-4 Sept. "Bon Portage Island", with leader Joan Czapalay, 348-2803 to Aug. 15th, 229-3327(cell) after Aug. 15th; **<joancz@ns.sympatico.ca>**. **Pre-Register for this trip!**

10 Sept. "Sydney Airport and Morien Bar", with leader Susan Myers, 431-9123; **<myerss@eastlink.ca>**.

28 Sept. "The Roseate Tern Recovery Project in Mahone Bay", with Chris Wessel of Bluenose Coastal Action Foundation.

29 Sept. **-1 Oct.** "Brier Island Weekend", with leaders James Hirtle, 640-2173; **<jrhbirder@hotmail.com>**, and Fulton Lavender 455-4966. **Reservations** — Suzanne Borkowski, 445-2922; **<suzanneborkowski@yahoo.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 free from the Department, 424-4321, and at many museums, parks, and tourist bureaus, and on the web at **<http://parks.gov.ns.ca/programs.aspa>**.

Nova Scotia Lighthouse Preservation Society: Monthly meetings and organised guided trips to lighthouses including boat trips to islands. For more information, phone Dan Conlin, 424-6442; or go to **<http://www.nslps.com/>**.

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

22 Apr. **-4 Sept.** "Northern Jaws: Sharks of Canada", produced by the Musée de la Nature et des Sciences.

1 Jul. "Canada Day: Butterfly Social". The Butterfly House opens for the season.

19 Jul. "Botanical Ramble through the Public Gardens", with Museum Botanist Alex Wilson.

5 Aug. **Rain date: 19 Aug.** "Bat Walk", with Museum Zoologist Andrew Hebda at Smiley's Provincial Park. **Register for this trip, 424-3563!**

8 Aug. **Rain date: 9 Aug.** "Family Butterfly/Dragonfly Hike at Uniacke Estate Museum Park", with Derek Bridgehouse.

12 Aug. "Stream Saunter", with Museum Zoologist Andrew Hebda at Smiley's Provincial Park. **Register for this trip, 424-3563!**

20 Aug. "Meet the Curator of Botany, Marian Munro". Bring in your mystery plants!

22 Aug. **Rain date: 23 Aug.** "Family Butterfly/Dragonfly Hike at Uniacke Estate Museum Park", with Derek Bridgehouse.

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

24 Jun. "Hike to Susie's Lake in the Blue Mountain/Birch Cove Lakes Area". Phone Bob McDonald, 443-5051.

26 Jun. "Belcher's Marsh and Pond Flora Survey". Phone Bob McDonald, 443-5051.

30 Jul. "Aylesford Mountain Nature & Historical Walk". Phone Duncan Bayne, 425-5263. Sponsored by the Nova Scotia Nature Trust.

12 Aug. "Coastal Barrens Interpretive Hike at Duncan's Cove Nature Reserve". Phone Oliver Maass, 424-2123. This is a Parks are for People Programme.

14 Aug. **28 Aug., 9 Sept., & 16 Sept.**, "Life Between the Cracks", a survey of urban plants living in hostile conditions in Halifax. Phone Barry Sawyer, 445-4938.

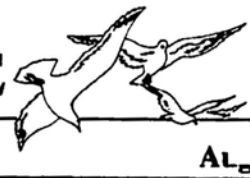
26 Aug. "Mosses of Eigg Mountain/James River Wilderness Area". **Register** with Robert Cameron, 424-2176. This is a Parks are for People Programme.

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

25 Aug. **-27 Aug.** "Nova East, Atlantic Canada's Longest-running Star Party", at Smiley's Provincial Park, Hants Co.

— compiled by Patricia L. Chalmers

TIDE TABLE



HALIFAX

July-juillet

Day	Time	Feet	Metres	jour	heure	pieds	metres
1	0549	1.6	0.5	16	0615	0.3	0.1
	1158	5.6	1.7		1201	5.9	1.8
SA	1838	2.3	0.7	SU	1901	1.3	0.4
SA				DI			
2	0003	5.2	1.6	17	0015	5.6	1.7
	0626	2.0	0.6		0712	0.7	0.2
SU	1240	5.6	1.7	MO	1250	5.9	1.8
DI	1927	2.3	0.7	LU	2001	1.0	0.3
3	0048	4.9	1.5	18	0112	5.2	1.6
	0707	2.0	0.6		0810	1.3	0.4
MO	1324	5.6	1.7	TU	1342	5.6	1.7
LU	2017	2.3	0.7	MA	2059	1.0	0.3
4	0139	4.6	1.4	19	0216	4.9	1.5
	0755	2.0	0.6		0911	1.3	0.4
TU	1412	5.2	1.6	WE	1441	5.6	1.7
MA	2106	2.0	0.6	ME	2159	1.0	0.3
5	0240	4.6	1.4	20	0330	4.6	1.4
	0847	2.3	0.7		1013	1.6	0.5
WE	1503	5.2	1.6	TH	1545	5.2	1.6
ME	2155	2.0	0.6	JE	2257	1.0	0.3
6	0348	4.6	1.4	21	0445	4.9	1.5
	0944	2.3	0.7		1115	1.6	0.5
TH	1554	5.2	1.6	FR	1650	5.6	1.7
JE	2246	1.6	0.5	VE	2353	1.0	0.3
7	0451	4.6	1.4	22	0550	4.9	1.5
	1042	2.3	0.7		1213	1.6	0.5
FR	1645	5.2	1.6	SA	1749	5.6	1.7
VE	2337	1.0	0.3	SA			
8	0546	4.9	1.5	23	0046	1.0	0.3
	1138	2.0	0.6		0644	5.2	1.6
SA	1735	5.6	1.7	SU	1307	1.6	0.5
SA				DI	1841	5.6	1.7
9	0028	0.7	0.2	24	0135	0.7	0.2
	0635	4.9	1.5		0732	5.2	1.6
SU	1231	2.0	0.6	MO	1354	2.0	0.6
DI	1825	5.9	1.8	LU	1929	5.9	1.8
10	0119	0.7	0.2	25	0219	0.7	0.2
	0721	5.2	1.6		0816	5.6	1.7
MO	1321	1.6	0.5	TU	1435	2.0	0.6
LU	1915	6.2	1.9	MA	2013	5.9	1.8
11	0207	0.3	0.1	26	0258	1.0	0.3
	0808	5.2	1.6		0856	5.6	1.7
TU	1412	1.6	0.5	WE	1512	2.0	0.6
MA	2005	6.2	1.9	ME	2055	5.9	1.8
12	0255	0.0	0.0	27	0332	1.0	0.3
	0855	5.6	1.7		0933	5.6	1.7
WE	1504	1.3	0.4	TH	1546	2.0	0.6
ME	2054	6.2	1.9	JE	2135	5.9	1.8
13	0343	0.0	0.0	28	0403	1.3	0.4
	0942	5.9	1.8		1008	5.6	1.7
TH	1600	1.3	0.4	FR	1621	2.0	0.6
JE	2143	6.2	1.9	VE	2213	5.6	1.7
14	0431	0.0	0.0	29	0430	1.3	0.4
	1029	5.9	1.8		1043	5.6	1.7
FR	1659	1.3	0.4	SA	1658	2.0	0.6
VE	2232	6.2	1.9	SA	2250	5.6	1.7
15	0522	0.3	0.1	30	0458	1.6	0.5
	1115	5.9	1.8		1117	5.6	1.7
SA	1800	1.3	0.4	SU	1741	2.0	0.6
SA	2322	5.9	1.8	DI	2327	5.2	1.6
				31	0530	1.6	0.5
					1152	5.6	1.7
				MO	1828	2.0	0.6
				LU			

August-août

Day	Time	Feet	Metres	jour	heure	pieds	metres
1	0006	4.9	1.5	16	0050	4.9	1.5
	0611	2.0	0.6		0752	1.3	0.4
TU	1229	5.6	1.7	WE	1311	5.6	1.7
MA	1919	2.0	0.6	ME	2038	1.0	0.3
2	0050	4.6	1.4	17	0150	4.6	1.4
	0703	2.3	0.7		0856	1.6	0.5
WE	1310	5.2	1.6	TH	1410	5.2	1.6
ME	2013	2.0	0.6	JE	2138	1.3	0.4
3	0143	4.6	1.4	18	0307	4.6	1.4
	0804	2.3	0.7		0959	2.0	0.6
TH	1358	5.2	1.6	FR	1522	4.9	1.5
JE	2108	2.0	0.6	VE	2238	1.3	0.4
4	0250	4.6	1.4	19	0435	4.6	1.4
	0908	2.3	0.7		1102	2.0	0.6
FR	1457	5.2	1.6	SA	1639	5.2	1.6
VE	2206	1.6	0.5	SA	2336	1.3	0.4
5	0407	4.6	1.4	20	0543	4.9	1.5
	1010	2.3	0.7		1159	2.0	0.6
SA	1603	5.2	1.6	SU	1741	5.2	1.6
SA	2305	1.3	0.4	DI			
6	0514	4.6	1.4	21	0029	1.0	0.3
	1109	2.3	0.7		0633	5.2	1.6
SU	1707	5.6	1.7	MO	1250	2.0	0.6
DI				LU	1831	5.6	1.7
7	0002	1.0	0.3	22	0116	1.0	0.3
	0610	4.9	1.5		0715	5.2	1.6
MO	1206	2.0	0.6	TU	1333	2.0	0.6
LU	1805	5.9	1.8	MA	1914	5.6	1.7
8	0055	0.7	0.2	23	0156	1.0	0.3
	0659	5.2	1.6		0753	5.6	1.7
TU	1300	1.6	0.5	WE	1410	1.6	0.5
MA	1857	6.2	1.9	ME	1954	5.9	1.8
9	0144	0.3	0.1	24	0231	1.0	0.3
	0747	5.6	1.7		0828	5.6	1.7
WE	1354	1.3	0.4	TH	1442	1.6	0.5
ME	1948	6.6	2.0	JE	2032	5.9	1.8
10	0231	0.0	0.0	25	0300	1.0	0.3
	0833	5.9	1.8		0901	5.6	1.7
TH	1449	1.0	0.3	FR	1512	1.6	0.5
JE	2038	6.6	2.0	VE	2108	5.9	1.8
11	0317	−0.3	−0.1	26	0325	1.3	0.4
	0919	6.2	1.9		0932	5.6	1.7
FR	1544	0.7	0.2	SA	1542	1.6	0.5
VE	2127	6.2	1.9	SA	2144	5.6	1.7
12	0404	0.0	0.0	27	0348	1.3	0.4
	1004	6.6	2.0		1003	5.6	1.7
SA	1641	0.7	0.2	SU	1616	1.6	0.5
SA	2216	6.2	1.9	DI	2219	5.6	1.7
13	0455	0.0	0.0	28	0413	1.6	0.5
	1049	6.2	1.9		1034	5.6	1.7
SU	1739	0.7	0.2	MO	1654	1.6	0.5
DI	2306	5.9	1.8	LU	2254	5.2	1.6
14	0550	0.7	0.2	29	0445	2.0	0.6
	1134	6.2	1.9		1107	5.6	1.7
MO	1839	0.7	0.2	TU	1738	1.6	0.5
LU	2356	5.2	1.6	MA	2331	4.9	1.5
15	0649	1.0	0.3	30	0527	2.0	0.6
	1220	5.9	1.8		1141	5.6	1.7
TU	1938	1.0	0.3	WE	1830	2.0	0.6
MA				ME			
				31	0011	4.9	1.5
					0625	2.3	0.7
				TH	1221	5.2	1.6
				JE	1929	2.0	0.6

September-septembre

Day	Time	Feet	Metres	jour	heure	pieds	metres
1	0059	4.6	1.4	16	0247	4.6	1.4
	0734	2.6	0.8		0944	2.0	0.6
FR	1309	5.2	1.6	SA	1501	4.9	1.5
VE	2031	2.0	0.6	SA	2215	1.3	0.4
2	0201	4.6	1.4	17	0424	4.6	1.4
	0841	2.6	0.8		1045	2.0	0.6
SA	1411	5.2	1.6	SU	1626	4.9	1.5
SA	2134	1.6	0.5	DI	2311	1.3	0.4
3	0323	4.6	1.4	18	0526	4.9	1.5
	0944	2.3	0.7		1140	2.0	0.6
SU	1527	5.2	1.6	MO	1726	5.2	1.6
DI	2235	1.3	0.4	LU			
4	0445	4.9	1.5	19	0003	1.3	0.4
	1045	2.3	0.7		0610	5.2	1.6
MO	1641	5.6	1.7	TU	1228	2.0	0.6
LU	2332	1.0	0.3	MA	1812	5.2	1.6
5	0544	5.2	1.6	20	0048	1.3	0.4
	1144	1.6	0.5		0647	5.6	1.7
TU	1743	5.9	1.8	WE	1308	1.6	0.5
MA				ME	1852	5.6	1.7
6	0025	0.7	0.2	21	0126	1.0	0.3
	0634	5.6	1.7		0721	5.6	1.7
WE	1242	1.3	0.4	TH	1342	1.6	0.5
ME	1838	6.2	1.9	JE	1929	5.6	1.7
7	0114	0.0	0.0	22	0158	1.0	0.3
	0720	6.2	1.9		0753	5.6	1.7
TH	1338	0.7	0.2	FR	1412	1.3	0.4
JE	1929	6.2	1.9	VE	2006	5.6	1.7
8	0201	0.0	0.0	23	0224	1.3	0.4
	0805	6.6	2.0		0823	5.6	1.7
FR	1432	0.3	0.1	SA	1441	1.3	0.4
VE	2019	6.2	1.9	SA	2042	5.6	1.7
9	0248	0.0	0.0	24	0247	1.3	0.4
	0851	6.6	2.0		0853	5.6	1.7
SA	1526	0.3	0.1	SU	1511	1.3	0.4
SA	2109	6.2	1.9	DI	2117	5.6	1.7
10	0337	0.0	0.0	25	0312	1.6	0.5
	0935	6.6	2.0		0923	5.6	1.7
SU	1620	0.3	0.1	MO	1544	1.3	0.4
DI	2158	5.9	1.8	LU	2152	5.2	1.6
11	0429	0.3	0.1	26	0340	1.6	0.5
	1020	6.6	2.0		0954	5.6	1.7
MO	1716	0.3	0.1	TU	1621	1.3	0.4
LU	2247	5.6	1.7	MA	2227	5.2	1.6
12	0526	1.0	0.3	27	0415	2.0	0.6
	1105	6.2	1.9		1028	5.6	1.7
TU	1814	0.7	0.2	WE	1704	1.3	0.4
MA	2336	5.2	1.6	ME	2303	5.2	1.6
13	0630	1.3	0.4	28	0501	2.3	0.7
	1151	5.9	1.8		1105	5.6	1.7
WE	1914	1.0	0.3	TH	1758	1.6	0.5
ME				JE	2344	4.9	1.5
14	0028	4.9	1.5	29	0604	2.6	0.8
	0736	1.6	0.5		1147	5.2	1.6
TH	1242	5.2	1.6	FR	1900	1.6	0.5
JE	2015	1.3	0.4	VE			
15	0128	4.6	1.4	30	0031	4.9	1.5
	0841	2.0	0.6		0716	2.6	0.8
FR	1343	4.9	1.5	SA	1237	5.2	1.6
VE	2115	1.3	0.4	SA	2005	1.6	0.5

ALL TIMES ARE ADT

Nature Notes from HFN Monthly Meetings

April Meeting

Janet Dalton spotted two **ladybugs** and Joanne saw two **Beaver** at the Frog Pond on Purcell's Cove Road. John VanDermeer and Regina saw two **Cardinals**; Linda Payzant her first **Lepidoptera** of the year. Pat Chalmers - **Red-winged Blackbirds** and **American Robins**; Peter Payzant two **spring peepers**, **Grackles**, possible **Juncos**, and an **American Robin**. John VanDermeer also saw about a dozon **Juncos**. Joanne saw **Cardinals** and a **Great blue Heron** on April 2nd. Shirley McIntyre and Patricia Chalmers saw **Mayflowers** in bud off the Coach Road in Bedford. Patricia also saw a **Fox Sparrow** at her parents' bird feeder and one at the Frog Pond as well. David Patriquin spied **Aspen catkins** in Point Pleasant Park around the skating pond. Bob McDonald and two fellow naturalists reported **Ruby-throated Hummingbirds** in the west Annapolis Valley. Jim Wolford saw both **Red and Silver Maple** in bloom in the valley.

May Meeting

On May 1st, at the Frog Pond, Patricia Chalmers saw three **Osprey**, heard **spring peepers**, the **Muskrat** and **Beaver** were quite active, and the **American Fly Honeysuckle** was in blossom. On May 3rd Pat spotted a pair of **Mergansers** (call for details), and on the 4th of May, a **Yellow-rumped Warbler**. Betty Hodgson noted bird pairs — **Kestrels** nesting near her house in Dartmouth, **Pheasants**, and **Crested Mergansers** in MicMac Lake. On Robie Street she spotted a pair of **Purple Finches** (House Finches?) and at Musquodobit Harbour two pair of **Piping Plover**; one pair in the surf, one on the beach grass. Karen McKendry spotted two **Lobster** in the shallows of the NorthWest Arm. Janet Dalton saw a **sleeping seal** at Brackley Beach, P.E.I.; he rolled over to get more sun on his stomach, but had left for the water by the time she had returned to the spot; the beach was very deserted.

June Meeting

The first odonatesof spring were observed mating, and females were observed laying eggs. Patricia Chalmers reported a **Snowy Egret** at Sambro Head. One of Nova Scotia's less-common waders, the bird seemed to be finding lots of food and appeared quite healthy.

Spring wildflowers were widely reported. Akhtar Abbasi attended the Cape Split hike and reported a good example of **White Baneberry**. Judi Hayes saw **38 Lady Slippers** near her home. Bob McDonald found his first **Painted Trillium** of the year behind the Mother House on the Mount Saint Vincent University property. Bob also reported seven or eight **Lady Slippers** in Hemlock Ravine, and that birders are in their element now that the wood warblers are back. Butterfly sightings included **Canadian Tiger Swallowtail**, **Spring Azure**, **Cabbage White**, and **Clouded Sulphur**. Joan Czapalay advised Nature Canada will soon release information on the Species at Risk Act.

Attendees at Nature Nova Scotia's annual conference watched a **White-tailed Deer** walk into the Annapolis Basin until the water was up to its neck. It was thought the animal was hoping for relief from ticks.

! NEXT DEADLINE !
21 August for September Issue
Contributions to the 'Newsletter', c/o NS Museum of Natural History
Email submissions to sdhaythorn@ns.sympatico.ca.