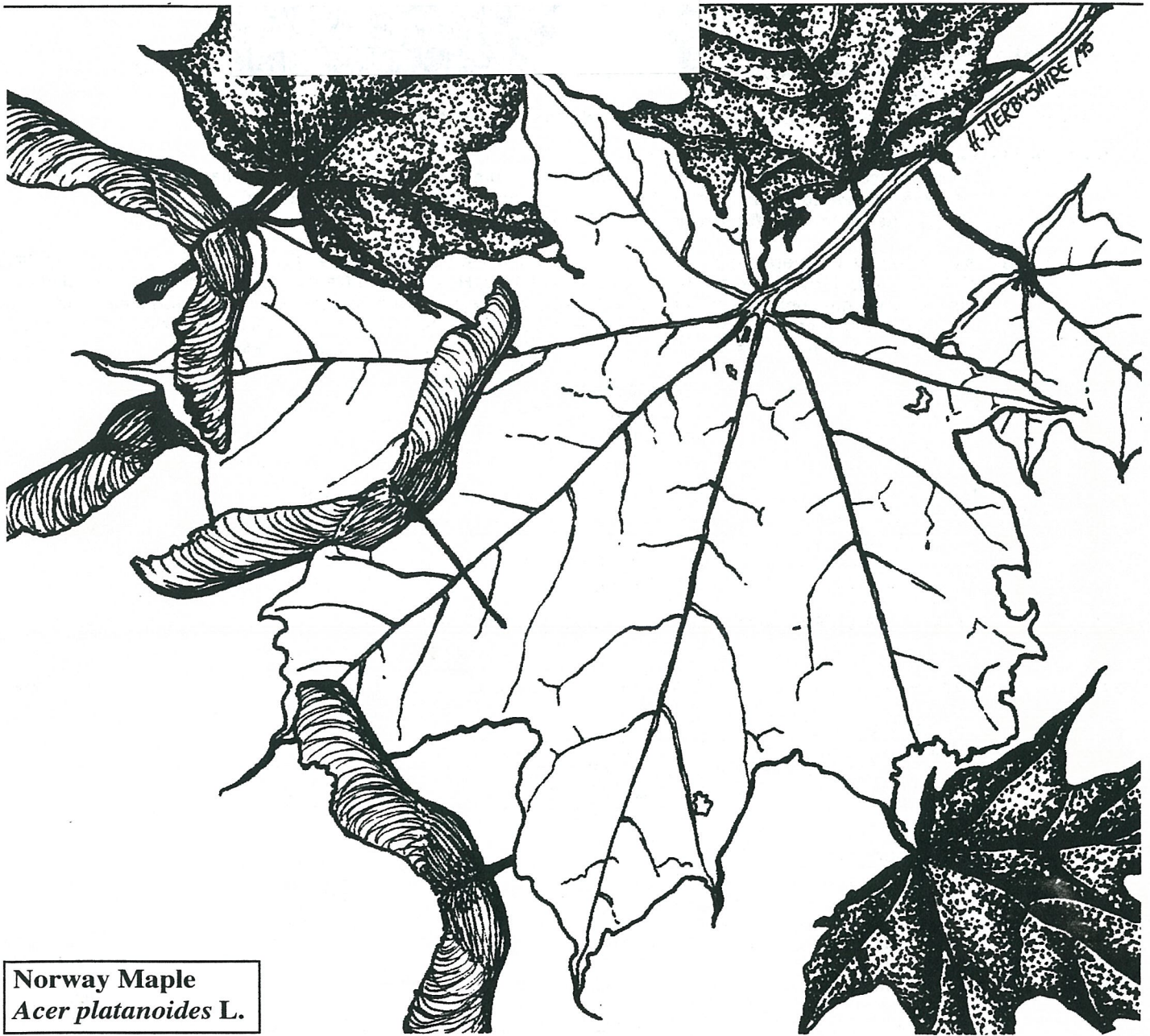


THE HALIFAX FIELD NATURALIST



No. 112
September to November, 2003



Norway Maple
Acer platanoides L.

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



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

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

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

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

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

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

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HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

It's the end of summer, 2003. It's been a fairly typical summer, though it began late. It's also the end of my time as Editor of the Halifax Field-Naturalist.

Stephanie Robertson and I took over from Doris Butters in the early 80s, and (mostly Stephanie) changed the composing of our Newsletter from cut-and-paste to desk top publishing (much less work!). Stephanie also designed the journal and contributed artwork. Members sent articles, and the Board has always been supportive. There's generally been a distribution committee too.

There were challenges, as when Stephanie went to Barbados for three years, leaving me daunted by Page-Maker. Our President at that time, Roy John, suddenly left to take another job, so I was producing the Newsletter almost singlehanded. About then Patricia Chalmers offered to design and compile a quarterly Almanac of both natural and other societal events outside HFN; it is now an important feature.

There was the day when I was printing the Newsletter on a balky copier which nobody would fix; the floor was awash with crumpled paper, but the issue at last got printed. (The copier? – Don't ask!)

Well, we go to the Dalhousie printers now, and when Stephanie went to Bangladesh in 2001, we compiled the Newsletter over the internet. It was nearly as good as doing it locally, especially with help from Linda and Peter Payzant. It's been a good time, and I am privileged to have been part of it. I look forward to seeing HFN and its Newsletter flourish in the future.

I have partly retired from professional work and find the meaning of 'time' is surprisingly different. I want to collect HFN's species records now, secure them in Museum archives, and also make them more available through HFN; it is particularly important at present, while conservation and land-use are so threatened. And I'm looking forward to following Sally Roth's advice on gardens for birds (*review, page 8*)!

– Ursula Grigg



NATURE ON THE NET

Go on Your Own Expedition! This is exactly how the American Museum of Natural History announced its Young Naturalists Awards for 2003, "Scientific Discovery Begins with Expeditions!" And, go on an expedition, a young Nova Scotian student did.

Natalie, a Halifax High School student, describes her expedition which successfully earned her a scholarship. To follow her journey, go to <http://www.amnh.org/nationalcenter/youngnaturalistawards/yna2003/natalie.html>.

For those who do not have access to the net, Natalie describes the life of the Common Periwinkle, *Littorina littorea*, and its life in the Halifax Harbour, as compared with those specimens living off Graves Island. As one could imagine, the daily exposure to pollution from the sewage outfall does not make life any easier for the creatures living in our harbour. Illustrations, charts, and

comparisons helped Natalie to explain the differences – and one only hopes that the Halifax Harbour will be cleaned up quickly!

If you know of any young naturalists who are keen to share their findings, let them know about these awards as they are held each year. It would be great to see another Canadian represented among the 12 annual award winners!

There is still time to join up with the Parks are for People events around our province too. Go to: <http://www.gov.ns.ca/programs.htm> to find out more about the remaining trips scheduled for this season.

– Wendy McDonald



ELECTION 2003

In July, before the NS Summer 2003 election, the Nova Scotia Environmental Network (NSEN) surveyed the three political parties about NSEN's Top Ten list of key environmental issues. The key issues were:

Digby Quarry	Aquaculture/Coastal Development
Black Bull Mine	Kyoto Commitments
Sour Gas Plant	Protected Areas
Balzer's Peat Bog	Indiscriminate Clearcutting
Sydney Tar Ponds	Seismic Blasting and Drilling

The overall survey results were: NDP – A; Liberals – C; and PCs – D!

For more details, see the Ecology Action Centre's *Between the Issues*, Vol. 21, No. 3, pp. 11 & 12; or go to www.ecologyaction.ca.

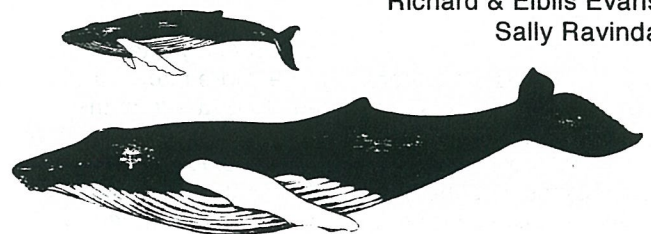


PARKS ARE FOR PEOPLE

Very many excellent outings that will take place in our Provincial Parks are listed in the 'Parks are for People' Programme, available free from the Department of Natural Resources, 424-4321; at many museums, parks, and tourist bureaus; and on the web at <http://parks.gov.ns.ca/programs.asp>.

NEW AND RETURNING

Richard and Grace Beazley
Richard & Eiblis Evans
Sally Ravinda



SPECIAL REPORTS

CNF CONFERENCE 2003

The Grasslands Naturalists, based in Medicine Hat, Alberta, took on the task of hosting the 2003 Canadian Nature Federation Conference and AGM, 19-22 June. Besides serving as the venue for CNF Board meetings and the AGM, the annual conferences serve to introduce delegates to different Canadian regions, focusing on their unique species and habitat. This conference was no exception, and the special areas included the native prairie, grasslands, sandhills, aspen parklands, and the rivers and wetlands. Over 280 delegates attended.

Several of the welcoming speakers mentioned the fact that Southeastern Alberta was blooming after a wet, cool spring. This had followed several years of hot, dry summers – so there were flowers in bloom that had not been seen for many years. The Friday morning keynote address, "Prairie Grasslands: the Beauty and the Biology", was a superbly illustrated, often humorous presentation by internationally known wildlife photographer and writer, Dr. Wayne Lynch. This unapologetic prairie advocate took us on a virtual tour of the grasslands, sandhills, sloughs, coolees, and badlands, and in each location introduced us to a few of the inhabitants. His final conservation message was short but poignant.

Following Wayne's presentation, we broke into one of four parallel sessions which focused on themes of the high plains; rivers and wetlands; forest and fescue; and adaptations to a harsh, dry land. I attended the sessions focusing on birds (of course) which included "The Ups and Downs of Prairie Raptors" by Jeff Holroyd (CWS), a 'good-news-bad-news' story about the Peregrine Falcon and the Burrowing Owl; a presentation by University of Alberta PhD student Cam Aldridge, entitled "Has the Sun Set on the Sage Grouse"; and a description of the jointly sponsored CNF-BSC Important Bird Areas Program in Alberta.

Towards the end of the afternoon, two short presentations by Cliff Wallis on "Protecting the Prairies" and Julie Gelfand, CNF President, on "What is the Future of the Naturalist Network?", summed up nicely the earlier sessions and gave us pause to think about the naturalists' role in protecting the environment. In fact, the repeated message in several of the talks was the importance of the role of the naturalist community in conservation and habitat protection and in influencing government policy in these areas. As an affiliate of the CNF, our Halifax Field Naturalists have a definite role to play in Nova Scotia, and as part of the Federation of Nova Scotia Naturalists, we have an even stronger voice.

Friday ended with the banquet, followed by highly entertaining musical presentations by John Acorn, host of the television series "The Nature Nut" and "Twits and Pishers".

Field trips, all day Saturday and Sunday after the AGM, gave us the opportunity to explore many natural points of interest in southeastern Alberta – from the badlands to the sandhills, rivers, and Cypress Hills Park. The "Birds" trip focused on lakes, reservoirs, marshlands, and the grasslands, mostly in the Brooks area. Highlights included the Burrowing Owl, Ferrugi-



nous Hawk, Black-necked Stilt, five species of grebe, Prairie Falcon, Lark Bunting, and Lazuli Bunting. The Saturday evening event was a buffalo barbeque at Echo Dale Historic Farm, only a few minutes from Medicine Hat, on the shore of the South Saskatchewan River.

The day the conference began there was an official designation of a National Wildlife Area within the Canadian Forces Base Suffield, about 60 km north of Medicine Hat. Although access to the base is highly restricted, allowance is made for CWS scientists, naturalists involved in breeding bird census compilation, and university scientists and their students. Unfortunately, a very special one-day post conference field trip to the Suffield NWA had to be cancelled due to impassable road conditions. Most of the local naturalists had never had the opportunity to visit the base so were very disappointed.

The CNF 2004 AGM and Conference will be held in Edmunston, New Brunswick, during the last week in May, to coincide with the height of warbler migration. There, presumably, parallel sessions will be in French and English, since our neighbour is of course Canada's only officially bilingual province.

See you there!

– Bob McDonald

MIDI WORKSHOP ON AMPHIPODS



The Marine Invertebrate Data Initiative (MIDI) held a one-day workshop on 17 June to instruct 10 applicants in the identification of local Amphipod Crustaceans. The workshop was advertised as being at University level, but hobbyists would have been accepted.

It was run by two specialists, Drs. Lene Mortensen from Norway, and Kevin MacIsaac of BIO, with demonstrators from other crustacean specialities. Dr. Derek Davis, Chairman of the Science Committee, presided and Elizabeth Vardy coordinated. BIO provided the facilities.

There are many species of amphipods, including scuds, beach hoppers, and the mud shrimps, which fatten migrating shorebirds. They are nearly all marine, and occur at all depths.

Two tasks were set for the day. First, the mouthparts from a beach scud were to be dissected and identified, as these appendages are essential for identification. Second, a vial containing one each of a dozen species was to be sorted by each participant and the animals identified. Field guides and descriptive literature were provided, with a list of the species and their sources.

Great emphasis was laid on complete examination before identification, and this was reinforced when the identity of a beach scud was discussed for half an hour; it was then decided that a pair of antennae had been damaged in youth, and had regrown without diagnostic side branches.

The workshop was accounted a success, and no one was in a hurry to leave.

– Ursula Grigg

HFN TALKS



SAVING WILDLIFE 5 JUNE

Hope Swinamer gave her talk (deferred from January because of bad weather) about the East Shore Wildlife Rehabilitation Centre, Seaforth. The Centre accepts any wild animal or bird in distress and tries to return it to freedom. This is a labour of love, which has grown from a kitchen-door enterprise in a residential area to a large compound, with pens, cages and aviaries, on a wooded tract in Seaforth.

Hope works at the Dartmouth Veterinary Centre, which is a major supporter of the Centre, contributing advice, veterinary services, and supplies.

When the Centre opened, there was little help available for injured animals, which were usually emergency cases. As the facility grew, it was thankfully accepted as a depot for injured or displaced creatures, so resources and knowledge were stretched from the beginning. There was not much information on the needs of even common species for food and accommodation so the place became a research centre as well. Australia is the leader in care, and Hope went there to learn more.

Paperwork has increased also, as regulations by all levels of government multiplied and were complicated by rarity, distributions, gene pools, and economic value of each species involved. On the other hand, authorities who insist on proper regulation of the Centre nevertheless have helped to provide the pens and cages needed as the Centre expands. Flight aviaries are especially costly, as they have to be big to rehabilitate large birds (i.e. eagles, owls).

The Centre's year starts with injured migratory birds, and the first litters of Red Squirrels whose youngsters need care. The squirrels are followed by young Raccoons – cute, but mischievous; most jobs of this type require replacement milk prepared for puppies or kittens. There are window strikes (birds); car hits; predation by cats and dogs; pigeons poisoned by treated corn; and oiled birds, including loons coated with cooking fat. Then there are birds blown off-course and which need to be taken to the sea in order to take off (the Dovekies were kept in the bath-tub until the right time of day for their release), and those which have to be fed live fish in the bath-tub to build up their strength. And the Barred Owl which pounced on a fishing lure and was literally reeled in...

Days of release are happy ones. Occasionally there is no way to rescue an animal, and the day of loss is sad. The Bobcat with a smashed limb was lost because he could not hunt at all, but the Canada Goose with an amputated wing was restored to a nearby marsh because he had a mate sitting there, and geese live through Nova Scotia winters.

Some creatures remain as pets, and are exhibited to school parties and other visitors. Guests learn about wildlife and often contribute to the Centre's support, which will probably always be of the wing-and-a-prayer variety!

The talk was illustrated with slides, and there were many interesting exhibits, but the most popular were Gretel, the Pine Marten cub, and the elderly Striped Skunk which, oblivious to people, inspected the floor, apparently looking for someone to dig. Gretel was tiny, wearing a toy dog's harness, and greeted everyone from Hope's arms. She was very young, the survivor of a pair produced in an attempt to breed them.

We thanked Hope for her thought-provoking talk, and for the discussion which followed.

As a result of our meeting, the Provincial Department of Resources criticised Hope for having exhibited Gretel, as she is a rare and endangered wild animal which should not become used to humans, and they demanded she be handed over. Gretel stayed at the Centre however, as she was too young to leave the nursery.

This is an example of complicated requirements, as Gretel herself cannot be released; her ancestry is not known and her release might alter the local gene pool. Presumably she will go to a wild-life park eventually.

– Ursula Grigg



WATERFALLS 4 SEPT.

Grace and Richard Beazley shared double billing for this talk, and photographer Robert Saulnier, of the Moncton Focus Camera Club, accompanied it with his beautiful waterfall slides. The Beazleys' interest in waterfalls was sparked by a Christmas present – a book – Waterfalls of Nova Scotia, by Allan Billard, and the 36 waterfalls described therein. Allan Billard regionalises Nova Scotia's falls into those of Cobequid; Cape Breton; the Central NS Uplands; and the Valley/South Shore. They are laid out in a grid system, and Billard uses a Book Map of Nova Scotia as a reference. He also rates the approaches to all of the waterfalls, from 'roadside' to 'extreme'. As a retirement goal, Grace and Richard determined to visit all of them.

They started five years ago, in September of 1998. The most memorable of their trips was finding six falls in five days in the Cape Breton Region – Miles Doyle's Falls; North River Falls (18 km in and out!); Ishkeban Falls; Mary Anne Falls; and MacIntosh Brook Falls. North River Falls are the highest in Nova Scotia with a 30-metre vertical drop. Many Cape Bretoners get engaged at Mary Anne falls.

Other falls visited were Piper's Glen – one of the few wider than their height; Glenora Falls – on private land and a treacherous, 16-metre waterfall; and Cutty Hollow falls – one of Billard's and Richard's favourites. Their most difficult fall (their 36th) was Second Fork Brook falls – with an arduous, three and three-quarter hour hike for the seven-kilometre trail in. The water near the end was knee-deep, and very, very cold!

Richard emphasised the need for safety in 'fall-ing' and outlined the best equipment; hats, old dress-shirts (cool and light, good mosquito protection, dries quickly), long pants, and most of all, best quality hiking boots and a very sturdy walking stick. Also, take sandals, and a bathing suit for those times when swimming/deep wading access is all there is in the final leg of the trip! Let others at home know where you are going and when you are expected back. A whistle is also a must for when one of the party becomes separated in very difficult terrain. There were many interesting accounts of deep gorges, dark ravines, mosquito plagues, lost participants, and long, arduous hikes; also of landowners personally guiding the Beazleys to many other, unknown falls.

Always ask permission to cross private land; access is usually granted to reasonable requests.

Robert shared his photo tips for taking good shots of waterfalls. Overcast or rainy weather is best – it eliminates image-destroying centre-of-the-picture glare and dark gloomy edges. A three to eight second exposure gives the best results and eliminates photo-capture of rain. Sometimes Robert uses a blue/yellow polarising lens as well.

There were many, many questions, which were continued on into our refreshment break.

A great talk!

– Stephanie Robertson

FIELD TRIPS

BUTTERFLIES I

DATE: Saturday, 5 July

PLACE: Uniacke Estate Museum Park

WEATHER: Mostly sunny, about 28 C.

INTERPRETERS: Peter and Linda Payzant

PARTICIPANTS: 19



It was a lovely day for our first butterfly trip of the season; the heavy coastal fog didn't reach as far inland as Mount Uniacke.

The fields were in good condition, although the Knapweed (an important nectar source) wasn't in bloom yet. The high temperatures seemed to make the butterflies more active, and it wasn't easy to catch some of them for close looks!

As usual, the field near the whale skeleton had lots of skippers, and we also saw good numbers of Atlantis Fritillaries, plus one or two Silver-Bordered Fritillaries. There were some Common Ringlets, but the numbers had declined somewhat compared to the previous weekend. Linda found a Silvery Blue larva feeding on vetch. The larva looks just like an unopened blossom, and is quite difficult to see.

We surprised a young Garter Snake in the grass, but it managed to escape before we could capture it.

Along the road to the drumlin hill we found adult Silvery Blues in flight, and also managed to capture a Slender Clearwing moth. These appealing daytime sphinxes look just like large wasps or bees, but are given away by their conspicuous black antennae. Like all of the specimens we captured, it was passed around in a jar for observation, and then released. We also got our only Aphrodite Fritillary of the day, and we pointed out the differences by which it can be separated from the similar Atlantis Fritillary. White Admirals were plentiful in general, but especially along the road.

On the drumlin hill we had more of the same species, although the usual hill-topping concentrations failed to materialise. The grassy field was full of small moths of the genus *Crambus*, known as Sod Webworm moths.

Following this part of the trip, a few hardy souls elected to go on to the Pockwock Road. Many of the participants had already been there earlier in the day,

due to a Nova Scotia Bird Society field trip which had taken place along this road in the morning. Upon our return, we found Tiger Swallowtails, lots of White Admirals, one or two Pink-edged Sulphurs (the larvae feed on blueberries), and a reasonable selection of skippers on the grasses beside the road. At a little bridge over a stream we looked down on Ebony Jewelwing damselflies sallying out from perches on, among other things, Poison Ivy!

A good day, and we're looking forward to Butterflies II, to see how things have changed.

– Peter Payzant



BUTTERFLIES I SPECIES

Leps

Canadian Tiger Swallowtail
Pink-edged Sulphur
Silvery Blue
Aphrodite Fritillary
Atlantis Fritillary
Silver-bordered Fritillary
Checkerspot
Northern Crescent
White Admiral
Ringlet
Dreamy Dusky Wing
European Skipper
Tawny-edged Skipper
Long Dash
Skipper
Dun Skipper
Virginia Ctenucha
Slender Clearwing
Sod Webworm moths

Papilio canadensis
Colias interior
Glaucopsyche lygdamus
Speyeria aphrodite
Speyeria atlantis
Boloria selene Harris
Chlosyne harrisii
Phyciodes selenis
Limenitis arthemis
Coenonympha tullia
Erynnis icelus
Thymelicus lineola
Polites themistocles
Polites mystic Hobomok
Poanes hobomok
Euphyes vestris
Ctenucha virginica
Hemaris gracilis various
Crambus spp.

Odes

Calico Pennant
Chalk-fronted Corporal
White Corporal
Jewelwing

Celithemis elisa
Libellula julia
Libellula exusta Ebony
Calopteryx maculata

Herps

Maritime Garter Snake
Northern Leopard Frog

Thamnophis sirtalis pallidula
Rana pipiens

SCOT'S BAY

DATE: Saturday, 19 July

PLACE: Bennett's Bay, Scot's Bay

WEATHER: Cloudy, 28 degrees C.

INTERPRETER: Ron Buckley

PARTICIPANTS: 34

Nova Scotia's geology is a fascinating tale for geologists and curious rockhounds alike. The story of the earth is literally at our feet. The rocks tell of the upheaval of continents, glaciers that buried the land deep in snow and ice, and of continuous sculpting by wind and wave. The rich sandy soil of the Annapolis Valley and the sheltering North Mountain are legacies of ancient geological events.

The Halifax and Blomidon Field Naturalists gathered at Bennett's Bay, near Scot's Bay, for a joint field trip in geology. It was led by Ron Buckley, a semi-retired geologist and Acadia University professor. Ron was assisted by Warren Ervine, one of the authors of The Last Billion Years, the recent book about Maritimes geology.

We started our exploration at the mouth of a small creek, where a 15-foot high gravel bar had piled up over this past severe winter. The brown gravel is basalt, ancient lava that formed the North Mountain, and lies under much of the Bay of Fundy. The basalt is filled with tiny colored specks called zeolites. As the lava cooled and solidified, the gas bubbles in it left holes, which became filled with silicate minerals in various combinations, forming the zeolites. Ron described the process as similar to freezing a bottle of bubbly soda pop. We admired the many different colors of zeolites – blue, green, and pinkish-orange.

Ron brought maps and diagrams showing us how the world looked 200 million years ago, when the continents were joined in a massive 'super-continent' called Pangaea. At that time the future Nova Scotia lay near the equator, between the African and North American continental plates, and abutted Morocco. During a trip to Morocco, Ron saw the same sandstone and lava, and even the same fossils, that are found here. The old suture line between the plates is still visible as the Cobequid Fault, and it is where the plates first rifted, or separated. The Bay of Fundy lies in a rift valley, like the Great Rift Valley in Africa.

As Pangaea began to break apart, lava poured out of the widening rift between North America and Africa. The lava oozed through cracks and fissures, forming layers and layers of basalt on the land. Off Grand Manan, the basalt is 2500 metres deep. The continental plates are still drifting apart at about six centimetres a year – about the rate that your fingernails grow.

What makes the geological story particularly interesting in the upper Bay of Fundy is the variety of rock formations in such a small area. Within 10 miles of Wolfville, all three major rock types exist – igneous, sedimentary and metamorphic. Nearby, there are also deposits of evaporites left behind when oceans or lakes dried up. One of these evaporites is gypsum (calcium sulfate), mined at a huge open-pit quarry in Milford and in Hants County.

After the lava cooled, ponds formed in depressions. There was much organic material mixed in with the

Scots Bay rock, and geologists speculate it might contain oil. We peered at the rock through hand lenses, and were able to see fine sand grains and silt, and faint rusty stains of fossils.

We were soon picking up interesting rocks all over the beach, and bringing them to Ron and Warren with questions about what they were. A pale creamy green rock with fossil deposits, called the Scots Bay Formation, was new to most of us; this formation represents an ancient lake bottom. There are two outcrops of Scots Bay rock at Bennett's Bay. Most of the formation is under the Bay of Fundy, and is as much as 2,500 feet thick.

We also found agates, chert, bluish chalcedony, red jasper, a bit of amethyst and tiny nodules of black obsidian, or volcanic glass. I was intrigued to see flint for the first time. I had heard stories of how pioneers used it to strike a spark and make fire. Ron demonstrated by pulling a steel file out of his pocket and scraping the flint against it, creating a shower of sparks. Flint was used to make a spark and light gunpowder in flintlock muskets, he said. This rock is common in some parts of England, where it is used as a building material.

Other rocks, like the red granite in the area, came from farther away, pushed by glaciers which covered the landscape during a series of Ice Ages. This granite originated in central New Brunswick.

All too soon, the incoming tide meant it was time to leave Bennett's Bay. Most of the participants lingered to talk along the trail back to the parking area, giving an idea of how much everyone enjoyed this expedition. Let's hope another geology trip can happen soon.

– Janet McGinity



BUTTERFLIES II



DATE: Saturday, 9 August

PLACE: Uniacke Estate Museum Park/Pockwock Road

WEATHER: Cloudy with sunny breaks, about 24° C.

INTERPRETERS: Peter and Linda Payzant

PARTICIPANTS: 7

Remember that long rainy foggy spell last August? This trip took place after almost a week of cloudy, wet weather, and amazingly, things cleared up just a little on the scheduled day. The low areas were soggy, but there were lots of butterflies. Perhaps they were just waiting to get up and fly after a long period of immobility.

The most common butterflies by far were Wood Nymphs. We found lots of them both in the whale field and the drumlin hill. There were no skippers at all in the whale field, but as in past years, we found lots of Common Branded-Skippers near the summit of the drumlin hill. The second brood of Silver-bordered Fritillary was out, and pre-trip, one of the leaders saw one ovipositing on a Violet sp. leaf.

There were good numbers of Clouded Sulphurs, and

we also found one late-ish Pink-edged Sulphur on the Pockwock Road. The Northern Crescents were almost gone (only one seen), and we saw no Common Ringlets or blues. There were lots of Virginia Ctenucha moths, but they seemed to be much smaller than the ones we saw earlier in the year – perhaps a second brood of this species is generally smaller.

A Viceroy was a pleasant surprise – we were able to get a good look at the tell-tale line on the hind-wings which are a giveaway when separating this species from the Monarch.

At a couple of favourite stands of Black Knapweed on the Pockwock road we saw good numbers of Atlantis Fritillaries, looking quite fresh and smart. There were also small numbers of Aphrodite Fritillaries. We also came upon one hummingbird hawk-moth, species unknown, which seemed to be rather later in the year than expected.

At the bridge over a stream we found, once again, Ebony Jewelwing damselflies. They obviously have quite a long flight period, since we saw them on our earlier trip in July. Other odes included Calico Pennant, White Corporal, and Yellow-legged Meadowhawk.

We saw a reasonable number of herps at Mount Uniacke, including three Garter Snakes and an American Toad. At the Pockwock road we saw a couple of Leopard Frogs and we heard a Bull Frog.

It was a very pleasant afternoon all in all, and with the very agreeable company provided by the participants, we all had a good time.



– Peter Payzant

BUTTERFLIES II SPECIES

Leps

Clouded Sulphur	<i>Colias philodice</i>
Pink-edged Sulphur	<i>Colias interior</i>
Aphrodite Fritillary	<i>Speyeria aphrodite</i>
Atlantis Fritillary	<i>Speyeria atlantis</i>
Silver-bordered Fritillary	<i>Boloria selene</i>
Northern Crescent	<i>Phyciodes selenis</i>
American Lady	<i>Vanessa virginiensis</i>
Viceroy	<i>Limenitis archippus</i>
Common Wood Nymph	<i>Cercyonis pegala</i>
Common Branded-skipper	<i>Hesperia comma</i>
Virginia Ctenucha	<i>Ctenucha virginica</i>
Clearwing moth	<i>Hemaris sp.</i>

Odes

Calico Pennant	<i>Celithemis elisa</i>
White Corporal	<i>Libellula exusta</i>
Yellow-legged Meadowhawk	<i>Sympetrum vicinum</i>
Jewelwing	<i>Calopteryx maculata</i>

Herps

Eastern American Toad	<i>Bufo americanus americanus</i>
Bullfrog	<i>Rana catesbeiana</i>
(heard) Northern Leopard Frog	<i>Rana pipiens</i>
Maritime Garter Snake	<i>Thamnophis sirtalis pallidula</i>



BOOK REPORTS

A BIRD FEEDER'S BIBLE

The Backyard Bird Feeder's Bible: The A-to-Z Guide to Feeders, Seed, Mixes, Projects, and Treats, by Sally Roth. This useful book has appeared recently in local bookstores. It is a Rodale Organic Gardening Book, the contents dealing with much more than birds. There's a section on landscaping, tables of suitable shrubs and seed plants and addresses of sources for them, and advice on garden problems; the recommended cure for chinch bugs is – starlings.

Backyard birds are described and illustrated with excellent photographs and descriptions of behaviour and migration; there are useful sections on identification, photography, etc. Bird counts and banding programmes, Project Feeder Watch, and the North American Rare Bird Alert system are discussed; references and addresses are given for each of them.

The projects mentioned in the title include plans for various feeders, from palatial to rustic, some with squirrel baffles, and also advice on deterring deer. There is a great deal on seeds and mixes, and how to attract species desirable for residential neighbourhoods. "Treasures from Trash" is an economy section, figuring chipped teacups suspended on cup-hooks, with seeds

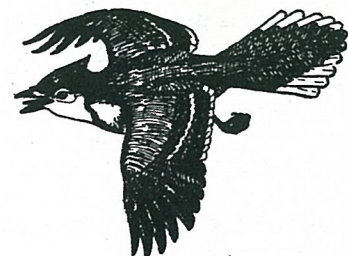


and suet in the swinging bowls and a chickadee feeding in one of them. There is a squirrel IQ test as well, and instructions for raising mealworms.

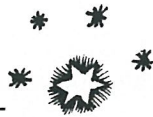
Topics are strung out along the alphabet, but accessible through a contents list at the front and a full index, including illustrations, at the back. Anyone who takes this book to heart will soon have a beautiful garden with a pond suitable for birds' bathing, and an exciting life as a naturalist. Meanwhile it is a perfect bedside book.

"That's the way it is with birds,... go look for an eagle and you won't find one. Look for rocks and you get an eagle." – Sally Roth.

– Ursula Grigg



ALMANAC



This almanac is for the dates of events which are not found in our 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.

"Slowly the days grow colder, the long nights fall;
Plows turn the stubble, fires are tended, and apples
Mellow in cellars; and under the roots of maples
Mice are burrowing. And the high geese call."

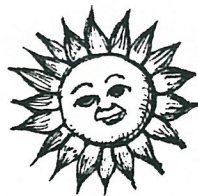
– Charles Bruce, from "Fall grass" in *The Mulgrave Road* (1951)

NATURAL EVENTS

- 10 Sept. Full Moon – this is the 'Harvest Moon'.
- 23 Sept. Autumnal Equinox at 7:47 a.m. Atlantic Daylight Time (ADT): Fall begins in the Northern Hemisphere.
- 30 Sept. Average date for first frost in Halifax. (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.
- 10 Oct. Full Moon – this is the 'Hunter's Moon'.
- 26 Oct. Daylight Savings Time ends; clocks are set back one hour to Atlantic Standard Time (AST) at 2:00 a.m.
- 26 Oct. Moon at perigee; large tides.
- 8 Nov. Full Moon.
- 8 Nov. Total Lunar Eclipse. The Moon begins to enter the dark umbra of Earth's shadow at 7:32 p.m. Total eclipse extends from 9:07 to 9:31 p.m. The Moon is clear of the umbra by 11:05 p.m.
- 22 Nov. Daily minimum temperature goes below 0°C.
- 23 Nov. Moon at perigee; large tides.
- 5-15 Dec. Earliest sunset of the year at 4:34 p.m.
- 7 Dec. Daily average temperature goes below 0°C.
- 8 Dec. Full Moon.
- 13 Dec. Geminid Meteor Shower. The best views will be before the Moon rises at 9:00 p.m.
- 14 Dec.-5 Jan. Audubon Christmas Bird Count period.
- 22 Dec. Winter Solstice at 3:01 a.m.: Winter begins in the Northern Hemisphere. But though the temperature drops, the days begin to lengthen.
- 22 Dec. Moon at perigee; large tides.
- 27-31 Dec. Latest sunrise of the year at 7:51 a.m.

– Sources: Atmospheric Environment Service, Climate Normals 1951-80 Halifax (Shearwater A) N.S.; Blomidon Naturalists Society's 2003 Calendar; Burke-Gaffney Observatory, Saint Mary's University.

SUNRISE AND SUNSET ON AUTUMN AND EARLY WINTER SATURDAYS



6 Sept.	6:42	19:43	4 Oct.	7:15	18:50
13 Sept.	6:50	19:30	11 Oct.	7:24	18:37
20 Sept.	6:59	19:16	18 Oct.	7:33	18:25
27 Sept.	7:07	19:03	25 Oct.	7:42	18:14
1 Nov.	6:52	17:04	6 Dec.	7:36	16:34
8 Nov.	7:01	16:54	13 Dec.	7:43	16:34
15 Nov.	7:11	16:47	20 Dec.	7:48	16:36
22 Nov.	7:20	16:41	27 Dec.	7:51	16:40
29 Nov.	7:28	16:36			

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

ORGANISATIONAL EVENTS

Blomidon Naturalists Society – <<http://www.go.ednet.ns.ca/~bns/>>. Meets 3rd Monday of the month, Room 241, Beveridge Arts Centre, Acadia U., 7:30 p.m. Field trips usually depart from the Robie Tufts Nature Centre, Front Street, Wolfville.

- 15 Sept. "Cutting Trees While Restoring Acadian Old Growth Forests", with speaker Lance Bishop of the North Mountain Old Forest Society.
- 20 Sept. "Forest Harvesting Alternatives", led by Lance Bishop.
- 28 Sept. "Life in the Minas Basin", led by Sherman Bleakney, 542-3604. Low tide, in the daytime.
- 26 Oct. "After Life in the Minas Basin", led by Sherman Bleakney, 542-3604. Low tide, after dark.

Burke-Gaffney Observatory – 496-8257; or <<http://apwww.stmarys.ca/bgo/>>. Public shows at the Burke-Gaffney Observatory, Saint Mary's University on the 1st and 3rd Saturday of each month, except from June through September, when they are held every Saturday. Tours begin at 7:00 p.m. between 1 November and 30 March, and at either 9:00 p.m. or 10:00 p.m. (depending on when it gets dark) between 1 April and 31 October.

Friends of McNabs Island – Dusan Soudek, 422-1045; <<http://chebucto.ns.ca/Environment/FOMIS/>>.

19 Oct. "Fall Foliage Tours". Carolyn, 477-0187; or Cathy, 434-2254.



Maritime Museum of the Atlantic – 424-7490; <<http://museum.gov.ns.ca/mma/>>.

15 May-30 Sept. "Charting the waters: Hydrography in Atlantic Canada": a new exhibit opens.

Nova Scotia Bird Society – Suzanne Borkowski, 445-2922; <<http://www.chebucto.ns.ca/Recreation/NS-BirdSoc/>>.

Meets on the 4th Thursday of the month, October to April, at the Nova Scotia Museum of Natural History, 7:30 p.m.

20 Sept. "Wallace Bay", led by Paul MacDonald, 627-2568; <rita.paul@ns.sympatico.ca>.

25 Sept. "Shoring up on Shorebirds: Meeting & Skills Workshop", with Fulton Lavender.

27 Sept. "Eastern Shore", led by Peter Richard, 463-5612; <Prichard@ns.sympatico.ca>.

10-13 Oct. "Brier Island Extravaganza!", Suzanne Borkowski, 445-2922; <sborkowski@hfx.eastlink.ca>.

23 Oct. "Annual General Meeting", followed by a wine and cheese reception.

25 Oct. "Sandy Lake, Tantallon", led by Catherine Earley, 455-6222 & S. Borkowski, 445-2922; <sborkowski@hfx.eastlink.ca>. **Rain date – 26 October.**

22 Nov. "Antigonish Coastal Waters", led by Randy Lauff, 867-2471; <rlauff@stfx.ca>. **Rain date – 23 November.**

27 Nov. "Identifying Gulls Part II: Meeting & Skills Workshop", with Richard Stern.

6 Dec. "Metro 'Hot Spot' Birding", led by Terry Paquet, 452-3622; <terrypaquet@hotmail.com>.

Rain date: 7 December.

14 Dec.-5 Jan. "Christmas Bird Count", Hfx/Dart. – Fulton Lavender, 455-4966. Bed./Sackville – Rich Peckham, 835-6918; <af930@chebucto.ns.ca>.

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

to 21 Sept. "The Butterfly Pavilion".

to 13 Oct. "Watercolours", an exhibition by Twila Robar-DeCoste, biologist and artist.

to 13 Oct. "The Terrarium", an interactive installation by textile artist Holly Carr.

17 Sept. "Mountains in the Maritimes: Exploring our Geological Heritage", with Dr. Brendan Murphy, St. F. X.

21 Sept. "Natural History Hike at Crystal Crescent Beach", with Museum botanist Marian Munro and Museum geologist Deborah Skilliter. **Register starting 1 September, 424-3563.**

23 Sept. "The Secrets of Egypt's Everlasting Oasis", with author Harry Thurston.

24 Sept. "Why Doesn't My Camera Take Good Pictures?" A workshop for beginners, with Bob Deluca, Photographic Guild of N.S.

27 Sept. "Wild Fungi Day".

27 Sept. "Mushroom Foray", with naturalist Scott Cunningham of Coastal Adventures. **To register, 424-6353 from 1 September.**

27 Sept. "The Fungus Among Us – a Virtual Exhibit", a website launch with the project coordinator, Marian Munro.

27 Sept. "Wild Mushrooms of Nova Scotia", a how-to session with naturalist Scott Cunningham.

15 Oct. "Images on the Rocks: Geology and Photography", with Dr. Rob Fensome of the Geological Survey of Canada - Atlantic.

18 Oct. "Two 'Fall Colours' Walks at Uniacke Estate Museum Park", with Museum botanist, Alex Wilson. Hikes to the Wetlands Trail in the morning; to the Red Spruce Trail in the afternoon.

24-26 Oct. "Museum Goes to the Dogs Weekend"; illustrated talks and displays about dogs (both wild and domestic), "Pats & Chats", and shows of dog agility, dog skills, and dogs with jobs.

29 Oct. "Spiders: Killers in the Garden", with Museum naturalist Calum Ewing.

1-2 Nov. "Orchid Society Fall Show & Sale".

Nov.-Feb. "The Secrets of Silver", a traveling show from the Montreal Museum of Fine Arts.



Nova Scotia Nature Trust – 425-5263; <<http://www.nmnt.ca/>>.

4 Oct. "Keep it Wild" workshop, Cloud Lake Wilderness Area. **Register with Leif Helmer, (902)543-4685.**

22 Nov. "Silent Auction and Dinner", with guest speaker Monte Hummel.

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

20 Sept. "Labrador Castle", led by Ray Fielding. **Rain date – 21 September.**

22 Sept. "New Zealand", with speakers Barry and Jean Sawyer.

Photographic Guild of Nova Scotia – <<http://www.photoguild.ns.ca/>>. Meets 2nd Monday, as well as 1st and 3rd Sundays of the month, at the Nova Scotia Museum of Natural History, 7:30 p.m. Shows are held at Saint Mary's University, Theatre A, Burke Education Centre.

22 Nov. "Annual Fall Show."

Royal Astronomical Society of Canada (Halifax Chapter) – <<http://halifax.rasc.cs>> <<http://halifax.rasc.cs/>>. Meets 3rd Friday of the month, Room L176, Loyola Academic Building, Saint Mary's University, 8:00 p.m.

– compiled by Patricia L. Chalmers



April

Bald Eagles were seen over the North-west Arm, and otters were swimming there.

Regine Maass saw Skunk Cabbage in bloom, and rhubarb coming up – hopes of spring!

Loons were spotted on the Arm, and a cardinal seen, singing by a house opposite the Dingle.

May

Lesley Butters's saw unidentified hawks circling over the North-west Arm and Violets blooming in the Burnside Woods.

Also seen was a Yellow-spotted Salamander; nests in trees on Summer Street; starlings in hollows; and a crow's nest in the crook of tree, the hen jousting with her mate as he attempted to unload more twigs on top of her!

! NEXT DEADLINE !

**21 November for December Issue
contributions to the Editor, HFN
c/o NS Museum of Natural History**