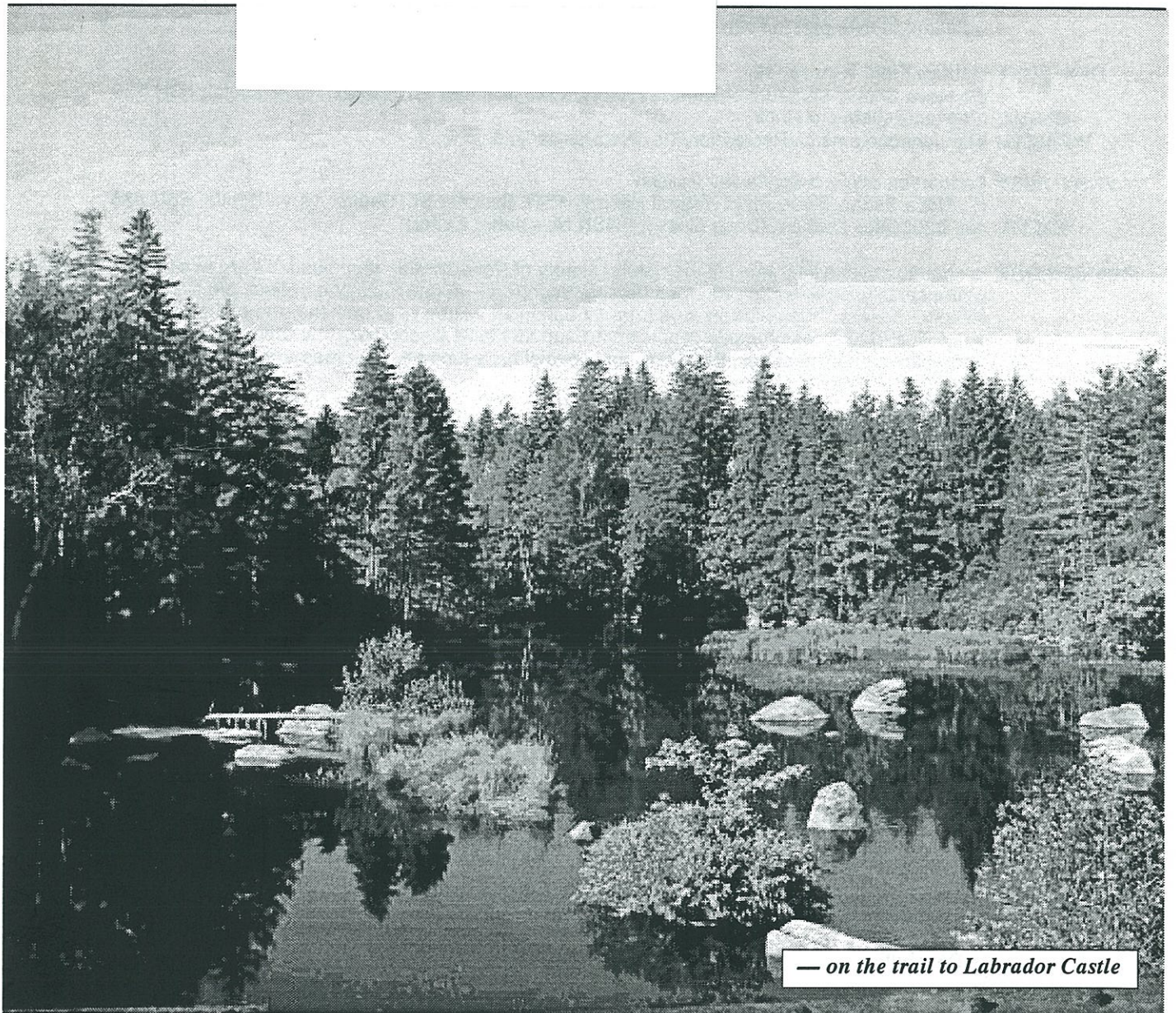


THE HALIFAX FIELD NATURALIST



No. 96
September to November 1999



News & Announcements..... p. 3
Talks..... p. 4
Articles p. 4

Reports p. 5
Field Trips..... pp. 6 - 8
Almanac pp. 9 - 10

Halifax Tide Table: October - December p. 11

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 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.

HFN POST 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 http://chebucto.ns.ca/Recreation/FieldNaturalists/fieldnat.html

FNSN POST Federation of Nova Scotia Naturalists
c/o Nova Scotia Museum of Natural History, 1747 Summer St., Halifax, Nova Scotia, B3H 3A6
EMAIL nstn0308@fox.nstn.ca (Doug Linzey, FNSN Newsletter Editor)

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

EXECUTIVE President	Ursula Grigg	455-8160
1999-2000 Vice-President	Bernice Moores	422-5292
Treasurer	Tony MacKay	462-1179
Secretary	Linda Payzant	861-1607
Past President	Peter Payzant	422-6326

DIRECTORS Harry Beach, Bob MacDonald, Linda MacKay, Shirley McIntyre, Marie Moverley, Stephanie Robertson, Colin Stewart

COMMITTEES Programme	Marie Moverley	420-9488
	Bernice Moores	422-5292

Refreshments Regina Maass

Membership Shirley McIntyre 835-3673

Newsletter

Editor	Ursula Grigg	455-8160
Production	Stephanie Robertson	422-6326
Almanac	Patricia Chalmers	422-3970
Distribution	Shirley McIntyre	835-3673
	Doris Young	457-2827
	Carol Klar	443-3385

Conservation Colin Stewart 466-7168

ARTWORK All uncredited illustrations by H. Derbyshire or from copyright-free sources. Halifax Tide Tables courtesy Canadian Hydrographic Service, Fisheries and Oceans Canada. **This issue (No. 96): P. 3 & 8** — Loon, Joan Dunning, The Loon, Voice of the Wilderness, Yankee Books; **p. 4** — Pheasants, Twila Robar DeCoste, Merritt Gibson's Nature Notes for Nova Scotians series; **Back Cover** — Daniel J. Cox, Audubon Nature Calendar, 1994.



HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

In spite of the long summer drought, the array of flowers and trees locally has been stunning, followed by abundant berries and seeds. Flowering plants did everything a fortnight early, fungi are emerging about a month late. Nesting conditions for birds were excellent, apparently mammals did well also. The Annapolis Valley has suffered however, and wet-place species must have done badly as water was pumped to save crops.

Most of the summer's news has related to parks and natural reserves. It seems as if our civilisation does not know how to manage wild land, and has a sophisticated image of how it should look. As naturalists, we know it should not be landscaped or cleared, but needs little attention, and no chemicals.

As naturalists, I think we should take responsibility for asking park managers, and our neighbours, to leave the truck and ATV at home, and to admire wild species just as they are. We can ask for some park areas to be kept trim for our own use without cutting out the dense thickets, marshes and high grass needed by other species.

Many thanks to everyone who has contributed to this Newsletter, and who has worked on conservation this summer.

— Ursula Grigg

HERP ATLAS

It's not too late to add your summer's observations of amphibians and reptiles to the Herpetofaunal Atlas; in fact, it will leave a few gaps if you don't. These records will be even more important if we continue to have hot dry summers in which wetlands are drained to provide irrigation for crops. Cards and instructions can be found at the Museum of Natural History, Summer St., Halifax, or at the October and November meetings of HFN. Ask for the new, coloured identification sheet; it's very useful for those who cannot remember which frog wears a black mask, or which one snores and which one wheezes.

Biology Department, Acadia University,
Wolfville, N.S., B0P 1X0; 1-902-585-1313.

NATURE TRUST BIRDATHON

BIRDATHON 99 —

Birds Coming, Going, and Staying

'Birdathon 99' is an event designed to raise the awareness of bird habitat conservation that will culminate in a bird count. Money raised from the Birdathon will help Nova Scotia Nature Trust raise funds to preserve critical bird habitats. Birdathon activities are for everyone — from expert birders, naturalists, and conservationists — curious children and the general public.

If you would like to become involved in the Birdathon activities, call 1-902-425-5263.

DEATH OF THE GOLDEN GOAT

The Golden Goat has shut down, equipment and goats sold, because of a change in Nova Scotia's tax laws which also changes the age-old definition of agricultural produce. The future use of Maxine Bruce's goat pasture is uncertain; will it continue to be managed so as to maintain a diversity of plants and animals, or will it be annexed to a larger farm, and possibly become a monoculture?

Also, what will become of the six people the Golden Goat used to support? **Contact Maxine Bruce in the Brewery Market, or Ursula Grigg, 455-8160, for more information.**

N.S. GENUINE PRODUCT INDEX

In Issue 93, we reported on Ron Colman's work toward the integration of existing market statistics with so far uncounted values in society (such as volunteer work and natural resources) to produce for Nova Scotia a Genuine Product Index. Ron's work is a local effort which is part of a growing international awareness in environmental economics.

Statistics Canada has designated the N.S. GPI as a pilot project, and Ron hopes this work will have impact beyond Nova Scotia. Three renewable resource accounts have been completed this fall. For copies, or more information, contact **Ron G. Colman, 20 Bonavista Drive, Schooner Cove, Hfx., N. S., B0J 1G0, 826-9021. gcolman@istar.ca.**

WELCOME, NEW AND RETURNING MEMBERS

Clarence Stevens Sr.



"Undisturbed meadows and fields are required if ground-nesting birds are to survive about our homes and communities. It is difficult to imagine a spring without the cheerful songs of bobolinks and the winnowing sounds of snipe. Uncut fields and wide borders around wetlands and along rivers are needed. Both can be provided by land owners and communities."

— Merritt Gibson, 'The Old Place'

HFN TALKS

ROADSIDE PLANTS

2 SEPT.

Diane LaRue is coordinator of the Roadside Landscape Ecology Project, a provincial nod to the ugliness of Nova Scotia's 100-series highways and intersections, monotonously edged with bald slopes, washouts, scanty vegetation, and often clogged ditches.

The soil is always very poor and the top-soil shallow; climatic conditions are harsh. When road projects are undertaken, the contractor takes the topsoil from the site and piles it, but instead of replacing it evenly over the finished roadside, he usually spreads it all nearby.

Working under punishing deadlines and budgets, the contractor often finishes the job by combing the soil vertically instead of along the contours, creating erosion gullies. To prevent this a government supervisor who knows why these things should be done as stipulated is needed on site for enforcement. Not all supervisors know or care!

Diane LaRue's team has been experimenting with different ways of covering the roadside banks with plants; they have tried many grass mixtures, with different methods of fertilisation and different sorts of mattresses to hold grass seed down until it has rooted. Highway Mix does best (not a surprise).

Experimental plots have shown that fertilisation is necessary for grass mixtures, which include Alsike clover, to do well. Compost gave the best growth, and of course added organic matter, but there is not enough of it to use everywhere. Clover fixes nitrogen from the air, but again, not enough. Erosion and mudslides obliterate some plantings.



Natural regrowth is sometimes good but is slow to develop and later is often considered overgrown and unsightly. The team is now considering planting perennials and shrubs, arranging for different sections of highway to have different plant assemblages. Lupins, a great success in some places, eventually revert to their original blue, and take over their surroundings, like purple loosestrife in bogs. Sweet clover, which is very common already and fixes nitrogen too, grows tall and unruly, and is a bit bland. Nitrogen-fixing alders are considered unsightly by many people, but grow very well in damp places.

The solution probably is to plant other native shrubs, or their cultivars, with red osier and wild roses as examples. Of course, there are not enough of these being produced either! Perhaps gardeners would be willing to grow some cuttings from their own stock? Or villages might adopt sections of roadbank? Meanwhile, if you see patches or strips of rather sparse plantings, usually near intersections on the Province's highways, these are experimental attempts by the Roadside Landscape Ecology Project to protect bare soil slopes and eventually to provide interesting and beautiful views. So far it is a rather thankless task, but will succeed as they learn, and teach others to help.

Diane LaRue's phone number is **1-902-893-6547**; fax **893-0244**; dlarue@nsdam.gov.ns.ca. She would welcome interest in this project.

— Ursula Grigg



SPECIAL ARTICLES



SAFE FOODS FOR WILD BIRDS

A recent NatureNB posting on feeding bacon fat to wild birds prompted me to make a few comments from my perspective as a veterinary pathologist.

What's considered safe for humans may be harmful to wild birds. For example, bacon contains a lot of salt and other food additives. Excessive amounts of dietary salt can be toxic for birds, causing inability to stand, intense thirst, severe muscular weakness, convulsions and even death. In chickens, the lethal dose of salt is 4 grams/kg. of body weight. Ducks are reported to be more susceptible to salt poisoning than chickens. Although I am not aware of any confirmed cases of salt toxicity in wild birds, I think that we should avoid feeding them any foods with a high salt content (e.g., bacon drippings, salted nuts, salted peanut butter, cookies, potato chips, etc.). Salt toxicity is more likely to occur when accompanied by a reduced access to water (e.g., in the winter).

Please refrain from feeding chocolate as well since it is also toxic and potentially fatal for wild birds and many species of mammals as well.



It's best to feed good quality natural foods that have been properly stored to prevent the growth of bacteria and moulds, and also the loss of nutrients. Many moulds produce toxins, called mycotoxins, that if ingested can cause severe health problems such as liver damage. Foods that have sat in your refrigerator or on your counter for too long should be put in the garbage, not fed to the birds. Wild birds are susceptible to most of the same types of food poisoning that can affect humans. Examples include botulism and salmonellosis, the latter often from improperly cooked poultry. Consumption of rancid fats by wild birds can lead to vitamin deficiencies. If the food isn't of good enough quality to feed to humans, then it shouldn't be fed to wild birds.

In view of the above discussion, it's a wonder that vultures, crows, ravens, and gulls are able to exist on their rather unsavoury diet that often includes foods of very deteriorated quality. These birds must have an incredibly tough constitution that's quite different from that of most feeder birds.

— Jim Goltz

jgoltz@gov.nb.ca

<NATURENB@LISTSERV.UNB.CA>

SPECIAL REPORTS

CONSERVATION



LAST CALL FOR WILDERNESS ON N.S. CROWN LANDS

Since the mid-1990s, the Nova Scotia Department of Natural Resources (DNR) has been quietly deciding what to do with 1.2 million hectares of public land — 22% of the province's land base. The scale of this planning exercise, called Integrated Resource Management, or IRM, is unprecedented in Atlantic Canada.

During the IRM process, teams of DNR staff in three planning regions (Western, Central, and Eastern) are classifying every parcel of unprotected Crown land in the province into one of three broad land-use categories:

- Category 1 — 'multi-use' lands will 'support a wide range of resources uses' (such as clearcutting, road building, and mining), or could be sold to private developers.
- Category 2 — 'modified multi-use' lands will also allow most forms of resource development but, according to DNR, with 'greater modification to enhance compatibility' with competing land uses.
- Category 3 — these lands will be protected and off-limits to ecologically destructive land uses. (The 300,000 ha of Crown land already protected will not be affected by the process.)

DNR plans to release a draft land-use plan for each region and hold 'Open Houses' by late 1999.

The government, then, is deciding which lands will remain available for intensive resource development in the future, and which areas, if any, to add to Nova Scotia's protected areas network. Indeed, it may be the last good opportunity for the province to establish new protected areas. Clearly, the stakes are enormous!

Back in 1992, the government of Nova Scotia made a commitment 'to protect a sample of each terrestrial natural region by the year 2000'. The 1998 Wilderness Act was a very significant step in that direction. With the clock ticking, however, the province concedes that only 23 of the 80 regions have a satisfactory level of protection.

To fulfill the 1992 promise, the IRM plans will have to recommend dozens of new parks, ecological reserves, and large wilderness areas. In some areas this will not be possible (there is little or no Crown land, or what there is is fragmented), but many of the remaining 57 regions do have significant tracts of Crown land that could be protected. Given the lack of financial incentives to encourage landowners to protect private properties, a large gain in protected areas on Crown land would seem to be our only alternative if the commitment is to be honoured. DNR, however, has a resource development mandate (it is essentially a forestry and mining department), and has already committed most of the 1.2 million ha to forestry agreements. Though the agreements are flexible, DNR does not generally want land 'taken away' for protection. Protected areas are under the jurisdiction of the Department of the Environment, but DOE has a very

limited role in IRM. DNR calls the shots in the poorly designed IRM process and we can expect the draft plans to recommend an embarrassingly small amount of new protected land.

A New Vision

Through its Wilderness Committee, the Ecology Action Centre has participated in the IRM process by attending workshops, contacting the regional teams, and making submissions at each stage of the proceedings. This summer EAC has embarked on a new project, 'A New Vision for Public Lands', which is working with about a dozen local volunteer organizations around the province to identify and lobby for 'hot spots' in need of protection. Public education will be an important part of the project. A tabloid (20,000 copies of which will be included as an insert in *Shunpiking Magazine* this winter) and a web site will highlight the hot spots and explain the IRM process.

Two such areas are Eigg Mountain, near Antigonish, and Gully Lake, north of Truro. Both these sites have large intact blocks of mature hardwood forest. To find out how to help save these sites check out www.auracom.com/~mbrennan. EAC is interested in finding additional sites on Crown land that merit protection. If you have any suggestions, please contact our Wilderness Coordinator, **Kermit deGooyer**, at 429-2202, or 492-4340.



— June Hall, Editor
Between The Issues, Vol. 17, No. 3, EAC

MAI-2

In a matter of months the World Trade Organisation will be holding a summit in Seattle, Washington. High on the agenda will be proposals to create a new investment treaty very much like the MAI, which the Council of Canadians is calling the 'MAI-2'. Like the original MAI, the MAI-2 could lead to American-style health care in Canada, American TV and radio mega-stations broadcasting here without restriction, and corporations actually suing Ottawa if the government brought in antipollution laws.

The council of Canadians will be there urging key MP's to abandon MAI-2 and to develop instead a trade policy that benefits citizens, not trans-national corporations.

They'll also be continuing the campaign to prevent billions of litres of Canadian water being sold to the US and other countries. Companies have applied to sell water from both Lake Superior and Newfoundland's pristine Gisborne Lake; from the former 600 million litres per year, from the latter 52 billion litres a year. The first plan was rejected but is being reapplied for; the second Newfoundland plan is still awaiting approval — approval which in the end will give these companies the right to sell as much of Canada's water as it likes *without restriction*.

For more information on how you can help prevent this environmental disaster, and Canada's water export policy being shaped up in Washington or Geneva, contact **The Council of Canadians, 151 Slater Street, Suite 502, Ottawa, Ont. K1P 5H3, 1-613-233-2773**.

FIELD TRIPS

BUTTERFLIES OF FIELD AND WOOD



DATE: Saturday, 3 July

PLACE: Uniacke Estate Park & Pockwock access road

WEATHER: Partly cloudy; hot & humid

INTERPRETERS: Peter and Linda Payzant

PARTICIPANTS: 25

We began this butterfly trip in the parking lot of the Uniacke Estate Museum Park, where we were pleased to see our first Eyed Brown of the year darting around the annuals and resting in the shady spots. Later we found at least two more in the same location.

The weather was warm and humid, and in spite of fairly brisk breezes it was an excellent day for butterflying. Once the participants had assembled, we set off on foot down the driveway towards the drumlin hill. In the weedy bits along the side of the driveway we encountered lots of European Skippers, easily the most numerous butterfly in Nova Scotia, and also several native skippers, including Dun, Hobomok, and Tawny-Edged.

A large patch of Knapweed hosted half a dozen Atlantis Fritillaries, and we were able to see clearly the distinctive markings which help butterfly watchers to differentiate this species from the very similar Aphrodite and Great Spangled Frits.

The drumlin hill field at Uniacke Estate is seldom mowed, and this means that there are lots of butterflies. We saw the end of the first flight of Ringlets, lots more skippers, and a few Eyed Browns. There were numerous Virginia Ctenucha moths, and also lots of clearwing moths. These little deceivers look like dangerous bumblebees, and they are so confident in their disguise that they can easily be touched as they hover in front of flowers. Sometimes they are reported as 'little hummingbirds', by people who haven't seen the conspicuous black antennae!



The grass was full of small white moths, most of which were probably in the genus *Crambus*. These are really beautiful when seen up close, but we were concentrating on bigger bugs, such as the many Atlantis Fritillaries and Northern Crescents attracted to the abundant Knapweed in the field.

On the Pockwock road (accessed from Exit 3, Highway 101) we found both Clouded and Pink-edged Sulphurs, as well as more Northern Crescents. There were a few White Admirals still around, and one real survivor, a worn and faded Tiger Swallowtail. A reliable patch of knapweed just after the first bridge produced a good group of fritillaries, mostly Atlantis but with a couple of Aphrodites also present for comparison.

Strangely, we saw not one Lycaenid — the Blues and Coppers. One wet area, which in the past has been reliable for Bog Copper, was completely dry and crisp.

— Linda and Peter Payzant

Butterflies Species List

Canadian Tiger Swallowtail		<i>Papilio canadensis</i>
Cabbage Butterfly		<i>Pieris rapae</i>
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>
Northern Crescent		<i>Phyciodes selenis</i>
White Admiral		<i>Limenitis arthemis</i>
Northern Pearly Eye		<i>Enodia anthedon</i>
Eyed Brown		<i>Satyrodes eurydice</i>
Ringlet		<i>Coenonympha tullia</i>
European Skipper		<i>Thymelicus lineola</i>
Tawny-edged Skipper		<i>Polites themistocles</i>
Hobomok Skipper		<i>Poanes hobomok</i>
Dun Skipper		<i>Euphyes vestris</i>

Virginia Ctenucha moth
Clearwing moth
and...

Ctenucha virginica
Hemaris sp.
various *Crambus* sp. moths

TANCOOK ISLAND



DATE: Sunday, 11 July

PLACE: Chester Basin

WEATHER: Sunny and warm; perfect!

INTERPRETER: Evelyn Rodenhizer

PARTICIPANTS: 20

Tancook Island... what a treasure! Twenty of us set out on the ferry from Chester at 10 a.m. and landed on Big Tancook Island at 11:00. We were met at the dock by Evelyn Rodenhizer, who was our gracious hostess, tour guide, and chauffeur for the day. We went directly to Carolyn's Cafe for coffee and a bite to eat, and to plan our itinerary for the next five hours.

Big Tancook Island has one main gravel road throughout the island and the points of interest we visited were the Devil's Footprints, General Store & Museum, Old School, Recreation Centre, Baptist Church and Cemetery, and Fossil Beach. As well as being a wonderful hostess, Evelyn acted as our chauffeur and drove us around in her pickup truck (two in the front and 18 in the back).

We drove along the Backalong Trail to see the Devil's Footprints in the rocks on the beach. We gathered at the Recreation Centre for lunch where Mr. and Mrs. Warren Pearl, lifelong residents of the island, shared island experiences with us and told us a bit of the history going back 200 years.

Martha Farrar operates the General Store and Museum. We stepped back in time as soon as we walked through the museum doors, seeing numerous farming implements and a variety of antique items. Martha's 90-year old father, Hollis Grant, entertained us with a tune on the antique organ!

Tancook has a variety of flora and fauna and Martha has set up a website listing all the varieties found there. The island has been famous in the past for producing

sauerkraut, and our hostess, Evelyn, took us to her home to show us how sauerkraut is made.

We were surrounded by beautiful gardens and flowers, quiet country roads, and, we drove by a whole field of summer savory. Janet McGinity, who had come with our group, showed us how to identify wild flowers and medicinal plants, her special interest.

The weather was perfect, the hospitality was second to none, and our visit to this charming and unspoiled island will always be a memorable one. Special thanks to Evelyn Rodenhizer who gave the HFN a royal welcome to her island!

— Marie Moverley

SHOREBIRDS



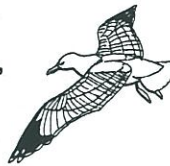
DATE: August 8, 1999

PLACE: Crescent Beach & Cherry Hill Beach,
Lunenburg County

INTERPRETER: Shirley Cohrs

WEATHER: Slightly overcast

PARTICIPANTS: 18



This was one of those field trips that left me with a feeling of wonderment at our pulchritudinous Province and the marvels of the shore birds that strutted around the marsh this Sunday at Crescent Beach. How fortunate we were to have Shirley Cohrs show the eighteen of us one of her favourite birding areas. Shirley, who lives nearby for the summer, proved to be extremely proficient in finding and identifying these shore birds.

One thing that made this encounter even more enjoyable was the variety that we were able to observe in just one location. Most often we observe only one or two species at a time, but here were Lesser and Greater Yellow Legs, two species of Plovers, Willets, Lesser and Semipalmated Sandpipers, and a few Ruddy Turnstones trotting and circling side by side. What a wonderful and rare opportunity to compare these species with each other while having expert birders on hand to point out the sometimes subtle differences.

Several local birds were splendid in putting on an aerial show, which appeared to be just for our viewing. Bob shouted, "Look at the Eagle and the Osprey", and we all turned our noses in the direction of the pointed finger. There we saw an Osprey carrying a fish, being closely observed by an Eagle and a Tern. The Eagle swooped down at the Osprey and almost crashed into him, causing the Osprey to drop the fish, which was quickly scooped up by the Eagle. Around this time several smaller birds entered the chase, along with the Tern, which tried to grab the fish from the Eagle. This attack continued until another eagle flew by and settled quietly on the top of a nearby tree. The first Eagle landed in the nearby marsh where his brilliant white head could be seen bobbing up and down above the grass as he fed while all the time keeping a keen eye overhead.

We walked farther along the road to the tip of the marsh where Shirley thought we might just see some Heron. Right on cue there appeared a count of thirteen Great Blue Herons.

Included in our group was a man named Don from the U.S. who has travelled over 60,000 miles since he retired one and one-half years ago. He travels to watch birds and has a life list of over 750 species. He came to Halifax to shake Bernice Moores's hand because she gave him information that guided him to another lifer for his list. It is always nice to meet new, interesting people.

We concluded this wonderful morning by eating our homemade lunches and taking a stroll at Risser's Beach. Sincere thanks and the highest appreciation go out to Shirley for an absolutely top-notch trip.

— Elizabeth Keizer

The weather at Crescent Beach this summer has varied among high winds, excessive heat, and thick fog. However, on August 8th, the day of the Shorebird trip, it was just right — warm, still, and with excellent viewing conditions.

18 naturalists gathered at the entrance to the beach and made their way slowly along the edge of the salt marsh as the tide fell and the birds came in to feed. There was opportunity for close-up viewing of migrant Short-billed Dowitchers; Black-bellied Plovers (some still in their flashy breeding plumage); many short, stubby Semi-palmated Plovers; some Semi-palmated Sandpipers; and a few Least Sandpipers. Three Ruddy Turnstones were still in their harlequin dress and a dozen or more Greater Yellowlegs fed and called loudly — 'tew-tew-tew' in descending notes. A Single Lesser Yellowlegs made a good comparison. The Willets, which nest here, were out in good numbers, including several juveniles.

As the tide went down, 15 - 20 Great Blue Herons arrived to forage on the flats. A fast-flying Merlin caused shorebird panic from time to time, as did a pair of Bald Eagles, one of which stole a fish from an indignant Osprey. A couple of Ring-billed Gulls joined the usual Herring and Great Black-backed Gulls, and the occasional Common Tern flew screaming past.

We made a stop on the beach side of the dunes at the Follies Rocks, where dozens of Double-crested Cormorants hung out their wings to dry, and a few Common Eider swam among the rocks. This is an excellent place to see Purple Sandpipers in the winter months.

Lunch was enjoyed at Risser's Beach Provincial Park, and 'The List' was tallied, a few passerines being added.

The formal trip ended here but several people wanted to explore the possibilities of Cherry Hill Beach. As I was recovering from a severe viral infection, I was most grateful to James Hirtle, who offered to show them the way, and who, as usual, proved a very competent leader.

Alas, no Piping Plover remained, but Sanderling was added to the shorebird list and a Caspian Tern excited everyone. A Ruddy Duck in transition plumage swam in Broad Cove, passed on the way. The rain began just as everyone returned to their cars.

To me, the 'Windbirds' are wild and fascinating and a source of constant pleasure. I hope the trip participants found them so.



— Shirley Cohrs

Shorebirds Species List

Birds

Common Loon	<i>Gavia immer</i>
Northern Gannet	<i>Morus bassanus</i>
Double Crested Cormorant	<i>Phalacrocorax auritus</i>
Great Blue Heron	<i>Ardea herodias</i>
American Black Duck	<i>Anas rubripes</i>
Common Eider	<i>Somateria mollissima</i>
Ruddy Duck	<i>Oxyura jamaicensis</i>
Turkey Vulture	<i>Cathartes aura</i>
Osprey	<i>Pandion haliaetus</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Northern Harrier	<i>Circus cyaneus</i>
Merlin	<i>Falco columbarius</i>
Black-bellied Plover	<i>Pluvialis squatarola</i>
Semipalmated Plover	<i>Charadrius semipalmatus</i>
Greater Yellowlegs	<i>Tringa melanoleuca</i>
Lesser Yellowlegs	<i>Tringa flavipes</i>
Willet	<i>Catoptrophorus semipalmatus</i>
Ruddy Turnstone	<i>Arenaria interpres</i>
Semipalmated Sandpiper	<i>Calidris pusilla</i>
Least Sandpiper	<i>Calidris minutilla</i>
Short billed Dowitcher	<i>Limnodromus griseus</i>
Ring billed Gull	<i>Larus delawarensis</i>
Herring Gull	<i>Larus argentatus</i>
Greater Black-Backed Gull	<i>Larus marinus</i>
Common Tern	<i>Sterna hirundo</i>
Mourning Dove	<i>Zenaida macroura</i>
Northern Flicker	<i>Colaptes auratus</i>
Barn Swallow	<i>Hirundo rustica</i>
Blue Jay	<i>Cyanocitta cristata</i>
American Crow	<i>Corvus brachyrhynchos</i>
Common Raven	<i>Corvus corax</i>
American Robin	<i>Turdus migratorius</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
European Starling	<i>Sturnus vulgaris</i>
Solitary Vireo	<i>Vireo solitarius</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Nelson's Sharp-tailed Sparrow	<i>Ammodramus caudacutus</i>
Song Sparrow	<i>Melospiza melodia</i>
Common Grackle	<i>Quiscalus quiscula</i>
American Goldfinch	<i>Carduelis tristis</i>



Plants

St. John's Wort	<i>Hypericum perforatum</i>
Mustard	<i>Brassica sp.</i>
Three-toothed Cinquefoil	<i>Potentilla tridentata</i>
Pasture Rose	<i>Rosa carolina</i>
Evening Primrose	<i>Oenothera biennis</i>
Queen Anne's Lace	<i>Daucus carota</i>
Chicory	<i>Cichorium intybus</i>

TIDE POOL TANGO

DATE: Saturday, 28 August

PLACE: Martinique Beach

WEATHER: Warm and foggy

INTERPRETER: Cathy Fuller

PARTICIPANTS: 35

Perhaps because it was one of those foggy Saturdays at the beach where most people try very hard to ignore the weather, it wasn't very long after Cathy arrived before she had children and adults alike wading past their knees in the tide-pools. The 35 people, of whom about 15 were children, were delighted by Cathy's easy manner. She strolled around in the pool ignoring the fact that she was wading in water six inches over the tops of her rubber boots, and her shorts were getting quite wet. Many people just took off their shoes and joined her in the pool.

As she dug among the rockweed (*Fucus sp.*), which



floated nearby by means of its airbladders, Cathy pointed out sexual organs on the ends of the fronds. These organs release reproductive cells into the water, where they may float around for a while before settling down to grow into new plants.

Next out of the tide-pool came the snails, herbivorous Periwinkles and carnivorous Dogwhelks. Dogwhelks eat mussels and barnacles by drilling perfectly round holes in their shells with rasp-like ribbons of teeth. They also inject a little poison, and then rummage around inside the shell rasping off parts of the prey.

A live Sea Urchin was found, surrounded by its spiny shell. When it was handed to me, I was certain that I could feel it wiggle under my fingers! At the same time, someone held up a Sea Star, with leather-like skin and five arms, four long and one short. Cathy explained how, if the Sea Star lost an arm, it could grow it back. Sea Urchins and Sea Stars (starfish) belong to the Phylum Echinodermata. There are 1,000 species of sea urchins (Class Echinoidea) and 1,500 species of sea star (Class Stellerioidea). A sea stars basically consists of a central mouth surrounded by arms. When one person heard that Irish Moss, the red alga she was walking over, is used as a stabiliser in chocolate milk and ice cream, she decided that she was giving up eating these items! Many things that we find on the beach every day are used in our daily lives. Mussels are being studied for possible medicinal uses.

Other specimens found in the pools included side-swimmers (amphipods), isopods, limpets and crabs. The reddish-brown Rock Crab is a segmented animal; it holds water in its gill pouches and thus can stay out of water for a while. We also found a Green Crab, a species which has extended its range northwards from Cape Cod over many years.


After everyone finished exploring the tide-pools, we weren't quite ready to leave, and we enjoyed strolling up the lovely, long, white sand beach while sloshing up to our ankles in the incoming tide. Along the way, we observed a Black-bellied Plover, Killdeer, Sanderlings, and Semi-palmated Sandpipers.

This was a most instructive and enjoyable field trip and outing. Thank you, Cathy, I hope we do it again some time.

— Elizabeth Keizer

TidePool Tango Species List

Algae

Rockweed (Bladder wrack)		<i>Fucus sp.</i>
Irish Moss		<i>Chondrus crispus</i>

Invertebrates

Molluscs

Limpet		? sp.
Periwinkle		<i>Littorina littorea</i>
Dogwhelk		<i>Thais lapillus</i>

Crustacea (jointed limbs)

Isopods

Amphipods

Rock Crab		<i>Cancer irroratus</i>
Green Crab		<i>Carcinus maenas</i>

Echinoderms

Green Sea Urchin	<i>Strongylocentrotus drobachiensis</i>
Sea Star	<i>Asterias sp.?</i>

Vertebrates

Birds

Black-bellied Plover	<i>Pluvialis squatarola</i>
Semi-palmated Sandpiper	<i>Charadrius semipalmatus</i>
Killdeer	<i>C. vociferus</i>
Sanderling	<i>Calidris alba</i>

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.

In the cathedral hush of... Indian summer, it came to me that to be able to love the mystery surrounding us is the final and only sanction of human existence.

— Hugh MacLennan

NATURAL EVENTS

- 23 Sept. Autumnal Equinox at 8:32 a.m. ADT: Fall begins in the Northern Hemisphere.
- 25 Sept. Full moon — this is the 'Harvest Moon'.
- 30 Sept. Average date for first frost in Halifax (i.e. Env. Can. says there is only a 1: 10 chance we will have frost before this date). Look forward to 210 days of frosty weather.
- 22 Oct. Orionid meteor shower peaks.
- 24 Oct. Full moon — this is the 'Hunter's Moon'.
- 31 Oct. Return to Atlantic Standard Time — turn clocks back one hour.
- 17 Nov. Leonid meteor shower: the expected storm may not be visible here.
- 22 Nov. Daily minimum temperature goes below 0°.
- 23 Nov. Full moon — this is the 'Beaver Moon'.
- 7 Dec. Daily average temperature goes below 0°.
- 14 Dec. Geminid meteor shower peaks.
- 22 Dec. Full moon — this is the 'Cold Moon'.
- 22 Dec. Winter Solstice at 3:44 a.m. AST: Winter begins in the Northern Hemisphere.
- 23 Dec. Very large tides will occur.



— Sources: Atmospheric Environment Service, Climate Normals 1951 - 80 Halifax (Shearwater A) N.S.; Colombo's Canadian Global Almanac, 1997 & 1999; Royal Astronomical Society of Canada's Observer's Handbook 1999; and the personal observations of the compiler.

SUNRISE AND SUNSET ON LATE SUMMER AND AUTUMN SATURDAYS



4 Sept.	6:40	19:46	2 Oct.	7:16	18:54
11 Sept.	6:48	19:33	9 Oct.	7:22	18:41
18 Sept.	6:56	19:20	16 Oct.	7:30	18:29
25 Sept.	7:04	19:07	23 Oct.	7:40	18:17
			30 Oct.	7:49	18:07
6 Nov.	6:58	16:57	4 Dec.	7:34	16:35
13 Nov.	7:08	16:49	11 Dec.	7:41	16:34
20 Nov.	7:17	16:42	18 Dec.	7:46	16:35
27 Nov.	7:26	16:37	25 Dec.	7:50	16:39

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

ORGANISATIONAL EVENTS

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

17 Sept. Joint meeting with the Nova Scotia Bird Society.

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

Friends of McNabs Island — For more information, call Dusan Soudek, 422-1045, or Mike Tilley, 465-4563, or <<http://chebucto.ns.ca/Environment/FOMIS/>>.

19 Sept. "McNab's Island Paddle and Cleanup".

17 Oct. "Fall Foliage Foray".

Nova Scotia Bird Society — Indoor meetings take place on the fourth Thursday of the month, October to April, at the Nova Scotia Museum of Natural History, 8:00 p.m. For more information phone 852-2428 (recording), or Fulton Lavender, 455-4966, or <<http://chebucto.ns.ca/Recreation/NS-BirdSoc/>>.

17 Sept. Joint meeting with the Blomidon Naturalists Society in Wolfville.

18 Sept. "Wolfville and Area", with Randy Milton, 542-1761, and Phil Taylor, 542-0437.

2 Oct. "Birdathon 99 — Counting for Conservation", in aid of the Nova Scotia Nature Trust. Contact Bonnie Sutherland, 425-5263.

8-11 Oct. "Brier Island", with Fulton Lavender, 455-4966.

10 Oct. "Cape Sable Island", with Murray Newell, 745-3340.

28 Oct. Annual General Meeting.

6 Nov. "The Pubnicos, Yarmouth Co. — President's Field Trip", with Gisele d'Entremont, 422-7739.

25 Nov. "The Breeding Cycles of Owls", with Bernie Forsythe.

27 Nov. "Late Fall Roundup at Hartlen Point", with Fulton Lavender, 455-4966.



Nova Scotia Lighthouse Preservation Society — Organises visits to lighthouses, including boat trips to islands. For more information, phone Dan Conlin, 424-6442, or <<http://www.ednet.ns.ca/educ/heritage/nslps/>>.

17 Oct. "Maugher Beach Light", in conjunction with the Friends of McNabs Island trip.

Nova Scotia Museum of Natural History — For more information about programmes, phone 424-6099 or 424-7353, or <<http://www.ednet.ns.ca/educ/museum/mnh/>>.

12 Jun.-19 Sept. "Monarca: Butterfly Beyond Boundaries", a display from the Canadian Museum of Nature.

19 Sept. "Environmentally Friendly Landscape Tour", with Vernon Mingo.

25-26 Sept. "Honey Festival", honey and bee-related activities and demonstrations, with members of the N.S. Beekeepers Association.

2 Oct. "Mushrooms and Their Relatives", with Marian Zinck. **Pre-register, 424-563.**

3 Oct. "Taylor Head Rock Walk", with geologists.

6 Oct. "Images... Trans Canada Trail", with Stephen Vines.

9 Oct. "Fall Colours Walk At Uniacke Estate Museum Park", with Alex Wilson.

27 Oct.-17 Nov. "Vascular Plants of Nova Scotia", a mini-course taught by Museum botanists, using museum specimens and photos, on four successive Wednesday evenings. **Pre-register, 424-3563.**

6-7 Nov. "Orchid Society Fall Show & Sale".

Nova Scotia Nature Trust — For more information, phone 425-5263.

15 Oct. Second Annual Silent Auction and Dinner, with guest speaker Stuart McLean.

Nova Scotia Wild Flora Society — Meets fourth Monday of the month, September to May, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information phone Heather Drope at 423-7032.

25 Sept. "Abraham Lake", with Art Lynds.

27 Sept. "Old Growth Forests of Nova Scotia, with Art Lynds.

16 Oct. "Flower Photography", with Heather Drope.

22 Oct. "Coastal Plain Flora Field Report", with Marina Myra.

25 Nov. "Coastal Plain Flora Recovery Project", with Sherman Boates.



Photographic Guild of Nova Scotia — Meets second Monday of the month, as well as the first and third 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. For more information, phone Kenneth Moore, 826-1121, or <<http://chebucto.ns.ca/Recreation/PGNS/PGNS.html>>.

17-18 Sept. "12th Halifax International Exhibition of Photography/Slide Show", Burke Education Centre, Saint Mary's University, 8:00 p.m.

19 Sept. "New Geoscience Society Competition", seminar with Howard Donohoe.

25 Sept. "Geological Features", a field trip with members of the Atlantic Geoscience Society.

17 Nov. "How to Take Winter Photographs", with Teunis Obdam, Fred Joyce, and John W. Webb.

Royal Astronomical Society of Canada (Halifax Chapter) — Meets third Friday of each month at the Nova Scotia Museum of Natural History, 8:00 p.m. For more information, <<http://halifax.rasc.ca>>. **Public shows at the Planetarium in the Sir James Dunn Building, Dalhousie University have been discontinued.**

— compiled by Patricia L. Chalmers



NATURE NOTES

July/August

Stephanie Robertson reports more than the usual amount of wildlife at Melmerby Beach in Pictou County this summer. So much for the 'lack of rain'. The Indian Pears were extremely plentiful and very sweet. Close to the cottages, with or without people around, we saw Deer, Hares, and Chipmunks. There were Terns foraging right over the cottages on a seasonal hatching of a species of winged insect, Great Blue Herons, Eagles and Hawks, and Foxes hunting mice. On one of the sojourns back and forth to the city, two male Bald Eagles were seen fishing in one of the very many small lakes by the highway, near Halifax.

Sept. 20/21

four Monarchs and one Red Admiral were photographed feasting on Stephanie Robertson's Michaelmas daisies.

Salmon

The Sackville River salmon are once again coming upstream, as each good rain deepens the flow. They are seen, from office towers, resting in pools created by human hands, and swim to cleaned nursery grounds in both the Sackville and Little Sackville Rivers. A survey of aquatic fauna is underway to see what food resources exist for young fish before they go to sea. All residents of Sackville, especially school children, seem to be involved with the guardianship of their special strain of Atlantic salmon, and the Sackville River Preservation Society should be very proud of their success.

! NEXT DEADLINE !

21 NOVEMBER FOR DECEMBER ISSUE

contributions to the Editor, HFN
c/o NS Museum of Natural History
Please phone 455-8160 to alert the Editor

! HUNTING SEASON IS UPON US!

Black Bear season	13 Sept. - 30 Oct.
Bow-hunters' Deer season	25 Sept. - 28 Oct. & 6 Dec. - 11 Dec.
Ring-necked Pheasant season	1 Oct. - 15 Dec.
Ruffed Grouse season	1 Oct. - 31 Dec.
White-tail Deer season	29 Oct. - 4 Dec.
Snowshoe Hare season	15 Nov. - 15 Feb.

**Hunters are abroad from 14 Sept. to 15 Feb.
Remember — dress to be seen in the woods!**