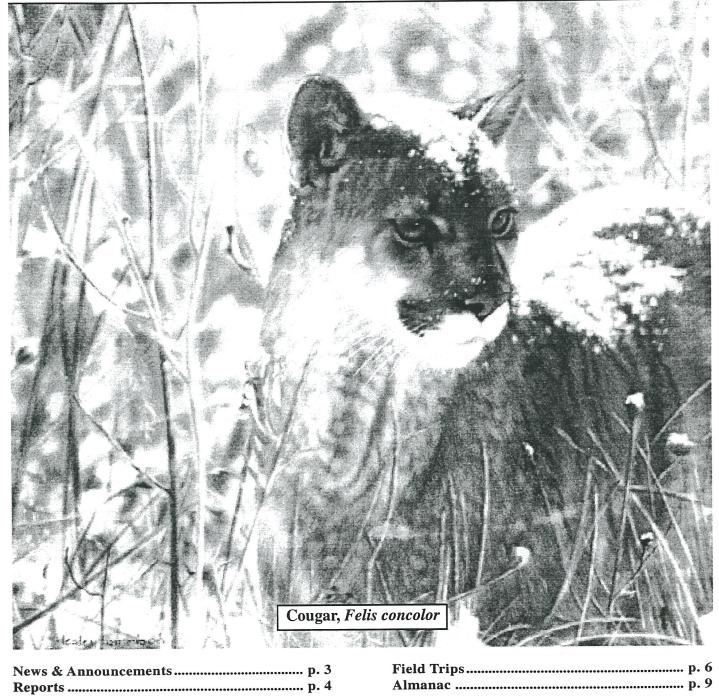
THE HALIFAX FIELD NATURALIST



No.109 December 2002 to February 2003



Hfx Tide Table: October - December p. 11

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. 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 <http://chebucto.ns.ca/Recreation/FieldNaturalists/fieldnat.html>

FNSN ADDRESS Federation of Nova Scotia Naturalists

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 <http://chebucto.ns.ca/Environment/FNSN/hp-fnsn.html>
- 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	
		\$20.00 per year	
		\$25.00 per year	
	FNSN (opt.)	\$ 5.00 per year	
	President Vice-President	Bob McDonald	443-5051
2002 2005	Treasurer	Janet Dalton	443-7617
	Secretary	Suzanne Borkowski	445-2922
	Past President	Ursula Grigg	455-8160
DIDDOTODO	Dit in Life on Detaile London	Demise Meaner Linde Devrent Dete	r Bourzont, Stonhania Pohortson
DIRECTORS	Colin Stewart	Bernice Moores, Linda Payzant, Peter	r Payzant, Stephanie Robertson,
COMMITTEES	Membership	Linda Payzant	861-1607
	Programme	Det Leader	457 0107
	Taiks & Trips	Pat Leader Jean Sawyer	457-9197
	Loveut production	Stephanie Robertson	445-4950
	Layout production		
	Newsletter		
	Editor	Ursula Grigg	455-8160
	Almanac	Patricia Chalmers	422-3970
		Stephanie Robertson 011-880-2-	
		Elliott Hayes	
		Pat Leader	
		Judi Hayes	835-9819
	Refreshments	Regine Maass	
	Conservation	Colin Stewart	.466-7168
	FNSN Representative	Ursula Grigg	455-8160
ARTWORK	All uncredited illustrations by H	H. Derbyshire or from copyright-free sou	urces. Front cover - Lesley Harriso ographic Service. Fisheries and O

RTWORK All uncredited illustrations by H. Derbyshire or from copyright-free sources. Front cover - Lesley Harrison; p.8 - the B613, Contic River Cruises; Halifax Tide Tables - Canadian Hydrographic Service, Fisheries and Oceans Canada.

HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

By the time this appears day-length will be increasing at both ends, and the first seasonal changes will be obvious even in the city. The first pigeon pair seen pitching a woo on the local mall cliffs were courting on December 30th. Some birds are still moving south to open water in January (and Canada Geese are massive enough to tough it out) while cats are holding their first gatheriings of the year. The tracks of local toms appear on doorsteps of tibbies, even if all of them have been neutered; tibbies make short visits to their outdoor ranges. While finding food is the first concern of most life in winter, reproduction is an obvious subtext.

This issue of the Halifax Field Naturalist is late again, and the Board is considering ways to stop it happening. The Newsletter Committee has three members, all of whom enjoy the job immensely, but all are becoming busier. The amount of material to be covered is also expanding and the focus has changed a bit. This is more like the situation in HFN's early vears, when we were the first group (in Canada?) to host a convention on the environmental effects of searching for oil under the sea. We also pioneered some biological surveys in Halifax County.

Winter's passing but there's still time to enjoy the snow outside and the long dark evenings inside.

- Ursula Grigg



seam nas told us that starting . 2003, parking in the South Par Wanderer's Grounds) will be paid parking only, at all times, and will be shared with the Hospital. Part of the south lawn has been paved to make more spaces. It is not clear how this will work out, or what the cost will be. HFN has complained to the Museum about this new policy.

NOVA SCOTIA NATURE TRUST

HFN has given Nova Scotia Nature Trust a donation to facilitate the acquisition of a piece of land near Halifax. Details will be given when the transaction is final.

HFN DISPLAY UNIT

The board of HFN has purchased a second-hand display unit to be used at conferences and exhibits. Pat Leader has volunteered to collect materials which could be displayed to promote the activities of the Society.

3

MAUD GODFREY

Halifax Field Naturalists have lost a long-time member in Maud Godfrey, who died unexpectedly on October 31, 2002. She took part in many club activities, including the survey of plants growing beside the Halifax railway cutting, and attended a meeting as recently as September 5, 2002.

An obituary will follow.



FROM THE EDITOR

RARE ORCHID FOUND

A rare orchid, the Southern Twayblade (Listera australis), has been found growing on Halifax's International Airport airfield. Although its presence in N.S. has been known for some time, it was not notorious until recently, when it was found in the path af a new runway to be built soon. It was declared a protected species in late summer; the runway will now have an angle in it, in order to avoid the patch of orchids.



COUGARS

Cougars have been expanding from their range in the west of the continent, following the increasing deer populations. They were known to be in Northern Ontario and are now confirmed in Northern Quebec and reported in New Brunswick. One sample of hair from NB was analysed for DNA and confirmed as being of north American origin.

The subject of the Eastern Cougar is difficult and their occurrence in N.S. is usually denied - if cougars are ackowledged, they are claimed to be released pets, which are apparently readily obtained from South America. The most puzzling question is, why the presence of these American cats in our forests is denied, whatever their origin?

- Ursula Grigg



Anne Norton Zoe Dalton Doug & Leslie Pezzack

SPECIAL REPORTS

CONSERVATION

CAPE SPLIT

It's been a good summer for a couple of long time park 'wants'. Early in July the province announced it had (at long last) acquired Cape Split. The other news is of McNabs, which officially became a park in November, and will be discussed in the next newsletter.

Cape Split is not yet a park, but it is under the management of the Parks and Recreation Division. Its cost was five million for 280 ha (700 acres, or about \$7,000 an acre), but that's probably the least the owners would have received on the open market. I believe the Nature Conservancy of Canada was also involved, so not all of the dollars paid came from taxes.

The story goes (and if anyone knows better, let me know and we'll publish it next time) that the property was given to Mrs. Joudrey in the late twenties, as a wedding present. It was kept separate from the rest of the Joudrey holdings (Minas Basin Pulp and Power), and Mrs Joudrey took an active interest in protecting it. Rumour has it that several attractive offshore offers were declined over the years. A deal with the province was close a few years back, but fell through the day before the scheduled announcement. Persistence has now paid off.

As part of the announcement, the government indicated it was taking suggestions on how the property should be managed. One of the informal comments made by staff at the announcement was that the point might need to be fenced for safety.

HFN has had many trips to Cape Split, most led by Leslie Butters who knows the area very well, and we (HFN) have indicated that the place is special to us and that we'd like to take part in the planning process. Among the ideas we will put forward are a right-of-way along the crest, and the acquisition of the land linking Cape Split to Cape Blomidon Provincial Park.

As yet, planning has not begun.

The area purchased by the province begins about half way to the point. It's where the 'private property, use at your own risk' sign was. If that doesn't help, it's the steep climb just before the first side trails that let you see over to the Parrsboro shore. The property line goes from shore to shore and includes all of the tip. The properties from there back to the parking area remain in several different private hands.

The area has been logged extensively, but it appears that none of the Joudrey property has been touched since roughly World War II. The trail in part follows an old logging track; in other places another track can be picked out 50 m or so downhill from the main trail. Little, if any, of the forest is old growth.

Some of it had been clearcut, but other areas

appear only to have been selectively logged, though probably very intensively. At the same time, some of the stands were approaching maturity when the cutting program ended. This means some stands are now in the hundred years+ category. There are individual maples and birches that were left as 'wolf trees' that are probably double this estimated age. A wolf tree is a forestry term for a tree that has a wide spreading crown and thus claims more than its share of growing space. The many branches make it hard to get good timber out of them. Prior to chain saws making it relatively easy to take trees down, they were usually left standing. There are a few of these along the trail.

Most people enjoy the forest, but what they really look forward to is the clear space and spectacular cliffs at the split itself. As one of the most used symbols of Nova Scotia, it's nice to know that these are now in public ownership.



INSPIRED NATURAL GARDEN PROTECTED

When Douglas Counter and his young nephews began a native plant garden in loving dedication to his late mother, he had no idea of the battle that lay ahead, nor of the bureaucratic waiting game that would ensue with the City of Toronto.

An urban paradise for birds, butterflies, and countless insects, the naturalised garden planted in memory of Georgi Counter began on Mother's Day, 1997. For Doug, the front yard is a tranquil meditation garden, a natural space that fosters spiritual peace.

So why would the City of Toronto want to destroy part of this beautiful oasis? Doug's infiltration garden – containing more than 40 species of native plants, six of them rare – extends into the City-owned drainage ditch. The native wetland plants in the ditch were especially planted to filter harmful pollutants from stormwater, resulting in cleaner, safer water entering local streams and Lake Ontario.

"Although the positive effects from just one ditch may not be readily measurable, if more neighbours joined me, there would be cleaner water running into nearby rivers and the lake," said Doug.

After receiving complaints from a neighbour, the City repeatedly threatened to cut down the garden growing in the ditch. Ironic, really, since Doug's garden has been on a City-sponsored tour, was nominated for a City of Toronto garden award, and Doug was publicly presented an award by Toronto Mayor Mel Lastman for his environmental commitment.

With support from Environmental Defence Canada, Doug filed a lawsuit against the City of Toronto. He alleged the City violated his rights to freedom of expression, religion, and conscience guaranteed



under the Canadian Charter of Rights and Freedoms.

The court agreed with Doug, ruling that his natural garden on the City's ditch is a protected form of expression under the Charter. In a victory for natural gardeners everywhere, the judge also recognised the "enormous environmental significance" of natural gardens. He went on to say that Doug's planting of the natural memorial garden was "an act having tremendous spiritual (religious) significance."

As for the City, the court said it can limit the size of natural gardens only where it is justified by safety concerns. The judge urged City officials to start "...developing and implementing coherent plans with specific guidelines to deal with the critical issue of natural gardens and their enormous environmental significance." This is something the Counters have been asking for all along.

"This is the second court case across Canada in recent months to highlight the importance of natural gardens for the health and beauty of the local environment," said Burkhard Mausberg, Executive Director of Environmental Defence. "This decision should encourage more gardeners to follow Doug's lead."

 from EcoNews, newsletter of Environmental Defence Canada, Fall 2002

WHALE CONSERVATION

ENDANGERED WHALES WIN RIGHT OF WAY

WebPosted. Dec 20, 2002 – The International Maritime Organization has approved a proposal from Ottawa to divert ships several kilometres from known whale habitats. It's an attempt to reduce the number of encounters with the Right Whales.

Transportation officials say they expect to reduce the chances of collisions by 80 per cent.

"Many groups with varied interests came together to help create what is believed to be the world's first ship strike sensitive shipping lanes," said Transport Minister David Collenette in a written release.

Government officials, environmentalists, and people in the shipping industry were involved in drawing up the new rules.

The new shipping lanes will become effective on July 1, 2003, in time for the whales' seasonal return to Fundy waters in the summer.

RIGHT WHALE CALVES IN GEORGIA/ FLORIDA

This year the New England Aquarium's EWS Right Whale aerial survey team started flying a modified survey as of December 1, 2002. Monica Zani of the New England Aquarium in Boston reports that in the past, the survey team covered the coastal waters just north of Brunswick, GA to just south of Jacksonville, FL. This year a modified survey was developed to allow for greater daily survey coverage by a number of survey teams. This modified survey covers a smaller range in latitude, but the newly extended track lines allow for a greater transit offshore with an average distance of 33 nautical miles.

This year the team brings together a wide range of experience, specialties and knowledge of marine mammals. We welcomed Gill Braulik, Jennifer Cucksey, Holly Fearnbach, Lindsay Hall, Cally Harper, and Terri Krauska, to a season full of possibilities. The team rolled into Fernandina Beach, FL on the 30th of November. With the help of New England Aquarium's Jessica Damon and Heather Pettis we conducted our first full scale survey on December 2nd.

Since that first survey we have been battered by high winds almost daily. We have managed to fly 22 full surveys in the 41 days that the team has been on site. Increasing winds and high sea states have reduced our sighting conditions considerably. However, the team has succeeded in reporting 25 Right Whale sightings of 11 individuals, seven of which are mothers since the start of the season.

We are all very hopeful for what this winter calving season may bring. So far the total number of whales in the southeast has been confirmed at 20 individuals, of which 12 are mothers. The most reassuring sign that the season to come will be successful is the uplifting story of #1151. Most of you may know 1151 as MaVynee, an adult female Right Whale named after MaVynee Betsch, a local Fernandina Beach, FL resident and environmentalist. 1151 was seen in the warm, shallow waters off the coast of Amelia Island with her calf in 2001. The EWS team of 2001 sighted and photographed mother and calf a number of times in the local coastal waters. As the season of 2001 continued, so did the increasing number of calves. The team's ongoing efforts to locate and report Right Whales in their survey area met with an unsettling realization. 1151 had been sighted without her calf. Throughout the rest of the 2001 season the sightings continued, more calves were born, but 1151's calf was never seen again.

But,in a recent and encouraging turn of events 1151 has returned to the southeast calving grounds in the 2003 season. Right whale 1151 has returned to the waters of southern Georgia and northern Florida with a new calf!

With the start of the New Year, we can only hope it will bring long stretches of favorable weather and amazing survey conditions. As the days continue to get longer, more daylight means more survey time, more survey time hopefully will mean more whales.



Grand Manan Whale & Seabird Research Station Inc.



FIELD TRIPS

HUMAN ENVIRONMENTAL IMPACT

Date: Sunday, 10 November Place: McIntosh Run, Spryfield Weather: Sunny and unseasonably warm – 15°C! Interpreter: Chris Brackley, Ecology Action Centre Participants: 11



This field trip was to explore some Crown Land in the Spryfield area. During the past Chris had led a series of eight EAC hikes on the Chebucto Peninsula, visiting a variety of landscapes and habitats on public land.

While Crown Land in other parts of the province is often subject to forestry pressures, here in the expanding metropolitan area wild land is more often subject to pressure from residential and industrial development. This poses a risk to our remaining local wilderness areas.

'Undeveloped' public lands close to the city have no official protection if they are not designated as parks. As a consequence they may be subject to heavy recreational use and unregulated dumping, leading to noise, pollution, habitat damage, and other deleterious effects. This diminishes their integrity and attractiveness as natural areas, both for wildlife and for humans seeking a wilderness experience.

To draw attention to the need to protect more of our Crown Land, Chris recently produced a booklet entitled "Public Land on the Chebucto Peninsula: a Citizen's Guide to Protecting Halifax's Backyard Wilderness", available free from the Ecology Action Centre.

The McIntosh Run Watershed Association is one of a number of local groups outlined in this booklet who are working towards effective protection of a specific area. This Association was formed in 1995 with generous financial support from the Spryfield branch of the Royal Canadian Legion. Under the leadership of Terry Bobbit, the group has been cleaning up this lovely small river which runs parallel to the Herring Cove Road, through various landscapes and several ponds in the 'Herring Cove Backlands', and so onward to the mouth of Halifax Harbour. Here in Spryfield, as is often the case, what was once Crown Land was sold off along the road frontage, so that while some people have property backing onto this area, there is no easy, well-marked and safe access for most people. The Association plans to develop a series of trails and has commissioned a trail study from Gordon Ratcliffe. There is a four-year plan to actually build the trails.

We met at the parking lot of the South Centre Mall in Spryfield, and from there carpooled a few kilometres to Princeton Avenue, just past Roach's Pond. We parked in a gravel area at the end of the street, within sight of a pumping station. We followed well-worn ATV trails off to the left, through an area of young hardwoods littered with old tires, broken appliances, barrels of Varsol, and other evidence of illegal dumping. As we walked further away from the steady hum of traffic on the Herring Cove Road, the quiet was marred by an ATV which roared towards us, but we soon left it behind and enjoyed the rest of our walk undisturbed.

We were struck by the abundance of cone and berry crops this fall; the bountiful clusters of Rose hips and Canada Holly provided bursts of colour among the subdued grasses and shrubs along the edges of the trails and streams. The needles of the Tamarack trees had mellowed to a clear gold, so that the trees stood out against the bare birches and maples. A granite ridge featured a Jack Pine barrens, among which was growing Bayberry, as well as Broom-Crowberry (*Corema conradil*), one of our less common plants.

We eventually left the main road to follow the surveyor tape which marked the proposed route for the hiking trail. Chris talked about the considerations that go into trail layout. He said we need to strike a wise balance between enhancing public access to and appreciation of nature, and protecting natural areas. This route doesn't follow the river too closely, in order to minimize shoreline disturbance in marshy areas, but it does come out on the river at selected scenic spots where the shore is stable enough to take some traffic.

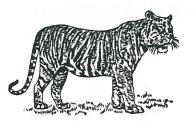
Dodging deadfalls and leaping a few streams, we entered a largely coniferous forest whose branches were dripping with Usnea lichens, and the floor was lush with green mosses, ferns, and clubmosses. Other noteworthy lichens included *Lobaria quercizans* and *L. scrobiculata*. We spotted several bright colonies of Earth Tongues, an orange club-shaped mushroom of the Geoglossaceae family. Some fallen spruce logs along the trail had masses of the Orange Jelly fungus, *Dacrymyces palmatus*, which looks much like the so-called Witches' Butter. Very few birds were seen, but the call notes of Black-capped Chickadees and Golden-crowned Kinglets rang out, as they worked in the trees above our heads, and a Ruffed Grouse flushed from the undergrowth ahead of us. There were fresh deer tracks in the soft mud of one of the narrower trails, which had been churned up by ATV's.

We passed through stands in which the conifers were all about the same age, 40 to 50 years or so, and a few of us remarked on how unhealthy they were. Many were dead or dying, leaving openings in the canopy. Lots of trees had woodpecker feeding holes and nesting cavities, some apparently made by Pileated Woodpeckers. There was no sign of fire, but this dense, even-aged forest of thin trees reaching up for the light, looked much like the sort of forest which comes up naturally after a clearcut, a fire, or an outbreak of spruce budworm. We would have liked to know more of the history and ecology of this forest. It would make a good subject for nature interpretation and school biology project.

No plant survey has been undertaken yet, and there is work to be done to ensure that trail construction and use avoids damaging vulnerable habitats and species.

Volunteers to work on any aspect of this project would be very welcome, and may contact Terry Bobbit at the McIntosh Run Watershed Association's office, Spryfield branch of the Royal Canadian Legion, 477-0467.

- Patricia L. Chalmers



THE SUNDARBANS – IN SEARCH OF THE ROYAL BENGAL TIGER

Date: Wednesday, 6 Nov. to Saturday, 9 Nov. Place: The Sundarbans Weather: Sunny and hot – 30°C Interpreter: Wosama Marre Participants: 10

Having arrived at last at the river docks in the Bangladesh port of Mongla – with tense neck muscles, sore back, and a severe headache, I and my other suffering fellow passengers tumbled stiffly out of our van, silently questioning the 'wisdom' of this journey after three hours of non-stop Formula I driving. We trudged shakily to the riverside with our backpacks, and soon we boarded two ancient gently bobbing Bengali-style painters – small, long wooden affairs with arched woven roofs like quonset huts. We were on our way at last, gratefully, on the more gentle river-leg of our trip, to hunt for Royal Bengal Tigers in the Sundarbans National Park, the largest natural mangrove forest in the world, spanning both India and Bangladesh.

Earlier that same morning, I had joined two other participants, both of whom worked with my husband's Bangladesh Environmental Management Project; Saskatachewan engineer Angela Arnold, volunteering for three months from her job with Wyerhaeuser towards an improved waste management program for the textile industry in Bangladesh; and Albertan lawyer Linda Duncan, here to draft environmental laws and set up enforcement and fining methods. The three of us had awaited the arrival of two Contic River Cruise vans with their drivers, and Wosamah, the 21-year old 'Rear-Admiral', organiser, and son of owners Rune and Yves Marre, and also the seven other tour participants - from France, Britain, Denmark, and Ireland. Wosamah had smoothly and invisibly handled all travel permits (special permission is required to visit and travel within the treasured natural mangrove forest area), luggage transfer, and air tickets/boarding pass arrangements without one hitch - no mean feat here. When all had been loaded to everyone's satisfaction, we were off to the Dhaka airport for our 30-minute flight south to Jessore.

The GMG Airline lounge had offered wrapped candies, wrapped cookie/cake affairs, and coffee, as we sat on well-worn and scratched plasticmoulded chairs awaiting our boarding call. Our Canadian-built Dash-8 to Jessore, full to capacity, offered on-flight drinks of flavoured milks/yoghurts, and the same candies and cookies again – sweets are the snack of choice in the east! I had been seated next to a Bengali rice research botanist who was travelling to Jessore with two Phillipino colleagues to study rice-paddy techniques.

On arrival, we had been met by two different Contic vans for our three- to four-hour drive to the river port of Mongla, and this was where the rot had begun to set in. Luggage had been transferred, and we had used the airport washrooms (I chose 'the-hole-in-the-ground' cubicle by mistake). Happy, blissfully innocent, and excited at first, we hadn't anticipated an allotted Grand Prix wannabee driver.

There was no escape, we had to hang on and bear it.

We had roared off to a simultaneous blast of frigid arctic air-conditioning which froze our cottonclad bodies, and of deafening, thousand-decibel local radio music – a mixture of Eastern rap, rock, and just plain cacaphony, which threatened to burst our eardrums and made conversing impossible. These both we had finally managed to gesticulate into oblivion, and our eager death-wish driver, with much disappointment, had turned the radio off (at first he thought we had wanted it turned 'up'!), and the air-conditioning down. No amount of entreaties, however, had been able to modify his driving style of speeding, swerving, lurching and yawing, and continual, non-stop hornblowing, on an essentially free-for-all road to the river port of Mongla.

We had soared past idyllic, delta-flat paddy and farm-land; isolated, immense cement factories; a very large acreage of a military cantonment, with its contrast of absolute cleanliness and spotless grounds and buildings. We flew over several railway lines, unadjusted in height for the road bed, but with giant speed-bumps on either side (the only time we slowed to a reasonable pace); past brick factories large and small; and many small villages and towns teeming with dogs, people, markets, rickshahs, goats, cows, chickens and their young. This heart-stopping journey had also included a short ferry-crossing on a tiny ferry crammed to sardine-status with people, hawkers, baskets, animals, bicycles, motorcycles, cars, vans, and giant trucks.

No lanes there, either.

So, we had been indeed relieved to have arrived in one piece in Mongla port. The painters that had transported us to our cruise-boat, the 'B613', were towed behind us during our three-day river trip to be used for crew sleeping quarters, and also for short forays into river inlets and along river banks to search for wildlife.

The B613 is a converted boat, from one of the largest wooden hulls in the country, built according to the ancient techniques of the Brahmaputra carpenters. A 'Malar' boat, 32 metres long and 8 metres broad, the biggest sailing boat of Bengal, it is equipped with six double cabins, 4 bathrooms, 2 shower rooms, (all small and lined in wood and bamboo), and a well-equipped galley. The 20-metre high, hinged mast (for low bridges) boasts 250 m² of two magnificent, hand-woven and dyed square-rigged red-ochre sails.

The river itself, one of very many delta fingers of the great Ganges, was a grey-brown muddy slurry populated with sleek coastguard vessels, giant paddle-steamer ferries, smaller, gaily decorated pleasure-ferries, indigenous poled craft with the palm leaf quonset hut-like roofs, and many international, towering container vessels at varying stages of loading and unloading. The riverbanks displayed many rusty hulks of old ships and boats – Homo sapiens was definitely the overwhelming species here. We were about to enter the 'country of 1,000 rivers'. We had a relaxing evening cruise downriver into the darkening sky, blessedly cool and breezy, past a long line of 'servicing' huts (for the confiscated vessels lying at anchor for years in the harbour), forested river banks, and then back and up to the Forest Station of Mongla. There we picked up two armed and uniformed guards, with ancient Chinese rifles, to protect us, not only from dacoits (pirates), but also from any wayward, man-eating tigers on our next day's hike into the Sundarbans forest and savannah areas.

After wonderful food and drink, and an exhausting day, most of us fell asleep on deck watching the Milky Way and thousands of stars emerging from the deepening night sky, eagerly anticipating our tiger-spotting trip into the mysterious nature of the Sundarbans. (*to be cont'd*)...

- Stephanie Robertson



! YOUR ARTICLE/REPORT HERE !

If you have anything of note you want to share with Halifax Field Naturalists, and naturalists in general, please inform the editor for the next issue. This is the place to do it!

We are always looking for submissions for The Halifax Field Naturalist, such as a write-ups on interesting private forays into NS wildlands or even HRM areas; on natural history in general, field trips, nature walks, daily observations, or articles with your slant on local or global issues.

This is your publication, and the place to make your observations and views known.



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.

"That country is so cold for seven or eight Months of the year, that the Sea freezes Ten foot deep, the Trees and the very Stones split, the Snow is ten or twelve Foot deep upon the Ground, for above six Months of the year, and during that season, no body can stir out of Doors, without running the risque of having their Nose, Ears and feet mortified by the Cold."

- Baron de la Hontan, New Voyages to North-America from 1683 to 1694, 1703.

NATURAL EVENTS

- **21 Dec.** Winter solstice at 21:12 AST: winter begins in the Northern Hemisphere; though the temperature drops, days begin to lengthen.
- 27-31 Dec. Latest sunrise of the year at 7:51 a.m.
 - **3 Jan.** Quadrantid meteor showers: they peak at 8:00 p.m.
 - **7 Jan.** Daily maximum temperature at Shearwater goes below 0°.
- 13-24 Jan. 'January Thaw' (the temperature stops falling, and the average actually rises 0.2°).
- 18 Jan. Full moon.
- 25/26 Jan. 'Eagle Days' in Sheffield Mills, King's County.
 - 1/2 Feb. More 'Eagle Days' in Sheffield Mills, King's County.
 - 6-8 Feb. Coldest days of winter (average daily minimum -9.4°)
 - 9 Feb. Average temperatures start increasing.
 - 22 Feb. Daily maximum temperature above 0°.
 - 16 Feb. Full moon.
 - 18 Mar. Full moon.
 - **19 Mar.** Perigean spring tides will be unusually large.
 - 20 Mar. Vernal equinox at 21:02 AST: spring begins in the northern hemisphere.
 - 23 Mar. Daily average temperature above 0°.
 - 6 Apr. Daylight Savings Time begins at 2:00 AST: turn clocks ahead one hour.
 - Sources: Atmospheric Environment Service, Climate Normals 1951-80 Halifax (Shearwater A) N.S.; Blomidon Naturalists Society's 2002 Calendar; Royal Astronomical Society of Canada's Observer's Handbook 2002.

7	Dec.	7:37	16:34	4	Jan.	7:51	16:47
14	Dec.	7:44	16:34	11	Jan.	7:50	16:55
21	Dec.	7:48	16:37	18	Jan.	7:46	17:03
28	Dec.	7:51	16:41	25	Jan.	7:41	17:13
1	Feb.	7:34	17:23	1	Mar.	6:53	18:02
8	Feb.	7:25	17:33	8	Mar.	6:40	18:11
15	Feb.	7:15	17:42	15	Mar.	6:27	18:20
22	Feb.	7:04	17:52	22	Mar.	6:15	18:29
29	Mar.	6:02	18:38				

SUNRISE AND SUNSET ON LATE WINTER AND EARLY SPRING SATURDAYS

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

ORGANISATIONAL EVENTS

Blomidon Naturalists Society: Indoor meetings take place on the 3rd Monday of the month 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, go to <http://www.go.ednet.ns.ca/~bns/>.

20 Jan. "Global warming", with speaker Ron Buckley.

17 Feb. "Show and Tell", with any naturalist; an evening of slides, pictures, displays and short talks. Note – this will be held in Acadia University Biology Building, Room 308.

Burke-Gaffney Observatory: Public shows at the Burke-Gaffney Observatory at Saint Mary's University are held on the 1st and 3rd Saturday of each month, except from June through September when they are held every Saturday. Tours begin at 7:00 p.m. between November 1 and March 30, and at either 9:00 p.m. or 10:00 p.m. (depending on when it gets dark) between April 1 and October 31. For more information phone 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, October to April, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information phone Suzanne Borkowski, 445-2922, or go to <http://www.chebucto.ns.ca/Recreation/NS-BirdSoc/>.

- **4 Jan.** "Sewer Stroll I, Halifax/Dartmouth Area", with leader Terry Paquet, 452-3622; email <terrypaquet@hotmail.com>.
- 23 Jan. "Members' Slide Night".
- 2 Feb. "Sewer Stroll I, Halifax/Dartmouth Area", with leader Blake Maybank, 852-2077; email <mailmaybank@ns.sympatico.ca>.
- 27 Feb. "A Birder's Guide to Field Recording", with speaker Bob Lindsay.
- 27 Mar. "Avian Interactions with Wind Power Structures", with speaker Becky Whittam of Bird Studies Canada.
- 29 Mar. "Baccaro and Blanche Peninsula", with leader Donna Ensor, 875-4269; email <ensorg@auracom.com>.

Nova Scotian Institute of Science: Indoor meetings take place on the 1st Monday of the month, October to May, usually at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information, go to <http://www.chebucto.ns.ca/Science/NSIS/Home.html>.

- 6 Jan. "Why Do We Need A Dirty Atmosphere? Aerosol Effects ...", with Ulrike Lohmann, Dalhousie Dept. of Physics and Atmospheric Science.
- **3 Feb.** "Introduction of Exotic Species/Biological Methods in Pest Management.", A public panel discussion with EAC's Mark Butler. Note to be held at the Guptill Lecture Theatre, Rm 117, Dalhousie's Sir James Dunn Building.
- **3 Mar.** "Tides and Storm Surges in the Bay of Fundy", with with Charlie O'Reilly, Canadian Hydrographic Service (DFO); Allan Ruffman, Geomarine Associates Ltd ; and George Parks, Canadian Hurricane Centre, Environment Canada.

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

- 14 Jan. "Homeopathy: a 200-year old System of Medicine", with Meryl Cook of the Kachina Health Centre.
- 21 Jan. "Whale and Ocean Noise", with Hal Whitehead, Killam Professor of Biology, Dalhousie University.
- **22 Jan.** "Eagles of Sheffield Mills", with Jim Wolford, Blomidon Naturalists Society.
- 25/26 Jan. "The Mystery of Sea Monsters", with Andrew Hebda, Curator of Zoology, MNH.
 - 28 Jan. "West Nile Virus: Is There Concern?", with Dr. Maureen Baikie of the N. S. Dept. of Health.
 - 8 Feb. "Volcanoes for Families", with Debra Burleson, Director MNH.
 - **19 Feb.** "Changing Climate in Atlantic Canada: Should We Worry?", with Dr. John Shaw, Geological Survey of Canada Atlantic.
 - 25 Mar. "Five Great Archaeological Mysteries", with David Christianson, NSM Archaeologist.
 - **26 Mar.** "Mass Extinctions, Asteroid Impacts, and Giant Volcanic Eruptions The Beginning and End of the Dinosaurs", with Dr. Paul Olsen, Lamont Doherty Earth Observatory of Columbia University.
 - 29 Mar. "Birds From Beaks to Bellies", a family workshop with the Nova Scotia Bird Society .

Nova Scotia Wild Flora Society: Meets 4th Monday of the month, September to May, at the Nova Scotia Museum of Natural History, 7:30 p.m. For more information phone Keith Vaughan, 445-9887, or go to <http://www.chebucto.ns.ca/~nswfs/>.

- **27 Jan.** "AGM and Members' Slide Night". For more info phone President Marion Sensen,422-8985, or email marion.sensen@stmarys.ca.
- 24 Feb. "Wildflowers of Nova Scotia, New Brunswick, and Prince Edward Island: the photographs of Mary Primrose".
- 24 Mar. "Spring Wildflowers".

Photographic Guild of Nova Scotia: Meets 2nd Monday of the month, as well as the 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. For more information, go to <http://www.chebucto.ns.ca/Recreation/PGNS/>.

6 Apr. "N.S. Bird Society Trophy Competition", "Atlantic Geoscience Trophy Competition", followed by "Waterfalls of Nova Scotia", with John William 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, go to <http://halifax.rasc.ca <http://halifax.rasc.ca/>.

- compiled by Patricia L. Chalmers

HALIFAX TIDE TABLE

HALIFAX AST Z+4

2003

TIDE TABLES

	January-janvier						February-février Day Time Feet Metres jour heure pieds metres							March-mars									
Day	Time	Feet M	letres	jour	heure	pieds n	netres	Day	Time	Feet M	Aetres			pieds r	netres	Day	Time		Metres		heure		
	0040 0620 1315 1905	1.3 6.2 0.3 5.9	0.4 1.9 0.1 1.8		0025 0620 1305 1905	2.3 5.6 1.0 5.2	0.7 1.7 0.3 1.6	1 SA SA	0210 0750 1435 2030	1.6 6.2 0.7 5.9	0.5 1.9 0.2 1.8	SU	0130 0725 1405 2005	1.6 6.2 0.3 5.9	0.5 1.9 0.1 1.8		0110 0650 1335 1930	1.6 5.9 0.7 5.6	0.5 1.8 0.2 1.7	SU	0020 0615 1250 1855	1.6 5.9 0.7 5.9	0.5 1.8 0.2 1.8
	0130 0710 1405 1955	1.3 6.6 0.3 5.9	0.4 2.0 0.1 1.8		0110 0700 1345 1950	2.0 5.9 1.0 5.6	0.6 1.8 0.3 1.7		0250 0835 1515 2115	1.6 6.2 0.7 5.9	0.5 1.9 0.2 1.8	17 мо LU	0215 0810 1445 2050	1.3 6.2 0.3 6.2	0.4 1.9 0.1 1.9	SU	0155 0735 1415 2010	1.6 5.9 0.7 5.9	0.5 1.8 0.2 1.8	мо	0110 0705 1335 1940	1.3 6.2 0.3 6.2	0.4 1.9 0.1 1.9
	0220 0800 1455 2045	1.6 6.6 0.3 5.9	0.5 2.0 0.1 1.8		0150 0745 1425 2030	2.0 6.2 0.7 5.6	0.6 1.9 0.2 1.7	3 MO LU	0335 0915 1555 2150	1.6 6.2 0.7 5.9	0.5 1.9 0.2 1.8		0305 0855 1530 2130	1.0 6.6 0.3 6.6	0.3 2.0 0.1 2.0	3 MO LU	0235 0820 1450 2045	1.3 5.9 0.7 5.9	0.4 1.8 0.2 1.8	TU	0155 0750 1420 2020	0.7 6.2 0.3 6.6	0.2 1.9 0.1 2.0
	0310 0850 1540 2130	1.6 6.2 0.7 5.9	0.5 1.9 0.2 1.8	SU	0235 0830 1510 2110	1.6 6.2 0.7 5.9	0.5 1.9 0.2 1.8	4 TU MA	0410 1000 1630 2230	1.6 5.9 1.0 5.9	0.5 1.8 0.3 1.8	19 WE ME	0350 0940 1615 2210	1.0 6.6 0.3 6.6	0.3 2.0 0.1 2.0	TU	0310 0855 1525 2120	1.3 5.9 1.0 5.9	0.4 1.8 0.3 1.8	WE	0245 0840 1505 2105	0.7 6.6 0.3 6.6	0.2 2.0 0.1 2.0
	0355 0935 1625 2215	1.6 6.2 0.7 5.9	0.5 1.9 0.2 1.8	20 мо LU	0320 0910 1550 2155	1.6 6.2 0.3 5.9	0.5 1.9 0.1 1.8	5 WE ME	0450 1035 1700 2305	2.0 5.9 1.3 5.6	0.6 1.8 0.4 1.7	20 TH JE	0445 1030 1705 2255	1.0 6.2 0.7 6.6	0.3 1.9 0.2 2.0	WE	0340 0935 1550 2155	1.3 5.9 1.0 5.9	0.4 1.8 0.3 1.8	TH	0335 0925 1550 2145	0.3 6.2 0.3 6.9	0.1 1.9 0.1 2.1
	0445 1020 1705 2300	2.0 5.9 1.0 5.6	0.6 1.8 0.3 1.7		0410 0955 1640 2235	1.6 6.2 0.7 6.2	0.5 1.9 0.2 1.9		0530 1115 1735 2345	2.0 5.6 1.6 5.6	0.6 1.7 0.5 1.7	21 FR VE	0540 1115 1800 2340	1.0 5.9 1.0 6.2	0.3 1.8 0.3 1.9	6 TH JE	0410 1010 1620 2230	1.6 5.6 1.3 5.9	0.5 1.7 0.4 1.8	21 FR VE	1645	0.3 6.2 0.7 6.6	0.1 1.9 0.2 2.0
	0535 1105 1750 2340	2.3 5.9 1.3 5.6	0.7 1.8 0.4 1.7	22 WE ME	0500 1040 1725 2320	1.6 6.2 0.7 6.2	0.5 1.9 0.2 1.9	1	0615 1155 1815	2.0 5.2 2.0	0.6 1.6 0.6	22 SA SA	0645 1205 1855	1.0 5.6 1.3	0.3 1.7 0.4		0445 1050 1645 2305	1.6 5.6 1.6 5.6	0.5 1.7 0.5 1.7		0525 1100 1740 2315	0.7 5.9 1.0 6.2	0.2 1.8 0.3 1.9
8 WE ME	0625 1145 1835	2.3 5.6 1.6	0.7 1.7 0.5	23 TH JE	0600 1130 1820	1.6 5.9 1.0	0.5 1.8 0.3	SA	0020 0705 1240 1900	5.2 2.0 4.9 2.0	1.6 0.6 1.5 0.6	23 SU DI	1300	5.9 1.3 5.2 1.6	1.8 0.4 1.6 0.5	8 SA SA	0520 1125 1720 2335	1.6 5.2 2.0 5.2	0.5 1.6 0.6 1.6		0625 1150 1845	0.7 5.6 1.6	0.2 1.7 0.5
TH	0025 0720 1235 1920	5.2 2.3 5.2 1.6	1.6 0.7 1.6 0.5	24 FR VE	0005 0705 1220 1915	5.9 1.6 5.6 1.3	1.8 0.5 1.7 0.4	SU	0105 0800 1330 1955	5.2 2.0 4.6 2.3	1.6 0.6 1.4 0.7	24 MO LU	1405	5.6 1.3 4.9 2.0	1.7 0.4 1.5 0.6		0610 1205 1810	1.6 4.9 2.3	0.5 1.5 0.7		0005 0725 1245 1950	5.9 1.0 5.2 2.0	1.8 0.3 1.6 0.6
	0110 0810 1325 2005	5.2 2.3 4.9 2.0	1.6 0.7 1.5 0.6	25 SA SA	1320	5.9 1.3 5.2 1.3	1.8 0.4 1.6 0.4	10 мо LU	1435	4.9 2.0 4.6 2.6	1.5 0.6 1.4 0.8	25 TU MA	1530	5.6 1.3 4.9 2.0	1.7 0.4 1.5 0.6	10 мо LU	0015 0705 1250 1905	5.2 2.0 4.6 2.3	1.6 0.6 1.4 0.7	25 TU MA	0830	5.6 1.0 4.9 2.0	1.7 0.3 1.5 0.6
	0205 0900 1425 2055	5.2 2.3 4.6 2.3	1.6 0.7 1.4 0.7	SU	0155 0910 1425 2120	5.9 1.3 4.9 1.6	1.8 0.4 1.5 0.5	11 TU MA	1550	4.9 2.0 4.6 2.6	1.5 0.6 1.4 0.8	26 WE ME	1650	5.2 1.3 4.9 2.0	1.6 0.4 1.5 0.6	11 TU MA	0100 0805 1345 2015	4.9 2.0 4.6 2.6	1.5 0.6 1.4 0.8	26 WE ME	0930	5.2 1.3 4.6 2.0	1.6 0.4 1.4 0.6
	0300 0950 1535 2145	5.2 2.0 4.6 2.3	1.6 0.6 1.4 0.7		0255 1010 1545 2225	5.6 1.3 4.9 1.6	1.7 0.4 1.5 0.5		0355 1050 1655 2255	4.9 1.6 4.6 2.3	1.5 0.5 1.4 0.7	27 TH JE	0455 1155 1755	5.2 1.0 5.2	1.6 0.3 1.6		0150 0905 1455 2120	4.9 2.0 4.3 2.6	1.5 0.6 1.3 0.8		0325 1035 1645 2305	4.9 1.3 4.9 2.0	1.5 0.4 1.5 0.6
	0355 1040 1640 2240	5.2 2.0 4.6 2.3	1.6 0.6 1.4 0.7	TU	0405 1110 1700 2330	5.6 1.0 5.2 1.6	1.7 0.3 1.6 0.5	TH	0455 1145 1750 2355	5.2 1.3 4.9 2.3	1.6 0.4 1.5 0.7	FR	0020 0600 1250 1850	2.0 5.6 1.0 5.2	0.6 1.7 0.3 1.6	TH	0300 1010 1615 2225	4.9 1.6 4.6 2.3	1.5 0.5 1.4 0.7	1.1	0445 1130 1745	1.0	1.5 0.3 1.6
TU	0450 1130 1735 2335	5.2 1.6 4.9 2.3	1.6 0.5 1.5 0.7	1.1.1.1.1	0510 1210 1800	5.9 1.0 5.2	1.8 0.3 1.6		0550 1235 1840	5.6 1.0 5.2	1.7 0.3 1.6					FR	0415 1105 1720 2325	4.9 1.3 4.9 2.0	1.5 0.4 1.5 0.6	SA	0005 0545 1225 1830	1.0	0.5 1.6 0.3 1.6
	0535 1220 1820	5.6 1.3 4.9	1.7 0.4 1.5	TH	0030 0605 1305 1855	1.6 5.9 0.7 5.6	0.5 1.8 0.2 1.7	SA	0045 0640 1320 1925	2.0 5.9 0.7 5.6	0.6 1.8 0.2 1.7						0520 1200 1810	5.2 1.0 5.2	1.6 0.3 1.6	SU	0050 0635 1310 1905	5.0	0.5 1.7 0.3 1.7
				FR	0120 0700 1355 1945	1.6 6.2 0.7 5.6	0.5 1.9 0.2 1.7													MO	0135 0720 1350 1940	1.0	0.4 1.7 0.3 1.8

Armoyan Re-submits Rejected '98 Proposal

Public Hearing February 3, 2003, 7:00 p.m. Keshman Goodman Library, 330 Lacewood Drive (near Home Depot)

Here we go again! A development proposal by George Armoyan threatens Williams Lake, Colpitt Lake, and environmentally sensitive lands in Mainland South.

This proposal will rezone from 'Holding' to 'RDD' 156 acres of environmentally sensitive land, between Purcell's Cove and Herring Cove Road, in order to build 870 new dwelling units. Bordering the area are Colpitt Lake – a pristine freshwater lake that flows into William's Lake, one of the most popular swimming spots in Halifax – and the MacIntosh Run.

An identical Armoyan (Kimberley-Lloyd Development) proposal was rejected in 1998 after much public outcry. Now Armoyan has resubmitted it.

The salient concerns are:

- More raw sewage will flow into the waters of Herring Cove. Development on this site is irresponsible until adequate sewage treatment facilities are in place.
- The proposed development does not ensure adequate protection of the water quality of the lakes or river, and once damaged, they may never recover.
- Access to the proposed development will be from Herring Cove Road. Traffic at the Armdale Rotary will increase by an estimated 3350 daily vehicle trips.

Your input is needed to alert the Council that the proposal is premature and irresponsible. We need comunity-driven planning, rather than ad hoc development.

Tell your Councillor to vote "No"!

For more in-depth information, background material, and Councillors' email links, go to <www.williamslakecc.org> (William's Lake Conservation Company).

Thank you!

Kathleen Hall

! NEXT DEADLINE !

1 March for March Issue contributions to the Editor, HFN c/o NS Museum of Natural History