26 (2) Summer / Été 1999

# N.B. Naturalist Le Naturaliste du N.-B.



## N. B. Federation of Naturalists Fédération des naturalistes du N.-B. 277 avenue Douglas Avenue, Saint John, N. B. E2K 1E5 Canada

The Federation is a non-profit organization formed in 1972 to encourage an understanding of nature and the environment, and to focus concern for the natural heritage of New Brunswick.

La Fédération est une organisation sans buts lucratifs formée en 1972 pour encourager une meilleure compréhension de l'environnement naturel, et pour éveiller le souci pour le patrimoine naturel du Nouveau-Brunswick.

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Chignecto Naturalists' Club, c/o CWS, Box 6227, Sackville, NB E0A 3C0; 536-0454; meets Sackville Public Library, 7:30 pm, 1st

Thur., Sept.-June.

Club de Naturalistes de la Péninsule acadienne, C.P.2041, St.Simon NB E8P 1L8; courriel: <a href="mailto:cnpa@francophone.net">cnpa@francophone.net</a> site web: <a href="http://www.francophone.net/cpna">http://www.francophone.net/cpna</a>; réunions alternants entre Caraquet, Shippagan et Tracadie, 1er mercredi, sept. à juin; Le Gobe-mouche mensuel.

Club d'ornithologie du Madawaska Ltée, a/sMusée historique du Madawaska, 195 boul. Hébert, Edmundston NB E3V 2S8; Gilles Roussel (dom.735-5430) (bur.735-2035) courriel: gilles.roussel@ext.gov.nb.ca; réunions à 19h30, 2ième mercredi, sept. à juin, Musée du Madawaska; Le Jaseur bimestriel.

Club l'Envolée Chaleur, C.P. 674, Petit-Rocher, NB E0B 2E0: 783-4336 ou 783-0080: réunions à 19h, 1er lundi, sept. à juin, salle d'activités (au sous-sol) de la Bibliothèque de Beresford.

Club les Ami(e)s de la Nature du sud-est, a/s Gilles Bourque,407 rue High, Moncton NB E1C 6E3; 532-2873(ligne d'information); réunions alternant entre Dieppe et Shédiac, 1 er lundi de chaque mois; excursions 3ième samedi ou dimanche; La plume verte.

Ford Alward Naturalist Association, c/o Elizabeth McIntosh, 560 Kenneth Road, Glassville, E7L 1B3; 246-5572; meets Florenceville Town Hall, 7:00 pm, 1<sup>st</sup> Tues., Sept.-June; meetings advertised in local newspapers.

Fredericton Nature Club, Box 772, Station A, Fredericton, NB E3B 5B4; 455-6365; meets Odell Park Lodge, at Odell Park, 7:00 pm, 2<sup>nd</sup> Wed., Sept-May, monthly newsletter.

Kennebecasis Naturalists' Society, c/o Ms H. Folkins, 827 Main St., Sussex, NB E4E 2N1; meets St. Paul's United Church Hall, 7:30 pm, 4<sup>th</sup> Mon., Sept.-June; quarterly newsletter.

Moncton Naturalists' Club, Box 28036, Highfield Square P.O., Moncton, NB E1C 9N4; 857-4271 or 384-5212 or 384-6397 (information line); meets Church of the Nazarene, 21 Fieldcrest Drive, 7 pm, 2<sup>nd</sup> Wed., Sept.-June; monthly newsletter.

Ornitho Restigouche Club, 6 Van horne Cr., Campbellton, NB E3N

3K3; 789-7759.

Restigouche Naturalists' Club, c/o Campbellton Library, Box 130, Campbellton, NB E3N 3G1; 684-3258; meets Campbellton Centennial Library, 7 pm, 1<sup>st</sup> Monday

Saint John Naturalists' Club, P.O. Box 2071, Saint John, NB E2L 3J5; meets N.B. Museum at Market Square, 7:30pm 2<sup>nd</sup> Wed., Sept.-May, elsewhere in June; monthly Bulletin.

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Merci beaucoup à tous les bénévoles dévoués qui ont contribué à cette publication.

Please submit articles for future issues of N.B. Naturalist to:

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### A MESSAGE FROM THE PRESIDENT UN MESSAGE DE LA PRÉSIDENTE

Pierrette Mercier

A new millennium, new optimism...

I am full of enthusiasm for the coming year. The Federation will soon have charitable status. This will certainly open new doors for us. By bringing in new funding, we will be able keep ongoing projects active and start new ones aimed at education and protecting the environment. Also, a project that the NBFN has been supporting and looking forward to, is the annotated bird check list of New Brunswick which should be completed soon.

There are still several issues such as protected areas, insurance for our members, the NB trails system and many more that the NBFN has been working on for some time and that still need to be addressed.

The opening of two new national parks in the Nunavut Territory gives me hope that our government is serious about protecting our natural heritage and makes me more determined to keep fighting for more protected areas in our own province. The World Wildlife Fund is urging all levels of government to have a working protected spaces strategy by the end of the millennium. Our provincial government still has a long way to go but I'm confident we can make an impact by pressuring our politicians and forest industry. We must make them understand that by putting aside these important areas, we are actually insuring the future of our forest industry.

I am looking forward to working with the new board of directors of the Federation on these important issues affecting our natural environment. I'm sure the next two years will be very busy but satisfying ones.

I would like to congratulate the Club des Naturalistes

de la Péninsule Acadienne for the fine work they did at the AGM. I'm sure everybody enjoyed themselves (I certainly did) and appreciated all the effort that was put in to receiving us. I would like to take this occasion to thank Frank Longstaff, Kathy Popma and Eileen Pike for their hard work and dedication. I would also like to thank Rose-Alma Mallet, who will be returning as past-president, for her guidance and continuing support. I hope to continue in her footsteps and do as good a job as she

did.

Nouvelle optimisme pour un nouveau millénaire...

Débutant à mon nouveau poste comme présidente de la FNNB, je suis très enthousiaste face à la prochaine année. La Fédération aura bientôt un status de charité. Ceci ouvrira plusieurs nouvels avenues pour nous. En apportant plus de fonds à la Fédération, nous pourrons continuer à supporter les projets déjà existants et d'en entreprendre de nouveaux visant l'éducation et la protection de l'environnement. Un autre projet que la FNNB supporte et attend pationnement sera bientôt complété, c'est à dire la liste annotée des oiseaux du Nouveau-Brunswick.

Il y a toujours beaucoup de problèmes tels que les espaces protégés, Sentier NB et l'assurance pour nos membres, sur lesquels la Fédération travail. Ces questions et biens d'autres seront adressées au cours de la prochaine année.

La création de deux nouveaux parcs nationaux dans le Territoire du Nunavut me donne espoir que notre gouvernement est toujours interessé à la protection de notre patrimoine naturel. Le World Wildlife Fund demande à tout les niveaux de gouvernement d'établir une stratégie viable pour les zones protégées avant la fin de ce millénaire. Notre province a un grand bout de chemin à faire. C'est à nous de convaincre nos politiciens et les compagnies forestières qu'en protégeant ces régions importantes, nous assurons un futur réel à notre industrie forestière.

J'ai bien hâte de travailler avec le nouveau bureau de direction de la FNNB sur ces questions qui influence notre environnement. Je suis convaincue que les deux prochaines années seront très chargées mais valorisantes.

Je voudrais félicité le Club des Naturalistes de la Péninsule Acadienne pour tout le bon travail et l'effort mis lors de l'assemblée générale annuelle en juin dernier.

Nous avons été accueillit comme des rois et nous nous sommes amusé. J'aimerais aussi prendre cet occasion pour remercier Frank Longstaff, Kathy Popma et Eileen Pike pour leur travail acharné et leur dévouement pour les causes de la Fédération. Je tiens aussi à remercier Rose-Alma Mallet pour son appui et ses conseils. Je souhaite pouvoir suivre son exemple et d'accomplir un aussi bon travail.

### A LAZY SUMMER AFTERNOON CANOE TRIP

(and the discovery of a plant new to New Brunswick)

Ngaire Nelson

Exploratory canoe trips this summer with my husband, Dick, have led us to the natural beauty of some of southern New Brunswick's lakes, far from noisy highways and populated areas. One such venture led us to Loch Alva via the East Branch of the Musquash River, Saint John Co., in late July. We had walked to Loch Alva on an old road before but this was the first time we travelled by canoe.

We paddled across the end of the Musquash to the earthen dam which separates the Musquash from Loch Alva. Plants of particular note below the portage were White Water Lilies and Pickerelweed in full bloom, and lots of early ripe blueberries. A couple of Hummingbird Clearwings joined several bees in nectaring on the blooms.

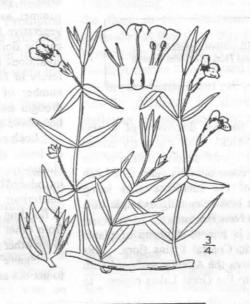
A portage of ten minutes enabled us to put the canoe in the Loch and we paddled on.

For readers who have good maps of the area and wish to follow along, our first excursion was kept to the southern end of the lake. We paddled into a little inlet on the near side which led to bogs known for good moose sightings and we saw several Common Loons fishing in the area and an Otter slipping into the water nearby.

Because the day was hot we pulled out on a little island to go for a brief swim before our return trip. Along the edge of the water were masses of short plants with bright yellow blooms that I didn't recognize. Before we left the island I pulled a specimen to examine more closely at home for identification.

Pouring over the pages of three flower identification books, I tentatively thought it was a Golden Hedge-hyssop (Gratiola aurea), also called Golden Pert. After posting my recent sightings on Nature N.B. listserv, I was surprised by a query from Jim Goltz—Are you sure? Where did you find this plant? Please describe it in detail!

After this excited response, I took the plant to Cecil Johnston, a well-established expert on plants and birds, for a closer examination. He took it to Stephen Clayden, curator of botany at The New Brunswick Museum. They decided that I had made a discovery. Phone calls came from both these gentlemen rather quickly. This "Golden Hedge-hyssop" was an unknown plant in New



Golden Hedge-hyssop

Brunswick. It grew in neighbouring provinces but had never been found here. What a surprise!

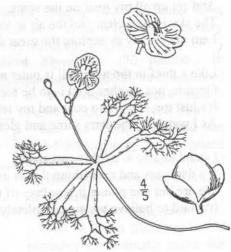
My husband and I returned to Loch Alva for another canoe trip a week later and travelled half way up the lake. At every rest stop we found this new flower; it wasn't a rarity here. We took more specimens back for further examination by Stephen.

Arrangements were made for Jim Goltz, Stephen Clayden, Hal Hinds, Cecil Johnston and Maureen Bourque to accompany my husband

(I had to work) to explore the shores of Loch Alva on August 1. They didn't have to travel far from the portage. The hedge-hyssop was in abundance, forming a yellow and green fringe along extensive areas of the shoreline.

Other rare plants that caused a bit of excitement included Screwstem (Bartonia paniculata), Alga-like Pondweed (Potamogeton confervoides) Inflated and Bladderwort (Utricularia radiata), known latter only from one other spot in the province.

Several of



Inflated Bladderwort

our beautiful waterways are used by summer cottagers for fishing and recreation. Slower paced canoers and even hikers can enjoy the wonderful outdoors and all it has to offer. You never know what discoveries can be made while enjoying a little bit of our natural paradise in New Brunswick.

Source of illustrations:

An Illustrated Flora of the Northern United States and Canada. Nathaniel Lord Britton and Hon. Addison Brown

Note by Jim Goltz:

Congratulations to Ngaire for her discovery of a new species of plant for New Brunswick! This discovery comes just in time for inclusion in Hal Hinds' second edition of the Flora of New Brunswick, due to come out next year. The Loch Alva wildlands area is one of the candidate sites being considered for protection as the best remaining example of a large wilderness area in southern New Brunswick.

The Golden Hedge-hyssop is one of a group of plants collectively classified as Atlantic Coastal Plains flora. This group of plants occurs mainly along the Atlantic seaboard with disjunct populations reaching into the Great Lakes region. In

Canada, the Atlantic Coastal Plains flora is best represented in southern Nova Scotia; unfortunately, New Brunswick is thought to have a poor representation of this floral element.

The Golden Hedge-hyssop and many of the other Atlantic Coastal Plains plant species typically grow on gently sloping sand or peat shorelines that often become emergent in late summer as water levels recede. Many such plants have a vegetative form that can grow underwater and have seeds that can lie dormant for many years. Blooming occurs when the conditions are just right. Dick Nelson told us that the water levels in Loch Alva were the lowest that he has seen for a number of years. This was largely due to the prolonged drought and the increased demand for water by industry and household consumers.

Loch Alva and other nearby bodies of water were evidently dammed at least 60 years ago. Has the Golden Hedge-hyssop always been there, or was it more recently introduced? Stable water levels are known to be very deleterious to Atlantic Coastal Plains flora. The annual cycle of flooding and scouring by ice helps to keep down competition from other plants that can't tolerate such extreme conditions. Were other species wiped out when the dams were put in?

Ngaire's discovery should serve as an inspiration to others to get out and find more of New Brunswick's nature treasures.

### WITHIN THE SOLITUDE OF THE STARS

Johanne McInnis

It's late at night as I close the front door And set up all my gear on the steps. The sky is very clear and the air is so crisp. I am now ready to explore the great depths.

Like a thief in the night, all is quiet and still. Outside, not another Soul is to be seen. It's just me, my warm coat and my telescope. As I watch all the stars shine and gleam.

I stand in awe at all this vast space. It's darkness and everything that is unknown. We are but one planet in a galaxy of this universe. It's hard to believe we are completely alone. I close my eyes and inhale the frozen winds.

All my troubles and cares are wished away.

I stare deeply into the wide black skies

And dream of new discoveries someday.

I feel a chill and my toes are now numb.
I've been out here for an hour at least.
Through my lens I've captured oblivion
And within the solitude of the stars,
I've found peace.



### TEN BEST BIRD SIGHTINGS IN NEW BRUNSWICK

Don Gibson

Who was the best athlete of all-time or who was the best entertainer of all-time? Seemingly fashionable questions as we approach the new millennium. Prompted by this trend let's consider something else near and dear to our hearts; what was the best bird sighting ever in New Brunswick or carrying it one step further, what were the ten best sightings of all-time?

To achieve this goal, David Christie, Peter Pearce, Stu Tingley and Jim Wilson were asked to list their top ten choices, with comments to explain their selections. This panel of four veteran birders, who might even be considered pioneers, eagerly accepted. The term pioneer is not meant to imply that they are old, but it is rumoured that one of them was an acquaintance of Audubon and another even goes back to the time of Cecil Johnston.

What exactly makes up a good sighting is open to interpretation and each person is going to approach it differently. Thus, the four lists were used to produce a consensus top ten list. The scoring system was as follows: first place got 10 points, second got 9, third got 8 ......tenth got 1. The values from the four lists were then totaled.

Sixteen different species received votes from our judges. The following were named but did not make the top ten: Bewick's Wren (6 points), Greater Flamingo (5 points), Common Chaffinch (3 points), Band-tailed Pigeon (2 points), Sooty Tern (2 points) and Mew Gull (western race) (1 point). Upon review one might consider the Bewick's Wren sighting a victim of the scoring system, as three of the judges included it on their lists.

The top ten selections are presented in ascending order.

10. Wood Stork (9 points) Two of our judges completely discounted the thesis that these large birds are in the baby delivery business and thus rated its appearance highly. This species has only been reported twice in N.B. The first being a bird that was collected near Saint John in June 1911 and the second was an individual that made a whirlwind tour over the southern part of the province in the fall of 1995. (Note: sighting not officially accepted by New Brunswick Bird Records Committee)

8. (tie) White-winged Tern (10 points) The July 1968 sighting was a first for Canada and possibly only the third in the Americas. Had a top ten list been generated at that time, this sighting would probably have been in the top three. A number of subsequent records in North America have caused it to drop in the rankings.

8. (tie) Little Stint (10 points) New Brunswick is not exactly deficient in shoreline but we probably are deficient in good shorebird sightings. Ten, yet to be seen, shorebird species are considered overdue, whereas only four of the 42 species on our current provincial checklist, are rated as accidental. The rarest of the four, the Little Stint was confirmed by photographs in 1980. It is felt that this bird has possibly been overlooked on occasion because of its similarity to commoner species.

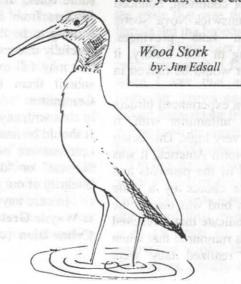
7. Shiny Cowbird (11 points) A bird that does not even appear in most North American field guides certainly has to warrant a fair amount of consideration for the list. On the other hand, many are of the opinion that this species will be discovered with increased frequency in the future, thus decreasing the value of this sighting on some scorecards. Nonetheless, the sighting in Lamèque in August 1993 made it to seventh place on our list.

6. Burrowing Owl (19 points) "Freakish", "truly outstanding" and "one of the most unexpected events in our birding history" were some of the comments used by our judges when describing the 1978 sighting in the Tantramar Marshes. Observed by few and not photographed, the bird's identity was confirmed from feathers collected at the site. Thus, it remains a mystery how a small prairie owl ended up in N.B.

Sulphur-bellied Flycatcher (20 points) In recent years, three exceptional flycatchers have appeared

> in a twenty kilometre stretch between Alma and New Horton. While the Fork-tailed and the Ash-throated were highly prized sightings, the Suphur-bellied sighting was chosen the fifth best of all-time.

4. Black Skimmer (23 points) A Black Skimmer would probably not normally make this list, but the bird sighted in August 1986 at Castalia Marsh was determined to be a South American subspecies, thus making it the first record for North America. It was once



considered a separate species, called the Dusky-tailed Skimmer. (Note: This sighting received one first place vote.)

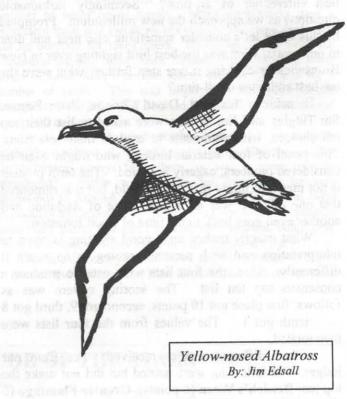
3. Yellow-nosed Albatross (26 points) There have been two Yellow-nosed Albatross sightings in New Brunswick and it could be argued that each deserves a place on our top ten list. A bird collected by Ernest Joy in 1913 and preserved by Allan Moses set off a chain of events that had a significant impact on the status of breeding eiders in the Bay of Fundy.

The real significance of this bird is what it precipitated. Thought at the time (it later turned out an earlier specimen had been misidentified) to be the first North American record of this species, various museums very much wanted to get it for their collections. Moses finally bartered it to the American Museum of Natural History to become a member of ornithological expedition to Africa. Leader of the trip was Stirling Rockefeller, whom Allan convinced to buy Kent Island to save its breeding eiders that were being persecuted by down collectors and eggers. That started the recovery of eiders in the Bay of Fundy and led to the establisment of Bowdoin College's summer field on the island. This makes it by far the most important New Brunswick bird record ever. [Christie, 1999]

The second sighting in May 1993 has to be one of the most bizarre sightings in the province's history, as Stuart Tingley and Rose-Alma Malllet encountered this species flying over downtown Moncton, approximately 50 kilometres from the Bay of Fundy. As Jim Wilson put it: "finding this oceanic bird at Moncton was the equivalent of discovering a Mallard in the middle of the dry Sahara".

- 2. Eurasian Kestrel (29 points) For six weeks in early 1988 this falcon, from another continent, bounced back and forth across the New Brunswick-Nova Scotia border, eliciting checkmarks in both provinces. Considered the second best sighting in N.B. history, it would be interesting to see where it would be ranked in Nova Scotia.
- 1. Stonechat (36 points) When experienced birders find a bird that they are totally unfamiliar with, it becomes obvious that this will rank very high. This being the first record of this species for North America, it was ranked either first or second by all of the panelists and thus outdistanced the second place choice by a wide margin. Photos confirmed that this bird was one of the Siberian subspecies, which would indicate that it reached New Brunswick from the west. It is rumoured that when Jim Wilson and Cecil Johnston realized they were

looking at a bird from Europe or Asia, they then gazed at the Russian trawler just off shore, then looked at one another and in unison uttered "NYET".



Obviously this list is subject to change at anytime. In recent years we have seen a couple of near misses. The **Brown Shrike** in Nova Scotia in 1997 and the **Hooded Oriole** in Matepedia in 1998 would have been prime candidates for this list if they had been encountered in New Brunswick. In July 1999, a **Sage Thrasher** was discovered on Kent Island and would surely warrant some votes. It is possible that another weary bundle of feathers from a distant land is already among us just waiting to be discovered. Thus you are encouraged to carefully document (photograph if possible) any sightings that may fall into this category and make sure that you submit them to the New Brunswick Bird Records Committee.

As with any list such as this, not everyone will agree. It should be remembered that these are opinions only, and opinions are not "right" or "wrong", instead they are "honest" or "dishonest" and we are confident of the integrity of our judges.

In case anyone is interested, my pick for best athlete is Wayne Gretzky and my pick for the top entertainer is Celine Dion. (considering Canadians only)

### MY MERLIN FAMILY

Mike Lushington

I first became aware of them one fine day in early May. I was just returning from a walk into town and had stopped to chat with neighbours at the foot of the hill. As we exchanged pleasantries on that beautiful afternoon, I

suddenly heard a high-pitched chatter, vaguely reminiscent of a shorebird or a woodpecker. As I turned toward the sound I caught a glimpse of a brown flash of feathers streaking toward a couple of tall spruces among a stand of older trees on my property. It soared up into the trees and was greeted with a similar voice from a second bird. A pair of merlins was investigating the trees and the surrounding area.

I remembered that those trees had had a crow's nest or two in them a year ago and that merlins often used such buildings for their own purposes. I hoped that this would be the case here.

Over the next several weeks, I often caught glimpses of one or other of the birds flying to or from the trees. Gradually I got a fairly close fix on where the nest was, but I was extremely reluctant to

poke too closely for fear of disrupting some very important process. I could have set up an observation point by the side of the road; it would have given me an unobstructed view of the trees and, in all likelihood, the nest. At the same time, I knew that the conspicuousness of my activities would draw altogether too much attention to the site. Instead, I elected to monitor as best I could from my home.

In that time it became evident to me that nesting was going on. It would be silent at the tree for long periods of time but then, usually in early afternoon and again before nightfall, there would be a small flurry of excitement. I gradually realized that these were coincident with the male's returning to the nest site with the latest meal. At first, I could distinguish two voices; the male's slightly higher pitched calls which he would emit as he drew near to the nest and the female's harsher, more demanding responses from the nest itself.

Then came the day when I could distinguish more than one voice coming from the nest There was at least one chick, I realized, and more than one, it often seemed. Through June and the early part of July it was business as



usual; most of the day things were quiet, then there would be those short, intense periods of excitement as Dad hauled something home to the larder. (It did seem to be the male that was doing most of the hunting while the female did the brooding and tending.)

Then, a little later on in July, things suddenly got much more interesting. I first realized that something was astir when I saw that almost every passing bird and, in particular, crows and ravens, were being subjected to fullout harassment from one or other of the merlins. The young must be about to start flying, I realized - and that was indeed the case.

On one day in particular, I was treated to a display of aerial acrobatics the likes of which I have never seen. A family of ravens - seven in all - chose to do some flying practice of their own by the big spruces. Suddenly they were set upon by the merlins. Now ravens are big, impressive birds; they are strong and they fly well themselves, usually in a straight forward, no foolishness

sort of way. I doubt that a merlin is any more than onefifth of their size, but, of course, they are incomparably faster and more agile in the air. In short order, they had the ravens, all seven of them, in full retreat.

I will never forget the finale to that episode. As the ravens retreated, the merlins turned back to their nest and then, as if to punctuate their intentions, one turned and set out after the fleeing ravens. Although they were more than half a kilometre away by this time., the merlin caught up to them in less time than it takes me to tell this. As it closed with the hindmost, it soared and then did a powerdive directly down onto the huge bird, clipped its back or head with its talons, kept on going without missing a wingbeat and nailed a second before pulling up in another soar in which it actually seemed to increase its speed, did a complete circle in the air, screamed its defiance at the ravens and the world and then sailed back to the nest. It was, quite simply, spectacular.

One evening in the third week of July I was sitting out,

watching the sunset and studying the merlins as they flitted back and forth. I still did not know for certain just how many young there were; I knew that there were two, and I suspected three, but I had never seen them all together. Then, just before sundown, I heard the characteristic call of the male coming from the west. I looked for him and spotted him laboring toward the nest, carrying his catch for the day. Suddenly, almost in procession, there were four more birds with him, all come out to greet him and to investigate supper - it was the female and her three fledglings. Since then I have seen them together on several occasions. The young are practicing their flying daily now and will soon be learning the serious business of hunting for themselves.

I know that there will come a day when I will realize that they are no longer around. I will miss them, but I will wish them well - and hope that the adults will return to the old spruces at the foot of the property next year. I will have the welcome sign out for them.

### RARE SIGHTINGS

Allan Madden

This article is not about rare species or of species on unusual dates. Instead it relates to behaviour we seldom get a chance to see, such as politicians using more than 3% of their brains.

After tallying countless hours in the natural world, one is certain to experience, sooner or later, just by chance, and probably for only a few seconds, a rare glimpse of animal behaviour that one will never see again.

One would think, since I've been in fish and wildlife management for 30 years, that most of my rare sightings occurred while on the job. However, most occurred outside working hours. Several memorable sightings also occurred when I was a youth who just about lived in the field. The following are a couple of the best I recall:-

In July or August 1961(?) I stood on the Moncton Lumber wharf waiting for the Tidal Bore to pass by so I could start my daily angling for eels and tomcod. No more than a minute after the bore had passed, I saw two 'Porpoises' porpoising in an upstream direction, one animal passing only 20 m away. Two days later, we found a dead Bottlenosed Dolphin about 3 m and 150 kg in weight, lying on the mud at the upstream junction of the railway and the aforementioned wharf. The dolphin had just died, for it emitted no odour but had several holes 3 cm in diameter, and 3-6 cm deep, in its sides. I have since wondered if eels or hagfish made them.

A Gray Fox was reported to be living on Halls Creek in summer, 1958 across from where Champlain Mall now sits. A friend and I set out to find it. Following its tracks in the mud just outside the dyke and 300 m upstream from the mouth of the creek, we saw, only 3 m away, something sticking out of the tall grass on the opposite side of the dyke. We didn't realize what we were looking at until a large grayish animal, three times the size of a fox, burst from cover and ran toward a lumber pile 50 m distant, leaped 1 m vertically onto the pile and disappeared. We had just witnessed an adult coyote at Coyotes in the province were very close range. extremely rare back then. If I recall correctly, a coyote was road killed at Sussex in 1961, that being one of the first provincial records.



## **BUTTERFLIES OF NEW BRUNSWICK: The Coppers**

Jim Edsall

Range of Salt-marsh Copper in

Although the number of butterfly species in New

Brunswick is small compared to that found in the larger provinces, the diversity is, none the less, very interesting. Found in New Brunswick are three of Canada's four endemic species, one of North America's rarest butterflies and a fascinating representation of boreal, western, and southern species as well as subspecies restricted to the Maritime region. Of these different groups, among the most interesting are the Coppers (Lycaenidae: Lycaeninae).

The Coppers are a group of smallish butterflies related to the Blues and Hairstreaks.

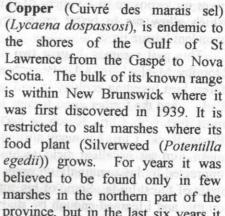
They are found on all continents although they are mainly butterflies of the northern hemisphere. Most species exhibit sexual dimorphism and the males are usually coloured in shiny reds, oranges and purples. They are fast flyers but rest frequently on vegetation or flowers and usually sit with their wings at an angle, allowing views of the upper and lower surfaces.

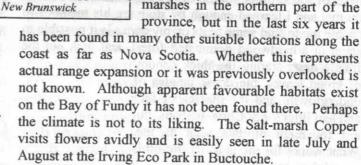
Five species of Copper make their home in New Brunswick, but they are seldom seen by casual observers because of their choice of habitat. In fact, if you want to see most of the Coppers you had better be prepared to get your feet wet. Four of our five species prefer wet areas; bogs, marshes, salt marshes and the marshy borders of lakes. I will not attempt to describe them here but their pictures and descriptions can be found in *The Butterflies of Canada* (R.A.Layberry, P.W.Hall, J.D.Lafontaine).

The most widespread in New Brunswick is the American Copper (Cuivré d'Amérique) (Lycaena phlaeas americana). It is found throughout the province in disturbed areas, along seashores, ocean cliffs, pastures, etc. It is diligent in the defense of its territory and can often be seen pursuing larger butterflies and even birds. A very good place to see it is at the Swallowtail lighthouse on Grand Manan Island.

The Bog Copper (Cuivré des tourbières)(Lycaena epixanthe) is the smallest. It can be quite common in the proper habitat. Because the larvae feed on cranberry, it is restricted to wet sphagnum bogs where it can be seen flying around cranberry blossoms in midsummer. A small bog near Chockpish, in Kent Co., was estimated to have over a hundred individuals flying on a July 1st butterfly count.

Perhaps our most interesting species, the Salt-marsh





Closely related to the Salt-marsh Copper is Clayton's Copper (Cuivré de la potentille)(Lycaena dorcas claytoni). This very rare subspecies of the Dorcas Copper was discovered in a field in Maine in 1938 and is protected in the United States. In the late 1980s, Dr. A.W. Thomas discovered a thriving colony in western New Brunswick about one hundred kilometres from the Maine colony. It is found around Potentilla bushes (Potentilla fruticosa) in the thigh-deep water surrounding a small lake. It is in danger from flooding of the lake by beavers and should probably be on the province's endangered species list. It is hoped that searching in the area will turn up new colonies.

In 1980, Dr. Thomas found a pair of male **Bronze** Coppers (Cuivré bronze) (*Lycaena hyllus*) on a marsh at Jolicure. It was not seen again in the province until a single male was discovered at the Sackville Waterfowl Park on July 1st 1998. This species is obviously rare but should be sought in suitable freshwater marshes, especially in the southwestern part of the province.

So, next summer, when birding is dull, and the butterflies are on the wing, get out your rubber boots and go in search of Coppers in the province's wetlands. You'll find it worth the effort.

### A TALE OF A DEVOTED MOTHER

Ken MacIntosh

One of the advantages of being a job-gypsy, wandering from one brief contract to another, is that it gives me exposure to a variety of skills and knowledge, which allow me to better enjoy my sometimes overabundant leisure time.

This past summer, I spent two months working for Dorothy MacFarlane, a UNB graduate student studying forest bird breeding ecology in and near Fundy National Park. I had the further good fortune to be teamed for the most part with Chris Kusch, a keen-eyed birder from Plaster Rock. Chris has many attributes and skills, which make him an excellent field technician. I was most impressed by his seemingly uncanny ability to locate the nests of forest birds. Some of his enthusiasm rubbed off on me, and I learned enough by studying his methods to enable me to find some nests on my own. Is it possible to stand in a hardwood dominated forest, and pick out the

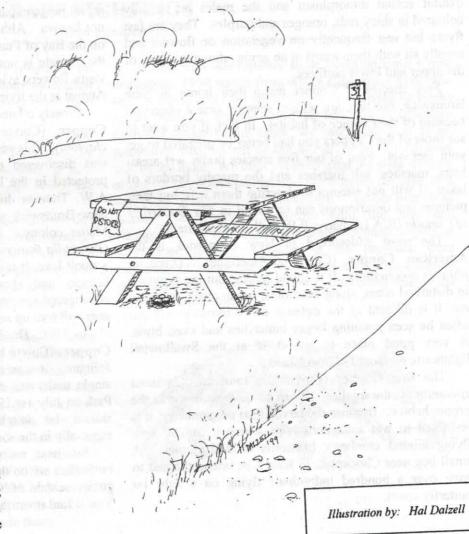
fragile nests among the thick canopy of broad leaves, the dense tangles of undergrowth, and the masses of fern and leaf litter? For Chris, perhaps, but not for mere mortals such as me. What works for me is to let the birds reveal their secrets.

Any time between late May and early July, a passerine of New Brunswick woods is very likely to be involved in some stage of nesting activity. During this period, careful attention to the behaviour of the bird will often reveal that it is gathering nesting material, or carrying food to a mate or to young - a dead give-away that you're on the right track. Often, simply watching to see where the bird goes at this point will lead you discovery.

Just such a scenario developed on June 17. Walking aimlessly through the overflow section of the Chignecto campground, I paused to admire an American Redstart foraging in a young Yellow Birch. I often rambled here during down time from my job. The gates were closed pending an increase in summer tourist traffic, and the paths made for pleasant walking and viewing of the abundant bird life. After a few moments watching the

redstart, a junco appeared on the edge of the campsite, flicking her tail and chipping her annoyance and, more importantly, sporting a prodigious moustache of fibres. I stepped back slowly, keeping my eye on her, and was surprised to see that, here on the edge of the mighty forest, she had determined to build her nest at the base of the picnic table which sat ready for human visitors. A trifle incongruous, but not a bad location, I thought. She and I were in for a nasty surprise.

Two days later, I cruised by again to check on her progress prior to leaving for a weekend at home. The nest was complete, a bowl of fine grasses and animal hairs lining a depression in the emergent grasses. In the bottom lay a single speckled egg. Both adults fluttered nearby to distract my attention, so I did not linger. I contemplated marking the location in some way so that a camper would not inadvertently disrupt the developing



family, but decided in the end that it was better not to draw attention to the site. Predators such as crows and jays will sometimes investigate any sign of human passage. Park attendance had been fairly light as well, so it seemed likely that the overflow area would remain closed.

I did not return until the June 25, six days later. What I found was quite a shock. The table under which the nest was built had been moved off to the side of site 31, and the grass had been mowed! Had there not been depressions in the turf where the table legs had rested previously, I'm not sure I could have relocated the nest, it was so well concealed. Miraculously, the perpetrator of this deed had managed to mow over the nest without destroying the contents, now three eggs. However, the nest lay exposed to any keen-eyed predator and, of more immediate concern, was being bombarded by a hot summer sun. The adults were nowhere to be seen. I pessimistically assumed that the eggs were cooked, and that the nest had been abandoned.

Leaving nothing to chance, I elected this time to interfere on the junco's behalf. Having noted a predisposition among juncos to nest under small evergreens, I found a few small spruce limbs and a strip of bark to fashion an inconspicuous tent over the nest, offering some degree of protection from weather and from prying, hungry eyes. I also left a note this time, written on a length of flagging tape, and secured to the picnic table, now some two metres from the nest: "Nest on ground near table please don't mow."

I did not return again for five more days. I really believed that this nesting attempt had been foiled by lawn management. As if a wild bird doesn't have enough to contend with! I observed, with some indignation, that the note I had left attached to the table had been removed. I give the responsible person the benefit of the doubt, and assume that he or she thought this to be garbage in need of removal. I approached the nest rather carelessly, expecting at best to see dead eggs lying cold on the ground. I stopped short, however, when I spotted a gray head and black eye peering up at me through the limb I had placed over the nest. This amazing little junco had returned to brood the eggs!

On July 7, now three weeks after the nest was constructed, I paid another visit. I knew better than to disturb the nest, but curiosity got the better of me. I worried about the tenacious parent, her nest now exposed to cold rain, hot sun, and flying, hopping and slithering predators. More particularly, the

overflow campground was now open, and several sites in the vicinity were occupied. Just twenty metres away, site 33 was cluttered with all the clichés of 90's tourism: sport-utility vehicle, mountain bikes, coolers, and tent. I looked again at the nest and its attractive surroundings, and pictured the next visitor rolling in. With the table moved off to the side, the nest was now front and centre. I could not imagine this nest escaping tires a second time, should some tourist find site 31 as attractive as the junco had.

I took another look toward the nest, and could see the contents. The adult was not there. In place of the three eggs lay a single nestling. The extent of feather growth suggested it was probably several days old, but still several days from fledging.

I could probably be fined under some wildlife protection legislation. I could probably be banned from the park for life. Almost certainly, some holier-than-thou, die-hard conservationist will wag a finger and pontificate at me, but I will tell what I did next. I moved the table back where it was, effectively concealing and sheltering the nest, and left another note: "Young Junco in nest under table will be gone by July 15 - please do not disturb!"

It turned out that my guess, and perhaps my decision to interfere, was correct, at least from my perspective. Bastille Day found the young junco fully feathered and looking as if it could fledge at any moment. Two days later, the nest was empty.

I thought a lot about this nest over the following months. I thought about the road crews in the park, cutting trees to widen auto trails in the height of nesting season. I noted the ride-on mowers keeping things tidy, and the excavators grading the embankments near Wolfe Lake, and wondered how many juncos, warblers and thrushes had been less lucky than the site 31 junco. When highway crews burn the embankments late in the spring, and mow the median in the summer, I can only shake my head in pity and wonder. I remain mystified as to the need for much of this management, and certainly question the timing. I was pleased to hear of plans to let much of the formerly mowed area within park boundaries grow wild. Whatever the motivation for this strategy, it will surely have beneficial effects for the park's wild inhabitants.

I blame no person or policy for the misfortunes that punctuate the history of this nest. The bird made an unfortunate choice. But I hope it suggests some simple changes we can make to leave space for wildlife.

### THE HEALING POWERS OF NATURE

Johanne McInnis

Once again I am in awe of the powerful effects that nature and wildlife have on me. A few mornings ago I awoke to get ready for work but as I got up the familiar pulsating pain behind my right eye sat me back down again. Migraine. For those of you who have never suffered from one, you are blessed. A migraine stops me dead in my tracks. I retreat from the normal world, hiding in a dark room until the nausea, blurred vision, enhanced hearing and excruciating pain go away. Sometimes, this can take hours or even days. I called my workplace and told them I wouldn't be coming in.

My husband kissed me goodbye and I thanked him for the glass of water and my medication. "Do you want me to close the window and drapes?" he whispered. "Just the drapes," I answered. I slammed my eyes shut and assumed the fetal position as I had done a thousand times before. The pressure behind my eyes was enormous so I tried to calm myself by breathing slowly. I lay quiet and still for what seemed like hours. I opened one eye and stared at the clock. Only 38 minutes had gone by. This

closed my eyes once more and tried to relax my poor tense neck muscles.

On the outside it was a beautiful summer morning. How many gorgeous days had I missed because of this debilitating problem? I stopped counting long ago. My neighbourhood was empty, everyone gone to work and the children carted off to day camps. Quietly and as still as possible, I lay listening to the rustling of new leaves in my backyard. The sweet smell of moist earth and lilacs filled my bedroom. Then, as I listened, the distinctive sound of birds at the feeders and in the nearby trees caught my attention.

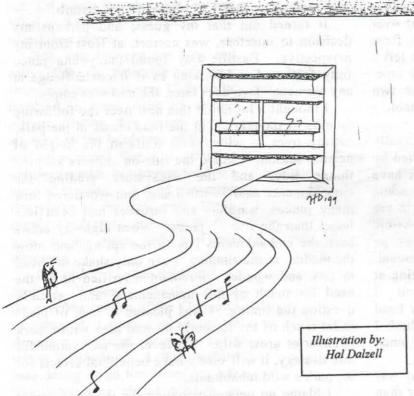
Although my eyes were closed and I was still hiding under my pillow, I started to identify them by sound and imagine them in my mind. "White-throated Sparrow: - small bird, loud song that sounds like Old Tom Peabody. Chickadee: - black head, noisy little thing. Goldfinch: - magnificent, yellow and a fast flyer. Robin: - beautiful red breasted worm catcher. Mourning Dove: - smaller than a pigeon and sounds so sad". Then a strange sound I

didn't recall hearing before. "Hmmm, sounds like a little sewing machine, quite loud too". I thought about it for a few moments. "Dark-eyed Junco!" I rejoiced as one by one I was able to picture them in my mind, putting the sound to the image. I took a deep breath of the sweet smelling breeze and soon found the tight neck muscles relaxing, the nausea subsiding and the pounding behind my right eye slowly disappearing. The hypnotizing sounds of nature lulled me into a comfortable and well-needed sleep.

When the telephone rang a few hours later, I answered groggily but migraine free. I stumbled to the kitchen, popped a few pieces of bread into the toaster and made a cup of herbal tea. Once armed with my little lunch I sat on my deck and admired everything I had heard earlier: the rustling of leaves, the sweet smell of summer flowers and the birds at my feeders. They were just as beautiful to look at as they were to imagine. "Maybe I should put a hammock in that back shady corner," I

mused as a butterfly went flitting by me and I smiled filling my lungs with the rejuvenating fresh air.

The power of nature is out there.



was going to be a very long day! I sighed and buried my head deep under my pillow. The darkness greeted me with open arms and I felt some comfort for a few moments. I

### BIRDING ALONG THE SALAMANCA TRAIL

Peter Pearce

Many of us have favourite birding haunts. One of mine is the Fredericton Wildlife Refuge (formerly Game Management Area), established in 1962 primarily to protect the young of box-nesting ducks from muskrat traps. About 120 ha in extent, it stretches along the St.John River from the old Canadian National Railways bridge (now part of Fredericton's fine trails network) to

the Princess Margaret Bridge, and from the highwater line on the northeastern bank of the river to Waterloo Row on the south

Within the refuge, the Salamanca Trail, prolongation of a longer trail known as The Green (part of which is also in the protected area), runs for 0.7 km parallel to the river through the flood plain from Morell Park to the Princess Margaret Bridge. I started birding there in 1959. In the early years I used to cut my own path through the thick vegetation to the

Riverview Arms pub, a worthy destination on a hot summer's day. The trail today is entirely different, well maintained for walkers and cyclists and crossing a small brook via a rustic covered bridge.

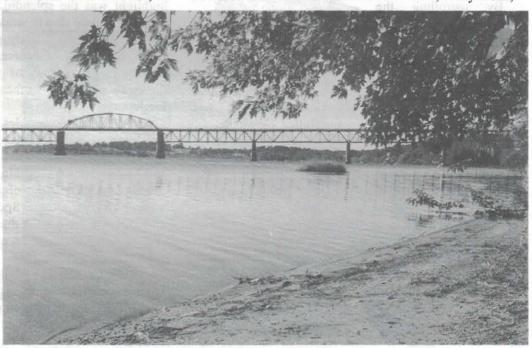
The locality is steeped in history. Loyalist settlers landed close by in 1783. Many died during the brutal winter that followed, to find their final resting place there in the Loyalist Provincials' Burial Ground. Salamanca was the name later given to that particular area below the town plat to commemorate a battle fought in 1812 during the Peninsular War.

A mosaic of habitats embraced by the Fredericton Wildlife Refuge includes the river itself, sand bar and muddy shore, tangle and thicket, bottomland forest,

manicured open space, and residential garden. The plant communities traversed by the Salamanca Trail are particularly luxuriant, characterized by stands of Silver Maple and clumps of willow and Speckled Alder, with scattered Butternut and White Elm on higher ground. Japanese Knotweed and Angelica, with occasional

Common Burdock and Riverbank Grape, are typical of the lush shrub layer.

With the formation of the Fredericton Field Naturalists' (now Nature) Club in 1960 the birdlife of the Fredericton area started to become better known than theretofore. Pioneer birding companions and contacts I associate with that era include Rae Brown, Andy Dean,



Fredericton Wildlife Refuge Photo: Don Gibson Digitized by: Don Vail

Nettie Moore, Bev Schneider, Austin Squires, Theresa Thibodeau Pearce, Bill Varty, Owen Washburn, and a young UNB undergraduate named David Christie. Many local "firsts" were recorded from the Salamanca Trail in those early years. My sustained interest in birds along the trail and in adjacent parts of the Fredericton Wildlife Refuge over a period of 40 years, the area's location on a natural migration corridor, and habitat variety have together rewarded me with the observation of 2ll species of birds there. To enumerate them all would make for dull reading. Instead, I present below some of the more memorable occurrences.

My list includes 28 species of waterfowl including Brant, usually coastal, Canvasback and, added as recently as 1998, Redhead. (Will Tufted Duck be next?) At any ice-free time of the year, one is almost assured of seeing at least a few ducks on the river in the refuge. In fall I have often noted rafts of several hundred American Black

Duck and Common Goldeneye. On some banner days I have had the satisfaction of seeing a dozen different kinds of ducks there.

By patrolling the river's edge repeatedly over many years, I have seen a fine array of migrant shorebirds. Of the 21 species I recorded,



Redhead By: Jim Edsall

Purple Sandpiper and Red-necked Phalarope were perhaps the least expected. (Long-billed Dowitcher was one I missed but recorded by another observer). Shorebird movement through the refuge has in recent years diminished notably, as it has at adjacent Carleton (Devon) Park where I have spent many productive shorebirding hours during the fall.

Gulls used to frequent a certain area off The Green in splendid variety during the 1960s. Fall visits have rewarded me with good views of such rare vagrants as Laughing, Black-headed, and Sabine's gulls. I also noted



Sabine's Gull By: Jim Edsall

a storm-driven Black-legged Kittiwake The there. attraction undoubtedly was pumping sewage raw into the river. Establishment of a treatment facility in 1970 resulted in a sharp decline in gull visits to that locality. But

the gull species count stands today at a respectable ten.

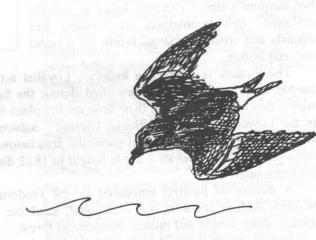
Among vagrant songbirds, I recall that encounters with Western Kingbird, Carolina Wren, Prairie, Kentucky and Connecticut warblers, and Blue Grosbeak quickened the pulse more than usual. Rose-breasted Grosbeaks used to be common in fall migration there but I have not seen any in recent years. Good weedy areas have attracted a

dozen species of sparrow but blackbirds have not been common in the refuge, although over the years I have noted eight species.

Among miscellaneous birds, Leach's Storm-Petrel is surely a standout. Red-throated Loon is another unlikely migrant, which I have not seen in the refuge since the 1960s. Herons, raptors and rails and their allies are relatively poorly represented on my list. A raptor highlight was the splendid view of two Golden Eagles together as they slowly worked their way upriver one fine spring afternoon. Totally unexpected was a California Quail, not listed, of course, which turned up obligingly enough in the garden of the late Bruce Wright, then director of the Northeastern Wildlife Station at Fredericton.

In the last four decades I have seen Gadwall, Baird's Sandpiper, Buff-breasted Sandpiper (possibly the province's first confirmed record), Band-tailed Pigeon and Tufted Titmouse within 100 m of the perimeter of the Fredericton Wildlife Refuge, and Hudsonian Godwit scarcely further afield. Specimens of both Least Bittern and Dovekie have been discovered in the close vicinity. Although not included on my list, it seems likely that all touched base in the refuge.

The many delightful hours I have spent along the Salamanca Trail and elsewhere in the Frederictor Wildlife Refuge have been most fulfilling. It is a special place for me. In another 40 years my local bird list should be up to 300 species.



Leach's Storm-Petrel By: Jim Edsall

### HYLA PARK'S FIRST NATURALIST

Katie Coffin

My name is Katie Coffin. I'm 18 years old and I work in Hyla Park (Nature Preserve in Barkers Point in Fredericton). I hope you have all been through the park, or at least have heard about it. If not here is a brief overview of things. Hyla Park is Canada's first amphibian park, established in 1995. It boasts seven of

the nine frog species found in New Brunswick, two species of salamander and one species of newt. It also has a wide variety of plant life, aquatic insects, birds and even larger mammals, including deer.

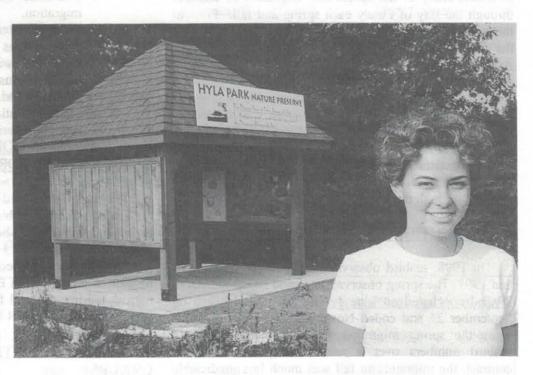
I'd like to share with you some of what I've seen and experienced while working in the park. First things first though. I've gone from a "whatever" attitude about nature, whereby I cared enough not to be disruptive, unless there was something I was interested in, to someone who tries to learn about everything she finds interesting.

Now, for some of the things I've seen. Although I've seen five of our seven species of frogs and, unfortunately I've not seen a newt or a salamander.

My favourite experience with frogs took place with a group of 16 four-six year old. They asked questions and I had a bucket with me so I caught and showed them some tadpoles, a green frog and a leopard frog. They liked the leopard best because the name sounded dangerous. They told me some interesting stories about catching frogs and toads near their homes. I also heard some interesting stories about wary mothers telling them not to touch such things because "They can poison and kill you." I told them the frogs couldn't kill them, however they should really listen to their mothers.

Another cool frog event happened recently. I was on a tour with a few 14-15 year olds. We were coming from one of the ponds where we had seen some green frogs, and there, sitting in the middle of the path, was an enormous bullfrog. I told them what it was and talked about it for a short while during which time it sat there and moved its head around, almost as if I had trained it. It was amazing, and I was really pleased to hear the teens talking about "the huge frog they saw" on the way to catch their rides home.

The most beautiful creatures I've seen so far this



Katie Coffin at Hyla Park Photo by: Don Gibson Digitized by: Don Vail

summer have to be the herons. I've always loved to watch the Great Blue Herons at my cottage in Prince Edward Island, but until this summer I'd never seen one so close. I got within a few metres of one of the beautiful birds before it took flight and soared directly overhead. It was such an overwhelming sight, I know I will never forget it.

I was never very interested in biology at school. Teachers made everything so cut and dried. This summer I have realized a deep interest in wildlife I never would have found if it weren't for my involvement in the park. I have not thought of changing my plans for the future, but I do think I have become a true lover of nature and will stay that way for years to come.

### POINT LEPREAU BIRD OBSERVATORY

Annual Report - 1998

Jim Wilson, Chairperson

### BACKGROUND

The Point Lepreau Bird Observatory (PLBO) was established over three years ago, in late 1995 as a project of the Saint John Naturalists' Club (SJNC). It was created to enable study of the spectacular migration of seabirds through the Bay of Fundy each spring and fall. Prior to the start of this project, virtually nothing was known of the scale of seabird migration through the Bay of Fundy. As this report will indicate, we have significantly advanced our knowledge over the past three observation seasons, yet we suggest there is much more to be learned.

The initial building construction was funded by the SJNC. The New Brunswick Federation of Naturalists and the Fredericton Nature Club provided additional financial assistance. Further support was welcomed from the Canadian Wildlife Service and from Bird Studies Canada, through the James L. Baillie Memorial Fund.

### **INTRODUCTION TO THE 1998 REPORT**

In 1998, seabird observations continued as in 1996 and 1997. The spring observation period began on March 29 and concluded on May 1. The fall period began on September 25 and ended November 24. As in previous years the spring migration saw very large peaks in seabird numbers over a narrow range of dates. In contrast, the migration in fall was much less predictable as to numbers and dates. However, the database is now large enough to reveal some significant patterns and trends. These will be treated in more detail later in this report.

During the spring and fall periods volunteers contributed 135 hours of time spread over 35 days. Although this is a considerable drop from the volunteer contribution in 1997, the number of birds observed per hour remained comparable. Consistent with other years, the three scoter species dominated, representing 73% of the total seabirds observed. Common Eider made up 22%, the two cormorants 4% and the two species of loons 1%.

In 1998 the Black Scoter was the most well represented species, accounting for 68% of all scoters counted, and 49% of total seabirds.

#### PROJECT OBJECTIVES

At the outset of this project, the SJNC established three long-term objectives that continue to be the core of the project. These are:

- Continue development of the database to determine accurate trends in seabird migration.
- Spark interest in other naturalist organizations to establish similar projects at suitable sites in the region.
- Educate industrial and other interested parties about the hazard posed to seabirds by oil or other pollution, particularly during peak migration periods.

### **OBSERVATIONS FOR 1998**

The reader is referred to Table on page 51 for data on the average number of birds observed per hour, both for spring and fall. As has been noted, spring is much more predictable than fall.

In 1998, not unexpectedly, a very strong movement of scoters and Common Eiders occurred in the relatively narrow window of April 12 to 23. Black Scoters made up 98% of the total of 3,864 birds counted on the 23<sup>rd</sup>.

## INTERACTION WITH OTHER NATURALIST GROUPS

A member of the PLBO Steering Committee participated in a seabird identification seminar held at the Moncton Public Library in late March, at which approximately 25 attended.

Members of the Steering Committee organized, coordinated and participated in "Superwatch98" on April 18. Nearly 50 volunteers spent four hours counting seabirds in various parts of the three Maritime Provinces in a survey conceived as a simple method to take a sample of the pattern of seabird movement on a single day at the height of spring migration. By doing simultaneous counts at a number of strategic locations throughout the region, it was hoped a pattern of movement would result.

The date was selected as observations conducted at the PLBO by volunteers during 1996 and 1997 indicated this as the peak of seabird movement up the Bay of Fundy. In all, there were observations made at 25 locations - 15 along the Bay of Fundy, six in Northumberland Strait, one at the Restigouche estuary in northern N.B., one at North Cape PEI, and two in northeastern Nova Scotia.

The results from Superwatch98 will be published separately.

The Moncton Naturalists Club is actively working toward placing a migratory bird observatory at Cape Enrage, east of Fundy National Park. It is planned for operation during the 1999 spring season.

### **OUTLOOK FOR 1999**

A very positive initiative will be the probability of a five day per week qualified observer for much of the spring observation period, to be funded by the Canadian Wildlife Service.

### FINANCIAL INFORMATION

The observatory ended the year with a cash balance of \$646.

### ACKNOWLEDGEMENTS

The Steering Committee is extremely grateful to the individuals and organizations that have supported this project during the past year of operations. They have generously contributed either volunteer effort or superb cooperation. Without these contributions, continuation of this project would not be possible. We are particularly indebted to:

Canadian Coast Guard

Mery Cormier

Canadian Wildlife Service

N B Power

Saint John Naturalists' Club

Paul Clark

On behalf of the Steering Committee,

Jim Wilson Chair

ele artimendes per la ele- sta e de companiste				BIRD OBSER by Species 1996	De di A		ous bed 1-1 circu	odgenamin Robbis
control of the second of the second	Average Birds per Hour - Spring				Average Birds per Hour - Fall			
Species	1996	1997	1998	Average	1996	1997	1998	Average
Black Scoter	364	336	512	404	13	92	19	41
Surf Scoter	134	212	123	156	6	6	13	9
Scoter - Species?	32	48	100	60	1	10	6	6
White-w. Scoter	8	13	10	10	2	4	5	4
Total Scoters	538	607	745	630	22	112	43	60
Common Eider	144	148	125	139	142	110	152	135
Dc. Cormorant	1	7	4	4	16	42	58	39
Great Cormorant	1	1	0	1	1	0	1	1
Cormorant - Species?	0	1	1	1	47	73	1	40
Total Cormorants	2	9	5	5 to 10 to 1	64	115	60	80
Common Loon	5	6	2	4	mail unit	1	2	alad or thorn
Red-th. Loon	30	18	6	18	0	0	2	1
Loon - Species?	0	1	0	0	0	0	0	0
Total Loons	35	25	8	22	1	_ 1	4	10 gw   p. 2
mil ne i sadhinikçen int k	negeyeni De jorava	ettegg, gar	History Laterage					
Grand Total	719	789	883	797	229	338	259	277

### PEANUT THE CHIPMUNK

Cathy Mignault

Writing this article has a happy side and a sad side. It started a couple years ago, when two chipmunks took up residence under our back deck. We watched them scamper and chatter away to each other and we named

them Peanut and Chippy. This year Peanut became quite tame, letting us get close to him and eventually he started eating from our hands. It was while feeding him that our daughter noticed a cut on Peanut's back. It was a dark gray colour, and at first we thought it was part of his stripe. A couple of days later my husband noticed the cut and said it was quite large. I called the vet, who said to bring Peanut over, if we could catch him.

We reinforced our cat cage and put it on the deck and surprisingly had him on his way

to the vet within a few minutes. At the vet's office he escaped under the door and had a nice tour of the whole clinic. Upon recapture, the vet briefly examined him and said the cut would heal on its own. We came home and let him go and he stayed around eating sunflower seeds from a bag in the garage. On the following day, Sunday, I couldn't find him; nobody could find him. On Monday he still couldn't be found. After supper we were in the yard and I called his name. I heard a noise and there was Peanut under the apple tree, his leg looked paralyzed to me but he was still trying to climb up the hill to see us. It was sad to see him like that and not be able to help him.

It happened that Jim Goltz was visiting a neighbour so I got him to look at Peanut. He picked him up and realized that a parasite had gotten into Peanut's body. He removed the parasite but cautioned us that Peanut might not make it. Peanut stayed in the cat carrier all night and the next morning we checked on him only to find him in bad shape. My husband brought him in the house and tried to help him. It was then that we realized he had another parasite in him. We removed it but he seemed to be getting worse.

I called the vet and we took him there. She found at least two more parasites in his tiny body and besides that his leg still remained paralyzed. Knowing he couldn't survive like that we did the humane thing and had him put down. I wonder now if the reason why he became so tame so fast was because of this parasite taking all the

nourishment from his body. I know that wild animal to be treated as wild animals, but sometimes it's diff to hold back. I've told my family not to tame anytelse.



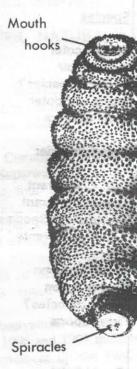
Information provided by Jim Goltz:

The parasite that afflicted Peanut was a bot fly (Cuterebra larva. It can infect rabbits, squirrels, chipmunks, mice, cats, dog occasionally humans. The adult fly, which resembles a bumble

lays its eggs along rabbit runs and near rodent burrows. As a suitable host brushes by, the first stage larvae hatch instantaneously, crawl immediately into the host's fur, and enter the host through its natural body openings.

The larvae take up residence beneath the skin, creating a breathing hole through which it can be seen. Once the larvae reach maturity they pop out of the skin and develop into pupae on the ground and transform into adults.

A Cuterebra larva can be removed by enlarging its breathing hole in the skin sufficiently to allow it to be extracted with forceps, care being taken not to crush the larva in the process. The wound heals rather slowly and sometimes exudes pus or and even sloughs. Many parasitized animals may recover without any problem but infection with this parasite may have fatal consequences, especially if the animal has multiple larvae. I once examined a dead chipmunk that had 11 cuterebra larvae.



Cuterebra jellisoni: third Bot Fly larva (x2)

### FOUR-TOED SALAMANDER IN FUNDY NATIONAL PARK

Vicki Sahanatien

On Saturday, 12 June 1999, a Four-toed Salamander (Hemidactylium scutatum) was observed in Fundy National Park. The only previous confirmed sighting was on 02 May 1983, when one adult was captured along the shoreline of Marven Lake (Woodley and Rosen 1988). During the intervening years, park staff and researchers have searched for this species but with no success. This spring a special search effort occurred to verify the continued presence of the Four-toed Salamander in the park and to assess the need to maintain the environmentally sensitive site designation for Marven Lake.

Finding a Four-toed Salamander is not easy an easy task. It is like looking for a needle in a haystack. They are small in size (6-8cm), sparsely distributed, not brightly coloured and do not congregate in spring breeding groups. The survey approach used was to focus the search on suitable nesting habitat. Female Four-toed Salamanders lay their eggs in sphagnum hummocks of a particular texture, moisture content and proximity to slow moving streams and ponds. Once the eggs are laid,

female salamanders tend to stay with the nest while the embryos develop and transform into larvae, which then enter the water. It is during that period – mid May to late June – that the likelihood of finding Four-toed Salamanders is greatest.

The search began at Marven Lake, then broadened to places with appropriate nesting habitat. The other locations searched included Chambers Lake, Laverty Lake, Caribou Plains, and a number of ponds, wetlands and slow-flowing streams in the park. The search team was composed of several park staff lead by Michael Macdonald, field biologist from Nova Scotia. Michael has been on the track of Four-toed Salamanders since 1993

and with others has contributed to expanding the known distribution of this species in Nova Scotia.

The first survey effort occurred during 14-16 May and much to our disappointment we came up empty handed. It seemed that we were searching a bit early: many of the sphagnum hummocks were quite cold and some even had ice crystals, making conditions unfavourable for Fourtoed Salamander egg-laying. The higher elevations (300m) and resulting cooler climate in the park delayed

the progress of nesting compared to that in Nova Scotia where many nests with developing embryos had already been found.

The second search effort took place 12-13 June and it was successful. Like the 1983 observation, we found the salamanders and nests along the sphagnum margin of Marven Lake. In total, three egg clutches in three separate nests and two adult salamanders were found. The number of eggs in each clutch was estimated visually (30, 20 and 17) rather than fully counted to reduce intrusion on the nests. The embryos were found to be in early-mid stages of development. One nest had a female salamander in attendance. A second adult salamander was noted in the sphagnum but no nest was found. Measurements and photographs were taken of the adults, egg clutches, nests and habitat.

No other observations of Four-toed Salamanders were made, even though there are many areas in the park with suitable, even ideal, nesting habitat, and our search efforts were intensive. But it is easy to miss a needle in a haystack and there is a lot of sphagnum out there!

The 1999 results are the second and third confirmed observations of Four-toed Salamanders in New Brunswick, and the only confirmed nesting observations for the province. This species' distribution includes Nova Scotia, Maine, Quebec, Ontario, and the eastern United States. We hope that our findings will encourage field naturalists and biologists across New Brunswick to search a little harder for this species. The results will certainly stimulate park staff in our efforts each spring. Finally, confirmation of the Fourtoed Salamander presence at Marven Lake means that the environmentally sensitive designation will remain and Fundy will do its best to protect this

important nesting location.



Woodley, S. and M. Rosen. 1988. First Record of the Four-toed Salamander, *Hemidactylium scutatum*, in New Brunswick. Can. Field-Naturalist 102(4):712.

Vicki Sahanatien is Park Ecologist at Fundy National Park.

### **EAVESDROPPING ON BATS**

Jane Tarn

Down on our cottage dock at Chamcook Lake, we sit as the sun fades behind the distant hills, and the trees become silhouettes against the darkening sky. We watch, as the remaining clouds appear as dark shadows across the quiet ripples on the lake, that reflects the last of the day's light. Suddenly my detector sounds with the click, click, click of a nearby bat that no one can see. It is dusk and the creatures of the night are stirring. Nightlife is exciting!

At dusk, many bats are not easily visible to the human eye as they fly after their prey. And the echolocation calls of most species of bats are not audible to the human ear. Nevertheless, a bat detector will pick up a bat's ultrasonic echolocation calls so you know you are not alone in the dark. Usually, many bats are out flying about on a dark or overcast night. If there are none, rubbing a thumb and middle finger together, to make a soft noise to imitate the sound of a moth or other flying insect, can entice bats to fly nearby to investigate. When a bat flies close, the clicking or other calls picked up by the detector become very rapid. No, bats will not land on you or get stuck in your hair. They sense you are not edible prey so they keep their distance, albeit just a metre or so away.

While not all species of bats echolocate, those that do have their own frequency that can be picked up on a detector as a distinct

call signature of clicks, chirps or putts. While the big brown bat and the little brown bat make similar clicking noises, the red bat emits a chirpy call. You can learn some bat echolocation calls that would be picked up by a detector by listening to the "Bat Chat" tape available from Bat Conservation International, Austin, Texas.

Where did my bat detector come from? It was built by my son-in-law, Bernie Griffith, who is an electrical engineer. In a discussion about bats, he asked me how people identify bats when they are flying around in the dark. I told Bernie bat echolocation signature calls can be picked up with a bat detector. "What's that?" he inquired. "Where can you get one?" I replied, "You can buy one for around three hundred dollars - a bit expensive!" Bernie was interested. With some web searching and some tinkering, he made a bat detector as a surprise for me!

You too can build your own bat detector. Why not assemble one this winter so you will be ready to "detect" when the bats are out and about again next spring and

summer

My bat detector was built according to the directions of the following web site from England.

http://www.btinternet.com/~mr.pentops/bat.html

However, the little Tandy realistic model 12-9462 radio used had to be sent from England by relatives as was not available in Canada. It is a simple detector that allows me to eavesdrop on bats for fun. For serious bats

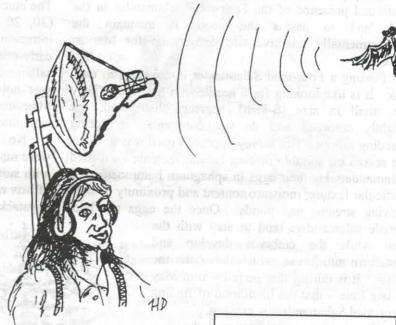


Illustration by: Hal Dalzell

studies, a sophisticated bat detector would be required to examine bat calls more closely.

The following web site is also good. http://pw1.netcom.com/~t-rex/BatDetector.html

As Tony Messina, of Las Vegas, Nevada says on this web site: "If you don't solder, don't despair as there are bat detectors available." From him, a fully assembled detector costs \$50.00, a full kit sells for \$35.00 and an essentials kit is \$16.00, (Prices in US dollars). To order a kit e-mail Tony at T-Rex@ix.netcom.com Or you can order a more sophisticated detector from Bat Conservation International for close to\$300.00. When exchange, taxes, and duties are added this is out of the dollar range for many of us. To learn more about this detector and how to order one, visit http://www.batcon.org.

To further appreciate how a bat detector works, be sure to read "Seeing in the Dark" and "Tuning in with a Bat Detector" at http://www.batcon.org/seedark.html

Enjoy eavesdropping on the masters of the night sky!

## TAXONOMIC REVISION YIELDS A NEW ORCHID SPECIES

James P. Goltz

P. hyperborea

New Brunswick's naturalists with a penchant for wild orchids are very familiar with the Tall Leafy White Orchid (also called Bog Candles, White Bog Orchis, Tall White Bog-orchid, Tall White Northern Bog Orchis,

Fragrant White Orchid and Platanthera dilatata) and Tall Northern Green Orchid (also called Tall Leafy Green Orchid. Northern Green Orchid, Northern Green Orchis, Northern Green Bog Orchis, Tall Northern Bogorchid, Tall Leafy Green Bogorchid and Platanthera hyperborea). Both species may grow up to a meter tall, usually have leafy stems and elongate spikes of flowers, and commonly grow on freshwater shores and in fens. bogs and roadside ditches.

Apart from the fact that no two books seem to be able to agree on a single common

name for these orchids, you'd think that it should be easy to tell the two species apart. One has pure white flowers that have a lovely exotic fragrance reminiscent of cinnamon and cloves, while the other has pale green flowers that lack this spectacular fragrance.

However, these two orchids have created considerable confusion among botanists for years. In many geographic areas, there is a broad spectrum of plants ranging from one species through intermediatelooking plants to the other species. Orchid experts formerly agreed that plants that showed intermediate characters were probably hybrids and called them Platanthera x media.

Dr. Paul Catling, considered to be Canada's leading authority on our native wild orchids, and his wife Vivian, also an accomplished botanist, conducted considerable research on this orchid complex. After doing detailed measurements and observations on 170 flowers and performing graphic analysis using a technique called bivariate plots, the Catlings concluded that the source of most of the confusion was a new species called Platanthera huronensis. They believe that this species arose through hybridization between its parent species, Platanthera hyperborea and Platanthera dilatata, and is

now capable of perpetuating itself. Plant species of hybrid origin are nothing new; other examples include Tesselated Rattlesnake Plantain (Goodyera tesselata), Clinton's Wood Fern (Dryopteris clintoniana) and

Laurentian Bladder-fern (Cystopteris laurentiana).

You will likely now ask, how do you tell this newly recognized species from its parents, and does it occur in New Brunswick? The key to identifying Platanthera huronensis and its parents is to examine fresh flowers in peak bloom. Dried specimens may work for scientists with considerable experience with the group, but such examinations require soaking of The key characters to flowers. separate these three species is colour of the floral lip (i.e., the bottommost petal), the shape of the lip, and the amount of space between the anthers. The tabular key on the next page should help you with this.

According to the Catlings, the name Platanthera x media is no longer valid. Anything thought to have been this taxon should now be called Platanthera huronensis. Although we haven't yet had the opportunity to do field work on fresh floral specimens to confirm the occurrence of the new species in New Brunswick, many dried specimens in our herbaria bear the label P. x media, so there is little doubt that Platanthera huronensis occurs in

common name for Platanthera huronensis. Fragrant Green Orchid and Green Bog Orchis have already been published by two different authors. Maybe the Huron Orchid would be a better name. Let's hope that the common names for this species don't multiply to the extent that the names of its progenitors did. The whole group is confusing enough as it is!

New Brunswick. The biggest challenge now is coming up with a good

For a more detailed account on this subject see: Catling, P.M. and V.R. Catling.

Morphological discrimination of Platanthera huronensis in the Canadian Rocky Mountains. Lindleyana 12(2): 72-

### Tabular Key to Identifying the Tall Leafy Orchid Group

Species	Lip Colour	Lip Shape	Space Between Anthers
P. dilatata	Pure white	Strongly dilated at base to 1-3 mm wider than below	Greater at top than bottom of anthers
P. huronensis	Green	Not dilated, or only slightly dilated at base to 0.4-1.0 mm wider than below	Greater at bottom than top; separation at top of anthers measures 0.6-1.5 mm
P. hyperborea	Yellowish green	Not dilated, or only slightly dilated at base to 0.4-1.0 mm wider than below	Greater at bottom than top; separation at top of anthers measures only 0-0.3 mm

### CONSERVATION DATA CENTRE TO TRACK NEW BRUNSWICK'S BIODIVERSITY

Robert Rainer

Over the next 2-5 years, documentation of the status of New Brunswick's natural heritage, and specifically its many plant and animal species of conservation concern, should be greatly advanced: The Atlantic Canada Conservation Data Centre (ACCDC) has been founded, with a mission of assembling and providing information and expertise on species at risk and natural communities in Atlantic Canada, in support of decision-making, research and education.

Conservation data centres (CDCs), of which there are more than 70 located throughout the western hemisphere (including one in each Canadian province west of New Brunswick), exist to aid decision-making on conservation planning and stewardship, natural resource management, environmental impact assessment and other end uses. They provide a permanent and dynamic atlas and data bank on the existence, characteristics, numbers, condition, status, location and distribution of elements of natural biological and ecological diversity. Information on over 72,000 species, subspecies and natural communities is now maintained by the international CDC network.

Key major partners in the ACCDC are the Canadian Wildlife Service, Canadian Forest Service, Parks Canada, Indian and Northern Affairs Canada, provincial wildlife divisions in New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador, The Nature Conservancy (TNC) and Nature Conservancy of Canada. A Board of Directors governs the centre. The current staff consists of an executive director, data manager, botanist/ecologist, zoologist, assistant zoologist and a director of development.

So what does a conservation data centre do?

All CDCs use a standard yet evolving method known as the Biological Conservation Data (BCD) system, first developed by TNC in the early 1970s as a means to keep up-to-date computerized inventories of biological and ecological features. The BCD is the CDC network's primary tool for managing and analyzing data, enabling the sharing of information across jurisdictional and ecoregional boundaries. At its heart are more than 30 interrelated computer files, supported by geographic information systems (GIS) and extensive map and manual files.

Files store information on taxa (species and subspecies) and natural communities. These "elements" are ranked according to their relative endangerment at three geographic levels: global (G), national (N) and subnational (e.g. provincial) (S). Ranks are assigned on a scale of 1 to 5. For example, S1 elements are extremely rare within a jurisdiction and are especially vulnerable to extirpation. A G5 element would be globally secure.

Conservation data centre staff obtain, manage, share and interpret the data for the diverse clientele. Typical information requests are:

Will this highway realignment affect the habitat of any rare or endangered species?

What is the global distribution of this salamander?

Who is an expert on these butterflies?

How many parks and reserves provide habitat for this species?

Why is the Wood Turtle nationally listed as a vulnerable species?

When did the research behind these data take place? What rare plants occur near this planned subdivision? How is vegetation characterized in our watershed?

In 1999, 52 species of plants and animals occurring in Atlantic Canada were considered to be nationally endangered, threatened or vulnerable by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). A larger number within the Atlantic region are considered to be provincially endangered or at least rare in one or more provinces.

The central product of the ACCDC is a current, accurate, and comprehensive database of species at risk and natural communities in Atlantic Canada, with information manageable and exportable in GIS. This database provides the information for the following specific products:

### Tracking Lists

Tracking lists are lists of species in various major taxonomic groups that occur within a jurisdiction. They provide data users with a concise and accurate assessment of the global, national and provincial status of each species on the list, and help determine the species for which a CDC should compile the best existing locational data.

The ACCDC is working in cooperartion with the NB Department of Natural Resources and Energy in

developing tracking lists for various taxonomic groups in New Brunswick.

#### **Element Occurrence Records**

An element occurrence is an area of land or water on or in which a species or community is present and which has practical conservation value for that species or community. Specifications for element occurrences are developed within the CDC network based on consultation with the experts on particular species of interest. Element occurrence records provide detailed information on the geographic location, condition, management, and conservation of the elements. As the records mount in number, a CDC's database increases in value to users.

### Maps of Distribution of Species at Risk and Natural Communities

Geographic information systems enable the ACCDC to produce digital maps that relate locations of species at risk and natural communities to a variety of other landscape features. For example, locations of species at risk can be superimposed upon physical and biological features of their habitat to elucidate habitat relationships, and to help identify other areas where the species may be found. Both species at risk and natural communities can be plotted within boundaries of parks and other protected areas to assess the degree of protection presently afforded and identify priority sites for future protection.

Data held by the ACCDC are currently provided by staff in response to data requests. In the future data will be available through the ACCDC Internet home page.

Naturalists and others in New Brunswick wishing more information on the Atlantic Canada Conservation Data Centre are encouraged to contact the centre at (506) 364-5092, or by email at: <a href="mailto:rob.rainer@ec.gc.ca">rob.rainer@ec.gc.ca</a>.

Information on the international CDC network is found at: http://www.abi.org

### BOULE DE NEIGE....

Bernadette Leblanc

Cet article est réimprimé de l'édition de juillet de <u>Pattes de Mouches</u>, Le mensuel de L'Association des Naturalistes de la Baie de Bouctouche.

C'est peut-être drôle de parler de boule de neige au mois de juillet, mais ce n'est qu'une expression pour décrire comment le passe-temps d'observation d'oiseaux ce fait de plus en plus populaire dans la région.

Des gens qui n'avaient, semblent-ils, aucun interêt sont devenus fascinés par ces merveilles de la nature qui nous entourent. Et comme c'est impossible d'être dehors sans voir des oiseaux, c'est le passe-temps de choix.

Cela pour dire qu'il faut promouvoir ce passe-temps, partager avec les autres nos connaissances et expériences, et être fièr(e)s que nous faisons partie d'une grande famille qui continue de grossir comme une boule de neige.

### **MINUTES OF NBFN DIRECTORS' MEETING MAY 1, 1999**

Kathy Popma, Secretary

PRESENT: R.-A. Mallet (Pres./Chair), J. Wilson (Memb. Sec.), K. Popma (Sec.), J. Brown (Treas.), F. Longstaff (P.Pres.); Club Reps: V. Beale, R. Chiasson, P. Mercier, M. LeBlanc, E. McIntosh, K. MacIntosh, G. Bishop, K. Tutt, G. Bourque.

AGENDA Accepted

Accepted as circulated.

MINUTES OF THE LAST MEETING
 Accepted as circulated. Secretary to pass on to NB Naturalist editor for Publication. action requested K. Popma

#### 3. BUSINESS ARISING

R.-A. Mallet will forward a copy of the letter sent to D. Tyler to F. Longstaff as per his request.

P. Mercier will contact the Club de Bas-St. Laurent regarding insurance.

R.-A. Mallet will send her more information on this. action requested R.-A. Mallet and P. Mercier

#### 4. CORRESPONDENCE

- 4.1 A letter from the Saint John Marine Pilots was read which asked us to oppose the use of nonlocal pilots. Discussion. R.-A. Mallet will write a letter expressing our concern in relation to environmental issues. action requested R.-A. Mallet
- 4.2 A letter was read from the N.B. Minister of the Environment regarding Protected Areas.
- 4.3 The Legislative Library let their subscription to N.B. Naturalist lapse and has requested the issues they missed. They will be sent by R.-A. Mallet . action requested R.-A. Mallet
- 4.4 A letter from the Government of Canada regarding Fundy National Park was read and a copy will be sent to Rob Walker by R.-A. Mallet. action requested R.-A. Mallet
- 4.5 Newsletter received from NBEN.
- 4.6 An overview of the Water Classification Regulation was received and given to F. Longstaff who will send a copy to R. Chiasson action requested F. Longstaff
- 4.7 Reports received for our information: Baillie Birdathon, Halifax Naturalist, Irving Pilot Survey, Action Plan for Protection of the Marine Environment
- 5. TREASURER'S REPORT

Although our current assets are correct as stated \$9397.82, due to some errors in the report J. Browill present a corrected copy of this report at the numeting. He also expressed concern regarding confused state of the historical records of Federation's financial affairs. F. Longstaff move 2<sup>nd</sup> by P. Mercier, that Kevin Tutt, Jim Brown a Jim Wilson form a committee to review and retriet these records. Passed. action requested Brown, K. Tutt, J. Wilson

- 6. MEMBERSHIP SECRETARY'S REPORT
  Jean reported she had received 60+ memberships
  the last couple of weeks bringing the total to 167
  1999, with a further 161 unpaid. Discussi
  regarding lapsed fees at which the issue of a sticl
  reminder was again mentioned. Jean will ask E. P
  why this cannot be posted on NatureNB. acti
  requested J. Wilson
- NEWSLETTER CO-ORDINATOR'S REPORT report.

#### 8. CHARITABLE STATUS

F. Longstaff and K. Tutt reported they are sworking on this but need the financial report proceed further. They hope to have it done in tifor the AGM. K. Tutt was given custody of the pminutes back to 1993 by K. Popma. active requested K. Tutt and F. Longstaff

#### PROJECT STATUS

- 9.1 R. Chiasson was given the floor at length to read a detailed draft of the Guidelines for Spectoriologics that he had developed. Discussi When finished they are to be submitted to the Naturalist to encourage new project submission.
- 9.2 R. Chiasson requested signing authority for grapplications for the Piping Plover Project Discussion. G. Bishop moved, 2<sup>nd</sup> by P. Merchat R-A Mallet on behalf of the NBFN send letter to the Piping Plover Project authorizes signing authority for grant application. Passed action requested R-A Mallet

### 10. ANNUAL GENERAL MEETING

R. Chiasson presented the brochure developed for meeting. Discussion. Time for Club Reps to get

together to informally discuss matters of common interest will be set aside Saturday from 4:30 to 5:30.

#### 11. FEDERATED CLUB REPORTS

- 11.1 Edmundston: P. Mercier reported they had a speaker who came to advise the club about fundraising; they had developed a new club insignia with a carving of a waxwing; they had a trip to a sugar bush and to observe waterfowl; they would participate in the N.B. Bird Day Sewage Lagoon Survey; a nature photographer is to speak in the future.
- 11.2 Acadian Peninsula: R. Chiasson reported on the various issues the club was dealing with regarding the AGM; they had a trip to a sugar bush; they participated in the annual Superwatch; they had an April Bird Count; P. Hicklin has been a recent speaker; they have applied for funding for students to work on shorebirds and terns; S. Tingley will speak on butterflies.
- 11.3 <u>Kennebecasis</u>: J. Brown reported they had a good owl prowl and are having good turnouts at meetings.
- 11.4 Les Amies de Nature-Shediac: G. Bourque reported they had a seabird talk from P. Hicklin; they had a trip to Albert County which resulted in seeing 64 bird species; in May they will have a speaker on recycling.
- 11.5 <u>Fredericton</u>: K. Tutt reported on their annual April trip to Jemseg. Don Gibson was a speaker on Birds of New Brunswick.
- 11.6 <u>Saint John</u>: K. MacIntosh reported Dan Busby had spoken on the Bicknell's thrush; upcoming was a DU speaker; they will have their AGM in June. Their newsletter is only sent to those from whom they receive one.
- 11.7 <u>Moncton</u>: V. Beale reported the club had finally finished its Constitution; they had a recent speaker on black bears; the Cape Enrage Observatory is open and functioning.
- 11.8 Ford-Alward: E. McIntosh reported their club sponsored a rabies vaccination clinic where over 100 pets were inoculated.
- 11.9 <u>Buctouche</u>: M. LeBlanc reported they had seen a video on a trip which went from France to South Africa; they participated in the Superwatch; they were looking for volunteers for a plover guardian project.
- 11.10 Chignecto: In the absence of a rep K. Popma reported the club recently had Mary Majka speak on Grindstone Island; they had participated in the Superwatch; bad weather had cancelled 2 field

trips but upcoming were a warbler trip to Amherst Pt. Bird Sanctuary, the Sewage Lagoon Survey, and their annual trip to Maccan N.S.

#### 12. OTHER BUSINESS

12.1 F. Longstaff described some of the Nominating Committee's activities. J. Brown and J. Wilson offered to reoffer. A. Smith has resigned as Director-at-Large. Pat Edmond is due to end his term. R. Gautreau has agreed to serve as Director-at-Large. F. Longstaff moved, 2<sup>nd</sup> by P. Mercier that she be so appointed. Passed. Discussion regarding further appointments. F. Longstaff moved K. O'Donnell be appointed Director-at-Large, 2<sup>nd</sup> by V. Beale. Passed.

## 13. NEXT MEETING Annual General Meeting

Date: Saturday June 5, 1999.

Location: Inkerman Community Centre
Time: 7:50 P.M.

#### 14. ADJOURNMENT



## BOTANY QUIZ: CAN YOU IDENTIFY THIS PLANT?

Gart Bishop

What is it? See if you can guess the identity of the following native wildflower. The answer will appear in the next issue of N.B. Naturalist / Le Naturaliste du N.-B.

Found in marshy, open meadows, seepy treed areas and along brooks and streams, this erect plant has slender, stiff, purplish stems terminated by a loose cluster of commonly nodding flowers. Each bloom is composed of purple, triangular sepals and slightly longer cream-coloured petals. The flowers mature into soft burry fruits. Perhaps the most unusual aspect of this mystery plant is its compound basal leaves with small leaflets randomly present amongst larger ones. It grows to 60 cm high and is found from Newfoundland, south to New Jersey and west to Alberta.

A chocolate-like flavoured drink can be made from boiling the root, though it is reputed to pucker one's mouth. The great botanist Merritt Lyndon Fernald commented on such use saying, "I have as yet found no reason to be enthusiastic about this drink." Hardly high praise!

The genus to which this plant belongs has a long history of medicinal and folk uses. In the 15<sup>th</sup> century it was thought "... where the root is in the house, Satan can do nothing, wherefore it is blessed before all other herbs, and if a man carries the root about him, no venomous beast can harm him." The American Botanist in 1918 reported that "... some people believed that friends who held in their hands the leaves of (this plant) were able to converse telepathically over many miles".

The ancient herbalist Culpeper stated "...root in the spring-time, steeped in wine doth give it a delicate flavour and taste, and being drunk fasting every morning,

comforteth the heart, and is a good preservative against the plague or any other poison." [Saunders, 1995]

Personally, I am quite willing just to enjoy looking a the plant where it grows.

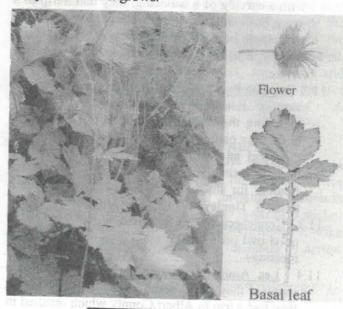


Photo: Gart Bishop

Saunders, J. 1995. Hedgemaids and Fairy Candles. Ragged Mountain Press, Camden, Maine.

The wildflower described in Botany Quiz in the last issue [Vol. 26(1)] was Wild Sarsaparilla, Aralie à tigue nue (Aralia nudicaulis).

### YEAR 2000 NATURE CALENDAR

Imagine The Future!

Natural Resources and Energy's popular nature calendar is back.

Using more than 50 high quality photographs, the Year 2000 montage takes a quick look at the past. Its selection of archive shots reflects who we are and where we've been. The bigger picture looks at who we are today - at the people of New Brunswick, their hopes and the roles they play in managing our forest of the future.

At \$5.50 (tax inc.), it's sure to be one of the most affordable Christmas gift on the market. Imagine The Future! Goes on sale Oct. 21 at all Natural Resources and Energy outlets around New Brunswick.

As you enter a new era, Calendar 2000 invites you to imagine a little. Spend a warm August day enjoying the raspberries on Heron Island with native elder Margaret Labillois and her granddaughter Jenna. Explore New Brunswick's ferns and fantastic nature with two-year-old Ruthie. Or come along as David and Gordon take their dad fishing. Enjoy the autumn leaves with Erica and her mom. These are kids with a future in New Brunswick's forest. And, as Calendar 2000 will tell you, New Brunswick's forest has a great future.

MEDIA CONTACT: Betty Anne McDorman, Communications, Natural Resources and Energy (506) 453-2573 e-mail: <a href="mailto:bamcdorman@gov.nb.ca">bamcdorman@gov.nb.ca</a>

### NATURE NEWS: JUNE-JULY 1999

David Christie

The last "Nature News" covered the winter months but I am going to skip to the summer months of June and July this time. Highlights from spring will be covered in the next issue.

The warm, dry weather pattern of late spring continued into mid summer. More normal precipitation in mid July in some areas was far from enough to make up the deficit in water supply. Low water levels and high temperatures were undoubtedly stressful for many species of streams and small ponds.

Many terrestrial creatures probably do better in a warm summer, and my own impression at the upper end of the Bay of Fundy was that songbird nesting was somewhat earlier than usual and quite successful. Most crops of summer berries were abundant and ripened as much as 2 weeks early, providing a large supply of food for wildlife. On the other hand, mountain-ash and spruce trees, which had produced heavily during 1998, rested this year and produced lightly. This indicates big southward movements this winter of birds that depend on those food sources, such as **Red-Breasted Nuthatches** which were numerous this summer.

### Mammals, Amphibians and Fishes

Current Cougar investigations are leading scientists to doubt that there is a distinct "Eastern Cougar" race. The limited amount of eastern Canadian material examined apparently shows no genetic difference from the cougars of western North America, except for one shot in Quebec a few years ago that was of South American origin. These data raise new questions about whether the cougars seen here might be escaped captives and their offspring. Could this wide-ranging large mammal be able to naturally maintain gene flow across the continent between a tiny eastern population and its core western range? These new findings are sure to fuel more study and debate about this 'mystery animal.' Whatever its status, observations continue to be reported. Gerry Verret had a decent look at a big cat crossing Route 127 north of St. Andrews on July 5, and near Gagetown July 20, a visitor from Florida observed young animal, "about the size of a mature fox" (fide BHB).

Whale numbers built up early in the Grand Manan area, where **Right**, **Finback** and **Minke** whales were being seen in the last half of June. A **Humpback** was seen July 1 and at least 4 **Sei Whales** July 3 (LM). The plankton-feeding Sei may be only an occasional visitor to

the Bay of Fundy. White-sided Dolphins were reported June 22 south of Machias Seal Island (fide LM).

Another rarity off Grand Manan was an Ocean Sunfish July 4. Laurie Murison says, "We usually get these when there has been an eddy break off the Gulf Stream and carry with it such things as sunfish and jellies."

Bev Schneider commented that their Fredericton pond usually hosts "a wonderful chorus of Am. Toads which lasts for more than a month" but this year none were heard. On the other hand, observers in Albert and Carleton counties report apparently normal numbers of toads. Was toad scarcity a general experience in the Fredericton area or confined to Bev's neighbourhood?

The distribution of **Bull Frogs** in New Brunswick is patchy, their presence beyond the south-central and southwestern parts of the province depending largely on where fishermen or small boys have moved them. They are doing well at Duff Lake, near Campbellton, one of the places where they have been introduced, as shown by the count of 17 visible "right out in the open" June 19 (ID, MGD).

#### Birds

Highlight of the summer was the nesting of Northern Gannets in the Bay of Fundy. In July a UNB student, Sean Corrigan, found a pair with one chick on White Horse Islet, off the eastern entrance to Passamaquoddy Bay. Gannets had been noted "prospecting" there the previous summer as well as for 3 years in the 1970s but there had been no indication that they had laid an egg. This is the first New Brunswick nesting since the big birds abandoned Gannet Rock after the lighthouse was established there in the mid 19th century. It is hoped that this single success will lead to establishment of a viable colony. Black-legged Kittiwakes, which have been nesting for a few years on South Wolf Island, have also begun nesting on White Horse.

A Northern Fulmar, more expected in autumn, seemed unseasonal off Grand Manan June 23 and 30 (LM), but there is a previous record of them being numerous in June. Manx Shearwaters were prominent in the bay earlier than usual, with one off Grand Manan June 23 and 2 on July 1. By July 17 there were several close to Grand Manan (LM). A Leach's Storm-Petrel in the lower St. Croix River, near Little Dochet Island, June 3 was surprising so far from the open sea (TD).

A Great Egret in the heron colony of Inkerman June 20-24 (Wallace Power) and at Pointe-Sauvage, near

Shippagan, June 28 (HC) seems to have been the only egret reported this summer.

The Ontario Canada Geese released here during the mid 1990s are establishing a moderate breeding population in eastern New Brunswick. There were reports of geese nesting in numerous localities (v.o.), as well as of small flocks of non-breeders. A late flock of 32 Snow Geese flew east past Campbellton June 3 (RC).

For the 4th year, a brood of **Harlequin Ducks** was reported in the Charlo River estuary, Restigouche County, in July (6 young reported—*fide* Alan Madden).

A male **Ruddy Duck** was at the Tracadie-Sheila sewage lagoon from June 26 into July (Nicole Benoit) and another at Pointe-Verte sewage lagoon June 29 (RG). There was no word of this duck at Bell Marsh, where it has sometimes nested near Moncton.

Ian Cameron and Jim Wilson found a **Turkey Vulture** nest in the same area near Saint John where the first nest was found last year. On June 15 an adult was sitting tight and a hatched egg shell nearby. On the 20th 2 young were seen in the nest. In the northwest, an adult was seen June 22 near lac Caron, Madawaska County (Georgette and Gisèle Thibodeau).

The breeding population of **Bald Eagles** has expanded significantly in southeastern New Brunswick during the past decade. At least 6 nests are now known along the lower Petitcodiac where there was earlier only one. Unfortunately two of them did not produce young this year (fide Rudy Stocek). A boat trip at Grand Manan June 22 reported 18 eagles, "all immature except 2" (LM). They would be mostly one and 2-year-old birds I assume. The salmon aquaculture industry in the lower Bay is very attractive to eagles.

Red-shouldered Hawks are scarce but widespread in the southern and central parts of western New Brunswick. One July 17 at Dundee, near Dalhousie (Marc Landry), was unusual there.

There were an unusual number of summer reports of Sandhill Cranes. One frequented fields at Lower Coverdale, Albert county, June 2-4 (v.o.) and a probable was seen in flight on the weekend of June 12-13 at Eight Mile Lake, Restigouche Co. (MGD). As of June 21, two had been present for about a week in a corn field on the New Canaan Road near Havelock (NBBIL) and one was seen at Shippagan July 1 (Réal Haché).

Piping Plovers, assisted through protective work by Piping Plover Guardians, did quite well in southeastern New Brunswick. Pairs nesting at Buctouche Dune were up from 3 to 5 (MLeB). The observation of approximately 25 Willets near Port Elgin on two occasions in late June (Dale Gaskin) indicates how

numerous this species has become along Northumberland Strait since the first New Brunswick nest was found in 1966.

Charlo Aiport is not a known nesting area for **Upland** Sandpiper but the fact that the species has been found there for 3 years running is suggestive. One was seen there June 24 (ID, MGD).

Southbound shorebirds started appearing in the last week of June and became numerous in late July. A couple of **Red Knots** at Johnson Point, Wetmorland Co., June 16 (MLeB) may have been non-breeders that would not go to the northern nesting grounds.

A skua that was "dancing on the head of a Greater Shearwater" off Grand Manan July 13 (LM) could not be specifically identified, but 4 days later Laurie Murison "had a wonderful view of a South Polar Skua as it flew over our vessel."

Rarest gull of the period was a first-summer Franklin's Gull foraging in a mowed field at Hammond



Franklin's Gull By: Jim Edsall

River July 25-26 (Jim and Jean Wilson). About 2 weeks earlier a visitor had reported seeing this species at the Buctouche Dune (fide MLeB). Other scarce gulls included the following Laughing Gulls, one at Miscou May 30 to June 5 (Stu Tingley+), 2 being repeatedly driven off by the terns when they tried to land on Machias Seal Island June 16 (LM), and an adult in the mouth of the Musquash estuary July 19 (Hank Deichmann); a Black-headed Gull in breeding plumage at Cap Bimet, near Shediac, June 17 (Bob Cotsworth); and a Lesser Black-backed Gull at Miscou June 5-6 (HC).

A **Black Tern** on the Tabusintac dune July 4 (Roland Chiasson), surprisingly, was the first mention of this species on the Acadian Peninsula. In the Gagetown area, where they breed, Bonnie Hamilton Bogart reported seeing more this year than ever before.

A stray Western Kingbird was at Tracadie-Sheila May 31 to June 2 (Gilles Landry, RG). Peter Pearce again located 3 pairs of Willow Flycatchers at a former airfield in Fredericton. Another was singing near Penobsquis June 22-24 (David Christie+).

Nesting Eastern Bluebirds were widely reported, including at Nictau (Wilma Miller) and New Mills (fide MGD). Dozens of pairs were known in southeastern New Brunswick, their best year in decades (Moncton Naturalist' Club info line).

A totally unexpected Sage Thrasher was banded, measured and photographed at Kent Island about July 20 (fide BED). This western species, never before reported in New Brunswick, is not known as a wanderer. The rare but regular Brown Thrasher was reported June 21 at Pennfield (Ian & Heather Cameron) and at Atholville where one was seen a year earlier (fide RC). Another was seen June 25 at Iroquois, Madawaska County (Gérard Verret).

On June 5 two Clay-Colored Sparrows were located on the Acadian Peninsula, one singing at Miscou lighthouse (Robert Doiron) and another at Lamèque during an early-morning bird walk for the NBFN annual meeting.

The identity of a meadowlark at Campbellton June 16 (Bob Gillis, MGD, Claude Richard and Edgar Landry) generated much discussion but eventually was decided to be a **Western Meadowlark** based on plumage characteristics and call-note. It is the first summer report of this species in New Brunswick.

In Albert County White-Winged Crossbills remained prominent in moderate numbers during June but dwindled quickly in July, the 1998 cone crop having been exhausted. A few Red Crossbills appeared at scattered feeders in southeastern New Brunswick during the early summer, whereas Pine Siskins were numerous at feeders all during June and July.

#### **Insects and Plants**

A lot of "8-inch-long bugs" on dead and dying elm trees attracted much attention in Campbellton in late June. Margaret Gallant Doyle described them to the NatureNB mailing list as being black and yellow with 2-inch body, 1-inch antennae and a long tail of about 5 inches, and posted pictures on the World Wide Web which allowed Stuart Tingley to identify them as Lunar Giant Ichneumon (Megarhyssa macrurus icterosticta), an ichneumon wasp the larva of which is an internal parasite of the Pigeon Horntail larvae and related wood borers.

The Irving Eco-centre organized a large-scale butterfly count in the Buctouche area July 1. 18 participants located 34 species during the day-long count in near-perfect weather. Details can be expected in Jim Edsall's year-end butterfly roundup. It was noted that Spreading Dogbane (Apocynum androsaemifolium)

which began blooming earlier than usual was an attractive plant for many butterflies.

Monarch butterflies were seen frequently this summer. A new generation from the south arrived July 11-12 at Grand Manan, with an estimated 50 and 150-250 island-wide on those days (BED). Doreen Rossiter in Alma is one of a number of persons who have planted milkweed in hopes of attracting Monarchs. She was rewarded on June 21, when she spotted one laying at least 30 eggs, one or two eggs on the underside of each leaf. The eggs hatched at the end of June into caterpillars so small that she would have overlooked them had she not been watching for them. On July 17, after 3 years of waiting, Kathy Popma discovered 2 monarch butterflies attracted to her milkweed in Sackville.

The Club l'Envolée Chaleur and the Club de naturalistes de la Péninsule acadienne had a joint field trip to a fen at Petit-Rocher July 4. They found several blooming plants of the magnificent and rare Showy Ladyslipper.

On June 16 at Pt. La Nim, Carla and Mike Lushington noticed that the only white Lupine at their place it was infested with large metallic green blister beetles, whereas all the purple-flowering plants were untouched. Stefen Gerriets commented that non-purple lupines are often severely attacked by aphids whereas dark purples have virtually no aphids. He suggested that purpleness and an aphid repellent chemistry may go hand in glove.

At Prince of Wales July 4, Ken MacIntosh and Sandra Cooper's spotted an Evening Primrose plant of peculiar shape. "The central stem, normal at the base, became about 10 cm broad (but only a few mm deep) near the top, so that the stem was shaped a bit like a Beaver's tail. At the top, the two sides are joined, but there is a gap in the middle, as if the outer edges had grown more quickly than the central portion, then merged. Leaves were evenly spaced in vertical rows up each side of the 'tail'. Flower buds were very dense at the top, 80-100 on the top 5 cm of the metre-tall plant." Stephen Clayden referred Ken to information on 'fascinations' which can have various causes, "including spontaneous mutations, genes transferred from bacteria, insect or physical damage, and chemical insult."

#### **Abbreviations**

BED, Brian Dalzell; BHB, Bonnie Hamilton Bogart; HC, Hilaire Chiasson; ID, Irene Doyle; JGW, LM, Laurie Murison; MD, Marcel David; MGD, Margaret Gallant Doyle; MLeB, Mike LeBlanc; NBBIL, N.B. Bird Information Line; RC, Raymond Chiasson; RG, Roger Guitard; TD, Tracey Dean; v.o., various observers.

# A RESOURCE TOOL FOR EDUCATORS UN OUTIL-RESSOURCE POUR ÉDUCATEURS ET ÉDUCATRICES

Bureau du Réseau Environnemental N.-B. / N.B. Environmental Network

Have you always wanted worms in your classroom? Are you teaching your students to be environmentally friendly? Use the People/Places Resource Guide to help make your classes more interesting. For example, if you are teaching your class about reducing waste, look under Recycling and Composting in this wonderful guide and come up with Garbage B-gone, a group based in Cassilis and willing to travel throughout New Brunswick to give a one hour presentation on worm composting.

The People/Places Resource Guide is a powerful tool produced by the Environmental Education Action Group of the New Brunswick Environmental Network. This bilingual guide has 26 entries of groups willing to provide services to educators. Services include presentations, workshops, tours, guided nature walks and more. Each entry consists of the group's name, what they offer, fees if there are any, and their contact information.

The entries are organized into six categories: The Natural World, Our Coasts and Oceans, Recycling and Composting, Energy and the Environment, Education and Sustainable Development. The categories make it easy for users to look up groups corresponding to topics being taught in the classroom.

The guide is available both on the Internet (at

www.web.net/nben/education/guide.htm) and in hard copy form from the

office of the New Brunswick Environmental Network, 167 Creek Rd,

Waterford, NB, E4E 4L7 Tel: (506) 433-6101 Fax: (506) 433-6111,

nben@nbnet.nb.ca

Est-ce que l'idée d'avoir des vers dans votre salle de classe vous intrigue? Est-ce que vous enseignez à vos élèves de vivre d'une manière écologiquement saine? Servez-vous du Guide de ressources humaines et des endroits ressources pour vous aider à rendre vos classes plus intéressantes. Ce guide est un outil puissant qui fut produit par le Groupe d'action sur l'éducation en environnement du Réseau environnemental du Nouveau-Brunswick. Ce guide bilingue contient 26 groupes qui sont prêts à vous offrir des services. Ces services comprennent des présentations, des ateliers, des tours, et plus encore. Chaque inscription vous indique le nom du groupe, ce qu'il a à offrir, ainsi que les renseignements de contacts nécessaires.

Les inscriptions sont réparties en six catégories: le Monde naturel, nos Côtes et Océans, le Recyclage et le Compostage, l'Énergie et l'Environnement, l'Éducation, et le Développement durable. Il est donc facile de se servir des catégories pour trouver les groupes correspondants aux sujets enseignés dans la classe.

À titre d'exemple, si vous donnez une leçon sur comment réduire les déchets, allez consulter la catégorie "Recyclage et Compostage" dans ce merveilleux guide et vous trouverez Garbage B-gone, un groupe situé à Cassilis et qui est prêt à voyager à travers le Nouveau-Brunswick pour donner une présentation d'une heure sur le vermicompostage.

Le guide est disponible à la fois sur l'Internet

(www.web.net/nben/education/guide.htm) et en copie sur papier auprès du bureau du Réseau environnemental du Nouveau-Brunswick, 167 Creek

Rd, Waterford, NB, E4E 4L7 Tél: (506) 433-6101 Téléc: (506) 433-6111, <a href="mailto:nben@nbnet.nb.ca">nben@nbnet.nb.ca</a>

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