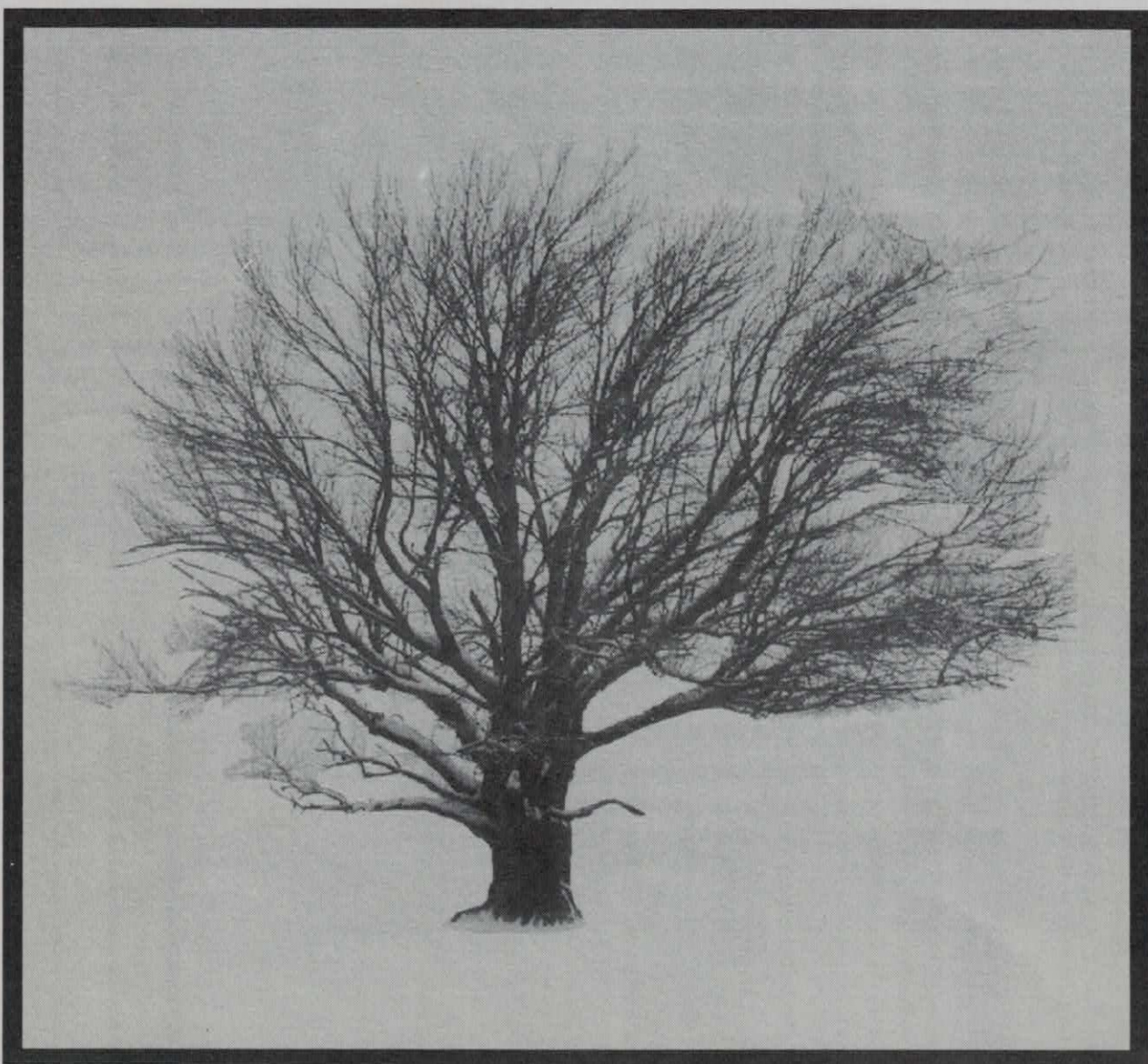


27(4) Winter / Hiver 2000 / 2001

# ***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 E0A3C0; 536-0454; meets Sackville Public Library, 7:30 pm, 1st Thur., Sept.-June.

**Club des Naturalistes de la Péninsule acadienne**, C.P. 2041, St. Simon NB E8P 1L8; courriel: cnpa@fracophone.net site web: http://www.fracophone.net/cnpa; réunions alternants entre Caraquet, Shipagan et Tracadie, 1er mercredi, sept. à juin; *Le Gobe-mouche* mensuel.

**Club d'ornithologie du Madawaska Ltée**, a/s Musée 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, 2<sup>ième</sup> mercredi, sept. à juin, Musée du Madawaska; *Le Jaseur* bimestriel.

**Club Les ami(e)s de la nature du sud-est**, a/s Gilles Bourque, C.P. 4204, Dieppe N-B E1A 6E8; ligne d'information: 532-buse. Réunions: 1er mercredi du mois, alternant entre Dieppe et Shédiac; sorties le 3<sup>ième</sup> samedi ou dimanche du mois; journal: *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, 1st Tues., Sept.-June; meetings advertised in local newspapers.

**Fredericton Nature Club**, Box 772, Station A, Fredericton, NB E3B 5B4; 455-0569; meets Odell Park Lodge, at Odell Park, 7:00 pm, 2nd Wed., Sept.-May; monthly *Newsletter*.

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

**Moncton Naturalists' Club**, P.O. Box 28036, Highfield Square, Moncton, NB E1C 9N4; 384-6937 (information line); meets Church of the Nazarene, 21 Fieldcrest Drive, 7 pm, 2nd Mon., Sept.-June; monthly newsletter.

**Restigouche Naturalists' Club**, c/o Campbellton Library, Box 130, Campbellton, NB E3N 3G9; 684-3258; meets Campbellton Centennial Library, 7 pm, 1st Monday

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

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*N.B. Naturalist* carries articles and reports pertaining to the natural history of New Brunswick. Articles are invited in either English or French, and will be printed in the language in which they are received. The opinions expressed are those of the authors. **Please send all submissions for the N.B. Naturalist to: Gert Bishop, 16 Pitt St. Sussex NB, E4E 1J1; tel. (506) 433-4994, gartali@nbnet.nb.ca** Ask for details of computer compatibility. Advertising rates available on request.

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On peut lire dans *Le Naturaliste du N.-B.* des rapports touchant l'histoire naturelle du Nouveau-Brunswick. Les articles seront acceptés en français ou en anglais pour être reproduits dans la langue d'origine. Les opinions exprimées sont celles de leurs auteurs. **Veuillez faire parvenir toutes articles pour Le Naturaliste du N.-B. à: Gert Bishop, 16 Pitt St. Sussex NB, E4E 1J1; tel. (506) 433-4994, gartali@nbnet.nb.ca**. Demandez les détails de compatibilité d'ordinateur. Tarifs publicitaires disponibles sur demande.

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**Important Dates:** NBFN AGM: May 11 - 13, 2001

**Dates Importantes:** AGA de la FNN-B: 11 - 13 mai, 2001

Sincere thanks to our many volunteers who contributed to this publication.  
Merci beaucoup à tous les bénévoles dévoués qui ont contribué à cette publication

**Please submit articles for the next issue by April 1, 2001**

**S. v. p., soumettez les articles à l'intention du prochain numéro avant le 1<sup>er</sup> avril, 2001.**

**to / à: Gart Bishop, 16 Pitt St.**

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## Message From The President - Mot de la Présidente

Pierrette Mercier

I recently was filling out some forms for a Federation project and was asked to describe who is the NBFN and what the NBFN does. I was amazed that when finished, I had four pages written and that for a small organization how much we can really accomplish.

The mission of the Federation is to encourage a better comprehension of the natural environment and to awaken the concern towards our province's natural heritage. The NBFN and the federated clubs strive to attain this goal through field trips, speakers, New Brunswick Bird Day, lobbying the government, publications such as the NB Naturalist, checklists and many more. However, our main route to achieve our mission is through public education. The NBFN sponsors many programs mainly through Mary's Point shorebird Reserve and The Piper Project.

Mary's Point has been running an information centre to educate the public on the Bay of Fundy and the migratory route of shorebirds and also produces pamphlets and educational materials and videos.

The Piper Project has also started many educational programs on the importance of coastal habitats and the impact of humans on an endangered species. It has also produced posters and pamphlets on Island and beach ethics. It has already published an educational kit for schools on coastal environments and is presently working on another one for endangered species.

The many affiliated clubs have also started their own educational programs, visiting schools and local businesses to promote New Brunswick's natural heritage.

The NBFN will continue to support and encourage the educational projects run by its affiliated clubs and programs and hopefully when we obtain charitable status we will be able to assist these projects financially.

L'autre jour, je remplissais un formulaire pour un projet de la Fédération et j'étais demandé de décrire qui nous sommes et que faisons nous. Après avoir complété le travail, j'étais étonné de voir que j'en avais pour quatre pages pleine et j'ai réalisé que pour une petite organisation, nous accomplissons une grande tâche.

La mission de la Fédération est d'encourager une meilleure compréhension de l'environnement et d'éveiller l'intérêt envers le patrimoine naturel de notre province. La FNNB et ses clubs affiliés travaillent à l'obtention de se but par l'entremise de sorties en nature, de conférenciers, de la journée provincial d'observation d'oiseaux, de pressions auprès des gouvernement, de publication comme le Naturaliste du N.B. et de listes d'observation, etc. Cependant, notre principal outil pour accomplir notre mission est par l'éducation du public. La NBFN support plusieurs programmes éducationnel principalement à travers de la réserve faunique de Mary's Point et le Projet Siffleur.

A chaque été, Mary's Point maintient un centre d'information sur la Baie de Fundy et son importance pour la migration d'oiseaux de rivage. Aussi Mary's Point produit des pamphlets d'information ainsi que des affiches et vidéos sur les oiseaux de rivage.

Le Projet Siffleur, pour sa part, a mise en marche plusieurs projets éducationnels sur l'importance de l'environnement côtier et les espèces menacés. Ils ont aussi produit des affiches et pamphlets sur l'éthique des îles et des plages. Ils ont déjà produit une trousse éducationnel pour les écoles sur les habitats côtiers et sont en train d'en produire une autre sur les espèces menacés.

Les clubs de la Fédération ont aussi des projets éducationnels dans les écoles et auprès du publique et les industries de leur régions respectives pour promouvoir le respect et la protection de l'environnement.

La Fédération des Naturalistes du Nouveau Brunswick continue à supporter et encourager les clubs et projets fédérés à poursuivre ces programmes et en souhaite que avec l'obtention de status d'organisme charitable, puisse supporté finaciairement ce travail important.



## A Short Winter Birding Trip to Iceland, December 1-2, 2000

Beverley J. Schneider

We arrived in Iceland at 6:00AM and by rented car made our way over the 45 Km. from Keflavik airport into Reykjavik (pronounced ray-kya-veek). On the arrival of sufficient daylight at about 11:00AM we used the city map to visit many areas of waterfront and green spaces around the city. This was a little difficult in a modern city of 300,000. In addition, the street names are difficult to comprehend (e.g., Kringlumyrarbraut or Sudurlandsbraut with various accents and unusual letters).

The waterfront is well industrialized and appears safe for visitors. We did not feel that we or our car were unwelcome on any wharf, embankment, or green space. There was lots of waterfowl to see and some Passerines. We found many Starlings but among one flock was a Redwing. What a nice thrush that is! On the water we found many Red-breasted Mergansers, Mallards, and Common Eiders. We found lesser numbers of Tufted Ducks, Razorbills, Greylag Geese, and European Widgeons. Also of interest were Glaucous, Herring and Iceland Gulls (Glaucous are more common and are often found accompanying eiders from whom they steal food), Oystercatchers, Purple Sandpipers, Red Shanks, and Ravens. Besides the Redwing the highlight for the day was the male Smew we saw in one inlet along with many Eiders and Mergansers. This bird is rare in Iceland, but this country is famous for its vagrants from both Europe and North America.

The next day we met a local birder I had contacted over the InterNet and he guided us around to see Icelandic wintering birds. What a friendly, personable, fountain of knowledge this biologist was! Not only did he find us most of the birds that are wintering in that area but he also gave us running descriptions of the interesting geology and ecology of the areas we visited in the 300 plus kilometres we covered.

The driving was good with almost no snow and temperatures ranging from -1 to +7°C. Frost on the asphalt made the roads a bit slippery but our studded tires made driving comfortable. The area we visited was flat and the roads were excellent. Signage is international and readily understood; and yes, they drive on the right.

On the second day we found 31 species. Practically the first birds we saw for the day were special. Alongside the road in a small flooded depression in the lava field were 8 Whooper Swans. Their bright yellow face plates really show

up! Visiting more bays and ponds we were treated to more Red Shanks, Oystercatchers, Purple Sandpipers, and European Widgeons, and also Snow Buntings.

One highlight was 3 Gyrfalcons, one of which just sat and looked at us for as long as we were present. These birds were quite dark in colour and very tame, providing excellent views.

We found 3 Bar-tailed Godwits and a Curlew which excited us greatly. The Godwits were close and provided a good view. We had searched for the Curlew all day but it eluded us until just before sunset around 4:00 PM. Revisiting a likely bay just before heading back we scanned the sandy mudflat and the seaweed-clad rocky islets in front. There among the seaweed with the crimson light of an Arctic sunset reflecting off that long, decurved bill was the Curlew! And what a big bird it was (50-60 cm). The Purple Sandpi-



Long-billed Curlew  
drawing by P.A. Taverner

pers and Red Shanks nearby looked quite small now.

I was surprised to find that the most common gull species were Glaucous, Herring, and Greater Black-backed. There are a few Iceland and Common (Mew) and recently they had some Black-headed. But there were no Thayer's as I expected and no Bonaparte's Gulls.

Here is our list for Iceland with approximate numbers where possible: Common Loon 1, Horned (Slovenian) Grebe 1, Great Cormorant many, Whooper Swan 50, Greylag Goose 36, Mallard 100, Black Duck 1, European Green-winged Teal 2, European Widgeon many, American Widgeon 1, Tufted Duck 14, Smew 1, Greater Scaup 30, Common Eider many, Harlequin Duck 8, Long-tailed Duck a few, Common Goldeneye 15, Red-breasted Merganser 40, Gyrfalcon 3, Oystercatcher 80, Curlew 1, Purple Sandpiper 200, Red Shank 12, Ruddy Turnstone 50, Bar-tailed Godwit 3, Glaucous Gull many, Iceland Gull a few, Great



Black-backed Gull many, Herring Gull 50, Razorbill 2, Redwing 1, Starling 550, Raven 25, Snow Bunting 75.

Around 4:00 PM with a lingering crimson-tinged sky we stopped into a convenience store where we bought coffee and Apolser@ (hotdogs). This was the closest we could come to a Tim Hortons and fast food. There were no disposable cups so we had to convince the attendant to let us leave with the breakable ones. You see, we wanted to catch the last rays on the nearby pond on which there were many Whooper Swans, Mallards, and a few European Widgeons. We placed the car on the roadside and feasted our eyes on 36

white swans tinged with crimson, surrounded by vocalizing ducks, with a backdrop of grassy turf being grazed by 3 multi-coloured Icelandic sheep. Just as light was nearly gone the whole flock of swans took off in one huge water-churning clatter and wheeled off into the east. What a fine closing to our day. And yes, we returned the cups.

For those interested in further reading on Icelandic birds, I recommend the following:

Hilmarrsson, Johann O. 2000. Icelandic bird guide. Indunn.

## Quiz On Breeding Birds Of New Brunswick

Don Gibson

1. The most abundant breeding waterfowl in New Brunswick is:

- a) American Black Duck
- b) Ring-necked Duck
- c) Common Eider

2. The most abundant breeding raptor in New Brunswick is:

- a) Northern Harrier
- b) Broad-winged Hawk
- c) American Kestrel

3. The most abundant breeding woodpecker in New Brunswick is:

- a) Yellow-bellied Sapsucker
- b) Hairy Woodpecker
- c) Northern Flicker

4. The most abundant breeding thrush in New Brunswick is:

(other than the robin)

- a) Veery
- b) Swainson's Thrush
- c) Hermit Thrush

5. The most abundant breeding warbler in New Brunswick is:

- a) Magnolia Warbler
- b) American Redstart
- c) Common Yellowthroat

6. The most abundant breeding sparrow in New Brunswick is:

- a) Chipping Sparrow
- b) Song Sparrow
- c) White-throated Sparrow

7. The most abundant breeding blackbird in New Brunswick is:

- a) Red-winged Blackbird
- b) Common Grackle
- c) Brown-headed Cowbird

8. The most abundant breeding bird in New Brunswick is:

- a) American Robin
- b) Magnolia Warbler
- c) White-throated Sparrow

Information from Atlas of Breeding Birds of the Maritime Provinces by Anthony J. Erskine



## Answers To Breeding Bird Quiz

- 1) American Black Duck 13 000  $\pm$  2 000  
 Common Eider 7 000  
 Ring-necked Duck 3 700  $\pm$  800

The Black Duck is fairly well distributed throughout the province. There is a fear that the more adaptable Mallard may replace the Black Duck in the east but there is insufficient evidence to date to determine if this will happen.

- 2) American Kestrel 4 800  $\pm$  1 700  
 Broad-winged Hawk 2 600  $\pm$  400  
 Northern Harrier 2 300  $\pm$  300

At home in farmlands and cut-overs this small falcon finds suitable habitat in all parts of N.B. Unlike many of its secretive cousins, the kestrel is very conspicuous and often observed along roadsides. It is estimated that the numbers for this species will remain stable for the near future.

- 3) Northern Flicker 46 000  $\pm$  13 000  
 Yellow-bellied Sapsucker 45 000  $\pm$  16 000  
 Hairy Woodpecker 20 000  $\pm$  3 000

The two migratory species far out-distance any of the non-migratory ones with respect to numbers. There are indicators that point to a decline in the Yellow-bellied Sapsucker whereas the Northern Flicker population has remained relatively stable.

- 4) Swainson's Thrush 312 000  $\pm$  94 000  
 Hermit Thrush 149 000  $\pm$  19 000  
 Veery 136 000  $\pm$  21 000

Although the Swainson's Thrush is probably the least familiar of the thrushes listed above, it is the most common thrush of the northern forests. Present logging practices will undoubtedly reduce the suitable habitat available to this species and a decrease in numbers appears inevitable.

- 5) Magnolia Warbler 380 000  $\pm$  120 000  
 American Redstart 370 000  $\pm$  110 000  
 Common Yellowthroat 330 000  $\pm$  84 000

The data available does not provide a definitive answer for this group. Each of these warblers prefers a different type of habitat. The Magnolia Warbler is basically a bird of the coniferous forest, while the American Redstart frequents both mixed and deciduous woodlands. Cut-overs, roadsides and the edges of marshes are the favourite habitats of the

Common Yellowthroat. It appears that the future of these species is more likely to be determined on their wintering grounds than in N.B.

- 6) White-throated Sparrow 420 000  $\pm$  110 000  
 Song Sparrow 80 000  $\pm$  22 000  
 Chipping Sparrow 63 000  $\pm$  21 000

No contest. The White-throated Sparrow is found throughout the province and frequents nearly every type of habitat. It is thought that this species was common even before the cutting of the forests began and this practice created more suitable habitat. Although the last twenty years have shown a decrease, it would seem that this bird should be plentiful in N.B. in the future.

- 7) Red-winged Blackbird 89 000  $\pm$  16 000  
 Common Grackle 86 000  $\pm$  16 000  
 Brown-headed Cowbird 23 000  $\pm$  3 000

Blackbirds in general are often very obvious, especially when they gather into large flocks. All of these species have increased dramatically since the time of European settlement. Declines have been experienced in each species recently but it is thought that numbers will be stable in coming years.



- 8) American Robin 420 000  $\pm$  130 000  
 White-throated Sparrow 420 000  $\pm$  110 000  
 Magnolia Warbler 380 000  $\pm$  120 000

As can be seen from the numbers it is difficult to determine a winner. While Nova Scotia has almost as many Robins as N.B., there is less than half the number of White-throated Sparrows in that province. Nova Scotia has about 30% less Magnolia Warblers than N.B.



## Tree-Crickets in New Brunswick

David Christie

One evening in late August 1999, I heard long, trilling calls around my home. They sounded a bit like a toad, but toads call from ponds and ditches in spring not from brushy fields in late summer. It must be an insect such as a cricket or katydid, I thought. The sound was familiar but I hadn't noticed it previously here at Mary's Point.

I tried sneaking up, prepared to shine a flashlight on the singer, but each one fell silent as I approached. My interest piqued, I noticed calls of these mysterious insects for several evenings, and sometimes in the late afternoon, at home, in Moncton and perhaps on Grand Manan.

I failed to find a likely song description in a couple of insect books. From a request on the Moncton Naturalists' Club information line, I learned only that Nelson Poirier was puzzling about the identity of this insect too.

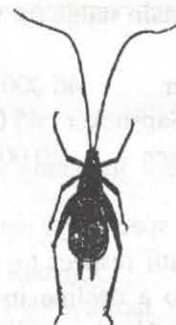
Then last winter I got a copy of Georges Pelletier's *Guide sonore des insectes chanteurs du Québec et de l'est de l'Amérique du Nord*, a booklet and CD of insect songs. Eureka! The recordings of l'Oécanthe à pattes noires (*Oecanthus nigricornis*) and l'Oécanthe à quatre points (*O. quadripunctatus*) closely resembled what I had heard. From other books I learned that these are the Black-horned Tree-Cricket and the Four-spotted Tree-Cricket, that both were known northeast to at least southwestern Maine (Morse 1920), but that as of 1974 there were no records of tree-cricket from the Maritimes (Vickery *et al.*, 1974).

That was quite intriguing, an insect that's apparently expanding its range into the Maritimes. Their sudden appearance at Mary's Point and Hal Hinds' assessment of an increase in New Brunswick from being "very rare about 10 years ago" to "now fairly widespread" fit that scenario. Unfortunately, I can't remember how often or where in the province I've heard them in the past, but during 1999 and 2000 I've found them to be quite common from Charlotte and York counties to Albert and Westmorland counties. Others have reported them within the same area (see map). They should be found in more districts of southern New Brunswick, but how far north do they go?

At this point, you may well be asking, "What are tree-cricket? I thought crickets lived on the ground." Certainly, the most familiar crickets, field crickets and close relatives, do live on the ground but there are others that climb about in the vegetation or burrow in the soil.

Tree-Crickets are one of the subfamilies of crickets; some occur in trees but ours are found mostly in raspberry,

goldenrod and low shrubbery. The northern species are mainly pale green in colour. Seen from above, males are shaped like the blade of a canoe paddle with a narrow head and broad wings hiding the slim abdomen. The wings of females wrap around the abdomen so that they have an elongated shape slightly wider in the middle than at the ends. Both sexes have very long thread-like antennae. The front and middle pairs of legs are spindly, the larger rear ones grasshopper-like but slim. Our tree-cricket are about 14-17 mm long with 24-28-mm-long antennae. The preferred habitat is bushy fields and low shrubbery, but one species,



Tree Cricket (*Oecanthus niveus*)  
drawing by Anna Comstock

possibly found here, inhabits pine woods.

Tree-cricket are conspicuous because of the loud trills of the males, but hard to see because they usually stop calling when a person approaches. An individual trill can last for up to 2 to 4 minutes and be promptly repeated. Identification of the call to species is tricky because the pitch and rapidity varies with temperature. In Albert County, by the Bay of Fundy, I have not noted tree-cricket calling much before the last week of August but have heard them earlier in the month in Moncton. In interior New Brunswick they might begin to call by the beginning of August. The first heavy frosts cause a great reduction in calling but Julie Singleton heard them at Taymouth on Oct. 22 and I heard a few near Mary's Point on Oct. 25, both observations well after hard frosts. Brian Dalzell also heard calls at Grand Manan around this time. October calls don't continue into the evening as they do during August and September.

One afternoon this October I finally managed to see a singing male tree-cricket, well-hidden among raspberry leaves at Mary's Point. In September, Fredrica Givan got



photos of some cooperative females sitting on flowers at Fredericton Junction. At both these places, the insect's black feet and blackish band on the underside of the abdomen indicated that they were Black-horned Tree-Crickets.

Julie Singleton had the ultimate tree-cricket experience September 26. She wrote, "I got a very close look at a pair of... tree crickets who were more intent on mating than on hiding from me... I had always associated the trill (which is almost the same as that of a toad) with crickets and that's how I found this pair. The male would raise his wings straight up from his back (like the trunk of a car) and they would vibrate when he was trilling... Then he would keep backing into the female, until she would climb on his back and feed from a secretion on his back. I could see the little beige gland where she was feeding on the male's back. I didn't see any obvious connection during this mating ritual — but I guess they were transferring sperm somehow."

Next year I hope to learn more about the distribution of tree-crickets in New Brunswick. If you've heard or seen them please let me know where, how long ago you first noticed them, and how common they are in your area. I've put together a Web page <<http://personal.nbnet.nb.ca/maryspt/bugs/tree-cricket.html>> of sounds, pictures and links to other sources to help people recognize tree-crickets

in general and possibly to identify the species.

Thanks to Fredrica Givan, Hal Hinds, Nelson Poirier, Julie Singleton, Brian Dalzell, Janice Harvey and Christopher Majka for providing information on tree-crickets, and especially to Fredrica for allowing me to use her photos.

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## A September Moment In Western Labrador

*Cheryl Davis (formerly from Riverview N.B.)*

*a.k.a - Bird Lady of Wabush, Labrador*

One day in early September while seeking a few minutes of solitude, I decided to visit the north end of Jean Lake which is about a 15 minute walk from my backdoor. Here, there is a foot bridge that stretches across a narrow neck of water that separates Jean Lake from Little Wabush Lake. I didn't have a great desire to do any amount of additional walking since it was cool, overcast and at times very windy. Much to my surprise the foot bridge was somewhat sheltered from the wind, even pleasant. It was mid afternoon when I arrived and the woods very quiet. Not a peep from anything.

Once on the bridge and facing north looking towards the mountains that shelter Labrador City I first noticed an immature Herring Gull surfing on the wind overhead. It soon landed in the water not far from me, but not before

disturbing a Greater Yellowleg that had been hiding in the grass. As the gull bobbed on the water the yellowlegs flew to a large rock that rose out of the water close to the bridge. As the gull bobbed and the yellowlegs sat, another bird further away caught my attention. We were soon joined by a beautiful mature Common Loon. As quick as the loon appeared, he then quietly slipped under the water. A few minutes later there was a slight disturbance "under" the water less than a foot away from the nearby gull. I'm not sure what the loon had done to convince the gull to move on, but a second later the gull left and the loon surfaced where the gull had been sitting. Did I detect a grin on the loon's face? As the gull gained altitude another Greater Yellowleg flew in to join the first.

So here we were, the loon, 2 yellowlegs and myself





minding our own business but still keeping an eye on each other. The loon feeding in the shallow water continually dove for food, but never down for long. Every once in awhile he'd come up and give his haunting loon call then slip under the water once again. Looking around to make sure no one was watching, I gave a weak attempt at a loon call. I couldn't have done that had since the loon replied and we had a great conversation for a few minutes. While engaged in this activity another moving shadow caught my attention along the edge of the shore. This time it was a Belted Kingfisher, silently moving from overhanging tree to overhanging tree while fishing in the shallows.

From this, I looked skyward to a drama being played out overhead. The gull had returned, but this time he was harassing an Osprey that was carrying a small fish in its talons. The Osprey, ducking the advances of the gull flew south-east with purpose and eventually the gull gave up the chase. As I watched the Osprey getting smaller and smaller in my binocular view it flew towards the hill along the lake that was covered with black spruce. Then the Osprey landed. Not on a regular old tree top as I expected but in a hard to see nest that still contained 2 young and hungry Osprey. The flashes of white were very evident against the dark green trees. When the parent left and the "youngins" settled back down in the nest, it was a tough chore to find the nest again even with binoculars. What a discovery! I had been coming to this spot off and on all summer and never once guessed that there was a nest in that spot. (Better still, once I got home I realized that I could see it from my kitchen window with the aid of my scope.)

Still on the bridge, I turned around again to the north and watched the loon who had moved further away. In the distance the peace and quiet was briefly shattered by the

sound of gunfire. Duck hunting had started in August only a few short weeks before. With this, one of the yellowlegs grew restless and flew just a few feet past me to another rock. Then it slipped off the rock into the water to wade towards some grass. In the area where the Kingfisher had been seen, a small flock of migrating American Robins appeared and then left.

Again, my attention went to the right and towards the loon, much further away this time. At the same moment the water had been disturbed from "below" only 10 feet from where I stood on the bridge. At first I wasn't sure what had moved the water. Within a few minutes my question was answered when a second Common Loon appeared out of nowhere. It soon joined the first loon who had started to come back towards me.

From this point on the loons were poetry in motion. They were never more than a couple feet from each other, and what was truly amazing was how they matched each others actions as accurately as any synchronized swimmers ever thought of doing. While swimming on the surface they continually bobbed their heads in and out of the water together. If one dove they both dove within a split second of each other. Never down for long, they would reappear together at the same time on the surface. The whole time they completely ignored me and weren't the least bit concerned that I was witnessing their dance even though I was only a couple hundred feet away. Even when the gull returned scarring off the yellowlegs, the loons just ignored it.

After a half hour from first arriving at the bridge I reluctantly left for home with spirits lifted and warmed by the feeling that what I had witnessed had been a gift from the Creator.



## Perspectives

Ken MacIntosh

I have recently started compiling an index to back issues of the New Brunswick Naturalist for the Federation. This work is proceeding slowly, in large part because the early issues make such interesting reading. It occurred to me that current subscribers would also be interested in selections from past issues, and I hope to make this a regular feature of the Naturalist.

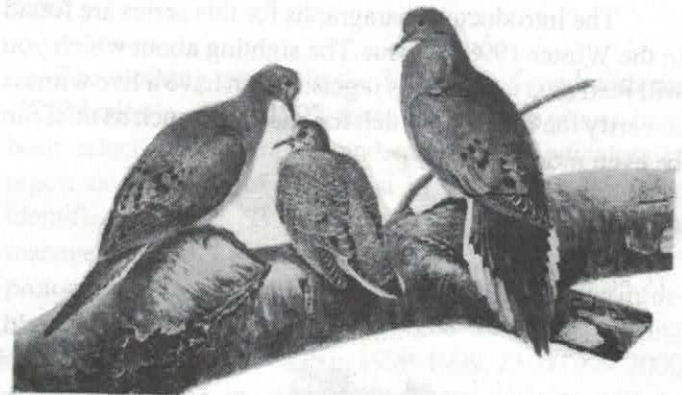
The early issues are entirely the work of David Christie, and correspond quite closely with what later became 'Nature News'. The flagship issue of the NB Naturalist is dated January, 1970. To hold it is a history lesson in itself. The issue is six sheets, typed on both sides with a manual typewriter, stapled in the top left corner and folded for mailing. Subscribers were asked to submit one dollar per year. A 5 cent stamp covered postage. And how strange the address looks without a postal code!

It is an account of the 1969-70 Christmas Bird Count season. "A record 24 Christmas Counts were taken this winter, including seven in northern New Brunswick, where there never have been more than two in one year before. All the counts lasted at least six hours except for one made at sea from the Grand Manan boat, where a longer count was impossible. All told, 205 participants observed for 387 party-hours and at 78 bird feeders and reported 59,213 birds of 104 species. An additional five species were seen during the Christmas count period." How we have grown! Christmas Counts are expected to total 46 for the current year.

Weather and its ramifications for wildlife are always of interest to naturalists. A mild winter leading into 1970 allowed a number of unusual bird species to linger. In keeping with opening comments on the mild winter: "Regarding geese, it is interesting to note the background to their appearance on several Christmas counts. Al Smith reports that goose numbers were high in all three Maritime Provinces this fall. Canadian Wildlife Service aerial surveys in November spotted 27,796 in the Maritimes. In December, when they normally record geese only along the south coast of Nova Scotia, the survey tallied 4100 geese in Prince Edward Island and 1560 along the north shore of Nova Scotia. Weather prevented an aerial survey of New Brunswick in December."

For those of us who are relatively new on the scene, a time when Mourning Doves were scarce in New Brunswick seems as remote as the days when Mastadons might be seen. The second issue of the Naturalist, from March 1970,

reminds us that this was not so long ago. "The number of Mourning Doves in New Brunswick has increased dramatically in the last ten years. Large flocks have been seen in fall, some remaining into early winter when they apparently die as a result of the snow or cold. Usually there are no reports after early January. Sightings this year suggest that the snow cover must be the important factor for despite the cold the following were seen between the last week of January and the beginning of March: three at McGowans Corner (Nettie Moore), five at Maugeville (Melvin Moore), four at Moncton (Doug Whitman), one at Albert (Ford Alward) and five at Upper Woodstock (Mrs. Rowena MacDonald)."



*Mourning Doves*  
painting by L.A. Fuertes

From volume 3, "A Loggerhead Shrike, rare here, was seen and heard singing at Turtle Creek April 19 (D. Whitman). This species nests very rarely in the province." This was about the time of the last reported breeding attempt by this species in New Brunswick.

From number four, a reminder that whale watching is not new, and species other than birds are renamed: "On June 21, R.J. Rowe of Fredericton, fishing off Pt. Escuminac, saw a whale heading into Miramichi Bay. He estimated its length at thirty feet, and took two photographs as it jumped clear of the water. That must have been quite a sight! Henrik Deichmann brought in the photos from which it easily was identified as a Little Piked Whale, probably one of the most likely species to be seen in that area." The Little Piked Whale



is familiar to us now as the Minke Whale.

I spent much of the summer of 1997 on the Wolves, Machias Seal Island and Grand Manan, and enjoyed many observations of Monarch butterflies, especially on Grand Manan. The following gave me some appreciation for how unusual that summer was. "The Monarch butterfly is very rare in New Brunswick. Reports in June probably represent migrants returning from wintering areas in the south. Single Monarchs were seen in Albert County, at Riverside June 20 (Majkas & Christie) and at Hebron June 23 (C. Majka). At St. Andrews Willa McCoubrey saw two in June."

More reflections on the Mastadon: it is difficult to imagine a time when the Coyote was not part of the New

Brunswick landscape. From Volume 3, no. 2, (March 1972) comes the following: "One of the most interesting mammal reports in quite a while comes from Henrik Deichmann who has provided details of what he suspects was a Coyote in Fredericton, January 27. The long-legged animal was seen running "swiftly and apparently effortlessly" across an opening in the Forest Hill area. Although the identification of such animals is made difficult by the similarity of some German shepherd dogs and their mutt offspring we do know that the Coyote's range is expanding eastward and that they have been recorded in several parts of Maine. Therefore, it would not be too surprising to have them reported here also."

## Rare Sightings

Alan Madden

The introductory paragraphs for this series are found in the Winter 1998/99 issue. The sighting about which you will read next is as rare as it gets. I even have a live witness to verify the incident, which for anecdotes such as this, can be even more rare.

### HIGH DIVING RABBIT



It was a cold, oggy night and all of sudden a scream pierced the darkness only 3.76 m. away sorry, got side-racked by another tory). Ron Gauthier and I were about to unload our canoes next to the Southeast Ipsalquitch River bridge at the 32 Mile in the New I.P. Road, Oct. 28, 1998, when a hare exited the woods

50 m. distant. The hare was trotting, on the road and heading in our direction, so we both assumed a predator was behind it. We found it difficult to believe, but the hare trotted by us, only 2 m. away, yet we and our vehicle against which we leaned were in full view. We kept watching the spot from which the bunny had come, because we were curious to see the predator, which we assumed was a fox, coyote, marten

or fisher, or even a weasel all equal possibilities in this area, but no predator yet. The hare did something even more surprising, for it continued onto the bridge, leaving even the grass cover at the edge of the road behind. Still, no predator was in sight. The hare loped along on a straight course approximately 1 m. from the edge of the bridge, and to our astonishment, when it was three-quarters of the way across the 30 m. span, it suddenly leaped a half-meter up into the air and in a trajectory that put it out over the bridge railing which was 25-30 cm. in height. We watched the animal hit the river's surface 3 m. below the bridge deck with a big splash. The hare fought the swift current, but the latter carried the animal 30 m. downstream to a point where the hare then swam for the shore of a small island on the same side of the river from which the incident began. Upon reaching the beach, the hare did not shake itself off, but simply trotted into the shrubbery. Ron and I remarked on the spot that it was fortunate that we had both been there to see the event, because we would never expect someone else to believe the story if only one of us had been there. No predator ventured out of the spot where we first saw the bunny, so why did the hare do what it did? Perhaps that bunny does this feat every day during the open water seasons just to amaze people. You'll have to go there to find out. Do you suppose it was an incident like this that triggered the cliché hare-brained!.

By the way, there is a salmon pool upstream from the bridge named Flying Eddy, so I propose we appropriately name the bridge the Flying Bunny Bridge.



## Fundy Model Forest: Reporting on the state of the forest

Isabelle Frenette, Communications Coordinator/Coordonnatrice des communications

Fundy Model Forest/Foret modele de Fundy



*Editors's Note: The NBFN has been a partner in the Fundy Model Forest for the past 9 years.*

The Fundy Model Forest (FMF) is a working forest located in the Acadian forest region in southern New Brunswick. The FMF and the Canadian Model Forest Program were established in 1992 by the federal government to promote sustainable forest management in Canada.

The FMF is one of 12 model forest project areas in Canada. Other model forests areas in the Atlantic Provinces include Nova Forest Alliance in Nova Scotia and Western Newfoundland Model Forest in Newfoundland.

The 31 partners of the FMF are working co-operatively to develop new innovative tools to ensure sustainable forest management in our region. This year represents the final year of the second 5-year phase of the model forest program. Over the past 9 years, working groups in the FMF have carried out over 300 projects dealing with subjects such as soil, water, biodiversity, socio-economics, wood supply, wildlife and recreation.

### Criteria and Indicator Framework

In 1993, the Canadian Council of Forest Ministers (CCFM) initiated a process to define and measure the forest values that Canadians want to maintain and enhance. The Criteria and Indicator (C&I) framework is meant to provide a common understanding and a scientific definition of sustainable forest management in Canada. Together they provide the framework to describe and measure the state of our forest, our values and our forest management practices and the progress we are making in sustainability.

The C&I framework reflects an approach to forest management which is based on the recognition that forest are ecosystems that provide a wide range of environmental, economic and social benefits to Canadians. (Criteria and Indicators of Sustainable Forest Management in Canada: Technical Report, 1997).

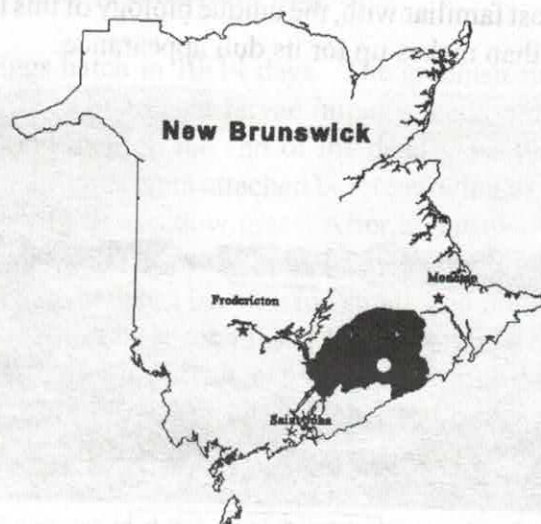
In 1997, the Canadian Model Forest Program adopted the C&I framework as a means to report on the state of the forest in each forest region of Canada. Following that lead,

the FMF partners developed a set of criteria and indicators of sustainability for the FMF. The FMF has chosen the 6 criteria set forth by the CCFM to report on the state of the forest in the region.

They are:

1. Conservation of Biological Biodiversity
2. Maintenance and Enhancement of Forest Ecosystem Condition and Productivity
3. Conservation of Soil and Water Resources
4. Global Ecological Cycles
5. Multiple Benefits to Society
6. Society's Responsibility to Sustainable Development

The working groups in the FMF are aligned with the CCFM criteria. Since 1997, these six working groups have been selecting, developing and monitoring indicators to report on the state of the forest in the area. They have identified a set of 53 indicators. The need to establish management level objectives and to define standards and protocols for monitoring, reporting and evaluating the information derived has resulted in some 24 projects being conducted in 1997-1998, 25 in 1998-1999, 23 in 1999-2000 and a further 33 in 2000-2001. More projects will be conducted this year to help us complete the report on the state of the forest.





### Indicators of sustainability in the FMF area

We know what is **important** in the FMF area. We have set our criteria. How will we know if we are going in the **right direction**? What indicators are we looking at in the FMF? Each working group has developed a set of indicators. Projects developed over the past four years will help to measure these indicators. What are those indicators? We have been measuring the areas and severity of insect and disease attack in the FMF. We have been looking at the area and severity of fire damage. Other indicators include the change in land patterns that have an impact on water quality. As well, we are looking at adherence to the Canadian Water Quality Guidelines and the status of riparian zones in the FMF. In order to report on the state of the forest we are also

reporting on the degree of fragmentation and the area of remaining forests relative to pre-European settlement conditions. Finally, we are also looking at social indicators such as the degree of protection of significant aboriginal sites in forest management plans in the FMF and the level of technology transfer activities.

All the indicators of the FMF will be reported on in the **State of the Fundy Model Forest Report** that will be published early next year. In the mean time, if you would like more information on any of these indicators or work related to the indicator process please contact us at [Info@FundyModelForest.net](mailto:Info@FundyModelForest.net) or visit our website at [www.fundymodelforest.net](http://www.fundymodelforest.net)

## The Life History of the Endangered Maritime Ringlet Butterfly

Reginald P. Webster

### Introduction

If one walks through a salt marsh in the estuary of the Peters River near Beresford N.B. during early August, one will likely see small (wing-span about 3.5 cm) tan colored butterflies coursing just above the canopy of the salt marsh vegetation. These are Maritime Ringlets, *Coenonympha nipisiquit* McDunnough. Although dull colored compared to most butterflies we are most familiar with, the unique biology of this insect more than makes up for its dull appearance.

The Maritime Ringlet Butterfly is one of only two species of butterflies in Canada that live exclusively in salt marshes. This insect has an extremely restricted distribution. It is known from only 4 salt marshes near the Chaleur Bay on the east coast of Canada. The global range covers an area of less than two square kilometers making it one of the rarest species of butterfly in North America. The three largest colonies occur in salt marshes completely within the city limits of expanding urban areas of Bathurst and Beresford, N. B. Although the Maritime Ringlet can at times be locally abundant



Marsh at high tide  
Photo: N. Arseneault



Marsh at low tide  
Photo: R.P. Webster



within these salt marshes, continued urban expansion in this region may in time result in a deterioration of the habitat with a concurrent reduction in population size and the eventual extinction of this butterfly. It is for these reasons that the Maritime Ringlet has been given endangered species status by the provincial government and by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). Over the past 7 years considerable research has been conducted to obtain information critical for developing a management strategy for this species. The life cycle, resource requirements of the immature stages and adults, female reproductive potential, and micro-habitat requirements of the species have been elucidated. In the remainder of this article I will describe the life cycle of this endangered butterfly.

### Adult Behaviour.

The Maritime Ringlet, like all butterflies has an egg, caterpillar, pupal and adult stage. Each of these life stages has different resource and micro-habitat requirements. It is the resource and micro-habitat requirements that influence where a given species of



*Adult Maritime Ringlet Butterfly*

*Photo: A.W. Thomas*

butterfly lives. Adult Maritime Ringlets are active from mid to late July to mid-August. Females usually mate within a few hours after emerging from their chrysalids, and then begin to lay 1.0 mm diameter greenish yellow eggs on the caterpillar host plant, salt

meadow grass, *Spartina patens*. Salt meadow grass appears to be the only species of grass that the Maritime Ringlet caterpillar eats, although other species of grasses in the salt marsh may be utilized on some occasions. This plant is therefore a critical resource for the Maritime Ringlet. Females lay eggs singly near the tips of small dead blades of the grass near the base of the plants. Females usually lay several eggs before flying to another location. Males spend most of their time flying just above the canopy of the salt marsh vegetation searching for virgin females. When not involved in reproductive activities, males and females feed on nectar from the flowers of sea lavender, *Limonium nashii*. The sugars contained in the nectar provide the energy the butterflies require to live. Males and females live on average about 8 days, but some individuals live as long as 14 days. Females can potentially lay 115 to 130 eggs during their life span. However, without nectar females would not be able to lay nearly this number of eggs. Therefore nectar from sea lavender flowers is also a critical resource for the adult Maritime Ringlet butterfly.

Maritime Ringlet adults are usually most abundant in sections of the salt marsh where salt meadow grass and sea lavender are most common. One rarely finds this butterfly in areas of the salt marsh where these two plants do not occur. Indeed, Maritime Ringlets seldom stray into upland grassland habitats adjacent to suitable habitat even though these grasslands may be less than a meter from areas with salt meadow grass and sea lavender.

### Behaviour of Immature Stages.

Eggs hatch in 10-14 days. The greenish striped neonate or first instar larvae initially feed on the egg shell and then on the end of the dead grass blade to which the eggs were attached before moving to young shoots of salt meadow grass. After about two weeks (usually during early to mid Sept.) the larva shed their old skin, which has become too small, and molt into a larger skin. The second instar larvae continue to feed on the new shoots of salt meadow grass within the litter zone. During mid to late October the second stage larvae, which have grown to between 5 and 6 mm in length, stop feeding and enter diapause.

Diapause is a form of hibernation. As the days



become shorter and the nights colder the larvae begin to produce chemicals that function much like anti-freeze. These chemicals protect the caterpillars from freezing during the late fall and winter. The diapausing larvae rest along the undersides of dead grass stems within the layer of grass litter and about 3 to 5 cm above the soil surface. The larvae pass the winter under the snow and ice.

After the snow melts during late April or early May the larvae resume feeding on the new shoots of salt meadow grass. The larvae feed only during the day and remain within the leaf litter zone where the developing shoots occur. Although frosts are still frequent at this time, the larvae avoid freezing by remaining within the insulating cover of the dead grass from the previous year. As the season progresses, the larvae continue to feed, grow larger and molt. By early June most larvae have molted into the fourth instar and now feed near the top of the canopy of salt meadow grass, which is now upwards to 30 cm high. Between mid June and early July most caterpillars molt to the last or fifth instar. This stage lasts about 15 days and unlike previous instars, caterpillars of this stage also feed nocturnally. The overall color pattern of all larval instars is green to yellow green with a series of longitudinal cream colored stripes. This cryptic pattern renders the caterpillars almost invisible among the foliage of the salt meadow grass.

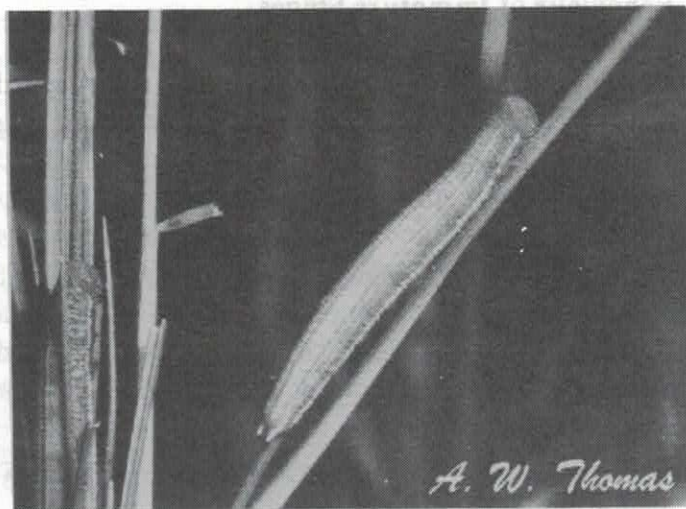
After about two weeks the last instar larvae, which are now between 20 and 30 mm in length, begin to molt

into the chrysalid or pupal stage. Most years this occurs between early July and early August depending on micro-climatic conditions within the salt marsh. Prior to pupation, the larvae attach themselves via a silk pad to stems of the host plant. Most pupate near the base of grass stems within the grass canopy. The pupae are blue green with a series of black stripes, which make the chrysalids all but invisible in the grass. The adults emerge from the pupa in about 10 days. After eclosion, the adults climb to a position near the top of the canopy, expand their wings and are ready to fly in about one hour. Adults are active from mid July to mid August.

As noted earlier, the Maritime Ringlet is unusual among North American butterflies in that the entire life cycle of the butterfly occurs in a salt marsh habitat. During parts of the monthly tide cycle the salt marsh vegetation may be covered to a depth of 0.5 to 1.0 meters. All life stages of this butterfly are therefore exposed to the effects of flooding by salt water for several hours during these high tides. Insects in general are not able to withstand extended exposure to salt water, and thus one finds few species in this kind of habitat. That is not to say that one does not find many insects in salt marshes. Anyone who has walked through a salt marsh during the summer has experienced the hordes of blood thirsty salt marsh mosquitoes. How the various life stages of the Maritime Ringlet and these other specialists withstand exposure to salt water, remains to be determined.

### Threats to the Maritime Ringlet.

Most of the salt marsh in the estuary of the Peters River is largely privately owned, residential, or recreational property. Small scale in-filling and clearing of adjacent buffer zone habitats by individual property owners, runoff containing domestic herbicides, pesticides, detergents, and lawn fertilizers represent a major threat to this species and are difficult to regulate. Since the entire life cycle of this insect is subjected to periodic flooding by salt water during the tide cycle, populations of this butterfly are particularly vulnerable to waterborne pollutants. Continued urban expansion in this region will likely result in a deterioration of the habitat and reduction in population size, unless steps are taken to stop these activities.



Caterpillar of Maritime Ringlet Butterfly  
Photo: A.W. Thomas



## Steps to Protect the Maritime Ringlet.

Two populations of the Maritime Ringlet at the Daly Point Reserve and Carron Point are protected through corporate stewardship agreements with Noranda and the Province of N. B. These salt marshes and surrounding habitats, which are owned by Noranda, have been established as nature reserves. Steps have been initiated to establish stewardship agreements with the numerous landowners of the salt marsh in the estuary of the Peters River. Gilles Godin, the regional biologist of the N.B. Department of Natural Resources and Energy in Bathurst is playing a lead role in this process. Numerous personnel from the Province, municipalities of Bathurst and Barendorf, and non-

government organizations have played a critical role in securing funding for research and establishment of current stewardship agreements. It is hoped that these continuing efforts will ensure that this unusual butterfly will continue to fly through these salt marshes in the future.

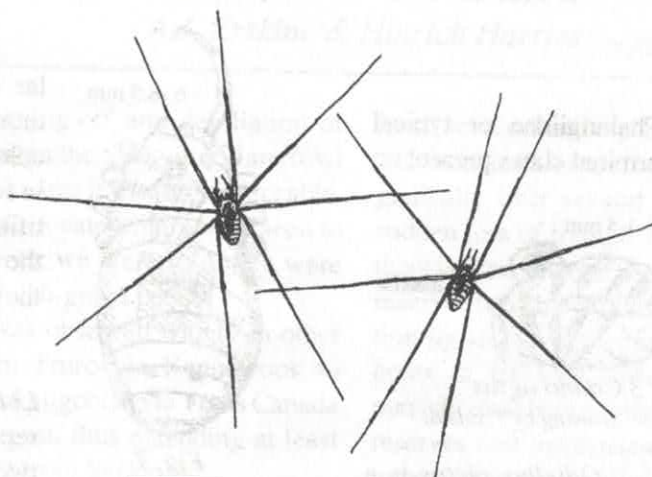
Much of the above research effort has been supported by The Endangered Species Recovery Fund of the World Wildlife Fund, The New Brunswick Environmental Trust Fund, The New Brunswick Wildlife Council Trust Fund, Noranda, The New Brunswick Department of Natural Resources & Energy and the Canadian Forest Service.

## Phalangida (Harvestmen) of New Brunswick

Jim Edsall

The order Phalangida (Harvestmen) is part of the class Arachnida. Its closest relatives are the Aranaea (spiders) and Acarina (mites). Unlike these two orders, the order Phalangida is rather small and does not display their incredible diversity. The legs of Harvestmen are usually three to four times longer than the body and they are known colloquially as Daddy-long-legs.

The Harvestmen are superficially similar to spiders. They have eight legs, usually longer than their bodies, and they feed with palpi and chelicerae. They, however, differ morphologically from the spiders in that their cephalothorax is joined broadly to the abdomen giving them a rather elliptical or football shaped body. The Phalangida have only one pair of eyes, instead of the spider's three or four pairs, and they are located on a tubercle on top of the cephalothorax. Harvestmen also lack the silk producing organs of spiders and therefore feed by



Adult Harvestmen (Daddy-longlegs)  
drawing:: J. Edsall

actively hunting or grazing. In some areas the Phalangida are significant predators of aphids and other small herbivores. Some species are omnivorous and will eat both animal prey and vegetative matter.

In most cases, positive identification of Harvestmen must be made using magnification of at least 10x and some cases certain features will be only visible with 50x magnification. Some species however are recognizable, with

experience, without magnification.

Features that are used in identification are the eyes, chelicerae, palpi and leg structure. While many species have central markings on the abdomen, these are variable and rarely useful in identification. General coloring and size can be useful identification features. Many species display a marked sexual dimorphism with the females appearing larger and paler with a more pointed abdomen. The features show the salient features of each species. Only the base of



the legs (coxa) are shown and in most, only one palp. Sizes given are for mature individuals.

Seven species of Harvestmen have been identified as occurring in New Brunswick. These represent two families of the suborder Palpatores.

The first family, Ischyropsalidae, is represented by one unique little species *Sabacon crassipalpe*, measuring 3-4 mm. It is readily recognizable by the form of the palps which are stout, bristly and very obviously segmented, like sausage links, (Fig. 1,2). The palps lack terminal claws, the only one of our species to do so. This species is found mainly in forested areas where it lives in the leaf litter.

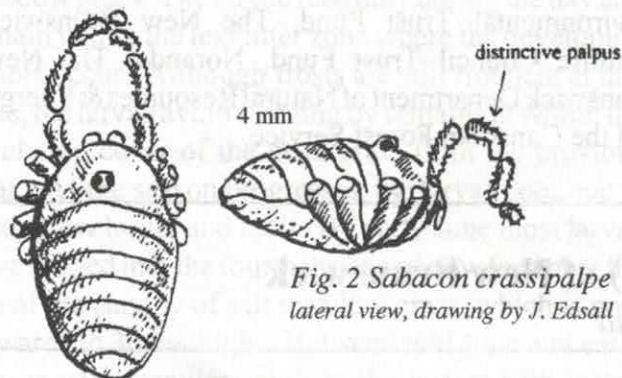


Fig. 1 *Sabacon crassipalpe*  
dorsal view, drawing by J. Edsall

The second family is the Phalangidae or typical Harvestmen. These species have terminal claws present on the palps.

*Caddo agilis* is our smallest species, averaging only 1.5 mm. It is characterized by its proportionally enormous eyes, (Fig.3).



Fig. 3 *Caddo agilis*  
lateral view, drawing by J. Edsall

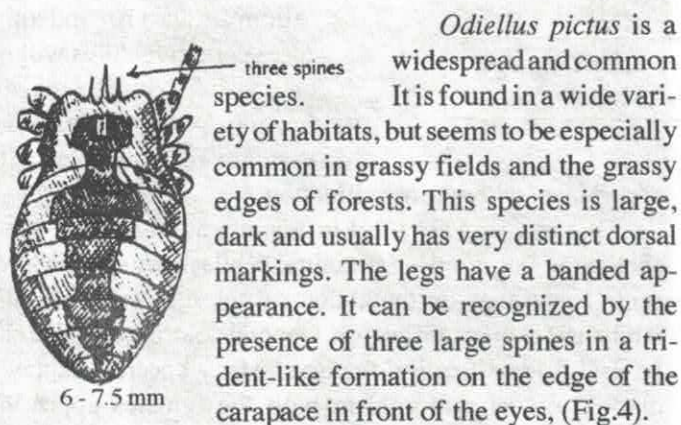


Fig. 4 *Odiella pictus*  
dorsal view, drawing by J. Edsall

*Odiella pictus* is a widespread and common species. It is found in a wide variety of habitats, but seems to be especially common in grassy fields and the grassy edges of forests. This species is large, dark and usually has very distinct dorsal markings. The legs have a banded appearance. It can be recognized by the presence of three large spines in a trident-like formation on the edge of the carapace in front of the eyes, (Fig.4).

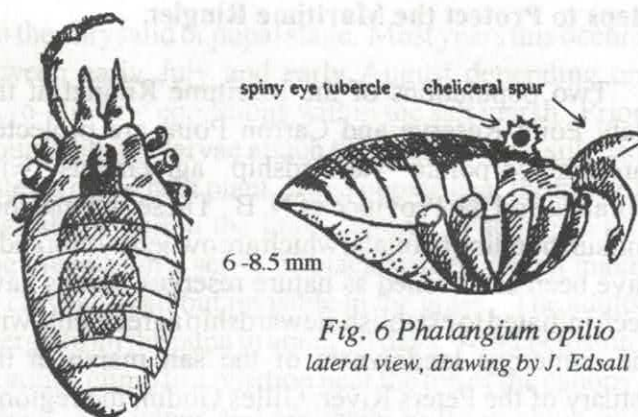


Fig. 5 *Phalangium opilio*  
dorsal view, drawing by J. Edsall

*Phalangium opilio* is a large species which is common in disturbed areas. It is well marked and in the male, has a very distinctive large spur on top of the chelicera, (Fig.5,6). In either sex it can be identified by the presence of six or seven spines around each eye. This species can be frequently seen around buildings, on foundations and along roadsides. It seems to have a distinct preference for areas that have been heavily disturbed and have bare earth and low vegetation.



Fig. 7  
*Opilio parietinus*  
dorsal view, drawing  
by J. Edsall

*Opilio parietinus* is very similar to the preceding species although tends to be a paler brown colour. It is more likely to be found in forested areas and can be identified by the lack of spines around the eyes and the lack of a spur on the chelicera of the males, (Fig.7).

The genus *Leiobunum* is represented by two species. identified by the presence of a row of denticles

on the coxa of most legs, (Fig. 11). These are only detectable under high magnification. Our two species can usually be recognized by their tan or golden-brown colouring, their very long slender legs and the rather pointed abdomen, which gives the body a football shaped appearance. They tend to be more arboreal than other species.



Fig. 8  
*Leiobunum calcar*  
dorsal view, drawing by  
J. Edsall



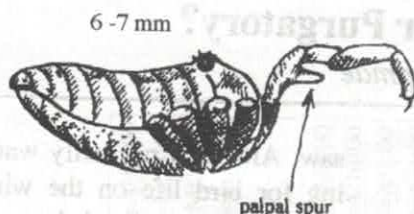


Fig. 9 *Leiobunum calcar*  
lateral view, drawing by J. Edsall



Fig. 10 *Leiobunum ventricosum*  
dorsal view, drawing by J. Edsall



Fig. 11 *Leiobunum ventricosum*  
lateral view, drawing by J. Edsall

*Leiobunum calcar* is a forest dweller often seen sitting on the leaves of shrubs. It seems to be the most frequently encountered species in the forest. This species is large, slender and long legged. The body is tan coloured with the legs contrastingly dark brown. The male has a large spur on the femur of the palp, (Fig. 8,9). This is replaced by several black tipped tubercles in the female. The eye often has several small spines around it.

*Leiobunum ventricosum* is another large, slender species of forested areas. Similar to the preceding species in

general appearance, it is usually more golden brown with the legs concolorous. Its eyes lack spines and the palps lack spurs of tubercles. The abdomen is more pointed, sometimes extremely so, (Fig. 10,11).

#### Bibliography

- Barnes, R.D., 1968. Invertebrate Zoology, (2nd Edition). W.B. Saunders Co., Toronto, Ontario.  
Edgar, A.L., 1966. Phalangida of the Great Lakes Region. The American Midland Naturalist, 75(2): 347-366.

## Recent local defoliation

A.J. Erskine & Hinrich Harries

Most of us noticed browning-off and defoliation of speckled alders (*Alnus rugosa*) in the Sackville Waterfowl Park last summer (2000). In this area it was very noticeable. If you looked closely, small black caterpillars were seen to be the active defoliation agents; we were told they were larvae of a small iridescent bluish-green beetle.

The same phenomenon was observed widely in other locations. We noted it from Truro via Kennetcook to Windsor in late July, and from Antigonish via Trans Canada Highway to Truro in mid-August, thus extending at least 100 km south and 200 km east from Sackville.

The browning-off was unsightly, and subsequent defoliation looked as if winter had come before its time, but some new foliage appeared on many alders in the waterfowl park by late August. Such regrowth after early-season defoliation is not unique. In early July 1964 in Alberta, I drove 200 km past aspen forests defoliated by forest tent caterpillars; a month later the same stands were green with new leaves.

Broad-leaved trees and shrubs shed leaves and grow new ones every year. Presumably repeated defoliations would exhaust their reserves, but a sometime event such as we saw here probably can be taken in their stride by such species.

Conifers are different. Instead of shedding their leaves

(read needles) and replacing them every year, as do larches and broadleaved trees, our conifers shed and replace foliage gradually over several years. When conifers experience a sudden loss of foliage (for example by spruce budworm), there is a much larger than usual growth demand, without the reserves broad-leaved trees have evolved. A severe infestation by spruce budworm, such as that experienced hereabouts in 1974-75, kills many Firs and (White) Spruce outright, and leaves others barely surviving, with depleted reserves and insufficient foliage to replenish them. Such unhealthy trees are still obvious between here and Dorchester 25 years later.

Future observations will show whether this defoliation will result in any significant die-back of alders. It will also show whether this outbreak was an isolated and fortuitous event - or the beginning of a new endemic situation caused by some change in the environment. In the latter case, it might cause a lasting decline of the speckled alder. This species is a main component in the plant cover of the Maritime Provinces and, because of its nitrogen fixation and easily decomposable, nutrient-rich leaf litter, a major factor in the development of forest soils and nutrient capital. Its decline would thus have extensive consequences in the ecology of our area.



## A Winter of Marsh Birding - Paradise or Purgatory?

Ruth Miller, artwork by Kathy Bunker-Popmae

In early November 1999 KathyBunker-Popmae-mailedme with an interesting proposal. Both she and I have visited the Tantramar Marsh many times over the last 20 years but never on a systematic basis. And mostly in the spring, summer and fall. How about the two of us do a weekly survey of the marsh during the winter and keep statistics of the birds and mammals we find? We would go by car as well as do some walking. Saturday morning was suggested as a suitable time and we would go rain or shine; it should only take about an hour. Sure, I agreed to this. It sounded like fun. We would visit the marsh once a week from mid-November to mid-April and consider it our millennium project. We would also post highlights of each week's trip on the NatureNB listserv.

The Tantramar marsh is almost our backyard being only a five minute drive from our homes in Sackville, NB. The marsh area around the head of the Bay of Fundy in both New Brunswick and Nova Scotia is huge, about 49,000 hectares. It is the largest expanse of dyked marshland in North America. The part of the Tantramar marsh we chose for our survey is 55 sq. km or about 1/8 of the entire marshland.

Nowadays this marsh is primarily used for cattle grazing and growing hay. Canada's short wave broadcasting station, Radio Canada International, with its massive curtain of wires and towers is located on one edge of the marsh. Farms and homes (with feeders) are along its other borders. Small stands of trees and occasional shrubs pocket the landscape. The Tantramar and Aulac rivers and several creeks meander their way to the Bay of

Fundy. The main power lines to Nova Scotia and Prince Edward Island cross through the middle of the marsh. Their large metal and wood pylons are wonderful perches for birds of prey. Marsh barns for hay storage are scattered across the fields and their roofs too provide perching spots for birds. Mostly, though, the marsh is a vast open space.

The Tantramar marsh is accessible by dirt road - most of the time. Drifting snow and soupy spring roads did create some driving problems and detours. We alternated driver and compiler each week and kept track of everything we



saw. Although primarily watching for bird life on the winter marsh, we also listed the mammals and tracks seen.

As well we noted nature in general - the phenomenon of the snow devils or snow rolls which welcomed in the millennium on January 1, 2000, the sparkling hoar frost mornings, the sea smoke rising from Morice Creek, the col-

lapse from the wind of four marsh barns (leaving fewer than 30 on the marshes compared to 360 in 1950). We observed the results of human activity too - the hay rolls dotting the fields, the muskrat traps in the water of Goose Creek, the discarded carcasses of 6 Green-winged Teal in a marsh barn, abandoned farm machinery.

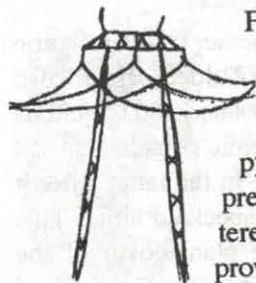


Snow Devils

And so we began a 23 week survey of life on a winter marsh, sometimes in fair weather and sometimes in foul. The coldest day, Jan. 15/00 was minus 20C with a wind chill of minus 45C. The warmest day was Nov. 29/99 at plus 14C. The marsh tends to be windy and 17 of the 23 Saturdays had wind ranging from light to a high of 80km on March 4/00. We had sun, cloud, rain, snow and fog. It is hard to see in the last three but we persevered. We had told ourselves we would go no matter what the weather.

Our route was 35km around part of the perimeter of the marsh and a big X through the middle. Although always watching for sightings, we made 12 designated stops along the route to look and listen. The first thing we learned was that the one hour estimated time was very much an understatement. Three to four hours became the norm. Dressing warmly was a necessity. Binoculars, scope, bird, mammal and track books were in the car and we regretted not bringing cameras every Saturday.

Statistics were kept of the bird species and number of individuals seen. Except that individuals were not counted for Crows, Ravens, Starlings, Rock Doves, Herring and Ring-billed Gulls. Not counting individual gulls was probably a mistake. A total of 56 species were seen in the 23 weeks. Some were seen often and some only once. The highest daily count was 35 on our last trip on April 16/00.





## Tantramar Marsh Survey, November 13, 1999 through April 16, 2000

Species	comments	Nov	Dec	Jan	Feb	Mar	Apr	Total	Greatest Number seen and Date Observed	Notes
Double-crested Cormorant								1	1	FSS=A/16/00
Great Blue Heron		1						1	1	LAS=N/13/99
Canada Goose			1					3	127	FSS=M/11/00
Green-winged teal		1						2	3	FSS=A/1/00
American Black Duck		1	1	1	3	4		10	57	
Mallard		3	2	2	4	4		18	160	
Northern Pintail								1	5	FSS=A/8/00
Blue-winged Teal								1	2	FSS=A/16/00
Northern Shoveler								3	7	FSS=A/1/00
Gadwall								1	4	FSS=A/8/00
American Widgeon								2	4	FSS=A/8/00
Ring-necked Duck								3	13	FSS=A/1/00
Greater Scaup								2	5	FSS=A/8/00
Common Eider								1	43	FSS=M/25/00
Common Goldeneye		1	2		2			5	5	
Common Merganser		2	2	1	3	2		12	39	
Bald Eagle		2						1	4	N13, 25/99, M25, A1/00
Northern Harrier			2					1	3	D12/99, A/16/00
Sharp-shinned Hawk								1	2	F/26, M/4/00
Northern Goshawk								1	1	J/1/00
Red-tailed Hawk								1	2	M/11, A/1/00
Rough-legged Hawk	winter resident	3	4	4	3	3		20	9	seen N/13/99
American Kestrel								1	1	FSS=A/1/00
Merlin			1					1	2	FSS=A/16/00
Ring-necked Pheasant		3	2	5	4	4		3	21	1 Green Pheasant A/8/00
Killdeer								1	2	FSS=A/8/00
Common Snipe								1	1	FSS=A/16/00
Ring-billed Gull		2	1					2	6	FSS=M/19/00 LAS D/4/99
Herring Gull		1	3	4	3	1		2	14	
Iceland Gull	winter resident	2	4	2	3	3		3	17	seen N/20/99 A/16/00
Great Black-backed Gull		3	3	2	3	3		3	17	
Rock Dove		2	3	5	4	4		3	21	
Mourning Dove			3	1	2	1		2	9	D/12/99
Short-eared Owl								1	2	F/12/ A/16/00
Belted Kingfisher								1	1	FSS=A/16/00
Northern Flicker		2						1	3	FSS=A/16/00 LAS=N/20/99

FSS = First Spring sighting; LAS = Last Autumn sight

23 Trips of approximately 35 km., 2.25 to 4.5 hrs per trip; 18 on Saturday morning, 4 Sunday morning, 1 Sunday afternoon

Temperature range: -20° (J/15/00) to +14 (N/29/99); Weather ranging from sunny, cloudy, drizzly, raining, snowing to fog

Wind: from 0 to 80 km (Mar/4/00); Wind Chill - minus 45°C (Jan 15/00); Snow Cover - none to 14 (never more than 15 cm)



## Tantramar Marsh Survey, November 13, 1999 through April 16, 2000

Species      comments      Nov      Dec      Jan      Feb      Mar      Apr      Total      Greatest Number seen      Notes

Species	comments	Nov	Dec	Jan	Feb	Mar	Apr	Total	Greatest Number seen	Notes
									and Date Observed	
Horned Lark						1		1	2	M/25/00
Gray Jay					1			1	2	J/1 F/26/00
Blue Jay			2	3	2	2	3	12	6	F/19/00
American Crow		3	4	5	4	4	3	23	129	J/22/00 in corn field day after storm
Common Raven		3	4	5	4	4	3	23	n/a	
Black-capped Chickadee			3	4	4	3	3	17	12	F/5/00
American Robin							3	3	3	A/16/00
Bohemian Waxwing	irregular winter visitor				2			2	19	F/5/00
Northern Shrike	winter resident		1	3				2	6	F/19,26/00
European Starling		3	4	5	4	4	3	23	n/a	
American Tree Sparrow	winter resident		1	4	1	2	21	9	10	D/26/99
Savannah Sparrow							1	1	2	A/16/00
Song Sparrow		1					1	3	5	A/8/00
Red-winged Blackbird							1	3	4	A/16/00
Common Grackle							2	3	5	A/16/00
Pine Grosbeak	irregular winter visitor		2					2	6	D/12/99
Dark-eyed Junco				3	2		2	7	9	A/16/00
Snow Bunting	winter resident	3	4	5	3	1		16	250	N/13/99
Common Redpoll	winter resident	3	4	5	4	4	2	22	73	N/20/99
House Sparrow			2	4	1	4	3	14	20	J/15/00
# of species/month		21	25	23	26	30	46			
Cumulative Total species		21	30	34	37	42	56			
# of trips/month		3	4	5	4	4	3	23		

FSS = First Spring sighting; LAS = Last Autumn sight  
 23 Trips of approximately 35 km., 2.25 to 4.5 hrs per trip; 18 on Saturday morning, 4 Sunday morning, 1 Sunday afternoon  
 Temperature range: -20° (J/15/00) to +14° (N/29/99); Weather ranging from sunny, cloudy, drizzly, raining, snowing to fog  
 Snow cover: none to 14 (never more than 15 cm)



The fewest species seen was 13 (twice) in December and January under frigid conditions. There were no rarities. Fifty-six is not a large species count but it was winter in New Brunswick after all.

We assumed we would see Rough-legged Hawks and we were not disappointed. With three exceptions, these hawks were seen every week. The average was three and the greatest number in one day was nine. We tried to sex and age the hawks as well as distinguish between light and dark phase but distance often made this impossible. Our biggest regret was not seeing a Snowy Owl. We were fooled three times by white plastic bags and a piece of ice.

Detailed statistics on the bird species are included at the end.

Mammals and/or tracks seen were coyote, fox, skunk, groundhog, muskrat, snowshoe hare, meadow vole and squirrel.

The most enjoyable aspect of the marsh trips was observing the behaviour the birds and mammals. We gained an appreciation and respect for their survival techniques in the cold and often inhospitable climate. Coming upon the unexpected was a thrill.

The flocks of Snow Buntings flit from seed head to grasses to road grit and we are huddled in the car trying to keep warm; neither cold nor wind deterred these small birds at all. Why do we seldom see the hawks and owls with prey when the reason they are on the marsh is the availability of prey species? The two coyotes gamboling in a field in January - is it just play or it is part of courtship? The surprising "green" pheasant which we subsequently found out are fairly common in this part of the province. Why were the two Crows chasing a Short-eared Owl? We were tense watching a Northern Shrike sneak up, fence post by fence post, on a unsuspecting Song Sparrow. The Sparrow finally sensed the danger and flew away. The elaborate courtship sky-dance of the male Northern Harrier was spell-binding.

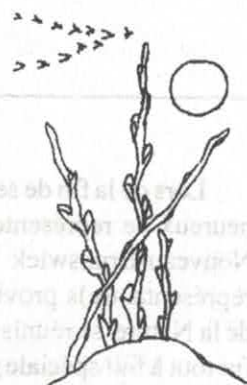
Was winter birding on the Tantramar marsh paradise or purgatory? Actually it was neither but it was certainly closer

to former than the latter. Somewhat to our surprise we came to really love the winter marsh and it has become a special place for us. It is never twice the same. One day it is sunny and crisp with hoar frost; the next week it is raining or snowing. Sometimes the birds almost come to us and other times it is a battle to find a dozen species. Winter birding on the marsh was fun, interesting and challenging.

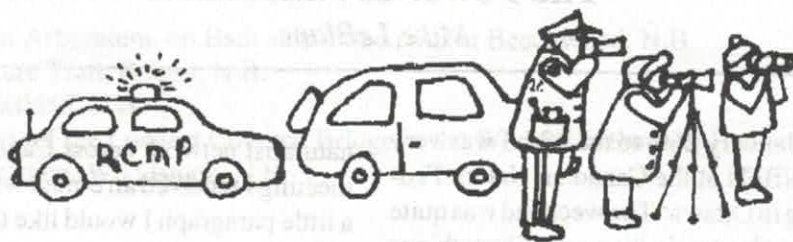
It must have been because Kathy and I are doing the survey again in 2000/01. As of early February 2001, it has been a very different winter than 1999/00. The snow cover is much deeper, temperatures are somewhat milder and there are fewer windy Saturdays. Rough-legged Hawks are here in greater number and we have finally seen Snowy Owls. Common Redpolls were, well, common in 1999/00 and this year we have not seen any. The opposite is true for American Goldfinch. We had only one sighting of Horned Larks in 1999/00. This year they are consistently hanging around the farms at the marsh edge.

We thank those people who answered our call on NatureNB to join us when either Kathy or I was away on a weekend. But don't wait for us to ask you, please ask us. We always welcome company on our Saturday outings; the more eyes the better. Please contact Kathy or me at the e-mail addresses below if interested in coming to the Tantramar with us.

But why not do the same sort of project in your local area. It does not have to be a marsh. It could be a city park, a farming area, a stretch of shoreline either river or ocean, a close-by woodland, etc. Nor does it have to be in winter, any season will do. It is more fun with a friend or two. Visit your chosen place often and in many conditions, keep statistics of your sightings. Learn as much as you can about your special place. Above all enjoy yourself.



*Pussy Willows & Geese*





## Ensemble

Mike LeBlanc

Lors de la fin de semaine du 26 au 28 janvier, j'étais très heureux de représenter la Fédération des Naturalistes du Nouveau-Brunswick à une rencontre où tous les représentant(e)s provinciaux de la Fédération canadienne de la Nature se réunissaient à Ottawa. Cette fin de semaine fut tout à fait spéciale pour moi. Cette rencontre m'a permis de mieux comprendre la façon dont les naturalistes travaillent au plan national. Le thème de la fin de semaine était d'établir un réseau de communication entre les naturalistes à travers le Canada. Quelques semaines avant la réunion, j'ai reçu un courriel avec un document préparatoire aux discussions et un petit paragraphe sur la définition d'un naturaliste a attiré mon attention et je voudrais le partager avec vous : "Les naturalistes apportent une perspective unique au mouvement environnementaliste et de conservation. Les naturalistes privilégient l'observation et la connaissance spécifique des espèces et leur intérêt principal est l'observation de la nature." Des naturalistes tels que John Muir, Aldo Leopold, E.O. Wilson, Rachel Carson et Paul Ehrlich ont opté pour cette définition.

Ce petit paragraphe m'a ouvert les yeux. J'ai beaucoup réfléchi durant le voyage de retour de vingt heures sur le train. Comme naturalistes, nous tendons souvent à être tranquilles et faire nos petites choses, soit en observant les oiseaux, les plantes, les libellules et etc. Nous avons notre endroit spécial pour nos activités d'observation, et nos marches en nature. Il faut que nous réalisons la force que nous possédons dans notre communauté, notre province ou dans l'ensemble du Canada.

Quand nous nous arrêtons et pensons à ceci, nous sommes environ deux cents trente membres directs de la FNNB en plus de tous les membres de nos douze clubs fédérés. Nous composons une voix forte auprès du gouvernement de notre

province et de notre pays. Nous devons faire entendre nos opinions sur les sujets qui concernent l'environnement. Si on pense qu'un projet est bon qu'on le dise aux membres de notre gouvernement. Nos députés provinciaux ont besoin d'entendre parler de nos opinions. Dernièrement ils ont entendu de la rétroaction négative en regard aux aires protégées dans le N.-B. Un appel téléphonique ou un courriel ou un court message prend juste une petite minute. Cela peut aider à la protection de l'environnement. Les élus ne savent pas ce que l'on pense il faut faire connaître nos idées. Il est bon de laisser savoir à nos députés et ministres qu'il est temps que les sites proposés dans le rapport final de Louis Lapierre soient protégés. Agissons avant qu'il soit trop tard. Des lettres dans les journaux de la province peuvent être utiles aussi. Avec nos démarches positives nous pouvons obtenir des sites spéciaux protégés.

En ce moment, le gouvernement fédéral étudie un projet de loi sur les espèces en danger. C'est la 3e fois que le projet est déposé à Ottawa. Même s'il a quelques sections qui pourraient être améliorées, il vaut la peine que l'on rappelle à nos députés fédéraux que le projet nous intéresse et que nous le supportons. Vous pouvez vérifier le site web de la Fédération canadienne de la Nature ([www.cnf.com](http://www.cnf.com)) pour en connaître d'avantage.

Ensemble nous pouvons avoir une voix forte auprès du gouvernement du Nouveau-Brunswick et du Canada. Ensemble nous pouvons accomplir des petites choses qui font la vie d'un naturaliste intéressante et amusante.

Au retour, le dernier oiseau que j'ai eu la chance de voir en Ontario fut un harfang des neiges. Quel magnifique spectacle! Un harfang des neiges s'envola de très près du train, j'ai presque sauté debout en criant : "Regardez un harfang des neiges". Quel bel oiseau!

## The Power of Naturalists

Mike LeBlanc

On the weekend of January 26th to the 28th I was very happy to represent the NBN at the Canadian Nature Federation affiliates meeting in Ottawa. The weekend was quite special to me and got to understand a bit more of how things work on a national level as well as certain things on the provincial level. The theme of the weekend was to build a

naturalist network across Canada. A few weeks before the meeting I received an e-mail with a document and there was a little paragraph I would like to share. What is a Naturalist?

Naturalists bring a unique perspective to the environmental and conservation movement. With a strong empha-



**Welcome to the New Brunswick Federation of Naturalists' (NBFN)  
2001 Annual General Meeting  
(2001 AGM)**

**May 11<sup>th</sup> – 13<sup>th</sup>, 2001**

**Hosted by Ford Alward Naturalists' Association  
Florenceville Village Hall  
381 Main Street  
Florenceville, N.B.**

**NOTE:** All activities will be held or start from Florenceville Village Hall except the banquet and AGM being held at Mount Pleasant Community Hall, Mount Pleasant, NB

**Outing Descriptions:**

**(1) Falls Brook Centre Hike – Leader: Sarah Shima**

Falls Brook Centre is located in Knowlesville, New Brunswick. It is a sustainable development site located on 400 acres in the Acadian Forest Ecosystem. Over 10 kms. of forest trails have been developed with boardwalks, hanging bridges and signage for understanding about the biodiversity of our Acadian Forest Region. Four ponds with walkways and signage of the plants of the area give visitors exposure of aquatic life in this region of the Maritimes. Please visit the web page: <http://www.fallsbrookcentre.ca>. There will be a \$2.00 entrance fee.

**(2) Discover Carleton County with Jim Goltz.**

What can one say, Jim knows his birds, rare ferns, violets and grasses. We are sure you will enjoy the day of learning!! Different sites will be visited each day.

**(3) Canoe on Williamstown Lake.**

Williamstown Lake is a dead water lake, near Lakeville, Carleton Co. Explore it with Gart Bishop & Jim Brown, seeing the birds & plants surrounding the lake. Canoe rental \$15.00/per person; maximum 26 people & bring your life jacket!!

**(4) Saint John River Valley – Leaders: Randy Audfroid (bilingual) and Kai Vido**

A vigorous hike on the NB Trail system.

**(6) Trees with Dean – Leader Dean Butterfield, local storyteller and historian**

This tour will visit a royal oak, a basswood tree, the biggest tree in New Brunswick and the Beechwood Arboretum.

**Some other ideas to go on your own in Carleton County:**

1. The New Brunswick Trail System is often close to the Saint John River between Hartland and Beechwood.
2. Beechwood Dam Arboretum, on Bath side of the river at Beechwood, N.B.
3. Skiktehawk Nature Trail, Bristol, N.B.
4. Nature Trail, Hartland, N.B.
5. 100<sup>th</sup> Anniversary of the Longest Covered Bridge in the World, Hartland, N.B.
6. Ecological Classroom, Woodstock, N.B.





**Bienvenue à l'Assemblée générale annuelle 2001 de la  
Fédération des Naturalistes du Nouveau-Brunswick (FNNB)  
(AGA 2001 )**

**Du 11 au 13 mai, 2001**

**Organisée par la  
Ford Alward Naturalists' Association  
Édifice municipal de Florenceville  
381 rue Main  
Florenceville, N.-B.**

**VEUILLEZ NOTER:** Toutes les activités auront lieu à, ou partiront de, l'édifice municipal de Florenceville, sauf pour le banquet et l'AGA qui auront lieu au Mount Pleasant Community Hall, Mount Pleasant, NB

**Description des excursions:**

**(1) Excursion au Falls Brook Centre avec Sarah Shima**

Falls Brook Centre est situé à Knowlesville, Nouveau- Brunswick. C'est un centre de démonstration de développement durable situé sur un site de 400 acres qui fait partie de l'écosystème de la Forêt acadienne. Plus de 10 kms de sentiers forestiers ont été développés avec trottoirs de bois, ponts suspendus et affichage pour aider à mieux comprendre la biodiversité de la Forêt acadienne de notre région. Les quatre étangs avec cheminement piétonnier et l'affichage des plantes de la région donne aux visiteurs un aperçu de la vie aquatique dans cette région des Maritimes. Veuillez visiter la page Web: <http://www.fallsbrookcentre.ca>. Il y a un frais d'entrée de 2 \$.

**(2) Découvrez le comté de Carleton avec Jim Goltz.**

Que dire de plus? Jim connaît ses oiseaux, ses fougères, ses violettes et ses graminés. Nous sommes assurés que vous allez vraiment profiter de cette journée d'apprentissage!! Des sites différents seront visités à chaque jour.

**(3) Canotage sur le lac Williamstown.**

Le lac Williamstown est un lac d'eau morte, près de Lakeville, dans le comté de Carleton. Explorez ce lac avec Gart Bishop & Jim Brown, pour y voir les oiseaux et les plantes qui vivent alentour du lac. Location de canot 15 \$/par personne; maximum de 26 & apportez votre gilet de sauvetage!!

**(4) Vallée de la rivière Saint-Jean – Leader: Randy Audfroid (bilingue) et Kai Vido**

Une randonnée vigoureuse sur le réseau de Sentiers NB.

**(5) Rencontrez les arbres avec Dean – Leader: Dean Butterfield, historien et raconteur local. Cette tournée va visiter un chêne royal, un tilleul, le plus gros arbre au Nouveau-Brunswick et l'Arboretum de Beechwood.**

**D'autres idées de visites individuelles dans le comté de Carleton**

1. Le réseau de Sentiers NB Trail est souvent près de la rivière Saint-Jean entre Hartland et Beechwood.
2. Arboretum du barrage de Beechwood, en haut de Bath, de ce côté là de la rivière à Beechwood, N.-B.
3. Sentier de nature Shiktehawk, Bristol, N.-B.
4. Sentier de nature, Hartland, N.-B.
5. 100ième anniversaire du plus Pont couvert le plus long au monde, Hartland, N.-B.
6. Classe écologique (Ecological Classroom), Woodstock, N.-B.





**AGM 2001 Registration Form  
Formulaire d'Inscription AGA 2001**

Name/Nom \_\_\_\_\_

Address/Adresse \_\_\_\_\_

Tel/Tél: \_\_\_\_\_

E-Mail/Courriel \_\_\_\_\_

Name of Club/  
Nom du club \_\_\_\_\_

**Costs/Coûts**

Banquet/Banquet \$15.00 x \_\_\_\_\_ \$ \_\_\_\_\_

Registration Fee  
Before April 20<sup>th</sup> \$15.00 x \_\_\_\_\_ \$ \_\_\_\_\_

After April 20<sup>th</sup> \$30.00x \_\_\_\_\_ \$ \_\_\_\_\_

Frais d'inscription  
Avant le 20 avril 15 \$ x \_\_\_\_\_ \$ \_\_\_\_\_

Après le 20 avril 30 \$ x \_\_\_\_\_ \$ \_\_\_\_\_

Box Lunches (Saturday) \$6.00x \_\_\_\_\_ \$ \_\_\_\_\_

Repas en sac (samedi) 6 \$ x \_\_\_\_\_ \$ \_\_\_\_\_

Box Lunches (Sunday) \$6.00x \_\_\_\_\_ \$ \_\_\_\_\_

Repas en sac (dimanche) 6 \$ x \_\_\_\_\_ \$ \_\_\_\_\_

Canoe Tour \$15.00x \_\_\_\_\_ \$ \_\_\_\_\_

Randonnée canotage 15 \$ x \_\_\_\_\_ \$ \_\_\_\_\_

Falls Brook Centre \$2.00x \_\_\_\_\_ \$ \_\_\_\_\_

Falls Brook Centre 2 \$ x \_\_\_\_\_ \$ \_\_\_\_\_

Total Enclosed: \$ \_\_\_\_\_

Total ci-inclu: \$ \_\_\_\_\_

**Circle outing of your choice**  
**Encerclez l'excursion de choix**

**Saturday/samedi**

- (1) Falls Brook
- (2) Comté Carleton Co. Goltz
- (3) Canoe/canotage
- (5) Trees/arbres @ Dean Butterfield

**Sunday/dimanche**

- (1) Falls Brook
- (2) Comté Carleton Co. Goltz
- (4) St. John River/Rivière St-Jean

**Please note**

The Ford Alward Naturalists' Association and the NBFN are not responsible or liable for injuries or damages to persons participating in any of the activities of the weekend of May 11 – 13, 2001. We the undersigned, accept to participate at **our own risk.**

**Veillez noter**

La Ford Alward Naturalists' Association et la FNNB ne seront pas tenus responsables de tout accident, blessure ou dommage subis par toute personne participant aux activités de la fin de semaine du 11 au 13 mai, 2001. Nous, soussignés, acceptons de participer à **nos propres risques.**

Signature(s) \_\_\_\_\_

Date: \_\_\_\_\_ 2001.

Pour toutes questions: 246-5572

Cheque or Money Orders/Chèque ou Mandat Poste

Payable to/Payable à

Ford Alward Naturalists' Association (FANA)

c/o Gary Moore

P.O. Box 237

Millville, NB

E6E 2L8





## Schedule

### Friday, May 11th

At 6:30 - 9:30 P.M. - A meet, greet and registration. Refreshments will be served during this time.

### Saturday, May 12<sup>th</sup>

6:30 A.M. - 8:30 A.M. - Free tea, coffee & muffins.

6:30 A.M. - 8:30 A.M. - Early bird walk

8:30 A.M. - 4:00 P.M. The following field trips will be offered:

- (1) Falls Brook Centre hike
- (2) Discover Carleton County
- (3) Canoe on Williamstown Lake
- (5) Trees with Dean Butterfield

6:30 P.M. A buffet banquet at Mount Pleasant Community Hall serving turkey and ham dinner C/W deserts, tea & coffee. (\$15.00 per person.)

8:30 P.M. - 10:00 P.M. AGM at Mount Pleasant Community Hall

### Sunday May 13

6:30 A.M. - 8:30 A.M. - Free tea, coffee & muffins

6:30 A.M. - 8:30 A.M. - Early morning bird walk

8:30 A.M. - 4:00 P.M. choice of other outings:

- (1) Falls Brook Centre hike
- (2) Discover Carleton County
- (4) Saint John River Valley hike.

## Programme

### Vendredi, 11 mai

De 18h30 - 21h30 - Séance d'accueil et inscription. Rafrâichissements servis.

### Samedi, 12 mai

06h30 - 08h30 - Thé, café et muffins gratuits.

06h30 - 08h30 - Randonnée matinale d'observations

08h30 - 16h00: Les excursions suivantes seront disponibles:

- (1) Excursion au Falls Brook Centre
- (2) Découvrez le comté de Carleton
- (3) Canotage sur le lac Williamstown
- (5) Rencontrez les arbres avec Dean Butterfield

18h30 Banquet au Mount Pleasant Community Hall, dîner avec dinde et jambon, accompagné d'un dessert, thé & café. (15 \$ par personne)

20h30 - 22h00 AGA au Mount Pleasant Community Hall

### Dimanche, 13 mai

06h30 - 08h30 - Thé, café et muffins gratuits.

06h30 - 08h30 - Randonnée matinale d'observations

08h30 - 16h00 - votre choix d'excursions

- (3) Excursion au Falls Brook Centre
- (4) Découvrez le comté de Carleton
- (5) Excursion dans la vallée de la rivière Saint-Jean

## **ACCOMODATIONS:**

### Beechwood Motel, Beechwood, N.B.

Phone (506) 278-5241

1 Bed 2 People = \$48.00 taxes extra

2 Beds 4 People = \$58.00 taxes extra

### Florenceville Motor Inn, Trans Canada

Florenceville, N.B.

Phone (506) 392-6053

1 Bed 2 People = \$82.50 taxes extra

2 Beds 4 People = \$89.50 taxes extra

### Ja-Sa-Le Motel, Near Hartland

Phone (506) 375-4419

1 Bed 2 People = \$ 50.00 taxes extra

2 Beds 4 People = \$ 50.00 taxes extra

## **HÉBERGEMENT:**

### Beechwood Motel, Beechwood, N.-B.

Tél: (506) 278-5241

1 Lit 2 Personnes = 48 \$ plus taxe

2 Lits 4 Personnes = 58 \$ plus taxe

### Florenceville Motor Inn, Transcanadienne

Florenceville, N.B.,

Tél: (506) 392-6053

1 Lit 2 Personnes = 82,50 \$ plus taxe

2 Lits 4 Personnes = 89,50 \$ plus taxe

### Ja-Sa-Le Motel, près de Hartland

Tél: (506) 375-4419

1 Lit 2 Personnes = 50 \$ plus taxe

2 Lits 4 Personnes = 50 \$ plus taxe





sis on observation and specific knowledge of species, naturalists' interest, first and foremost, is the observation of nature. Prominent naturalists who have taken this view include John Muir, Aldo Leopold, E.O. Wilson, Rachel Carson and Paul Ehrlich.

This little paragraph was an eye opener for me and I realised a lot of things during the weekend, as I made my way home on the 20 hour train ride and since thinking about a lot of stuff that went on that weekend.

As naturalists we often tend to be quiet and do our little routines, either looking at birds in our special place, reading our botany books, waiting for the season to get here or just being naturalists and we don't realise the strength that we possess in our community, province or throughout Canada.

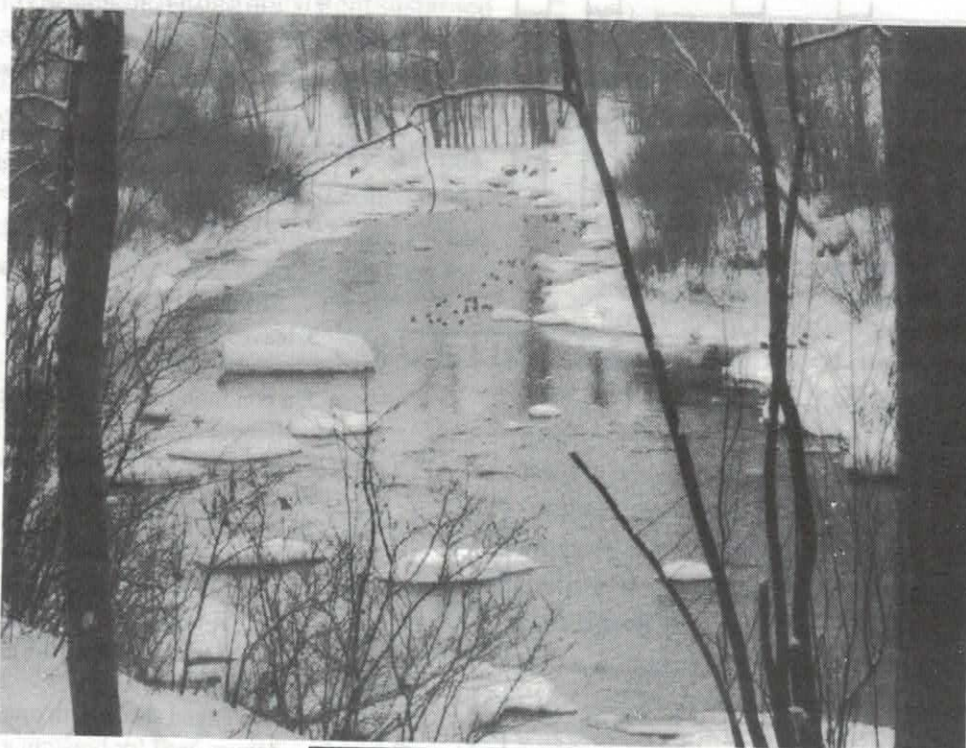
When we stop and think about this we are about 230 direct members of the NBFN and that is not counting all the members of our 12 affiliated clubs across New Brunswick. We do have a strong voice concerning things that involve the environment in NB and across Canada, but we have to speak up. There has been a bit of negative feedback lately about the protected areas in NB but not much positive feedback that is where we should be taking a few minutes of our time to call or go see our MLA's to let them know that it is about time that these sites be protected in NB and we need them

now and to let Premier Lord know also, to write letters to the editors of our local newspapers to let everyone know that this is a good thing for the province. With our positive help we can get this legislation passed.

It is the same for the federal species at risk legislation; it was tabled on February 2nd in Ottawa, although there are a few items that could be improved. You can communicate with the CNF to see the improvements that could be made or check their website. ([www.cnf.ca](http://www.cnf.ca)) We and the species still need this law and with our help it will be passed, so go see your federal representative to tell them that we need protection for our endangered species.

We are strong together, cuz we (the naturalists) in New Brunswick and Canada are strong if we work together for the little things that make being a naturalist so interesting and fun.

Just in passing when I was on the train between Ottawa and Montreal I almost made a fool of myself when a snowy owl flew from right beside the train and I almost jumped up and yelled "Hey look everybody a snowy" but in a way I was glad I didn't because the rest of the ride would of been very uncomfortable for me. But it was the last bird I seen in Ontario and what a bird it was.



Trout Creek, Sussex NB

Photo: G. Bishop



## Botany Quiz

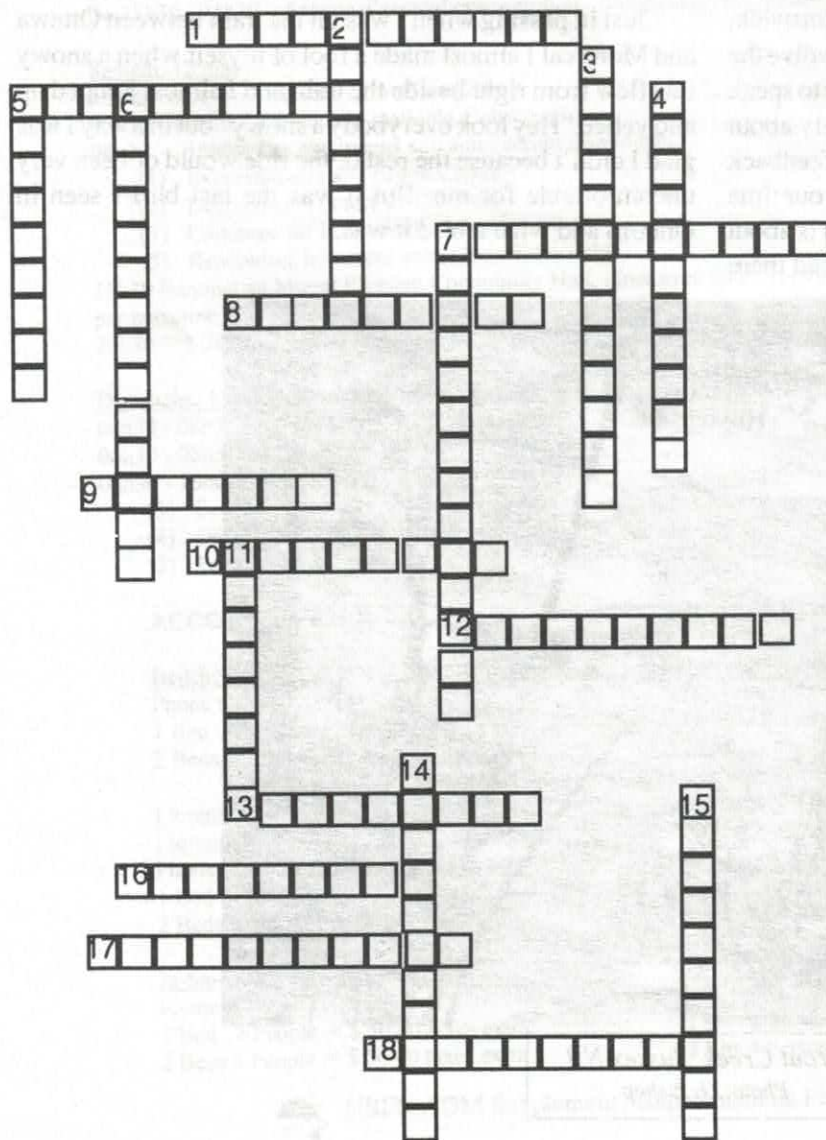
Gart Bishiop & Alison McArthur

The challenge for this issue is a crossword puzzle using the common English names of some of the shrubs and wildflowers of New Brunswick. Please note that some answers are composed of more than one word. The answer will appear in the next issue of the NB Naturalist.

In last issues' Botany Quiz, the answer to the previous issue question accidentally was omitted. The wildflower described in the Summer issue [Vol 27(2)] Botany Quiz was Rabbit's Foot Clover or Trèfle des champs or *Trifolium arvense*.

The question posed in the last issue [Vol 27(3)] was the origin of the common name "Serviceberry". I was pleased to receive from Bonnie Deveau the following response which agrees with what I had been told. .

"Those who died in the Appalachian region in winter could not be buried and the coming of the 'berries' blossoms in spring signalled the time for the memorial services to be done."



### Crossword Clues

#### Down

2. a dandelion impostor found in the early spring .
3. a wild cousin of the garden's bleeding heart, blossoms are a delicate pink and yellow
4. a space-bound lady
5. a troublesome young hen.
6. the frills of a royal lady's dress
7. a soft-soled lady slipper.
11. a raptor's flower.
14. an aquatic, carnivorous plant with modified sack-like leaves
15. a weak-stemmed plant with leaves in whorls of 6-8; untamed and perhaps a little insane

#### Across

1. a wagger moving in great excitement; a hopping Elizabeth
5. leaves in five; shiny, metallic paper for part of your kitchen plumbing
7. a common field shrub named for a sugary habitat
8. a mug associated with a dairy product
9. part of a feline's anatomy
10. a small daisy-like flower; an introduced species; some stink, some used for tea
12. a shrub used for a diviner's stick
13. a first-rate feline
16. another name for a flower that begs not to be touched
17. a wetland shrub with orange fuzzy under leaves used for brewing a hot beverage
18. a small woodland flower with evergreen leaves in threes, named for its bright yellow roots.



## Christmas Bird Count — 2000-2001

David Christie

Forty-five Christmas Bird Counts were conducted in New Brunswick this winter. The 44 summarized here (Edmundston report unavailable) tallied 178,695 birds, more than last year but well below the record of 1996-97. The 130 species reported on count day (+9 additional during the count period of Dec. 14 to Jan. 5) is 9 fewer than during the very mild early winter a year earlier but slightly above the average for the 1990s.

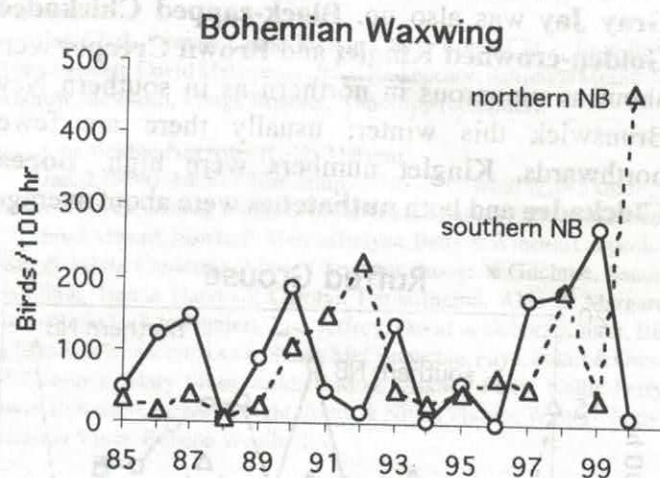
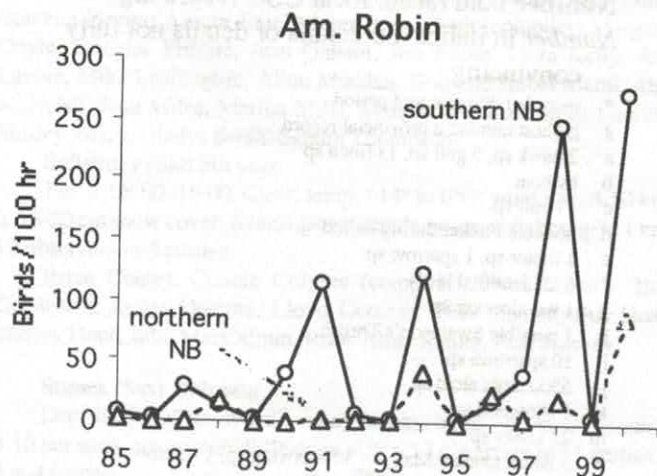
The only new species reported on count day was a **Redwing**, a vagrant European thrush, at Riverside-Albert. There was also a possible **Swainson's Thrush** at Florenceville. A **Sandhill Crane** at Hammond River-Hampton and a **Yellow-throated Warbler** at Moncton were firsts during the count period.

Other birds, particularly rare here in winter, were 3 **Little Gulls** at Campobello Island, a **Clay-colored Sparrow** at Shediac, and a count period **Tufted Titmouse** in the Florenceville area, .

On Christmas Bird Counts most species fluctuate up and down from year to year or over a period of a few years but three have been showing a consistent sustained change for several years. **Mourning Dove**, which has been increasing almost without a break for more than 25 years, reached its highest-yet levels in both southern and northern New Brunswick on this winter's counts. **House Finch** has been increasing almost as consistently for just over a dozen years. On the other hand, **House Sparrow** has declined for at least 25 years, but the rate

of decline has now slowed very much. **Northern Cardinal**, which has been increasing in a much less regular pattern than the others, remained about as numerous as last year.

The big crop of mountain-ash berries was responsible for, or contributed significantly to, the numbers of fruit-eating birds seen. Most notably it was a record year for **American Robin**, especially in the south but three northern counts also had large numbers. **Bohemian Waxwing** numbers were very high in northern N.B., but few in the south, while the less-numerous **Cedar Waxwing** was common in many places. There were also high numbers of **European Starling** and a record number of **Northern Flicker**, including 2 in the north.



A pretty good crop of conifer and birch seeds here and farther north affected finch numbers. It was an off year for **Common Redpoll** and **Red Crossbill**, which mostly stayed elsewhere. Also for **Pine Grosbeak** which, however, has a much more varied diet and was found in moderate numbers mainly in or near northern areas where it nests. More numerous were the species that breed widely in our province, particularly **American Goldfinch** which was found in high numbers in many areas. Moderately high numbers of **Purple Finch** and **Pine Siskin** occurred, while **White-winged Crossbill** was numerous in the north with a scattering southwards. Not influenced by small seeds, **Evening Grosbeak**, though present in significant numbers inland, was



generally low, as in the previous 3 years.

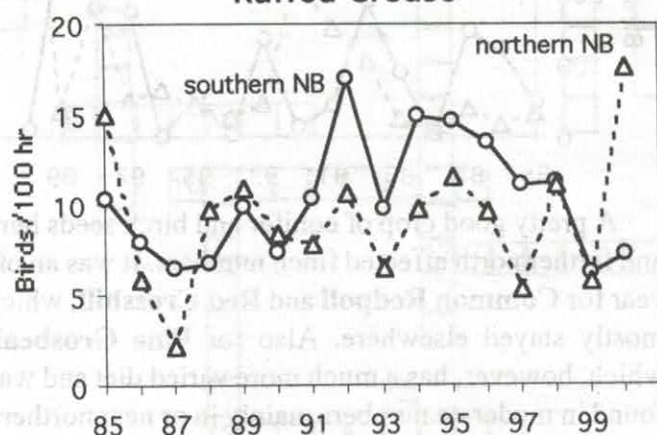
Seeds falling from the trees helped make it a good year for native sparrows. Deviating most from the norm were **Dark-eyed Junco**, high both north and south, **White-throated Sparrow** mainly in the south, and **Song Sparrow** just in the south. There was an unprecedented number of **Eastern Towhee**, 5 plus a sixth in count period.

Out in the open grasslands, **Snow Bunting** was high in the north (with big counts at Kedgwick, Lamèque and Glassville), and the scarce **Lapland Longspur** and **Horned Lark** at a few places in the south.

Numbers of **American Crow** were high throughout. Few blackbirds are found here in winter, but this year numbers of **Common Grackle** and **Red-winged Blackbird** were above the recent average because of a few local concentrations.

There were higher than usual counts of **Downy** and **Hairy Woodpeckers**, especially northwards, where **Gray Jay** was also up. **Black-capped Chickadee**, **Golden-crowned Kinglet** and **Brown Creeper** were about as numerous in northern as in southern New Brunswick this winter; usually there are fewer northwards. Kinglet numbers were high. **Boreal Chickadee** and both **nuthatches** were about average.

### Ruffed Grouse



**Ruffed Grouse** abundance, usually similar in southern and northern New Brunswick diverged this winter, being high in the north, low in the south. **Ring-necked Pheasant** numbers were high in several parts of southern New Brunswick.

Among predators this was a peak year for **Northern Shrike**, about a third higher than last winter's good

count. **Sharp-shinned Hawk** was unusually numerous throughout, often preying on the flocks of robins, waxwings and sparrows, as likely were several **Merlin**. Several **Northern Harriers** lingered in southern coastal locations. **Rough-Legged Hawk** was numerous at Sackville and Jemseg. Few **Barred Owls** and very few **Great Horned Owls** were counted. A moderate number of **Snowy Owls** and 3 **Northern Hawk Owls** reflected the much larger flights of them being experienced in central and western Canada.

Among waterbirds, the numbers of **Common Loon**, **Red-necked Grebe** and especially **Common Eider** were outstanding at the mouth of the Bay of Fundy, but **Great Cormorant** numbers were low. After a couple of low years, **Mallard** rose again to 25% of **American Black Duck** numbers. **Greater Scaup**, **White-winged Scoter**, and **Long-tailed Duck** (formerly Oldsquaw) were low. **Barrow's Goldeneye**, as usual mainly at Dalhousie, was high. **Hooded Merganser** continued an upward trend. **Common Merganser** was in good numbers, as was **Red-breasted Merganser** in the north.

Along the shore, it was a low year for **Purple Sandpiper**, a good year for **Ring-billed Gull** and low for **Bonaparte's Gull**. A record concentration of nearly 6000 **Great Black-backed Gulls** at Moncton pushed its provincial total to a new high. A high number of **Black Guillemot** was seen in the outer Bay of Fundy and an average number in the north. Otherwise alcid numbers were low.

### Abbreviations and footnotes to the tables

**Species bold faced:** first on N.B. CBCs

**Number bold faced:** local CBC record high

*Number in italics:* no details or details not fully convincing

- \* recorded during count period
- # highest number a provincial record
- a 2 hawk sp, 5 gull sp, 13 finch sp
- b by boat
- c 17 gull sp.
- d possible Flicker during period
- e 1 raptor sp, 1 sparrow sp.
- f 6 unidentified birds
- g 1 woodpecker sp.
- h 1 possible Swainson's Thrush
- i 10 sparrows sp.
- j 5500 large alcid sp.
- k 2 shorebird sp.
- m 25 scoter sp.
- n 3 Black Duck x Mallard, 30 waxwing sp, 1 sparrow sp.
- p 300+ scoters sp, 1 meadowlark sp.
- q 1 hawk sp, 1 grouse sp, 1 finch sp.



- r 1 blackbird sp, 20 crossbill sp.
- t likely a recent release or escapee
- u many of them released from a hunting reserve
- ++ much above average numbers
- + above average numbers
- below average numbers
- much below average numbers

*Results of the Miramichi, Dalhousie, Restigouche, and inland counts are presented in the first two pages of tables.*

#### Miramichi (Mir) 29th year

Dec. 27, 08:00-16:45. Clear to thin overcast; temp.  $-12^{\circ}$  to  $-2^{\circ}\text{C}$ ; wind almost none. 7 cm snow cover; practically all water frozen. 9 observers in 6 parties + 33 at 33 feeders.

Margaret Adams, Mrs. William Arnoldus, Joyce Atkins, Greg Bell, Jeep Bosma, Eileen Bransfield, Ivan Breau, Monica Charnley, Marilyn Churchill, Florence Currie, Gregg Currie, Rodney Currie, Barbara Digdon, Carl Gillis, Fidele Goguen Jr., Tom Greathouse, Fred Green Jr., Ralph Harrigan, Walter Holland, Joan Houston, Delbert Johnston, Richard Landry, Irene Loggie, Georgia McLean, Dave McLeod, Kathy Mercier, Madeleine Morrisette, Walter O'Toole, Greg Pickard, Irma Power, Mickey Reynolds, Lionel Richard, Mary Ripley, Eldon Rogers, Theresa Ross, Jim Saunders, Delta Steeves, Hayward Sturgeon, Doug Underhill, Harry Walker (compiler), Winnie Walker, Bun Worrell.

#### Dalhousie (Dal) 16th year

Dec. 30, ?-?. overcast, becoming clear; temp.  $-4^{\circ}$  to  $-1^{\circ}\text{C}$ ; wind NW, 20 km/h. 100% snow-cover; freshwater 100% frozen, bay and wider stretches of estuary open but had been more than 50% a couple of days earlier. 20 observers in 6 parties + 9 at 6 feeders.

Ruth Bulmer, Raymond Chiasson, Jim Clifford, Ray Clifford, Irene Doyle, Margaret Gallant Doyle, Suzanne Fontaine, Bob Gillis, Sandra Gulliver, Tom Gulliver, Ann Lavoie, Frances Letourneau, Guy Letourneau, Mike Lushington (compiler), Don Mann, Isobel Mann, Noella Meade, Irene MacNair, Ray MacNair, Gale MacKinnon, Veronica MacKinnon, Dave MacPherson, Martha MacPherson, Pat McGorlick, Shirley Sharpe, Rosa Soucy, Sandra Thompson, Andy Watson.

#### Restigouche (Rst) 11th year

Dec. 26, ?-?. Cloudy; temp.  $-10^{\circ}\text{C}$ ; wind 20-30 km/h. 30 cm snow cover; river 50% frozen. 11 observers in 6 parties + 18 feeders.

Wallace Best, Jean Paul Breton, Ruth Bulmer, Jean Caissie, Emily Clavette, Pierred'Amour, Exie Delaney, Irene Doyle (compiler), Margaret Doyle, Douglas Firlotte, Jean Gallant, Jim Katan, Flora Kelly, Ann Lavoie, Mike Lushington, Allan Madden, Don and Isabel Mann, Alan McNeish, Jean Miles, Marina Mills, Margot Richard, Jim St Laurent, Shirley Sharp, Gladys Swan, Sandra Thompson.

#### Salisbury (Sal) 8th year

Jan. 2, 08:00-16:00. Clear; temp.  $-14^{\circ}$  to  $0^{\circ}\text{C}$ ; wind SW, 5-10 km/h. 15-20 cm snow cover; rivers open at rapids, some stretches up to 1 km. 12 observers in 5 parties.

Brian Coates, Connie Colpitts (compiler), Pearl Colpitts, Bob Cotsworth, Jackie Decoste, Lloyd Decoste, Elsie Gallant, Sue Hoar, Shirley Hunt, Julia MacCallum, Rose-Alma Mallet, Ron Steeves.

#### Sussex (Ssx) 28th year

Dec. 16, ?-?. Cloudy with sunny breaks; temp.  $-6^{\circ}$  to  $-3^{\circ}\text{C}$ ; calm. 8-10 cm snow cover; very little open water. 17 observers in 11 parties + 5 at 4 feeders.

Laura Anderson, Tom Anderson, Wilma Arisz, Gart Bishop, Jim Brown (compiler), Darren Byers, Anne Candy, John Candy, Sonya Carhart, Anthea Doyle, David Hughes, Beth McFarlane, Carol McFarlane, Lawrence McFarlane, Barry McPhee, Jim McQueen, Anne Mosher, Gunnar & Lois Raven, Tom Snowden, Eldon Thorne, Colby Yeomans.

#### Hammond River-Hampton (Htn) 28th year

Dec. 27, 06:00-16:00. Sunny, with a few clouds; temp.  $-14^{\circ}$  to  $-5^{\circ}\text{C}$ ; wind NW, 20 km/h. Snow cover 12 cm; all standing fresh water frozen, including flowing portions of Hammond River and Darlings Lake. 20 observers in 7 parties + 29 at 27 feeders.

Beth Allaby, Bob Barton, Todd Beach, Richard Blacquiére, Merv Cormier, Barbara Crossley, Helen Darling, John Darling, Phyllis Darling, Hank Deichmann, Jean Dykeman, Mary Ellis, Ross Ellis, Linda Ewart, Gordon Foster, Lorna Fowler, Stuart Fraser, Bill Gentleman, Bill (Jr.) Gentleman, Jillian Gentleman, Allen Gorham, Janet Gorham, John Hanson, Bruce Harding, Evelyn Hazlett, Kathy Hazlett, Lowell Henderson, Peggy Kelbaugh, Nancy Ketchum, Tina MacIntosh, Harvey MacLeod, Shirley MacTavish, David McCurdy, Bill McKay, Juliette Nowlan, Alice O'Neil, Aliceann O'Neil, Elizabeth O'Neil, Geoff Sayre, Kathy Sessamen, Ron Sessamen, Peter Wilshaw, Brian Wilson, Gretchen Wilson, Jean Wilson, Jean (Sr.) Wilson, Jim Wilson (compiler), Phil Withers.

#### Hampstead/Queenstown (Qtn) 4th year

Dec. 29, 09:00-16:00. Clear to partly cloudy; temp. ?; wind N, gusting to 40 km/h. 100% snow cover; rivers, ponds, streams frozen except springs and fast-flowing sections. 11 observers in 5 parties + 1 at 1 feeders.

Ian Clark, Leanne Clark, Melvin Clark, Robin Clark, Enid Inch, Anne Fawcett, David Makepeace, Scott Makepeace, Adrienne McIntosh, Andrew McIntosh, Marge Roberts, Ann Slipp (compiler).

#### Cambridge-Narrows (C-N) 31st year

Jan. 2, 08:40-14:50. Clear; temp.  $-9^{\circ}$  to  $-5^{\circ}\text{C}$ ; wind W, 0-5 km/h. 25 cm snow cover; no open water. 13 observers in 8 parties + 23 at 16 feeders.

Ford Alward, Jean Bell, Marion Belyea, Betty & Winston Carpenter, Jean & Merle Carpenter, Marie Carpenter, Imogene Gilchrist, Sandra Hamilton, Hanna Handojo, Carolyn Hetherington, Alan & Margaret Hicks, Enid Inch (compiler), Lisa Jeffrey, David & Debora Kantor, Bill & Elva McConnachie, Dot & Sandy McConnachie, Faye, Stuart & Owen McCormack, Mary Moss, Mildred Moss, Audrey Perry, Nellie Perry, Joyce Robinson, Jackie Straight, Joyce & Niven Thorne, Walter Thorne, Virginia Viger, Robena Weatherley.

#### Jemseg (Jem) 38th year

Dec. 30, 08:00-16:30. Sunny a.m., overcast p.m.; temp.  $-11^{\circ}$  to  $-1^{\circ}\text{C}$ ; wind variable, 0-10 km/h. Ground snow-covered; water frozen. 14 observers in 6 parties + 1 feeder.

Margery Acheson, Susan Blair, Barbara Carroll, Don Gibson, Jim Goltz, Ann Marie MacDonald, David Myles, Lisa Palmer, Marvin Palmer, Peter Pearce, Shirley Sloat, Cliff Thornley, Owen Washburn (compiler), Ron Wilson.

#### Fredericton (Ftn) 45th year

Dec. 17, ?-?. Snow overnight, rain all day; temp.  $-3^{\circ}$  to  $+13^{\circ}\text{C}$ ; wind ?. Ground snow-covered; Ponds and lakes frozen, river partially open and opening more as the day went on. 43 observers in 25 parties + 21 feeder reports.

Yvon Beaulieu, Moira Campbell, Eric Carr, Mike Casey, Gerry Clayden, Merlene Crawford, Stanley Crawford, Rod Currie, Hal Dalzell, Tony Diamond, Lucy Dyer, Don Gibson, Margaret Gibson (compiler), Jim Goltz, Charles Graves, Jeremy Gullison, Hal Hinds, Susan Little, Tony Little, David Lounsbury, Cathy MacLaggan, Milda Markauskas,



Diane Mercier-Allain, Barry Monson, David Myles, Murray Neilson, Paul Nicholson, Jean Noble, Jim Noble, Margie Olive, Peter Papoulidis, Peter Pearce, Dwayne Sabine, Darla Saunders, Bev Schneider, Bill Seabrook, Jane Seabrook, Shirley Sloat, Jane Tarn, Richard Tarn, Cliff Thornley, Kevin Tutt, Ron Wilson.

#### **Mactaquac (Mac)** 21st year

Jan. 1, 07:30-17:00. Cloudy intervals; temp. -15° to -5°C; light wind. Ground and water frozen. 15 observers in 6 parties + 7 at 7 feeders.

Moir Campbell, Barbara Clayden, Gerry Clayden, Jeff Clayden, Stephen Clayden, Susan Clayden, Suzanne Gerin-Lajoie, Don Gibson, Jim Goltz, Charles Graves, David Lounsbury, David Myles (compiler), Beverly Schneider, Marc Schneider, Shirley Sloat.

#### **Stanley (Sty)** 26th year

Dec. 30, 08:30-16:30. Cloudy with sunny breaks; temp. -10° to 0°C; wind light. 20 cm snow cover, trees free of snow, water 60% open. 6 observers in 4 parties + 13 at 10 feeders.

Katherine Bavis, Lorna Belyea, Dena & John Corey, Gordon Dunphy & Michico Nishajima, Thelma Fairly, Gisele Gaudet, Jeremy Gullison, Connie Ince, John MacRae, Hazel Millet, Margie Pacey, Uda & Oro Ross, Julie Singleton (compiler), Stephanie Sopow, Sheron Suttie, Robert Whitney.

#### **Woodstock (Wsk)** 37th year

Dec. 27, 09:00-17:00. Clear; temp. -12°C; wind 8 km/h. Ground snow-covered; no open water. 10 observers in 3 parties + 30 at 28 feeders.

Sheldon Anderson, Blair Avery, Leona Avery (compiler), Rev. T.S. Bellis, Jane Bernard, Earle Blackie, Danny Bowser, Earle Briggs, Duff Campbell, Moira Campbell, Lillian Clark, Michael & Lois Derrah, Gerald Donovan, Mrs. Melvin Fogarty, Mrs. David Fry, R.C. Gibson, Verna Grant, Charles Graves, Adam Hadley, Eric & Jane Hadley, Matthew Hadley, Ronald Hawkins, Jack Lavender, Edwin Marsh, Don McArthur, Allie McBride, Walter Neal, Mrs. Roger Olmstead, Bernard Phillips, Alma Speer, Karen Speer, Martin Speer, Robert John & Donna Speer, Mrs. Donald St. John, Alex Whiteway, Gordon Wort, Mrs. James Yerxa.

#### **Florenceville (Flo)** 21st year

Dec. 26, 08:00-17:00. Cloudy and blustery with light snow; temp. -8° to -14°C; wind NW, 20 km/h; 15 cm snow cover; Saint John River open with bits of frozen slush. 9 observers in 4 parties + 26 at 26 feeders.

Catherine Bell, Elmer Briggs, Ansel Campbell, Marie Campbell, Frances Canam, Arthur DeMerchant, Opal Derrah, Harry & Anna Ebbett, Dale & Doreen Giberson, Sandra Gray, Janet Green, Raymond & Robert Green, David Hatt, Franklin Kinney, Aubrey Lamont, Mrs. John Lockhart, Helen Lovely (compiler), Lorna Maddox, Pearl McNair, Ray Mulherin, Irene Perkins, Dean Prior, Laurie Prosser, Marg Seymour, Marlene Tracy, Dick Trafford, Ellen Watson, Dave Wolverton, Harry Wolverton, Joanne Upton.

#### **Glassville-Juniper (G-J)** 17th year

Dec. 22, 08:00-16:00. Overcast with some sun; temp. -10 to -13°C; calm. Snow cover 7.5 cm; brooks 50% open. 3 obs. in 2 parties, 12 at 12 feeders.

Peter Brooks, Nan Curto, Marjorie Martinson, Kent McAuley, Carol Ann McBrine, Joe McBrine, Nada McBrine, Darlene McIntosh, Elsie McIntosh, Jesse McIntosh, Rita McIntosh, Sally McIntosh (compiler), Peter Puleston, Marion Spence, Marjorie Spence.

#### **Perth-Andover (P-A)** 32nd year

Dec. 28, 08:00-16:00. Overcast with some sunny periods and flurries; temp. -9° to -3°C; calm. Snow cover 10-15 cm; more open water in rivers than usual. 2 observers in 1 party + 12 at 10 feeders.

Ellsworth DeMerchant, Barbara Fenwick, Corinne Fitzherbert, Glen Furge, Judy Hanson, Robert Innis, Richard B. Jamer, Roy Leach, Henry Manzer, Judy McNally, Mary Jane Savoy, Fred Tribe, Margaret Wallace, Murray Watters (compiler).

#### **Plaster Rock (PR)** 29th year

Jan. 2, 09:00-16:30. Overcast, occasional flurries; temp. -8° to -2°C; calm. Ground snow-covered; river frozen enough to hold a truck, two small open areas. 6 observers in 2 parties + 7 at 4 feeders.

Gwen Clyde, Doris Crawford, Bob & Kate Finnamore, Juanita & Claire Harrison, Irene Hollins, Roger Jenkins, Darryl Kennedy, Bessie & Peter MacDonald, Laverne Rabatich (compiler), Melissa Skinner.

#### **Nictau-Riley Brook (Nic)** 28th year

Dec. 29, 08:00-15:00. Cloudy; light snow the day before; temp. -15° to -10°C; wind NW, 3-5 km/h. Lot of places froze up. 7 observers in 3 parties + 7 at 7 feeders.

Juanita Black, Roger Jenkins (compiler), Wes Jenkins, Leroy Johnson, Erwin Landauer, Diana McAskill, Rose McCullum, Leola McDougall, Bill Miller Jr., Wilma Miller, Joan Nevers, Betty Ross, Theresa Ruff, Joe Yacovino.

#### **Edmundston** 14ième année (incomplete at time of printing)

Le 16 déc. Clair; temp. -16° à -6°C; calme. 30-40 cm de neige au sol; lacs et rivières 95% gelés. 20 observateurs en ? groupes. Heures groupe, ? (? à pied, ? en voiture); km groupe, 407.8+ (7.8+ à pied, 400+ en voiture). Am. Black Duck, 2; Mallard, 5; Herring Gull, 49; Rock Dove, 433; Mourning Dove, 73; Yellow-bellied Sapsucker, 2; Downy Woodpecker, 7; Hairy Woodpecker, 10; Three-toed Woodpecker, 1; Pileated Woodpecker, 1; Northern Shrike, 1; Gray Jay, 3; Blue Jay, 89; American Crow, 114; Common Raven, 43; Black-capped Chickadee, 143; Boreal Chickadee, 2; Red-breasted Nuthatch, 2; White-breasted Nuthatch, 2; American Robin, 2; European Starling, 451; Bohemian Waxwing, 15; Cedar Waxwing, 3; Am. Tree Sparrow, 2; Snow Bunting, 6; Red-winged Blackbird, 1; Pine Grosbeak, 2; Purple Finch, 5; Am. Goldfinch, 150; Evening Grosbeak, 34; House Sparrow, 58; unidentified gulls, 35. Total birds, 1746; total species, 31.

Club d'ornithologie du Madawaska.

#### **Kedgwick (Ked)** 11ième année

Le 16 déc., 08:30-16:00. Clair; temp. -15° à -8°C; calme. 15 cm de neige au sol; lacs et rivières 95% gelés. 4 observateurs en 3 groupes + 6 à 5 postes d'alimentation.

Mariette April, Claudette Arpin, René Cimon, Arthur Desjardins, Cécile Desjardins, Pat Émond (compilateur), Yvon Émond, Sylvie Girard, Diane Paré, Wilfred Roy.

#### **Mount Carleton Provincial Park (MtC)** 23rd year

Dec. 22, 09:00-16:00. Sunny; temp. -22° to -12°C; wind N, 0-5 km/h. Snow cover 20 cm, some open water. 2 observers in 2 parties.

Roger Jenkins (compiler), Erwin Landauer.

#### **Southeast Upsalquitch (SEU)** 19th year

Dec. 27, 10:00-15:00. Snowing, then clear; temp. -5° to -10° C; wind W, 30 km/h. 30 cm snow cover; river frozen with open channels. 6 observers in 3 parties.

Ron Gauthier (compiler), Garry Goodwin, Eldon McLean, Rod O'Connell, Jason Smith, Stuart Wells.

#### **Paquetville (Paq)** 13ième année

Le 30 déc., 08:00-16:30. Ciel dégagé le matin, nuageux en après-midi; 10-15 cm de neige en forêt; glace? temp. -7° à -0°C; vent NO, 0 km/h. 9 observateurs en 4 groupes + 1 à une poste d'alimentation.

Frank Branch, Michel Chiasson, Marcel David, Jean-Claude Doiron,



Audort Godin, Réjean Laforge, Jude Larocque, Roland Robichaud (compilateur), Donald St-Pierre, Jim Scott.

*Results of the following coastal counts are in the last 3 pages of the tables.*

#### Grand Manan (GM) 30th year

Jan. 3, 08:00-17:00. Partly sunny am, mostly cloudy pm; temp. -11° to -7°C; wind NW, 10-25 km/h. 10-cm snow cover; still water frozen, running water open. 15 observers in 8-10 parties + 1 at feeder.

Laurel Bernard, Brenda Blinn, Gilles Boucher, Jim Brown, Mara Burns, Brian Dalzell (compiler), Tony Diamond, Susan Harris, Jim Leslie, Elaine Maker, Rodger Maker, Laurie Murison, Monica Ott, Carmen Roberts, Peter Roberts, Peter Wilcox.

#### Eastport-Campobello (E-C) 34th year

Dec. 26, 07:45-15:45 EST. Cloudy, with wind-driven snow, sev. inches accumulation; temp. -16° to -11°C; wind NW, 16-56 km/h. 10-15 cm snow cover; fresh water frozen. 6 observers in 3 parties.

Bob Croteau, Ralph Eldridge, Maury Mills (compiler), Jody Rose, Fred Stocking, Marion Stocking.

#### St. Andrews (StA) 40th year

Dec. 16, 08:00-16:00. Overcast a.m., clearing with sunny breaks p.m.; temp. -5° to 0°C; wind E, 30-5 km/h. snow cover?; most fresh water frozen, except Chamcook Lake mainly open, salt water open with small amount of shore-ice. 7 observers in 5 parties + 15 at 10 feeders.

Mindy Brown, Moira Campbell, Carlota Cummings, Tracey Dean (compiler), Lad Dunfield, Brenda Fullerton, Charles Graves, Peggy James, Ken Langmaid, Ken & Sandra MacIntosh, Margo Mais, Bill Nelson, Ray & Dick Peterson, Lee & Lonny Ryall, Tom Smith, Marion & Dick Wilder, Max & Willie Wolfe.

#### Blacks Harbour (BH) 38th year

Dec. 30, 08:00-17:30. Clear; temp. -10° to -2°C; wind S, 0-15 km/h. ? snow cover; running water partly open, still water frozen. 3 observers in 3 parties + 1 at feeder.

Sandra Cooper, Brian Dalzell, Tracey Dean, Ken MacIntosh (compiler).

#### Lepreau (Lep) 37th year

Dec. 17, 09:17-16:08. Rain, at times very heavy; temp. +3° to +10°C; wind SE, 50-60 km/h. ? snow cover; fresh water frozen. 5 observers in 2 parties.

Merv Cormier, David McCurdy (compiler), Eileen Pike, Janet Whitehead, Jim Wilson.

#### Saint John (SJ) 44th year

Dec. 30, 08:00-17:00. Cloudy with sunny breaks; temp. -3° to +1°C; wind NW, 20 km/h. 3 cm snow cover; skim ice well offshore in river, other freshwater frozen. 24 observers in 13 parties + 23 at 21 feeders.

Lori Adams, Mike Bamford, Ethel & Roly Bosence, Helen Brown, Ian Cameron, Moira Campbell, Robert Carson, David Christie, Meredith Clayden, Stephen Clayden, Merv Cormier, Hank & Joanne Deichmann, Betty & Jim Evans, Jeanne Finn-Allen, Allen & Janet Gorham, Kit & Margaret Graham, Holly Haines, Kelly Honeyman, Cecil Johnston, Olive Keith, Don McAlpine, Fenning McAlpine, Doreen McIntosh, Ina Mortimer, Paul Mortimer, Ngaire & Richard Nelson, Rick Peacock, Joan Pearce, Eileen Pike, Elizabeth Prescott, Aldei Robichaud, Marion Sherwood, David Smith (compiler), Don Smith, Evan Smith, Ian Stead, Ed Walters, Belle Watkins, Janet Whitehead, Jim Wilson.

#### St. Martins (StM) 20th year

Dec. 30, 07:00-16:00. Clear a.m., overcast p.m.; temp. -3° to +2°C; wind SW, light. 5-30 cm snow cover; fresh water partially open. 9 observers in 3 parties + 1 feeder.

Leo Collins, Shirley Hunter, Ed LeBlanc, Jane LeBlanc, Jane LeBlanc, Cathy Rodger, John Rodger, Nancy Sears, Ted Sears (compiler), Gail Walker, Rob Walker.

#### Fundy National Park (FNP) 36th year

Dec. 15, ? am-? pm. Mostly clear with a few clouds; temp. -2° to -3°C; wind N, strong a.m., light p.m. 8 cm snow cover; fresh water, no ice at coast. 17 observers in 10 parties + 3 at 3 feeders.

Lisa Babineau, Anne Bardou, Betty Betts, Matt Betts, Jim Blewett, Alain Caissie, David Christie, Jacqueline Decoste, Lloyd Decoste, Susan Hoar, Shirley Hunt, Mary Majka, Beulah Michelin, George Sinclair, Brian Townsend, Rob Walker, Jane Watts.

#### Riverside-Albert (R-A) 32nd year

Jan. 1, 07:15-17:00. Weather variable, mostly cloudy with sunny periods and snow squalls; temp. -1° to +1°C; wind W to NW, 10-30 km/h. 10-20 cm snow cover, freshwater frozen except where fast-flowing; sea open with almost no shore ice. 8 observers in 6 parties + 4 at 3 feeders.

Esther Bradley, David Christie (compiler), Barbara Curlew, Jim Edsall, Rick Elliott, John Inman, Mike Majka, Beulah Michelin, Juliette Pellerin, Gail Walker, Rob Walker, Pauline Woodworth.

#### Hillsborough - Memramcook (Hil) 9th year

Dec. 23, 07:30-16:50. Clear to partly cloudy; temp. -10° to -8°C; wind W to NW, 0-20 km/h. 20-40 cm snow cover; lakes frozen, fast-flowing streams open; tidal waters ice-free. 11 observers in 6 parties + 3 at 3 feeders.

Dwayne Biggar, Gilles Bourque, Alain Clavette (co-compiler), Barbara Curlew, Jackie Decoste, Lloyd Decoste, Rick Elliot, Dale Gaskin, Shirley Hunt, Roger LeBlanc, Freda Murphy, Margie Murphy, Rob Walker (co-compiler), Betty Wright.

#### Moncton (Mtn) 39th year

Dec. 16, 07:45-16:45. Clear; temp. -14° to 0°C; wind none. Light snow cover; fresh water frozen. 46 observers in 17 parties + 14 at 14 feeders.

Chris Antle, Mike Antle, Marg Bartlett, Brian Beaman, Gilles Belliveau, Gisele Belliveau, Normand Belliveau, Gilles Bourque, Meghan Brodie, Marc Chiasson, Bob Cotsworth, Jackie Decoste, Lloyd Decoste, Jim Edsall (compiler), Marg Fanjoy, Bill Gallant, Elsie Gallant, Gayle Gallant, Sue Hoar, Shirley Hunt, Jean Inglis, Roger LeBlanc, Janet MacMillan, Rose Alma Mallet, Nelson Poirier, Mike Rae, Kevin Renton, Edgar Savoie, Wendy Sullivan, Dorothy Thomas, Angela Tracy, Rob Walker, Alma White, Don White, Ralph White, Bill Woods.

#### Sackville (Sck) 41st year

Dec. 16, 07:45-17:00. Overcast a.m., cleared early p.m.; temp. -12° to +1°C; wind W, 0-5 km/h. 5-20 cm snow cover; moving water partly frozen, still water frozen. 25 observers in 8-14 parties.

Ron Arsenault, Sean Blaney, Paul Bogaard, Andrew Boyne (compiler), Sarah Boyne, Sandy Burnett, Dan Busby, John Chardine, Don Colpitts, Marc D'Entremont, Richard Elliot, George Finney, Ross Galbraith, Gay Hansen, Hinrich Harries, Peter Hicklin, Ron Hounsell, Jason Hudson, Andrew Macfarlane, Colin MacKinnon, Bill Murphy, Julie Paquet, Kathy Popma, Al Smith, Becky Whittam.



**Cape Tormentine (CT) 39th year**

Dec. 14, 07:45-16:05. Cloudy with intermittent light snow after 09:30; temp. -10° to -5°C; wind SW, 0-10 km/h in am, E 5-15 in pm. 2.5-10 cm snow cover; fresh water frozen, salt water partly frozen in bays, much slush and ice floes near shore. 20 observers in 5-13 parties.

Sean Blaney, Paul Bogaard, Andrew Boyne, Sandy Burnett, Dan Busby, Richard Elliott, Ross Galbraith, Nev Garrity, Hinrich Harries, Ron Hounsell, Jason Hudson, Donna Johnson, Helen Lines, Andrew Macfarlane, Colin MacKinnon, Julie Paquet, Kathy Popma, Al Smith (compiler), Ralph Stopps, Becky Whittam.

**Shédiac (Shd) 13ième année**

Le 17 déc., 08:00-16:00. Couvert avec pluie, venteux; temp. 0° à +4°C; vent E, 15 km/h. 30 cm de neige; eau douce 70% gelée, mer 25% gelée. 27 observateurs en 8 groupes.

Caroline Arsenault, Gilles Belliveau, Gisele Belliveau, Normand Belliveau (compilateur), Gilles Bourque, Yvon et Bernice Comeau, Leona Cormier, Noella et Abel Doucette, Angela LeBlanc, Bernadette LeBlanc, Mike LeBlanc, Albert Leger, Angela Leger, Cécile Leger, Fred Leger, Richard Leger, Rose-Alma Mallet, Onide Maurice, Clarence Nowlan, Jacqueline Nowlan, Juliette Pellerin, Francis Richard, Edgar Savoie, Denise Theriault, Stu Tingley.

**Boucoute (Buc) 5ième année**

Le 21 déc., 08:30-16:30. Clair, venteux; temp. -8° à -3°C; vent O, 10-30 km/h. Neige et glace dans les champs, les bois; détroit ouvert, les baies et estuaires couverts de glace avec des endroits ouverts. 17 observateurs en 6 groupes.

Gisèle Belliveau, Norm Belliveau, Louis-Émile Cormier, Denis Doucet, Maria Gauvin, Pat Goldburg, Brigitte Julien, Bernadette LeBlanc, Irène LeBlanc, Jean-Paul LeBlanc, Michael LeBlanc, Mike LeBlanc (compilateur), Roger LeBlanc, Stella LeBlanc, Richard Leger, Rose-Alma Mallet, Juliette Pellerin.

**Kouchibouguac National Park (KNP) 30ième année**

Le 30 déc., 09:00-16:00. Clair; temp. -6° to 0°C; vent O, 0-5 km/h. un peu de neige par terre; rivières gelées mais le détroit que n'était pas accessible était tout ouvert. 17 observateurs en 6 groupes + 3 à 3 postes d'alimentation.

Nicole Daigle, Denis Doucet, Maria Gauvin, Bernadette LeBlanc, Irène LeBlanc, Mike LeBlanc (compilateur), Marc LeBlanc, Stella LeBlanc, Rose-Alma Mallet, Nelson Poirier, Gilles Robichaud, Lucille Robichaud, Pierre A. Robichaud, Pierrette Robichaud, Maxime Savoie, Victor Savoie, Lorette Smith, Barry Spencer, Margot Spencer, Maria Vautour.

**Tracadie-Sheila (Tra) 14ième année**

Le 3 jan., 08:00-16:00. Ensoleillé avec quelques averses de neige; temp. -10° à -5°C; vent NO, 5-10 km/h. 25 cm de neige sur terre; eau gelée. 9 observateurs en 4 groupes + 3 à 3 postes d'alimentation.

Nicole Benoit, Frank Branch, Hilaire Chiasson, Rose-Aline Chiasson, Jude Larocque, Roland Robichaud, Donald St-Pierre, Gertrude St-Pierre

(compilatrice), Jolande St-Pierre.

**Ile Lamèque (Lam) 28ième année**

Le 26 déc., 08:00-16:00. Précipitation (neige) toute la journée; temp. -13° à -5°C; vent NO, 30 km/h. Neige sur terre 10 cm; eau de mer gelée à 50%. 11 observateurs en 6 groupes + 3 à 3 postes d'alimentation.

Denise Benoit, Gérard Benoit, Frank Branch, Hilaire Chiasson (compilateur), Michel Chiasson, Rose-Aline Chiasson, Lucille DeGrace, Émile Ferron, Jacques Guignard, Jocelyne Guignard, Stéphane Guignard, Fleur-Ange Haché, Jude Larocque, Roland Robichaud.

**Ile Miscou (Mis) 14ième année**

Le 16 déc., 08:00-16:00. Partiellement nuageux; temp. -10° à -5°C; vent SO, 9 km/h. Peu de neige au sol; pas de glace. 8 observateurs en 4 groupes.

Frank Branch, Hilaire Chiasson, Michel Chiasson (compilateur), Rose-Aline Chiasson, Robert Doiron, Jacques Guignard, Jude Larocque, Roland Robichaud.

**Caraquet (Car) 16ième année**

Le 17 déc., 08:00-16:00. Averses de neige, se changeant en grésil puis en pluie; temp. -5° to +1°C; vent SE, 20-30 km/h. 10 cm de neige au sol; zones côtières envahies par les glaces à 50% du territoire. 7 observateurs en 4 groupes + 1 à poste d'alimentation.

Frank Branch, Michel Chiasson, Marcel David (compilateur), Guylaine Dugas, Réjean Laforge, Rosita Lanteigne, Jude Larocque, Roland Robichaud.

**Bathurst (Bst) 18th year**

Dec. 30, 08:00-17:00. Clear; temp. -6° to 0°C; wind NW, 5 km/h. snow cover 15 cm; open salt water with estuary open only in channel. 10 observers in 6 parties + 8 at 4 feeders;

Luc DeRoche, Mary Gauthier, Ron Gauthier (compiler), Hazel Hansen, Charlie McAleenan, Eldon McLean, Nora McLean, Heidi Miller, Stuart Wells.

**Petit-Rocher (P-Ro) 6ième année**

Le 23 déc., 7:30-13:30. Couvert en a.m., ensoleillé en p.m.; temp. -11° à -9°C; vent O à NO, 18-24 km/h; 15-20 cm de neige au sol près des côtes, 30-50 cm en forêt et hautes terres; eau avec petits amoncellements de glace, pas d'accumulation de glace sur le rivage; la plupart ruisseaux et crues gelés de 90-100%. 2 observateurs en 2 groupes + 2 à 2 postes d'alimentation.

Jeanne-Mance Cormier, Luc DeRoche (compilateur), Roger Guitard, Marc Landry.

**Errata, Fredericton Christmas Bird Count, 1999**

On p. 98 of Vol. 26, No. 4, I reported incorrect effort information for the Fredericton area. It was actually 55 observers in 27 parties + 38 feeder reports; Party-hr, 140 (67 on foot, 73 by car); party-km, 1037 (168 on foot, 869 by car). Sorry!



2000-2001 CBC	Mir	Dal	Rst	Sal	Ssx	Htn	Qtn	C-N	Jem	Ftn	Mac	Sty	Wsk	Flo	G-J	P-A	PR	Nic	Ked	MtC	SEU	Pag
Common Loon										*												
D-crest Cormorant		1																				
Snow Goose	*									1						*						
Canada Goose										218				40								
Am Black Duck		141	58							167	21	8		83		*		*				2
Mallard		2	11							82	13			40								
Lesser Scaup		9																				
Long-tailed Duck										1												
Com Goldeneye		30				4				353	10											
Barrow Goldeneye #		313								2												
Hood Merganser										6												
Com Merganser	*	1	218				1		1	214	152			15		6		4				
Red-br Mergans																						
Bald Eagle		1	1	5	4	12	7	*	1	8	5	3	3	1	1	1	1	1	*			
Northern Harrier						1				*												
Sharp-shin Hawk	1		1	1	1	4		2		2		2	1									
Cooper's Hawk								*		*		1	1									
Northern Goshawk					3			*	2			1				1			*			
Red-shoulder Hawk			2	2	3	1		2		*		*										
Red-tailed Hawk									8			*	1									
Rough-legged Hawk							*					*	1									
American Kestrel																						
Merlin		1								1			1									
Ring-nk Pheasant	1			9	19			7														
Ruffed Grouse	7	1	6	3	7	1	*	8	1	1	3	3		6	24	1	4	2	3	2	*	1
Sandhill Crane																						
Purple Sandpiper		1																				
Ring-billed Gull			1							4	1											
Herring Gull		45	1	3	3	97				254	30					*						
Iceland Gull		14		*		1				*												
Glaucous Gull				*																		
Grt Blk-back Gull	2	20	1	4	7	29		*		800	93											
Rock Dove	259	35	235	453	545	166	17	29	108	1174	288	12	314	124	55	94	75	4	42		2	
Mourning Dove	92	45	25	161	493	255	90	351	118	401	249	86	85	283	27	29	78		4		109	
Great Horned Owl								*		*		*				*						
Snowy Owl																						
Northern Hawk Owl			1						1	1	1											
Barred Owl					1			*	1							*						1
N Saw-whet Owl					1																	
Red-bellied Wdpr						*																
Downy Woodpecker	25	14	24	7	8	13	3	11	9	23	20	14				5	17	16	6	10		9
Hairy Woodpecker	15	10	28	10	15	10	3	12	12	21	18	15	33	40	4	10	17	16	7	2	2	18
Blk-back Woodprk									1	*				*								
Northern Flicker	4	2	*d	1		1				8	4	7	1	1	1	*	1	1	2		1	
Pileated Woodprk					2	*		5	4	2	6	2	2	*		*	1	1	2			
Northern Shrike	*		*	3	5	2		2	3	2	6	2	5				1	1	2			2
Gray Jay	15	2		7	14			10	13	2	13	9	2		5		7	32	16		5	32
Blue Jay	67	46	138	157	134	85	27	148	91	97	183	105	116	155	133	81	35	72	58	3	1	58
American Crow	80	73	186	279	144	516	38	111	80	893	145	43	287	101	29	58	24	5	3			7
Common Raven	32	28	88	143	310	30	27	68	30	73	41	42	115	35	26	15	9	24	20	3	2	30
Horned Lark					14								10									



2000-2001 CBC	Mir	Dal	Rst	Sal	Ssx	Htn	Qtn	C-N	Jem	Ftn	Mac	Sty	Wsk	Flo	G-J	P-A	PR	Nic	Ked	MIC	SEU	Paq
Blk-cap Chickadee	264	162	471	358	267	439	74	253	267	609	457	222	259	237	161	204	47	106	103	42	8	186
Boreal Chickadee		11	2	4	5			*			1	*		3		4	1	4	10	38	6	10
Tufted Titmouse														*								
Red-br Nuthatch	21	16	7	12	9	7	3	16	31	20	30	42	10	11	17	7	4	13	*	4		32
White-br Nuthatch	1		1		3	1		5	8	8	5	1	11	*			6	1	*			2
Brown Creeper	1				1	*		2	1	2		*						1			1	
Carolina Wren						*											*					8
Golden-cr Kinglet	*	3	5	35	19	10	10		18	26	22	24	2									
Ruby-cr Kinglet						*					*											
American Robin	95	117	*	4	99	16		*	191	528	6	*	49	12		1	1	*			2	
N. Mockingbird					2																	
Brown Thrasher	1																					
European Starling	486	810	659	809	1536	498	88	200	550	1935	559	176	723	164	125	56	111	6	61		194	*
Bohem Waxwing	447	718	485						40	54						*	13	*	*			
Cedar Waxwing	45	270		10					32	5			32	5								
Pine Warbler						*				*	1											
Eastern Towhee	1					1																
Am Tree Sparrow	18	6	6	85		79	59	153	148	68	143	8	88	36	8	22	*		4			13
Chipping Sparrow						*			1	*												
Fox Sparrow	*		1	1		3				5												
Song Sparrow																						
Swamp Sparrow	4	6	*	5	11	12		1		9	1	1					3			1		
Wh-throat Sparrow																						
Wh-crown Sparrow																						
Dark-eyed Junco	47		17	80	116	105	5	55	48	105	85	58	14	27	12	17	6	12			8	
Snow Bunting	64	*	48	83	85	41	36	169	4	*	32	*	72	220	1220	29	19	*	2282		*	352
Northern Cardinal						10		1	1	9	2		4	2		6	1					
Red-wing Blackbird							2			4												
Rusty Blackbird	11						4															
Common Grackle		2		2						1							2					
Brown-hd Cowbird																						
Pine Grosbeak	1	15			3			24			2	3					36	4	72	46	2	5
Purple Finch	10	5	1	13	2	8	4	26	1	6	92	41	32	23	103	2	2	9	1			
House Finch					6					16	4											
Red Crossbill	18	18	55	38					14	1	71	118				17		53	147	20	10	66
Wh-wing Crossbill																						
Common Redpoll					*			15														
Pine Siskin	28	69	79	11	29	*	20	5	78	18	364	391	4	3	120	8	17	18	66	78	80	40
Am. Goldfinch #	232	149	146	500	222	646	47	538	491	1226	853	172	308	298	87	61	58	23	248	43		53
Evening Grosbeak	184	44	77	302	125	21	69	260	101	12	207	155	222	75	17	75	213	108	63			95
House Sparrow	15	14	101	107	103		7		65	19	35	30	48	24	37	26	12		25			
Unidentified	20 a	17 c				2 e	7 f		1 g					1 h				10 i				
TOTAL BIRDS	2601	3286	3205	3707	4472	3146	648	2489	2576	9499	4273	1802	2933	2135	2254	846	830	584	3245	293	118	1340
TOTAL SPECIES	32	44	37	36	43	37	24	30	39	51	46	32	35	34	24	27	32	27	23	14	11	28
Add. Spp. in Period	5	1	5	3	1	10	3	7	1	11	1	7	0	4	0	8	2	4	5	0	2	1
Hrs on foot	11	9	6	0.5	12.25	5.5	1	7.25	19	42.5	3.75	4.5	1.5	1.5	5	2	2.5	9	4	8.5	14	7.6
Hrs by car	14	17.5	26	32.5	42	37	12.4	14	23.8	79.5	39.5	22.5	14.5	7.5	5	8	8	9	10	5.5	1	29
TOTAL HOURS	25	26.5	32	33	54.25	42.5	13.4	21.25	42.8	122	43.25	27	16	9	10	10	10.5	18	14	14	15	36.6
Km on foot	12	16	?	1	?	8	2	13.5	24.5	69.5	10.5	8	2.5	5	6	3	5	15	5	18	8	20
Km by car	217	280	425	503	260	763	181	208	318.9	968.5	460	261	216.5	97.2	120	95	59	113	157	90	52	295.2
TOTAL KM	229	296	?	504	?	771	183	221.5	343.4	1038	470.5	269	219	102.2	126	98	64	128	162	108	60	315.2



2000-2001 CBC	GM	E-C	StA	BH	Lep	SJ	StM	FNP	R-A	Hil	Mtm	Sck	CT	Shd	Buc	KNP	Tra	Lam	Mis	Car	Bst	P-Ro	NB Total
Red-throat Loon		3				1	4	3	1														12 ±
Common Loon	26	5	51	28	15	6	5												1				137 +
Pied-bill Grebe						1																	1
Horned Grebe	35	10	57	12	20	3	1																138 +
Red-neck Grebe #	295	3	52	15	7																		372 ++
Northern Gannet	5				2													1					8
D-cr Cormorant		2	3	6																			
Great Cormorant	28	23	2	23	3				*					10			1						13 +
Great Blue Heron						*					2	*	1	2			*	1		*			89 -
Snow Goose																							5 ±
Canada Goose	16	10	1			7	*	150		12		2	1	20	*		*				*		1
Brant	35																						478 +
Gadwall						2	2																35 ±
Am Black Duck	980	222	1083	289	32	878	235	355		27	41	81	17	163	243		3	3					4
Mallard	48	7	10	11	1	101	5	2		942	9		2	2	17			7		6	*	66	5281 +
Northern Pintail	1	1	1				1		*														1331 +
Grn-wing Teal #	10	3				65																	4
Greater Scaup	*		12	2	35									1									78 ++
Lesser Scaup																							50 -
Common Eider #	1450	148	6270	1836	257	5	11						8	66	5		3	168	32	249			9
Harlequin Duck	35	2												1									10508 ++
Surf Scoter	95			25	9								1				3	1					38 ++
Wh-wing Scoter	14		21	22	1	4											*						133 +
Black Scoter #	24	2		375	2												6				1		63 -
Long-tailed Duck	325	10	210	141	39								373	119	88		17	67	68	169	62	1	410 ++
Bufflehead	74	90	189	90	53	63	18	5					78	316	89		2	86	20	5	3	60	1690 -
Com Goldeneye	215	9	208	17	20	306	27	9	7														582 ±
Barrow Goldeneye		2				3								54	3		1	12	1			42	1916 ±
Hood Merganser #	*	39		7	4																*		391 ++
Com Merganser	4	43	23	12	12	30	*	1	9		11	18		638	27		21						56 ++
Red-br Merganser	195	50	8	31	23	87	4												2		19	2	1499 ++
Bald Eagle	5	15	4	13	3	3	*	1	1		9	4	3	41	33		4	13	23	7	43	66	633 ±
Northern Harrier	1	1				1	*	2	*	1	3	2	1	3	8						1		130 ±
Sharp-shin Hawk		*				1	1	2	2	2	3	7	1	1	1		*	1					14 +
Cooper's Hawk																							38 +
N. Goshawk						*		1	1	1	2	2		1	1		*						1
Red-should Hawk																		*					14 +
Red-tailed Hawk	1	3	2	*		1	1			2	2	2		2	*								1
Rough-leg Hawk						1					23	1	1	*	3			*	1				27 ±
American Kestrel						*																	38 ±
Merlin						*	1	*	1			1		*	*						*		*
Gyrfalcon																	1						7 +
Peregrine Falcon																	*						*
Ring-nk Pheasant																							
Ruffed Grouse	58							54 u		44	29	213	2	82	*								*
Spruce Grouse		2	*	3	4		1	10	2		4	3	23		5		10	1			6		570 +
N. Bobwhite																		1					158 ±
Sandhill Crane						* t												1					1 -
Sanderling	35																						*
Purple Sandpiper	*	73					36			8							*						*
Dunlin						1																	35
																							118 -
																							1



2000-2001 CBC	GM	E-C	Sta	BH	Lep	SJ	SM	FNp	R-A	Hil	Mtn	Sck	CT	Shd	Buc	KNP	Tra	Lam	Mis	Car	Bst	P-Ro	NB Total
Little Gull #	3	30	14	9	35																		3
Bonaparte's Gull		210	29	47	8	95	12	4	4		13	*	39	20	1						*	4	88 -
Ring-billed Gull																							492 +
Herring Gull	1750	4518	1850	2305	160	656	52	122	53	73	6041	89	124	1010	424	105	18	7	14	3	154	147	20108 ±
Iceland Gull	6	202	*	89	5	249	1		13	6	45	13	29	48	9		47	58	180	83	1	*	1100 ±
Less Bk-bk Gull #	2																						2
Glaucous Gull		4		2		*					5		1	6	3		1	6	5		2		36 -
Grt Bk-bk Gull #	875	2290	253	570	14	86	4	4	5	33	5810	59	129	886	299	105	72	118	57	37	850	71	13583 +
Blk-leg Kittiwake	2500	89		6	82													*	12				2689 -
Dovekie	250	2																					252 +
Common Murre	*				1																		1
Thick-bill Murre	*				2																		2
Razorbill	688	9			67																		764 ±
Black Guillemot	240	23		84	6											11	6		113	13			496 +
Atlantic Puffin #	3																						3
Rock Dove	30	141	63	224	39	493	29	1	4	45	1415	398	90	487	203	94	217	54	31	85	110	8284 ±	
Mourning Dove #	215	33	191	143	8	315	79	91	141	152	715	518	160	193	144	69	168	128	3	45	16	20	6528 ++
Great Horned Owl						*						*			1			4			*	*	1 - -
Snowy Owl	1	1																					6 ±
N. Hawk Owl																							3 +
Barred Owl																							5 -
Short-eared Owl	*					*			*		4	1					1		1		*	*	6 +
N. Saw-whet Owl	1		1	2																			3 ±?
Belted Kingfisher													*										4 ±
Red-bellied Wdpkr			*																				1
Downy Woodpkr	6	1	12	4	40		1	24	4	16	40	19	12	7	4	3	12	5		5	1		532 +
Hairy Woodpecker	5	2	11	2	29		1	4	4	13	39	17	12	4	11	4	12	4	1	5	6	2	505 +
3-toed Woodpecker																		*					3 ±
Bk-back Wdpkr			*								3	3		*	4								13 ±
N. Flicker #	1		1	3	5		2	1	1		1	9	9	1			2						38 ++
Pileated Woodpkr																				*			78 +
Northern Shrike	5			4	4	3	2	4	7	*	6	3	2	1	1	1	2	6	11		1	1	104 +
Gray Jay				4			3	9	1	1	10	20	7	2	16	27	5		9	4	1		308 +
Blue Jay	28	12	87	20		132	18	24	26	55	269	185	69	88	72	55	60	36	18	16	36	12	3308 ±
American Crow	240	189	230	306	174	350	59	45	90	67	579	436	241	503	305	52	51	62	22	32	72	120	7327 +
Common Raven	42	8	17	58	6	22	8	8	22	99	139	93	59	36	38	12	25	74	18	9	8	1	1993 -
Horned Lark #	*					3	30					112	374	307	382	288	247	7					176 +
Bk-cap Chickadee	185	214	248	102	21	504	58	177	59	134	481	716	7		5	2	17	14	95	150	113	38	10265 +
Boreal Chickadee	22	2	3			6	6	44	*			17	7			2	17	14	13	10	2	1	270 ±
Tufted Titmouse																							*
Red-br Nuthatch	5		15	6		16	4	23	4	7	27	15	6	13	24	54	3	12	3	6	3		558 ±
White-br Nuthatch		1					*				3				1								58 ±
Brown Creeper	2		1			1		4	1			1			1	1	1	1					23 -
Carolina Wren																							* *
Winter Wren				1																			1
Golden-cr Kinglet	21	1	21	9		20	10	64	25	1	29	126	158	23	164	33	6	27	13	4	12		949 +
Ruby-cr Kinglet								2															2
Redwing									1														1
American Robin	26	19	44	439	93	303	417	*	180	21	46	299	19	167	121	9	*				43		3368 ++
N. Mockingbird	2	1				4				*	2			*		*				1			12 ±
Brown Thrasher																				1			1



2000-2001 CBC	GM	E-C	StA	BH	Lep	SJ	StM	FNP	R-A	Hil	Mtn	Sck	CT	Shd	Buc	KNP	Tra	Lam	Mis	Car	Bst	P-Ro	NB Total
European Starling	750	42	724	570	98	3083	543	71	860	488	2731	1655	673	1295	483	239	232	179	44	230	193	337	25266 +
Bohem Waxwing						1	*		7		1			30	14	46	119		1	180	63	*	2219 ±
Cedar Waxwing				40	152	97	7	8	184		41	40		18		30	3				39	*	1058 ++
Yel-rump Warbler				1							1	2	5	4			1						14 -
Yel-thr Warbler											*											*	*
Pine Warbler																							*
Eastern Towhee						1			1														5 +
Am Tree Sparrow	19	6	10	29	12	67	18	13	95	73	85	158	69	34	6	18	10	11		2	5		1684 ±
Chipping Sparrow						3		*															4
Clay-col Sparrow													2	1									1
Savannah Sparrow	1	1						1	*	1	2		1										9 +
Fox Sparrow	2			*				*					1										5 +
Song Sparrow	18	7	4	2	2	11	8	4	3	4	8	6	10	8			1	1	1				108 +
Swamp Sparrow						1					2	4											8 +
Wh-thr Sparrow	12	2	1	2	8	39	3	9	16	8	4	20	11	14		4	1	4	1				213 ++
Wh-crn Sparrow																							2
Dark-eyed Junco	10	82	24	28		72	44	34	119	163	60	158	90	93	1	14	27	44	27	15	1		1923 +
Lapland Longspur						25	6					15							2				48 +
Snow Bunting	48	9	1			7	5	*	422	15	90	826	39	73	53		285	1497	192	48	27	10	8403 +
Northern Cardinal	12		7			13			2		*									1			72 +
Dickcissel	1										1												2
Red-w Blackbird	2							*	1			10				*							30 +
East Meadowlark													1	*									1
Rusty Blackbird								2	1			3											10 ±
Common Grackle	55	3	1			*		4	2		1	2	1	*		6	1						83 +
Bm-hd Cowbird												1											4 -
Baltimore Oriole																							1
Pine Grosbeak	3	3	43	9		36	2	12	54	4	1	11	3	*	1	*	4	1	1	1	1	2	251 -
Purple Finch							*																570 +
House Finch #				2		124					406			25	25								637 ++
Red Crossbill	15																						8 -
Wh-w Crossbill																							1446 +
Common Redpoll																							378 -
Pine Siskin	18	21		3		2	2		36	92	100	1	1	7	24								1865 +
Am. Goldfinch	220	6	199	108	7	667	101	86	341	389	632	476	98	341	470	116	172	47	23	53	30		10983 +
Evening Grosbeak	3	3	20	21		30	16		4	112	100			1	48	16	10	1	24	14	17		2865 -
House Sparrow																							1104 -
Unidentified	5500j	45	6	25 m		72	301 p		17	3	61	76	12	51	35		34	9			15		5944
TOTAL BIRDS	17849	9262	12365	8250	1499	9343	2224	1098	3264	2178	21130	7017	3197	7396	3972	1514	2261	2790	1500	1222	1977	1105	178695
TOTAL SPECIES	69	66	59	58	39	68	51	41	51	37	57	57	52	54	51	35	47	44	35	31	38	25	130
Add. spp. in per.	8	0	5	2	0	9	7	6	5	2	2	3	0	7	4	5	4	5	0	2	7	5	9
Hrs on foot	15	1	4	4	1	35	16.3	50	20.8	8.5	33	64.5	44	8	13	15.5	4.3	17.8	16	2.3	14	0.8	566.4
Hrs by car	25	15.5	20.5	17	?	29	20	10.5	6.75	21.9	80	27.3	31.5	46	30	15	27.8	30.3	15.5	12.3	6.5	10	956+
Hrs otherwise	5 b	0.5 b																				0.3	20.3
TOTAL HOURS	45	17	24.5	21	?	64	36.3	60.5	27.5	30.4	113	91.8	75.5	54	43	30.5	32	48	31.5	14.6	20.5	11	1542+
Km on foot	16	0.8	10	7.5	2	47.5	18.6	87.5	34.5	13.5	28	102	66	11	15	24.5	9	34	34	5.5	20	0.5	840.3
Km by car	240	258	294	294	200	364	176.8	171	126	294	752	512	600	481	522	297	456	443	218	370	108	243	13559+
Km otherwise	24 b	1.6 b																					25.6
TOTAL KM	280	260	304	301.5	202	412	195.4	259	160	308	780	614	666	492	537	322	465	477	252	375	128	243	13740+



## The Honorary Life Members Of The Federation

Jim Wilson

Honorary life memberships have been awarded to outstanding contributors to the NB Federation on 12 occasions during its 29-year history. They are:

Austin Squires (1973)  
Bruce Wright (1974)  
Nettie Moore (1975)  
Willa MacCoubrey (1975)  
George Stirrett (1978)  
Art Callaghan (1983)  
Freeman Patterson (1984)  
Will Astle (1986)  
Wilma Miller (1986)  
Keith Ingersoll (1991)  
Hal Hinds (1996)  
David Christie (1998)

Seven honored members have since passed on. The five living honorary life members are as follows.

### Freeman Patterson

Freeman Patterson is a familiar name to naturalists and many other people in New Brunswick and beyond. He is a celebrated photographer and an acclaimed author whose skills have conveyed an appreciation of nature to a wide audience.

Through photography and words, Freeman has been able to transmit the natural beauty and tranquillity of our province to thousands of people in many corners of this continent and the world. Freeman is a long-time supporter of the Federation. In its early years, he was a member of the board and an author of briefs. He served as director-at-large from 1973-77 and made a significant contribution to the success of the Canadian Nature Federation meeting in Sackville in 1983.

Freeman was awarded an honorary life membership in the Federation in June 1984. He continues to live at Shampers Bluff, overlooking the Saint John River, on the Kingston Peninsula, near Saint John.

### Will Astle

Will Astle, a former teacher, and his wife Isabel have spent their summers in New Brunswick ever since their wedding year - in 1928! At about that time they built a small cottage at Cape Spencer, near Saint John, and they have returned to it annually from their home in Flushing, New York.

Will, a great enthusiast for nature, delighted in the fresh cool atmosphere of the Bay of Fundy and his interest soon brought him in contact with the New Brunswick Museum and local naturalists. Several young people, now grown up, such as Hank Deichmann, David Christie, Chris Majka, Donald McAlpine and others, have been inspired by his knowledge and dedication. He has always been an active birder and has contributed many important New Brunswick records. He has also banded songbirds and gulls in this Province for more than forty years. Will has made many important contributions to the NBFN since it was formed in 1972.

Will was awarded an honorary life membership in the Federation in September 1986. He and Isabel now reside in Evergreen, Colorado but still maintain the cottage at Cape Spencer.

### Wilma Miller

Wilma Miller has spent much of her life in Nictau, near Mount Carleton Park in northern New Brunswick. The Miller family has been building cedar canoes there for three generations and has always held a special appreciation for the outdoors and for nature.

Wilma is one of those people you love the moment you meet them. Good-naturedness, kindness and genuine interest in people radiate around this warm, motherly naturalist. She was an early member of the Federation, and has always been a strong supporter, particularly during the first twenty years. She was a director-at-large ("large director" as she usually called herself) from 1974-86. She and husband Bill have made many contributions, including hosting wonderful gatherings of naturalists in that spectacular part of the province. Their "bean hole" bean suppers are famous.

Wilma was awarded an honorary life membership in the Federation in September 1986. She continues to live at Nictau, on the beautiful Tobique River.



## Hal Hinds

Hal Hinds' principal field of interest is botany. Since his arrival here more than 30 years ago, he has worked diligently to document the plant life of our province and to protect threatened habitats. His explorations have taken him to virtually every part of New Brunswick. As a teacher, herbarium curator at UNB, and willing speaker and field trip leader he has introduced many to plants and fungi. He has prepared numerous publications, including landmark editions of the Flora of New Brunswick in 1986 and 2000.

Hal has been active in several conservation organizations, including the Federation which he served as vice-president (1984) and president from 1985-87. He was also a founder and first executive director of the Nature Trust of New Brunswick.

The following was stated in 1996 when Hal was presented the CCEA's Outstanding Achievement Award:

"In grateful recognition of his scientific leadership in documenting the flora of New Brunswick, his personal commitment to conservation activities in the Atlantic region and his dedication to raising public awareness about the importance of protected areas and biodiversity."

Hal was awarded an honorary life membership in the

Federation in June 1996. He lives in Fredericton, where he continues to teach and inspire botanists and explore the flora of the province.

## David Christie

David Christie was a charter member of the NBFN, and has maintained a very active role since that time. His interests cover a wide range of natural history. As the former curator of the Natural Science Department at the NB Museum he formed a close liaison between the Museum and the Federation that continues to this day.

David served as President of the Federation from 1972-75, as secretary from 1976-80, and was co-editor of the NB Naturalist for many years. He has contributed numerous articles, created and maintains the NBFN website and has prepared the "Nature News" section of the NB Naturalist for 31 years.

David was awarded an honorary life membership in the Federation in May 1998. He lives at Mary's Point, overlooking the spectacular Upper Bay of Fundy with close friends Mike and Mary Majka.

## Un Gros Merci / A Big Thank You

Publier Le Naturaliste demande de grands efforts de plusieurs volontaires aux divers échelons de la production. La Fédération des Naturalistes du Nouveau-Brunswick prend l'occasion de remercier et d'exprimer sa gratitude à Irene Doyle et Rob Walker, deux de ses membres qui se retirent de leur poste au sein de l'équipe de la rédaction du Le Naturaliste.

Irene Doyle a été notre compilatrice d'articles et membre du comité d'édition depuis 5 à 6 ans. Merci Irene de tes efforts et ton excellent travail.

Rob Walker a produit un numéro du Le Naturaliste chaque année depuis environ 6 ans. Il continue d'aider le comité de rédaction. Merci Rob de tous tes articles, oeuvres d'art et excellents numéros.

Producing the NB Naturalist is big effort involving numerous people fulfilling a variety of roles. The NBFN would like to take this opportunity express the gratitude and appreciation to two members of our editorial team who are retiring from current positions.

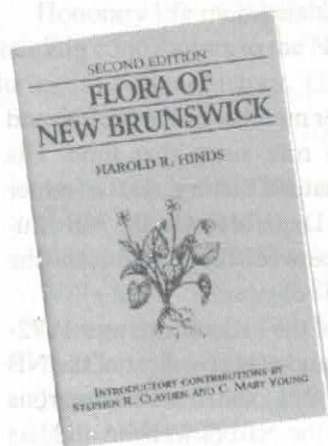
Irene Doyle has been our submission compiler and editor for the past five or six years. Thank you Irene for your dedicated and efficient service.

Over the same five or six years, Rob Walker has been annually producing and editing one issue of the NB Naturalist. He is staying on the editorial team as a helping editor. Thank you Rob for your artwork, articles and the fine issues you have produced.



## A Review of Harold R. Hinds' Second Edition Flora of New Brunswick

Sean Blaney, Atlantic Canada Conservation Data Centre



Well, it's finally here! Naturalists in New Brunswick have been eagerly awaiting the publication of Hal Hinds' second edition of the Flora of New Brunswick for some time. As of January 2001, the wait is over. This beautiful and comprehensive new work summarizes all available information on the status of wild plants in New Brunswick, much of which has been

learned from the author's lifetime of exploration.

Some people who already own the 1986 edition of the Flora may be wondering if it will be worth their while to get the new edition. Even for the most casual botanist, I would strongly recommend doing so. The second edition is full of new features that go far beyond the necessary task of updating species' taxonomy, range maps and status in light of information newly discovered since 1986.

In a new introductory section, Stephen Clayden of the New Brunswick Museum provides an outstanding overview of the complex natural factors which have shaped New Brunswick's flora, from fossil species millions of years old up to the present. Also in the introduction, Mary Young has produced a history of botanical exploration in New Brunswick. Her attractive line drawings of the flora are found scattered throughout the text as well.

The accounts of each species now include translations of the Latin names, Mi'k Mac and Malacite names of plants, listing of rare and endangered status and a range of interesting information about toxic, medicinal and otherwise useful species. Among a number of useful new appendices, the lists of species known from areas adjacent to New Brunswick but not yet within the province should guide and inspire searches for new provincial records. The formatting of the new book is also a vast improvement over the earlier edition. A very clean-looking font and layout is used, with range maps and improved species illustrations both found immediately beside the species accounts. This will relieve much frustration for those used to flipping to separate sections at the back of the first edition for illustrations and maps. Some people with older eyes may find the font a bit

small, but this was obviously necessary to keep the book to a field-usable size. Of course, botanists are used to using magnifiers anyway!

For those who have not spent time looking at plants in other parts of the world, I would like to point out just how lucky we are to have a work of this calibre available to us in New Brunswick. Many states and provinces do not have an equivalent volume, especially one that is both current and accessible to scientific botanist and average naturalist alike. With this definitive guide, anyone can easily assess the regional importance of a plant sighting. Identifications can be made by keying out the identity of a plant in the Flora, or the book can be used to confirm identifications made using popular field guides.

For instance, if you have just identified Wood Lily (*Lilium philadelphicum*) using the Peterson Wildflower Guide, you will find that the species is not known in New Brunswick and you should re-check what might be an exciting find. Alternatively, if you have identified Mugwort (*Artemisia vulgaris*) you will find that the flora shows it to be commonly introduced throughout New Brunswick, but you are also told that it effectively repels moths and that high doses of the plant's aromatic oil can be toxic!

The Second Edition of the Flora of New Brunswick is a must-have volume for all regional naturalists which I am pleased to recommend. Congratulations and well done Hal! You have produced a remarkable legacy for those of us interested in knowing and conserving New Brunswick's flora.

Order forms for the Second Edition Flora of New Brunswick can be downloaded from [www.unb.ca/biology/Flora.html](http://www.unb.ca/biology/Flora.html), or the book can be ordered directly from Marni

Turnbull, Biology Department, University of New Brunswick, Bag Service 4511, Fredericton, NB. E3B 6E1. Cost is \$50 per book with an \$8 shipping fee (which does not vary with number of books ordered). If you are in the Fredericton area, you can purchase the book directly from the University of New Brunswick Biology Department Office.



Hal Hinds



## Nouvelles de la nature / Nature News

Après plus de 30 ans de volontariat au sein de la rédaction d'une section du *Le Naturaliste*, David Christie prend sa retraite comme auteur et compilateur des *Nouvelles de la nature*. Son travail assidu a permis aux membres de la Fédération des Naturalistes du Nouveau-Brunswick de connaître les nouvelles découvertes, les observations et les divers courants de pensée en histoire naturelle du Nouveau-Brunswick. (Voir l'article de Ken MacIntosh "Perspectives" à la page 95 de cette revue)

Merci David de tous tes efforts, ... cela a été grandement apprécié.

Afin de continuer le travail d'envergure entrepris par David Christie, il a été nécessaire de le remplacer par une équipe de naturalistes. Comme dans le passé *Nouvelles de la nature* dépend toujours des observations des membres de la FNNB. Chaque aspect de la nature sera couvert par des personnes différentes. S.V.P. envoyez vos observations aux compilateurs et compilatrices suivants:

### Oiseaux:

Don Gibson (numéro d'hiver), [50 Golf Club Rd., Fredericton, N.-B. E3B 5M4 Tel: 506-454-3261, courriel: gibsondg@nbnet.nb.ca]

Rose-Alma Mallet (numéros du printemps), [801 Route 133, Boudreau West, N.-B. E4P 6P2, Tel: 506-532-3482, courriel: malletra@nbnet.nb.ca]

Ken MacIntosh (numéro d'été), [735 Deadman's Harbour Road, Black's Harbour, N.-B. E5H 1J6 Tel: 506-456-1904 courriel: coopers@nbnet.nb.ca]

Pierrette Mercier (numéro d'automne), [888 chemin de Pouvoir, St.-Joseph de Madawaska, N.-B. E7B 2M4, Tel: 506-735-6872, courriel: petem@nb.sympatico.ca]

### Papillons

Jim Edsall, [59 Anne St., Moncton, N.-B. E1C 4J5; Tel: 506-855-4934 courriel: edsallj@nbnet.nb.ca]

### Libellules et demoiselles

Stuart Tingley, [30 ch. de l'Aigle, Shediac Bridge N.-B., E4R 1G6; Tel: 506-532-3482 courriel: tingley@nbnet.nb.ca]

### Plantes

Jim Goltz, [126 Wilsey Road, Apt. 17, Fredericton, N.-B. E3B 5J1; tel: 506-459-8685 courriel: marph@nbnet.nb.ca]

### Reptiles and amphibiens

Don McAlpine, [Curator of Zoology, Natural Science Department, musée du Nouveau-Brunswick, 277 Douglas Ave. Saint John, N.-B. E2K 1E5; tel: 506-643-2345 courriel: dmcalpin@nb.aibn.com]

After over thirty years, David Christie is retiring as author and compiler of the *Nature News* section of the *NB Naturalist*. His diligent and consistent efforts over the years have kept NBFN members informed of new discoveries, observations and helped trace various trends of New Brunswick's natural history (as mentioned in Ken MacIntosh's article "Perspectives" on page 95 in this issue.)

Thank you David for your huge effort, ... it has been greatly appreciated.

To ensure that *Nature News* continues to fulfil the broad spectrum David has been able to cover, it has been necessary to replace David by a team of naturalists. This column has in the past and will in the future, rely on the NBFN members to report their observations.

Please send your observations to the following compilers:

### Birding will be covered by:

Don Gibson (Winter issue) [50 Golf Club Rd., Fredericton, NB E3B 5M4 Tel: 506-454-3261 email: gibsondg@nbnet.nb.ca]

Rose-Alma Mallet (Spring issue) [801 Route 133, Boudreau West, NB E4P 6P2, Tel: 506-532-3482, email: malletra@nbnet.nb.ca]

Ken MacIntosh (Summer issue) [735 Deadman's Harbour Road, Black's Harbour, NB, E5H 1J6 Tel: 506-456-1904 email: coopers@nbnet.nb.ca]

Pierrette Mercier (Fall issue) [888 chemin de Pouvoir, St.-Joseph de Madawaska, NB E7B 2M4, Tel: 506-735-6872, email: petem@nb.sympatico.ca]

### Butterflies

Jim Edsall [59 Anne St., Moncton, NB E1C 4J5; Tel: 506-855-4934 email edsallj@nbnet.nb.ca]

### Dragonflies

Stuart Tingley [30 ch. de l'Aigle, Shediac Bridge NB, E4R 1G6; Tel: 506-532-3482 email: tingley@nbnet.nb.ca]

### Plants

Jim Goltz [126 Wilsey Road, Apt. 17, Fredericton, NB E3B 5J1; tel: 506-459-8685 email: marph@nbnet.nb.ca]

### Reptiles and Amphibians

Don McAlpine [Curator of Zoology, Natural Science Department, New Brunswick Museum, 277 Douglas Ave. Saint John, N.B. E2K 1E5; tel: 506-643-2345 email: dmcalpin@nb.aibn.com]



## Nature News - Birds: December 1, 2000 to February 28, 2001

Don Gibson

A bumper crop of Mountain Ash berries induced hundreds of fruit-eating birds, mainly robins and waxwings (cedar), to forego migration. While this extraordinary event would normally be the feature story, two thrushes from Eurasia stole the headlines. A **Redwing** was seen once by one person at Marys Point and a **Fieldfare** was seen often by many at Fredericton.

A late **Pied-billed Grebe** was discovered at Saint John Dec. 30 (DSC).

Two **Northern Gannets** off Point Lepreau Dec. 17 were thought to be the first of this species to have been recorded on the Point Lepreau CBC. On the opposite side of the province, a first year gannet was seen flying northwest off Miscou Island Jan. 1 (RD).

A **Great Blue Heron** was recorded at Cocagne River Dec. 3 (MLeB) and another at Tantramar Marsh Dec. 17 (KP, RM). Evidence of Great Blue Heron activity was found on Jan. 29 (AC) at the DU impoundment ponds near Taylor Village, in the form of tracks in the snow. A **Little Blue Heron**, first reported at Parlee Beach Nov. 30, made it onto the "winter list" when it was seen as late as Dec. 6 (Richard Léger).

A lone **Snow Goose** was recorded at Fredericton feeding on grass near the river Dec. 17 (CG, Moira Campbell). A flock of 380 **Brant** was seen near White Head Island Feb. 8 (BED) and 14 appeared at Maces Bay Feb. 19 (MJC). A male **Gadwall** and a male **American Wigeon** were discovered at Shediak Dec. 5 (SIT) and three **Northern Pintail** were at St. Andrews Feb. 5 (TD).

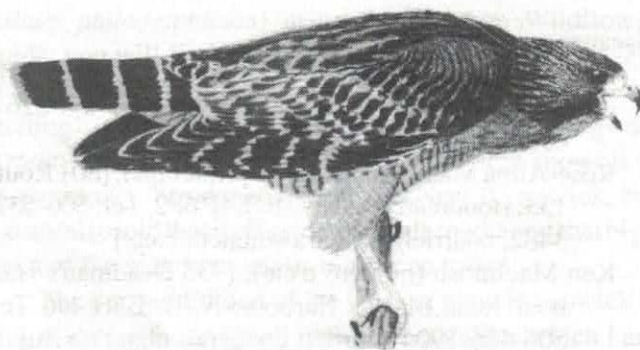
An adult male **Tufted Duck** was discovered at Saint John with a flock of Greater Scaup Feb. 4 (KM). There also appeared to be a female Tufted Duck in the flock, and possibly a second male that was off by itself. About 100 **Greater Scaup** were in the St. Andrews harbour Jan. 27 (TD); these birds had not been there at Christmas. Upwards of 5500 eiders chose to winter in and around St. Andrews, but it wasn't until Jan. 27 (TD) that a male **King Eider** was found among them. Two regal males were observed here Feb. 10 (TD, SJNC). About 70 **Harlequin Ducks** were encountered off the eastern side of White Head Island Feb. 8 (BED), where they seemed to be enjoying the fast rushing tidal currents. Unfortunately the birds were beyond the range where their vocalizations could also be enjoyed. Other reports of harlequins included: one female at



Robin

Bouctouche Dune Dec. 6 (DD), one at Cocagne Cape Dec. 16 (NP), one female at Cape Spencer Jan. 13 (JnW, JGW) and five at Point Lepreau Feb. 19 (MJC).

A **Cooper's Hawk** visited backyards in Fredericton throughout the winter (DGG), occasionally taking a pigeon (Rock Dove). Pigeons were also on the menu for Cooper's Hawk at Moncton Jan. 10 (John Tanner). Bob Blake reported a **Northern Goshawk** at Riverview Dec. 11 and another was reported at Stilesville Feb. 26 (Jean & Kevin Renton). At Crocks Point, about five kilometres downstream from the Mactaquac Dam, a beautiful adult **Red-shouldered Hawk** was found on Jan. 1 (SS, DGG). The bird was observed again on Jan. 3 (DGG, PAP, CG), and this time wowed the onlookers by catching a small mammal, possibly a Short-tailed Shrew.



Red Shouldered Hawk  
Painting by L.A. Fuertes

Scott Makepeace found a rather late **American Kestrel** (female) at Central Hampstead Dec. 20. A **Peregrine Falcon** was observed on the Harbour Bridge Jan. 26 (JGW). Because of its apparent smaller size, it was felt that this was a male bird. Two **Gyrfalcons** were discovered chasing ducks (unsuccessfully) at Bon Ami Rocks in Dalhousie Jan. 21 (ML). The Restigouche River being frozen down to Dalhousie, caused ducks to concentrate in the open water around the Rocks and the Thermal Plant lagoon, thus providing the falcons with a good supply of potential prey. Another Gyrfalcon was seen at Inkerman Dec. 1 (Ginette Doucet).

An **American Coot** was at Redhead Marsh Dec. 1 (MJC). The effluent treatment lagoon in east Saint John played host to two coots Jan. 25 (KM). These appeared to be adult birds and it was assumed that they were a bonded pair, possibly the same two birds recorded at this location in



Feb. 2000.

A **Sandhill Crane** at Nauwigewauk remained well into January (Richard Blacquiére).

A few shorebirds were encountered, such as one **Sanderling** at Petit-Cap Dec. 10 (RAM, SIT) and 35 at Long Pond Beach Feb. 16 (BED). A **Purple Sandpiper** was tallied on the CBC at Dalhousie (fide MGD) and 75 were at Marys Point Jan. 21 (DSC). A **Dunlin** was seen at Bouctouche Dune Dec. 6 (DD).

A **Little Gull** flew over East Quoddy Head, Campobello Island Dec. 26 (Maurry Mills & Jody Rose). On Feb. 10 at Pocologan, Jim Wilson spotted a **Mew Gull** sitting with a small flock of Ring-billed Gulls. Jim determined that it was a first winter bird of the *canus* subspecies, which mostly occurs in Europe. Two **Lesser Black-backed Gulls** were found on the Grand Manan CBC Jan. 3 (Carmen Roberts).

Karel Allard and John White, during the ferry trip from Saint John to Digby Feb. 2 and the return trip Feb. 4, were able to tally all of the "eastern" alcids. The list included three **Dovekies**, six **Common Murres**, three **Thick-billed Murres**, 47 **Razorbills**, eight **Black Guillemots** and two **Atlantic Puffins**.

On Feb. 9, Brian Dalzell observed an "unprecedented flight" of **Dovekies** off White Head Island. At one point it was estimated they were flying by at a rate of 65 birds/minute, with an average flock size of about 10-15 birds. The total number passing was estimated to be 15 000 birds. One **Common Murre** and two **Thick-billed Murres** were tallied on the Point Lepreau CBC Dec. 17. Thick-billed Murre sightings in Alma are very unusual, so it was quite a surprise when one was spotted Feb. 1 (RJW). Rob said it was the first one he had seen here since Jan. 1984. One Thick-billed was also at Anthonys Cove Jan. 13 (JGW, JnW). Over fifteen hundred **Black Guillemots** were flying southeasterly off Miscou Lighthouse in flocks of fifty Dec. 30 (RD). Peter Pearce was able to see four **Atlantic Puffins** from the GM ferry Dec. 4.

**Snowy Owl** reports included one at Long Pond Dec. 1 (PAP), another on the same date at Saint-Laurent (RG) and one near the end of Bouctouche Dune Dec. 6 (Gilles Martin). An unfortunate Snowy died after being hit by a vehicle at St. Leonard Dec. 16 (fide Roy Lapointe). A lone bird was at Bancroft Point Dec. 22, and two were noticed flying over this location Feb. 20 (BED). Also there was a sighting at Inkerman Dec. 28 (RD) and another at Five Points (near Salisbury) Jan. 22 (RS). Two Snowy Owls (one adult and one immature) were observed at Tantramar Marsh throughout the winter (KP, RM); however, good fortune doubled as four Snowies could be viewed at once Feb. 25 (KP & Harold Popma).

On December 3, **Northern Hawk Owls** were discovered at McGowans Corner (SS) and at Belledune (fide LD). Others were reported in Campbellton Dec. 17 (MGD) and near the Prince of Wales exit on Highway #1 Feb. 8 (TD, JD). An unfortunate bird was found dead at Beresford (thought to have been struck by a vehicle) Dec. 24 (fide RG). Scott Makepeace, who has undoubtedly observed more owl interaction than most of us, had a once-in-a-lifetime experience when he watched the Northern Hawk Owl harass a Great Horned Owl at McGowans Corner. Constant vocalizing by the hawk owl during the episode was an added treat.

Possibly flying in from Nova Scotia, a **Short-eared Owl** was seen approaching White Head Island from the east Feb. 8 (BED). Other reports included: two at Riverview Dec. 8 (RAM, SIT), one at Inkerman Dec. 28 (RD), one at Breau Village Jan. 3 (LEC), one at Saints Rest Marsh Jan. 14 (Janet Whitehead) and one at Memramcook Jan. 25 (Gilles Bourque). On February 14, Ken MacIntosh observed 60-70 crows extending Valentine's Day wishes to a Short-eared Owl at Saint John.

A **Boreal Owl** was found dead in Sackville Jan. 23 (fide NG). Four birders from Pennsylvania got a response to a Boreal Owl tape at Fredericton at 5.00 A.M. Feb. 3. Finding the Fieldfare was their main objective, but upon arriving before daybreak they decided to go owling while waiting for sunrise.

A **Northern Saw-whet Owl** was found dead in Sackville Jan. 26 (fide NG). Others discovered spending daylight hours in evergreen trees were at Alma Feb. 2 (RJW), Alma (Doris Hatt) and St. Martins Feb. 4 (Ted Sears). One hit a window in Beaver Dam, but apparently suffered no ill effects as it stayed in a tree for a brief period and then flew away Feb. 17 (Pat Hovey). Fred Dubé received

a second hand report of an employee at the MacDonald's in Shediac who thought she saw a mitten in the drive-thru area, but when she went out to pick it up and it turned out to be a N. Saw-whet Owl.

**Belted Kingfishers** were reported at Cocagne River Dec. 3 (MLEB), at Shediac River Dec. 19 (NP) and at Bouctouche Jan. 15 (MLEB).

A **Three-toed Woodpecker** was reported at Edmundston Dec. 16 (JDB), and another, a female, was discovered at Bouctouche Dec. 19 (DD). The bird at



Saw-whet Owl  
Painting by L.A. Fuertes



Bouctouche remained in the area for a few weeks, and was viewed by a number of birders and for some it was a "lifer". Two males and female **Black-backed Woodpecker** were encountered at Bouctouche Dec. 20 (DD, MLeB). A male and female black-backed found a stand of tamaracks much to their liking at Fredericton Dec. (Ron Wilson). Other reports included: Riverside-Albert Jan. 29 (DSC) and Second Falls Feb. 15 (Dave Baldwin).

**Horned Larks** were often seen at Tantramar Marsh, including a flock of 29 Dec. 17 (RM, KP).

**Tufted Titmouse** numbers in the winter of 1999-2000 provided a reason to be optimistic for an increase this year; however, it did not happen. Only one titmouse was reported in the province at Williamstown Dec. 28 (Dean Prior).

A **Carolina Wren** was visiting a feeder on Norton Shore Road Dec. 31 (Betty Prince). A **Winter Wren** was tallied on the Blacks Harbour CBC Dec. 30 (BED).

As many as three **Ruby-crowned Kinglets** were seen at Alma Dec. 10 (DR) and one at Prince William Jan. 2 (Dawn Parker).

A **Varied Thrush** was reported at DU headquarters on Union Street Fredericton Jan. 12 (Andrew MacInnis), and another (or possibly the same bird) was seen on the south side of the river Fredericton Jan. 18 (Joan Pearce). A **Fieldfare** was discovered in the company of a large flock of robins at Fredericton Jan. 18 (DGG, SS, BJS and Margery Acheson). The Varied Thrush and Fieldfare were seen perched in the same tree on one occasion, causing some to speculate that these were the rarest two birds to ever occupy the same tree at one time in New Brunswick. The Fieldfare remained in the same general area from the time it was first seen on into March, and was sighted often. David Christie started the year in grand fashion (bird-wise). While checking Marys Point during the Riverside-Albert CBC Jan. 1, he recognized a **Redwing** with a small flock of robins on the mudflat. He was able to watch the bird for about twenty minutes, but soon lost contact with the flock. Many people searched the area in the following days, but no one was able to locate the bird again.

A number of **Northern Mockingbirds** were reported including: Aldouane Dec. 31 (Pierrette Robichaud), Riverview Jan. 7 (Bob Blake), Cap Brûlé Jan. 31 (RAM) and one that visited the yard of Mac Hunter at Shediac on a regular basis. A mockingbird discovered at the Experimental Farm at Fredericton Jan. 8 (George Maicher) was observed guarding fruit on crabapple trees and would chase any robin that dared venture into its territory. Delta Steeves of Miramichi City reported a **Brown Thrasher** coming to a heated birdbath Dec. 27. One was seen at

Pennfield Jan. 9 (Lena Morehouse) and another at Moncton Jan. 19 (Jackie Doucet).

After a good showing for this species in November, at least one **Orange-crowned Warbler** persisted until December 4, when it was found at Bouctouche (DD). A **Yellow-throated Warbler** tantalized birders, as it appeared sporadically at Moncton. It was first seen in Shirley Hunt's yard Dec. 11. A western race **Palm Warbler** was found at Central Hampstead Dec. 10 (Scott Makepeace). A **Yellow-breasted Chat** that had frequented Doreen Rossiter's yard since October, was seen feeding on Mountain Ash berries Dec. 3.

Both sexes of **Eastern Towhee** put in appearances at feeders including: a male at Harvey Bank Dec. 12 (Pauline Woodsworth), a male at Saint-Louis-de-Kent Dec. 25 (Pauline Arsenault), a female at Fredericton Dec. 27 (Jean McFadyen), a male at Prince William Dec. 29 (Phil Moore) and a female at Charlo Dec. 30 (fide MGD). A female that appeared at the feeder of Kay Stafford of Riverview in mid-January, remained for six weeks.

A **Clay-colored Sparrow** discovered at Shediac Dec. 4 (RAM, SIT) was still present Jan. 1. Brian Dalzell flushed a **Savannah Sparrow** at Castalia Marsh Dec. 10, quickly catching the attention of a shrike. The sparrow was forced to fly out over the water, which proved fatal. The shrike and its prize then attracted two crows. The final outcome of this encounter could not be determined as the entire group disappeared out of range. A Savannah Sparrow was also seen at Bouctouche Dune Dec. 6. (Gilles Martin). The Jemseg CBC gained its first **Swamp Sparrow** when one was found near McGowans Corner Dec. 30 (PAP+). Feeders attracted **White-crowned Sparrows** at Prince William Dec. 15 (DLM) and Hopewell Cape Feb. 4.

A small flock of **Lapland Longspurs** was discovered along the beach at Saints Rest Marsh Feb. 2 (Dianne and Frank Kelly). The birds were showing signs of attaining their breeding plumage (MJC). Two days later the flock now numbering seven, was reduced by one when a falcon made a successful attack (Ruth Rogers). A large flock of **Snow Buntings**, estimated at 2000, was seen at Salisbury Dec. 24 (BED).

**Northern Cardinals** have established a strong presence in the southern part of the province, but are still relatively rare in the north. One was seen between Dalhousie and Campbellton Dec. 20 (fide MGD).

A nondescript female



*Brown Thrasher*  
Painting by E.J. Sawyer



**Dickcissel** was found in Moncton Dec. 16 (RL) travelling with a large flock of House Sparrows. In St. Andrews two were found in the company of House Sparrows Feb. 5 (TD). There were two reports from Grand Manan: Castalia Marsh Dec. 3 (PAP) and Whale Cove Jan. 3 (Rodger Maker).

Two male **Red-winged Blackbirds** were accompanying the flock of grackles at Grand Harbour Feb. 4 (BED). Three were visiting Shirley Sloat's feeder Dec. 13 and one was seen at Aldouane Dec. 29 (Pierette Robichaud).

The southeastern part of the province yielded a number of **Meadowlark** sightings: Upper Cape Road between Port Elgin and Cape Tormentine Dec. 4 (KP), two seen at this location Dec. 15 (NG, Becky Whittam, Sean Blaney and Helen Lines), Cape Jourimain National Wildlife Area Dec. 10(v.o.), Petitcodiac Dec. 11(fide DR) and Upper Dorchester Jan. 16 (Joanne Irving Mitton). These birds were not seen or heard well enough to determine if they were anything but "Eastern" Meadowlarks.

A **Yellow-headed Blackbird**, possibly the same bird seen in 1999-2000, visited feeders in Moncton. It was observed at the Vandenburg feeder Dec. 2 (visited Nov. 30, 1999) and at the McKinnon feeder Feb. 12. Nev Garrity had only one **Rusty Blackbird** at his feeder at Sackville, rather than the usual four or five. Others reported included: Alma Dec. 8 (RJW), Sackville WFP Jan. 8 (Andrew MacFarlane) and Edgetts Landing Jan. 21 (DB). About 50 **Common Grackles** were in Grand Harbour Feb. 4 (BED). They were first noticed Nov. 18 and it was speculated that they came from Nova Scotia. There were about 120 at that time. A **Brown-headed Cowbird** was at Tantramar Marsh Dec. 17 (RM, KP).

A female **Baltimore Oriole** was observed eating sunflower chips at Moncton Dec. 13 - 20 (Cathy Carter). Frank Kelly also reported one at Saint John Dec. 4.

Peter Papoulidis tallied four **Red Crossbills** for the Fredericton CBC Dec. 17. Very few **Common Redpolls** have been encountered this winter; however, Jackie Doucet had one visiting a feeder at Moncton, Feb. 1 and ten were tallied at Campbellton Feb. 14 (MGD)



Red Crossbill

#### Abbreviations

ACA Alain Clavette; BED Brian Dalzell; BJS Bev Schneider; CBC Christmas Bird Count; CG Charles Graves; DD Denis Doucet; DGG Don Gibson; DLM David Myles; DR Doreen Rossiter; DSC David Christie; DU Ducks Unlimited; FD Fred Dubé; GM Grand Manan; JD Joanne Dewey; JDB J. Denis Bourque; JGW Jim Wilson; JnW Jean Wilson; JPG Jim Goltz; KM Ken MacIntosh; KP Kathy Popma; LEC Louis-Émile Cormier; MGD Margaret Gallant Doyle; MJC Merv Cormier; ML Mike Lushington; MLeB Mike LeBlanc; NG Nev Garrity; NP Nelson Poirier; PAP Peter Pearce; RAM Rose-Alma Mallet; RD Robert Doiron; RG Roger Guitard; RJW Rob Walker; RL Roger LeBlanc; RM Ruth Miller; SJNC Saint John Naturalists' Club; SIT Stu Tingley; SS Shirley Sloat; TD Tracey Dean.

## Nature News: Botany Ramblings

James P. Goltz

The editors of the *N.B. Naturalist* are determined to give plants a higher profile in our quarterly Nature News report. We need your help. Please report your interesting sightings and discoveries of flowering and other vascular plants, mosses, lichens, mushrooms, liverworts, etc. to Jim Goltz. Please remember to record the date and location for each observation, as well as the name of the observer, and the numbers of plants of each species. Just as for birds, it's best to document observations with good scientific proof. Adequate substantiation for plant records includes a pressed specimen or a photograph depicting the key identifying characteristics of the plant (Note: it is illegal to collect

specimens of any of the eight plant species listed under the province's *Endangered Species Act*<sup>1</sup>. Rare, threatened or uncommon plants should only be collected when collecting will not threaten the population.). Illustrations or detailed descriptions may also be useful adjuncts, but by themselves are usually not adequate to confirm the record. Nonetheless, original artwork depicting your botanical discoveries would provide a most welcome accent for this column. Now that Hal Hinds' second edition of the *Flora of New Brunswick* is available, plant enthusiasts will be able to quickly determine the significance of their discoveries.

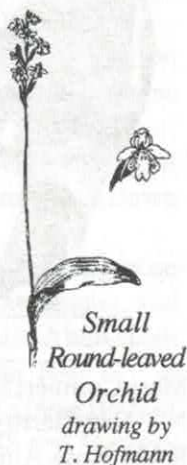


## People and Plants

The year 2000 marked the formation of a new botany group for the province, the **New Brunswick Botanical Club**. In its first growing season, the club held outings at Miscou Island in July and in the St. John River valley between Meductic and Florenceville in August. For more information about this group, contact Sean Blaney, phone: (506) 364-2658, E-mail: <sblaney@mta.ca>.

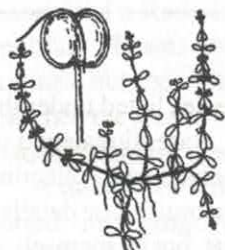
## New Hot Spots for Plants

While conducting field research for the Atlantic Canada Conservation Data Centre, Sean Blaney came across a new calcareous fen wetland complex in the vicinity of the Eel River and First Eel Lake, with such rarities as **White Adder's-mouth** (*Malaxis monophylla*), **Northern Bog Aster** (*Symphyotrichum boreale*), **Brown Beak-rush** (*Rhynchospora fusca*) and **Swamp Fly Honeysuckle** (*Lonicera oblongifolia*). Sean found a single plant of **White Adder's-mouth** in a calcareous wetland near Belle Brook, bringing the known extant New Brunswick locations for this extremely rare species to three. Sean also discovered that Lambert and Carr Barren Bogs near Bathurst are among the best spots in the province for orchids, with at least 19 species occurring there, including the very rare **Small Round-leaved Orchid** (*Amerorchis rotundifolia*).



Small  
Round-leaved  
Orchid  
drawing by  
T. Hofmann

## New Native Species and Hybrids



Terrestrial  
Water-starwort  
drawing from  
Britton & Brown

During a botanical survey commissioned by the Nature Trust of New Brunswick to evaluate a site near the St. Croix River, Bruce Bagnell and Gert Bishop discovered **Terrestrial Water-starwort** (*Callitriche terrestris*), a new species for both New Brunswick and Canada! This small (2 to 3 cm.), inconspicuous, creeping plant was found in the ruts of an old bush road that runs through an open mixed forest. The nearest known location

for this species is Massachusetts.

Sean Blaney's explorations along the Meduxnekeag River in late May resulted in the discovery of *Carex sterilis*, a new sedge species for the province. After reviewing recent

publications on sedges, Hal Hinds identified a number of herbarium specimens of *Carex vacillans*, a salt marsh sedge species that is also new for the province, having been segregated from a similar-looking species called *Carex recta*. Sorry, most of our sedge species have no standard common names.

Hal found 34 plants of **Case's Ladies'-tresses** (*Spiranthes casei*) on Sept. 13 at Currie Mountain, the only known site for this orchid species in the province. Although past their peak bloom, Hal was glad to see a big increase in the local population from the 7 or 8 plants that were there when he first discovered this species in 1997.

While leading a field trip for the New Brunswick Botanical Club near Woodstock on August 12, Sean Blaney spotted a few plants of the hybrid between **Red** and **White Baneberry** (*Actaea x ludovici*) and later that day found the hybrid between **White** and **Wood Aven** (*Geum x catlingii*) at Meductic. Neither of these hybrids had been previously reported for New Brunswick.

## Endangered Species

It was a bumper year for the **Gulf of St. Lawrence Aster** (*Symphyotrichum laurentianum*). At least a thousand plants were found at the Val-Comeau site, about ten times as many as had been seen there in 1999. Valérie Godbout and her field crew found three new provincial locations for this species, two in Kouchibouguac National Park and one on the Bouctouche dune. About 1000 plants were found at each of these new locations, a remarkable observation considering that the global population of this species was formerly believed to be only about 1000 plants. This aster species was formerly known to occur at only three locations in New Brunswick, and had vanished from two of these.

In contrast, the year 2000 was poor for **Pinedrops** (*Pterospora andromedea*). No plants of this species were seen at Meductic except for a few fruiting stalks from previous years. Pinedrops has a habit of disappearing from known locations for periods of up to several years, but usually reappears if its habitat is maintained.

## Other Rare Native Species

At 7 new locations on the St. John River between Islandview and Florenceville, Sean Blaney found **Early-leaf Brome** (*Bromus latiglumis*), a rare grass formerly known only from one location on the Restigouche River. Sean located new stations for the very rare **Massachusetts Fern** (*Thelypteris simulata*) at French Lake and in a bog northwest of Minto, as well as a new site for the very rare **Fringed Violet** (*Viola sagittata*) near Prince William Sta-



tion. Sean also discovered **Bristle-leaf Sedge** (*Carex eburnea*) on the Meduxnekeag River, an area where it had not previously been seen, and reported **Coastal Salt Grass** (*Distichlis spicata*) at Waterside, the first confirmed location for this species along the Bay of Fundy in New Brunswick.

On July 9, Maureen Bourque and I found a large colony of **Northern Adder's-tongue Fern** (*Ophioglossum pusillum*) in a wet field near Sunpoke Lake, growing with its scientific namesake **Rose Pogonia** (*Pogonia ophioglossoides*) and **Loesel's Twayblade** (*Liparis loeselii*).

Two plants of the rare **Andrews' Rose-purple Orchid** (*Platanthera x andrewsii*), the hybrid between Ragged Fringed-orchid (*Platanthera lacera*) and Small Purple Fringed-orchid (*Platanthera pycnodes*), were seen at Lake Utopia on August 5 (J. Goltz).

At its only known New Brunswick location on Grand Lake, a single plant of **Round-headed Bush Clover** (*Lespedeza capitata*) persisted, sending forth over 40 stems of blooms.

### Range Expansions or Declines

Hilaire Chiasson, botany expert for the Acadian Peninsula, reported several new discoveries for Miscou Island, including **Water Horsetail** (*Equisetum fluviatile*), **Field Chickweed** (*Cerastium arvense*), **Old-field Cinquefoil** (*Potentilla simplex*), **Water Bulrush** (*Schoenoplectus subterminalis*) and a single plant of **Cursed Crowfoot** (*Ranunculus sceleratus*).

In early May, Julie Singleton found a nice population of **WildGinger** (*Asarum canadense*) in bloom on the floodplain of the Tay River. Julie and Rob Whitney found three plants of **One-flowered Cancer-root** (*Orobanchae uniflora*) amidst dense vegetation along a rich section of the Nashwaak River floodplain on June 26.

A May 28 trip to the Hartland area by Fredericton area botanists to see **Calypso** (*Calypso bulbosa*) was successful, much to the credit of aspiring botanist Don Gibson, but it was alarming to find that this species had disappeared from two sites where it used to be found.

### Unusual Colours, Forms, Numbers, Blooming Dates

On June 11, Julie Singleton and Rob Whitney found the unspotted white-flowered yellow-stalked form of the western subspecies of **Spotted Coralroot** (*Corallorhiza maculata*



Northern  
Adder's-  
tongue  
drawing by  
J.K. Small

var. *occidentalis* forma *flavida*) near Bower Brook on the Tay River.

On July 2, Don Vail, Dwayne Sabine and I saw a single white-flowered plant of **Arethusa** (*Arethusa bulbosa* forma *albiflora*) in a small calcareous fen near Arthurette.

On July 13, Don Gibson and I found hundreds of plants of **Rose Pogonia** (*Pogonia ophioglossoides*) that had two flowers, growing along the boggy fringe of Sunpoke Lake among thousands of plants with the usual single flowers.

At Lower Jemseg on July 30, James Walde and I saw dozens of plants of **Canada Lily** (*Lilium canadense*), with colours ranging from deep orange-red to the usual pale yellow-orange.

A very late **Jack-in-the-pulpit** (*Arisaema triphyllum*) was found in peak bloom on August 5 at Lake Utopia during a fern and flower foray with a group from Sunbury Shores Arts and Nature Centre (J. Goltz).

Flowering plants of **Cardinal Flower** (*Lobelia cardinalis*) were exceptionally abundant along the Digdeguash River in late July and early August, much to the delight of Ruby-throated Hummingbirds (their principal pollinators) and various naturalists' groups (J. Goltz).

Mike LeBlanc reminded me to report on the prolific fruiting of **Mountain Ash**, **Balsam Fir** and **Spruce** over wide areas of the province in 2000; this sensational phenomenon had significant impacts on wintering bird populations.

### Non-native Species

During the August foray of the New Brunswick Botanical Group, Gart Bishop and Sean Blaney discovered and identified a new weed species for the province, **Narrow-leaved Bittercress** (*Cardamine impatiens*), along the St. John River near Florenceville. Other non-native species found for the first time in the province by Sean included **Everlasting Pea** (*Lathyrus latifolius*) along the Canada-United States border near the Meduxnekeag River, **Cup-plant** (*Silphium perfoliatum*) along the St. John River between Bath and Florenceville, and **Carex hirta** near the Saint John-Digby ferry terminal. Sean also added **Water-melon** (*Citrullus lanatus*) to the New Brunswick plant list, thanks to his discovery of 20 plants growing without cultivation near a campsite on French Lake.

New localities for **Summer-cypress** (*Kochia scoparia*), a very rare Eurasian introduction previously known in New Brunswick only at Fredericton, were found by Sean at McGowan's Corners and Moncton. His keen eyes revealed many new locations for **Rugel's Plantain** (*Plantago rugelii*), a provincially rare and easily overlooked species, mainly along the St. John River valley between Fredericton and Woodstock.



Huge populations of **Scouler's Popcornflower** (*Plagiobothrys scouleri*) were found in disturbed ground at Wilkins' field in Fredericton on October 8 (J. Goltz).

Hilaire Chiasson observed that **Oak-leaved Goosefoot** (*Chenopodium glaucum*) had completely vanished from the vicinity of Lac Frye, Miscou Island where it had been abundant the previous year. In contrast, **Bird's-foot Trefoil** (*Lotus corniculatus*) has become very well established on lawns at Miscou Centre. Hilaire also reports that **Purple Loosestrife** (*Lythrum salicaria*) was found for the first time on Miscou Island in August 1999.

The invasive **Norway Maple** (*Acer platanoides*) was found near Tidehead by Sean Blaney, documenting for the

first time the naturalization of this species along the Restigouche River. Near Woodstock, Hartland and Sackville, Sean detected new stations of **Wild Chervil** (*Anthriscus sylvestris*), a prolific colonial weedy species.

<sup>1</sup> By legislation, New Brunswick's endangered species are **Furbish's Lousewort** (*Pedicularis furbishiae*), **Prototype Quillwort** (*Isoetes prototypus*), **Pinedrops** (*Pterospora andromedea*), **Southern Twayblade** (*Listera australis*), **Parker's Pipewort** (*Eriocaulon parkeri*), **Anticosti Aster** (*Symphyotrichum anticostiense*), **Gulf of St. Lawrence Aster** (*Symphyotrichum laurentianum*) and **Bathurst Saltmarsh Aster** (*Symphyotrichum subulatum* var. *obtusifolium*).

### Nature News - Amphibians and Reptiles

Donald McAlpine, Curator of Zoology Natural Science Department New Brunswick Museum

The December to February period is not an active one in New Brunswick for frogs, salamanders, turtles or snakes. And not surprisingly we know virtually nothing about the winter habitat of New Brunswick amphibians or reptiles. I was therefore more than a little intrigued when Scott Makepeace passed on an observation to me of snakes hibernating in a cold spring. I spoke to the observer, Brian Bubar, who discovered 5 garter snakes in a well at his summer camp at Penniac in mid November. By late Decem-

ber he observed 5-6 snakes coiled together in a ball below the water line. I have received one similar report in the past. In late the fall of 1989 Don Blyth discovered 7 garter snakes hibernating in a cold spring at McCloud Hill, near Fredericton. Perhaps the phenomenon is more common than realized. I would be interested to hear from any naturalists with herpetological observations, but especially from those who observe amphibians or reptiles hibernating in the province. Check out those cold-springs!

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