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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. Canada E2K 1E5

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

Club d'ornithologie du Madawaska Ltée, a/s Le Musée historique du Madawaska, 195 boul. Hébert, Edmundston NB E3V 2S8; Gilles Roussel, Pres., domicile (506) 735-5430, bureau (506) 735-2035; courriel <gilles.roussel@ext.gov.nb.ca>; réunions à 19h30, 2ième mercredi, sept. à juin, Musée du Madawaska; *Le Jaseur* bimestriel.

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

Club les Ami(e)s de la Nature du sud-est, a/s Gilles Bourque, 407 rue High, Moncton NB E1C 6E3; (506) 532-2873 (ligne d'information); réunions alternant entre Dieppe et Shédiac, 1er lundi de chaque mois; excursions 3ième samedi ou dimanche; *La plume verte*.

Ford Alward Naturalist Association, c/o Elizabeth McIntosh, 560 Kenneth Road, Glasville NB E7L 1B3; (506) 246-5572; meets Florenceville Town Hall, 7:00 pm, 1st Tues., Sept.-June; meetings advertised in local newspapers.

Fredericton Nature Club, Box 772, Stn A, Fredericton, NB E3B 5B4; 450-6365; meets Odell Park Lodge, 7:00 pm, 2nd Wed., Sept.-May; monthly *Newsletter*.

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

Ornitho Restigouche Club, 6 Van Horne Cr., Campbellton, NB E3N 3K3; 753-7261.

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

Saint John Naturalists' Club, 277 Douglas Ave., Saint John, NB E2K 1E5; meets N.B. Museum at Market Square, 7:30 pm, 2nd Wed., Sept.-May, elsewhere in June; monthly *Bulletin*.

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by Jim Edsall, digitized by Don Vail

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

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A MESSAGE FROM THE PRESIDENT UN MESSAGE DE LA PRÉSIDENTE

Rose-Alma Mallet

I am very pleased that Donald McAlpine has returned as curator of zoology at the New Brunswick Museum. My thanks go out to all of you for making your views on his threatened dismissal known to politicians, to the museum's Board of Directors and to the media. Our pressure and good arguments did not go unobserved. Donald McAlpine expresses his appreciation and thanks for all the support he received from the naturalists of New Brunswick.

Roland Chiasson and Sabine Dietz are now co-ordinators of the **Maritime Important Bird Areas** program. They are very excited about the project. They start their task at the end of May, 1999. They were selected by a board consisting of several Canadian Nature Federation members and the three presidents of the Maritime naturalists' federations. Congratulations to Roland and Sabine.

Many members of the NBFN and of the federated clubs throughout the province expressed their views at the public hearing of Dr. Louis LaPierre's project on the **Protected Areas Strategy** for New Brunswick. Two of the public presentations will follow this message, those of Jim Goltz and myself. Jim Goltz was spokesperson for the NBFN at the first public meeting on January 20 in Fredericton and I spoke at the last public meeting on March 1 in Moncton.

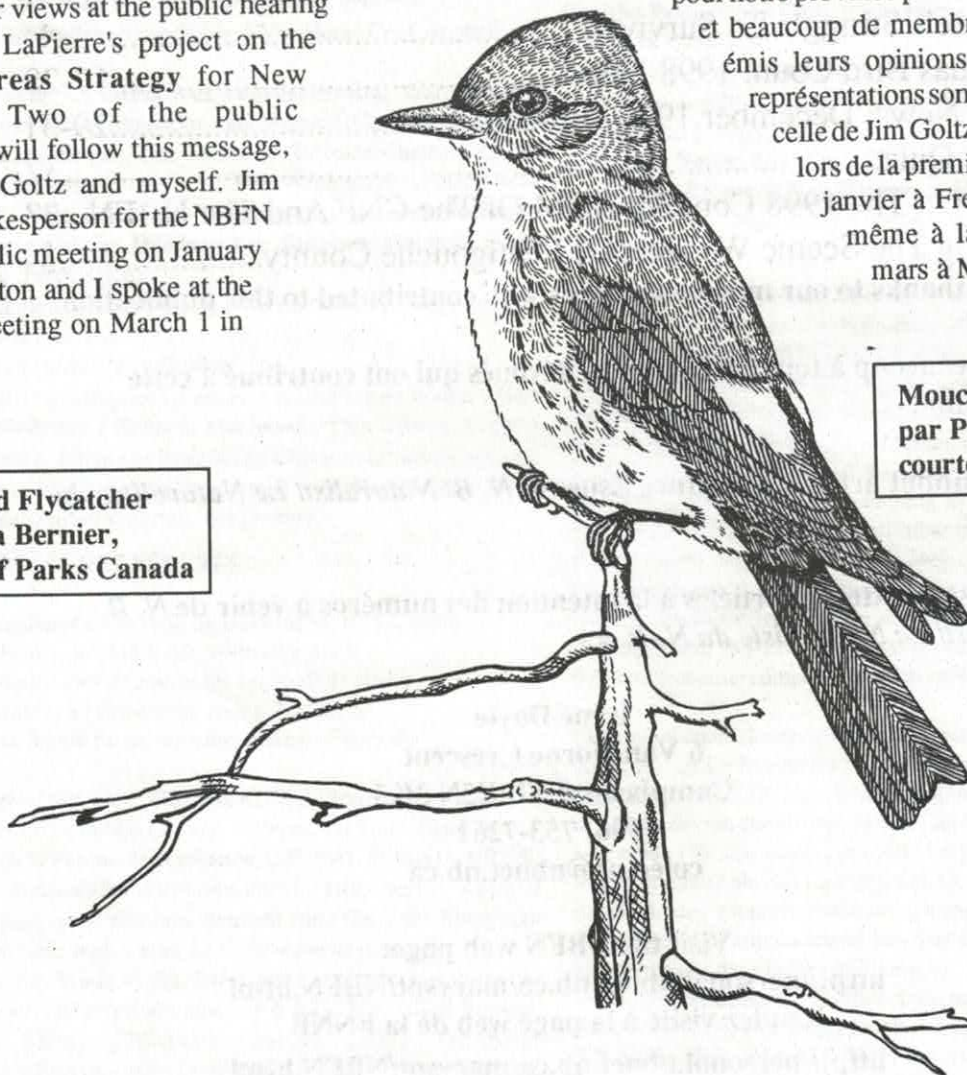
Olive-sided Flycatcher
by Patricia Bernier,
courtesy of Parks Canada

Je suis heureuse de vous annoncer que Donald McAlpine a repris son poste de conservateur de zoologie au Musée du Nouveau-Brunswick. Les points de vue des naturalistes dans ce dossier ont été très importants et n'ont pas passé inaperçus. Donald McAlpine remercie les naturalistes de la province de leur démarches auprès des politiciens, les membres du conseil des directeurs du musée et les médias.

Roland Chiasson et Sabine Dietz sont maintenant les coordinateurs du projet **Sites importants d'oiseaux dans les Maritimes**. Ils sont très enchantés du projet et devraient être à l'oeuvre à la fin du mois de mai 1999. Le choix de ces deux candidats a été déterminé par un comité composé de représentant(e)s de la Fédération canadienne des naturalistes et les président(e)s des trois fédérations de naturalistes des provinces maritimes. Félicitation à Roland et Sabine.

Lors des sessions publiques sur le projet du Dr. Louis LaPierre portant sur la **Stratégie des zones protégées** pour notre province plusieurs membres de la FNNB et beaucoup de membres des clubs fédérés ont émis leurs opinions sur le sujet. Deux des représentations sont reprises dans cette revue: celle de Jim Goltz qui a représenté la FNNB lors de la première session publique le 20 janvier à Fredericton et celle de moi-même à la dernière session le 1er mars à Moncton.

Moucherolle à côtés olive
par Patricia Bernier,
courtoisie de Parcs Canada



NBFN PRESENTATION ON THE N. B. PROTECTED AREAS STRATEGY

Jim Goltz

Dr. LaPierre, Ladies and Gentlemen: The New Brunswick Federation of Naturalists is very pleased to have the opportunity to present our views on the proposed Protected Areas Strategy for New Brunswick. Members of the Federation include some of New Brunswick's most knowledgeable scientists, both professional and amateur, who have greatly contributed to the knowledge base regarding the province's wildlife. We use the term wildlife in the broadest sense to include plants and animals.

It is from this perspective and with this expertise that we support the validity of the scientific principles upon which the strategy is based. We congratulate Dr. LaPierre and his team of experts and consultants for pulling together the best available scientific information and expert opinion in crafting this strategy, a strategy that has strong scientific merits and is also doable.

We call for the protection of all 12 candidate sites as the minimum that must be done to protect areas representative of the province's ecoregions and enduring natural features. Each of these sites must be large (preferably at least 25,000 hectares) in order to help ensure that natural processes can continue with minimal human influence, and the wildlife they support can continue to thrive. Any good scientific process needs to have controls -- in this case large areas where no harvesting of trees, no mining, no major industrial development and no hydroelectric development are permitted. Currently we have few protected areas of adequate size, so how can we know how we are changing the land and affecting wildlife, both in the short term and over time? Such sites will serve as benchmarks against which to measure the impact of human activities that occur across a majority of the province.

The portions of the 12 candidate sites that occur on public land must be given immediate interim protection to ensure that their natural features are not compromised before final decisions are made. It is important that we keep our options open and these sites are not ecologically impoverished or further degraded.

We also support the completion of a comprehensive protected areas network with the protection of medium and small sites to capture the range of biodiversity and natural processes that do not occur, or are poorly represented, in the larger sites. The smaller sites would afford protection for uncommon, rare, threatened or endangered flora, fauna, ecosystems and/or landforms since such values were not taken into consideration when the larger candidate sites were selected.

We strongly urge that our protected areas network be integrated into the land management process so that the protected areas do not become oases of green in a sea of

clearcuts and/or development.

Why do we need these protected areas? For people, natural areas provide many environmental services including clean air, a clean reliable water supply, and sources of medicine, food and inspiration. They have scientific, educational, health and spiritual value. They help define our identity and help to enrich our lives. They are an investment in the future.

New Brunswick currently has the least amount of protected land of any jurisdiction in Canada. If the situation doesn't improve, our poor efforts in this regard will almost certainly have negative repercussions for access to global wood markets, for ecotourism, for our economic growth and ultimately for keeping New Brunswickers in New Brunswick.

Protected areas are not just important for humans, but are essential for the wildlife that shares our province. According to studies done by the Canadian Wildlife Service, wildlife is extremely important to the vast majority of New Brunswickers. In New Brunswick, we enjoy a rich diversity of species, thanks to an incredibly rich diversity of habitats or ecosystems. Like humans, wildlife cannot continue to exist unless it has a suitable habitat. At greatest risk in New Brunswick are the wildlife species that tolerate change poorly or have very specialized habitat requirements such as old growth forest. Many wild orchids, ferns, birds of prey and predatory mammals are at risk because we have too few permanent large protected areas. Some species, such as the lovely wild orchid called Calypso have disappeared over much of their range in eastern North America because of loss of their required habitat, namely old growth coniferous woods dominated by Eastern White Cedar. One of our Ministers of Natural Resources and Energy publicly made the claim that each tree in this province is slated to be cut, and is stamped with the date it is to be cut and the name of the person who will cut it. Just like us, our wildlife deserves to have permanent places to call home. Industrial silviculture and forestry operations result in the untold loss of huge numbers of wildlife, especially nestling birds and young mammals, frogs, salamanders, invertebrates and plants that cannot escape and flee to safety.

In closing, we urge you and all of New Brunswickers to carefully consider the ramifications if we don't complete our protected areas strategy now. Think of the future, not just for you, but for future generations of New Brunswickers, and future generations of wildlife. Time and opportunity are running out. Now is our best opportunity to strike a balance as to how we use our lands. We reiterate that all 12 candidate sites must be protected, these sites must be large, immediate interim protection must be given, the development of the protected areas network must continue until it is rounded out

NBFN PRESENTATION ON THE N. B. PROTECTED AREAS

STRATEGY (cont'd. from p. 3)

smaller and medium-sized sites, and land management must improve so our protected areas do not become isolated from one another. This is not only good science; it makes good sense.

This is perhaps the best, most meaningful opportunity that New Brunswickers have had to actually determine how our public lands are managed. We were never consulted before clearcutting was widely implemented across our province, nor were we consulted before the use of our public lands was given to major industrial forest corporations. We urge all New Brunswickers to support the development of a comprehensive protected areas network for New Brunswick, using Dr. LaPierre's strategy as a foundation.

PRÉSENTATION DU CLUB DES AMI(E)S DE LA NATURE DU SUD-EST AU COMITÉ PUBLIC SUR UNE STRATÉGIE DE ZONES PROTÉGÉES POUR LE NOUVEAU-BRUNSWICK

Rose-Alma Mallet

Bonsoir Monsieur Lapierre. Mon nom est Rose-Alma Mallet et depuis des années je consacre tous mes loisirs à promouvoir l'histoire naturelle de cette province. Actuellement, en plus de mon travail rémunéré, je suis présidente de la Fédération des Naturalistes du Nouveau-Brunswick.

Ce soir, je m'adresse au comité des Zones Protégées au nom des naturalistes de Shédiac/Moncton, c'est-à-dire du club des naturalistes Les Ami.e.s de la nature du Sud-Est. Notre groupe, représentant une centaine de membres, est très intéressé à la biodiversité dans notre province, le Nouveau-Brunswick. C'est pourquoi je suis ici ce soir.

Le Club des Ami.e.s de la nature du Sud-Est approuve le projet du Dr. Lapierre sur Une stratégie des Zones protégées. Le club appuie la protection des douze zones proposées par le Dr. Lapierre. Toutes ces douze zones doivent être d'au moins 25,000 hectares. Les études des écologistes et des scientifiques d'Environnement Canada ont démontré que la vie sauvage a besoin d'un terrain un peu plus grand que le Parc Fundy pour survivre. Nous n'avons pas besoin d'études pour arriver à cette conclusion, le bon sens nous dit que pour maintenir la biodiversité dans la nature il faut préserver de grand terrain afin de permettre à un grand nombre d'individus de survivre et de se reproduire, sinon les espèces vont disparaître. Toutes les provinces ont besoin de préserver un certain pourcentage de territoire à l'état presque sauvage, un territoire qui ne tombe pas sous la coupe des compagnies de bois, ou des compagnies minières, ou sous la construction de routes ou de lignes d'électricité.

Les sites proposés dans le projet Une stratégie de zones protégées pour le Nouveau-Brunswick et le 1.4% du territoire déjà protégé n'est pas un pourcentage très élevé de terrains protégés dans notre province. À 6% de territoire protégé, nous sommes une province qui n'a pas fait beaucoup de progrès dans ce domaine. La Colombie-Britannique protège 10%, l'Ontario 6.6% et la province voisine, la Nouvelle-Ecosse protège 8% de son territoire. Et nous, les compagnies de bois crient au scandale pour un petit 6%.

Les zones protégées sont nécessaires pour l'écosystème. Nous comme humain nous oublions que nous sommes un des maillons de cette chaîne naturelle. Toutes nos activités dépendent de cet écosystème, nous avons besoin de cet écosystème pour demeurer en vie. Et chaque fois qu'une espèce disparaît cela nous amène plus près de notre disparition. Toutes ces coupes à blanc et ces plantations d'arbres réduisent l'habitat de la vie sauvage. D'après les experts à travers le monde et les experts d'Environnement Canada, les activités des êtres humains entraînent la disparition des espèces à une vitesse alarmante sans précédent. 11% de tous les oiseaux, 25% de tous les mammifères sont menacés. On peut dire la même chose des plantes et des amphibiens. Il est temps que la province du Nouveau-Brunswick fasse sa part et protège une partie de son territoire pour la nature et pour les générations futures. Certaines espèces de plantes, d'oiseaux et de mammifères ont besoin d'une forêt mûre, vieillie par le temps pour survivre.

Si le gouvernement du Nouveau-Brunswick accepte de protéger toutes les zones proposées dans le rapport scientifique du Dr. Lapierre, cela veut dire que seulement 3% ou moins des forêts de la province serait retiré de la production. Nous ne croyons pas que ce 3% est suffisant pour sauver l'industrie forestière. Si cette industrie a besoin de ce 3% de la forêt, cela veut dire qu'elle souffre d'une pénurie de bois. Cette industrie semble se diriger dans la même direction que l'industrie de la pêche vers un épuisement de la ressource. C'est peut-être le moment où notre gouvernement devrait penser à diversifier et trouver d'autres usages de la forêt. Car si le gouvernement attend trop longtemps à agir, cela coûte cher au payeurs de taxes d'aider ces communautés qui n'ont plus de moyen économique pour survivre. Pensons à tous l'argent versé par les gouvernements à la province de Terre-Neuve et aussi dans la Péninsule Acadienne. Par contre, si l'on protège toutes les douze zones proposées dans le rapport du Dr. Lapierre, cela peut créer une diversité de possibilités d'emplois reliés aux installations récréatives de plein air, à la vente

d'équipement, à la recherche scientifique, à l'aménagement, à l'interprétation, au guidage, et bien d'autres services touristiques. Nous suggérons au gouvernement du Nouveau-Brunswick de diversifier l'économie avant que la ressource soit épuisée.

L'industrie touristique contribue déjà 850\$ millions par année à la province, un chiffre qui augmente à chaque année. Le tourisme dépend grandement sur la beauté naturelle du Nouveau-Brunswick. Les gens ne viendront pas au Nouveau-Brunswick faire l'expérience d'une vie sauvage endommagée ou détruite. Les touristes ne viendront pas dans la province voir des plantations d'arbres. Une plantation d'arbres c'est tout simplement un jardin d'arbres, une monoculture comme un champs de maïs ou de patates. Les touristes seront choqués par la vue des coupes à blanc. C'est la beauté naturelle du paysage qui attire les touristes. Le parc national Fundy accueille plus de 190,000 visiteurs par année et celui de Kouchibouguac 120,000 visiteurs par année. Ajoutons à ces chiffres tous les visiteurs qui se rendent à la dune de Boutouche. Un sondage fait par Environnement Canada et publié dans leur bulletin Science et Environnement d'octobre 1998 révèle que 85 % de la population de 15 ans et plus s'adonne à des activités reliées à la nature. Cela vaut la peine de dépenser en environnement. Notre club encourage le gouvernement de notre province à conserver des écosystèmes naturels indispensables à la survie et à la santé à long terme de la faune et de la flore sauvages.

Un sondage effectué en novembre 1998 par la firme Corporate Research Associates d'Halifax a révélé que 93% des Nouveau-Brunswickois ont trouvé qu'il était important de protéger des zones pour la nature au Nouveau-Brunswick. Ces gens ont répondu à ce moment - là librement sans menace. Mais que s'est-il passé? Nous avons appris que certaines réunions public sur Une stratégie des Zones protégées furent orageuses et que certaines personnes étaient

très vocales contre le projet des zones protégées. Il est difficile de croire à l'annonce de tous ces emplois perdus pour un 3% de la forêt qui serait protégées. Les pertes d'emplois dans l'industrie forestière se fait à chaque année, la mécanisation des machineries en forêt coupent les arbres à un rythme effrayant aucun bûcheron peut en faire autant avec sa scie mécanique et dans les moulins à scies les machines l'informatisées ont besoin peu de main d'oeuvre et les camions lourds peuvent transporter beaucoup de bois sans trop de main d'oeuvre. Alors où étaient les compagnies lorsqu'il fallait protéger les emplois? Elles mécanisaient et informatisaient à outrance. A ce moment là, les compagnies ont pensé qu'à faire de l'argent. Actuellement lorsque l'on examine ce qui reste de la forêt à travers la province on croirait que les compagnies forestières veulent tout couper jusqu'au dernier arbre et ne pas prendre leur responsabilité et pratiquer des coupes de bois respectant le développement durable et le plein emploi. Alors quel est le problème des compagnies forestières? Pourquoi ne veulent-elles pas partager 3% des terres de la couronne avec la population du Nouveau-Brunswick? Est-ce que nous les habitants du Nouveau-Brunswick nous recevons notre part de nos terres, ou est-ce que certaines compagnies s'enrichissent avec notre patrimoine et celui de nos enfants? Est-ce que les grandes compagnies partagent les terres de la couronne avec les petits producteurs de bois? Ces grandes compagnies qui se payent des pages de publicité dans les journaux ne veulent rien partager. N'oublions pas 97% de la forêt dont une grande partie des terres sont à la couronne est entre les mains des grandes compagnies forestières. 97% de la forêt est exploitable. Je le répète 97 % des terres boisées sont exploitées par les compagnies forestières. Alors c'est peu demander que de réserver 3% à d'autres occupations qu'industriel.

Merci de votre attention.



Common Loons, courtesy of Parks Canada

Plongeurs huart, courtoisie de Parcs Canada

A SUMMARY OF SEABIRD "SUPERWATCH 1998"

Jim Wilson

Background and Purpose

On the morning of April 18, 1998 nearly 50 volunteers spent four hours or more scanning coastal waters in various parts of the three Maritime provinces in a survey dubbed "Superwatch 98." The purpose of the effort was to help shed more light on the overall pattern of seabird migration.

Superwatch 98 was conceived as a simple method to take a snapshot, so as to speak, of the pattern of seabird movement on a single day at the height of spring migration. By doing simultaneous counts at a number of strategic locations throughout the region, a pattern of movement should result.

The date was selected as a result of observations conducted at Point Lepreau Bird Observatory (PLBO) by volunteers during 1996 and 1997 that indicated this as the peak of seabird movement in the Bay of Fundy. Unfortunately, thick fog prevailed for much of the four-hour count in many places, and several observers extended their stay when the fog finally began to lift. In all, there were observations made at 24 locations - 14 along the Bay of Fundy, 6 on the N. B. side of Northumberland Strait, 1 at the Restigouche estuary in northern N. B., 1 at Cape North P. E. I., and 2 on the Nova Scotia mainland at either end of Canso Strait. At Waterside on the upper Bay of Fundy a count was impossible due to dense fog and there was no coverage at East Point, P. E. I., so Superwatch '98 actually included 26 locations.

Highlights

The object of the survey was not to tabulate absolute numbers, as there was the probability of counting the same birds at different locations during the designated four hours. Rather, the intent was to determine what species were present in relative numbers at each location and to try to extract conclusions about the movements of each species.

In total, scoters represented the majority of birds at 80%. Black and Surf were 52% and 8% respectively, and another 19% were identified as "unidentified dark-winged" scoters of either of those two species. Therefore, Black Scoter and Surf Scoter together represented 79% of total birds seen. White-winged Scoters added another 1% to bring total scoters to 80%.

Common Eiders were another 13%, bringing the total for these four seaduck species to 93% of total birds counted.

The next most counted species after the scoters and eiders were Red-breasted Mergansers and Red-throated Loons. Therefore six species represented 97% of the birds seen.

Comments by Location

The Long Eddy Point, Grand Manan count included 1633 Black Scoters, and 807 Red-throated Loons. Lots of birds were moving through, all passing outside The Wolves

and therefore probably not visible from Point Lepreau.

Grand Manan and Digby ferries had relatively few birds counted. However, loons appear to migrate in a broad band, many well offshore. Scoters generally follow the coast, but at least some swing well out into the bay, passing beyond The Wolves. Generally, eiders tend to hug the coastline.

At Point Lepreau there was steady movement with many scoters far out over the bay after likely having passed on the mainland side of The Wolves. Scoters of undetermined species were seen flying in the fog close to Point Lepreau, indicating that they do migrate in heavy fog. Black Scoter is the only scoter species that calls audibly while in flight, a probable indication of regular movement during fog and darkness.

Cape Spencer had a total of 3157 Black Scoters counted and others were heard passing in the early fog.

Quaco Head Light and Cape Enrage counted more total scoters than Cape Spencer and Point Lepreau which seems to indicate that the birds follow the shoreline more consistently farther up the bay. Observations from Long Eddy Point, Grand Manan and from the ferry to Grand Manan indicates that flocks are diverged by the time they arrive at The Wolves (and possibly Grand Manan) at the entrance to the bay. Red-throated Loons were passing in numbers at all locations in the Bay of Fundy up to Cape Enrage. After Cape Enrage we had no further sightings. Where do the loons cross overland?

On the Petitcodiac River at Dieppe Roger LeBlanc spent four cold hours at the bend of the Petitcodiac and no seaducks were observed.

At Memramcook Bridge Mike Rae and Oscar LeBlanc saw only one Common Eider and it was heading south!

Fort Folly Point had seven observers who spent nearly eight hours counting nearly 2500 scoters and over 450 Common Eiders. Most of the scoters seemed to follow the Petitcodiac, while the eiders tended to go up the Memramcook.

The Atlantic Industries Wharf is on the east side of the Memramcook River opposite Fort Folly Point and just a short distance upstream from Shepody Bay. Kathy Popma and Ruth Miller visited this location between 1650 hrs and 2000 hrs. They counted 1450 eiders and observed the birds split their migration paths, with approximately 50% following the Petitcodiac and Memramcook Rivers. Over 300 scoters rafted in the Memramcook River and on Shepody Bay.

Migration counts at Cape Jourimain, Baie Vert, and Caissie Cape Wharf were light, with less than 200 scoters observed at each site. Virtually no eiders were observed at these locations.

Pointe aux Pruches (between Pointe Sapin and Point Escuminac) had a total of 1141 scoters.

At the wharf at **Escuminac**, Sandra and Tom Gulliver saw an estimated 1500+ scoters.

On the **Restigouche Estuary** Mike Lushington conducted a count of the scoters massed and came up with a total of 7800. These were 7000 Black scoters and 800 Surf Scoters.

At **Cape George and Little Harbour** (west of Canso, N. S.) Peter Hicklin and Ron Arsenault respectively attempted counts in thick fog and concluded that there were few birds passing.

At **Cape North**, P. E. I. Gisele Martin and Suzanne Essensa counted nearly 1100 scoters, 71 Common eiders, 229 Oldsquaw, 109 Red-breasted Mergansers and 74 Gannets. Obviously this is a key location for future observations.

Observers

A total of 47 observers took part in Superwatch '98 as listed below.

1. Long Eddy Point, Grand Manan, N. B.: Brian Dalzell.
2. Grand Manan Ferry Crossing (Round Trip), N. B.: Sandra Cooper, Ken MacIntosh.
3. Point Lepreau Observatory, N. B.: Phil Withers, Jim Wilson, Jean Wilson.
4. Saint John to Digby Ferry (Round Trip on April 19), N. B./N. S.: Falk Huettmann, Neal Simon.
5. Cape Spencer, N. B.: David Smith, Hank Deichmann.
6. Quaco Lighthouse, N. B.: Janet Whitehead, Eileen Pike.
7. Waterside, N. B.: Ruth MacLean, Garry MacLean.
8. Cape Enrage, N. B.: Rob Walker.
9. Marys Point, N. B.: David Christie.
10. Hopewell Rocks Park, N. B.: Alma White, Don White, Jennifer Elgee, Jim Elgee.
11. Petitcodiac River at Dieppe, N. B.: Roger LeBlanc.
12. Memramcook Bridge, N. B.: Mike Rae, Oscar LeBlanc.
13. Fort Folly Point, N. B.: Gilles Bourque, Norm Belliveau, Gisele Belliveau, Yvon Cormier, Bernice Comeau, Garry MacLean, Ruth MacLean.
14. Atlantic Industries Wharf, Memramcook River Opposite Fort Folly Point, N. B.: Kathy Popma, Ruth Miller.
15. Pecks Point, Cumberland Basin, N. B.: Paul Bogaard.
16. Cape Jourimain, N. B.: Kathy Popma, Harold Popma, Rhianna Edwards, Ruth Miller.
17. Baie Vert, N. B.: Kathy Popma, Harold Popma, Ruth Miller.
18. Caissie Cape Wharf, N. B.: Leona Cormier, Janice Melanson.
19. Buctouche Dune, N. B.: Gilles Martin, Don Cormier, Nicole Comeau.
20. Point aux Pruches (between Pt. Escuminac & Pt. Sapin), N. B.: Rose-Alma Mallet, Mike LeBlanc.
21. Escuminac Wharf, N. B.: Sandra Gulliver, Tom Gulliver.
22. Restigouche Estuary, N. B.: Mike Lushington.
23. Cape George, N. S.: Peter Hicklin.
24. North Cape, P. E. I.: Gisele Martin, Susanne Essensa.
25. East Point, P. E. I.: no coverage.
26. Little Harbour (west of Canso), N. S.: Ron Arsenault.



SEABIRD SUPERWATCH SUMMARY-April 18, 1998 from 0900 to 1300 hrs																
COMPILED BY JIM WILSON - 2 Neck Road, Quispamsis, N.B. E2O 1L3 (Tel: 506-847-4508) E-mail: jgw@nbnet.nb.ca																
November 20, 1998																
Location	Black Scoter	Surf Scoter	Scoters Species?	White-w. Scoter	Total Scoters	Common Eiders	Red-th Loon	Common Loons	Loon Species?	morant	morant	squaw	Merg'ser	Red-br. bill	Razor-bill Species	Gannet Total Birds
Long Eddy Pt., G. Manan	1633	18	0	1	1652	838	807	18	0	0	0	20	6	0	0	3341
G. Manan Ferry (round trip)	0	0	103	0	103	158	60	2	0	0	18	29	1	0	0	371
Point Lepreau Observatory	2336	504	379	5	3224	951	161	5	0	112	4	68	11	0	0	4536
St. John-Digby Fy. (rd.trip)	97	10	17	13	137	13	9	3	11	9	0	17	0	1	46	251
Cape Spencer	3157	4	0	3	3164	69	0	2	0	0	0	0	1	0	0	3236
Quaco Lighthouse	1360	4	5030	0	6394	265	0	20	0	0	0	0	0	0	0	6679
Waterside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cape Enrage	3345	1711	0	6	5062	1258	11	1	0	12	0	13	2	0	0	6421
Marys Point	191	9	221	2	423	199	0	0	0	0	0	1	22	0	0	645
Hopewell Rocks Park	684	18	0	7	709	31	0	0	0	0	0	0	7	0	0	747
Petitcodiac R. at Dieppe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Memramcook Bridge	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Fort Folly Pt.	2114	375	0	0	2489	453	0	0	0	0	0	3	0	0	0	2945
Atl. Indust. Wh. (opp. Ft. Folly)	24	7	276	1	308	1450	0	0	0	0	0	0	0	0	0	1758
Pecks Pt. (Cumberland Basin)	233	35	265	0	533	154	0	0	0	0	0	0	4	0	0	697
Cape Jourmain	30	104	12	0	146	0	0	3	0	2	0	5	20	0	0	15191
Baie Vert	0	0	160	3	163	0	0	0	0	0	0	0	0	0	0	163
Caissie Cape Wharf	35	74	26	38	173	12	0	0	0	0	0	4	251	0	0	35475
Buctouche Dune	48	13	68	0	129	4	0	0	0	0	0	0	109	0	0	15257
Pte aux Pruches	956	99	76	10	1141	24	2	1	1	0	0	3	107	0	0	1387
Escuminac Wharf	0	0	1500	6	1506	0	0	0	0	0	0	0	0	0	0	1506
Restigouche Estuary	7000	800	0	0	7800	0	0	0	0	0	0	12	50	0	0	57867
Cape George	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
North Cape	169	1	587	331	1088	71	0	0	0	0	4	229	109	0	0	1575
East Point (No Coverage)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Little Harbour (wst of Canso)	0	0	3	0	3	5	0	0	0	0	0	0	0	0	0	8
Grand Total	23442	3786	8723	426	36347	5956	1050	55	12	135	26	404	700	1	46	32945061
% of total	52%	8%	19%	1%	80%	13%	2%	0%	0%	0%	0%	1%	2%	0%	0%	100%

HOW LONG CAN A BIRD LIVE?

Brian Dalzell

Having been banding songbirds for almost four years, I am now starting to get a few returns from birds that are at least three years old. Most of these are birds that live banded at my feeders, such as chickadees, nuthatches, sparrows and woodpeckers. The oldest to date have been an American Tree Sparrow and a Black-capped Chickadee that are both at least three years old. Now that doesn't sound very old, certainly not in human years, but you have to consider just how incredibly fast-paced and dangerous a place the world is for a wild bird. For example, the Tree Sparrow has already flown to the low arctic (perhaps the Ungava peninsula of Quebec) and back to Grand Manan five times, and is getting ready for its sixth such voyage.

Out of curiosity, I went to the Bird Banding Laboratory (BBL) website to see just how long a Tree Sparrow might live, based on banding recoveries from the past 40 years or so. The record for this species is an incredible 10 years and nine months, so my little feeder visitor has a few more winters yet to go. Somehow I doubt he (she?) will make it, but you never know.

I thought readers might be interested to know what some of the current records are for the longest-lived wild birds from the files of the BBL, so I picked out the 10 oldest species. Keep in mind there may be older birds in the world, because most of the banding data collected by the BBL has been submitted by American and Canadian researchers over the past 50 years. The oldest naturally-occurring species are the seabirds, who generally have one young per year, or in the case of albatrosses, every other year. The longevity record is held by a Laysan Albatross of 42 years. I should note that I have rounded these ages off to the next lowest year (except in the case of birds a month shy of the next highest year, in which case I rounded up).

The other nine species that make up the top 10 oldest species of wild birds are: Black-footed Albatross - 41; White Tern - 36; Wandering Albatross - 35; Arctic Tern - 34; Sooty Tern - 33; Black-browed Albatross - 32; Greater Frigatebird - 32; Caspian Tern - 30; Red-tailed Tropicbird - 28; Black Brant - 28. You will note there is actually a tie between the last two species.

The BBL notes these records are all from their files, and they can only report what researchers have in turn reported to them. I mention this because I know (according to this list) the third oldest species of bird in the world comes from Grand Manan, although it isn't listed. That species is the Leach's Storm-Petrel, and it currently resides on Kent Island each summer. Actually, the oldest-known bird reached an age of about 37, but I can't recall when exactly. The species has been studied intensively there since 1953 by Dr. Charles Huntington (known affectionately as "Chuck" by his many admirers). Most of the petrels were banded as chicks in their burrows, so their exact

ages can be determined when they return many years later. I don't know just how many birds have reached or exceeded the age of 35, but there can't be a whole lot, perhaps less than 10. One interesting story I recall is of an old bird that returned one year with a missing leg. If Chuck hadn't had the presence of mind to put bands on both legs of his oldest birds, he would not have known of the return of this particular bird for its 36th summer.

So, at any one time, there are likely one or two Leach's Storm-Petrels nesting on Kent Island that are among the oldest birds in the world. But there certainly there must be several more petrels out there over 35 years of age. I say this because the largest nesting colony in the world (Baccalieu Island in Newfoundland I believe) exceeds one million pairs.

What about other species of North American birds? Well, at the risk of being boring, I am going to list quite a few of the oldest. Before you read each of the following paragraphs, try and guess how old each of the listed species will be. I think you will be as surprised as I was to learn just how old some of our wild birds become (or apparently don't become, in some cases).

I'll start with some of the seabirds that are commonly found along our shores. One is the Herring Gull, of which I had heard the oldest was 36 years, but the BBL only lists the record as being 28 years. I imagine some researcher out there knows of an older bird, but is keeping that information to themselves in order to publish it as the result of their (obviously) long-term studies.

Common Loon is only listed as 12 years; I would have thought such a large bird would live at least 20 or 25 years. On the other hand, the Atlantic Puffin, a much smaller bird, can indeed live to be at least 20 years. The Black Guillemot is only listed as living to 13 years, but again I know of a bird banded at Kent Island that lived to at least 18 years.

Here are some more species that occur commonly in the province: Northern Gannet - 27; Double-crested Cormorant - 18; Mallard - 23; Black Duck - 26; Wood Duck - 22; Common Goldeneye - 15; Oldsquaw - 15; Common Eider (I believe the record came from Grand Manan) 22; Canada Goose - 28; Brant - 21; Great Blue Heron - 23; Black-crowned Night-Heron - 21.

American Woodcock - 20 (incredible!); Common Snipe - 9; Ruffed Grouse - 8; Mourning Dove 27 (rather hard to believe considering their apparently high mortality rate); Bald Eagle - 21; Peregrine Falcon - 16; Great Horned Owl - 27; Snowy Owl - 10; Hairy Woodpecker - 15; Downy Woodpecker - 11; Northern Flicker - 9; Common Nighthawk - 9; Chimney Swift - 14.

HOW LONG CAN A BIRD LIVE?

(cont'd. from p. 9)

Ruby-throated Hummingbird - 9 (about twice what I would have guessed); Eastern Kingbird - 12; Eastern Phoebe - 10; Blue Jay - 17; Gray Jay - 11; Common Raven - 13 (I would have thought much more, say 25); American Crow - 14; European Starling - 15; Brown-headed Cowbird - 16; Red-winged Blackbird - 15; Baltimore Oriole - 11; Common Grackle - 20; Evening Grosbeak - 15; Purple Finch - 11; House Finch - 11; American Goldfinch - 10; Snow Bunting - 8; White-throated Sparrow - 9; Chipping Sparrow - 9; Dark-eyed Junco - 10; Song Sparrow - 11; Northern Cardinal - 15; Rose-breasted Grosbeak - 12; Scarlet Tanager - 10; Purple Martin - 13; Tree Swallow - 11; Barn Swallow - 8; Cliff Swallow - 11; Cedar Waxwing - 8; Black-and-White Warbler - 11; Yellow Warbler - 10; Common Yellowthroat - 11; Prairie Warbler - 10; Yellow-breasted Chat - 9 (I would have thought this to be the oldest warbler); American Redstart - 10; House Sparrow - 13; Northern Mockingbird - 9; Gray Catbird - 11; Brown Thrasher - 12; Black-capped Chickadee - 12; American Robin - 14.

Perhaps I should give a short explanation of how the maximum age is calculated. It is based on the age of the bird at banding and the date of subsequent retrap or recovery. A

June hatching date is assumed for all species. This works very well for most birds and makes it possible to compare species of groups of species more easily. June is therefore assumed to be month 00, with July month 01, August 02, etc. For example, a bird banded as a second (calendar) year bird in July 1990 and encountered again in August 1997 would be eight years and two months of age, since it hatched in 1989. As I noted earlier, I rounded down most ages, mostly due to the difficulty of using months in the listings.

Naturally, the maximum longevity record for a bird cannot be longer than the time researchers have been studying the species. Also, the lifespan of some of the bands used was actually shorter than those of the birds, especially seabirds. Most bands working with long-lived species are now using harder metal bands (such as stainless steel) that will last as long as the bird does.

If I didn't list a species you were looking for, have no fear. You can find the entire list on the Internet at the BBL website. The URL is: <http://www.pwrc.usgs.gov/bbl/homepage/longvrec.htm>. In the meantime, I'll keep on banding songbirds and maybe if I live another 40 years I'll be able to contribute something to this list of oldest birds. However, don't hold your breath.



NEW-BRUNSWICK FEDERATION OF NATURALISTS MEMBERSHIP

HELP BUILD A STRONGER VOICE FOR NATURE

Membership fee for 1999 is \$15.00 annually in Canada and \$20.00 in other countries. Fees should be directed to the membership secretary, Jean Wilson, 2 Neck Road, Quispamsis, N. B. E2G 1L3.

Please note: The status of your membership is indicated on the address label of your last copy of *N. B. Naturalist/ Le Naturaliste du N.-B.*

Renewal

New member

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GIFT MEMBERSHIP

Gift Name :

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A gift and a welcome note will be sent to the above name in your name and the Federation name.

A FOLLOW-UP ON "MR. CHIPS"

Jim Katan

After observing and feeding our backyard resident chipmunk for three years, we thought we knew it quite well. Its right ear has a distinctive notch, making it easy to distinguish from other chipmunks that visit our feeding stations. We noted how territorial the little creatures were. On several occasions we witnessed skirmishes when one chipmunk tried to move into the feeding station of another. "Mr." Chips was not satisfied with just chasing an intruder a few feet away from its feeding area, but often was in hot pursuit along the edges of our property 50 feet away, as well as up trees, along branches and back down to ground level until assured that it had exclusive hoarding rights once again.

However, in late May 1998, after being well fed with sunflower seeds and peanuts since emerging from hibernation, "Mr." Chips acquired a definite potbelly. Judging from the quantity of food hauled away every day in its cheek pouches, we thought it must be eating the vast majority of its hoard rather than storing it.

One fine day in June "Mr." Chips popped out of the burrow conveniently located close to our back patio where the food was offered each morning along with a bowl of water.

Imagine our surprise to see a smaller, more brightly colored version of our friendly chipmunk follow it out. Then another, and another... soon there were four small young chipmunks and they were still getting milk from Mrs. Chips.

Over the summer we watched the youngsters grow in size as they learned to forage on their own. But life can often be short and brutal. We found one of the offspring on the street, run over by a car; another fell victim of a neighborhood cat with the speed and agility to catch young chipmunks just learning of the many dangers of daily life. We had no idea how many of the young chipmunks survived, if any.

Then one morning in September, Mrs. Chips emerged from her usual burrow in the backyard followed by a brightly colored young chipmunk. It began to suckle as Mrs. Chips stood up on her hind legs to watch for danger. Soon three more kits emerged. Two litters of four babies in one summer seemed enough to ensure the survival of the family line.

Editor's Note: Jim Katan's previous article was entitled "Goodbye Mr. Chips." It appeared in the Sept. 1996 (Vol.23, No. 3) issue of this journal.



LA FEDERATION DES NATURALISTES DU NOUVEAU-BRUNSWICK

Membre

TOUS ENSEMBLES POUR LA SAUGARDE DE LA NATURE

La cotisation pour l'année 1999 est 15,00\$ annuellement au Canada et 20,00\$ pour les autres pays. La cotisation doit être envoyée à la préposée aux abonnements Jean E. Wilson, 2 Neck Road, Quispamsis, N.-B. E2G 1L3.

Notez s. v. p.: Le statut de votre abonnement est indiqué sur l'étiquette d'adresse de votre dernière copie de *N. B. Naturalist/ Le Naturaliste du N.-B.*

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Une note de bienvenue et de souhait sera envoyée au nom ci-haut mentionné en votre nom et celui de la Fédération.

THE NBFN BOARD OF DIRECTORS MEETING OF NOVEMBER 7, 1998

Katherine Popma, Secretary

The Board of Directors of the NBFN has decided to publish the minutes of the quarterly meetings in the N. B. Naturalist/ Le Naturaliste du N.-B.

Present: Pres. Rose-Alma Mallet, Past Pres. Frank Longstaff, Treas. Jim Brown, Sec. Kathy Popma, Memb. Sec. Jean Wilson, Acting V-P. Kevin O'Donnell and Club Reps. Mike LeBlanc, Gart Bishop, Vivian Beale, Gilles Bourque, Ken MacIntosh, Elizabeth McIntosh, Pierrette Mercier, and Al Smith.

1. Adoption of Agenda: The President accepted several additions to the agenda. It was moved by Rose-Alma and seconded by Gart that the amended agenda be adopted. Carried.

2. Minutes of the September Meeting: These were circulated earlier. Kathy moved that the minutes be adopted. Seconded by Gart. Carried.

3. Business Arising: Rose-Alma sent a "Thank You" to the Canadian Wildlife Service for their help at the AGM, which was received with appreciation. Rose-Alma is to follow up on the request for Directors' liability insurance. Pierrette checked with a contact in Québec who will call Rose-Alma. Rose-Alma will follow up on getting the mail for the NBFN from Saint John. The application for Important Bird Areas was sent in. By means of a conference call, Rose-Alma and Roland Chiasson represented the NBFN to the Canadian Endangered Species project, asking the government to take action regarding Piping Plovers. New Brunswick got a dismal mark as ever. It was decided that funds earmarked for the Piping Plover project would have the project's name on the cheque to so designate its purpose for the books. Three-year funding for the co-ordinator of the New Brunswick Important Bird Areas was applied for but no answer has yet been received from the CNF.

4. Membership Secretary's Report: There are 299 paid members for 1998. The club representatives were thanked for encouraging lapsed members to rejoin. Jean will submit the addresses for the Federated Clubs to the N. B. Naturalist and will include e-mail addresses. A membership renewal form is available off the NBFN website. The status of a member will appear on the magazine's label.

5. Treasurer's Report. As of October 9, 1998 the bank balance is \$5390.42. Discussion took place regarding the new N. B. bird check-lists and their distribution. Rose-Alma will approach N. B. Tourism on this matter.

6. Reports From The Federated Clubs. Rose-Alma extended a welcome to all and introduced Gilles, the new rep. for Club les ami(e)s de la nature (Shediac and Dieppe).

Kennebecasis Naturalists' Society. Gart reported that Kathy Popma had spoken to the club on her scoter migration project for the Canadian Wildlife Service at Cape Jourmain. Don McAlpine spoke on the importance of collecting specimens. There are now 70 members in the society. Their sad loss of a very active member, Vera Martin, was noted.

Chignecto Naturalists' Club. Al reported that they had a speaker on wolf research. The 25th annual field trip to Cape Jourmain was planned for November 15.

Moncton Naturalists' Club. Vivian reported that the upcoming speaker will be Rod Hughes from Environment New Brunswick who will speak on global warming.

Club d'ornithologie du Madawaska. Pierrette reported that they had a speaker on bird populations in Québec. She also described the ongoing detailed bird survey in which the club is participating.

Ford Alward Naturalist Association. They have 15 members but there are usually 20 to 25 people at the meetings. Elizabeth reported that Jim Goltz would be the next speaker. They are planning a trip to a Maine Wildlife Area.

Saint John Naturalists' Club. Ken reported that they have an upcoming field trip to Grand Manan with Jim Wilson as the leader. Their committee for the Point Lepreau Seabird Observatory will be approaching the Canadian Wildlife Service for funding to put permanent observers there at appropriate times in the spring and fall.

Association des Naturalistes de la Baie de Buctouche. Mike reported that Rose-Alma was a speaker recently and that she spoke on her New Brunswick Birder's Big Year (1995). Recently they had a field trip devoted to mushrooms and a supper after. Gart Bishop and Bruce Bagnell will be presenting their talk on the plants of Mt. Carleton. A membership drive is planned, as is a book on the birds of Kent County. Also, the club is developing a website.

Club Les Ami(e)s De La Nature. Gilles reported that they recently had a speaker on Costa Rica. The club has 9 members but a low turnout at meetings. This seems to be a problem with several clubs.

7. Information On The Atlantic Canada Conservation Data Center. Kevin reported on the establishment of the center, located at and funded by the Canadian Wildlife Service in Sackville. It is a clearing house for submissions on all aspects of wildlife in Atlantic Canada. Concerns were expressed as to the accessibility of data, as both government and the Irving company are involved. Al informed us that the Atlantic Region is the last one to become involved since the

project's inception 15 years ago. The software is versatile, showing gaps in databases as well as current status of wildlife. There is likely to be a fee for its use, but it is felt that we should support it. It was moved that we send a letter of support. Carried. Kevin will draft it and send it to Rose-Alma by e-mail. The Data Center should be on the agenda for the next AGM so that members will be aware of it. An article will be written on it for publication in the N. B. Naturalist (Secretary's addendum: Kevin requested that Al Smith do this and Al was informed on February 26, 1999).

8. Agreement Between CNF And Provincial Affiliates. Frank explained that the Canadian Nature Federation is trying to build better relationships with the provincial federations and that we already are affiliates, but they want us to sign a memorandum of understanding to that effect. They also would like to continue the conjoint AGM. Frank moved that Rose-Alma sign the memorandum draft at the meeting in Ottawa and be involved with any amendments. Jim seconded the motion. Carried.

9. Congratulations To Mary Majka. Congratulations will be sent to her from the Directors on the occasion of her Honorary Doctorate degree at the University of New Brunswick.

10. Charitable Status. Frank is ready to send our application for this, but he needs the financial statement that Kevin Tutt was to have ready. He will contact Kevin about this. Apparently the bylaws don't include an amendment to include the Membership Secretary as part of the Executive, but Frank will include that as part of the by-laws.

11. N. B. Naturalist Report. Ken reported that all of the text and format are in place and that one-half of the magazine has been run off. He is waiting for graphics for the remainder. Articles for the next issue are to go to Irene Doyle by mid-January. Don Gibson will be the summer issue editor. Rob Walker will do the spring issue. Al says that Paul Bogaard will be sending a summary of the 1998 AGM presentations to Gart.

12. Letter To Premier. Rose-Alma sent a letter on behalf of the NBFN regarding the protection of candidate sites proposed in Dr. Louis LaPierre's Protected Areas Strategy.

13. Other Business.

13.1. The lease by the government of Trails/ Sentiers NB to the Snowmobile Association was discussed. The trail system was originally designed as multi-use and this seems to reserve them for the exclusive use of snowmobiles from December 15 to April 15. It was moved by Frank and seconded by Mike that we write a letter in the strongest possible terms to the Minister of Natural Resources and Energy protesting this arrangement. Carried.

13.2. The Restigouche club has requested that it be allowed to host the AGM in the year 2000. Frank moved to accept this request. Elizabeth seconded the motion. Carried. Rose-Alma will inform them of the procedures.

13.3. The Moncton club would like the club representatives to get together at the next AGM and have a workshop on "club organization." Rose-Alma will pass this request on to Roland Chiasson.

13.4. The AGM is slated for the weekend after the May long-weekend, but Roland wants to change it to June 4, 5 and 6. Ken will publish this change in the N. B. Naturalist.

13.5. The next New Brunswick Bird Day will be on May 8, 1999.

13.6. Jim Wilson sends (via Jean) the report that the work on the Annotated Bird Checklist is continuing. The Bird Records Committee has met and they expect to complete their part of the work by November 15, the editorial review will be complete by January 31, the final English product will be complete by February 28, and the translation is to start on March 1, with publication scheduled for the fall of 1999. The NBFN is requested to help with the cost of publication, to be repaid. The provincial government is not interested in helping to fund it. Contrary to the original arrangement, the New Brunswick Museum cannot contribute. Discussion took place regarding the need to find out how much financial help is required. It was then moved by Gart that the NBFN publish the Annotated Bird Checklist with a \$6000 contribution from the Bird Records Committee. Carried.

13.7. Discussion took place about the Information Session On Essential Elements For Federal Endangered Species Legislation, where NBFN was represented by David Christie. Al described the highlights of the information session. More meetings will follow.

13.8. It was suggested that New Brunswick Bird Day could be a province-wide survey of sewage lagoons. Each club could be responsible for its local lagoons.

13.9. Action 2000 was brought to the attention of the Club Representatives in case their organizations were looking for funding for various projects from Environment Canada. The website is: www.ec.gc.ca/ecoaction

13.10. Wildlife Habitat Canada has asked NBFN for their opinion and feedback on two proposals for funding originating here in New Brunswick.

13.11. The Canadian Nature Federation is in the process of writing a Citizen Action Plan For Endangered Species. They want the names of people who can write on New Brunswick. The names of Roland Chiasson and Laurie Murison were submitted.

14. Adjournment. Meeting adjourned. The next meetings will be on March 13, 1999 and May 1, 1999 at 11:00 a.m. at the Biology Building, UNB in Fredericton.

BAT CAVES NEED PROTECTION

Ajo Wissink

Twenty years ago when I moved to the Rosevale area of Albert Co., on the north side of the Caledonia Mountain range and 30 km SW of Moncton, bats were a common sight during warm summer nights. I have one of those sentinel lights that pollute the night sky but at the same time attract thousands of flying insects which in turn attract bats.

Back then dozens of Little Brown Bats could be seen every night flying around the lamp post feeding on the insects. Many of these same bats hibernated in Berryton cave a little over one km north of my property. The entrance to this limestone cave is on the property of a neighbour, and he does not seem to be interested in restricting access to the cave at any time of the year.

About 10 years ago I started noticing a drastic decline in the number of bats and during the last five years only one or two will come to the light (none have been sighted so far in 1999). I don't have proof for it, but I have the feeling that this near-extinction is the result of disturbance during the winter. Lately there has been a considerable interest in cave exploration and while this has no harmful effect when it is restricted to the summer months, it may be fatal to the bats if carried out when they are hibernating. Each time they wake up they expend stored energy that cannot be replaced until spring.

This threat to hibernating bats is particularly true for caves with low ceilings, as in the case with Berryton cave. This cave system has an awkward entrance consisting of a narrow hole through which one must go down several metres on a rope, but once your feet are on the ground again the passageways are mostly horizontal and extend for hundreds of metres. It is all very narrow and many passages have low ceilings where you have to crawl along on your belly. Considering how densely bats cluster when hibernating, it is

obvious that Berryton cave could potentially shelter thousands during the winter months. Most of the bats hibernating here are in low places where they can be touched; only at one location is there a rather large chamber where the bats are out of reach. Even in summer some bats use the cave as a day roost.

Killing hibernating bats is certainly not done on purpose by most people. During the last couple of years I often see vehicles parked at the beginning of the trail that leads to Berryton cave, and this includes during the winter months. Also, I have repeatedly seen the same large van, which makes me conclude that some of the visiting is done by organized groups. Worst of all, one of my neighbours spoke to me of an occasion when a bunch of people went to the cave

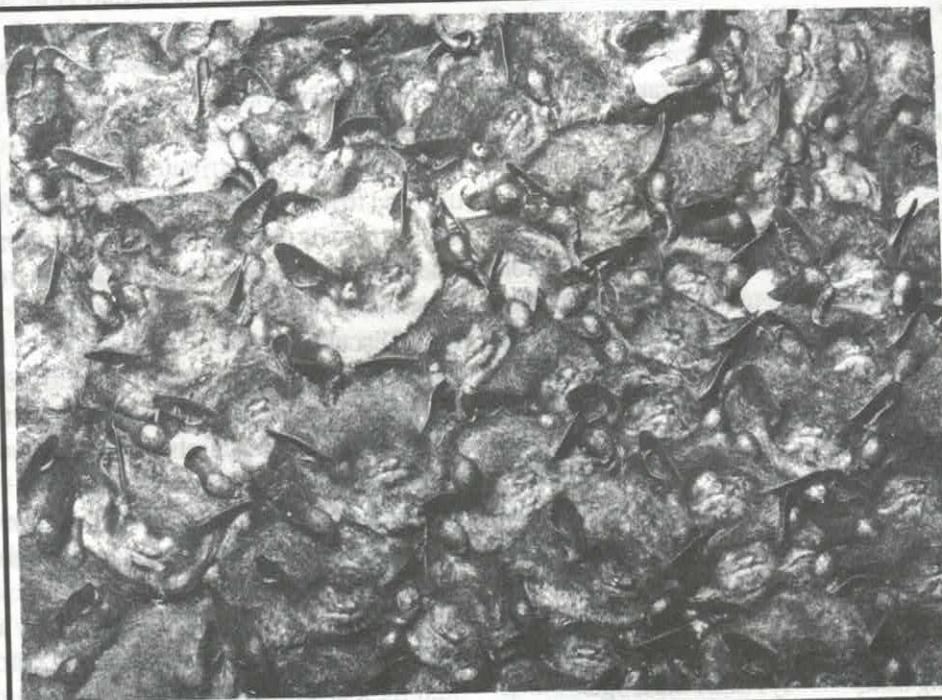
"just to kill some bats." He was laughing when he said it and found it a good joke.

Bats are among the best friends that we humans have. Just think of how many moths they eat of species that do damage, as larvae to forests, orchards and gardens. Little Brown Bats can live for 30 years or more.

Many people assume that bats are dangerous because they sometimes have rabies. In Canada fewer than 1% of rabies cases

are attributable to bats (they are less likely to cause rabies than dogs and cows). Even if rabid, they are seldom aggressive and usually only bite in self-defense.

Bat caves, in particular those with narrow passages and low ceilings, should be off limits during the cold season. the only solution to the problem of protecting bats to have the whole situation regulated by the Department of Natural Resources or by the Department of the Environment? Have you noticed any decreases in bat populations? Is anyone studying bats here in New Brunswick. Let's do something about this problem before it is too late.



Hibernating bats, some with identification bands. Photo: Brock Fenton, courtesy of National Museum of Natural Sciences (*Biome*, Vol. 2, No. 1, 1982).

LES OISEAUX SE CACHENT-ILS POUR MOURIR?

Pierre Duguay

Cet article a déjà été publié dans le journal
quotidien *l'Acadie Nouvelle*.

Depuis le début de ma carrière d'ornithologue amateur j'ai eu la fortune d'observer plusieurs caractéristiques et comportements intéressants des oiseaux. Du petit Colibri à gorge rubis en passant par le majestueux Pygargue à tête blanche, j'ai noté que les oiseaux sont des créatures de grandes persévérance qui ont un désir de vivre qui est sans aucun doute supérieur à celle des humains.

Je vais vous donner un exemple de ce vouloir de vivre en vous racontant l'histoire d'un petit Bruant à gorge blanche qui a tenter de passer l'hiver à Pointe aux Outardes sur la côte nord du Québec. L'histoire a débuté vers la fin de novembre 1998 alors que mon oncle Jean-Marie Morais a découvert qu'un bruant fréquentait ses mangeoires. Mon oncle, un naturaliste en général, en savait suffisamment sur le Bruant à gorge blanche pour savoir que ce petit oiseau devrait être beaucoup plus au sud à cette période de l'année. La neige qui recouvrait le sol cachait la nourriture du bruant ce qui la forcé de se trouver refuge dans la cour de mon oncle.

Après quelques jours à observer le bruant s'envoler un peu partout mon oncle a réalisé qu'il se nourrissait dessous son perron ou la neige ne recouvrait pas le sol. Il avait une mangeoire qui était posté sur le perron et comme tous les mangeoires une certaine quantité de graine finissent toujours par tomber au sol. C'est à cet endroit que le bruant se nourrissait des graines dispersées au sol par les autres oiseaux. Une fois que mon oncle a réalisé ou qu'il se nourrissait il a commencer à placé des graines au sol juste pour lui. Tout allait bien pour la durée du mois de décembre alors que le bruant se nourrissait de graine qu'il avait à sa disposition. Même les petites tempêtes de neige ne semblaient pas lui déranger mais lorsque les grandes périodes de froid que nous avons témoigné au mois de janvier sont arrivés les choses ont changé pour le pire.

C'est durant la période froide de janvier alors que le mercure se trouvait dans les -20 degrés que mon oncle a remarqué que le bruant semblait avoir de la difficulté à respirer. Il m'avait indiqué que le bruant respirait avec le bec ouvert et qu'il semblait manquer de souffle. Ceci a duré pour deux jours lorsque il s'est aperçu que le bruant ne pouvait pas se fermer le bec car il y avait un glaçon pris dans le bec. Le glaçon qui fût sans aucun doute crée par la condensation de sa respiration était devenu un obstacle qui allait décider la vie ou bien la mort du bruant. La prochaine chose que mon oncle a observé était que le bruant essayait d'enlever le glaçon en se tapant le bec sur la mangeoire. Son acte a porter fruit mais avec horreur car en frappant son bec contre la mangeoire il a

réussit à se casser le bec complètement. Tout ce qui lui restait était environ de 3 à 4 mm de bec. Il faisait tellement froid qu'un simple coup de bec a cassé sa mandibule supérieure et inférieure en même temps. Quelle misère que ce oiseau s'était trouvé lorsqu'il a décidé pour une raison ou l'autre de ne pas migré avec ses confrères. Dans les jours qui ont suivit mon oncle se sentait impuissant avec aucune manière de venir en aide au bruant. Tout ce qui pouvait faire c'était de regarder le triste spectacle qui se déroulait chaque jour.

Après quelques jours le froid a cassé et une tempête est venue frapper à la porte. Dans l'après midi mon oncle a observé le bruant qui tentait d'avalier quelques graines avant de se cacher pour la nuit. Vers 20:00 heures mon oncle qui voulait regarder par la fenêtre a allumer sa lumière dehors ce qui a fait sortir le bruant de sa cachette. Tout ce que mon oncle a vu c'était un petit oiseau qui s'est envolé dans la nuit parmi le vent et la poudrerie. Ce fût la dernière fois qu'il l'a vu. Le bruant qui fût sans doute épeuré par la lumière s'est enfui et n'a pas été capable de retrouver sa cachette. Il a sans doute péri dans la nuit.

Mon oncle a témoigné à un drame qui est une réalité pour les oiseaux. Jamais auparavant avait il observé une créature qui avait tant le goût et la détermination de vivre. Je vous quitte avec un petit poème écrit par le poète français François Coppée (1842-1908)

La mort d'un oiseau

*Le soir au coin du feu
j'ai pensé bien des fois
à la mort d'un oiseau
quelque part dans les bois.*

*Pendant les triste jours
de l'hiver monotone
les parures nids déserts
les nids qu'on abandonne
se balancent au vent
sur un ciel gris fer.
O! comme les oiseaux
doivent mourir l'hiver.*

*Pourtant,
nous ne trouverons pas
leurs délicats squelettes
dans les gazons d'avril
où nous irons courir.*

*Est-ce que les oiseaux
se cachent pour mourir?*

A MOOSE'S STRUGGLE TO SURVIVE

Paul Bogaard

It was April 17, 1999 and I was monitoring seabird migration at Peck's Point -- a rocky cliff at the narrowest point along Cumberland Basin in the upper stretches of the Bay of Fundy -- when I noticed a moose swimming through the rough swells and white-capped waves of the basin. But that makes it sound a little too easy. There were a number of floating logs and stumps to be seen all day long, but one of them caught my attention. For a while I was convinced that it was just a curiously shaped log (with ears!), then I decided it might be a deer (which I have observed before swimming in the basin), but finally I settled on it being a moose.

While recording the scoter and eider migration that had brought me to this post, I would check back occasionally to see if the moose was going to make it. Eventually it emerged from the water well inside Peck's Cove, where the mud and stones led into a sandy shore. It simply stood there for a long time, obviously exhausted.

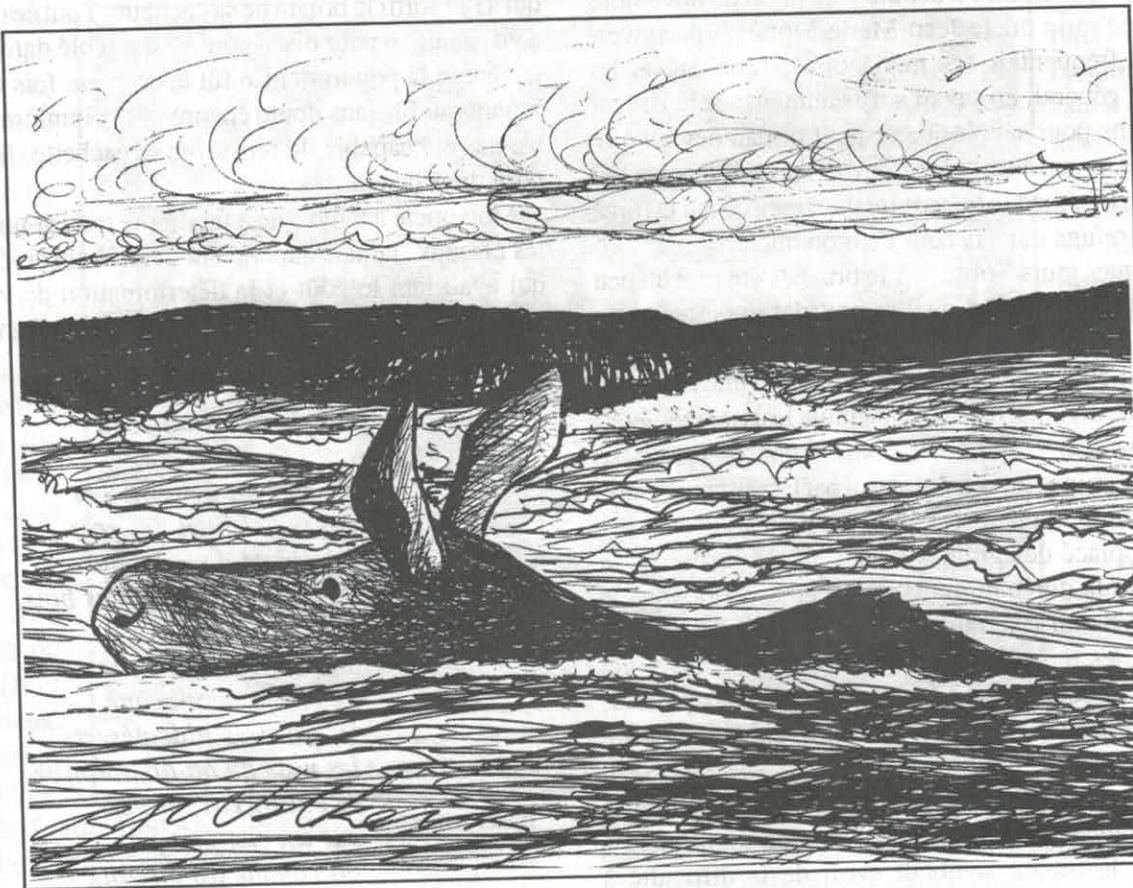
An hour or so later I was in my car and heading down the road which edges Peck's Cove beach. The thought came to mind to watch for the moose. There it was, about 40 metres inland from the road, trudging slowly toward the tidal creek that winds through the back side of a brackish marsh. I did not think it unusual when the moose plunged directly into the tidal creek -- especially after witnessing its escape from the raging waters of the basin -- but then it started to sink into the muck under the tidal current. Even though the stream was only four metres wide,

it was obviously struggling to get across.

The moose forged onward and was about 2/3rds emerged on the far side when its hind legs seemed to sink further into the muck. Its rear end sank so quickly, and the animal struggled so violently with its front quarters that it reared up vertically. To my astonishment it kept coming right over backwards, twisting partially onto one side, to fall with a mighty splash into the tidal current.

My gut was churning. This beast was in serious trouble. One moment it was languidly strolling through the marsh and the next it was thrashing wildly on its side in the ooze, struggling to right itself. Its hard to say how long this struggle lasted, perhaps only a couple of minutes, but I was transfixed for what seemed an agonizingly unending time.

Finally its snout and a portion of the head emerged, allowing it to breathe, but the flailing around to gain a grip took considerably longer. This struggle, and the tidal current, carried the moose further downstream to a more solid footing. As it clambered out I could



see that its legs were shaking. Clear of the water it just stood there, its head down.

Now I needed to catch my breath! I watched for quite a while and the moose did not move. There was no doubt in my mind that I had just witnessed a life and death struggle and that such a struggle to survive can happen to a wild creature at almost any moment. My own world finally claimed my attention. As I drove away, the moose was still standing there, reclaiming its life.

CHRISTMAS BIRD COUNT 1998 - '99

David Christie

Although the St. Stephen Christmas Bird Count was reincarnated this winter, the number of counts conducted within New Brunswick dropped to 44, due to illness or absence of 3 compilers. The counts reported 154,520 birds of a record 134 species (plus 9 additional species during the count period).

Mild weather conditions during late fall and early December contributed to the high number of species reported. During the count period conditions were near average overall but varied widely between counts (from above freezing on Dec. 28-29 down into the -20's Jan. 1-3).

The heavy cone crop on spruce and fir trees throughout the province, as well as large supplies of birch seeds and mountain-ash berries in some districts, were important factors controlling the numbers of many songbirds. Food was probably also abundant farther north which meant that very few **Common Redpolls** migrated to New Brunswick this winter. Likewise, there was little influx of **Pine Grosbeaks**. They were found in moderate numbers close to nesting areas in northern New Brunswick but were almost entirely absent in the south.

Finches that nest widely in this province were more common, particularly **American Goldfinch** (most numerous in the south) and the spruce-cone specialist, **White-winged Crossbill** (especially in the north). **Pine Siskin** was also prominent in northern N.B. The **Purple Finch**, which is usually a rather scarce winter finch here, was fairly common and widespread, being almost as numerous as the usually-much-more-common **Evening Grosbeak**, which was found in the lowest numbers in 30 years.

The **House Finch**, a relative newcomer to New Brunswick, continues to increase steadily in southern urban areas but none were found in the north. **Northern Cardinal**, possibly buoyed by a moderate influx last fall, increased in the south following two years of decline, but dropped to none in the north (although there was a count period report from Perth-Andover).

Counts were high in southern N.B. for our two common wintering sparrows, **Tree Sparrow** and **Dark-eyed Junco**, but low for each in the north. Most were feeding in the wild rather than visiting feeders. **Snow Buntings** were above average in the north (including 1055 at Miscou) but low in the less snowy south (except for a big count of 916 at Sussex).

The **Black-capped Chickadee** population dropped from the last three years but they were still more numerous than during the 1980s. There were high counts of **Boreal Chickadee** in the north yet fewer than usual in the south. Average numbers of **Red-breasted Nuthatch** were tallied but **White-breasted Nuthatch** was low.

Golden-crowned Kinglet numbers increased significantly throughout the province. As usual they were most common in the south.

Mountain-ash fruits held **American Robins** here this winter. Their numbers were very high but patchy in distribution in the south, less numerous yet still above average in the north. A big concentration of **Bohemian Waxwings** (1473) at Shediac was exceptional in southern N.B. this season but the species was widespread in good numbers northwards. Lesser, yet above average numbers of **Cedar Waxwings** remained into early winter. **European Starling** numbers were high in most parts of the province. An unusually high total of 18 **Northern Flickers** was probably also due of the abundance of berries.

American Crow has been slowly increasing for several years but **Common Raven** numbers were below average. **Gray Jays** were low in the north but a bit above average in the south. **Blue Jays** were low throughout.

High counts of **Ring-necked Pheasant** in southern New Brunswick, probably result from a succession of easy winters as well as from continuing releases of pen-reared birds. **Ruffed Grouse** numbers turned sharply upwards in northern New Brunswick.

There were high numbers of both **Rock Doves** and **Mourning Doves** throughout the province.

Relatively few raptors were counted; perhaps they were less concentrated and less conspicuous because of the light snow cover. Notable exceptions were **Bald Eagle** (large numbers on the Charlotte County coast and above average elsewhere), above average numbers of **Northern Goshawk** in southern N.B., and a moderate concentration of **Rough-legged Hawks** at Jemseg. Two **Gyrfalcons** were a highlight of the Restigouche count. A few owls were noted but only a single **Snowy Owl**.

In the north it was an average year for **Northern Shrike** but few were counted in the south. Snow depth and the 3-4-year cycle of vole populations play important roles in their distribution.

Common Loon and **Horned Grebe** continue at high levels in the lower Bay of Fundy. Despite the mildness of the fall, fewer **Double-crested Cormorant** lingered than in most recent years. Surprisingly almost all the tardy **Great Blue Herons** were seen along the east coast rather than on the Bay of Fundy.

The fact that most ducks were found in good numbers probably reflected the relatively late freeze-up. The first week of January's cold probably soon moved a lot farther south. **American Black Duck** reached record high levels on this year's counts but **Mallard** dipped well below their numbers of the past 4 years, to less than 15% of the Black

CHRISTMAS COUNT (cont'd. from p. 17)

Duck total. Numbers of Mallards at Moncton were the lowest (185) since 1991, but there were almost as many at Florenceville (180).

Greater Scaup and **White-winged Scoter** continued at low numbers and **Oldsquaw** were below average. **Surf Scoter** increased noticeably in southern NB up to about where they were in the mid 1980s. **Common Goldeneye** and **Barrow's Goldeneye** were at record numbers in the north probably because there were optimal ice conditions to concentrate them in favoured areas (e.g., 295 Barrow's at Dalhousie). Their numbers were normal in the south, while **Red-breasted Mergansers** were above average in both regions. 5000 **Common Eider** at St. Andrews boosted the provincial total to a record for that species. The record number of **Harlequin Ducks** in the Bay of Fundy is a nice indication that the hunting ban is having positive results.

The mildness of the pre-count season probably accounts for a high number of **Bonaparte's Gull** and above average numbers of **Ring-billed Gull**. These species tend to move south only as required by cold weather. Lower numbers of **Herring Gull** and **Great Black-backed Gull** were registered than normally.

A record number of **Common Murre**, 2250, and of **Razorbill**, 15,000, were found at Grand Manan. Well above average numbers of **Black Guillemot** were counted in northern N.B.

First reports for New Brunswick Christmas Bird Counts were a **Cory's Shearwater** at Cape Tormentine, **Clay-colored Sparrows** at Buctouche and Sackville, **Hooded Oriole** at Restigouche (but in the Quebec portion of the circle), and a **Black-headed Grosbeak** during count period at Fredericton. Documentation provided for these records will be reviewed by the New Brunswick Bird Records Committee.

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 Black Duck x Mallard hybrids

b by boat/ferry

c 5 finch sp.

CW in count week but not count period

d 305 gulls sp.

e 5 scoter sp., 1 sandpiper sp., 1 warbler sp.

f 11 gulls sp.

g 1 goose sp. (heard)

h 10 gulls sp.

t by all terrain cycle

++ much above average numbers

+ above average numbers

- below average numbers

-- much below average numbers

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

Miramichi (Mir) 27th year

Dec. 28, 08:10-16:45. Overcast; temp. -7° to -3°C; wind W, 7-12 km/h. Ground half bare in the open, 10-15 cm snow in the bush; only a few small patches of open water on the river.

Eileen Bransfield, Jim Breau, Heather Brewster, Monica Charnley, Winston Churchill, Florence Currie, Rodney Currie, Barbara Digdon, Tom Greathouse, Fred Green Jr., Mary-Alma Harrigan, Linda Hartlen, John Henderson, Walter Holland, Delbert Johnston, John Keating, Eugene Kukulski, Richard Landry, Robert Lisk, Margaret MacKinnon, Heinz Mayershofer, Martina McCarthy, Lem McDonald, Georgia McLean, Cathy Mercier, Madeleine Morrisette, Walter O'Toole, Irma Power, Mary Rawlinson, Mickey Reynolds, Joe Richard, Lionel Richard, Mary Ripley, Mrs. Donat Robichaud, Eldon Rogers, Alice Ronan, Theresa Ross, Bill Savage, Delta Steeves, Hayward Sturgeon, Doug Underhill, Bruce Walker, Harry Walker (compiler), Parker Wheaton, Bun Worrell.

Bathurst (Bst) 16th year

Dec. 28, 08:00-16:00. Clear; temp. -4° to -14°C; wind NW, 10-15 km/h. snow cover ?; estuary only open in channels, sea open.

Billy Allen, Gordon Allen, Chris Gauthier, Mary Gauthier, Ron Gauthier (compiler), Charlie McAleenan, Eldon McLean, Nora McLean, Stuart Wells.

Petit-Rocher (P-R) 4ième année

Le 27 déc., 7:00-7:00. Nuages 20-5%; temp. -8° C; vent NO, 20 km/h; 15 cm de neige au sol; Eaux douces gelées à 70%, la mer à 5%.

Luc DeRoche, Pierre Duguay (compilateur), Denise Guitard, Réjeanne LeBreton.

Dalhousie (Dal) 14th year

Jan. 3, 08:00-16:00. Partly cloudy am, clear at noon, overcast pm; temp. -18° to -10°C; wind NE, increasing to 20 km/h. 100% snow-cover; freshwater 100% frozen, bay skim ice and floes.

Clark Button, Jason Clifford, Jim Clifford, Ray Clifford, Irene Doyle, Margaret Gallant Doyle, Sandra Gulliver, Tom Gulliver, Ann Lavoie, Mike Lushington (compiler), Ray MacNair, Don Mann, Isabelle Mann, Patricia McGorlick, Marlene Noel, Shirley Sharpe, Andy Watson.

Restigouche (Rst) 9th year

Dec. 20, 09:00-16:00. Overcast am, clear pm; temp. -9° to -4°C; wind W, 25 km/h. Ground snow covered; lagoons frozen, river partly frozen. Wallace Best, Ruth Bulmer, Jean Casey, Raymond Chiasson, Emily Clavette, Exie Delaney, Irene & Margaret Gallant Doyle (compilers), Carole Dubé, Jean Gallant, Bob Gillis, Greg Guidry, Sandra & Tom Gulliver, Jim Katan, Flora Kelly, Ann Lavoie, Ben Legacé, Mike Lushington, Alan MacNeish, Alan, Annette & Julie Madden, Don & Isabelle Mann, Jean Miles, Marina Mills, Margot Richard, Shirley Sharpe, Gladdie Swan, Sandra Thompson, Andy Watson, Foryst White, Denise Zyveniuik.

Sussex (Ssx) 26th year

Dec. 19, 08:00-16:00. Light cloud with blue sky showing; temp. -12° to -4°C; calm. Ground frozen, light snow cover; flowing water open, still water frozen.

Jim Brown (compiler), participants not listed.

Hammond River-Hampton (Htn) 26th year

Jan. 2, 07:00-16:45. Slightly overcast; temp. -24° to -14°C; wind NW, 20 km/h. Snow cover 15 cm; fresh water solidly frozen.

Beth Allaby Bob Barton, Todd Beach, Don Campbell, David Christie, Merv Cormier, Barbara Crossley, Henry Darling, John Darling, Phyllis Darling, Jean Dykeman, Mary Ellis, Ross Ellis, Linda Ewart, Bill Gentleman, Bill Gentleman Sr., Myrna Gentleman, Annick Gionet, Allen Gorham, Janet Gorham, John Hanson, Evelyn Hazlett, Kathy Hazlett, Carol Henderson, Lowell Henderson, Jean Isaacs, Denise Johnston, Peggy Kelbaugh, Nancy Ketchum, Judith LeClue, Bruce Loughery, Mary Loughery, Win MacAndrew, Jean MacDonald, Tina MacIntosh, Harvey McLeod, Mary Majka, David McCurdy, Bill McKay, Bill Nowlan, Geoff Sayre, Janet Whitehead, Matt Wilshaw, Peter Wilshaw, Brian Wilson, Gretchen Wilson, Jean Wilson, Jean Wilson (sr.), Jim Wilson (compiler), Phil Withers, Jan Wright.

Cambridge-Narrows (C-N) 29th year

Dec. 29, 08:45-16:40. Clear; temp. -4° to 0°C; wind E, 5 km/h. 5-cm snow cover; lakes frozen.

Bill & Jean Bell, John & Shirley Brown, Betty & Winston Carpenter, Jean Carpenter, Marie Carpenter, Merle Carpenter, Pauline Chase, Thora Connell, Winnie Crouch, Ben Fanjoy, Iris Ferris, Imogene Gilchrist, Dorothy Graham, David & Sandra Hamilton, Hanna Handajo, Margaret Hicks, Alden Howes, Enid Inch (compiler), Rhoda Inch, Faye Jeffrey, Debora Kantor, Ivan Kantor, Gladys Kierstead, Bill & Elva McConnachie, Dot McConnachie, Faye & Owen McCormack, Sandra McFarland, Erin Moore, Mildred Moss, Audrey Perry, Nellie Perry, Doug & Eleanor Phillips, Phyllis Pyett, Joyce Robinson, Catherine Sleep, Ethel Sleep, Jackie Straight, Joyce & Niven Thorne, Walter Thorne.

Jemseg (Jem) 36th year

Jan. 2, 08:00-16:30. Clear; temp. -26° to -14°C; wind W, 20 km/h. Ground snow-covered; all water bodies frozen.

Mike Casey, Rod Currie, Don Gibson, Enid Inch, Jim Goltz, Enid Inch, Andrew MacDougall, Don MacDougall, Andrew MacInnes, Nancy MacInnes, David L. Myles, P. David Myles, Marvin Palmer, Edward Petrie, Shirley Sloat, Owen Washburn (compiler), Bill & Dorothy Varty, Max & Willi Wolfe.

Fredericton (Ftn) 43rd year

Dec. 20, 07:30-17:00. Sunny with occasional cloudy periods; temp. -8° to 0°C; wind NW, 30 km/h. 20 cm snow cover; River open except near bridges.

Randy Adams, Diane Allain, Brenda Barclay, Charlene Boutot, Moira Campbell, Eric Carr, Mike Casey, Gerry Clayden, Susan Clayden, Rod Currie, Molly Demma, Andy Dydik, Mary Kate Dydik, Lucy Dyer, Fuzzy English, Jo Anne Fellows, Katie FitzRandolph, Don Gibson (compiler), Margaret Gibson, James Goltz, Hannah Grant, Charles Graves, Heidi Grein, Hal Hinds, Alison Hughes, Yvette Kerry, Gisèle LeBlanc, Morris Lemire, David Lounsbury, Cathy MacLaggan, Milda Markauskas, Brian McEwing, Hilary McKay, Jack McKay, William Mountain, David Myles, Murray Neilson, Patti Newell, Paul Nicholson, Jean Noble, Jim Noble, Liese O'Hara, Margie Olive, Peter Papoulidis, Peter Pearce, Chris Robicheau, Dwayne Sabine, Mary Sabine, Bev Schneider, Marc Schneider, Larry Shaw, Shirley Sloat, Cliff Thornley, Leon Vietinghoff, Owen Washburn, Aaron White, Heather Wilson, Ron Wilson.

Mactaquac (Mac) 19th year

Jan. 1, 07:45-17:00. Sunny; temp. -20° to -10°C; wind NW, light. Frozen and snow-covered.

Moira Campbell, Barbara Clayden, Stephen Clayden, Don Gibson, Jim Goltz, Charles Graves, Jim Hallet, Jeff Hoyt, David Lounsbury, Ernest MacLean, Lorna MacLean, David Myles (compiler), Shirley Sloat.

Thomaston Corner (TC) 6th year

Dec. 26, 08:00-16:00. Sunny with cloudy periods; temp. -5° to -1°C; wind NW, 5 km/h. Ground ?; river partially open, lakes frozen.

Andrew MacDougall (compiler), Don MacDougall, Lois MacDougall-Becc.

Stanley (Sty) 24th year

Dec. 20, 07:50-16:55. Cloudy am, sunny pm; temp. -15° to -5°C; wind 5 km/h. 30 cm snow cover, trees free of snow, water 40% frozen.

Katherine & Gerald Bavis, Dena Corey, Peter & Luke DeMarsh, June Douglass, Thelma Fairly, Gisèle Gaudet, Jim Goltz, Connie & Roger Ince, Justine & Molly Leeco, Andrew MacDougall, Hazel Millet, Ruth Munn, David Myles, Uda & Oro Ross, Julie Singleton (compiler), Shirley Sloat, Sheron Suttie, Robert Whitney.

Woodstock (Wsk) 35th year

Dec. 27, 09:00-17:00. Clear; temp. -12°C; calm. Ground snow-covered; no open water.

Blair Avery, Leona Avery (compiler), Rev. T.S. Bellis, Jane Bernard, Earle Blackie, Danny Bowser, Earle Briggs, Moira Campbell, Mrs. Paul Clark, Gerald Demmings, Gerald Donovan, Mrs. Blair Findlater, Mrs. Melvin Fogarty, Mrs. David Fry, R.C. Gibson, Sterling Grant, Verna Grant, Charles Graves, Adam Hadley, Eric & Jane Hadley, Matthew Hadley, Malcolm Hall, Ronald Hawkins, Ken Homer, Stephen & Anne Homer, Zoe Homer, Wallace Jones, Jack Lavender, Mrs. Charles MacDonald, Edwin Marsh, Don McArthur, Allie McBride, Herb McBride, Walter Neal, Mrs. Roger Olmstead, Wayne Pelkey, Alma Speer, Mrs. Donald St. John, Alex Whiteway, John Williams, Ken Winfield, Gordon Wort, Clifford Wright, Pauline Yerxa.

Florenceville (Flo) 19th year

Dec. 26, 09:00 to 16:00. Sunny breaks am, overcast pm; temp. -10° to 0°C; wind SW, 15 km/h; patchy snow cover; St. John River open.

Ronald Ball, Donald Bell, Ann Brennan, Elmer Briggs, Andrew Caldwell, Ansel Campbell, David Campbell, Marie Campbell, Doug Clark, Keith DeMerchant, Bob Derrah, Ruth Dow, Ann Ebbett, Harry Ebbett, Dale Giberson, Raymond Green, Frank Gray, Sandra Gray, May Heinz, Florence Knowlton, Aubrey Lamont, Helen Lovely (compiler), Lorna Maddox, Cindy Morris, Ray Mulherin, Janice Oakes, Barb Page, Dean Prior, Richard Trafford, Joanne Upton, Diana Wasson, Fred Wiley, Harry Wolverton.

Perth-Andover (P-A) 30th year

Dec. 28, 09:00-16:00. Overcast, a few snow flurries; temp. -2° to +2°C; calm. Snow cover 5 cm, some southerly areas almost bare; more open water than normal.

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

Plaster Rock (PR) 27th year

Dec. 30, 09:45-15:15. Sun and cloud; temp. -15°C; wind NW, gusty. 20-30 cm snow cover; all water frozen.

Daphne Anderson, Doris & Wendell Crawford, Kate Finnermore, Irene Hollins, Lois & Ron Jensen, Bessie & Peter MacDonald, Laverne Rabatich (compiler), Melissa & Harold Skinner.

Nictau-Riley Brook (Nic) 26th year

Dec. 30, 08:30-15:00. Heavy snow (18-20 cm) in am, nice in late pm; temp. -4° to -6°C; wind NW, 10-15 km/h. 28-30 cm snow cover; river and brooks fairly open, ponds frozen.

Juanita Black, Roger Jenkins (compiler), Erwin Landauer, Diana McAskill, Leola McDougall, Wilma Miller, Joan Nevers, Betty & Ray Ross, Joe Yacovino.

CHRISTMAS COUNT(cont'd. from p. 19)**Edmundston (Etn)** 12ième année

Le 19 déc., 08:00–14:15. Beau à 8h devenant nuageux à 14h30; temp. –14° à –9°C; vent O, 11 devenant S, 6 km/h. 100+ cm de neige au sol; rivières et ruisseaux non gelés.

Jean-Pierre Beaulieu, Daniel Bouchard, Guy Bouchard, Simon Bouchard, J. Denys Bourque (compilateur), Claudette Chiasson, Gilberte Cyr, Sylvain Fiset, Louise-Anne Lajoie, Florida Lavoie, Patsy-Ann Lynch, Marlene Lynch, Roger Martin, Pierrette Mercier, Sylvie-Line Michaud, Pauline Morneau, Gene Nadeau, Jocelyne Perron, Monique Plourde, Gilles Roussel, Gisèle Thibodeau, Adeline Verret, Gérard Verret.

Kedgwick (Ked) 9ième année

Le 28 déc., 08:30–16:00. Ciel couvert; temp. –8° à –6°C; vent NO, 15 km/h. ? cm de neige; glace?

Jean-Yves April, Mariette April, Marie-Josée Castonguay, Suzanne Castonguay, Hélène Cimon, René Cimon, Arthur Desjardins, Cécile Desjardins, Ginette Émond, Marcel Émond, Pat Émond (compilateur), Jacqueline Guiguen, Diane Paré, Wilfred Roy, Marie-Reine Simon, Roland Simon.

Mount Carleton Provincial Park (MtC) 21st year

Dec. 28, 08:00–15:00. Cloudy, with about 2 cm snow in early am; temp. –2° to +1°C; wind N, 10 km/h. Snow cover 16–20 cm; running water open, rest frozen.

Chris Kusch, Roger Jenkins (compiler), Erwin Landauer.

Southeast Upsalquitch (SEU) 17th year

Dec. 27, 10:00–16:00. Clear; temp. –14° to –8° C; wind NW, 20–30 km/h. Snow cover ?; river frozen with open channels & spring brooks.

Chris Gauthier, Ron Gauthier (compiler), Gary Goodwin, Rod O'Connell, Jason Smith, Stuart Wells.

Paquetville (Paq) 11ième année

Le 2 jan., 08:00–16:00. Couvert, légère neige; Poudrerie; glace ?; temp. –25° à –17°C; vent N, 40 km/h.

Frank Branch, Bernise Robichaud, Roland Robichaud (compilateur), Bruno St-Pierre, Donald St-Pierre, Gertrude St-Pierre.

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

Grand Manan (GM) 28th year

Dec. 28, 07:30–17:00. Overcast am, partly sunny pm; temp. –9.6° to +5.1°C; wind SW, 40–60 km/h. No snow cover; fresh water partly open, salt open.

Jim Brown, Sandra Cooper, Brian Dalzell (compiler), Jim Leslie, Ken MacIntosh, Peter Pearce, Peter & Carmen Roberts, Barry Russell.

Eastport–Campobello (E-C) 32nd year

Dec. 26, 07:50–16:10 EST. Mostly cloudy, snow/sleet showers accumulating to 2.5–5 cm on Campobello; temp. –4 to +2°C; wind SW, 8–40 km/h. Ground bare except on Campobello; most fresh water frozen, salt water open.

Ralph Eldridge, Fred Hartman, Ellen Johnson, Maurice Mills Jr. (compiler), Bill Townsend.

St. Stephen (StS) 3rd year?

Dec. 26, 09:00–15:00. Cloudy; temp. –2°C; wind calm. Little snow with ice patches; water ?

Anson Acheson, Dennis Armstrong, Brian Bartlett, Miles Delong, Hans Forster, Bernice Groom, Peter Heelis, Tony Huntjens, Garnet Linton, Murray Linton, Mike MacKinnon, Grant Milroy (compiler), Bill Nelson, Tony Reader, Gail Smith, Clark Steward.

St. Andrews (StA) 38th year

Dec. 19, 08:00–16:00. Mostly cloudy, clouds thickening by afternoon; light snow by evening; temp. –5° to –3°C; wind NE, light. 10–12.5 cm neige; snow cover; large lakes and running streams open, ponds frozen, very little shore ice, salt water open.

John Allen, Mindy Brown, Sandra Cooper, Carlotta Cummings Tracey, Dean (compiler), Lad Dunfield, Brenda Fullerton, Peggy & David James, Ken Langmaid, Eloise Lemire, Ken MacIntosh, Margo Mais, Bill Nelson, Ray and Dick Peterson, Lee & Lonny Ryall, Peggy & Dick Saunders, Tom Smith, Gwyneth Wilbur, Marlene and Dick Wilbur, Marion & Dick Wilder.

Blacks Harbour (BH) 36th year

Dec. 20, 08:00–17:00. Clear am, partly cloudy pm; temp. –5° to –2°C; wind SW, 15 km/h. 13 cm snow cover; some open water on streams and large lakes.

Hartley Avery, Sandra Cooper, Merv Cormier, Brian Dalzell, Halton Dalzell, Ralph Eldridge, Joe Hunt, Ken MacIntosh (compiler), Johanne McInnis.

Lepreau (Lep) 35th year

Dec. 19, 08:51–16:30. Overcast with snow flurries; temp. –10° to –6°C; wind NW, 10 km/h. Light snow cover; fresh water ?, bay open.

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

Saint John (SJ) 42nd year

Dec. 28, 08:00–17:00. Light overcast, fine drizzle for an hour around noon; temp. +5° to +3°C; wind SW, 40 km/h. Ground frozen, virtually no snow; fine skim ice in sheltered coves of river.

Mike Bamford, Ethel & Roly Bosence, Ian Cameron, Moira Campbell, Robert Carson, David Christie, Greta & Ken Clark, Sandra Cooper, Merv Cormier, Hank, Joanne & Kirsten Deichmann, Jim & Betty Evans, Jeannie Finn-Allen, Allen & Janet Gorham, Kit & Margaret Graham, Charles Graves, Holy Haines, Charlotte Hutchinson, Cecil Johnston, Melanie Koteff, Ross & Willa Mavis, Don McAlpine, Fenning McAlpine, Ken MacIntosh, Dave McCurdy, Doreen McIntosh, Ngaire Nelson, Paul Noel, Rick Peacock, Joan Pearce, Elizabeth Prescott, Aldie Robichaud, Jane Roma, Marion Sherwood, David Smith (compiler), Don Smith, Evan Smith, Jim & Jean Wilson, Frank & Mitzi Withers.

St. Martins (StM) 18th year

Dec. 28; 05:00–17:00. Cloudy, periods of rain; temp. +3° to +4°C; wind WSW, 30 km/h. Negligible snow cover; lakes frozen, brooks open.

Merv Cormier, Jenny Haynes, Berle Henderson, Shirley Hunter, Diann Kelly, Frank Kelly, Ed LeBlanc, Jane LeBlanc, Bob Melvin, Trudy Melvin, Chris Sears, Nancy Sears, Ted Sears (compiler), Dennis Seeley, Rob & Gail Walker.

Fundy National Park (FNP) 34th year

Dec. 18, ? am–? pm. Snow storm, count only partially done; temp. –5° to 0°C; wind N 25 km/h to NE 60 km/h. Rapidly increasing snow cover; lakes frozen, streams partly open.

Anne Bardou (compiler), Jim Blewett, Shirley Butland, Alain Caissie, David Christie, David Clark, Anna Holdaway, Roger LeBlanc, Beulah Michelin, Doreen Rossiter, Vicki Sahantien, George Sinclair, Corinne Snider, Herb Tingley, Brian Townsend, Rob Walker, Jane Watts.

Riverside-Albert (R-A) 30th year

Jan. 1, 07:20–17:20. A few clouds; temp. –18° to –6°C; wind NW to SW 0–15 km/h. 0–10 cm snow cover at coast, 15 cm in hills, freshwater frozen except fast-flowing; sea open with very few ice cakes.

Chris Antle, David Christie (compiler), Barbara Curlew, Rick Elliott, Mike Majka, Rob Walker.

Hillsborough – Memramcook (Hil) 8th year

Jan. 2, 07:00–17:00; also 'owling 21:00–21:45. Clear a.m., some clouds p.m., extensive "sea smoke" and vapour clouds over sea; temp. -27° to -16°C ; wind WNW, 5–30 km/h. Snow cover 2–5 cm; brooks, lakes and ponds frozen, tidal waters 80% covered with slob ice and ice pans.

Dwayne Biggar, Gilles Bourque, Valmond Bourque, Alain Clavette, Barbara Curlew, Jackie DeCoste, Lloyd DeCoste, Rick Elliott, Dale Gaskin, Edith Gilcash, Susan Hoar, Shirley Hunt, Jean Inglis, Karen LeBlanc, Roger LeBlanc, Freda Murphy, Margie Murphy, Tania Smith, Karen Tingley, Rob Walker (compiler).

Moncton (Mtn) 37th year

Dec. 19, 08:00–16:30. Clear; temp. -13° to -5°C ; wind W, 10–19 km/h. Snow cover to 30 cm; freshwater thinly frozen except where running.

Chris Antle, Mike Antle, Anne Arsenault, Caroline Arsenault, Marg Bartlett, Vivian Beal, Gisèle Belliveau, Normand Belliveau, Rae Bourgeois, Gilles Bouque, Julie Bourque, Louise Boutin, Meghan Brodie, Mary Lou Bungay, Malcolm Campbell, David Christie, Donald Cormier, Bob Cotsworth, Ted Currie, Jennifer Day-Elgee, Jackie & Lloyd Decoste (compilers), Richard Doucet, Fred Dubé, Joyce Dubé, Oscar Duguay, Jim Edsall, Jim Elgee, Marg Fanjoy, Pat Fox, Elsie Gallant, Derek & Madeleine Gemmell, Bruce Greig, Susan Hoar, Charles Howell, Shirley Hunt, Jean Inglis, Ford Keith, Connie King, Roger LeBlanc, Cheryl MacLaggan, Janet MacMillan, Alice MacQuarrie, Rose-Alma Mallet, Sharon McGladdery, Edwin Melanson, Wayne & Win Murray, Sharon Northorp, Ron Pellerin, Nelson Poirier, Kathy Popma, Mike Rae, Shirley Robinson, Stan Robinson, Edgar Savoie, Bill Scott, Jean Siddall, Heather Silliker, John Tanner, Mary Tanner, Dennison Tate, Charlotte Vardy, Rob Walker, Alma White, Don White, Ralph White, Vivian White, Doug Whitman, Phyllis Whitman, Don Williams, Renata Williams.

Sackville (Sck) 39th year

Dec. 20, 07:35–17:00. Low cloud cover; temp. $+2^{\circ}$ to -12°C ; wind S-20 km/h. 15–25 cm snow cover; little open water except 10% at Westcock. Peter Austin-Smith, Paul Bogaard, Sandy Burnett, Adam Campbell, John Chardine, Don Colpitts, Richard Elliott, Tony & Janet Erskine, George Finney, Liam Finney, Gay Hansen, Peter Hicklin (compiler), Andrew Macfarlane, Colin MacKinnon, Ruth Miller, Kathy Popma, Al Smith, Bill Wood.

Cape Tormentine (CT) 37th year

Dec. 21, 07:35–16:45. Cloudy, light rain by mid morning, changing to periods of rain by mid day; temp. $+5^{\circ}$ to $+3^{\circ}\text{C}$; wind SW, 20, gusting to 60 km/h in am, NW 30–50 by early p.m. No snow cover; fresh water frozen, salt water fully open.

Paul Bogaard, Sandy Burnett, Adam Campbell, John Chardine, Richard Elliott, Tony Erskine, Ross Galbraith, Margaret Anne Galbraith, Nev Garrity, Donna Johnson, Helen Lines, Andrew Macfarlane, Bill Murphy, Kathy Popma, Sue Purdy, Hon. Fernand Robichaud, Al Smith (compiler), Ralph Stopps.

Shédiac (Shd) 11ième année

Le 1 jan., 08:00–16:00. Soleil a.m., nuages p.m.; temp. -15° to -8°C ; vent S, 10 km/h. "froid et gelé."

Terry Arsenault, Gilles Belliveau, Gisèle Belliveau, Normand Belliveau (compilateur), Gilles Bourque, Raymonde Chartier, Donald Cormier, Léona Cormier, Louis E. Cormier, Elise Daigle, Abel Doucet, Denis Doucet, Noëlla Doucet, Oscar Duguay, Lise Gionet, Léonel Gionet, Bernadette LeBlanc, Mike LeBlanc, Angela Léger, Fred Léger, Rose-Alma Mallet, Onide Maurice, Janice Melanson, Juliette Pellerin, Francis Richard, Tobi Stewart, Denise Thériault, Stuart Tingley (Les Ami(e)s de la Nature).

Bouctouche (Buc) 3ième année

Le 20 déc., 08:00–15:30. Dégagé avec passages nuageux; temp. -5° to -1°C ; vent NO, 10–30 km/h. Conditions sur la terre et l'eau ?

Stephanie Beers, Jean Brideau, Nicole Comeau, Louis-Émile Comeau, Denis Doucet, Lisa Gauvin, Maria Gauvin, Brigitte Julien, Anna LeBlanc, Bernadette LeBlanc, Irène LeBlanc, Jean-Paul LeBlanc, Michael Adam LeBlanc, Mike LeBlanc (compilateur), Stella LeBlanc, Rose-Alma Mallet, Gilles Martin, Janice Melanson, Lorette Smith, Tobi Stewart.

Kouchibouguac National Park (KNP) 28th year

Jan. 2, 07:00–18:00. Clear with scattered cloud; temp. -26° to -16°C ; wind NW, 20–30 km/h. ? cm snow cover; fresh water frozen except a few open springs, coastal waters and gullies open.

Anne-Marie Bordage, Vincent Bordage, Alvin Cormier, Donna Crossland, Lily Daigle, Tom Greathouse, Gilles Lebel, Mike LeBlanc, Rose-Alma Mallet, Nelson Poirier, Fernand Robichaud, Gilles Robichaud, Lucille Robichaud, Pierre Robichaud, Pierrette Robichaud, Michel Savoie, Margot Spencer, Barry Spencer (compiler), Tobi Stewart, Harry Walker.

Tracadie-Sheila (Tra) 12ième année

Le 26 déc., 08:00–16:00. Nuageux avec percée de soleil; temp. -6° à $+2^{\circ}\text{C}$; vent SO, 0–20 km/h. Peu de neige au sol; eau: gelée dans les baies.

Donalda Benoit, Hilaire Chiasson, Michel Chiasson, Roland Chiasson, Marcel David, Robert Doiron, Émile Ferron, Jude Larocque, Jean-Yves Paulin, Marie Paulin, Donald St-Pierre, Gertrude St-Pierre (compilateur).

Ile Lamèque (Lam) 26ième année

Le 27 déc., 08:00–16:00. Ciel clair; temp. -5° à -4°C ; vent NO, 45 km/h. Neige sur terre 0–10 cm; l'eau gelé à 50%.

Gérard Benoit, Denise Benoit, Égide Chiasson, Hilaire Chiasson (compilateur), Michel Chiasson, Rose-Aline Chiasson, Marcel David, Lucille DeGrace, Émile Ferron, Réjean Ferron, Jacques Guignard, Jocelyne Guignard, Stéphane Guignard, Rosita Lanteigne, Jude Larocque, Gertrude St-Pierre.

Ile Miscou (Mis) 12ième année

Le 19 déc., 08:00–16:00. Clair; temp. -8° à -5°C ; vent O, 37 km/h am, nul pm. Neige au sol 5 cm; entrée de l'île glacieuse, ailleurs pas de glace.

Donalda Benoit, Hilaire Chiasson, Michel Chiasson (compilateur, pour Rose-Aline Chiasson), Émile Ferron, Jacques Guignard, Rosita Lanteigne, Jude Larocque, Gertrude St-Pierre.

Caraquet (Car) 14ième année

Le 20 déc., 08:00–16:00. Ciel variable; temp. -7° to -4°C ; vent NO, 40–55 km/h. 10 cm de neige au sol; baie de Caraquet gelée à 30%, baie des Chaleurs dégagée.

Donalda Benoit, Hilaire Chiasson, Michel Chiasson, Marcel David (compilateur), André Haché, Réjean Laforge, Rosita Lanteigne, Jude Larocque, Gertrude St-Pierre.



Evening Grosbeak, male

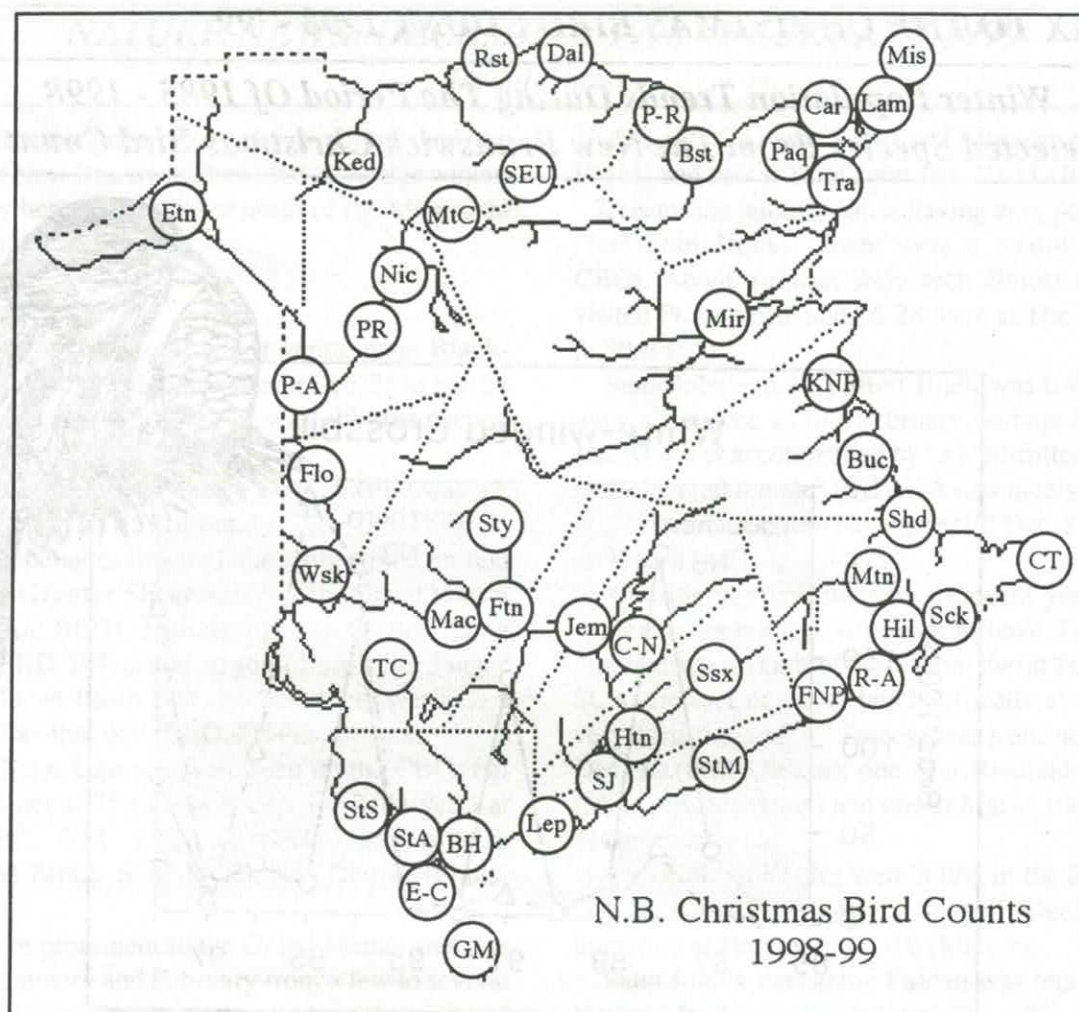
1998-99 CBC	Mir	Bst	P-R	Dal	Rst	Ssx	Htn	C-N	Jem	Ftn	Mac	TC	Sty	Wsk	Flo	P-A	PR	Nic	Ein	Ked	Mic	SEU	Paq
Great Cormorant	*			*																			
D-crest Cormorant	*			*																			
Great Blue Heron																							
Canada Goose	17	*					*	*		15			*										
Am Black Duck	7	*	71	101	84	181	4			21	300				59				10				
Mallard		3	2	6	6	56				1	13			1	180								
Ring-neck Duck							4				3				20								
Greater Scaup							1																
Lesser Scaup #										4													
Com Goldeneye		25	14	223			11			353	41				17				7				
Barrow Goldeneye #				295						1													
Hooded Merganser		*					3			13													
Common Merganser	1	23	3	4	6	6	16			77	50					9			1				
Red-br Merganser		51		2	7														1				
Osprey																							
Bald Eagle	1	*	1		2	5	2	3	4	8	5	1	6	4	1	1	6	2	*				
Northern Harrier					*	1	*	*	1	2	*					*	1						
Sharp-shin Hawk																							
Cooper's Hawk					*	3	1			*													
Northern Goshawk																							
Broad-wing Hawk																							
Red-tailed Hawk					2				1	1			1										
Rough-legged Hawk									13														
Merlin																							
Gyrfalcon																							
Ring-neck Pheasant	1			2	2	13	2	1						18		*	*						
Ruffed Grouse	4	7	1		4	5	2	13	7	6	3	1	2	5	7	1	5	6	*	9			2
Ring-billed Gull		*	14		10					5	1								4				
Herring Gull	2	192	190	48	2	27	36			200	6			27	9				1	*			
Iceland Gull		2	2	9			1																
Glaucous Gull	1	6	1	23																			
Great Blk-bk Gull	2	877	260	23	29	6	28			600	10												
Black Guillemot				*																			
Rock Dove	245	45	129	88	250	891	54	28	125	1470	49	17	71	677	178	228	127	13	239	150			41
Mourning Dove	50	31	4	31	3	333	196	277	103	394	81	26	16	95	276	25	57	*	50				
Great Horned Owl						1	*	*	*		*		*			*				1			
Barred Owl		*							1				*										
N Saw-whet Owl																							
Belted Kingfisher						1				*													
Red-head Woodprkr				1																			
Downy Woodprkr	25			10	9	22	21	27	9	33	10	4	1	29	14	4	12	8	4	4	12	2	8
Hairy Woodprkr	30	8		12	6	19	17	27	8	43	14	8	12	24	21	3	12	9	7	6	3	*	4
Blk-back Woodprkr																				1			
Northern Flicker	1	*					5				2												
Pileated Woodprkr				2	1	4	*	5		12	4	2	4	1	1		3	4	*	*	3	*	*
Horned Lark						7																	
Gray Jay	16	2		5	2	7	4	33	2	25	14	*	10	7	7		7	5	1	13	5	2	*
Blue Jay	73	6	1	51	51	103	82	209	47	108	81	40	106	67	126	28	54	20	93	41	11	*	38
American Crow	36	71	110	86	79	878	535	172	51	274	134	26	48	157	103	34	37	3	131	8			16
Common Raven #	83	6		27	108	520	19	48	45	173	43	24	77	71	82	9	10	49	70	27	7	5	14
Blk-cap Chickadee	276	60	57	144	287	249	357	306	166	676	278	280	307	418	237	113	129	140	157	157	137	20	48

1998-99 CBC	Mir	Bst	P-R	Dal	Rst	Sxx	Hfm	C-N	Jem	Ftm	Mac	TC	Sty	Wsk	Flo	P-A	PR	Nic	Em	Ked	Mic	SEU	Paq
Boreal Chickadee	27	4	2	7	6	2	5	45	1	1	15	79	12	20	1	*		19	12	18	58	7	1
Red-br Nuthatch		2		12	10	13		6	14	61	15		73	20	2	6	15	15	9	10	23	15	1
White-br Nuthatch				*	2	2		2	2	3	1	1	2	3	2	*	2	3					
Brown Creeper					1		1	8	3	1	1	14	2	3	3			2				*	
Golden-cr Kinglet	1	8		3	1	11	16			20	14	14	47	3	1				1		2		1
American Robin		26		9	1		13	*		17			*						1		1		1
N. Mockingbird	*	7		16	178	21			65	165					20		*		1				
Bohemian Waxwing		30		15										4				30					
Cedar Waxwing																							
Northern Shrike	380	9	186	312	522	660	247	382	203	1438	230	90	1	1	129	18	114	2	1	2			36
European Starling						3																	
Yel-rump Warbler																							
Pine Warbler #	4																						
Northern Cardinal						2	10		1	5	5			2		*							
Blk-hd Grosbeak																							
Am Tree Sparrow	20	1	2			169	115	86	342	59	139	21	18	68	30	*				12			4
Chipping Sparrow						3				2					20								
Savannah Sparrow					1					1				1									
Song Sparrow		1	1			1	11			*	1						8						
Wh-throat Sparrow						1	2	4		*													
Wh-crown Sparrow										1													
Dark-eyed Junco	1	144	35	35	35	916	197	12	8	78	45	40	42	2	18	5	4		2				
Snow Bunting	14						185	218	255	100	4		284	90	58		45	1	170	825	*	383	
Red-wing Blackbird																							
Rusty Blackbird	3				1		2	1		*		2											
Common Grackle	4				1			1						12									
Bm-head Cowbird																							
Hooded Oriole																							
Pine Grosbeak	6			17	10				6	2		67	2			*	5	12	26	48	56	8	
Purple Finch	18				8	22	8	24	10	94	70		123	140	44	3	30	34	11	118	5	30	1
House Finch	*					11	4			20				*							2		
Red Crossbill		12		165	66	5			4	17	17	23	89					40	16	101	353	57	
Wh-wing Crossbill				10	11				56										15	*	23	*	30
Common Redpoll	85			5	*	22	12	35	2	45	23		122	14	10	24	35	52	46	60	236	54	
Pine Siskin	3																						
American Goldfinch	449	39	1	19	97	274	697	536	249	564	298	102	422	501	172	87	106	13	36	45	14	3	15
Evening Grosbeak	112	*			*	214	4	234	7	8	4		43	9	9	*	39	1	15	40			77
House Sparrow	22	6	20		32	99	22	10	31	28	36		32	32	21	1	38		52	67			
Unidentified				11 f							1 g				10 h								
TOTAL BIRDS	2020	1704	1108	1831	1927	5960	2952	2757	1842	7248	2046	869	2234	2692	1891	599	933	452	1469	1875	952	205	718
TOTAL SPECIES	35	30	24	36	38	47	41	30	33	51	38	22	30	32	35	18	27	23	32	25	19	12	17
Add. Spp. in Period	4	9	0	4	4	0	5	5	1	6	3	1	4	1	1	10	1	2	3	3	0	6	2
Hrs on foot	11	10	3	10	?	20.5	5.5	15	11	71.5	5.75	2	14	10.3	9.5	2	2	12	9.8	7.5	16	10	?
Hrs by car	19	3	8.25	16	?	28	36.3	18.5	24.5	71.5	31.8	12	13.5	17.8	10	5	3.5	3	35	16	4	3	?
TOTAL HOURS	30	13	11.3	26	45	48.5	41.8	33.5	35.5	143	37.5	14	27.5	28	19.5	7	5.5	1.5	44.8	23.5	20	13	24
Km on foot	21	8	3	19	57	?	10	22	14	114.5	15.5	5	15	19.7	25	3	1	20	17.5	6	42	10	3.5
Km by car	264	14	156	221	187	?	617	290	454	751.5	343	180	336	230	132	110	65	59	596	302	87	80	336
TOTAL KM	285	22	159	240	244	?	627	312	468	866	358	185	351	250	157	113	66	79	614	308	129	90	340
No. of observers	8	7	5	14	18	22	22	17	14	58	18	3	13	15		2	2	3	16	11	3	6	6
No. of parties	6	5	3	6	9	9	7	8	7	26	6	2	6	?		1	1	3	8	5	3	3	3
Feeder reports	36	2	4	3	16	4	26	25	2	35	2	0	8	32	29	10	6	6	3	5	0	0	0

1998-99 CBC	GM	E-C	StS	StA	BH	Lep	SJ	StM	FNP	R-A	Hil	Mtn	Sck	CT	Shd	Buc	KNP	Tra	Lam	Mis	Car	NB Total
Red-throated Loon		2								1												5 -
Common Loon	35	25		29	51	27	4															171 ++
Horned Grebe	42	21		32	40	58	1															194 ++
Red-necked Grebe	168	5		14	14	37								1								238 +
Cory Shearwater																						1 *
Northern Gannet	*																					211 ±
Great Cormorant	90	45		1	63	2	9												1	1		4 ±
D-crested Cormorant	*			1											*				1			6 +
Great Blue Heron	1																					24 -
Brant	23																					209 ±
Canada Goose	3	50			*		41	2		46	19				*				16			21 +
Green-winged Teal	1			7			12	1							*							5916 ++
Am. Black Duck	725	1009	60	537	298	99	805	75	8	1019	6	34	148	100	30	102	2	2	1	20		755 -
Mallard	45	34		6	9	1	64	4	*	3	184		63	2	27	42	1	1	2			3
Northern Pintail	1			1			1															1
Gadwall								1														2
American Wigeon																						2
Ring-necked Duck																						27
Tufted Duck	40	3		*			1								*			6				1
Greater Scaup							12															62 --
Lesser Scaup																						4
Common Eider #	750	90		5312	600	92		2	1	5			38	7	982	*	23	28	119			8049 ++
Harlequin Duck #	25					11		9									2					47 ++
Oldsquaw	225	135		117	169	73							179	298		88	6	144	17	198	45	1694 -
Black Scoter	40	2			8	58		12									1					124 +
Surf Scoter	65	42		35	42	8	1															194 +
White-winged Scoter	27			36	6	2	5															77 -
Common Goldeneye	240	33	20	113	9	26	348	40	4	6			28	142		570	118	42	7	41		2478 +
Barrow's Goldeneye							1		*					2	*	1	30					361 ++
Bufflehead	75	170	1	169	53	30	171	12									1					684 +
Hooded Merganser		5			1		4						11	1	248	55	2	11	2			26 +
Common Merganser		1	18		22	7	22	2	*	63	7			84	67	15	31	16	24	8		659 +
Red-br Merganser	210	67		11	58	32	134															820 +
Ruddy Duck							1															1
Osprey																						1
Bald Eagle	3	34	4	6	50	1	2	*		1	1	2	12	6	2	2	1		1			180 +
Northern Harrier	1	1			*		*	*		*	*	*	2				*		*			6 ±
Sharp-shinned Hawk		1			1		*	*		*	*	*		1			*		*			7 --
Cooper's Hawk		1																				2
Northern Goshawk	*			2					*	2	1	2			1	*						12 ±
Broad-winged Hawk																						1
Red-tailed Hawk		1								1	2	2	2	*	*		2					15 -
Rough-legged Hawk			2		1					*	*	1	6		*							23 -
Golden Eagle										1	*					*			*			1
Merlin	*	1						*		1												4
Peregrine Falcon																						*
Gyr Falcon																						2
Ring-neck Pheasant	5					1				5	16	86	201	4	37	1						393 +
Spruce Grouse		1																	1			6 ±
Ruffed Grouse	*	1	6	4	*		2	7	2	4	7	6	3	7	16	4	2	4	2		1	168 +
Killdeer								1								*						1 *

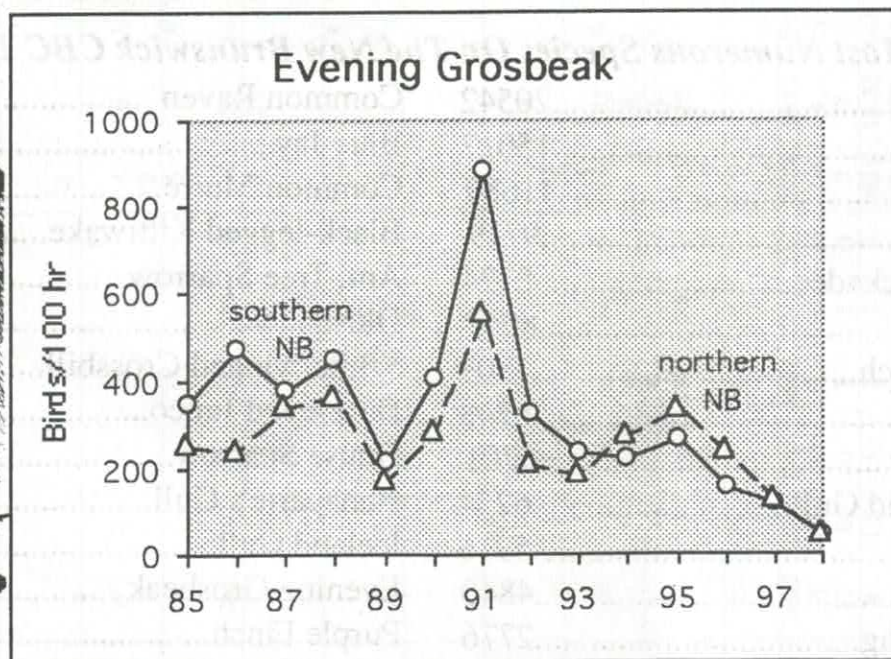
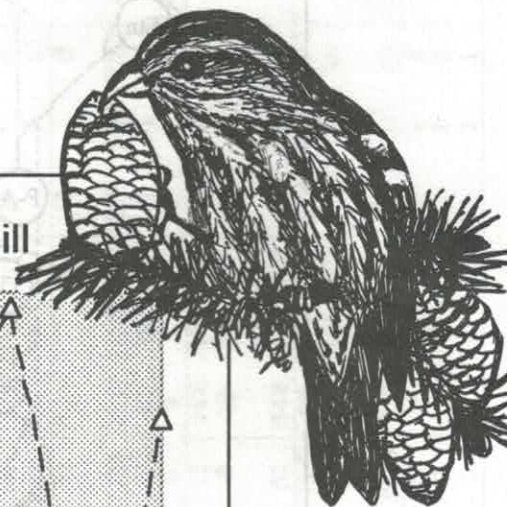
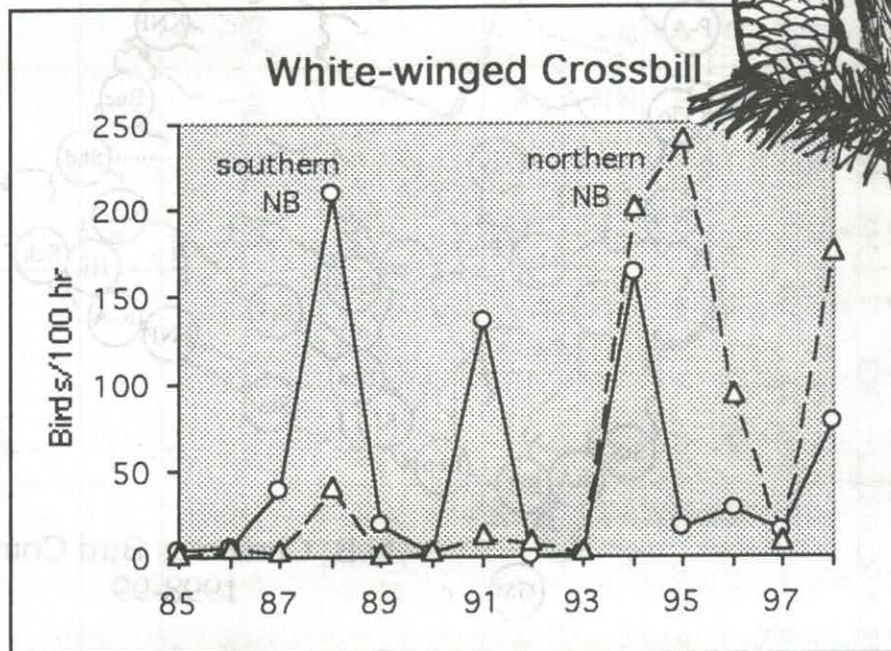
1998-99 CBC	GM	E-C	StS	StA	BH	Lep	SJ	StM	FNP	R-A	Hil	Mtn	SeK	CT	Shd	Buc	KNP	Tra	Lam	Mis	Car	NB Total
Purple Sandpiper	10	29				310		12		7				2								370 ±
Dunlin						3																3
Common Snipe	2						1															3
Black-headed Gull																						3
Bonaparte's Gull #	10	1201				12																1235 ++
Ring-billed Gull	29	24		13	28	60	93	5	3	85	10	10	10	8	1	CW		5				418 +
Herring Gull	2450	2044	106	763	1315	73	1916	77	69	209	31	570	93	239	334	339	180	87	25	15	14	11689 -
Iceland Gull	18	33			55	1	181	1	2	79	4	103	40	125	8	*		21	92	122	167	1066 ±
Lesser Black-bk Gull	*											*										*
Glaucon Gull	480	954	9	68	185	6	1	383	5	1	4	82	48	76	353	1	1	1	6	6	1	55 ±
Great Black-bk Gull	1500	745			2							661							223	45	144	6234 -
Blk-leg Kittiwake																						2247 -
Dovekie	40																					40 +
Common Murre #	2250																					2250 ++
Thick-billed Murre		2																				2
Razorbill #	1500	11			22	6												4	20	308		15017 ++
Black Guillemot #	66	9				7																436 +
Atlantic Puffin	*																					*
Rock Dove	3	216	240	18	236	36	473	7	2	14	65	1118	458	103	704	456	161	213	108		14	9719 +
Mourning Dove	161	57	71	119	45	57	226	83	28	94	114	448	459	78	172	163	111	73	67	22	103	4840 +
Great Horned Owl					*		*	1						*		1	*					3 -
Snowy Owl									*			1					1					1 -
Barred Owl	1									*												3 -
Short-eared Owl																						1
N Saw-whet Owl															*			*				*
Belted Kingfisher		1			1					1												3
Red-headed Woodpecker																						2
Red-bellied Woodpecker																						1
Downy Woodpecker	2	3	5	9	5		12	*	3	4	25	40	8	3	19	4	7	8	4	3	4	436 ±
Hairy Woodpecker		1	10	6			8		1	1	24	32	12	4	18	4	9	14	3	1	6	447 ±
Black-bk Woodpecker										*					2	*						7 -
Northern Flicker	1	1	2	1	3	1	1	*		*	*	1	1		4	1	1	1				20 ++
Pileated Woodpecker		2					*					2	1			1	2					60 ±
Horned Lark								*														8 -
Gray Jay	18	31	45	52	8	6	2	8	1	4	2	8	11		11	3	6	2	2		6	243 -
Blue Jay							38	7	1	12	61	172	103	28	136	37	35	33	15	10	21	2303 -
American Crow	245	119	56	166	157	170	333	93	6	61	98	480	306	157	674	209	74	64	112	31	81	6701 +
Common Raven	73	13	6	18	23	1	22	10	1	18	58	73	115	22	92	53	22	21	220	3	4	2385 -
Blk-cap Chickadee	86	99	102	172	78	12	313	67	12	72	193	574	403	126	498	269	134	189	108	93	135	8734 ±
Boreal Chickadee	*					1	2	14		10	*	4	4	2		10		22	33	16	20	287 ±
Red-br Nuthatch	*		2	2	2		6	11	2	7	11	42	30	11	7	30		2	4	11	3	657 ±
White-br Nuthatch			1	*			2															32 -
Brown Creeper	*		1	1			2	1	4	1		4			1				3			29 -
Carolina Wren			1				*															1
Golden-cr Kinglet	75	2		16	27	7	44	37	32	21	6	21	61	86	50	48	6	3	5	2	5	704 +
Ruby-crown Kinglet							*															*
American Robin #	5	222		27	480	358	27	1050		13	1	3	27	6	150	*	*	1	20	34	15	2509 ++
N. Mockingbird							4					1	1									7 -
American Pipit							1															1
Bohem Waxwing #					18	50		52							1473	24	7	128	161	84	345	2776 +
Cedar Waxwing					1			1		*		2	1	*	23					3		169 +
Northern Shrike																						22 -
European Starling	540	1238	217	363	476	356	3728	1950	22	438	176	1649	628	281	772	812	118	285	348	81	280	20542 +

1998-99 CBC	GM	E-C	StS	StA	BH	Lep	SJ	StM	FNP	R-A	Hil	Mtn	Sck	CT	Shd	Buc	KNP	Tra	Lam	Mis	Car	NB Total
Yel-rump Warbler				1								*		7	3							21 -
Pine Warbler				1	1				*			1	1		1							8 +
Com Yellowthroat												1										2
Yellow-breast Chat												1										1
Northern Cardinal												1										50 +
Blk-hd Grosbeak	6		2	5			10	*				1										*
Eastern Towhee																						1
Am. Tree Sparrow	92	8	22	66	30	23	73	9	3	18	35	97	153	26	65	23	14	*	4	1		1848 ±
Chipping Sparrow												1	1			1						25
Clay-col. Spar.	*											1										2
Savannah Sparrow																						5
Nelson's Shp-t Spar.																						1
Fox Sparrow																						1
Song Sparrow	4	7		3	1	1		4	6	3	2			1	4	4		1				55 ±
Swamp Sparrow																						2
Wh-throat Sparrow	5			1			5	3	*	8			5			1			2			46 ±
Wh-crown Sparrow																						1
Dark-eyed Junco	144	19	23	100	83	39	140	28	86	26	137	43	57	29	47	13	10	1	1			1607 +
Snow Bunting	*	4	15	2			5	21		12	19	127	144	93	188	226	175	300	335	1055	191	6748 ±
Red-wing Blackbird												1										3 -
meadowlark sp.	*																					*
Yel-hd Blkbird																						1
Rusty Blackbird																						11 +
Common Grackle	2	2		1	5	1			14	*	1	8	2			3	2	2	1			50 ±
Brown-hd Cowbird																						17 -
Hooded Oriole																						2
Baltimore Oriole																						253 -
Pine Grosbeak																						992 ++
Purple Finch	22	3	36	16			2	3		15	4	7	15			36	8	*	2			430 ++
House Finch #				13	*		61	4														6 -
Red Crossbill																						1688 +
Wh-wing Crossbill	105			8	52	5	2	52	9	81	51	24	86	42	7	1	20	28	43	20	12	608 -
Common Redpoll				30				8		*		10	1			2	76	89	119	26		932 +
Pine Siskin	1	3	194	189	148	1	311	26	1	156	466	532	195	18	387	30	145	111	29	3	6	7809 +
American Goldfinch	*	33	5				12			48	20	1	1		47	*	38		3	6	6	993 -
Evening Grosbk																						1345 -
House Sparrow	*	30		4			79		5c	305 d	11	231	192	12	30	110	20	20	52		25	341
Unidentified							2 a							7 e								154,520
TOTAL BIRDS	26235	8978	1316	8687	5001	2162	10294	3823	352	2956	1771	7748	4152	2037	8233	4358	1412	2229	2273	2438	1781	
TOTAL SPECIES	55	63	33	51	51	46	64	46	29	43	36	55	46	47	47	48	30	46	47	31	34	134
Add. Spp. in Period	17	0	0	3	5	0	7	7	7	8	5	3	0	4	8	9	3	4	2	0	1	9
Hrs on foot	3	1.5	5	2	4	4	40.5	15.33	14.8	10.5	8.75	32.5	35	26.5	12	14.8	17	14.5	14.5	14	14.1	562+
Hrs by car	16	14	1	20	19.5	7	33.5	9.75	2.25	14.8	29	73.2	35.3	30	40	20	28	23	33.5	18	24.9	872+
Hrs otherwise	2b	0.25b			1.5b								1t									4.75
TOTAL HOURS	21	15.8	6	22	25	11	74	25.08	17	25.3	37.8	106	71.3	56.5	52	34.8	45	37.5	48	32	39	1508
Km on foot	11	2.4	2	10	5	4	63.5	23.6	35.5	8	22	38.5	64	38	15.5	20	39	29.9	35.2	33.1	38	990+
Km by car	160	227	20	127	200	222	534	180.5	18	169	374	1028	536	467	375	330	454	403	570	181	362	12747+
Km otherwise	20b	0.4b		10b									5t									35.4
TOTAL KM	191	230	22	137	215	226	598	204.1	53.5	177	396	1067	605	505	390.5	350	493	433	605	214.1	400	13772+
No. of observers	9	5	2	5	8	4	27	13	15	6	15	51	20	18	27	18	14	10	13	8	8	579
							15		5	7	5	7	6-12	5-11	7	5	8	5	6	4	5	268+
																			3	0	1	343



Top 30 Most Numerous Species On The New Brunswick CBC 1998-'99

European Starling.....	20542	Common Raven.....	2385
Razorbill.....	15017	Blue Jay.....	2303
Herring Gull.....	11689	Common Murre.....	2250
Rock Dove.....	9719	Black-legged Kittiwake.....	2247
Black-capped Chickadee.....	8734	Am. Tree Sparrow.....	1848
Common Eider.....	8049	Oldsquaw.....	1694
American Goldfinch.....	7809	White-winged Crossbill.....	1688
Snow Bunting.....	6748	Dark-eyed Junco.....	1607
American Crow.....	6701	House Sparrow.....	1345
Great Black-backed Gull.....	6234	Bonaparte's Gull.....	1235
Am. Black Duck.....	5916	Iceland Gull.....	1066
Mourning Dove.....	4840	Evening Grosbeak.....	993
Bohemian Waxwing.....	2776	Purple Finch.....	992
American Robin.....	2509	Pine Siskin.....	932
Common Goldeneye.....	2478	Red-breasted Merganser.....	820

APPENDIX TO THE CHRISTMAS BIRD COUNT 1998 - '99**Winter Population Trends During The Period Of 1985 - 1998
For Selected Species From The New Brunswick Christmas Bird Count Data**

NATURE NEWS: DECEMBER 1998 - FEBRUARY 1999

David Christie

Although temperatures were above normal and the southern half of New Brunswick had little snow this winter, there was really heavy snow cover north of the Miramichi after mid December.

Birds

The highlight of the winter was a young male **Black-headed Grosbeak** at a Fredericton feeder Dec. 25 to Jan. 27 (Linda Kneebone, Judy Nason+). It was only the second confirmed New Brunswick record.

A late **Horned Grebe** at Miscou Dec. 16 (PD) was the only one away from the Bay of Fundy.

A few autumn pelagics lingered into early winter around Grand Manan: 3 **Greater Shearwaters** at the Grand Manan Basin Dec. 3 (*fide* BED), 2 **phalaropes** (**Red?**) off Long Island Dec. 2 (BED, FH+), and an adult **Pomarine Jaeger** at the Grand Manan Basin Dec. 2 where there was also a **Northern Fulmar** that day (BED, FH+).

A few **Northern Gannets** were seen on the CBCs but there were also about 75 (adults except for 2 1st-year) at Long Eddy Pt., GM, Dec. 10 (FH+) and one in Northumberland Strait, S of St-Thomas Dec. 5 (Louis-Émile Cormier).

Dovekies were prominent in the Grand Manan area this winter. During January and February from a few to several could usually be seen during each crossing of the Grand Manan ferry. During a pelagic survey to the Old Proprietor Shoals Jan. 21, Brian Dalzell estimated a minimum of 5000 to be present "in a small area of shoal water south and east of White Head Island." Falk Hüttmann tallied 672 Dovekies on the outward trip and 2444 Dovekies on the return. About 400 were seen on a pelagic birding trip there Feb. 9 (BED+).

The 15,000 **Razorbills** and 2250 **Common Murres** off Grand Manan on the Dec. 28 CBC seem not to have been matched on later trips, but 6400 Razorbills were moving to the east off Ashburton Head Dec. 10 (FHA, DMcF) and 3000 were seen there Dec. 14. Although poorly represented on the CBCs, small numbers of **Thick-billed Murres** were seen regularly around Grand Manan later in winter.

An immature **Snow Goose** accompanied 50 Canadas at St. Stephen Dec. 11-16 (Hartley Avery, GMi). An early? or wintering? **Canada Goose** was unexpected at Youghall Pt., Bathurst, on Feb. 28 (LD).

In addition to lingering ducks seen during the CBCs, a male **Wood Duck** was noted at North Head Dec. 3 (*fide* BED), 2 **Green-winged Teal** at St. Stephen Dec. 13 (GMi), a female **Northern Pintail** at Mary's Point from Jan. 6 through February (DSC+), 15 **Northern Shovelers** at Dorchester sewage lagoon c. Dec. 5 (KP) and one at Castalia, GM, Jan. 9-17 (RL, BED+), a **Gadwall** at Bouctouche Dec.

13 (MLEB), 7 **Lesser Scaup** at Dalhousie on Dec. 2 (DSC, EMM) and one at Saint John Jan. 10-31 (JGW+).

It seems the hunting ban is having very positive effects on **Harlequin Ducks**. There were a record number on the CBCs. About a dozen were seen almost anytime anyone visited Pt. Lepreau, and 26-28 were at The Wolves Dec. 20 & 30 (FHA).

Saint John's male **Tufted Duck** was back for the fourth winter from Dec. 27 into February, perhaps March (v.o.). On Jan. 31 it was accompanied by "a well-tufted and previously undiscovered female" (SIT+). A less nicely plumaged male was at Dalhousie from November till Dec. 2 (DSC) but gone on Dec. 6 (MHL).

Considering their increase in recent years and the mild winter it was not too surprising to have **Turkey Vultures** reported at both ends of the season: two at Todd's Point, near St. Andrews, Dec. 10, ("their bald heads, as well as my nose, very red in the cold" — Tracey Dean), one near Hillsborough Dec. 20 (Dale Gaskin), one near Riverside-Albert Jan. 10 (Mike & Chris Antle) and one at Maces Bay Feb. 20 (Scott Makepeace).

Two **Golden Eagles** were found in the Riverside-Albert area, an adult (or nearly so) at Shepody Dec. 8 (DSC) and an immature at Harvey Jan. 1-10 (Mike s).

Saint John's **Peregrine Falcon** was reported around the Harbour Bridge during January (v.o.). The only **American Kestrel** of the winter was seen at Saint John Jan. 17 (Christine Cornell & Kevin Tutt). Two gray phase **Gyrfalcons**, discovered on the Quebec side of the Restigouche Dec. 20 (Ann Lavoie) were later seen at Campbellton from Dec. 30 to January 14 (v.o.) and one was seen there Feb. 19 (Edgar Landry). Perhaps the smaller of the two was seen sporadically at Dalhousie from Jan. 24 through February (MHL+). Another gray Gyr Falcon was reported near Woodstock in February (Kent Orlando).

More surprising than the **Killdeer** on the St. Martins CBC (Ted Sears) was one in mid winter at Saint John Jan. 31 (SIT) and a **Ruddy Turnstone** at St-Thomas-de-Kent Dec. 30-31 (MLEB+). Shorebirds that are more frequently seen in winter were 2 **Sanderlings** at Maces Bay Dec. 19 to Jan. 10 (JGW+), others at Grand Manan Dec. 24 (*fide* BED), and 3 **Dunlin** at Maces Bay to Jan. 31 (JGW, SIT+). An overwintering **Common Snipe** was found in a small brook in the Tantramar marsh Feb. 12 (John Tanner, FD) and for the second winter there was a surprising February report from Sugarloaf Park in Campbellton (Robert MacKie — *fide* MGD). An **American Woodcock** was reported at Moncton, Dec. 15 (Roy Hopper, *fide* Jim Edsall).

Two adult **Little Gulls** lingered among flocks of **Bonaparte's Gulls** off Long Eddy Pt., GM, Dec. 3 (FH+).

NATURE NEWS (cont'd. from p. 29)

There were 4000 "Bonies" feeding there Dec. 10 (FH, DMcF) and 5150 off Wilsons Beach and south of Deer Island Dec. 30 (FH), when there were also 3260 **Black-legged Kittiwakes**.

Up to 7 **Black-Headed Gulls** frequented Blacks Harbour in January (KM). The usual **Lesser Black-Backed Gull** was seen quite regularly at Moncton during December and several times during January (JE). There was also one at Grand Manan Dec. 27, and one during count period in the Shediac area.

Snowy Owls were really scarce this season. In addition to only one on the CBCs, there were January reports at Cap-Lumière (fide Barry Spencer), Miscou (fide LD) and possibly Campbellton (fide MGD) and in February at Bathurst (Marc Landry) and Taymouth, York Co., (Feb. 27—fide Julie Singleton).

Kathy Popma had an unnerving experience while watching 3 **Short-eared Owls** on the Tantramar Marsh Dec. 2: "Two flew off, but the third landed in a tree. As I watched it with my binoculars, it headed straight for me at eye-level across the field. There was no doubt in my mind what was going to happen...it came in on stiffly beating wings, none of that normal, beautiful, light moth-like flight usually associated with these creatures. It didn't look right or left just straight at me all the way, and came in so fast I couldn't keep it in focus. I told myself to hold my ground to see what exactly it would do but, at the last moment I ducked and it missed. I have no doubt that if I hadn't moved, it would have wounded me. I looked up as it went by and as I did it clearly said "SCRAM". It came back once more only not as menacingly and passed overhead by about 6 feet. Then it calmly went back to its hunting."

In addition to more **Belted Kingfishers** lingering than usual during the CBCs, there was one by a brook in the South Branch area, S of Rexton, Jan. 6 9 (GMA).

Three immature **Red-headed Woodpeckers** stayed on from the fall flight: at Baie Verte (Noreen Spence+) and Riverside-Albert (v.o.) all winter, and at Dalhousie from early December to Jan. 3 (Pat

McGorlick). All were visiting feeders. A female **Red-bellied Woodpecker** spent the winter around feeders in Hillsborough (v.o.).

Northern Flickers continued to be reported off and on through the winter, even in Campbellton (e.g., Jan. 10, 21, and twice during February—Flora Kelly+). One flushed from the beach at Bancroft Point, GM, Jan. 17 may have been feeding on springtails, "tiny insects flopping around on the sand" (BED).

A **Carolina Wren** at Steve Smith's feeder near St. Stephen continued from November into January at least. In the Saint John area there were CBC-period individuals at feeders at Grand Bay and Rothesay (fide DFS).

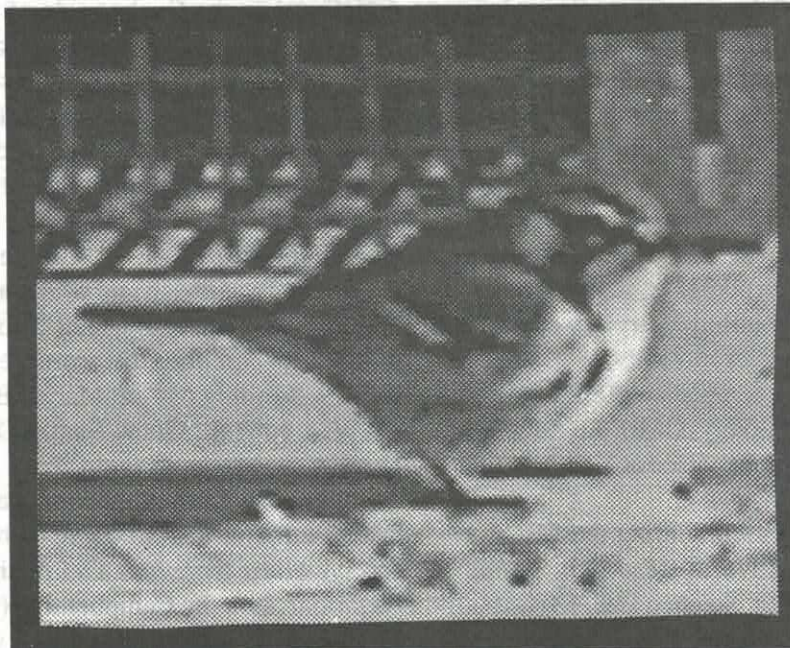
Flocks of up to a few dozen **American Robins** were found here and there throughout the winter, but Ken MacIntosh was still seeing as many as 200 in the Blacks Harbour area in early February.

A **Northern Mockingbird** in Campbellton Jan. 19 and 21 (Bob Gillis) was unique in northern New Brunswick this winter. Two **Brown Thrashers** were found. One that appeared at Guy Hébert's & Corinne Mallais's feeder in St-Simon, near Caraquet, Dec. 10 lost some feathers to a shrike Jan. 23 but was still coming Mar. 7 There was another in St. Andrews in late January and/or early February (fide GMi).

Bohemian Waxwings began to be seen more widely in southern N.B. (in small flocks) after mid January. 400 were at Bouctouche Feb. 5 (MLeB & Bernadette LeBlanc).

Some **Yellow-rumped Warblers** likely survived this mild winter in the Cape Tormentine area, where 6 were still doing well on a bumper crop of bayberries Feb. 14 (KP). Of several **Pine Warblers** noted during December, at least a couple survived into late winter at feeders, at Alma (Anne Bardou, David Clark) and Fredericton (Don Gibson). On the Acadian Peninsula, there were two at a feeder in Landry Jan. 10-14 (Francine Landry).

An interesting assortment of reports of other warblers included an **Orange-crowned** at Moncton Dec. 2 (JE), a **Yellow-breasted Chat** at a feeder in Moncton Dec. 12-28 (RL+) and another in Sackville Dec. 12 (George Finney). A **Northern Parula** at Saint John Nov. 26 to Dec. 2 (DFS) may have been one but two others that were reported turned out to be Pine Warblers. Most unusual was a **Yellow-throated Warbler**



Yellow-throated Warbler at Miramichi City on Dec. 10, 1999, from a video by Eldon Rogers.

at a Miramichi City feeder from November till Dec. 10 (Eldon & Thelma Rogers), New Brunswick's second winter record of that species. Astonishingly, it reappeared there Mar. 23-24. How did it ever manage to survive?

An immature **Indigo Bunting** lingered at Mary's Point till Dec. 3 (DSC). A female **Eastern Towhee** was at Saint-Irénée, (Roger Basque, Ronald Benoit+) and two were reported in the Sackville area during December (*vide* AJE). The two **Clay-Colored Sparrows** reported on CBCs, at Buctouche Dec. 20 (Rose-Alma Mallet+) and Sackville Dec. 19 (AJE+), were the second and third winter reports for New Brunswick.

In addition to CBC reports, a **Savannah Sparrow** was at Sainte-Marie-de-Kent Dec. 31 (GMa). One overwintered at Castalia Marsh (v.o.). **White-throated Sparrows** were mostly seen in the south but there was one at Tide Head into early December (Denyse Zyveniuk). A **White-crowned Sparrow** was at Welch Cove Jan. 18 (SIT).

The only **meadowlarks** seen were both suspected of being Westerns, but neither was positively identified, a tricky thing to do. One at Castalia off and on from late December through winter was considered very pale (BED, Peter Pearce, KM). The other was at Petite-Lamèque Jan. 4 (Hilaire Chiasson+).

A young male **Yellow-headed Blackbird** spent Dec. 13-18 at Alma (Doreen Rossiter, RJW+). A **Baltimore Oriole** that was first attracted by a fruit-bearing grape vine visited Tressa and Weldon Lewis's feeder in Riverview from mid December until January 31. Despite provision of water and food warmed by a heat lamp, during the last week its behaviour changed and it was appearing less frequently and making shorter stays.

David Smith who has had **House Finches** suffering from conjunctivitis at his feeder in Saint John for a few years also reported **American Goldfinch** with eye infection on Dec. 21. Eye problems in House Finches were also reported in Riverview (FD) and Moncton (Alma White) in late January-early February.

In late January Pat Émond reported **Purple Finches** and **White-winged Crossbills** as being everywhere in the

Kedgwick area, perhaps a thousand of each (*vide* MGD). Crossbills were prominent in many other places too. Nest building was observed at Grand Manan Jan. 31 (BED) and Alma Feb. 20 (RJW). Many picking up grit on the road through Fundy Park were killed by cars.

A **European Goldfinch** (evidently an escaped cage bird, with a blue band on the right leg) visited Barb Curlew's and Rick Elliott's feeders at Waterside Jan. 10 through Mar. 28.



European Goldfinch

Mammals

There was widespread agreement that **Red Squirrels** were scarce this winter. Of course the heavy crop of spruce cones provided lots of food for them in the woods so that they were absent from many bird feeders but they also seemed to be few in forested areas. Jeff Bowman who has been conducting mammal research in the Nictau area noted, "This past year (1998) we saw very low squirrel numbers and we assume that this is due largely to a poor cone year in 1997 (i.e. there is a lag in the response to cone abundance). Red squirrels do not have a strong, regular cyclicity but instead

fluctuate in response to weather and cone abundance. Squirrels will likely be back in very high numbers next year because of this years bumper cone crop."

A rare albino **Harbour porpoise** was seen on the western side of Grand Manan Dec. 21 by a lobster fisherman who joked about the miniature white "whale" or Moby Dick. This is the second sighting from the Bay known to Laurie Murison in recent years. She had seen one several years ago while whale watching.

Abbreviations

AJE Tony Erskine; BED Brian Dalzell; DFS David Smith; DMcF Dorothy McFarlane; DSC David Christie; EMM Mary Majka; FD Fred Dubé; FH Falk Hüttmann; GM Grand Manan; GMa Gerry Mazerolle; GMi Grant Milroy; JE Jim Edsall; JGW Jim Wilson; KM Ken MacIntosh; KP Kathy Popma; LD Luc DeRoche; MGD Margaret Gallant Doyle; MHL Mike Lushington; MLeB Mike LeBlanc; PD Pierre Duguay; RJW Rob Walker; RL Roger LeBlanc; SIT Stu Tingley; v.o. various observers.

BOTANY QUIZ: CAN YOU IDENTIFY THIS PLANT?

Gart Bishop, Kennebecasis Naturalists' Society

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

This species is one of our common woodland plants, occurring on poor to moderate soils throughout the province in mixed and deciduous woods. The single compound leaf is divided into three parts, each usually bearing five oval leaves. Depending on the conditions where it is growing, the plant may be anywhere from 15 cm on exposed coastal headlands to 70 cm in rich woodlands.

The umbrella-like leaves are fully developed before the flowers appear in May or June on a separate leafless stem branching off the leafstalk at ground level. The flower stalk splits near its summit into three separate stalks. On each of these is a round cluster of flowers composed of tiny greenish-white blossoms, each having five petals and five stamens. The fertilized flowers mature into purplish-black berries during July. At the tip of each berry are the remains of the floral parts, making the berry look like a puckered mouth which may help to remind an observer that he berries are not edible (they contain a poisonous glycoside). However, these small, fleshy fruits and their seeds are enjoyed by thrushes, sparrows and other birds and a few mammals such as Red Squirrels, Eastern Chipmunks, and Red Foxes.

This plant's English common name is borrowed from that given to tropical vines of the genus *Smilax*; both of which reportedly have a medicinal quality to their roots. The long, slender rootstalks are yellow, often in the form of runners which may produce several individual plants. The roots are somewhat aromatic, and a small washed piece can provide

an enjoyable chew while hiking. A fair tasting tea can be made by boiling the root, then letting it steep for an hour. The rootstock, best collected late in the season, was often used as an ingredient in root-beer. Small amounts of the root can be chopped and added to salads, casseroles and other vegetable dishes.

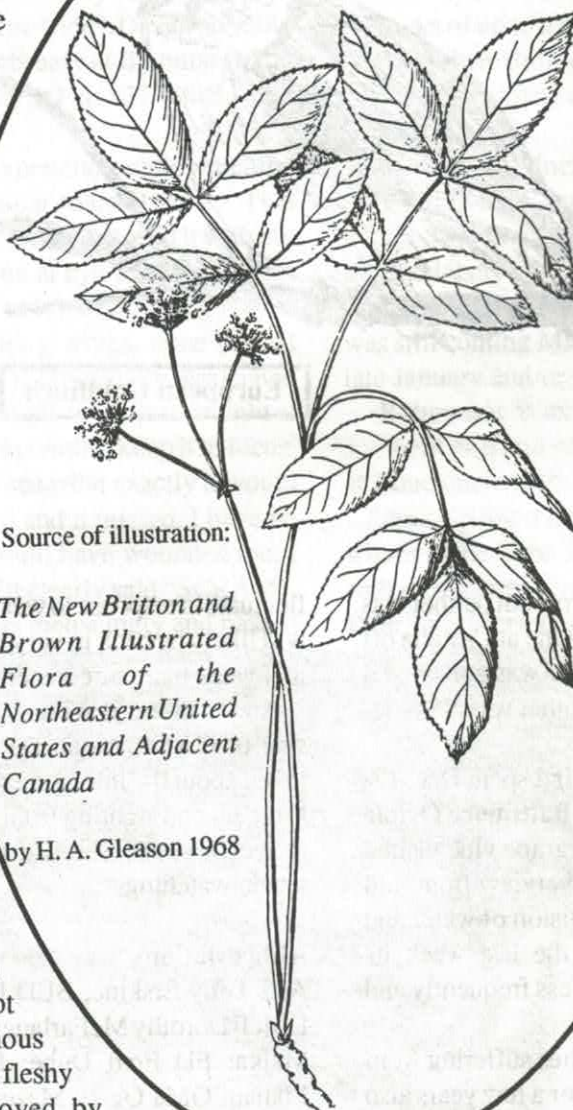
Native Americans reportedly commonly subsisted on these roots while on expeditions. The Micmacs boiled the root in water until it was soft and applied it as a poultice to wounds. This plant has been used as a tonic to treat fevers, chills and afflictions of the throat and chest. It was officially listed in the United States Pharmacopoeia from 1820 to 1882, where it was classified as a stimulant (an agent that excites or quickens physiological processes in the body), an alterative (an agent producing a gradual beneficial change in the body) and a diaphoretic (an agent that promotes perspiration). In the second half of the nineteenth century it was a very common ingredient in numerous tonics and syrups touted to be beneficial, but enthusiastically endorsed by physicians and patients mainly because of the high alcohol content.

The following books were consulted for this article: *Micmac Medicines* by Laurie Lacey, Nimbus Publishing, Halifax, 1993; *Edible Plants of New England* by Joan Richardson, Delorme Publishing, Yarmouth, Maine, 1981.

Source of illustration:

The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada

by H. A. Gleason 1968



The wildflower described in the Botany Quiz from the last issue (Vol. 25, No. 4) was *Claytonia caroliniana*, the Spring Beauty/ Claytonie de Caroline.

A REPORT ON THE 1998 CONJOINT AGM OF THE CNF AND THE NBFN

Katherine Popma

The conjoint Annual General Meetings of the Canadian Nature Federation and the New Brunswick Federation of Naturalists, hosted by the Chignecto Naturalists' Club, was held at Mt. Allison University in Sackville, N. B. from August 6 to 9, 1998. The theme of the conference centered around the celebration of the 50th anniversary of the Canadian Wildlife Service, and how its presence in the Tantramar region reflects the rich natural and cultural history of the area. The meeting was timed to coincide with the arrival of the thousands of shorebirds that appear annually on southward migration, feeding on the tidal mudflats in the Upper Bay of Fundy.

A pre-conference trip to Grand Manan was held, then attention switched to Sackville. A total of 130 people were registered Thursday afternoon by the capable team of Cindy, Pam, Susan and Andrew. Paul Bogaard's introductory talk set the stage, explaining how over the eons the giant tides of the Bay of Fundy created the landforms and led to the flora and fauna we see today. A film, "Touched by the Tides," was shown, giving registrants an idea of what the following day would hold for them.

Developing the theme further, six symposia were presented on Friday by biologists from the Canadian Wildlife Service and by other experts. Topics ranged from the Tantramar marshes and shorebird migration mentioned above to animal rehabilitation and "A Birder's Year in New Brunswick." Later, attendees got a chance to relax at an outdoor barbecue. The group then split and some attended the AGM of the New Brunswick Federation of Naturalists while other went to a meeting of the Canadian Nature Federation. All then joined in at the AGM of the Canadian Nature Federation where several important resolutions were dealt with. NBFN members will hear about these at a later date.

On Saturday, folks headed out on various field trips relating to the previous day's discussions. By bus and private

car, they fanned out around the Chignecto area, travelling to Northumberland Strait and Cape Jourimain National Wildlife Area, fossil sites in Nova Scotia, a bird sanctuary in Amherst, the Acadian settlement of Memramcook, the Tantramar marsh, and of course, everyone's favourite, the shorebirds at Dorchester Cape/ Johnson Mills. In the evening a banquet was held and the CNF presented two awards: one to the group of individuals who had been responsible for the development of the Bruce Trail in Ontario; the other to Frank Switzer, a Saskatchewan naturalist. The keynote speaker for the evening was local freelance author Sandy Burnett, who

spoke eloquently and inspiringly about the history of the Canadian Wildlife Service and its dedicated men and women, making us all very proud of this unsung Canadian institution.

As well as the individual daily events, at 6:00 a.m. each day of the conference birding excursions were made to the Sackville Waterfowl Park, a 50-acre area in the centre of Sackville and mere footsteps away from Mt. Allison University. As the Atlantic headquarters of the Canadian Wildlife Service is situated at one end of the park, people were able to visit them as well. Also, throughout the conference, an on-site bird carving competition and numerous displays relating to nature were open for everyone's inspection.

The final events were held on Sunday, in the form of

two full-day trips led by experts David Christie, Rose-Alma Mallet, and Jim Goltz. The Fundy Shore trip visited Mary's Point and area, and the Gulf Shore trip went to Buctouche Dune and Kouchibouguac National Park. From there everyone dispersed to various departure points. Thanks to the organizational skills of Paul Bogaard, Frank Longstaff, Al Smith and Richard Elliot, and the incredibly good weather, the program went on smoothly and enjoyably. Visitors left with a fuller appreciation of both the natural richness of the area and the contributions of the Canadian Wildlife Service.



ENJOYING THE SCENIC WONDERS OF RESTIGOUCHE COUNTY

Ann Lavoie

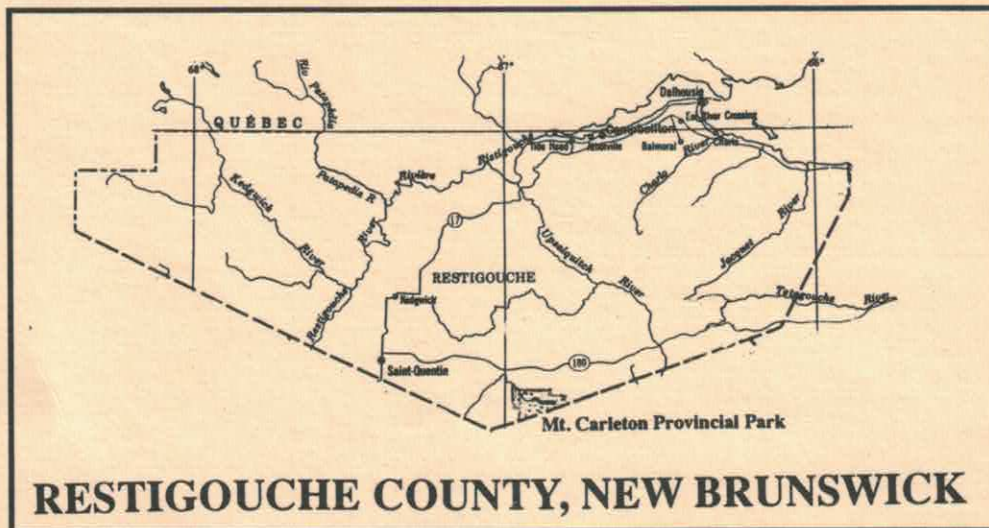
Hiking, canoeing, snowshoeing, cross-country skiing, mountain biking - these are all activities that we can participate in while keeping nature foremost in mind; some of the above may take place on a groomed trail while others involve making your own trail in the heart of a forest setting or along some waterway. Whichever strikes your fancy, it can surely be said that a scenic lookout or waterfall along the way will be one of the highlights of the journey.

Whatever season, there can be no sight more splendid than a cascading waterfall, regardless of its size or volume of water. The spring freshet will greatly alter a trickling stream to a raging torrent of water that drowns out all other sounds. Summer and fall may find the same waterfall tranquil and moss-covered with a scattering of various ferns and seasonal plants. Winter can provide

spectacular sights around a frozen waterfall as it goes through the stages of slightly frozen mist to a sheer wall of ice.

A scenic lookout is definitely a luring attraction for the many far-reaching viewing ranges they provide. Most known lookouts are reached by a maintained trail as well as a viewing platform and picnic tables; a great place to spend

several hours or perhaps a whole day. Restigouche County and its environs offer an excellent variety of these sites, with approximately seventeen coming to mind. Some of the more extraordinary include the four vantage points overlooking the Restigouche and



its magnificent river valley.

For help in finding these areas, you may contact Ann Lavoie at annygoat@nbnet.nb.ca

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