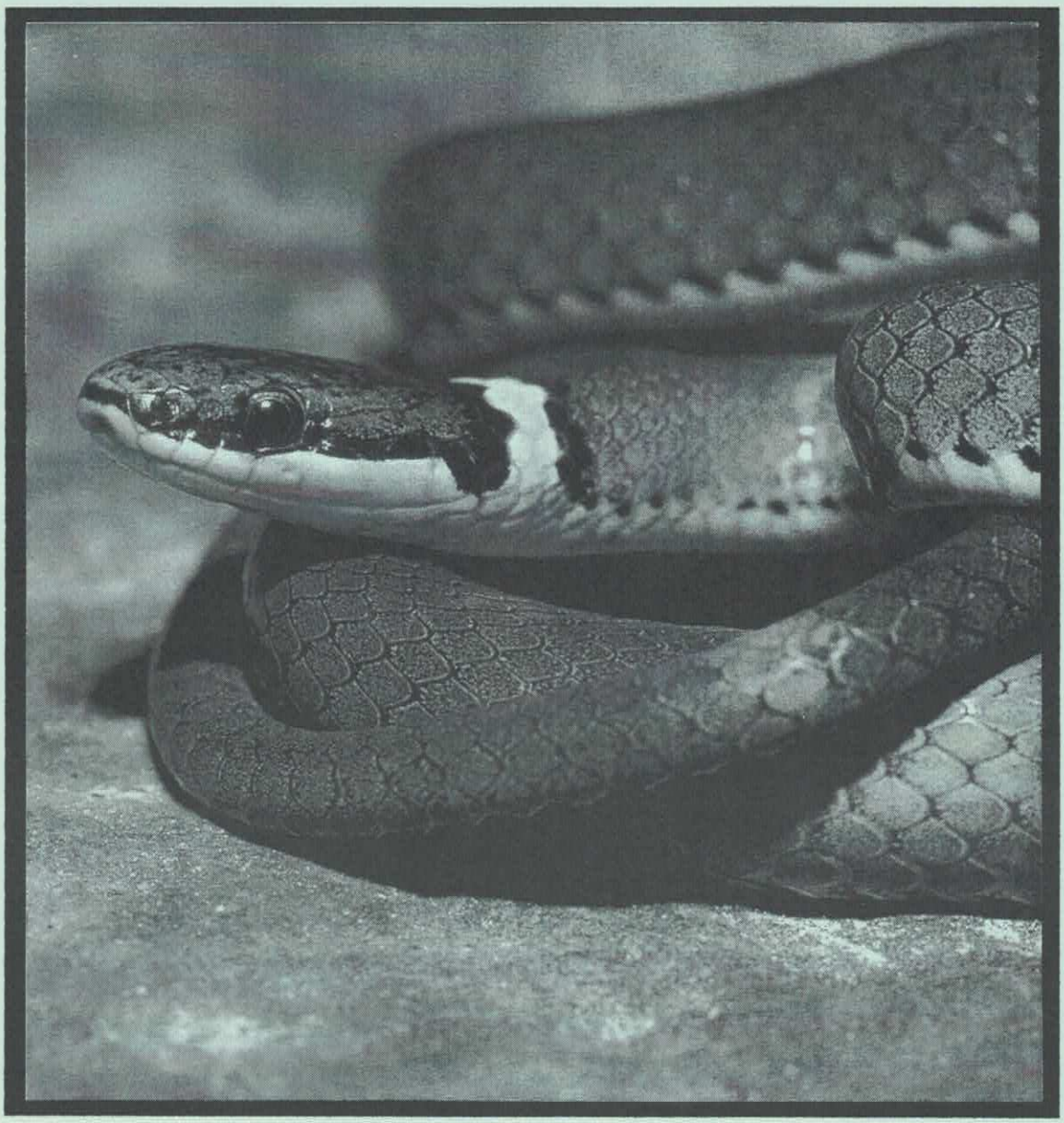
24 (2) Summer / Été 1997

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



N. B. Federation of Naturalists Fédération des naturalistes du N.-B.

277 avenue Douglas Avenue, Saint John, N.B. E2K 1E5 Canada

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

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

FEDERATED CLUBS / CLUBS FÉDÉRÉS

Chignecto Naturalists' Club, Box 1590, Sackville, NB E0A 3C0; 536-0454; meets Sackville Public Library, 7:30 pm, 1st Thur., Sept.-June.

Club des Naturalistes de la Péninsule acadienne, C.P. 421, Lamèque NB E0B 1V0; 344-2286 ou 395-5023; réunions alternants entre Caraquet, Shippagan et Tracadie, 1er mercredi, sept. à juin; *Le Gobe-mouche* mensuel.

Club d'ornithologie du Madawaska Ltée, a/s Musée du Madawaska, 195 boul. Hébert, Edmundston NB E3V 2S8; 735-5613 (Gérard Verret); réunions à 19h30, 2ième mercredi, sept. à juin, Musée du Madawaska; *Le Jaseur* bimestriel.

Club Les ami.e.s de la nature du sud-est, a/s Oscar Duguay, 207 ch Chartersville, Dieppe NB E1A 1K3; 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 Grant Milroy, RR #5, Hartland, NB E0J 1N0; 375-6371; 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; 455-0569; meets N.B. College of Craft and Design, 7:30 pm, 1st Wed., Sept-May; monthly *Newsletter.*

Kennebecasis Naturalists' Society, P.O. Box 1565, Sussex, NB E0E 1P0; meets St. Paul's United Church Hall, 7:30 pm, 4th Mon., Sept.-June; quarterly newsletter.

Moncton Naturalists' Club, Box 28036, Highfield Square P.O., Moncton, NB E1C 9N4; 386-3544 or 384-6937 (information line); meets Church of the Nazarene, 21 Fieldcrest Drive, 7 pm, 2nd Wed., Sept.-June; monthly newsletter.

Restigouche Naturalists' Club, Box 591, Campbellton, NB E3N 3G9; 789-0107 or 753-7261; meets Campbellton Centennial Library, 7 pm, 1st Monday

Saint John Naturalists' Club, 277 Douglas Avenue, 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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N.B.Naturalist carries articles and reports pertaining to the natural history of New Brunswick. Articles are invited in either English or French, and will be printed in the language in which they are received. The opinions expressed are those of the authors. **Please send all submissions for the N.B. Naturalist to: Irene Doyle, P.O. Box 591, Campbellton, NB E3N 3G9, (506)789-0107.** Ask for details of computer compatibility. Advertising rates available on request.

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On peut lire dans *Le Naturaliste du N.-B.* des rapports touchant l'histoire naturelle du Nouveau-Brunswick. Les articles seront acceptés en français ou en anglais pour être reproduits dans la langue d'origine. Les opinions exprimées sont celles de leurs auteurs. **Veuillez faire parvenir toutes articles pour le Naturaliste du N.-B. à: Irene Doyle, C.P. 591, Campbellton, NB E3N 3G9, (506)789-0107.** Demandez les détails de compatibilité d'ordinateur. Tarifs publicitaires disponibles sur demande.

Please submit articles for the next issue by **August 1, 1997**
Veuillez soumettre vos articles avant le **1 août 1997**

Thanks to our many kind Volunteers who contributed to this publication
Merci beaucoup à tous les bénévoles dédiés pour votre contribution

In This Issue / Dans ce numéro

GOING FROM STRENGTH TO STRENGTH

A Message From the President -- Frank Longstaff

Where does the time go?

It's hard to believe that my two year term as President of the New Brunswick Federation of Naturalists has drawn to a close. At the Annual General Meeting in Moncton at the end of May, the responsibility for directing the organization was turned over to Rose-Alma Mallet.

Looking back over the events of the past two years, I'm struck by conflicting impressions. The first is that it is impossible for a small group of nature enthusiasts to do all the things expected of them -- to be a voice for conservation and to provide opportunities for people to learn more about the natural world. The second is that, given our restrictions, we manage to do so much.

Red-winged Blackbird
Illustration by Diane Mercier-Allain

Ours is a volunteer organization. Those who contribute to the work of the NBFN or its member clubs do so for the love of the cause. Many of us have demanding jobs and deserving families. Accordingly, when the government looks for comments on a new initiative (because it's required under the legislation, not because they care what we tell them) or when the media wants a talking head for the six o'clock news or a controversial sound bite, it's hard to find the time to comply. But we do what we can and, when I look back on the past two years, I'm amazed at what we, as an organization, have accomplished.

First and foremost, we have made this journal, the *N.B. Naturalist/Le Naturaliste du N.-B.* the best, most informative piece of nature oriented journalism in the province. It's well written, well edited, *bilingue*, and it comes out on time.

Second, we support and, in significant ways, make it possible for special projects to grow and flourish. A good example is *Project Piper*, a programme developed by Roland Chiasson and Sabine Dietz to protect the habitat of the endangered piping plover on the Gulf of St. Lawrence beaches. Their work is done under the auspices of the NBFN and, while they have worked long and hard to make the project a success, the Federation has helped them fundraise and given them the legitimacy they need in their dealings with business and government.

Third, we have sponsored or supported programmes that get people in the field for the joy of birding or botanizing. Our Annual General Meeting has a broad range of trips with expert leaders. We have celebrated New Brunswick Bird Day which encouraged fledgling birders from the public at large to get out with informed enthusiasts. And when the Village of Gagetown wanted suggestions and assistance in organizing their *Celebration of Birds*, they came to us.

Finally, when we have been able to raise our voice on legislative matters, the government has sometimes been compelled to listen. When the Department of Natural Resources and Energy declared open season on so-called nuisance wildlife, we led the howls of outrage and worked to get a bill passed that provided protection for the raccoons and squirrels and blackbirds who share the countryside with us. Fundy National Park listened when we asked them to ban fishing on a lake where loons were nesting. Our long term lobbying for a better *Endangered Species Act* paid off with amendments to the legislation which didn't go as far as we might have wanted but were much better than what there was before. We've been less successful on endangered spaces or a better environmental assessment process, but we have been heard and our voice is respected.

We have this impact because our volunteers care. I salute everyone who has worked on a committee or an executive, led a trip or made a presentation. Some are taking a well earned rest and relinquishing their posts after many years of service. Rob Walker, Diane Mercier-Allain, Mike Bamford, Gayle Greer and Jim Goltz, all of whom served on the executive with me and made strong contributions during their tenure, have already stepped down. They have made a great contribution. But others come forward to take their places. Rose-Alma will have a strong board to work with. With their support, and with yours, I know our new President will go from strength to strength.

FLIGHT OF THE BRANT

Brian Dalzell

Illustration by Dr. Jacqueline Badcock

I consider myself one of the luckiest birdwatchers in North America, because every year in late winter, I'm treated to a real honest to goodness wildlife spectacle of global significance literally on my front doorstep.

About the middle of February, the first Brant begin to arrive along the shore, perhaps from wintering grounds in the mid-Atlantic states, but more than likely from nearby Cow Passage at White Head Island. It is there that a small number began to overwinter in the late 1950s, attracted perhaps by the return of eelgrass, their favourite food. Now, some 40 years later, from 500-1000 can be found there each year in early winter.

For reasons known only to the Brant, conditions are not suitable for them here at Bancroft Point during the winter, although for all intents and purposes, and to my eyes, it appears identical to Cow Passage.

Within a month of showing up this year, they went from a handful of birds to thousands, thusly: Feb. 7 - 10; Feb. 14 - 50; Feb. 18 - 350; Feb. 19 - 800; Feb. 25 - 1200; Mar. 3 - 2000 ; Mar. 5 - 3500; Apr. 2 - 5000.

I've even got in the habit of sometimes leaving a north-facing window half open, even on the coldest days, just to hear them as they swirl about in their thousands, seemingly disturbed by the slightest of events. They seem to be able to stay still no longer than 10 minutes, then it's up and about for a couple of minutes, only to settle right back where they came from. Usually the culprit is a Bald Eagle, but not always.

I've noticed they can't tell the difference between a Bald Eagle and an aircraft. You would think the closer it got, they could see the difference, but it doesn't seem to matter whether it's a mile away or right overhead. It does make a difference how high the plane or chopper is. Generally over 2500' they don't seem to get too upset, but anything below that and within two miles, they are off like someone shot a cannon over their heads.

For the months of March and April numbers will remain in the low thousands here, then start to drop off, as the birds either head for their high arctic nesting grounds, or other staging areas at Maces Bay and Tabusintac.

Strangely, there seem to be two distinct movements of Brant through Grand Manan each spring. One fattens up on eelgrass and sea lettuce off Bancroft Point and Castalia Marsh, the second at Grand Harbour.

The two flocks seem to be mutually exclusive, but perhaps not. All I know is there are no Brant in Grand Harbour until late April, and numbers peak there in late May, long after the Brant have left Bancroft Point.

They are strange critters, so entirely dependent on eelgrass that they almost went extinct after a blight struck eelgrass along the entire east coast of North America in 1931. They starved to death in the thousands.

It was many years before the eelgrass recovered, almost 50 in some cases, and it never attained its former status, apparently having lost ground to other forms of marine seaweeds and algae.

From research I have done, it appears the number of Brant at Grand Manan each spring (I estimate 10,000 over three months) is significantly higher than those found here in the late 1800s and early 1900s. Simeon F. Cheney, who lived on Nantucket Island in the late 1800s, estimated numbers there only in the low hundreds. For instance, the largest flock he ever saw there was about 500, and that was 25 November, 1887. After the big eelgrass blight in 1931, it was still possible to find 250 a day at Kent Island in late May of 1935. Just two years later, 3000 were estimated in Three Islands Harbour on 11 April 1937.

Their main wintering grounds then, as now, are in the salt and brackish waters of the bays of Virginia and North Carolina, where they were found by the thousands and tens of thousands, according to T. Gilbert Pearson. Writing in "The Birds of America" published in 1917, he had the following to say about the methods used to slaughter Brant:

"When the weather is fair Brants gather in very large companies to feed on the eel-grass growing in

the shallow water of the shoals, or at high tide to drift a chattering host upon the bosum of the slow-heaving sound.

"When strong winds blow, these large `rafts' are broken up and small companies of from two to a dozen fly about seeking companionship. It is then that the gunners get in their deadly work.

"In a small blind erected on four posts standing on the shoal, often three or four miles from land, the hunters take their stand. Anchored in the water about them are from 50 to 100 wooden decoys representing ducks and brant.

"It is to these dummy sirens that the small flocks of Brant come; they `draw to the idols,' the local gunners say. They are awkward, slow-flying birds and poor indeed is the marksman who cannot make a good score with a shotgun under such conditions."

Fortunately, brant hunting was banned shortly after 1931 and the ban has continued to this day. Unless another disaster befalls the eelgrass beds, I will continue to eagerly anticipate their annual spring sojourns.

OUR WALK SHOULD REFLECT OUR TALK

Paul Bogaard and Kevin O'Donnell, NBFN Directors

What struck us both at first glance was that the **Naturalists' Code of Conduct** (see pages 42 and 43) is basically common sense. As naturalists, we are all well aware of these concerns. However, there are times when we all need to remind ourselves that, as self-appointed stewards of nature, we need to not only talk the talk but walk the walk. It is when the sightings get exciting, and we grow into groups, that a clear sense of this code of conduct is most needed.

Most of us at one time or another have witnessed or been part of a situation which belies the naturalist's normally sensitive disposition towards nature. Birdwatchers can be notorious in pursuit of their 300th species in the Province, a lifer, or any very rare sighting. The list of examples goes on and is certainly not confined to birdwatching. We've all heard of naturalists going to great lengths for a mere glimpse of a bird, and we sympathize when they fail to see it. That is a risk we all take at one time or another and it's a risk we accept. But during the chase, there are other considerations we must not overlook.

We should always sympathize with the poor homeowner or landowner whose privacy is invaded by an odd array of naturalists armed with cameras and binoculars clamouring for a spot up front to observe a single animal or plant. Most homeowners tolerate this peculiar behaviour, and some go as far as inviting shivering birdwatchers into their own homes for the added pleasure of watching a rare bird in a more comfortable setting. For the most part, this is the welcoming response we normally receive. However, many of us have seen or heard of naturalists who behave like paparazzi pursuing a well known but elusive celebrity. In such moments it is too easy to forget the rights of the owner and the result can be a disorderly stampede characterized by frustration and even aggravation. It is not too difficult to understand the landowner's reaction. Imagine this ruckus occurring on your own land or in your own backyard. It is important to appease these proprietary sensibilities, and understand why they are puzzled, distressed or infuriated. We should treat these properties like we would a natural treasure.

When in groups who share our enthusiasm, it is also important to keep a safe distance and give everyone a chance to see. There is nothing so inconsiderate and frustrating as waiting behind a watcher intent on the perfect photograph or those who insist on viewing without permitting others the same privilege. Equally frustrating are those whose posture or actions seem to say now they have seen it - it can go. Consider what kind of impact this can have on other naturalists, particularly those who are learning by watching experienced individuals. As a Federation, we are very protective toward nature. And yet, isn't it odd how we can forget what seems like common sense. It might be amusing to think about naturalists being barred from sewage lagoons, backyards and other well known observatories, but the impact is less humorous.

Our first obligation is to the wildlife we are so keen to observe. While we tend to focus more attention on endangered, threatened, or rare species, if we want respect as naturalists and want to engender this respect in others, we must show the utmost care for all wildlife and all habitats. What draws us together, surely, is the delight we share in observing nature, being outdoors, having fun and satisfying our curiosity about common species as well as the more elusive. So please, take another look at the Code and remember, our walk must reflect our talk.

On behalf of the Federation, we express our profound appreciation to David Christie and Mary Majka for drafting our Naturalists' Code of Conduct and for drawing our attention to its importance. Thanks also to Alison Dibble, Hal Hinds and Rob Walker for their valuable input into preparing the Code.

NATURALISTS' CODE OF CONDUCT

Guiding Principle: The New Brunswick Federation of Naturalists recognizes that all wildlife (including plants and animals) has an intrinsic value and that it must be allowed to coexist with us and thrive. It is our responsibility to serve as stewards who look out for the well being of all wildlife and all habitats.

1) Advance your own and others' respect for and understanding of nature:

a) Becoming knowledgable serves to enhance our appreciation of nature and helps to minimize human impact on nature.
b) Learn about wildlife and habitats, especially species which are endangered, threatened or rare, and the factors that make them vulnerable.
c) Share your knowledge of and respect for nature with others.
d) If you find a plant, animal or fossil that may be rare, notify your local expert, museum or university.
e) Whenever possible, volunteer to help with wildlife population surveys and other studies.

2) Always put the welfare of wildlife ahead of your desire to view it:

a) Moving slowly permits wildlife to become accustomed to human presence.
b) Keep your visit brief and quiet.
c) Keeping your distance, especially from nests, dens, and colonies, will minimize any disturbance or exposure to danger.
d) Avoid repeatedly flushing or chasing birds and other animals; never separate young from their parents.
e) Use recordings and similar methods of attracting birds sparingly and not at all in heavily birded areas.
f) Replace any rocks or logs overturned when searching for aquatic and terrestrial reptiles, amphibians and invertebrates.
g) Carefully return reptiles, amphibians and invertebrates to their habitat if you must handle them. Better still, observe them without touching.
h) Do not handle birds or mammals except in cases of emergency.
i) Leave wild plants in their natural habitat and do not pick or uproot them unless they are about to be destroyed through development.
j) Leave fossils on-site except where they are numerous and/or likely to be damaged by erosion.

3) Always preserve the integrity of natural areas and ecosystems:

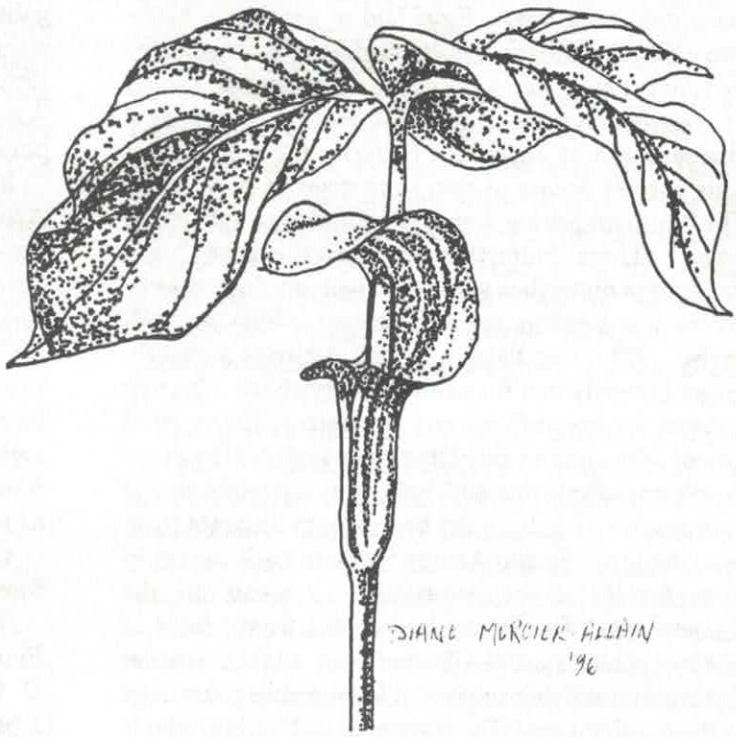
a) Never disturb the habitat of endangered, rare, uncommon or threatened plants or animals, particularly during reproductive cycles or breeding seasons.
b) Whenever possible stay on existing roads and trails to avoid trampling and reduce the disturbance to wildlife and their habitats.
c) Carry a litter bag and carry out any trash, even if it isn't your own.
d) Only you can prevent forest fires.
e) Avoid supporting commercial trade in plants or animals taken from the wild.

4) Always respect the rights of others:

a) Be courteous to others.
b) Behave in a manner that will enhance the image of naturalists everywhere.
c) Respect the privacy and property of others by obeying "No Trespassing" signs and asking landowner permission before entering private or posted properties.
d) Follow all rules, regulations and laws governing public use of natural areas.

5) When in groups, individuals must assume special responsibilities:

a) Take care to alleviate disturbances and problems which multiply when moving through areas in groups.
b) Individual actions must be in the best interests of the group but principally in the interest of nature.
c) The conduct of the group must reflect a sensitivity to nature.



Jack-in-the-Pulpit
Illustration by Diane Mercier-Allain

6) As a group leader:

a) You must assume responsibility for the group.
b) You must inform the group of any special rules, regulations or conduct applicable to the area or habitat being visited.
c) You must ensure that groups are limited to a size which does not threaten the environment or the enjoyment of others.
d) You must educate others to respect and enjoy wildlife and their habitats by your words and actions.

FLUTTERING FAUNA: MUCH MORE THAN MEETS THE EYE

Tony Thomas

What do a robinesque bird and a butterfly have in common? Both are more than they appear.

It has been shown recently that the Gray-cheeked Thrush in the highlands of northern New Brunswick is in reality a distinct species - **Bicknell's Thrush**. In an analogous situation, the widespread Spring Azure butterfly is not one, but a group of closely-related species.

Originally thought to be a subspecies of the British Holly Blue butterfly, the taxonomy of the North American Spring Azure species is still in a mess. It appears that 3 species of the complex occur in New Brunswick.

The first one to emerge in the Spring retains the name "**Spring Azure**". It is a small pale blue butterfly that is on the wing, in N.B., as early as late-April in some years (but not 1997!), but is usually most common in mid-May. This species has just one generation each year. Eggs laid in the spring hatch into caterpillars that complete feeding in early summer and then change into a chrysalis. The species spends the rest of the summer, the fall, and the winter as a chrysalis and emerges as a butterfly the next spring. This species occurs as two subspecies in N.B. [1] - The Northern Spring Azure is restricted to sphagnum bogs. These butterflies are described as "very diminutive butterflies with very light sky-blue colour, sometimes tending towards greenish-blue in both sexes". [2] - The Eastern Spring Azure is a slightly larger butterfly that flies almost everywhere. The two subspecies are difficult to separate. The ground colour of the underside of the wings is dark gray in the Northern subspecies and light gray to white in the Eastern ssp. I believe the best way to separate them is by habitat. Spring Azures flying in early spring in open forested areas, especially dry areas, are the Eastern ssp. The larvae feed on the flower buds of cherry, blueberry and viburnum. A slightly smaller Spring Azure flying somewhat later in sphagnum bogs is the Northern ssp. The larvae fed on the flower buds of labrador tea. Scanning sphagnum bogs containing much labrador tea, with binoculars, on a sunny day in mid-May is a good way to discover the females as they fly from shrub to shrub laying eggs on the apical flower buds.

The second species to emerge is the **Cherry Gall Azure**. Superficially it is identical to the Eastern Spring Azure and flies in the same habitats but later in the season, beginning in early June. (Worn azures flying in early June are most likely Eastern Spring Azures). When pinned specimens of Eastern Spring Azures and Cherry Gall Azures are compared side by side under certain light conditions there is a noticeable difference in the blue colour. The blue colour is not a pigment colour but a structural colour formed by the scattering of light by diffraction. This suggests that the scales on the wings of the two species are of a different structure. The larval food plant(s) of Cherry Gall Azures is not well known in N.B. Further south, in the U.S.A., the larvae feed on galls on cherry leaves; galls caused by a mite. Such galls are not known to occur in N.B. and the species appears to feed on the flower buds of Bristly Sarsaparilla. Like the Spring Azure, the Cherry Gall Azure has one generation and passes the winter as a chrysalis.

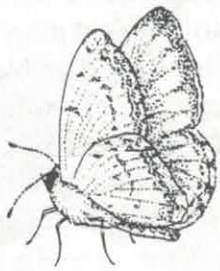


Illustration by Diane Mercier-Allain

In early July, when the last of the Cherry Gall Azures are worn and tattered and the Spring Azures are all resting in their chrysalis stage, our third species - the **Summer Azure** - emerges. This species is much rarer than the other two species. It is a pale species and is best recognized by its flight season. It usually flies throughout July and in warm summers there may be a partial second and even a third generation. I have seen them as late as 3 September. The larvae feed on flowers and flower buds of late-flowering plants such as meadowsweet.

Colour photographs of all three species are to be found in my recent publication:

Thomas, A.W. 1997. Status of butterflies of Fundy National Park and its greater ecosystem. *In*: D. Clay (editor). Resources of Fundy National Park: a primer of ecosystem studies. Part II. Chapter III. Pk. Can. Eco. Sci. Rev. Rept. No. 4. 15 pp.

Even if you don't feel confident in separating the three species it will be most helpful if you record your observations on the Checklist of Butterflies published in the Winter 1996/1997 issue of the *N.B. Naturalist*. We can probably make a good guess at the actual species if we know the dates and locations of your observations. Of course, any records of female egg-laying would be of immense value.

WHEN THE PINE WARBLERS COME BACK TO CURRIE MOUNTAIN

Peter Pearce, Fredericton Nature Club

The Pine Warbler is perhaps one of our lesser known parulids. It is not as conspicuously marked as many other wood warblers. However, the combination in the breeding-plumaged male of yellow breast with blurry side streaks, white belly and undertail coverts, two white wing bars and tail spots separates it from its relatives. Its song, resembling the Chipping Sparrow's trill, can be distinguished once learned, and the bird's habit of creeping about tree branches while foraging for insects is unusual among wood warblers. Finally, the Pine Warbler is very closely associated with open stands and groves of white and other pines during the nesting season. Thus, familiarity with appearance, song, habits and habitat preference allows one confidently to seek out that species during spring and summer. Yet I have really "discovered" the Pine Warbler in new Brunswick only in the last ten years or so, occasional earlier encounters having been purely by chance.

Squires (*The Birds of New Brunswick*, 1976) characterized the Pine Warbler as a rare summer resident, possibly only a transient or wanderer in New Brunswick. No breeding records were cited. Godfrey (*The Birds of Canada*, 1986) considered it as a rare migrant in southern New Brunswick. More recently, Erskine (*Atlas of Breeding Birds of the Maritime Provinces*, 1992) reported evidence that the Pine Warbler now breeds in the province, almost exclusively in the southwest region from Fredericton-Minto to St. Stephen. During the atlas project, carried out from 1986 to 1990, three observations of fledged young being fed were reported, as well as the discovery of a nest (at Currie Mountain). The Pine Warbler's establishment as a breeding bird in our province is a reflection of a recent natural range expansion northeastward from Maine, but increased observer awareness and reporting care have surely helped to document that phenomenon.

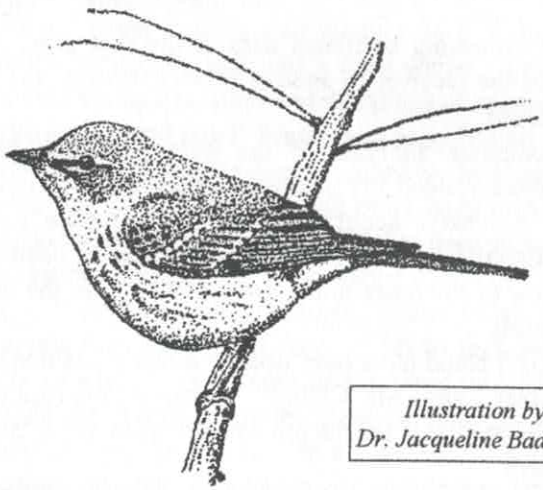


Illustration by Dr. Jacqueline Badcock

I have noted singing male and pairs of Pine Warblers at various places in Fredericton (e.g. Lower St. Marys, Marysville, Odell Park and Woodstock Road) and surrounding areas (e.g. Burton, Douglas, Princess Park and Tracy). One of the many interesting natural areas in and about the capital city is Currie Mountain, where there are usually three or four breeding pairs of Pine Warblers. Situated at Douglas, just west of Fredericton on the north bank of the St. John River, Currie Mountain is an ancient, cone-shaped volcanic plug clad with White Pine with scattered Eastern Hemlock, Red Oak and Yellow Birch -- a relic of an earlier forest. It is one of the few places in New Brunswick where one can find the Round-lobed Hepatica, a vascular plant whose continued presence at that site is becoming increasingly precarious. Currie Mountain is a fascinating place to spend a few quiet moments in any season.

Along with the Palm Warbler and the Yellow-rumped Warbler, the Pine Warbler is one of our hardier, shorter-distance, parulid migrants. It may occasionally attempt to overwinter at feeders in southern New Brunswick. All three species arrive early in the spring - usually during the third week in April at Fredericton. A perennial game I play is to see which one I can spot first. To my mind, the spring has surely arrived and much is right with the world when the Pine Warblers come back to Currie Mountain.

VOLUME 3 OF *MICHIGAN FLORA* NOW IN PRINT

The long awaited third and final volume of Ed Voss' *Michigan Flora* is now in print. This is an indispensible flora for people wishing to identify vascular plants in northeastern North America. Although the *Michigan Flora* series does not cover all of the species found in New Brunswick, it is renowned as having the most comprehensive and user-friendly keys available and will prove very useful for any serious botanists. Copies of the new volume are available for U.S. $18.50 (price includes shipping and handling) from the University of Michigan Herbarium, North University Building, Ann Arbor, Michigan 48109-1057, U.S.A. (313-764-2407).

GREATER SCAUP DUCK RESEARCH GETS A HIGH-TECH HELPING HAND

Reprinted with permission from *UNB Perspectives*, Vol. 3, No. 6,March/April 1997

The spirit of co-operation is alive and well at the University of New Brunswick in Fredericton. Andrew Smith, a master's student in biology, went no further than the department of geodesy and geomatics engineering when he needed to produce a map for his research.

Since 1995, Mr. Smith has been examining the influences that affect the nest-site selection and nest success of one of the province's rarer breeding water birds, the Greater Scaup.

"The only nesting ground for these ducks in New Brunswick is on Grassy Island," says Mr. Smith. "And the vegetation on this island is changing."

Located in the Saint John River near Oak Point, the island was traditionally used to graze cattle. "This provided an ideal habitat for the Greater Scaup, as it prefers to build its nest in vegetation away from dense forested areas," he explains. "My research focuses on how the duck's nest-site selection is changing now that cattle no longer keep the island's plant life under control." He's also examining the influence of the island's terns and gulls on the duck's nesting habits.

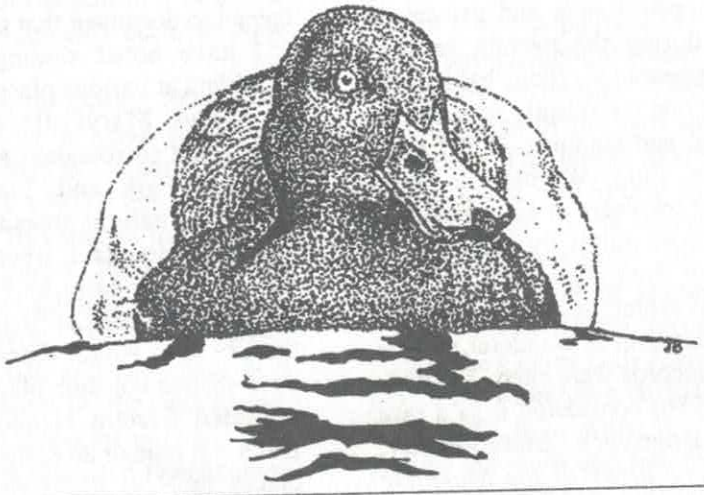


Illustration by Dr. Jacqueline Badcock

For his field research, Mr. Smith needed to map the exact location of the nests of each Greater Scaup, tern and gull on the island. "I decided to set up a grid 100 metres square using 40 eight-foot posts and then record the nest locations relative to the nearest posts," says Mr. Smith. "Since there are no distinguishing features on the island, it was very difficult to tie the post locations accurately to the map." That's when he approached Paul Collins, a master's student in the department of geodesy and geomatics engineering.

"It was like a consulting joy," says Mr. Collins. "He came to us and said, 'I need this kind of map.' The challenge was to achieve the map he wanted with the equipment we had on hand."

Mr. Collins' own research involves the development of GPS-aided aircraft navigation. "GPS is the U.S. military's satellite-based Navstar Global Positioning System," he explains. "It's a 3-D real-time positioning system that can be used any place at any time." Researchers in UNB's department of geodesy and geomatics engineering, including Mr. Collins' supervisor, Richard Langley, have played a major role in developing civilian applications for GPS.

"Andrew needed two things from us," says Mr. Collins. "He needed to tie the post locations accurately to the map and to position the posts in the grid more precisely in relation to each other.

"I set up a GPS receiver at one of the grid posts on the island and a second, which simultaneously collected data, at a geodetic reference mark on the roof of UNB's Gillin Hall. After collecting sufficient data at the first post, we moved the receiver to another post on the far side of the island."

Computer analysis of the data from the two receivers yielded the positions of the selected posts with decimetre accuracy. Mr. Collins then used traditional surveying methods to accurately position the rest of the posts in the grid in relation to the two end posts.

"GPS could have been used to directly position all the posts," says Mr. Collins. "However, the receiver we had available for the job was not quite as portable as some."

Mr. Smith has now finished his fieldwork and is working on his thesis. "It's interesting to work with a graduate student from a different discipline," he says. "It gives you a different perspective and brings in new ideas." As for his research, it's too early to say whether the Greater Scaup's nesting habits have been affected by the gradually changing habitat of the island. However, his preliminary findings do indicate

island. However, his preliminary findings do indicate that the success of the duck nests is positively influenced by the presence of terns and gulls on Grassy Island.

"Ducks don't normally defend their nests; they depend on cover for protection," he explains. "If threatened, a duck will flee its nest. Terns and gulls, on the other hand, actively defend their nests. I believe the ducks on island nesting in proximity to the terns and gulls are less vulnerable to predation."

Mr. Smith's research is a co-operative project between UNB and the provincial government. Working with the New Brunswick Co-operative Fish and Wildlife Research Unit, he is supervised by Tim Dilworth of UNB's biology department in Fredericton and Pat Kehoe of the New Brunswick Department of Natural Resources and Energy, Fish and Wildlife Branch.

LATE SPRINGS

Paul Martin, Kennebecasis Naturalists' Society

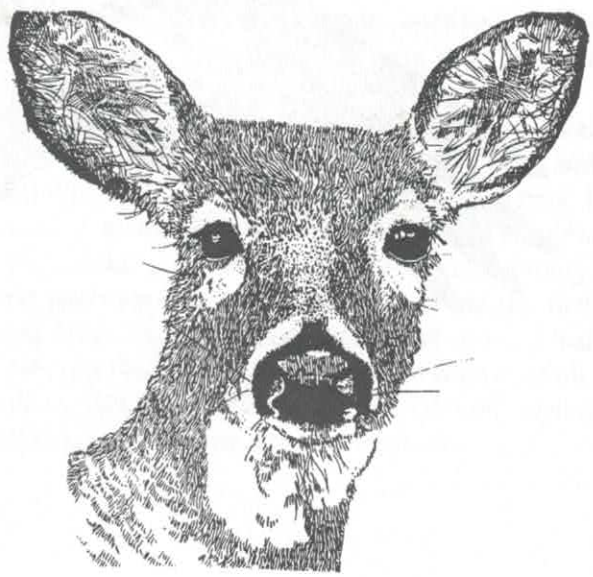
The year is 1997, it's the end of April, and low and behold it's snowing. I live up at Crawford Lake. For those of you who may not know, the lake is located about half way between Sussex and Martin Head (on the Bay of Fundy). If I had my preference, I would like to see the snow gone, but Mother Nature likes to do things her way. So, like every one else, I must live with what I'm dealt.

The birds find it hard to find food in this weather, but it does make it easier to find a variety of species when you're bird watching. Since there's lots of snow up here, many species are concentrated at my feeder, on stretches of bare roads, or in bare patches around the trees.

It isn't just the birds that have a tough time with late springs. Most species find winters hard to survive through, especially if it was a hard winter. Luckily, this year the cold weather and dumpings of snow didn't really arrive until late February and early March. The early part of winter was probably less energy demanding for moose, deer, and other large mammals that find it difficult to move and feed in deep snow, but the recent snowfalls have probably averaged things out. I must wonder, though, about those early migrants that come from down south to find food or spots to nest. The foliage of the trees will be late coming out and therefore the cover or camouflage the birds need will be sparse. I'm not an expert, but with weather like this, populations of certain species will probably decrease in numbers or try to brood a second or late batch of offspring.

Some say that we should leave nature to take nature's course. However, in the last couple of years I have come to a conclusion that one certain species on earth has messed up the biosphere to a point that there are limited spaces and quite frankly limited time for certain species of flora and fauna before they, like the Great Auk, seem destined to be found only in books as references of the past. Maybe that's one reason that I, like many people, keep my feeders out until the end of May and may leave one feeder out year around. With such a late season, we should leave food for both birds and mammals alike in areas where they can have ready access to it until such time that the species in need can survive on their own. Our help may be especially valuable at higher elevations, like Crawford Lake, where Jack Frost usually leaves late.

In conclusion I ask a question. When I was growing up near Montreal, I remember the winters as being long and cold with lots of snow. As the years pass, it seems that the snowfall becomes less, or not as frequent over the entire winter, winter seems to be starting later in the season and it does not seem to be as cold. We hear of the greenhouse effect and every year we hear of holes in the ozone layer of the earth's atmosphere. The question I ask is should we be worried if we keep getting late winters and/or late springs? If so, what should we do about it, if we can do anything at all?



LES EFFETS DES PESTICIDES SUR NOS OISEAUX

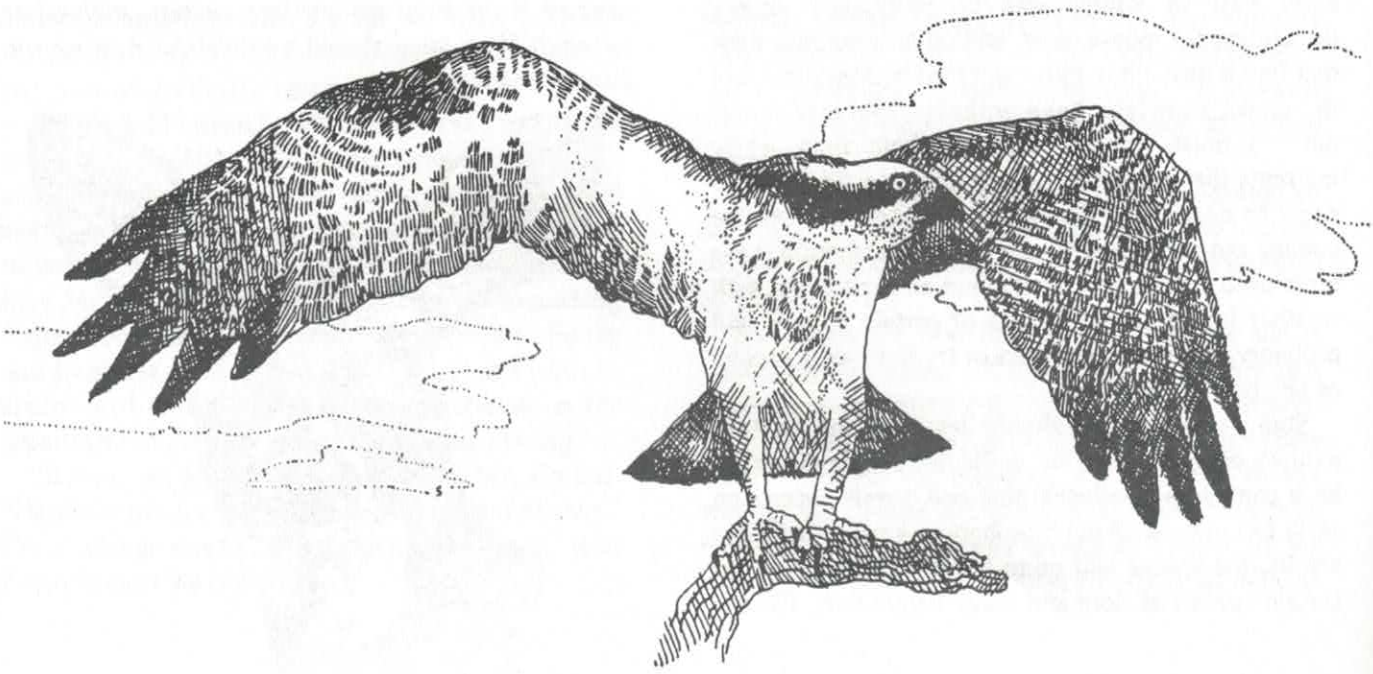
Pierre Duguay, le Club l'Envolée Chaleur

Avec l'arrivée du printemps la majorité des gens se hâte de nettoyer les alentours de leur maison et réparer leur gazon. C'est alors le temps de racler les feuilles et de s'assurer d'avoir la plus belle pelouse du voisinage. Mon père m'a souvent dit que les hommes se rendent malade à entretenir leur pelouse. C'est une tâche qui prend beaucoup de temps et de patience. Aujourd'hui il y a beaucoup de gens qui se servent de pesticides pour avoir une pelouse parfaite.

En effet le marché des pesticides est un marché qui grossit de plus en plus chaque année. Il vous suffit de rendre une petite visite à votre quincaillerie locale et vous allez voir des produits de tous les genres pour augmenter la beauté de votre pelouse. Tous les différents produits qui existent sur le marché disent presque toujours qu'ils ne sont pas nuisible à l'environnement mais ceci n'est pas toujours le cas. Rappelons nous que dans les années 50 et 60 le pesticide DDT a mit en sérieux danger l'existence de plusieurs espèces rapaces tels que le Pygargue à tête blanche, le Faucon pèlerin et le Balbuzard. L'usage du DDT faisait en sorte que ces oiseaux pondaient des oeufs avec des coquilles minces et se brisaient aussitôt que les parents essayaient de les couvrir. Les scientifiques ont découvert que le DDT causait ce problème et il a été vite bannis de toute production et usage. Depuis que le DDT a été banni, ces oiseaux menacés ont fait une remontée spectaculaire. Il est même question de retirer le Pygargue à tête blanche de la liste d'oiseaux en danger d'extinction tellement ils ont fait du progrès.

L'usage des pesticides cause encore des problèmes aujourd'hui. La Chouette des terriers montre un sérieux déclin car sa diète comprend des sauterelles qui sont empoisonnées par les fermiers qui utilisent des pesticides pour combattre les insectes qui détruisent leur récolte. Ceci n'est que quelques exemples de l'effet des pesticides sur les oiseaux. Il est à craindre que lorsque nous connaîtrons les conséquences de ces produits, il sera trop tard. Si vous êtes absolument obligés d'utiliser un produit pour enrichir l'apparence de votre pelouse, prenez le temps de demander des informations sur les produits que vous achetez. Il faut s'assurer que votre produit soit biodégradable et non toxique pour les oiseaux. Pensez aux petits Chardonnerets jaune qui raffolent des graines de chardon avant d'arroser cette plante de pesticide et des Merles d'Amérique qui courent un peu partout sur votre pelouse le printemps à la recherche de vers de terre pour se nourrir. Les Bruants qui fréquentent votre jardin vont-ils être empoisonnés parce que vous avez utilisé des pesticides qui nuisaient à l'environnement? Seulement le temps pourra nous le dire mais une chose est certaine, si on utilisait moins de pesticides, la planète serait une plus belle place pour vivre pour les oiseaux et pour nous aussi.

Retiré d'une de ses chroniques dans l'*Acadie Nouvelle*.



CHRISTMAS CARDINALS

Joanne Duguay

A mother's words are often pearls of wisdom, whether one is two or forty-two. Such were my mother's, when she encouraged me and my siblings to get involved with the fast-growing pastime of birdwatching and birdfeeding.

Three years ago, I moved to small town N.B. from Toronto, after a seventeen year absence. I felt lonely, in a new place with no job, no friends, and no family nearby. My mother's words to me were "Why don't you start to feed the birds? You have the perfect location, and you will derive great enjoyment out of it." Sure enough, she was right. Overnight it seems, I became an avid birdwatcher and birdfeeder. My brother and sister, who lived quite near to my parents, were also amateur ornithologists, and our conversations often revolved around our mutual hobby. With time, I made new friends, found a good part-time teaching position, and was no longer lonely. I was much busier, but I continued to feed my feathered friends. They had become an important part of my life.

That first December back in N.B. marked the first time in fifteen years that my three brothers, my sister, and I would all be home for Christmas. There was a great deal of excitement, as one brother was coming all the way home from Alberta. I was planning to drive the three hours home to my parents', a few days before Christmas, with my family, when my youngest brother Pierre called to inform me that our sister Louise had a male and female **Northern Cardinal** visiting her feeders. We had started to exchange notes on visitors to our feeders, and as I had never had a Cardinal yet visit my feeders in Grand Falls, I looked forward to seeing one of these beautiful songbirds.

Upon arriving at my parents', I rushed over to my sister's house, to try and get a glimpse of this much heralded Cardinal. It was late afternoon, December 23, and although there were many other birds at her backyard feeding stations - chickadees, finches, Tree Sparrows, and the ubiquitous squirrel, there was no Cardinal. Louise reassured me that the male always came in the morning, and that I would no doubt see him the next day. I was sound asleep at my mother's when my sister called me early the next morning, Christmas Eve, to tell me to come over right away, as both the male and the female were visiting. Unfortunately, by the time I arrived, they had gone - eaten their fill and disappeared. I lingered near the picture window in the dining room, hoping against hope that they would put in another appearance, but it was not to be. I muttered dejectedly to myself, "I am never going to see this bird, male or female. Doesn't it know it has a command performance?"

Illustration by Diane Mercier-Allain

Christmas morning dawned clear and crisp, and we were all to meet at my parents' house for a late breakfast. My sister told me, upon her arrival, that the Cardinals hadn't yet come to feed that morning. I quickly decided to slip away while everyone was chatting, and drove my car up the road to my sister's house. As I drove up the driveway, I saw out of the corner of my eye, a flash of red high in the spruce trees about 100 yards away from the feeders. Could it be the elusive Cardinal? I dashed into the house, and crept up quietly to the window - sneaking a peak outside slowly, so as not to disturb the other birds who were already feeding. Y E S - THERE WAS MY CARDINAL! He was a brilliant shade of red, more beautiful that I had imagined. I felt a thrill of excitement, as I watched him pecking away at the seeds strewn on the ground all around the feeders. Suddenly, he flew away. However, before I had time to feel disappointed, he returned, followed by the female. He had gone to get his mate, once he knew the coast was clear. I sat there observing them for over half an hour.

I sat there alone in my sister's empty house, total silence all around me. Surrounded by peace and tranquility, and the sight of these Cardinals feasting, I marvelled at the pleasure that one of God's tiniest creatures had given me on this Christmas morning. Their presence had overwhelmed with the joy that comes from that one perfect moment in time. I had indeed, just received the best Christmas present of all. In all my life, I had never, until that moment, seen a Cardinal, and I have never seen one since.

A SHARED RESPONSIBILITY

Paul Martin

Passing the time on one rainy spring day, I decided to go for a walk up the road past my place. I have driven up it many times, while on the way to work, but had never walked it. The road is Mill Brook Rd., located just off route 111. It seems to have a very pleasant view from the truck. The road cuts between two large hills just outside Sussex and goes through a valley. The side of the valley with the road on it is mainly dominated by White Pine, while White Pine and mixed hardwood cohabit the opposite slope. Mill Brook runs down between the slopes in amongst alder and wild grasses. This is a good spot for birding and it sounds like a very beautiful place.

Unfortunately, thoughtless people have found it easier to dump their garbage here, and along other back roads in New Brunswick, instead of taking it to a dump. Although most of the garbage has obviously been at the site for quite some time, there is evidence that some was dumped recently. It is especially upsetting that the dumping continues to go on while all along that part of the road there are "no dumping" signs that advertise fines of up to $1000.00.

Sadly, there has been a rise in illegal dumping since the government closed most municipal dumps, created regional landfills and implemented weekly garbage collection in rural areas. In my opinion, the idea of regional dumps is good since this enables garbage to be sorted, controls contamination of water sources, and ensures some recycling. To take garbage directly to the dump only costs a minimal charge per bag and this helps pay for the collection process. Illegal dumping isn't just aesthetically unpleasing but it may be dangerous to the local wildlife habitat as well as to humans. Some of the stuff I've seen dumped includes broken windows, old oil drums with solvent still in them, and garbage bags with out of date drugs inside.

Especially for those of us enjoy the outdoors through hiking, birding, and other outdoor activities, I believe that it is our responsibility to try and stop those who dump illegally by either reporting them or trying to educate them. We have an obligation to record and report the vehicle license plate numbers of offenders or to go through the garbage to find some sort of identification. We should also clean up those places that we find have been contaminated by polluters who seem to care so little for the environment in which we live.

WORDS FOR BIRDS

Peter Pearce

Sometimes (it is to be hoped rarely) one can only guess at the identity of a bird. The task can be especially daunting when presented only with word descriptions. Try the following:

1. A green-vested outfielder
2. A garnet granny
3. A boreal raider
4. A sun-tanned bully
5. A sovereign seizure
6. A skeleton bird
7. A soft sister
8. An amber-aproned maple syruper
9. An Astrakhanian road bend
10. A prairie joke
11. A tawny ivy
12. An inebriated conduit smoother

ANSWERS

If you scored 12/12, it probably means that you are a pretty inveterate work player. A score of 0/12 indicates that you, too, are perfectly normal. In other words, this has been much ado about nothing. Hope you had fun!

1. Olive-sided Flycatcher
2. Red Knot
3. Northern Harrier
4. Brown Thrasher
5. Royal Tern
6. Bony parts Gull (!)
7. Limpkin
8. Yellow-bellied Sapsucker
9. Caspian Tern
10. Western Meadowlark
11. Brown Creeper
12. Potted pipe sander (!)

AWARDS FOR MARY MAJKA AND THE NEW BRUNSWICK MUSEUM

The New Brunswick Museum and well-known naturalist Dr. Mary Majka received international recognition from the Gulf of Maine Council on the Marine Environment at a formal reception in Fredericton on December 5, 1996.

The US/Canadian marine conservation organization honored the museum and Majka with **Gulf of Maine Visionary Awards** for their outstanding commitment to protecting the coastal environment in the Gulf of Maine region.

"These recipients serve as excellent examples of what citizens and organizations can do to protect and sustain our coastal environment," Fisheries and Aquaculture Minister Bernard Thériault said. Thériault is the 1996/97 chair of the council.

"We see the Visionary Awards as a way of giving formal international recognition to those who have made innovative and creative contributions to the goals we all share -- a diverse, healthy and productive marine environment throughout the gulf," Thériault said.

Majka, a founder of the New Brunswick Federation of Naturalists, was honored for her life-long commitment to preserving and enhancing the upper coastal region of the Bay of Fundy and, in particular, her efforts to establish an internationally-recognized shorebird reserve at Marys Point, in Albert County.

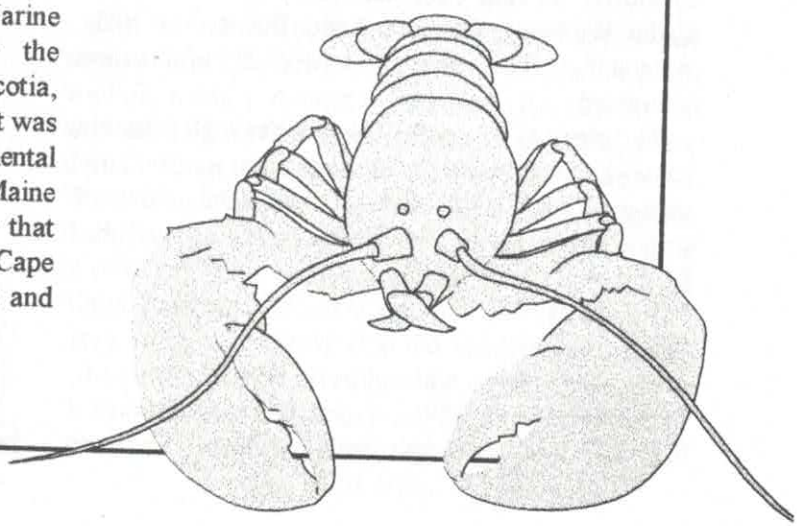
"Mary Majka is much revered by her peers for her many years of dedication to and passionate concern for the welfare of the natural resources of the Bay of Fundy and the Gulf of Maine. Clearly, after more than 40 years of service to our environment, she is a most deserving candidate for this award," Thériault said.

The New Brunswick Museum was honored by the council for its outstanding work in the field of conservation education, particularly about the resources of the Bay of Fundy and the Gulf of Maine. Dr. Donald McAlpine, curator of zoology, accepted the award on behalf of the museum.

"The New Brunswick Museum continues to recognize the value of educating visitors about our natural environment, particularly our marine environment," Thériault said. "It has dedicated a number of exhibits and educational programs to marine animals. In addition, the museum's scientific staff regularly contribute results of their research to journals of national significance and are often consulted for their expertise on conserving the resources of the Bay of Fundy and the Gulf of Maine."

Each year since 1991, the Gulf of Maine Council has honored one citizen and one organization from each of the five provinces and states bordering the Gulf of Maine who have demonstrated an extraordinary commitment to preserving and protecting the marine environment.

The Gulf of Maine Council on the Marine Environment was founded in 1989 by the governments of New Brunswick, Nova Scotia, Maine, New Hampshire and Massachusetts. It was created to maintain and enhance the environmental health, beauty and productivity of the Gulf of Maine and its watershed, a body of land and water that stretches from Cape Cod, Massachusetts to Cape Sable, Nova Scotia, including Georges Bank and the Bay of Fundy.



THE IMPORTANCE OF PHOTOGRAPHIC PROOF

Ken MacIntosh

Is that a real *Larus canus*, or a Sears *Larus canus*? You be the judge.

Early in March, my student e-mail account in Fredericton announced a message from Brian Dalzell. Brian had a plan. Brian had a mission. Brian had made up his mind that migrant **Black-headed Gulls** were lurking somewhere on the Fundy coast, and he was determined to track them down. To be brotherly, he invited brother Hal; to be neighbourly, he invited yours truly.

We agreed to camp out at my home in Black's Harbour on the eighth of March, and rest up for an early start on the ninth. This we did, and Sunday morning we set out for Beaver Harbour, Mace's Bay, Point Lepreau, Green's Point, and Deer Island, turning up nothing particularly unusual, although Lepreau gave us nice looks at **Purple Sandpipers** and **Harlequin Ducks**.

Only on our return to Black's Harbour did we find what we had set out in search of: three **Black-headed Gulls** on the muddy shores of Black's, scavenging mostly near a small creek which flows into the harbour at its North end.

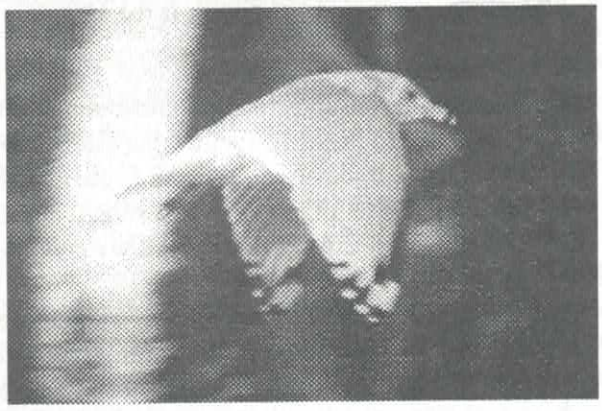
The post-birding coffee generated a discussion which somehow required that I produce photos to substantiate a point or lack thereof. It is here that this story really begins.

There is nothing special about my bird photos, believe me. In my photo album you will find a few shots of coloured specks in trees from my trips to neotropical locales, some pretty good shots of half-frozen January feeder visitors, and a mish-mash of slower moving common New Brunswick birds: Cedar Waxwing, Common Loon, that sort of thing. Among these was a photo with which Brian was most impressed.

The photo is of a gull. The gull has a grey mantle, somewhat dirty white head, dark eyes, a substantial yellow bill with a sub-terminal black band, and black and white on the tips of the primaries. Ring-Billed Gull, right? Well, maybe.

Let me say first that this is the only photo of a gull that I own, perhaps the only photo of a gull I ever made. The photo was taken in Black's Harbour, December eighth, 1996. I shot this gull because it happened by when I was getting frustrated trying to frame and focus a **Black-Legged Kittiwake** which was circling the same area, passing by before me once every minute or two.

Through some minor miracle, I managed to succeed with the gull where I was failing miserably with the Kittiwake; I had it in fair focus and depressed the shutter release. "There", I said to Sandra, who was patiently waiting while I struggled with uncooperative Kittiwakes, "I shot something, let's go home."



Mystery Gull Photograph by Ken Macintosh

When the film was developed, I saw an adequate (nicely centered, almost focused) photo of a **Ring-billed Gull**. This, I thought, would be a fitting souvenir of my days as a coastal critter. I put it in my photo album, and there the matter rested until Brian looked at it on the ninth of March, and gave it an "Oooooohh". Brother Hal "Oooooohed" in fraternal harmony, all of which I took to be a sarcastic show of appreciation for my selection of subjects.

When he declared that this might be one of very few photographic records of the **Mew Gull** in New Brunswick, I laughed at his joke. Ha ha. I had never seen a Mew Gull. I didn't know what one looked like. So far as I was concerned, this was a picture of a very ordinary, common Ring-billed Gull, and the Dalzells were giving my leg a yank.

Poor Brian had to go out to the car to get his copy of the National Geographic *Field Guide to Birds of North America* to prove to me that he was neither kidding nor drunk on caffeine. And there on page 149 was a very good hand drawn facsimile of my photo of a Ring-billed Gull, clearly labelled "Mew Gull". It was then that I decided to follow his advice, and

forward this photo to David Christie, in his capacity of secretary of the New Brunswick Bird Records Committee, for expert analysis.

What makes the bird in the photo stand out as something unusual (as has been demonstrated to me) is the pattern of black and white on the primaries. The pattern in the photo and the pattern in the drawing in the field guide could not be more alike.

I refer to The Handbook of the Birds of Europe, the Middle East and North Africa, in which the author describes the Common Gull, *Larus canus* (the species known in America as the Mew Gull): "ADULT BREEDING. Back and most of upperwing dusky-grey, with faint blue tint, contrasting with black white-tipped primaries and wholly white head, body, rump, and tail. In flight, wing shows conspicuous white leading and trailing edge and bold black and white end, formed by outer three primaries being mainly black with large white mirrors showing on distal quarter of outer two, and bold black and white checking of next four primaries ... Bill about as long as distance from base to eye, appearing short and pointed (and far less hooked, heavy, and deep than *L. argentatus* or *L. delawarensis*)...."

The authors go on to describe the non-breeding adult as having streaked cheeks, nape and hindneck, and a dull yellow-green bill sometimes marked with black above gonys. Drawings typically show the bill as black-tipped. The eye generally appears dark.

The Ring-bill, by comparison, has yellow eyes, a longer, heavier, yellow bill with a subterminal black band, and the white on the primaries is limited to a spot on each of the first two primaries.

Where does that leave us with respect to the photo? The wing is textbook Mew Gull. Eyes are also dark, *à la* Mew Gull, but this could be due to subtleties of lighting. The bill appears to be quite substantial with a clearly delineated subterminal band. This and the heavy head favour Ring-billed Gull. I would not trust the photo as an accurate representation of bill colour; I am guessing the difference is subtle anyway.

Do I feel inadequate because I can't make up my mind? Not at all. In fact, David Christie himself is wavering on this one. Hemming and hawing, he says, is typical of these gull identification problems. One can't help but focus on the obvious black and white pattern on the primaries, but the experts are currently leaning toward accepting this as an **aberrant Ring-billed Gull**, giving more weight to the head and bill shape than to the plumage pattern.

And me? What do I think? How kind of me to ask! I just think it would be howlingly funny if my only gull photo turned out to be a rarity. The possibility that I captured the one Mew Gull among a thousand Ring-billed Gulls by sheer accident is just too outrageous not to believe. And if it turns out that this is accepted as a Mew Gull, I won't even count it on my life list, as I didn't really 'see' the gull at all, it just happened to come too close to my camera. I certainly didn't recognize it as anything remotely odd. (It takes one to know one, I hear.)

Hmmm. I must flip through the photos which didn't make the cut for my album. Who knows what might be there?

LIVING WITH URBAN WILDLIFE

The Canadian Federation of Humane Societies has produced four excellent fact sheets on living with urban wildlife, notably raccoons, mice and rats, skunks and squirrels. These fact sheets, written from a perspective that is consistent with the philosophy of the New Brunswick Federation of Naturalists, are available from The Kindness Club for free. If you are interested in receiving them, please send your request along with 90¢ in stamps to:

The Kindness Club,
65 Brunswick St.,
Fredericton, New Brunswick
E3B 1G5.

MEET KAI VIDO, NEW BRUNSWICK'S YOUNG SUPER-BOTANIST

Grant Milroy, Ford Alward Naturalists' Association

Kai is a remarkable 14 year old boy who loves botany. He has grown up on a 230 acre farm in the Kintore Hills above the Muniac Stream not far from Perth-Andover, New Brunswick. He has two younger sisters. His mom and dad are devoted to an alternative lifestyle that is "Back to Earth." Kai's education is at home where he has been able to pursue, to his heart's content, his love of plants.

At the age of 5 years, Kai began to ask questions about the trees and this is when his obsession with plants began. With his parents' help, he started to find the answers to those questions. He was able to put his newly learned reading skills to work. He cut his teeth in Peterson's guides to the trees and shrubs, and wild flowers. When Kai was 7 or 8, Fred Tribe from Perth-Andover introduced him to the globally endangered Furbish's Lousewort (*Pedicularis furbishiae*). The Latin names for the plants followed. In fact, Kai finds the Latin easier because there is only one Latin name for each plant whereas often there are several in English. It wasn't long before Kai came into contact with Hal Hinds' *Flora Of New Brunswick*, a book which fed his hunger to learn more. Interest in the uses of plants, especially their medicinal properties, brought Kai to the *Use Of Plants* by Charlotte Erichsen-Brown.

In more recent years, Hal Hinds has served as mentor for Kai and has afforded him the opportunity to spend some time at the University Greenhouses. Hal has been instrumental in sending Kai to the Josselyn Botanical Society's Annual Meetings in the State of Maine. These functions have served to foster a continued growth in Kai's first love.

For Kai, botany is a natural, easy to come by source of enjoyment. For him it is fun and entertainment all wrapped into one. No doubt the lack of other social diversions encourages this hobby in his life.

One of Kai's early memorable botanical discoveries was the beautiful vanilla fragrance of Ladies'-tresses (*Spiranthes sp.*). These he found growing in the hay field where his dad was working. The different kinds of ferns are a source of great curiosity and Grape Ferns are some of his favourites. One of the very rare ones that he has encountered is the St. Lawrence Grape Fern (*Botrychium rugulosum*). Kai thinks that he may have found two different species of Rattlesnake Plantain (*Gooyera* sp.). Coral-root (*Corallorrhiza sp.*), with no chlorophyll, is an oddity that appeals to Kai. The pink and yellow Lady's-slippers found on the farm have provided quite a thrill for him as well.

Plants in the coastal habitats are less known to Kai and he would love to have more time and opportunity to study and learn about these. He's keen to botanize the inland sphagnum bogs and swampy habitats. Also he hasn't yet seen Showy Lady's-slipper, Calypso, Rose Pogonia, Cardinal Flower, and some of the Gentian family and rare Bladderworts.

Two years ago Kai began to take an interest in the birds. He loves to get out and about during the winter in order to learn the animal tracks. Their habits are a source of curiosity and Kai wants to learn more as he goes.

Kai's advice for others who want to pursue botany is to just get out there and follow your heart. Perhaps, he says, mushrooms would be a way to get things going for you. In July, Kai's family collects 3 lbs a day of *Boletus*, an edible mushroom that grows in the woods near their home. Some days this mushroom doubles in size in one day. Kai and his family love to create new dishes using these and other woodland delicacies.

As far as future plans or career aspirations, Kai just wants to enjoy his life and is not particularly concerned about these matters at this point.

According to Dr. Alison C. Dibble of the Josselyn Botanical Society:

"I'm sure I'm not the only one in the Josselyn Botanical Society to be impressed with Kai Vido's interest and ability in plant identification. I've had the pleasure of Kai's delightful company on a number of field excursions and consider him a friend. Kai is making an effort to learn the new plant names, which is a big challenge to professional botanists and amateurs alike.

Kai converses easily with people of different ages; he appears to appreciate that we are all children at heart, all still learning and discovering. He keeps up with the plant enthusiasts as we crouch, excitedly exclaiming in Latin, when we encounter some wispy bit of green that most people would probably step on before they noticed it.

Kai has found a way to contribute to the Josselyn Botanical Society and probably does not realize how unusual his contribution is. Although we ask the members to turn in a copy of their field notes with plant lists for the various sites we visit, Kai is one of the very few who actually hands us a list. Most of the other members probably assume that someone else is performing this task; they don't realize that this is not so. We have relied on Kai's notes to make the Winter Newsletter (our only one all year) more meaningful and we appreciate his careful identifications and accurate spelling. I salute Kai's family for encouraging him to go exploring with botanists, and I look forward to more great trips with him as his interest grows."

Editors' Note: Every year, **The Kindness Club** sponsors a province-wide **essay contest** for students in grades 6, 7 and 8. This year, an essay topic was: "Discuss a wild place in New Brunswick that you think should be protected." Students were asked to explain where the place is, why they think that it is worthy of protection, what the area is like, how big it is and how they would protect it. They were to discuss what human activities should be allowed to occur in the area and the benefits for wildlife and humans that will be derived from protecting it. The New Brunswick Federation of Naturalists wishes to thank The Kindness Club for sharing with us some of the more interesting and outstanding essays. Minor editing has been done to make these more relevant to readers of the *N.B. Naturalist*. It's exciting that these young people have such a deep passion for New Brunswick's wildlife and wild places, and that they have already formulated commendable personal codes of conduct for dealing with nature.

GRAND LAKE

Heidi Joynes (Gr. 6) -- Belleisle Regional Middle School, Norton

Grand Lake in Cambridge Narrows, New Brunswick is in trouble and needs protection.

The government is going to try putting a Trans-Canada Highway in through Grand Lake's meadows and through a small amount of the lake.

I would like to protect Grand Lake and Grand Lake's meadows because, in the summer, Grand Lake is where I go swimming and the meadows are where I have picnics. If the Trans-Canada Highway is near, it would not be as peaceful to swim. I would be too noisy with all those cars, trucks and vehicles riding across.

I would also like to protect it because some of the fish that live in the water will be killed, and some animals would lose their habitat. Eagles' nests will be disturbed and eagles are an endangered species. There's lots of moose and if the highway was put in, they would be forced to stay on one side of the meadow.

I think Grand Lake is worthy to protect because it is a beautiful place. The animals have a wonderful place to live and the fish have nice fresh water to swim in. I would be cruel to take that away from them, just to have a highway.

Grand Lake's meadows are New Brunswick's largest inland wetland area. It's five thousand hectares. That's why they picked it to put the Trans-Canada Highway there. It's just like saying there's "lots to spare."

Activities that should be allowed in this area are boating, fishing, nature hikes, bird watching and just enjoying the beauty of nature. How can you enjoy nature with a Trans-Canada Highway in the middle?

The benefits to animals, if we save this area and make it a protected place will be, animals can't be hurt because it would be protected. The waterfowl would have a safer place to land, with no hunters and they would live in peace.

We could try to protect Grand Lake by putting up signs of how people are against the new plan, of how it should be protected, and ask more people who are against it to keep e-mailing the government, and tell Frank McKenna about their concerns.

The whole point to this report is to help give humans and animals a place to enjoy and have fun where there is no Trans-Canada Highway to bother them.

LAND I TREASURE

Roxanne Dawson (Gr. 7) -- Nelson Rural School, Miramichi

Stepping outside in the morning and listening to the wildlife... yes, it sounds so nice and I want to keep it this way forever, not just for me, but for my three brothers as well.

I'm talking about land that my father has left us. Dad died when I was seven and this land is a part of him that he left for us. The land is about a half a mile back the North Barnaby River Road. The area is so beautiful and peaceful.

You can always see lots of wildlife there. The area is 56 acres of land and has a little bit of both waterfront and backwoods. I want to make sure that we keep it peaceful and beautiful for us and for all those animals.

Why protect this area? I think it is worthy of protection because I like it just the way it is. I think it's pretty. I don't want it all messy and ugly, then the animals would all go away. Animals need a safe place to live too.

The best way to protect this area, would be to have no hunting, or snowmobiles and four wheelers on the property. It would be okay if you wanted to ski, snowshoe, slide, or skate, just as long as you don't harm the habitat. You could also swim and camp in that area but you would have to be very careful not to leave any garbage laying around, always making sure you picked up after yourself.

I think the wardens should be responsible for maintaining this area and protecting the animals. But everyone else should do their part to help in protecting the animals' quality of life. The natural beauty of our wildlife and wilderness should not be taken for granted. I think if everyone did their part in helping to protect nature, we will be able to enjoy these natural resources for many more years to come.

By looking after this special gift my dad has given me, I will have something to give my kids.

PROTECTING BEAUBEAR'S ISLAND

Allyson Fitzpatrick (Gr. 8) -- Nelson Rural School, Miramichi

Beaubear's Island is a very beautiful island. It is about one mile long and a half a mile wide. The island is located in Nelson-Miramichi, surrounded by the Miramichi River.

The year of the Miramichi fire, Beaubear's Island was spared and, as a result, today we have hundreds of very old pine trees. Beaubear's Island has much wildlife within its boundaries. The pine trees there are for the habitat of the Bald Eagle, Osprey and many other animals. That is why when we go to Beaubear's Island we must be very careful not to pollute, start fires or do anything careless to disrupt the wildlife.

We should protect Beaubear's Island because there is a lot of history behind it, and it is a beautiful and enjoyable place to be.

We could protect Beaubear's Island by getting people to work there and make sure nothing goes wrong. There could be a foot bridge of some sort for visitors and workers to get across. This would allow people to have more access to the Island and to learn more about it.

The only activities that should be allowed at Beaubear's island are swimming where life guards are, hiking on the paths that are made to hike on, bird watching and taking pictures. There should not be any snowmobiling across any part of Beaubear's and you should not take things off the island, like plants and flowers, because they could be an animal's food and there may not be very much of it left for the animals to eat. People should be allowed to bring food to the island, but should only be allowed to eat where picnic tables are located and all of their garbage should be placed in the garbage cans. In addition, there should also be paths so people won't walk where animals might be living. The island should not have any kind of contact with fire because fire trucks cannot get across to the island so everything could burn to ashes.

Some benefits that wildlife and humans would have if Beaubear's Island was protected would be that the animals would have a safer place to live and won't become extinct, and humans would have a very enjoyable place to go and visit in the wilderness.

MAGGIE'S FALLS

Hilary Canam (Gr. 6) -- Tobique Valley Middle School, Plaster Rock

I believe that wild places should be protected for our own health.

One place I think should be protected is Maggie's Falls which is located in Birch Ridge, New Brunswick, about three miles from the main road in Arthurette. This area is a natural rock formation and has waterfalls about one mile long, with a forest surrounding the waterfall. Behind the waterfall there is a cave; but it really is not a cave, it is more like a dent in the rocks. The falls are very rocky and slippery with a lot of cliffs that could make it somewhat dangerous but if you're careful you will be okay.

The protected area should be about one hundred acres.

This area could be protected are by turning it into a natural forest park. What I mean by a natural forest park is by not cutting or damaging the trees or the soil but by just keeping it maintained. I could also get a group in the community to go out on a regular basis and make sure it was clean and undamaged. I would put out more garbage cans, picnic tables, basic bathroom facilities, and signs that read "no littering", "only contained fires", "do not cut or damage trees" and "do not disturb wildlife homes". I could also put more activity areas so other places would not get disturbed, only enjoyed.

Activities that would be able to occur there could be picnics, camping, swimming, sitting areas to relax and enjoy nature's beauty, playing games and hiking. I would also build small cottages to camp in just outside the falls.

Some of the benefits to adults and children would be that they could have a nice time at Maggie's Falls because there would not be garbage, there would be more trees to play in, and you could play around without getting hurt or cut. People could use this area to learn more about animal life. They could learn to appreciate natural beauty in the world instead of man made surroundings. The air would be cleaner and fresher with more oxygen for everyone to breathe so they would be healthier. You would be able to watch the animals play happily in their new environment.

Everyone would get more enjoyment out of this place if they would just keep things cleaned up. If we do not, soon it will not be there to enjoy.

During the summer months my family often visits Maggie's Falls. We enjoy sitting and taking in the peaceful surroundings. We always walk through the wooded area along the brook.

My sister and I explore the rocks, and all the moss and other natural features. We sometimes find small holes in the ground and wonder if it is an animal's home. We also swim there. The water is usually very cold but it feels so good on a hot summer day.

This is one spot that we enjoy having a picnic. We have a lot of fun there and it never costs us a dime.

God sure has made wonderful places for us to enjoy so we should take good care of them.

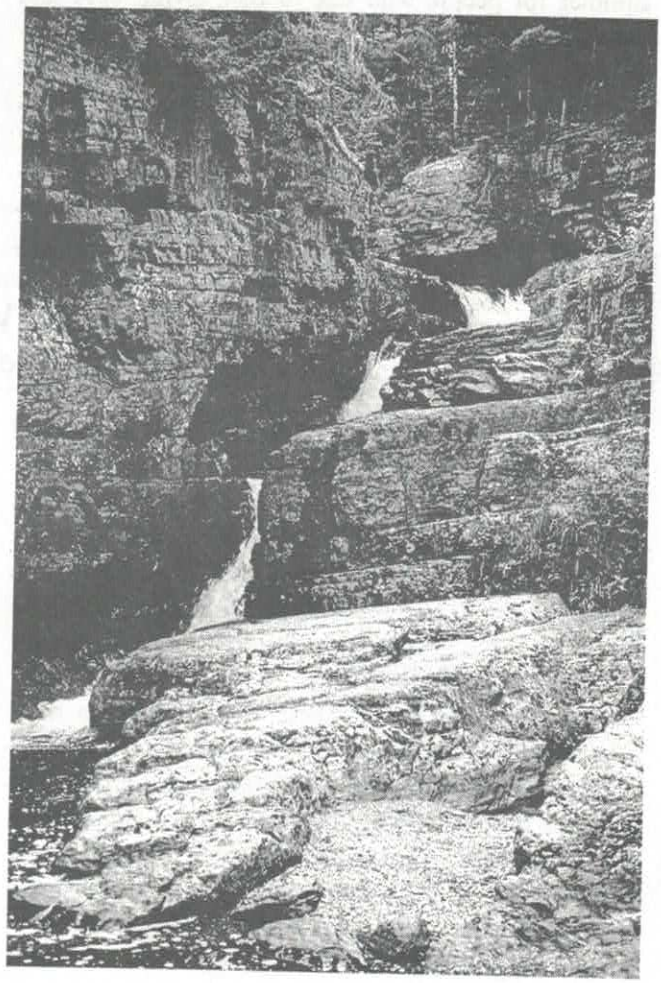


Photo of Maggie's Falls by James Goltz

SAVING BLUE MOUNTAIN AND THE TOBIQUE RIVER

Tyrell T. Porter (Gr.6) -- Tobique Valley Middle School, Plaster Rock

Blue Mountain is located above the Tobique River, halfway between Plaster Rock and Nictau. The Tobique River flows past communities at Riley Brook, Plaster Rock, and Arthurette and empties into the St. John River at Tobique Narrows. Blue Mountain and the Tobique River are the two things I see every day on my way to school or as I look out my windows or play in my dooryard. Blue Mountain is a great place for deer, moose, grouse, foxes, bear and other great animals. There are also a variety of plants and trees.

The Tobique River is a home to many fish, plants and other animals like beavers and ducks. It provides animals with a place to drink, bathe and a chance to cool off in the summer. It is also a popular spot in the summer for people who like to fish, swim, boat and generally enjoy the water.

I live in front of Blue Mountain and the Tobique River flows by my house. It is very beautiful and a great tourist attraction. THERE'S A PROBLEM; Trees and animals are disappearing very fast, so this is why we should protect both Blue Mountain and the Tobique River.

We should put up signs saying "No Hunting" and "No Clear Cutting." We should put up towers, hire forest rangers to watch the mountain for poachers, illegal cutting and fires. The forest rangers and wardens could go out, walk around and put radio collars on the animals to keep track of them. If the animals stopped for a long time then the men in the towers could look down on that spot and find out if the animals were all right.

Some of the things that would be allowed are hiking, camping and having picnics on the mountain with strict rules against littering and fires. No all terrain vehicles would be allowed to disturb the animals and plant life. It could be a wilderness paradise once again. Some of the things allowed on the Tobique River would be swimming, boating and fishing with the catch and release rule.

Some of the benefits from this would be cleaner water, more fish in the river, more trees and animals on the mountain. It would be very nice once again like it was before clear cutting came along.

THE VALLEY

Danika Daley (Gr. 6) -- Nelson Rural School, Miramichi

Many places in Canada are so beautiful and full of life that they are chosen to be conserved for the future. These are wonderful places where you can see robins feeding their young or places where you can see frogs gliding through a stream. I have chosen an area that is just as beautiful and peaceful and I think it should be saved for our great-grandchildren and the other children of the future to enjoy.

This beautiful place called "The Valley" is right after a bridge in Barnaby. It is situated near the river.

The Valley is home to lots of trees and animals. The trees are spruce, maple, poplar and birch. The animals are small such as raccoons, squirrels, skunks, foxes and rabbits. It possesses a marvellous view of the river and the rock structure on the opposite side. It is a beautiful place to take an evening walk or to watch the sun set.

It should be protected because it is full of wildlife and it is a wonderful place. Without proper protection the wildlife and plants will eventually be killed by hunters and pollution. If The Valley is not protected this might create a chain reaction and harm the surrounding area.

I would have it protected by foot patrol. Wardens could watch this area and make sure no one harms it. This way animals would not be kept captive, like if they were fenced in. The only place for a fence is near the road so they won't be wandering on to it and getting killed.

This would be a wonderful place for a walk or a picnic and maybe a peaceful boat trip. It wouldn't be a place to build on. You could not do anything to harm the environment, like hunt, fish, litter, cut the trees, camp out, drive recreational vehicles and definitely no fires.

Like I said before, "Many places in Canada are so beautiful that they are chosen to be conserved for the future." This place, The Valley, should be one of them.

CONSERVING THE NORTH POLE STREAM

Bobby Norton -- North & South Esk Elementary School, Sunny Corner

I believe that the North Pole Stream should be preserved, because it is one of the last of the Miramichi River systems that has no factories or industries on it, except for Repap, and they are usually very careful in their harvesting.

The North Pole Stream is about 15 to 20 miles long. The North Pole is very rocky, but very narrow. There are many beautiful waterfalls on the North Pole. Some of the waterfalls are called Palisades; they are a series of drops in these falls. Another one is Sherman Falls. It is mostly surrounded by mature forest.

The benefits of conserving the North Pole Stream for humans are fun and relaxation; for the animals, a better habitat.

Some of the animals that live around the river are White-tailed Deer, Black Bear, Red Fox, Snowshoe Hare and squirrels. Some of the birds that nest in the area are Blue Jays, chickadees and 'moose birds' (Canada Jays). Among the insects that invade the area in the summer are mosquitoes! The types of fish that live in the river are salmon and trout. These are important for the recreational fishery.

I think that the government should enforce the law of hook and release harder than it is at present, because too many people are hooking fish and keeping them when there is no visibility of enforcement. Since this area is the spawning ground for salmon and trout, this is hurting the number of fish being produced for the future.

The North Pole Stream is located in the back woods of New Brunswick. This area is hard country and uncivilized. I think the North Pole Stream is one of the most beautiful rivers in New Brunswick. When you go and see all that beauty, you just seem to forget all your troubles. It is a great place to go, relax, and just a beautiful place to be!

RECORDS OF N.B. REPTILES AND AMPHIBIANS WANTED

Ring-necked Snake
Photo by Don Vail

This summer, Don McAlpine plans to begin some concerted field work on the amphibians and reptiles of New Brunswick and hopes that this will ultimately lead to a book and/or exhibit. Don would greatly appreciate receiving reports of any observations of amphibians or reptiles, especially from the northern part of the province. Also, spring records of when amphibians were first heard calling and/or found breeding in your area would be useful. Don is especially hoping to receive reports on the Wood Turtle so that he can determine more precisely the distribution and status of this species in the province. Any site records that you might have made of Wood Turtles during the past few years would be much appreciated. This species is now protected over most of its range in the eastern US where collecting for the pet trade and habitat loss have reduced populations. The status of the Wood Turtle is also of concern in New Brunswick, even though the species is thought to be widespread in the province and, in some areas, locally common. Information on the Wood Turtle in New Brunswick is available from Don (ask for the New Brunswick Museum's *Chickadee Notes* No. 11) in French or English.

Please send your New Brunswick reptile and amphibian reports to:

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Natural Science Department
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COMMENT AIDER LES OISEAUX SAUVAGES

Andrea Prince (4e année) -- Croft Elementary School, Miramichi

The following article was submitted to The Kindness Club in response to their the first story writing contest for students in grades 4 and 5. The topic was "Helping Wild Birds".

Un jour, je me suis réveillée et j'étais très excitée! Ma journée était planifiée; moi et mes amis Keltie et Whitney irons à la plage Oak Point pour jouer et on ira nager toute la journée!!! Juste après le déjeuner, je suis allée dehors pour me balancer un peu. Là, j'ai trouvé un petit oiselet qui était tombé de son nid. Alors, ceci a mis ma journée toute à l'envers! J'ai du rester à la maison pour prendre soin du petit oiselet (ce qui ne me dérangeait pas parce qu'il était très mignon et je voulais l'aider).

J'ai trouvé une boite à souliers, et j'ai coupé du papier pour mettre à l'intérieur, j'ai placé deux trous dans la boite (un de chaque coté) et j'ai placé un bâton à travers pour que l'oiselet puisse se percher. J'ai doucement placé le petit oiselet dans la boite et rentré à la maison chercher de l'information sur l'internet, comment prendre soin des petits oiselets. Ils ont dit de donner à l'oiseau de l'eau sucrée et d'utiliser un compte-gouttes pour le nourrir. Ils ont aussi dit que les oiselets doivent manger chaque demi heure, à une heure du lèver du soleil au coucher du soleil. Ils ont dit de donner des vers de terre en ultilisant une pince à échardes. Nous devons mettre le compte-gouttes et la pince à échardes au fond de son bec. Je devais être très prudente quand je donnais de l'eau sucrée à l'oiselet parce que si je le mettais dans le devant de son bec ou dans ses narines ça pourrait aller dans ses poumons. Cela pourrait lui donner une pneumonie (je ne voudrais pas ca!). La première fois, j'ai seulement donné de l'eau sucrée mais après, j'ai mélangé du son pour lui donner de la protéine.

Après qu'on a eu toute notre information, mon papa et moi sommes allés dehors pour chercher le nid du petit oiselet. On a cherché partout et finalement mon papa l'a trouvé en haut d'un grand, grand arbre. On est allé chercher l'oiselet et une très grande échelle. Mon papa a doucement apporter le petit oiselet en haut de l'échelle et l'a placé dans le nid. Quelques minutes plus tard, on s'est installé sur des chaises et surveillé le nid pour voir si la maman oiseau allait revenir. Une heure a passé et pas de maman. Finalement la maman est venue et on savais maintenant que tout irait bien pour le petit oiselet.

Editors' Note: No doubt all of our readers know that a young bird's parents can usually care for it much better than a human foster care provider. Although we instinctively are drawn to try to help animals that we perceive to be in distress, often the best help thing we can do is to wait and observe, provided the young bird is not in any immediate danger or provided it has not been injured. Young fledged birds should be watched at a distance to make sure they are being fed. Unfledged birds should preferably be returned to their nest, provided it can be found. If we do take on the role of providing foster care for a young bird, the first step is to properly identify it to species so we can provide a suitable diet. Next, consult an expert on wildlife care and rehabilitation. Good intentions do not always a success make. One final word of caution, the internet is a great source of ready information on many topics, but one cannot always be certain as to the accuracy of this information.

BUTTERFLY INFORMATION UPDATE

After kindly checking his records, Tony Thomas has asked that we make readers aware of a few minor updates to information presented in Jim Edsall's 1996 Butterfly and Moth Roundup (*N.B. Nat* 24(1): 6-7). Prior to 1993, **Little Wood Satyr** was documented by specimens from at least 5 New Brunswick locations, including Grand Bay, Bathurst, Lynnfield, King Brook Lake and Lakeville (Carleton Co.). **Two-spotted Skipper** was previously known from Becaguimec Stream and Bull Pasture bog, as well as the Fredericton area.

LIFE WITH HOOTY: A LESSON IN OWL REHABILITATION

James P. Goltz

Photo of HOOTY by Don Vail

Like most other naturalists, I have a special fascination with owls. However, despite my best attempts to find and study them in the wild, I know surprisingly little about them, even though I have seen all but one of the owl species that occur in eastern North America. Hence, you can imagine my excitement when I received a phone message from Brian Dalzell on Sunday February 9, asking if I would be willing to care for a **Boreal Owl** with an injured wing.

The choice was easy. Of course I would! Brian reported that this little owl had been found on a roadside at Seal Cove, Grand Manan Island on February 5. The people who found it were feeding it salmon hearts and their children delighted in following it around as it hopped through the house. The only reason that it was coming my way, as opposed to going to experienced raptor rehabilitators David Christie and Mary Majka, was logistics. Brian could take the owl to Black's Harbour via the early morning ferry and relay it to Ken MacIntosh, one of New Brunswick's keen up and coming birders, who could bring it to Fredericton where he was taking some university courses.

Late the next morning, Ken arrived with the patient. A quick assessment revealed a beautiful little Boreal in excellent body condition, with well fleshed pectoral musculature and good strength, but with a droopy left wing. Although I was unable to palpate any fractures or other bone injuries, a radiograph showed that the left elbow joint was dislocated (luxated). Unfortunately, lesions of this nature heal best if treated within 12 hours of their occurrence. In consultation with Dr. Jim Berry, a fellow veterinarian with a lot of expertise in avian orthopedics, it was decided that the best initial treatment would be to attempt to reposition the bones through gentle traction and then to immobilize the wing in a figure 8 bandage for no more than two weeks. I provided the restraint while Jim did the manipulations. We hoped that this would enable the healing process to

begin so that the owl could be rehabilitated and released.

The medical assessment and procedures completed, it was then time to attend to the owl's other needs. The housing was switched from a cardboard box to a good-sized cage with dead branches for perches. The cage was placed among houseplants in the corner of a fairly quiet room that gets morning sunshine. The diet was immediately changed to laboratory mice (that had been humanely killed with carbon dioxide and quick frozen), a good substitute for the natural fare of a little Boreal. I was very relieved when I first offered the owl a mouse and, without hesitation, it took it in its beak, gently placed it near its feet and looked up at me as if to say, "Keep away; this is mine!" A dish of clean water was provided daily but as far as I know was never used.

I was somewhat hurt that the owl took an immediate dislike to me. Understandable, it didn't like being handled, briefly taped to an x-ray plate or bandaged up. As its primary health care provider, I was seen as the bad guy. Whenever I came near it, the little owl's pupils would dilate. In contrast, it took an instant liking to James Walde, whom it found to be not the least bit threatening. James soon found that if he approached the little one slowly and whistled to it softly, then the owl would respond with vocalizations of its own. Consequently, James affectionately named it Hooty. Hooty would "sing" on a daily basis, with no particular time schedule. His songs were almost always very muted and often could only be heard within a range of two meters. I could also elicit vocalizations from Hooty -- a loud clacking sound (that I called "beak snapping") and typical Boreal-type calls resembling those heard on commercial birding tapes. I was hailed with the former whenever I handled him, and with the latter whenever he found the handling sessions to be especially intrusive, e.g. when we changed the bandage.

By measuring his wing chord length (i.e., the distance between the wrist and the tip of the longest primary feather), Scott Makepeace helped us to determine that Hooty was a male. Kay McKeever, an Ontario owl rehabilitator with over 37 years of experience, told us that Borealswith wing chords of 180 mm. or more are almost always female, those measuring 170 mm. or less are usually male, and those with intermediate measurements could be either gender. Hooty measured 158 mm. (or 160 when his primaries were flattened).

Hooty quickly became an important focal point in our lives. He showed very little apprehension of humans and spent most of his day sitting quietly on his favourite perch. Often, the only sign that he was alive was a slow blink of one eye or a turn of his head. At night, especially around midnight and just before 7 a.m., he would usually become very active and bounce around in his cage. It was not uncommon to find him hanging upside down from the top of his cage. With his wing bandaged, his balance was not the best and we'd sometimes find him lying on his back, but he could easily right himself.

He would usually eat 1 to 1.5 mice per day, and showed a distinct preference for their heads. Within minutes of feeding time, the head would be devoured. He often would come back later for the chest and front legs, but seldom would eat the abdomen and hind legs. On several occasions, he decorated his perch with dangling mouse intestines. Although Borealsare well known to eat birds up to the size of Blue Jays in the wild, Hooty wasn't the least bit interested in a dead **American Goldfinch**, the victim of a window strike.

After 10 days, we removed his bandage (he had already removed parts of it) and attempted daily physiotherapy in the form of extension and flexion of the wing. We often had to reposition his wing when it would end up at an awkward angle on the wrong side of the perch. Hooty tolerated this well, even from me, and would usually just sit on his perch and carefully scrutinize me all the while, never trying to get away or to bite. At Kay's suggestion, we cut short the primary feathers of his damaged wing to keep him from further damaging it by perching on it or having it fetch up on the perch as he turned around. I was alarmed that he continued to hold his wing in a droopy position as this might be indicative of nerve damage.

Since dislocation of the elbow often results in permanent crippling, I wanted to find out what options would be available for this little one should he not recover. Kay McKeever, who was at that time nursing 10 Borealsaid that Borealswere her favourite owls offered to give him a home, even though she would have preferred it if he were a female. Kay is not prejudiced against male owls but was concerned that a flightless male might be more susceptible to aggression from the other males that she has in her care. She said that Borealsare very social creatures that need to be in contact with others of their own kind, and they mate for life. It was a relief to know that if

he couldn't be rehabilitated, then Hooty would have the opportunity to live and breed in captivity, and his offspring could be released into the wild.

By late March, it became apparent that Hooty would probably never fly again or be able to be set free. A follow-up radiograph revealed that his dislocated joint had not healed at all and was beginning to fuse with scar tissue. Hooty's damaged wing was constantly quivering and he began to hold it out from his body. Further, there was evidence that Hooty was becoming increasingly stressed by captivity. He became more active at night and desperately wanted to be released whenever he was taken outside. He developed a few small lacerations near the tips of three of his toes, and I was concerned that this might be the start of a disease called bumblefoot (Staphylococcal pododermatitis) that often leads to the demise of captive raptors. We treated the foot lesions twice a day with iodine surgical scrub sponges and 1% chlorhexidine, and wrapped his perch in chlorhexidine-impregnated gauze, which he tore off as quickly as possible.

We began to make plans to fly him to Ontario. I would have liked to have sent him sooner, but Kay advised that we wait until early April when the worst of winter would likely be over. Life with Kay McKeever would be the best option, given the circumstances. Kay is world-renowned for her expertise in dealing with injured owls and providing excellent care and accommodations for them. There, Hooty would be with other Boreals, may find a mate and perhaps could pass on his genetic potential. Kay was not especially concerned about the foot lesions since they were not on weight-bearing parts of his foot. Early on the morning of Sunday April 6, I was shocked to find blood splattered all over Hooty's cage. During the night, he had severely mutilated his injured wing. This was a very bad sign. I suspect that he must have suffered nerve damage to his wing and, as the nerve regenerated, he began to experience some very unpleasant sensations. Or perhaps he had simply had enough of captivity. Once animals start to mutilate themselves, it is often very difficult to get them to stop. I bandaged up his wing to try to prevent further self mutilation. This did not make him happy. He would snap his beak at the bandage. By Tuesday morning he had completely chewed through the bandage and renewed his attack on his poor wing, to the extent that the bone was exposed.

Everyone I consulted agreed that there were two options -- euthanasia or wing amputation. The choice was not easy. We'd grown very attached to the little fellow. It would have been neat to have him continue to be our houseguest. At first he tolerated captivity well, but he really wanted to be free. Kay advised that wing amputees are best kept indoors since they can't deal well with biting flies or cold weather. She also said that amputees can't be kept with other owls that have any ability to fly, since they can't easily defend themselves. She has found that amputee males can't balance themselves well enough to breed. I considered keeping Hooty as an amputee, thinking of the educational possibilities, etc., but who would have benefitted? Certainly not Hooty. After considerable soul-searching and consultation, I decided that it was not in his best interests to be kept alone, in captivity, as an amputee. Kay has found that amputee males make good foster parents, but what are the chances of us finding Boreal chicks that need fostering?

On Tuesday, April 8, I euthanized Hooty by administering a lethal injection of T-61. It was one of the most heart-breaking things I've ever had to do. James and I both felt very depressed and helpless, and were a mess of tears. Hooty's little body will be donated to the New Brunswick Museum. Brian Dalzell suggested that we immortalize Hooty by publishing this article in the *N.B. Naturalist*.

To James, Brian, Ken, Jim, Kay, Sandy (my supplier of mice), Scott, Dr. Jacquie Badcock, Barry Rothfuss and others who so kindly tried to help Hooty recover, thank you so much for all that you did. I can only hope that we have better luck with Otus, an injured **Long-eared Owl** that was found by Shirley Sloat at Silverwood on Sunday May 11. Unlike Hooty, Otus is very high-strung and antisocial, fluffing himself up to three times his normal size and hissing at us whenever we come anywhere close to his cage, even with mouse in hand.

To my little friend Hooty, wherever you are, thank you for being my most gracious guest and for enriching my life with your presence. You never did try to bite and seldom used your needle sharp talons. I'm deeply sorry that I couldn't fix your little wing and release you back into the wild.

Addendum: *Fortunately, Andrew MacInnis had better luck with rehabilitating a Boreal Owl that was found in very poor body condition at Nashwaaksis on February 24, 1997. The owl initially showed some reluctance to eat and had to be tempted with bits of mice. Its interest in food soon picked up and after a steady diet of one to two mice per day, the owl was released near Jemseg on April 15. It flew off into the woods, hopefully en route to its breeding area.*

CHASING DRAGONS! -- A NEW PURSUIT FOR NATURALISTS

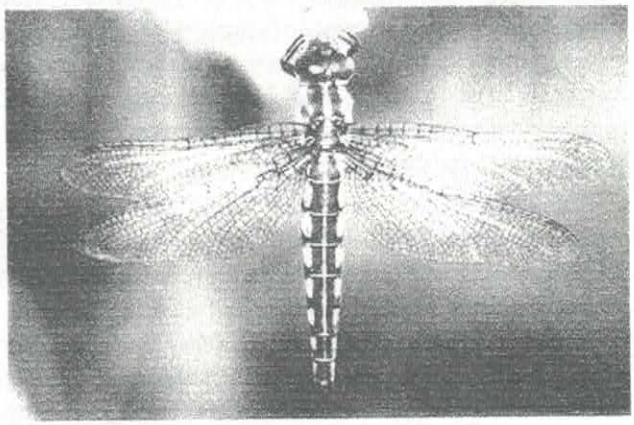
Text and Photos by Stuart Tingley

Following is a slightly edited account of a posting I made to the NatureNB Internet discussion group last July concerning my impressions after attending the annual meeting of the Dragonfly Society of the Americas which was held in St. Stephen from June 28-30, 1996.

"Got back yesterday afternoon after a fantastic weekend of dragonfly chasing around St. Stephen and elsewhere in Charlotte County. The occasion was the annual meeting of the DRAGONFLY SOCIETY OF THE AMERICAS. About 50 people from all over the US and eastern Canada attended. The reason that St. Stephen, NB was selected for the first DSA meeting ever to be held outside of the USA was that Paul-Michael Brunelle, a Halifax odonatologist and founder of the newly-created Atlantic Dragonfly Inventory Project (ADIP), recently discovered a new species of dragonfly unknown to science on the Canoose Stream near St. Stephen. Brunelle, who drives a Jeep with a big scoop net on the front bumper to salvage dragonflies that would otherwise be mangled in the car's grill, was the main organizer of the weekend event and lined up a full schedule of field excusions all day Saturday and Sunday to a variety of habitats in Charlotte County. Many of the participants were collecting specimens of desired species for their private collections but most of the collectors were representing museums or universities. Some were just into netting, getting a closer look, and releasing while a few others were primarily into photography.

I was indeed fortunate to tag around all weekend with a terrific group of guys from Massachusetts (Blair Nikula, Dick Forster, Peter and Jeremiah Trimble -- all top notch birders now totally hooked on dragonflies). They are among the best at field identification of dragonflies in northeastern North America and Jeremiah, 18 or so, is one of the best netters around. He was amazing....Blair would spot a special dragonfly flying high up over the road as we were driving, we'd pull over and let Jeremiah out with his net and he would pursue the bug with intensity and focus until it came down low enough for a swipe and he rarely missed. Our team was the envy of the meeting (not because of my contribution!) - we had about 60 species for the weekend (about half the NB list!) including 3 firsts for NB!!! They were **ORANGE BLUET** (*Enallagma signatum*), **FRAGILE FORKTAIL** (*Ischnura posita*), both common in adjacent parts of Maine and overdue here, and **STYGIAN SHADOWFLY** (*Neurocordulia yamaskaensis*), a big jump in known distribution from southwest Maine.

The latter is an evening-flying species, and was caught while we were collecting the newly discovered species which is in the same genus (*Neurocordulia **nov sp***.) at Canoose Stream. Before a new species is officially named it has to be described in painstaking detail in a recognized journal by a qualified entomologist. The species was discovered two years ago but hasn't yet been 'described'.



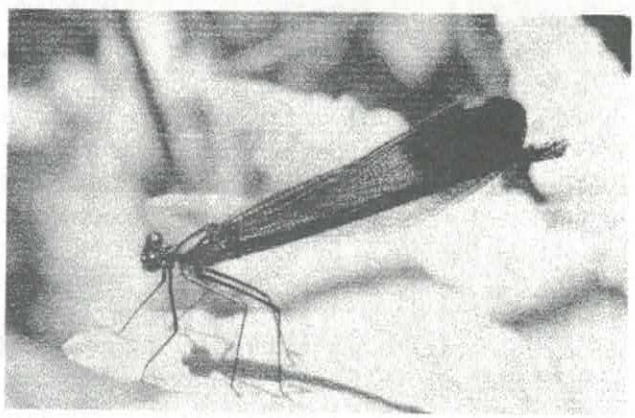
*New Species of **Shadowfly** (Neurocordulia **nov sp**.)*

On Friday and Saturday evening these *Neurocordulia* didn't start flying until about 9:10 pm and finished at 9:45!! They have rarely, if ever, been found during the day and are apparently tied to the evening flight of some other insect that they feed on, perhaps a stonefly. Nobody I asked seemed to know if there was an early morning flight also...

Paul has found exuvia (empty nymph skins from which the adults have emerged) from the new species at several streams in Charlotte County and on the St. Croix River as well but so far it hasn't been found elsewhere. It was definitely the focus of the weekend but people were out all day long all over Charlotte County. Other firsts for the province this weekend included the smallest North American dragonfly, the **ELFIN SKIMMER** (*Nannothemis bella*), only 20 mm long (!! NOT a damselfly) found at Cranberry Lake Bog, and the **HARLEQUIN DARNER** (*Gomphaeschna furcillata*), collected by several parties mainly along streams.

My photos of **EASTERN RED DAMSEL** (*Amphiagrion saucium*) which I took at Hall's Creek Marsh in Moncton a few years ago were confirmed as the first record for NB, though Paul-Michael Brunelle, the 'keeper' of the NB database, seems a bit reluctant to add a species to the provincial list without a specimen in hand. It's a bit like the situation with bird records about 50 years ago but will change soon hopefully. [Paul has recently informed me that he's prepared to accept photographic records as provincial firsts if the photos are diagnostic and accompanied by written details of the sighting -- not unlike the procedure for adding a new bird to the NB list!]. Other 'good' or 'interesting' records I had confirmed from my photos this weekend were **DRAGONHUNTER** (*Hagenius brevistylus*) which I photographed near Canaan several years ago (this species is very large, 75mm, and is notorious for catching and eating other dragonflies!) and, one of my favourite names, **EBONY BOGHAUNTER** (*Williamsonia fletcheri*), a rare though widespread boreal species which I photographed near Midgic 3 weeks ago [June 10/96].

My 'team' was especially interested in a group of dragonflies known as Emeralds (Cordulidae), specifically those in the genus *Somatochlora*. Primarily northern in distribution, they are a rather difficult group to identify, metallic green with subtle markings, very rarely land and spend most of their time hawking high up over narrow logging roads and streams. Dick Forster, who clearly had a bias for this group, called them the 'jaegers' of the dragonfly world. You've got to be fast to net one but Jeremiah came through again and with his contribution our team netted six different species of them, several of which were 'lifers' for my friends (all were 'lifers' for me!). I must add that my contribution was virtually nil as I stood around all weekend watching these pros at work and absorbing as much info as I could from the dragonflies that they netted. My netting abilities are pathetic but hopefully will improve.



River Jewelwing *(Calopteryx aequabilis)*

Another highlight of the weekend was the netting by one of the visiting participants of an **EXTRA-STRIPED SNAKETAIL** (*Ophiogomphus anomalus*) on Mohannes Stream. This dragonfly is apparently only known from a very few adult specimens, although it is commonly found in many streams as nymphs and exuvia. Apparently once the adults emerge from the nymphs (which usually happens during the night) they head straight to the treetops and rarely come down to within net's reach! However, they have to come down to the streams to breed so it's amazing how few have been taken. A great mystery.

A slide show by Blair Nikula on Sunday night was another highlight. Blair showed outstanding slides of sixty or seventy species and it was great to hear a couple of experts in the group call out their ID almost immediately. Field identification of dragonflies in North America has made tremendous gains in recent years and a majority of species may soon be identifiable without having to collect them. We just need a good field guide -- the photos and the know-how are out there. It's just a matter of bringing them together under one cover.

Although the group never got together for a cumulative weekend list I would guess that close to 75 species of Odonata (dragonflies and damselflies) were observed/netted/collected over the weekend. The New Brunswick list currently stands somewhere around 120 species."

POSTSCRIPT: *After that weekend last June I was hopelessly hooked on dragonflies and damselflies and spent most of my spare time during the summer pursuing and photographing them over much of the province. I managed to see about 85 species during the summer and already have a plan of attack drawn up for this summer to see additional species that I missed last year. The Mount Carleton area has many species not known from elsewhere in the province and will figure prominently in my summer travel plans! For more information on dragonflies including recommended guides and literature, a complete list for NB and photos of many species taken here, visit my home page at http://www.geocities.com/~stubird/odonatNB.html or for a printed copy of the NB list send a self addressed stamped envelope to: S.Tingley, General Delivery, Shediac Bridge, NB E0A 3H0]*

BIRDER'S WISH LIST FULFILLED

Mary Majka

Don Gibson's "Birder's Wish List", which appeared in the last issue, awoke recollections that I want to share with others. I am sure when Don becomes my age he will have fulfilled his wishes and perhaps surpassed me. Here are my memories:

Leach's Storm-Petrel. Many years ago I was privileged to stay on Machias Seal Island for a night. We were guests of the lighthouse keepers, the Russells and the Cookes. This was our first visit to that wonderful place. We were cautiously wandering over the entire island discovering ever so many nests of **Arctic Terns**, listening to the moans and groans of the young **Atlantic Puffins** and **Razorbills** hidden in their burrows, and watching the antics of their parents. But it was at night that the true wonder of the island, the mystery of the returning petrels, left the strongest impression. In the beam of the revolving light, like little dark flakes from the sky, hundreds of petrels descended calling softly and, together with the sound of their chicks, the air was filled with chirps and calls. Add to this the wafting mists, the pounding surf, and the wailing of the foghorn and you have a perfect picture for a mystery novel.

Turkey Vulture. One day, over the marshlands of Albert County, David Christie and I saw not one, not two, but six soaring Turkey Vultures. So, to answer Don, they don't always "sit" in dooryards feeding on scraps. Turkey Vultures are now relatively often seen in New Brunswick but your wish reminded me of an amusing story about the **Black Vulture**, which is very rare.

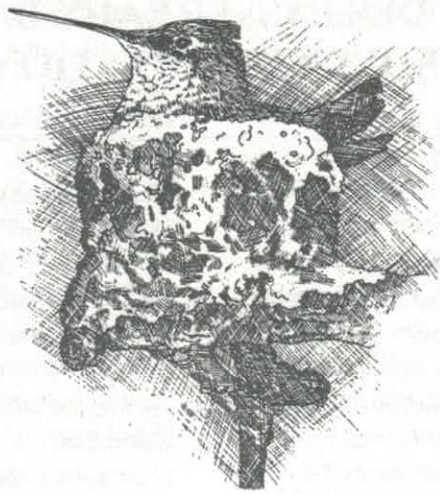
This bird came to visit a pig farm near our home (thank goodness, on the other side of a hill from us!) Stuart Tingley immediately notified the late Norman Chesterfield, a famous birder from Ontario, who was known to drop everything in pursuit of a new bird. It turned out Norman was on Vancouver Island trying unsuccessfully to locate, guess what, a Black Vulture! He immediately hopped on the next plane and the next morning was picked up by Stu. It was pouring rain as we travelled back and forth on the gravel country road in front of the farm, which finally aroused the suspicions of the farmer. No, he had no dead pigs, and of course he buried any offal according to rules, he informed us. And, no, he had not seen any birds and was not interested in them. To our relief he hopped in his truck and drove away quite angry. I thought this was an opening for me. Curious children were eyeing us from the windows.

"Hi kids. Has anyone seen this bird?" I took out the book. Silent shaking of heads. I probed further, "Where does your Dad throw out the waste from butchering?" I asked slyly.

"Down in the gully," piped one youngster. I hastened out the door and, together with David Christie, down to the gully. We didn't have to go very far. There was the vulture sitting on a hunk of rotten meat. He took off majestically over the trees, just as we could hear shouts of delight and joy. It was Norman and Stuart congratulating each other.

Ruffed Grouse drumming. The sight of a drumming grouse eluded me for many years but a few springs ago we drove "down memory lane" with René Belliveau, a former park naturalist, into Fundy National Park. We climbed the hill to what used to be an arts and crafts centre and is now used as a youth hostel. On a stone wall which encircles a small auditorium, there was a male drumming. The bird did not seem to care about our presence. We stopped the car and videotaped that wonderful performance for about 20 minutes. When we drove away the grouse was still performing.

Pomarine Jaeger. While I was leading whale-watching tours on the Bay of Fundy out of Grand Manan I saw some unusual bird happenings. Once, a **Great Blue Heron** decided to land on a whale's back, and only in the last minute realized it wasn't the right place. Since I had my camera at the ready I was able to record this in a few shots. A **Parasitic Jaeger** incident was even more amusing. (Don agreed that a Parasitic Jaeger would be a suitable substitute.) A bunch of cormorants and gulls milled around a fishing weir, where some fishermen were about to start working their nets. One gull was successful in securing a large herring and was about to swallow it when a Parasitic Jaeger swooped over him forcing the bird to fly up still with his bill open and the fish flailing his tail. As the gull flew up the fish gained his freedom. It fell on the deck of our boat, among the unsuspecting and totally dumbfounded whale-watchers. The jaeger, equally dumbfounded, flew away in a hurry. I grabbed the still very alive herring and threw him overboard. So, yes Don I truthfully can say I didn't only see but touch the saliva.



Ruby-throated Hummingbird nest. My friend was an elderly lady, of Polish origin like myself. I adored her and miss her to this day. I know she has gone to heaven for I have met no other human being who was so close to sainthood as Freda Gamble. She lived in Albert Mines, a small community in Albert County, and her garden full of flowers was one of the many things people admired. I visited her often. One day she had a special gift for me, a hummingbird nest! She led me cautiously to a dense bush of *Rosa rugosa* and carefully lifted a few leaves. There, glued to a branch as small as a thimble, as neat as a button, set a tiny nest with three eggs not bigger than small peas. About two weeks later she called to tell me the eggs had hatched. The hatchlings she reported were the size of "big flies". We decided not to disturb the nest anymore but I saw them, once they fledged, chasing each other and scolding as all youngsters big and small do. I hope heaven is full of flowers and hummingbirds.

Red-headed Woodpecker. I know I have seen Red-headed Woodpeckers in New Brunswick but I have no recollection of any unusual or amusing story connected with those sightings. Maybe Don will be more lucky and have a more vivid memory of one.

Northern Shrike. One day in the late fall when all the leaves had gone from the trees, I stood on what we call "the bridge" in our house, studying the patterns of clouds on the glistening mud flats. As I lowered my binoculars something peculiar, a bird, but not a bird, appeared on a small wild apple tree. I studied it for a moment and then went down to see what it could be. It was a tiny dead redpoll wedged securely to be stored for a later meal. I left it there taking some pictures of it. I was not lucky to see the shrike retrieving it, but I spotted the hunter several times around the house.

Field Sparrow. One early winter when we still lived on Caledonia Mountain, a Field Sparrow arrived and decided to make its winter home right in the shelter of our feeder. Of course we were delighted, and so were many birdwatcher friends who came to observe the bird from our living room window. We of course, were hoping that the bird would find a mate in the spring and stay there, but sometime in May it left us. At that time David Christie and I were working as naturalists in Fundy National Park. To our surprise we discovered a Field Sparrow singing its heart out in the Micmac Campground area. Was it our bird? The Field Sparrow claimed this territory altogether for three summers, never being successful in finding a mate, and finally he gave up. Yesterday we discovered a Field Sparrow singing at Mary's Point. Hopefully he will find a mate and stay.

Brown-headed Cowbird. I was working and studying in an Audubon nature center in Connecticut. One of my assignments was to monitor the nesting success of the birds around our centre. I used a mirror attached to a long pole to peek into the nests and marked the number of eggs in my notebook. A Phoebe nest contained two eggs but when I next checked I discovered a larger and differently coloured egg, of what else, a cowbird! Now, what to do? I went to see my supervisor and we decided to let nature take its course. The phoebes were then incubating. Once they started to feed their hatchlings I checked again and I could see the enormous gaping mouth of the cowbird completely dominating the hardly visible weakly calling phoebe babies. Another conference with my supervisor, and my pleadings resulted in removal of the cowbird. I installed it in an old straw hat and took over the phoebe's duties. I'm happy to report that, without competition, the baby phoebes thrived. So did my cowbird. I brought her up and let her go to probably repeat what nature told her to do, lay eggs in somebody else's nest.

White-winged Crossbill. From time to time when the cone crop is heavy in the forest, the crossbills descend on our part of the country. Soon, they are courting despite the wintry scene around them. On a sunny day we don our snowshoes and travel though the woods trails, all the time surrounded by the crossbills' beautiful songs. On a branch securely tucked under overhanging boughs, we discovered a nest with an incubating female, while higher on the tree the male trilled heartily. To feed the hatched young is no problem even in the midst of winter. The cones are all around. Yes, Don, this as you call your toughest challenge is not a challenge in the right year; just wait and see.

PRODUCTIVITÉ DES PASSEREAUX DANS LES FORÊTS SOUS EXPLOITATION

Serge Rhéaume

Formé depuis 1995, le ***Réseau des centres d'excellence*** en gestion durable de la forêt travaille en étroite collaboration avec les secteurs universitaires, industriels et publics du Canada. L'***Université de Moncton*** (***U de M***), l'***Unversité du Nouveau-Brunswick*** (***UNB***) et la compagnie forestière ***Fraser Papers Inc.*** sont les principaux partenaires de ce projet de quatre ans au Nouveau-Brunswick.

L'objectif du projet est d'effectuer un suivi des populations nicheuses chez les passereaux, afin de s'assurer que la récolte et l'aménagement forestiers (sylviculture) ne se fassent à leur détriment, même à long terme. Bien que nous n'ayons aucun moyen de vérifier ce qui se passe dans les forêts néotropicales pendant l'hiver, il demeure important de mesurer les effets des mosaïques du paysage forestier (à grande échelle, macro; à petit échelle, méso) sur nos passereaux, car c'est ici qu'ils se reproduisent.

L'activité forestière change le paysage et fait varier le succès de reproduction des passereaux et, pendant les quatre années que durera le projet (1996 à 1999), nous aimerions répondre à des questions telles que: Qu'arrive-t-il aux passereaux dans un paysage fragmenté? Où les oiseaux vont-ils après une perte d'habitat? Comment s'adaptent-ils à un nouvel habitat et quels sont leurs taux de succès de reproduction dans des coupes partielles ou totales? Etc.

Le secteur d'étude est situé à une heure au nord-est de la ville de Grand-Sault qui se trouve elle-même à 30 minutes au sud d'Edmundston. Il faut ensuite passer par Plaster Rock, d'où l'on parcourt une distance de 30 km. vers l'est avant d'arriver au site d'échantillonnage (dans la région de Riley Brook).

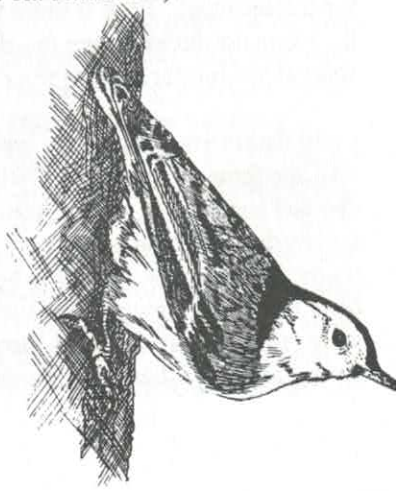
Ce projet se déroule dans la limite sud-est de la forêt boréale canadienne. Une étude semblable est présentement en cours en Alberta, à Owl River, près de Lac-la-Biche, à 200 km. au nord-est d'Edmonton. Au Nouveau-Brunswick, le paysage du secteur d'étude est vallonné, parsemé de plateaux d'érablières et de hêtraies, et encavés de ravins ainsi que de basses terres. Ceux-ci sont en majorité colonisés par le **Sapin baumier** (*Abies balsamea*) et par l'**Épinette noire** (*Picea mariana*). Quelques milieux ouverts plus ou moins perturbés comprennent l'**Épinette blanche** (*Picea glauca*) et le **Peuplier faux-tremble** (*Populus tremuloides*).

Le sectuer de référence couvre une superficie de 49 km2 et comprend 64 points d'écoute séparés les uns des autres par un kilomètre. On l'appelle la macro-grille. Ce secteur de référence comporte des plantations ainsi que des coupes partielles et totales. Cependant, ce site d'échantillonnage ne sera pas soumis aux coupes forestières pendant toute la durée du projet, bien que certains sites environnants pourraient subir quelques coupes. De plus, l'exploitation forestière y a été plutôt modérée par rapport à d'autres secteurs. Dans ce 49 km2, deux méso-grilles d'environ quatre km2 chacune ont été incorporées. Ces nouveaux points d'écoute se situent tous les 200 mètres et ce, afin de réduire le risque de détection du même oiseau d'une station à une autre (par exemple, on peut entendre de très loin les vocalises d'oiseaux comme la **Paruline couronnée** et le **Troglodyte mignon**).

Les stations d'écoute ont été visitées quatre fois entre la fin mai et le début juillet, soit pendant la période la plus propice aux chants des passereaux. Des biologistes, techniciens et étudiants gradués y travaille. En 1996, un totale de 81 espèces d'oiseaux ont été observées dans la région de Nictau, Riley Brook et Plaster Rock.

On retrouva à la plus grande partie des stations d'écoute en forêt décidue, des espèces typiques de cet habitat, qui sont moins fréquentes plus au nord (Gaspésie ou Bas-St.-Laurent). Il s'agit du **Tangara écarlate** (*Piranga olivacea*), et de la **Sittelle à poitrine blanche** (*Sitta caroliniensis*).

De la mi-juin à la fin juillet, un projet parallèlle se réalisait sur le site de référence et dans des coupes partielles: le succès d'appariement de la **Paruline bleue**. Il s'agissait d'effectuer le suivi d'un même



mâle jusqu'à confirmation du succès d'appariement. Ce suivi se terminait avec une perte du contact auditif ou visuel de plus de cinq minutes. Le succès d'appariement est assuré lorsque le mâle chanteur est observé à moins de dix mètres d'une femelle. Des indices de nidification, comme le transport de matériaux, de nourriture ou de sacs fécaux, étaient aussi pris en note. À la découverte d'un nid, la distance du point d'écoute, l'essence arbustive utilisée par l'oiseau et le nombre d'ouefs et/ou de jeunes étaient notés. Le même observateur visitait le nid à tous les trois jours. Les nids des **Parulines bleues** ont surtout été retrouvés dans le **Viorne à feuille d'aulne** (Viburnum lantanoides). D'autres ont été vus dans de petits conifères, dans des amoncellements de branches mortes et, étrangement, dans des racines d'arbres renversés, comme le fait aussi le **Troglodyte mignon**. La prédation et la date d'abandon du nid étaient également inscrites.

Le projet aura, en 1997, une deuxième macro-grille ainsi que deux autres méso-grilles à échantillonner. Ce sector, appelé « Buisness as usual », représente une forêt sous aménagement intensif. Des inventaires seront effectués avant et après les coupes pour observer les déplacements des passereaux dans la mosaïque forestière réalisée par Fraser.

L'année 1997 s'annonce encore une fois remplie d'oiseaux, de travail et de mouches... sans compter les ours! Je tiens à remercier Julie Marcoux et Marc-André Villard (professeur à l'***U de M***) pour leurs commentaires et leurs suggestions. Il est à noter qu'une étude similaire est en préparation au Québec par l'***Université du Québec à Montréal***. Le paysage boréal nord-ouest abitibien a été retenu comme site d'échantillonnage de ce projet.

D'autres articles feront suite à celui-ci au cours des publications à venir. Ils porteront, entre autres, sur les données, traitées et analysées, du succès d'appariement de la **Paruline bleue** selon le type de paysage (naturel ou fragmenté).

Ceux qui sont intéressés à recevoir plus de renseignements sont priés de contacter le responsable suivant:

Serge Rhéaume,
biologiste-technicien de la faune,
154, boul. du Sommet ouest
Rimouski, QC
G5L 7B5
(418) 724-4971 (fin de semaine)
Courrier électronique: sbeaulie@globetrotter.gc.ca

THE CASE OF THE PEREGRINATING PETRELS

Peter Pearce

Leach's Storm-Petrel is a bird of the trackless ocean, where it feeds at the surface. It comes to land only to nest, in burrows, on coastal islands or, unusually, mainland headlands. In New Brunswick there is a large breeding population on Kent Island and nearby islands in the Grand Manan archipelago. In the nesting season the petrels come and go under cover of darkness and are thus not conveniently observed. Single birds or small groups may occasionally be seen by the seagoing naturalist in waters off Grand Manan and further up the Bay of Fundy. They may be separated from the sometimes-abundant Wilson's Storm-Petrel by differences mainly in size, configuration and manner of flight. More rarely, numbers may be seen close inshore as, for example, when strong northeasterly winds brought hundreds to the Cap Bimet and Shediac areas of Northumberland Strait on 15 to 19 September 1996, to be observed by Stuart Tingley and others.

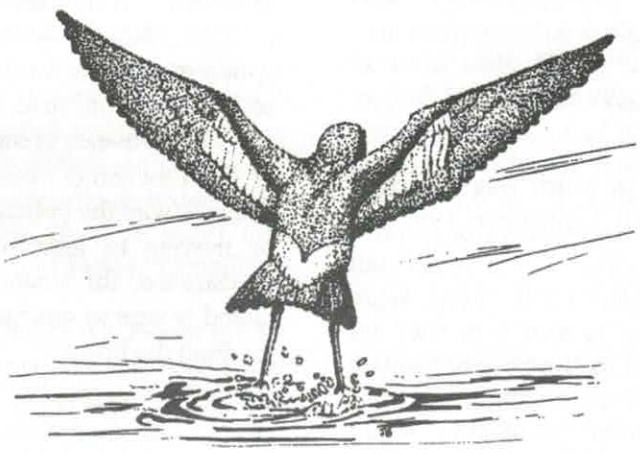


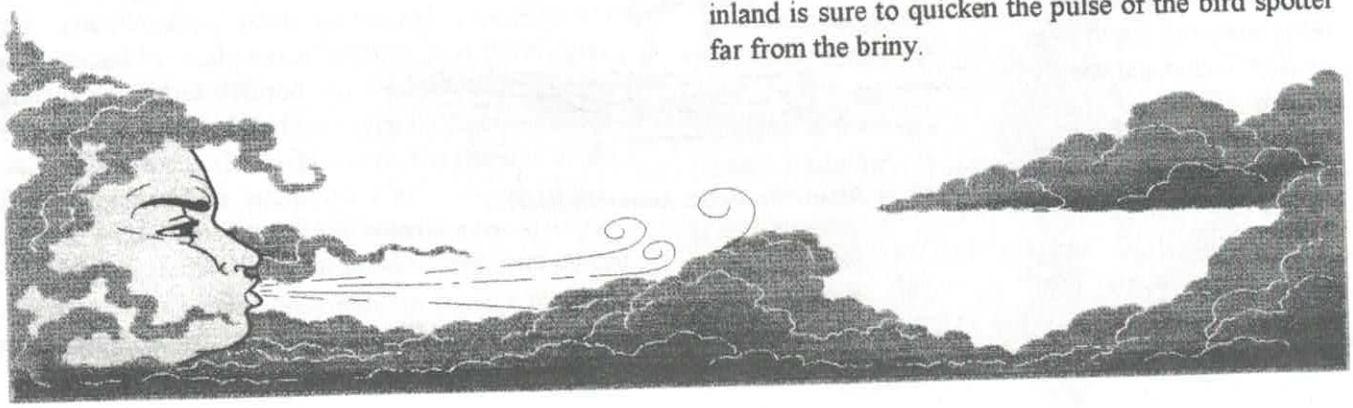
Illustration by Dr. Jacqueline Badcock

Leach's Storm-Petrels would hardly be expected to be seen at inland stations but the following records,

presented sequentially by month, illustrate that such events do occur from time to time, in New Brunswick as elsewhere.

- Two were seen on the Nashwaak River at Marysville (Fredericton) on 15 May 1960 by Douglas and Shirley Gibson.
- One was noted at Hall's Creek marsh, Moncton, on 23 May 1990 by Stuart Tingley.
- One was observed on the St. John River at McKinley Ferry, 15 km. above Fredericton, on 28 May 1960 by the author and Earl Anderson.
- One was seen at First Eel Lake on 1 June 1991 (reported on 3 June) by Pat Kehoe.
- A record of one seen at Lake George on 11 July 1969 was cited in the 1969 annual report of the Fredericton Field Naturalists' Club. It was attributed to Rudy Stocek -- erroneously, it was recently learned. The source of the original report cannot be traced.
- Two which were apparently trying to land on the Trans-Canada Highway at Anagance were seen on 31 July 1986 by Brian and Halton Dalzell during heavy rain accompanied by strong southerly winds.
- A storm-petrel not identified to species, but presumably Leach's, was reported over the St. John River at Fredericton on 12 August 1964 by Nettie Moore.
- One was noted flying over the St. John River at Fredericton on 29 August 1992 by Donald Gibson (later by David Myles).
- Five were observed, one of which was collected, "near Fredericton" on 18 September 1903 by William Moore.
- One was found dead in an aircraft hangar at Canadian Forces Base Chatham on 18 September 1987.
- One was noted on the St. John River at Fredericton on 22 September 1963 by the author (later by Andy Dean).
- One was discovered in a weakened condition on the steps of a downtown Fredericton office building on 2 October 1978. The author attempted to rehabilitate the bird but it died two days later. The specimen is preserved (catalogue #8078) at The New Brunswick Museum.
- One was seen over the St. John River at Fredericton on 23 October 1961 by the author (later by N. Rae Brown and David Christie). That occurrence was immediately preceded by the regional passage of tropical storm "Gerda".
- One was identified on the Kennebecasis River at Penny Point on 4 November 1962 by David Christie.

It is evident that Leach's Storm-Petrels can turn up far from their normal habitat at any time from spring to fall. Many of the records are of birds which apparently travelled up the St. John River. The summer and fall occurrences inland seem often to be related to the passage of weather disturbances -- a tropical storm in one instance, extra-tropical low pressure systems in others. (The sudden appearance of petrels was thought by earlier mariners to presage a storm, thus the nomenclatural association.) The spring records are not so readily explained by weather conditions at the time. Perhaps petrels occasionally cross the province in migration to colonies in the Gulf of St. Lawrence: the spring dates cited certainly coincide with the period during which the birds would be moving to their breeding quarters. The rare appearance, for whatever reason, of such seabirds inland is sure to quicken the pulse of the bird spotter far from the briny.



CONFESSIONS OF A SOLITARY BIRDER

Mike Lushington, Restigouche Naturalists

It had been a very pleasant morning. A dozen of us, members of the local naturalists' club, had met just before 8:00 and for the next several hours we had scoured the surrounding area for warblers and other spring migrants. In all we had found more than fifty species of birds and, at times, the action had been busy enough that one didn't really know whether to look over there where several of the group had cornered a **Wilson's Warbler** at the same instant that a second group was trying to search out a well-hidden but very vocal **Winter Wren**, while a third was gloating over the spring's first **Swamp Sparrow**.

Now we were having lunch together while checking out birds in the marshes, comparing notes, laughing, joking and enjoying each other's company. It had been a morning of birding as a social activity, and it had been, indeed, a very pleasant one.

****

Earlier, it had rained, a cold, freezing rain that seemed to penetrate to my very soul. Now the wind was backing to the north, bringing snow squalls and plunging temperatures. I was hunkered down behind a huge boulder, trying to find a bit of shelter from the wind and a spot of calm air so that I could use my scope.

Before me, the mass of sea ice had crashed and jumbled into a chaos of broken floes, some heaved almost vertically upright by the action of wind and tide. At first it seemed as though nothing alive could possibly be out there, in that ice.

But there, tucked down behind a massive chunk, a **Gyrfalcon** was dining on a duck - probably a goldeneye - that it had killed sometime just before I had arrived. Several ravens lurked nearly, hoping that the big falcon would satiate itself before finishing off the carcass. Further off, in a lead of open water, other goldeneyes (Barrow's, at this time of year) had resumed their affairs, secure from further predation - for the moment.

I had been there for over an hour, and, except for the birds and my long-suffering and faithful dog, I had been completely alone for the whole time. Alone, but not lonely, because I was also completely at peace.

****

For many, birding is a social activity. I know people who would never think of going out alone; one of the most important reasons why they pursue the activity is that it affords them opportunities to socialize with like-minded others. And this is fine. They enjoy themselves, they learn from and instruct one another and they often find lots of birds. Usually, in fact, they will find more in a given period than will the solitary searcher.

And yet, I often come back from such outings feeling vaguely unsatisfied. I realize that this has nothing to do with those with whom I have been associating. Rather, the dissatisfaction comes from within.

I have come to realize that birding, to me, is a solitary activity, just as hunting and fishing used to be. When I am in the woods, I want to blend in with my surroundings, to be a silent witness to the rhythms and harmonies of the small lives around me. I want to be able to move quietly and slowly, or simply stand motionless, oblivious to mosquitoes in summer or cold in winter, or the nagging sensations of hunger or thirst at any time. Often I lose all track of time until it is suddenly dark or I realize that the sun has peaked at noon and I have other things to do.

Now, I do not entirely deny the pleasures of companionship on such outings. I have several friends with whom I have experienced very pleasant days in the field. These friends, like myself, are content to share in silence, to improvise as the situations warrant, and to accept cold or sudden discomfort of rain. With such companions, I do not feel the need to be accommodating or sociable or even polite; we are where we are to fulfill personal needs, not those of each other. At the same time, we complement each other. I have good eyes, my wife has the finer hearing; I am fairly good on gulls, Andy has done considerable work on warbler song.

This is not a promotion of a way to bird. It is simply a statement of my personal preference. Over the past few years, I have learned the value of sharing information and I think that I am getting better in offering to guide people into certain special places in the hopes of having them share what I have experienced. But I feel no obligation in this, and, in the case of a rare or sensitive find, I am far more inclined to protect than I am to exhibit.

In the minds of some, this makes me a loner, I guess. I can do little about this if the perception is also one of criticism; otherwise I accept it as a fair evaluation of what I am and why. The best of my birding experiences have far transcended additional ticks on a list. They have taken me into a world of inner peace and awareness, and renewed my sense of who I am and what is truly important to me.

CAMPOBELLO TO AVALON: A LICHEN SAGA

Stephen Clayden

"Don't it always seem to go that you don't know what you've got 'till it's gone ... " [Joni Mitchell]

Or almost.

One of the rarest and most endangered lichens of the northern hemisphere was first collected in July 1902 on Campobello Island, New Brunswick, by William Gilson Farlow of Harvard University. Farlow was a renowned teacher and specialist on fungi, plant pathology, and seaweeds, but he deferred to others on the critical identification of lichens[1]. From his Campobello collections, Farlow sent a specimen or specimens of a leafy lichen of uncertain identity to a French 'lichenologist' (what else?), the Abbé Auguste-Marie Hue. This material was described in 1911 as a new species in the genus *Pannaria*, but the description appeared in a relatively obscure place as an appendix to a paper by Hue on an unrelated topic in volume 38 of the *Mémoires de la Société des sciences naturelles de Cherbourg*! Not surprisingly, the new name *Pannaria pedicellata* and the lichen itself attracted little notice.

Then, in 1938 and 1939, the Swedish lichenologist Sten Ahlner found a very similar lichen growing on twigs of Norway spruces in three neighbouring forested areas in North Trøndelag, Norway. He later found a larger but very localized population in Värmland, Sweden. Unaware, however, of the earlier collections from New Brunswick, nor of their description by Hue, Ahlner described the Scandinavian populations as a new species in 1948, this time (more fittingly) in the genus *Erioderma*: *E. boreale*.

It was not until about 1971, when Per Magnus Jørgensen of the University of Bergen was examining collections of *Pannaria* at the British Museum in London, that one of Farlow's 1902 specimens from Campobello Island resurfaced. Several other duplicate specimens (portions of the original collection) were subsequently located at Harvard University and it became clear that *Erioderma boreale* and *Pannaria pedicellata* in fact referred to one and the same species, for which Jørgensen established the correct and current name *Erioderma pedicellatum*. One of the duplicate specimens held an additional surprise. Mixed in with the material of *E. pedicellatum* was a fragmentary thallus of a different *Erioderma*, *E. mollissimum*. At the time, the latter species was known elsewhere in North America only in the Great Smoky Mountains of the southern Appalachians. (Cases like these underline the basic importance of well-maintained herbarium collections!)

Erioderma pedicellatum forms a several-lobed, rosette-like thallus measuring up to about 4 cm in diameter. The upper surface is slate gray to gray-brown and very finely hairy. The lower surface is covered in a nap of short, whitish to blue-black, stouter hairs which attach the thallus to the tree trunks or twigs on which it grows. The photosynthetic partner of *E. pedicellatum* is a filamentous blue-green bacterium belonging to the genus *Scytonema*. Strictly speaking, the name *E. pedicellatum* refers only to the fungal part of the lichen, but in practice the name is used as a shorthand for the association or 'symbiosis' of *E. pedicellatum* and *Scytonema*. The same is true of all lichen names: They double informally for the fungus plus alga and/or bacterium, but apply formally only to the fungus.

Many lichens have evolved specialized structures which enable the joint dispersal of their fungal and photosynthetic partners. In *E. pedicellatum* and many others, such adaptations are lacking, and the partners reproduce separately from one another. The fungal reproductive structures of *E. pedicellatum* are reddish-brown discs measuring about a millimetre in diameter and studding the upper surface of the thallus near the lobe margins. Each disc contains numerous spore sacs, and each of these is packed at maturity with eight colourless spores measuring about 1/100 mm in length. Survival of the *E. pedicellatum* fungus depends on these spores germinating in a suitable microhabitat, then encountering free-living cells of *Scytonema* with which they may reassociate to initiate the development of a new lichen thallus.

But to pick up the threads of the story ... Between the discovery of '*E. boreale*' in Norway in the late 1930s and the recognition in the early 1970s that this species had already been described under another name, more than the name of the lichen had changed. By the 1960s, *E. pedicellatum* had disappeared from all four of its previously documented Swedish and Norwegian localities, apparently as a direct or indirect result of forest clearcutting. A discovery of two thalli near the original Norwegian sites was reported in 1995, but the fate of this population is uncertain at best and *E. pedicellatum* appears to be on the brink of extinction in Europe. It has been listed as "critically

endangered" in the "Red List of Lichenized Fungi of the World" by the International Union for the Conservation of Nature (IUCN).

Meanwhile, the focus of concern over the fate of *E. pedicellatum* has shifted back to Canada. Intensive searching of Campobello Island in the 1970s by Wolfgang Maass, then with the National Research Council Laboratory in Halifax, and more limited recent exploration by myself, have failed to locate any surviving population of either *Erioderma* species on the island. Although *E. pedicellatum* may yet be present, but undetected, somewhere on Campobello, Maass has shown that most of the island has been logged and/or burned in this century. Acid rain and fog may also be significant potential threats, as *Erioderma* and other lichens with blue-green bacteria as photosynthetic partners are more susceptible to injury than are those with green algae. The odds that *E. pedicellatum* persists on the island are slim.

Erioderma pedicellatum has been found, however, in both Nova Scotia and Newfoundland. Its occurrence in Newfoundland was first recorded in 1972, based on a collection made in 1956 but only identified some years later. After 1980, Wolfgang Maass broadened and intensified his search for *E. pedicellatum* in northeastern North America and discovered many additional occurrences. A handful of these are on the cool south shore of Nova Scotia, the others in southern Newfoundland, especially on the Avalon peninsula. Most of the populations are in moist open balsam fir stands and comprise only a few thalli. The thalli occur mainly on balsam fir trunks (less often twigs), but in Newfoundland they have also been found on black spruce and (rarely) white spruce.

It appears that the Bay of Fundy coastal region may just meet (or have met) the general climatic requirements of *E. pedicellatum*. Along with several other lichens characteristic of Newfoundland and of the south shore of Nova Scotia, it is restricted to the most 'oceanic' parts of the boreal zone in eastern North America. The climates of these areas are characterized by relatively cool summers and mild winters compared with the more 'continental' climates of interior regions. The difference between the average temperatures of the warmest and coldest months of the year along the Bay of Fundy coast is about 23 to 25 C: 16 to 17 C in July, -7 to -8 C in January. The comparable summer-winter range for the most continental locations in New Brunswick is about 31 C, with January averages of -14 C or colder. No location on the Bay of Fundy is as oceanic as the Nova Scotian south shore or southern Newfoundland, where summer and winter average temperatures differ by as little as 15 C. Then again, no part of eastern North America is as oceanic as coastal western Europe. Interestingly, however, the Norwegian and Swedish populations of *E. pedicellatum* occurred not in the extremely oceanic coastal region, but somewhat inland in climates more like those in which it is found in Atlantic Canada.

At a meeting of the International Association for Lichenology (IAL) in Salzburg, Austria, in September 1996, 94 members representing 27 countries signed a letter to the Premier of Newfoundland urging him and his government to "realize its international responsibility to conserve this rare species [*E. pedicellatum*]." Premier Tobin replied with an invitation to the IAL Conservation Committee to visit the province and provide advice on appropriate measures to protect the lichen and its habitat. As a result, Christoph Scheidegger of the Swiss Federal Institute for Forest, Snow and Landscape Research spent several days in Newfoundland in October talking to government officials and conservationists and conducting field work. His, Wolfgang Maass's and other recent studies indicate that about half of the *E. pedicellatum* occurrences are in the Lockyers Waters area on the Avalon peninsula. It is also clear, however, that most of the balsam fir forests in the ecologically distinctive but very small 'Avalon Forest Region' have been clearcut, and that many populations of *E. pedicellatum* must have been eliminated. A logging access road was cut into Lockyers Waters last summer, but Scheidegger has recommended a halt to harvesting in the area as well as the establishment of a surrounding 1 km wide no-harvest zone. Premier Tobin has provided assurances that no further cutting will take place in the area until "the status of the *Erioderma* is determined and mitigating measures are put in place." And that is where things stand.

Or almost. On the basis of his field observations last October, Scheidegger has proposed a fascinating hypothesis linking the life cycle of *E. pedicellatum* to the ecological cycle of its balsam fir or fir-spruce forest habitat. Balsam fir is a relatively short-lived tree and often forms even-aged stands. Typically, these are recycled by spruce budworm epidemics, fungus diseases or wind storms on an approximately 60-80 year cycle, although at the scale of the landscape, a mosaic of forest patches of different ages often develops. Noting that reproductively mature thalli of *E. pedicellatum* are found only on old trees in

'overmature' or collapsing stands, Scheidegger suggests that this lichen produces only one generation of thalli in each generation of the forest. Thalli are apparently initiated on small trees in young stands, then (in response to increasing light levels) begin to grow more quickly and reproduce as the stands are opened up by the death and decay of the trees over a roughly 15 to 25 year period. Spores of the *E. pedicellatum* fungus could then be dispersed by wind to nearby younger fir stands, where the cycle would begin anew. A key implication of this scenario is that fir stands left to grow old, die and decay, while abhorrent to the forester, may be vital to the survival of *E. pedicellatum*. Protection of stands of varying ages in proximity to one another may also be critical. These questions are likely to be addressed in a status report on *E. pedicellatum* currently under preparation for the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) by Wolfgang Maass.

It is tempting to extend to New Brunswick the lesson apparently presented by the subtle and unanticipated ecological requirements of *E. pedicellatum* in Newfoundland. Conservationists here have pushed hard in recent years for the protection of overmature balsam fir-dominated forests in the province's northern highlands. Their concerns have often been dismissed by foresters, many of whom maintain that the impacts of clearcutting on the diversity and functioning of fir stands are indistinguishable from those of blowdowns or budworm decimation. No-one is suggesting that *E. pedicellatum* is likely to turn up in northern New Brunswick. The lesson is this, however: there is always more than meets the eye in nature and the best hedge against our ignorance is for us to tread as lightly as possible. We are rich, observed Thoreau, in proportion to the number of things we can afford to leave alone.

[1] Lichens are associations of fungi with microscopic green algae and/or blue-green bacteria from which they obtain their essential carbohydrate. The fungus houses its photosynthetic partner within a protective 'thallus' which may be hair-like, shrubby, leafy or crust-like in form.

The author thanks Judy Loo, Wolfgang Maass and Christoph Scheidegger for providing information which was incorporated into this article.

NATURE NEWS: JANUARY-MARCH 1997

David Christie

"In like a lamb, out like a lion" applied to the whole winter, not just to March. It was a mild season overall and, in southern New Brunswick at least, the biggest storms were towards the end, in March and even the beginning of April.

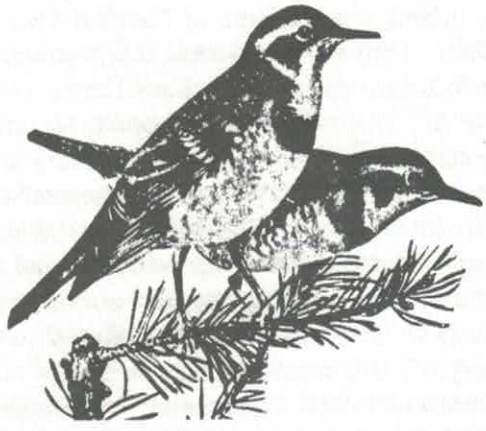
Insects

Mary Majka had the dubious distinction of being first bitten by a **mosquito** in 1997. The insect in question attacked while she was in bed Jan. 19. This was possibly *Anopheles earlei*, which is known to hibernate in buildings and therefore can become active in winter.

Another episode in the winter caterpillar story occurred Mar 20 when an **Am. Robin** extracted from the grass at Bancroft Pt., GM, a half dozen **cutworms** and two **bright green larvae** about 1.5 to 2 cm long (BED). "The light greenish cutworms... appeared quite limp when eaten, but the two bright green ones appeared to be alive."

Birds

Highlight of this winter were three unusual thrushes. December's **Mountain Bluebird** which, incidentally, stayed at Robertville till Dec. 20 (fide PD), was followed by another western visitor, a female **Varied Thrush** at Red Bridge, near Belleville. It visited Hugh and Mildred Galloway's feeder from Jan. 4 to Mar. 25. The Galloways hosted many birdwatchers during its stay. Finally, from Europe, a **Fieldfare** was discovered among robins at Sussex by David and Judy Hughes on Feb. 21. This bird, the second confirmed New Brunswick record of its species, stayed into May. [See John Candy's article about it (*N.B. Nat.* 24(1): 17-18).]



Varied Thrush by R. Bruce Horsfall

High on the list of attractions for mobile birders was an immature **Harris' Sparrow** at Celia Malcolm's and Mike Adams' in Gondola Point from late December till at least Mar. 25 (JGW). Celia, a natural for title of "feeder-operator of the year," also had 5 **Northern Cardinals** throughout the winter, a **Yellow-breasted Chat** till Jan. 17, a **Baltimore Oriole** till Jan. 21, a **Northern Flicker** Jan. 20-22, and numerous more usual feeder visitors. All these birds also attracted a **Sharp-shinned Hawk** which caught the chat (JGW, GMi) and was suspected of being responsible for the disappearance of the oriole.

At least 350 **Red-necked Grebes** wintered at Grand Manan; the largest group, 165 at Whale Cove, had dropped to 17 on Mar. 28. On close observation, Brian believes they were feeding largely on 1-2 cm amphipods which their sharp pointed bills allow them to pick from under subtidal rocks and boulders.

An inland **Great Cormorant** found on open water below the dam at Mactaquac Jan. 7 & 11 (v.o.) may have been in that area since November (see last issue). A **Double-crested Cormorant** survived there till at least Jan. 11 (v.o.). A migrant Double-crested appeared Mar. 28 at Reversing Falls, Saint John (JGW).

A **Great Blue Heron** was still inland at New Maryland Jan. 4 (JPG), one at Moncton about Jan. 12 (JD, CA), and a very late one at Beaver Harbour Feb. 2 (KMacI, Sandra Cooper).

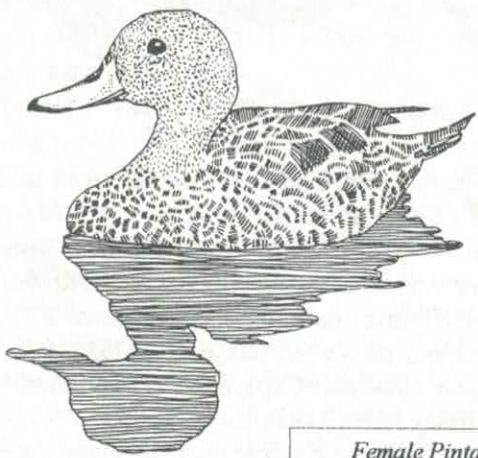
A flock of 15 or 16 **Snow Geese** were reported "flying obligingly low" over Woodstock Feb. 8 (RWH). Where they were coming from in the middle of winter is unknown. Two spring migrants, one blue or dark phase and one white, were seen at Saints' Rest Marsh, Saint John, from Mar. 9 (Paul Clark) into April (v.o.). On Mar. 27 one passed New Horton Ridge, near Riverside-Albert (SIT), and Mar. 30 4 flew by Island View, upriver from Fredericton (PAP).

Brant push the beginnings of northward migration well into the winter season. At White Head Island, GM, they had increased to 375 Jan. 23 and 550 on Feb. 7 (BED), considerably more than were seen there during the CBC. Fifty appeared off Castalia Marsh Feb. 14 and there were 3500 there by Mar. 5 (BED). Forty **Canada Geese** migrated past Southwest Head, GM, Jan. 5 (BED), a single tarried at Cape Enrage Jan. 12 (AC) and another at Beaver Harbour Jan. 19 (KMacI), and a small flock were at Maces Bay Jan. 26 (MNC). A lone goose seen flying over Campbellton in the third week of February was certainly far from good habitat (MGD).

Two female-type **Green-winged Teal** were at Castalia Jan. 13 & 31 (BED). A few were seen in Courtenay Bay, Saint John, throughout January (v.o.), but the **Eurasian** male that had been with them in December was not specifically mentioned. However, there was a **Eurasian Green-wing** among six there Mar. 16 (EP, RAM), as well as one at St. Martins c. Mar. 28 (fide NS) and another at Saints Rest Mar. 29 (CLJ).

A male **Gadwall** was seen sporadically at Courtenay Bay through the winter till Mar. 16 (EP, RAM). Two flew past New Horton Ridge Mar. 29 (SIT). The unusual wintering **Northern Shoveler**, a female, was reported at Courtenay Bay Jan. 26 (MNC), Feb. 2 and Mar. 16 (EP, RAM).

There were an unusual number of reports of winter **Northern Pintails**. At Grand Manan a pair were at Woodwards Cove Jan. 29 and Castalia Marsh Feb. 3 & 14 (BED), a male in Grand Harbour through the beginning of February (BED), a pair at Great Pond Feb. 15, and five (3m, 2f--all the preceding together?) feeding off Bancroft Point Feb. 16. At Saint John, a pair were seen Feb. 1 & 8 (EP, RAM; JGW+). March reports, including 3 males at Courtenay Bay Mar. 2 (KHD) and a female at Blacks Harbour Mar. 9 (BED, HAD, KMacI) may have been of northbound migrants.

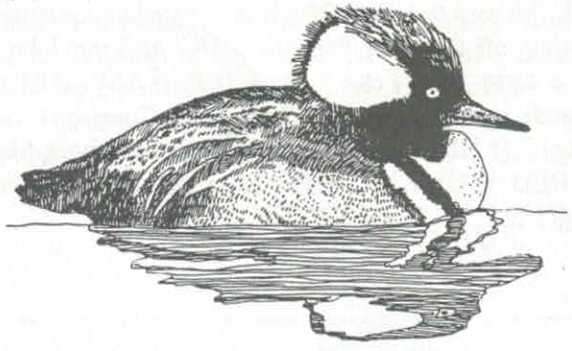


Female Pintail

The female **Tufted Duck** discovered during the Grand Manan CBC was present at Seal Cove Jan. 3-13 (BED). A male, likely the one that wintered a year earlier, was on the river at Saint John Jan. 4 to Mar. 26 (EP+). On Mar. 5, Cecil Johnston and an out-of-town birder spotted three of these European ducks, two females and an immature male, evidently just passing through, in Marble Cove, Saint John. Numbers of **Greater Scaup** were low during the CBC but increased later, when 80 were at Ingalls Head, GM, Feb. 2 (BED). Nine **Lesser Scaup** were at Ross Island, GM, on Feb. 2 (BED).

A **King Eider** was seen at the Bar Road, St. Andrews, over the Jan. 18-19 weekend (NBBIL). An adult male flew by New Horton Ridge Mar. 28 (SIT+) and another remained close to shore at Cape Enrage Mar. 29 (EI+). A single **Harlequin Duck** was at Pt. Lepreau Jan. 17 & 26 (v.o.) and 2 pairs were there Mar. 9 (BED, HAD, KMacI) and Mar. 29 (courting--JGW+). Eight were reported at Machias Seal Island on Mar. 12 (RE).

Barrow's Goldeneyes are most prominent in the few locations with open water along the gulf coast, especially at Dalhousie, where there were still "a couple of hundred" Mar. 16 (ML). Elsewhere, there were 6-8 at Saint John Jan. 12-17 (v.o.), 8 at Blacks Harbour Jan. 26 (KMacI), and 2 in the river near Florenceville Feb. 7 (Gmi). At least two **Hooded Mergansers** continued into February in Courtenay Bay (v.o.).



Hooded Merganser

A **Black Vulture** paid a 15-minute visit to Shirley Hunter's home at Fairfield, west of St. Martins, to feed on scraps thrown out for the crows. A **Turkey Vulture** was at Inkerman Jan. 3-4 (JGR, fide BH). The MNC Information Line mentioned a "reliable second-hand report" of one in the Demoiselle Creek area, near Hopewell Cape, Feb. 12, and there were 2 near Sussex Mar. 9 (RP, EP).

Up to 15 **Bald Eagles**, most of them immatures, were seen during January and February in the vicinity of a hog farm near Port Elgin (v.o.). One or two of December's **Northern Harriers** remained into January at Moncton (v.o.), one was at Courtenay Bay Jan. 16 (KHD), and another was in Albert County c. Feb. 23 (AC).

Alma White is confident of a female **Cooper's Hawk** about Jan. 3 near Jones Lake, Moncton, where one was reported in winter a year ago. On Mar. 16, Peter Pearce observed one in his Fredericton yard. An adult **Red-shouldered Hawk** was seen frequently in the Shemogue area till at least Feb. 15 (v.o.); the incidence of this species in winter is increasing. Scott Makepeace reported one back on territory near Central Hampstead on Mar. 30. A possible **Golden Eagle** was observed near Daniels Marsh west of Hopewell Cape, Mar. 9 or 10 (AC, RL). This is the location where one wintered for several years before being found dead on the highway,

Normally, only the male **Peregrine Falcon** winters at Saint John but 2 were seen at the Reversing Falls Feb. 2 (EP, RAM). The pair were mating at the Harbour Bridge nesting site Mar. 15 (JGW, PD). At Grand Manan the first report was received on Mar. 18, when one was flying north at Deep Cove (Laurie Murison) and two swooped low over Bancroft Pt. Mar. 22 (BED). A pair was back in the Hillsborough area Mar. 27 (DB). A gray **Gyrfalcon** that was reported killing pigeons at Atholville in the first week of January (fide ML) may have been the one seen at Dalhousie Jan. 19 through Mar. 8 or 9 (v.o.); a dark bird was also seen there, the two together on Feb. 8 (ML+).

Sanderlings were again seen throughout the winter at Long Pond Beach, GM; there were still 26 on Mar. 19 (BED), the same number seen on the CBC. A **Common Snipe** in a spring-fed ditch at North Head Feb. 1 (fide BED) was unique this winter.

Three **Black-headed Gulls** were at Blacks Harbour Mar. 9 (BED, HD, KMacI) through Mar. 29/30. A **Bonaparte's Gull** at Long Pond Beach on Jan. 23 (BED) was the latest ever at Grand Manan. The Grand Manan **Mew Gull** was seen at Whale Cove only during the CBC Jan. 3 (BED, JB, JL). The **Mew Gull** at Saint John was seen fairly regularly at the sewage lagoon at Saints Rest through at least Mar. 15 (v.o.). A concentration of 150 **Iceland Gulls** gathered to feed on sardine factory waste in Blacks Harbour Jan. 20 (BED) and 200 were reported near Campobello Island in the second week of January (Maine Birdline). Moncton's **Lesser Black-backed Gull** was noted Feb. 8 (RS, CC). At Dalhousie no gulls at all were to be seen Jan. 19, a time of cold and lots of ice, but by the weekend of Feb. 15-16, 15 to 20 **Glaucous Gulls** were there (ML). About 10,000 **Black-legged Kittiwakes** were reported at Machias Seal Island in the first week of January and near Campobello Island the following week (Maine Birdline).

A **Common Murre**, a species missed during the CBCs, was seen from the Grand Manan ferry Jan. 20 (BED), when **Razorbills** were much in evidence. 300 to 400 of them were feeding off Pt. Lepreau Jan. 17 (JGW, GMi) and an estimated 30,000 (!) passed Pt. Prangle on White Head Island during a half hour on Feb. 7 (BED). A few **Atlantic Puffins** were seen

around Machias Seal Island in the first week of January (Maine Birdline) and six off the north end of Grand Manan on Feb. 7 (Laurie Murison). The first overflight of Machias Seal I. was on Mar. 29 (RE).

Snowy Owls continued to be noted frequently near the gulf coast during January, including one in the Campbellton area (S&AN, fide ID). One was seen frequently at Dieppe and adjacent Moncton into March (v.o.). Unfortunately two of these visitors from the north were killed by vehicles, at Bouctouche in mid January (MLe) and near Hartland Feb.4 (Gmi). Elsewhere, single snowies were at Silverwood, near Fredericton, Jan. 13 (Mrs. Robbins), Nictau Jan. 20 (Diane Labarre), near McGowans Corner c. Mar. 15 (PMa) and at Courtenay Bay Mar. 2 (KHD).

A **Hawk Owl** found near Port Elgin in December was seen very regularly till Feb. 12 (v.o.). Another near Fontaine Jan. 3-4 (Barry Spencer+) was rediscovered at Ryan, KNP, before Jan. 31 (Gilles Daigle). A **Great Gray Owl** noted at Lower Coverdale Jan. 5 & 17 (George Foster, Jennifer Edwards, Erin Foster, Corey Stevens) managed to elude teams of searching birders.

A major southward flight of **Boreal Owls** in eastern North America was just barely detected in New Brunswick. Three of them got into trouble: one harassed by Blue Jays at Acadia Forest Experiment Station, near Ripples, Jan. 13 was found dead the next day (Brian Kilpatrick, fide AWT), one was picked up with an injured wing south of Seal Cove Feb. 5 (fide BED), and another was found in poor body condition at Nashwaaksis on Feb. 24 (Andrew MacInnis). A healthy Boreal was seen on Miscou Island Feb. 8 (BH) and another reported calling at night SW of the Christmas Mountains Feb. 22 (KMacI). Almost all the **Saw-whet Owls** reported were in March when snow depths and the beginnings of migration brought them more into view.

Boreal Owl by Mary Majka

Wintering **Horned Larks** were seen in the Salisbury area Jan. 16 (3--Lloyd & Jackie DeCoste), Lower Coverdale about the end of January (a few--AC), Saints Rest Feb. 8 (1--JGW+), and on the Tantramar Feb. 12 (12--JT). Migrants appeared at Inkerman Mar. 8 (Lucia Robichaud), Petit-Rocher Mar. 10 (3--PD), and Castalia Marsh Mar. 19 (9--BED). A flock was present at Pointe de Bute from about the end of February (TH).

At 11 p.m. Feb. 12, Ken MacIntosh heard a crow calling at Fredericton and looked up to see "not one, but easily 200" **Am. Crows** flying overhead, closely and evenly spaced. We assume that something must have disturbed them at their night-time roost. In the Dalhousie area, the first few returning crows were noticed Mar. 16 (ML).

A **partly albino Am. Crow** with a white band on its breast was reported in Edmundston Mar. 5 (Robert Émond). A possibly similar **Common Raven** appeared to have a white bib at Fredericton Feb. 1 (Linda Caissie).

A good crop of mountain-ash fruits produced some interesting birdwatching as robins and Bohemian and Cedar Waxwings shifted from place to place in search of the best feeding. Flocks of **Am. Robins** included 30 at Lac-Baker Jan. 13 (GT, GV, AV), 35 at Shediac Cape Jan. 18 (SIT), 35 at Chipman Jan. 19 (NP), 30 at Lower Charlo Jan. 20 (ML, AWa), a large flock" at Bouctouche about Jan. 23 (MLe), 100 near Jones Lake, Moncton, about Feb. 9 (Joanne MacAulay), 70 at Campbellton Feb. 14 (MGD), 60 at Fredericton Feb. 25 (DGG), 60-80 at Sussex Feb. 26 (RJW), and 30+ at Robertville in the first week of March (PD). By that time a small flock were foraging in the seaweed at Dalhousie (JC), where the fruits had probably been exhausted.

Bohemian Waxwings began appearing in numbers in southern N.B. Jan. 18-21. Noteworthy were 325 (with 25-30 **Cedars**) at Shediac Cape Jan. 18 (SIT), 200 at Chipman Jan. 19 (NP), 300 at Riverview Feb. 5 (Shirley Childs), and 300 at Fredericton Feb. 22 (PAP). There were still Bohemians in the the north, for example, a mixed flock of 250 Bohemian and Cedar Waxwings at Campbellton Feb. 14 (MGD), in the Bathurst area in early March ("Everyday we can see Bohemian Waxwings flying from one mountain-ash tree to another"--PD), and 100+ near Nicholas-Denys Mar. 21 (LD).

Cedar Waxwings were regular in the Dalhousie area through mid January (ML) and numerous at Robertville (PD) and Sussex (v.o.) in March. Specific sightings include 100 at Edmundston Jan. 3 (GT, GV), 30 there Mar. 1 (GV), 30 at Lower Charlo Jan. 19 (ML, AWa), 30 at Fredericton Jan. 19 (DGG) and 20 there Feb. 10 (HAD).

The berry crop held quite a few **Northern Flickers** in the province, including ones that appeared at feeders at Campbellton about Jan. 15 (FC, fide ID) and Moncton Jan. 20 (fide Awi). Others were noted at Alma (fide RJW), Cap-Brûlé (RAM), Sussex

Northern Flicker by Jean-Raymond Gallien

(2--JGW, JnW), Edmundston (GLT), and in the Bouctouche area (MNC line, Mar. 26). A **Hermit Thrush** that appeared to be feeding on moths disturbed from under tree bark in St. Andrews March 17 seems more likely to have been a wintering bird than a spring arrival (TD).

At Moncton, the **Black-throated Blue Warbler** frequented Alma and Don White's feeder till Jan. 5 and a Pine Warbler came sporadically till Feb. 12. A **Yellow-rumped Warbler** appeared Jan. 20 in Salisbury where a **Pine Warbler** continued through Feb. 8 (CC, PC). Another Yellow-rump was seen on White Head I. Feb. 7 (BED). A **Common Yellowthroat** at Bancroft Marsh was last seen Jan. 4 (BED).

Near the province's northern extreme was a male **Northern Cardinal** at St-Hilaire Jan. 17-18 (Hermance Ouellet). **Dickcissels** were noted at Barachois Jan. 1-8 (1-2--v.o.), at Robichaud about the same time (NBBIL), and Saint John West Jan. 6-18 (2--CLJ+). A male **Eastern Towhee** at a Glassville feeder disappeared after Feb. 13 (Ron McBrine+).

Stu Tingley commented on the behaviour of an **Am. Tree Sparrow** that shook seeds out of clusters of alder cones, then flew to the ground and started feeding on them at Pt Lepreau Jan. 4. There was still one at Lac Baker Jan. 13 (GT, GV, AV) and some in the Campbellton area about the same time (S&AN).

An early **Savannah Sparrow** was reported at Jolicure Mar. 30 (TH). One at Doreen Rossiter's feeder in Alma from about Mar. 29 was identified as the "**Ipswich Sparrow**" subspecies (RJW). A **Lincoln's Sparrow**, very rare in winter, visited Andrew MacFarlane's feeders at Sackville during the first three weeks of March (MNC line). **White-throated Sparrows** were generally scarce, but included 8 at Campobello Jan. 20 (Marion Bates) and in the far north one at a Pt. La Nim feeder in mid January (AWa).

Lapland Longspurs were seen at Pt. Lepreau Jan. 17 (JGW, GMi), in a farm yard between Woodstock and Hartland Feb. 8 (a few--GMi), and on the Tantramar Feb. 12 (JT). Hundreds of **Snow Buntings** were seen during a drive through York and Carleton counties Jan. 11 (DLM+), about 1000 on the marsh opposite Moncton about Jan. 12 (JD, CA), and 3 or 4 flocks of 75-150 birds in the Cap-Pelé-Port Elgin area about Jan. 17 (NB). A snow storm Jan. 28 brought a flock to a feeder at Pt. La Nim (ML) and there were "masses" at a Barachois feeder at the beginning of February (NP).

The small flocks of **Rusty Blackbirds** reported are quite unusual in winter: 9 at Riverside-Albert Jan. 3 (SIT), 5 at Courtenay Bay Jan. 26 (MNC), and 7 in Sackville in early March (MNC line). Singles were noted at Markhamville (Peter & Beth Powning), in the St. Croix-McAdam area (DLM+), at Saints Rest sewage lagoon (JGW+) and Edgetts Landing, near Hillsborough (DB). Two **Common Grackles** survived the winter at a Pt La Nim feeder (ML).

Pine Grosbeaks, very scarce in early winter, later became more numerous in the north, for example, seen daily in March in the Bathurst area (PD, LD) and 30 at Edmundston Mar. 1 (GLT, MT). Beginning in mid January, there was a small movement to feeders of **Purple Finches** but one Campbellton feeder had 25 by Jan. 15 and 200 Feb. 19 (FC). Outside the main cities, there were 2 **House Finches** at Ste-Marie-de-Kent in mid February (Mle). An **orange variant House Finch** was noted at Edmundston Mar. 29 (Lise, Monique & Richard Plourde).

At most places **Am. Goldfinches** continued numerous at feeders throughout the winter. At Barachois in January, Nelson Poirier commented "more than I ever had, everyday." There were 200 at a Salisbury feeder in the third week of January (CC), and 50-100 at Rosevale in mid February (Awi). Smaller numbers of **Pine Siskins** joined them in March. **Common Redpolls** were so scarce as to be noteworthy this winter. One bird remained at a feeder at Barachois from January through March (NP), there were 4 at Scoudouc in the first week of February (NB) and one at Castalia on Mar. 21 (Roger Morse).

Spring Arrivals

In early spring it's difficult to separate the small numbers of migrants that appear well in advance of the main migration from the overwintering birds of the same species, for instance a **Common Grackle** at Edmundston Feb. 28 (GV), but a flock of 25 **Canada Geese** flying north near Richibucto c. Feb. 27 (KP) definitely were on their way. Other possible advance migrants were a male **Am. Kestrel** at East Saint John Mar. 2 (KHD), an **Am. Woodcock** calling at Whale Cove, GM, the same day (Marilyn Cronk), 2 **Common Grackles** at Crawford Lake Mar. 4 (PMa) and one singing at Fredericton March 9 (PAP), a pair

of **American Wigeon** at Saints Rest Mar. 14 (JGW), a bright male **American Robin**, 3 male **Red-winged Blackbirds** and a **Common Grackle** at Whale Cove Mar. 14 (BED), and a male **Northern Harrier** at Fredericton Mar. 15 (DGG).

A **Killdeer** was at Castalia Marsh Mar. 18. The following day, one at Whale Cove, 3 **Wood Ducks** at Castalia Marsh (BED) and the first multiple sightings of **American Robins** at Grand Manan set the stage for more major movement. Mar. 20 was one of the first big days for waterfowl migration; 1515 **Canada Geese** and 458 **Common Eiders** passed New Horton Ridge (SIT+). Other flocks of geese passed over Walton Lake, near Waterford (PMa), and up the lower Kennebecasis valley (KHD). A **Great Blue Heron** and several **Song Sparrows** and **Dark-eyed Juncos** arrived at Machias Seal I. (RE) and 2 **Grackles** at St. Andrews (TD). On the 21st 2 **Song Sparrows**, 7 **Red-winged Blackbirds**, and 8 **Grackles** arrived at Alma (RJW).

Song Sparrow by T.M. Shortt

Some of the appearances over the next few days were a **Killdeer** and 2 **Fox Sparrows** at Saint John West Mar. 22 (CLJ); 4 **Ring-necked Ducks** at Long Pond, GM (BED), **Song Sparrows** singing at many locations in the Lepreau area (DGG+), and **Grackle** at Coteau Road, Lamèque I.(Jude Larocque) Mar. 23; a **Red-winged Blackbird** at Rosevale, near Turtle Creek (Awi), **Grackles** in Millidgeville, Saint John (PMo) and one at Fredericton (DGG) Mar. 24; a **Merlin** at Bancroft Point (BED), 19 **Red-tailed Hawks** and several small groups of **Horned Larks** at New Horton Ridge (SIT+), and **Ring-billed Gull** at Évangéline, near Inkerman (Corinne Mallais), Mar. 25.

There was a big movement of birds Mar. 27-29. On the 27th there were lots of **Red-winged Blackbirds** at Saint John West (CLJ); 1289 **geese**, 988 **eiders**, a male **Northern Shoveler**, and small flocks of **Robins**, **Grackles**, and **Red-winged Blackbirds** passing New Horton (SIT+); and a few **Canada Geese** at Fredericton (SS; DGG). On the 28th, there were 5 **Great Blue Herons** at Saints Rest (Aldei Robichaud); 1110 **Common Eider**, 577 **Canada Geese**, 13 **Great Blue Herons**, 22 **Red-tailed Hawks**, 8 **Bald Eagles**, and 1000+ **Robins** passing New Horton (SIT+); numbers of **Killdeer** at Mary's Point and Waterside (fide SIT); **Song Sparrows** in song everywhere and **Juncos** in many areas in coastal Albert County (SIT); and the first modest wave of **Robins** on the Kingston Peninsula (KHD). On the 29th, 867 **Black Scoters**, 650 **Common Eider** and a pair of **Wood Ducks** passed Pt. Lepreau, and there were 9 **Woodcock**, an **Eastern Phoebe** and 5 **Fox Sparrows** there (JGW); the first **Fox Sparrows** at several sites in Albert Co.(SIT) and singles at 2 Sackville feeders (KP; Nev Garrity); **Gannet** at Miscou (Émile Ferron); **Red-winged Blackbird** at Inkerman (André Robichaud); some **Song Sparrows**, **Juncos** and **Red-winged Blackbirds** on the Kingston Peninsula (KHD); a pair of **Wood Ducks** and 8 **Hooded Mergansers** at Fredericton (DGG); and an **Am. Kestrel** at St-Hilaire (PAM, CP).

On Mar. 30 **Killdeer** appeared at Fredericton (DGG) and Landry, near Pokemouche (Donald St-Pierre); **Song Sparrow** and numbers of **Common Grackles** and **Red-winged Blackbirds** at Fredericton (DGG) and Pointe-Alexandre, Lamèque (RAC). On the 31st **Brown-headed Cowbird** was seen at Caraquet (Édithe Robichaud) and there were 22 **Black Ducks**, 6 **Mallards** (GV), 2 **Wood Ducks**, 2 **Hooded Mergansers** (GT) and 2 **Killdeer** (GV) in the Edmundston area.

Mammals

Tracks of a **Fisher**, a rarity in southern N.B., were found at Summerville, near Bayswater, Mar. 9 and 14 (KHD); one had been accidentally trapped near there the previous winter. Grant Milroy was intrigued by short repeated bird-like whistle heard near Hartland Jan. 3. It turned out to be a **River Otter** beside an opening in the ice calling to another just down river.

In late winter, **Bobcat** sightings were frequent in southeastern N.B. One was seen 3 times at a roadside in Crawford Lake, near Waterford, in late February (PMa). At Edgetts Landing, near Hillsborough, Dwayne Biggar was putting out some meat scraps at his feeder and on Feb. 15 attracted a **Bobcat** that kept coming around for three weeks. In late March another fearless **Bobcat** was hunting throughout the day for squirrels and birds around our feeder at Mary's Point (Ellen Brewster). Wildlife biologist Rod Cumberland

suggested that the Bobcat population has been increasing and the ones being seen are likely young animals that were being made to fend for themselves by their mothers.

An early **Eastern Chipmunk** appeared at Shirley Sloat's feeder March 2, and Don Gibson saw a dead **Skunk** also in Fredericton that day. A **brown bat** found on a Fredericton sidewalk Mar. 19 (Margie Pacey) had emerged fatally early.

Abbreviations

+, and other observers; AC, Alain Clavette; AV, Adeline Verret; AWa Andy Watson; AWi, Ajo Wissink; AWT, Tony Thomas; BED, Brian Dalzell; BH, Benoit Hébert; CA, Caroline Arsenault; CBC, Christmas Bird Count; CC, Connie Colpitts; CLJ, Cecil Johnston; CP, Charles Pelletier; DB, Dwayne Biggar; DGG, Don Gibson; DLM, David Myles; EI, Enid Inch; EMM, Mary Majka; EP, Eileen Pike; FC, Flora Couture; GLT, Gisèle Thibodeau; GM, Grand Manan; GMi, Grant Milroy; GT, Georgette Thibodeau; GV, Gérard Verret; HAD, Halton Dalzell; ID, Irene Doyle; JB, Jim Brown; JGR, Jean-Guy Robichaud; JC, Jim Clifford; JD, Joel Daigle; JGW, Jim Wilson; JL, Jim Leslie; JPG, Jim Goltz; JT, John Tanner; KHD, Henrik Deichmann; KMacI, Ken MacIntosh; KNP, Kouchibouguac National Park; KP, Kathy Popma; LD, Luc DeRoche; MGD, Margaret Gallant Doyle; ML, Mike Lushington; MLe, Mike LeBlanc; MNC, Moncton Nat. Club; MT, Martin Thibodeau; NB, Norm Belliveau; NBBIL, NB Bird Info Line; NP, Nelson Poirier; NS, Nancy Sears; PAM, Pauline Morneault; PAP, Peter Pearce; PC, Pearl Colpitts; PD, Pierre Duguay; PMa, Paul Martin; RAC, Rose-Aline Chiasson; RAM, Rose-Alma Mallet; RE, Ralph Eldridge; RJW, Rob Walker; RL, Roger LeBlanc; RP, Roy Pike; RS, Ron Steeves; RWH, Wallace Hale; S&AN, Suzanne & André Nadeau; SIT, Stu Tingley; SJNC, Saint John Nat. Club; SS, Shirley Sloat; TD, Tracey Dean; TH, Thaddeus Holownia; TP, Theresa Pearce.; v.o., various observers.

Errata

Last issue's column was intended to be entitled October-December 1996, not October-November. I was in a rush and didn't notice my mistake. I will mention a couple of other errors. Under **insects**, the second sentence about **green caterpillars** should read "Nev Garrity found one near Sackville Dec. 1, three were caught by the **Mountain Bluebird** at Robertville Dec. 2 and 4 (SIT), and one was seen at Mary's Point Dec. 4 (EMM)." The date of the latest **Sooty Shearwater** was Dec. 6. The paragraph about **Indigo Buntings** was supposed to include only the first sentence.

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