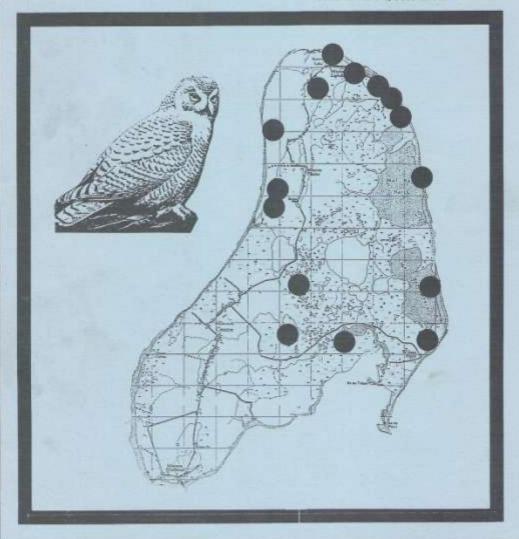
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Cover Illustration Snowy Owls at Miscou Island, Christmas Bird Count, 1987 (CNPA) Illustration de la Couverture Les Harlangs des neiges à l'île Miscou, Recensement d'oiseaux de Noël, 1987 (CNPA)

From the Editors

We're sorry to say we are still behind publishing schedule, but we do hope to catch up. 1987 members can be assured that they will receive all four issues of Volume 16, even though it is now 1988. To get lots of accumulated information out to you, this number is the largest we have ever published. We still have quite a lot of material for the next issue, but beyond that, only ideas and promises. So, please consider putting pen to paper (or fingers to keyboard) and write or draw something to share with your fellow members through this magazine.

The N.B. Naturalist / Le Naturaliste du N.-B. covers a wide range of subjects. Few readers will be equally interested in each article, but we hope everyone will enjoy most of them. The membership represents a broad range of interests in nature. We would like the magazine to reflect that richness, but your help is needed.

In addition to our more regular contributors, special thanks this issue go to Mary Young and Harold Hatheway of Fredericton, Alma White of Moncton, and Jean Isaacs of Kingston. Jean's nature photographs have graced magazines and calendars, but for us she has chosen words to reveal the beauty of spring. We hope everyone of you is able to enjoy nature to the fullest this spring.

David Christie and Mary Majka

Events Calendar

Formal Start for Nature Trust May 31

On May 31, the Nature Trust of New Brunswick will be formally launched by the province's Lieutenant-Governor, Hon. Gilbert Finn, who has agreed to serve as honorary president of the trust. Diane Griffin, executive director of the Island Nature Trust, a similar organization on Prince Edward Island, will be keynote speaker at the inaugural banquet During the evening a leasehold agreement will be signed between Fraser Companies, Inc., and The Nature Trust of New Brunswick, establishing the trust's first nature reserve at Shea Lake, Victoria County. The reserve is well-known for its large variety of orchids and rare plants and for a fine stand of mature hemlock.

All interested persons are invited to attend. The banquet will take place at 7 p.m., May 31, at the Windjammer Restaurant, Lincoln Road, Fredericton. Registration of \$25 per person should be sent to The Nature Trust of New Brunswick, 180 St. John Street, Fredericton, N. B. E3B 4A9.

Federation to Meet in Late August

The N.B. Federation of Naturalists' 1988 annual meeting weekend is tentatively scheduled to be held August 26-28 at Lamèque, hosted by the Club de naturalistes de la Péninsule acadienne. It will be a great opportunity to learn about and enjoy the spectacular beaches, bogs, and shallow bays of the Acadian Peninsula and islands. Mark it on your calendar and plan to attend.

A

From the President

"Wildlife '87" has come and gone, but many of the special events of the year will undoubtedly long linger in the memory. It is important not to lose the momentum that has been generated. I am sure we can all think of ways to maintain it. The Christmas Bird Count, to be reported elsewhere, was identified as the "kick-on" event to the second century of wildlife conservation in Canada. It was well celebrated in New Brunswick: a record 38 counts were conducted in our province, surely more than in most other provinces, and - dare it be said by this writer? - a splendid response to a challenge from Edmonton, Alberta, was made by birdwatchers at Fredericton.

Congratulations go out to naturalists in Edmundston on the formation of the new Club des ornithologues du Madawaska. Nous leurs souhaitons tous les succès. The Federation stands ready to give them every assistance they need. The only remaining part of the province unrepresented by a naturalists' organization is the Campbellton-Dalhousie region. "Restigouche Naturalists" club" has a fine ring to it. Any takers....?

Your Board of Directors met at Fredericton in November and will convene at Bathurst in early April at the invitation of the Nepisiguit Naturalists' Club. Recently letters have been sent to various Ministers of the Crown advising of a perceived threat to an ecological reserve in Tobique River country, requesting that non-consumptive users of wildlife be better represented on the Department of Natural Resources and Energy's wildlife advisory board, and proposing a Fundy hiking trail in Saint John County as an alternative to a planned coastal highway.

A communication was sent to Ducks Unlimited Canada expressing concern about a proposed development project at Castalia Marsh, Grand Manan, and to Grand Manan Museum Inc. supporting early publication of Keith Ingersoll's "Wings over the sea: a biography of Allan L. Moses." The Federation has also encouraged the proper archiving of W. Austin Squires' papers by the New Brunswick Museum.

A donation of \$500 was made by the Federation to support the Maritimes Breeding Bird Atlas project. There still remains a lot of field work to be done. We can all make contributions, big or small, to the data bank. Why don't we? Completed bird atlas projects elsewhere are already showing the many conservation uses to which the information can be put.

The Nature Trust of New Brunswick is reaching the latter stages of gestation. A board of trustees has been named, and the Honourable Gilbert Finn, Lieutenant-Governor of New Brunswick, has graciously consented to be Honorary Patron. A special event is planned for the spring. The Federation wishes the Nature Trust well in this important new initiative. Progress is also being made with regard to establishment of a provincial botanic garden: I hope N. B. Naturalist/Le Naturaliste du N.-B. will keep you up to date.

There are encouraging signs that N.B. Naturalist/Le Naturaliste du N.-B. may be getting back to a regular publication schedule. In many ways it is the cement that binds the Federation together. Let us get behind it, contribute to it, promote it.

In summary, I can report that there has been a fair amount of Federation activity and that there is much evidence of Federation well-being. Let each of us try to enroll a new member so that our voice may be yet stronger. In the meantime — forgive my bias! — there is that Eurasian Kestrel in the border region...

Peter Pearce

On First Looking into a Microscope

Harold Hatheway

Today, when visits to the moon and genetic engineering are the stuff of casual conversation, the suggestion that looking into a standard, optical microscope could be a mind-boggling event may be a bit hard to accept. Nevertheless, that has been my experience.

I was schooled in those pre-scientific days before the Second World War and later, opting for arts at university, I managed to become "educated" without ever hovering over a microscope.

I have always known that use of a microscope could greatly extend my enjoyable but unorganized collecting of nature information. However, as birdwatcher, hiker, canoeist, camp builder and general nature groupie I felt no real lack and, as a beginning plant-watcher, an eight or ten-power hand lens showed me all I thought I wanted to see. After all, my reference was the widely recognized Peterson's Field Guide to Wildflowers, carefully crafted to serve exactly my level of expertise.

However, the observer who stops at the Field Guide remains blissfully ignorant of the seething world of subspecies. Peterson does give warnings, like the deceptive note, on a page showing five distinct plants: "Hawkweeds. A highly variable group, 19 or 20 occur in our area." Bear in mind that "our area" takes in northeastern and north-central North America, with habitats ranging from Cape Breton to Missouri, and from northern Minnesota to Virginia; from Atlantic headlands to near desert and from black spruce swamp to mountainous timberline. Within such a range a single species can be strongly effected by the environment, and the subspecies which have developed over the years defy even the experts.

Nevertheless, "fools step in..." and the beginner has the secret conviction that a bit more reading, a course or two, and some expensive paraphernalia to lug through the fields would magically elevate him from beginner to a legitimate, if junior, member of the botanical fraternity.

Alas, nothing is quite that simple. Equipment without knowledge is useless weight; basic courses tend to be designed as dry pre-requisites for "real" students, and reading brings the realization that the charming clutter of green and flowering things seen by the beginner is taken very, very seriously by the professional.





First off, one has to learn a new language — as a matter of fact, several new languages. Not only are Latin and Greek far from dead in the world of botany but, perhaps more confusing, the "normal" conversation of botanists is equally unintelligible in either of Canada's official languages.

One is plunged into a world of bracts, meristems, monocotyledons (soon casually reduced to "monocots") and an ever-more-specialized glossary, which led Fernald, one of the most distinguished authorities, to define no less than sixty (presumably) distinct terms to describe the ways in which a plant is not smooth!

Not only is the novice required to learn new languages to describe previously unsuspected parts and aspects of plant life, it is soon apparent that much of the newly acquired information is impossible to verify with the naked eye, and even the trusty hand lens is, at best, a crude and limited tool.

Inevitably, the microscope must be confronted. True, there are no threatening winking lights or bleeping signals, but this is clearly a professional, scientific instrument. What right does a rank amateur have to use such a tool — and how can an untrained person be expected to know how to adjust, focus and control it? Simple instructions are given, assurances that common sense makes serious damage almost impossible and, quietly, quickly and without warning, you enter a new world!

Imagine being so small that one little flowerlet from an elderberry cluster seems the size of your dining room table — then grows to the size of the dining room itself — while you float down, down into the heart of the flower, slide down a stamen, glowing gold and infinitely soft, down to the huge round bed from which stamens and pistil spring like pre-carboniferous vegetation.

Then up from the depths, to the back of a leaf, to wander through a surrealistic design of huge, curving, interlocking hairs, on a velvet carpet of every imaginable shade of green, to where the leaf stem sheathes the branch in cloth of gold; a branch studded with delicate bas-reliefs, like the carvings on the walls of some mysterious ancient city.

Dissection under the microscope heightens the unreality. Not only is the scale completely outside normal experience; the needle point must be manipulated by a hand still in the "real" world, a hand which must be rigidly disciplined to transform wild lunges into the most minute, precise and controlled of movements. Perhaps Gulliver's Travels should be prerequisite reading!

Then, much too soon, it is over. The world is, indeed, "too much with us". It is painful to leave this multi-dimensional world of wonders, of brilliant colours and textures which seem to caress the eye. It is deflating to find yourself sitting at an everyday table, trying to record memories of the vanished beauty in the dry, exact, terminology demanded by science. On reflection it is no wonder Fernald needed sixty terms to describe "not smooth" — six thousand terms could not do justice to the glory that is one grain of pollen.

"Miracle" is a badly overworked word, but I am hard pressed to find another to adequately describe what I find under the lens. Best of all, and unlike most great experiences, this one can be relived. I can go back to that world, and a thousand, thousand others like it, again and again. For me, the microscope is a magic carpet, carrying me to the corners of another universe, at the flick of a switch.

Lords and Ladies in Distress

Sandy Burnett1

If you should chance to see a group of delicate little waterfowl with sharply patterned slateblue, white, black and rusty plumage, swimming in the sheltered waters of some rocky cove in Newfoundland or Nova Scotia, or among the islands in the lower Bay of Fundy, stop and take a second look. And if you should happen to be carrying a shotgun, hold your fire.

The birds are Harlequin Ducks, widely known as "lords and ladies", and there are likely fewer than a thousand left in eastern North America.

Their small numbers in this region are something of a mystery. In Iceland, there are estimated to be more than 5000 breeding pairs of the tiny sea-ducks. In southern Greenland they are reported to be "fairly common", and the Pacific coast harbours a population of more than a million.

A review of writings by hunters and ornithologists over the past century suggests that Harlequins have never been very numerous in these parts. The earlier accounts refer to winter flocks in the Gulf of St. Lawrence, off Newfoundland and south to Cape Cod which numbered in the hundreds. Mid-twentieth century observers speak of flocks of a few dozen; yet, last month, aerial surveys of known wintering spots in Nova Scotia found only about 100 birds — in small, scattered groups.

For some reason the Harlequins of Atlantic Canada are declining, little by little, towards the point of no return. Why this should be happening is a question on which wildlife biologists are currently focusing their attention.

Most Harlequins in eastern Canada nest along turbulent streams which flow into the Atlantic Ocean and Ungava Bay from the rugged Torngat Mountains of Labrador. Even there, in prime breeding territory, they are uncommon. A survey last summer revealed a probable density of about one pair for every ten kilometres of suitable habitat. In other parts of the world ten times this density — i.e. one per kilometre — is considered to be low. Is it possible that the food supply on these cold, nutrient-poor streams is too limited to sustain a greater number of breeding birds?

Harlequins winter in sheltered coves along rocky shorelines, where they forage for prey among the seaweeds of the intertidal zone. They tend to stick close to a few traditional sites, a habit which could make them especially vulnerable to unexpected calamities. An influx of heavy pack ice could block access to their feeding areas. A spill of oil or toxic chemicals could devastate an entire wintering flock.



Last but by no means least among possible reasons for their decline is the pressure of hunting. Although in recent years significant numbers of Harlequins have been taken only in Newfoundland, they are no strangers to east coast hunting lore. Evidence of this appears in the wide variety of popular names by which they are known in various pats of the region: "rock ducks" from their preferred feeding sites; "lords and ladies" and "white-eyed divers" with reference to their elegant plumage; "squeakers" and "sea-mice" from their high-pitched calls.

¹One of an ongoing series of articles by free-lance writer and naturalist J. A. (Sandy) Burnett, under the sponsorship of the Canadian Wildlife Service.

It would be hard to prove the precise extent to which hunting has contributed to the neardisappearance of these birds from our shores. However, it is worth noting that in Iceland a similar steady decline continued until the 1960s, when the taking of Harlequin Ducks was outlawed. Since then, the population has shown promising signs of an excellent recovery.

When a particular wildlife population falls below a certain level, it no longer matters what the primary cause of the decline may have been. Any further stress may be enough to push the remaining number out of existence. Waterfowl biologists suspect that the eastern Canadian population of the Harlequin Duck may be close to this critical point.

In an attempt to reverse the trend, the Canadian Wildlife Service recently clamped down on the shooting of Harlequins, and published an attractive information brochure, "The Harlequin Duck: Help Protect It", to inform sportsmen about the need for strict conservation measures. Still, regulations in themselves are only symbolic; compliance will be the key. Given wise management and the support of hunters, it is not too late to predict with confidence that the elegant little "lords and ladies" will continue to grace the shores of Atlantic Canada.

The Most Curious Pitcher

C. Mary Young1

From the time of the early explorers to the present day, botanists have been fascinated by the strange appearance of "curiosities" of the plant world.

"Among the plants to be distinguished" wrote Sir James Alexander in the 1840s, while engaged in surveying the route of a proposed military road from the bend of the Petitcodiac (Moncton) to Grand Falls,

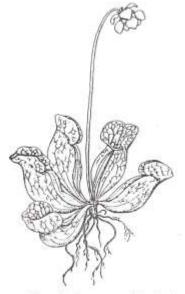
is the rare and most curious Indian cup or pitcher plant (Sarracenia Purpurea), the leaves of which have their edges united together, so as to form a deep cup filled with water, distilled probably from the moss in which the plant is found. From the circle of the pitcher-leaves rises a stem, eighteen inches in height, and crowned with a circular leathery flower with five reddish petals.²

The plant had been named Sarracenia purpurea L. in honour of Michel Sarrazin, plant collector and médecin du roi, a resident of Quebec; a century and a half before Alexander's time, he had collected specimens on the Avalon Peninsula of Newfoundland.

In 1839 James Robb, lecturer in natural science at King's College, Fredericton, commented on the appearance of and the numbers of dead and living insects in the cups of the pitcher plants collected near the college. In a letter to his mentor Sir William Hooker, then professor of botany at Glasgow University and later the director of the Royal Botanic Garden at Kew, he wrote:

I have been paying a good deal of attention to the Sarracenia which is very abundant in our swamps. In early spring the ascidia are always full of water & at the bottom is a mass of stuff among which I recognize 50-60 bodies of Coleoptera, Diptera, Neuroptera, & even Hymenoptera and spiders. — in early Spring there is often a difference of 10-20 or even 30°F between the temp. of the air or the water at the roots (among sphagnum &c) and that in the cups. — (This is owing doubtless to the reflection of heat downward). By the bye I discovered 30 or 40 carnivorous larvae (probably of a dipterous insect) these sport about in the tepid water and cyiscerate the dead insects — after a time these escape how I can't well say & during the season

¹The author is grateful to The Legislative Library, Fredericton; The Harriet Irving Library, University of New Brunswick; The Archives, Royal Botanic Garden, Kew, for the use of books and papers used in this article, ²Alexander, Sir J.E., 1849. L'Acadie or Seven years Explorations in British America. 1:257.



deposit their ova in the cups which are vivified next spring and nourished by the animal matters so abundant within. The water I have reason to believe comes from the atmosphere. It is very slightly acid. There is certainly a cuticle on the inside of the leaves — the leaf of the plant has reticulated venation, hence it cannot be formed by the folded petiole as is alleged... To me it appears to be a true leaf...

Robb's measurements of temperature are particularly interesting and pertinent, as are his count of dead insects, his check on the acidity of the fluid, his comments on the structure of the pitcher, and observations on the insect larvae.

Robb was content merely to report his observations. Alexander, however, was not so cautious:

The use of the water in the pitcher seems to be this (and it is indeed a singular arrangement of the great Creator) mosquitoes are reared therein, for they are seen to issue from the cups in numerous flights in spring, whilst to support them in their aquatic stage of life, the small bristles which line the inside of the lip of the cup conduct flies into the watery receptacles, where they are drowned, and are devoured by the young brood.

Mosquito larvae certainly do live in the liquid of the cup. The larvae of the mosquito Wyeomyia smithii Coq. are curiously adapted, for not only do they live in the fluids which are certain death to many insects but, unlike the larvae of of other types of mosquito, they are able to withstand the low winter temperatures ensconced in a solid block of ice — the frozen contents of the cup.²

Sir James Alexander expressed views that were in keeping with the time and suggested that the pitchers were expressly created by God for the use of the mosquito.

It does not appear to have occurred to either Alexander or Robb, that the dead insects also found in the pitchers, might in some way be serving the plants. That was left for Darwin to demonstrate in his *Insectivorous Plants* 1874.³

Pitcher plants live in acid bog and peaty soils often deficient in nutrients particularly nitrogen. The insectivorous habit enables them to overcome this deficiency. Insects which fall into the passive trap are drowned in the fluid and attacked by digestive enzymes which break down the protein, starches and fats of the insect bodies. The process is probably aided by bacteria which are frequently found in numbers in opened pitchers and the nutrient solution so formed is absorbed by the plant through cells at the base of the cup.

These observations were all made in the nineteenth century. Recently, research on carnivorous plants including Sarracenia has involved the use of electron microscopes and radioactive tracer substances enabling scientists to examine cellular structure and to determine the movement of molecules and ions. Although digestive enzymes are secreted by the plant when the pitcher first

¹James Robb to Sir William Hooker, 6 Feb. 1838. North American Letters, v. LXIII. ff.143-4. Archives, Royal Botanic Garden, Kew.

²Bates, Marston, 1949. The Natural History of Mosquitos, MacMillan Co., New York. 117, 176.

³Darwin, Charles, 1897. Insectivorous Plants. D. Appleton & Co., New York, 453 pp.

⁴Heslop-Harrison, Yolande, Feb. 1978. "Carnivorous Plants." Scientific American 104-114.

opens, the fluid later becomes alkaline and is populated with commensal bacteria which take over the breakdown process of the dead insect tissues. The breakdown products are absorbed continuously but the different molecules and ions (amino acids, phosphate and sulphate ions) are absorbed at different rates.

Botanical texts and scientific papers present detailed information on structure, physiology of digestion, gland function and the movement of molecules in the cells of the pitchers. Entomological texts discuss the life cycle and habits of the resident Wyeomyia smithii mosquito. Is there, however, any account bringing all these factors into ecological focus examining the precise interrelationships of habitat, plants, their physiology, commensal bacteria an dependent mosquitos? Why, for instance, are the mosquito larvae which make their home in the pitchers not attacked by the digestive enzymes which deal so effectively with insects which fall unwittingly into the trap? Do the pitchers serve as an ecological niche for other types of insects? Do the mosquito larvae feed entirely on the commensal bacteria or are they partially carnivorous, competing with the plant for the nutritive substances available by virtue of the plant's remarkable adaptation to its habitat? The bogs of New Brunswick present us with fascinating challenges.

Oh Those Tides!

The Reversing Falls Medal goes to free-lance writer (and imaginative nature observer) Nan Drosdick. Writing in the *Hartford* (Conn.) Courant of Sunday, May 5, 1985, under the heading "Bay of Fundy Has High Tides, Ferry Boat Rides and Sunsets," Drosdick advised readers to arrive in St. Andrews "...when the day is about to give up its light to streamers of sunset." She continued:

"Find a place to sit for a while not far from the shoreline. Now watch. And listen. One of the world's greatest natural phenomena is about to happen.

"Off in the distance the gurgling starts. A billion tons of the North Atlantic begin to gush into the bay. Once past the wide bay mouth, the tide boils up, storming against the coastlines of this ever-narrowing estuary. The tide seethes, rushing in as a tidal bore, a singular wave carrying whale, porpoise, and schools of cod, mackerel, flounder and herring in its wake.

"Flocks of osprey, cormorant and tern swoop and cry out above the foaming turbulence. The tide will crest at more than 50 feet about 130 miles further east where the bay is narrowest. At St. Andrews on the protected Passamaquoddy Bay, it will rise about 25 feet and then pull back to reveal bits of jasper, peridotite, agate and quartz on the bay floor."

Have we been missing something here?

[From Sunbury Notes, No. 39, Summer 1985; Sunbury Shores Arts and Nature Centre, Inc., P.O. Box 100, St. Andrews, N. B.]

Institute for Field Ornithology Programs

**

The Institute for Field Ornithology at Machias, Maine, has announced its summer course offerings: bird population studies June 19-24, warblers July 3-8, seabirds of the NW Atlantic July 31-Aug. 6, shorebirds, Aug. 7-12. Registration is \$350 to \$405 U.S. Other bird workshops will be offered in Washington State and New Jersey. For information, write to the institute, University of Maine at Machias, 9 O'Brien Ave., Machias, ME 04654.

La tourterelle triste



Rose-Aline Chiasson

Triste? Pourquoi triste? C'est pourtant un bel oiseau brun d'une trentaine de centimètres de longueur, au corps élancé, à une longue queue pointue, bordée de blanc. Son cri long et plaintif qu'elle émet le soir jusqu'à la noirceur et tôt le matin, est la raison de son qualificatif de triste.

La Tourterelle possède une petite tête en comparaison de son corps, un petit bec mince, elle s'envole en faisant siffler ses ailes en saccades. On la trouve dans presque toutes les zones déffrichées au Canada, surtout près des fermes, sur les terres à découvert avec quelques arbres et arbustes. Elle se nourrit surtout de graines de mauvaises herbes. D'après certaines études, faites en baguant ces oiseaux, la Tourterelle peut vivre 10 ans à l'état sauvage et jusqu'à 17 ans en captivité. Elle s'accouple aussi pour la vie; et sa vitesse au vol peut atteindre 90 km/h.

Cet oiseau très rare au siècle dernier, se répand de plus en plus. On croit qu'il en aurait de 400 à 500 millions aux États-Unis. Àcause de cette abondance, 38 des 50 états autorisent maintenant la chasse à la Tourterelle et on estime à 50 millions par année le nombre de tuer. Ce n'est pas pour protéger leur récolte, ni pour la nourriture, c'est avant tout pour le palisir de chasseur, pour les uns et pour les retombées économiques pour les autres. Au Québec, des groupes font pressions pour pouvoir eux aussi chassr la Tourterelle mais jusqu'à maintenant, le gouvernement a résisté, mais pour combien longtemps?

Au N.-B., il semble que ces dernières années, la Tourterelle augmentent beaucoup en nombre. En 62-63, dans 10 recensements, il n'y a pas de mention de cet oiseau; en 72-73, on mentionne qu'on 1'a vue durant la période du recensement. En 74-75, sur 27 recensements, on en compte 16; en 82-83, sur les 28 comptes, on a un total de 213 et en 85-86, sur les 30 recensements on en a observé 706 individus.

Aux cours des années 70, si on pouvait voir une ou deux Tourterelles dans le nord du N.-B., la chance étair avec nous. Maintenant, on peut les admirer une dizaine à la fois. Nous avons même la preuve de nidification sur l'île Lamèque et plusieurs passent l'hiver avec nous en trouvant leur nourriture dans les mangeoires.

Cet oiseau, que les auteurs de guides d'oiseaux n'osent pas encore indiquer comme fréquentant notre région, s'y trouve en assez grand nombre. Nous comptons bien les admirer pour plusieurs années encore.

Chesterfield Nears 500

Canada's top bird lister neared his goal of 500 species seen in Canada in late January when he "ticked" the famous Eurasian Kestrel at Minudie, N.S. at the end of a daylong search and a strenuous hike onto the marshland to get an adequate view of the bird. It was a tough bird for Norman Chesterfield. An earlier trip from his Wheatley, Ontario home failed because the kestrel had moved away from its then-known haunts at Fort Beauséjour, N.B.

Jubilated at his success with number 499, Norm is eagerly looking forward to his 500th species, probably later this year. He advises Maritimers to watch out for White-winged Dove and Gull-billed Tern, two birds he hasn't seen, which occur here more regularly than anywhere else in Canada. If you see one of them, call Norman Chesterfield collect at 519-825-4509.

Find a Better Bunting, and...

Alma White

Often when in pursuit of a reported rare bird, the thought occurred, how nice it would be if, just for once, one of those would stray into my garden, and stay long enough for me to share its glory and play host to my birder friends.

Well, day dreams do sometimes come true. On November 11 of last year all this came true for me. That was when a glorious Painted Bunting alighted on my feeder in Moncton. I've marvelled at this exotic creature on the pages of field guides, but never really believed it would look "just like in the book". The truth was, in bright sunlight, it was even more beautiful.

The memory of its sudden appearance will be stamped forever on my memory, and so will many other choice anecdotes of the next few hectic days to follow. I'd always prided my ability to stay cool in an emergency, but it took three goes before my trembling fingers could dial correctly the Mary's Point number to report my guest. Then there was husband Don's reaction. He had just come inside after moving the feeder to a better place for viewing from the kitchen, and he greeted me with scorn when I remarked that yes that was a much more sensible location and that a Painted Bunting had just flown on to it! His expression turned from scorn to incredulity as he saw for himself that I wasn't kidding.

Then there is a treasured memory of two excited birder friends, both somewhat hefty in stature, waiting patiently in the porch for the bunting to re-appear when a beckoning hand from outside indicated a sighting further down the street. The agility they displayed, one still in his indoor footwear, as they catapulted outside and sped away over the icy snow like marathon runners was indeed a sight to behold. As I followed ready to render first aid, neighbours on the street paused in their snow-shovelling and were rewarded by a whoop as one of the two celebrated his first sighting of his quest by embracing me in the middle of the street. A puzzled neighbour on the other side of the house thought her house was on fire when another group sped across her backyard to join the fray.

So, as I had dreamed, birders did flock to my door. The bunting stayed around for three days and thus treated almost all of those who drove many miles in its honour to a glance of its beauty.

Am I satisfied? Grateful, yes, but now I'm always on the lookout for the next rarity. What a wonderful way to meet new friends, be reunited with old ones, and to stimulate interest in birding in the neighbourhood.



Ordering Bird Checklists

Members wishing to purchase copies of Check-list of New Brunswick Birds or Liste d'oiseaux, Nouveau-Brunswick may do so from The New Brunswick Museum (tel. 658-1842), 277 Douglas Avenue, Saint John, N.B. E2K 1E5 (Attn. Vivian Hachey, bookstore manager). The cost is 25¢ each.

Federated clubs may purchase checklists, at a reduced price, for resale to their members by contacting the federation treasurer, Harriet Folkins (tel. 433-1801), P.O. Box 12, Sussex, N.B. E0E 1P0.





Spring's Small Wonders

- through the eyes of a photographer

Jean Isaacs

Early January weather that pushes the thermometer to record high levels makes it easy to "think spring". With several days of deceptively balmy air, plus an overnight rain, the snow completely disappears. The warm red-brown of alder bushes deepens and even the branches of birch trees show rosy hues.

In an indefinable way, there is something special about the approach of spring. There's a vague, elusive sense of anticipation before there is any obvious evidence of the new season.

In this corner of the country, on a Scotch-misty morning, when fields are still brown and dead, you can walk into the woods and find encouraging signs. On old stumps and fallen branches, there are bright patches of red where British soldiers display their scarlet lacquer caps. The moisture and just a hint of warmth in the air have revived them, along with grey-green pixie cups, reindeer moss and other less conspicuous lichens. Snow may still linger in hollows but mosses have turned freshly green in a deep spongy cushion on the forest floor. The glossy evergreen leaves of goldthread appear in patches scattered through the moss.

No matter what the vagaries of the weather, no matter what delays may occur, the evidence is clear that spring is on its way. Soon the gold of coltsfoot will brighten the the gravel shoulders of the roads — a sure signal that mayflowers will be scenting the air in those secret places in the woods. By mid-April, the first tiny bluet will lift its cheery face to the sun. Whether it's only a small cluster, or vast drifts of blossom filling whole fields, these diminutive flowers with their pale blue petals and bright gold centres, are especially appealing.

Even after the first bluets have flowered, events may still move at a foot-dragging pace, but then one day, spring can suddenly burst upon us, and "burst" is the operative word. Warm morning sunshine brings a rapid temperature climb and all the pent-up leaf and flower buds seem to open at once. You can almost see the change happening as yesterday's bare tree silhouettes are softened with a mist of sudden green in a dozen different shades. Wildflowers appear like magic in woods and fields.

So much happens at once that nature photographers may wonder where to begin. Most of us have numerous photographs of spring flowers native to our own area, but every year offers a new challenge. Whether your approach is interpretive or purely documentary, this may just be the year you'll make the ultimate image of violets, trout lilies, trilliums, or lady's-slippers. It could be the year when rhodora or lupines or daisies put on a special show for your lens.

The succession of wildflowers alone can keep most photographers well occupied for weeks, but there is a wealth of other small wonders too fascinating to be ignored. Pussy willows are perennial favourite, and understandably so, but the catkins of alders and birch and poplar deserve attention, too. Many other trees produce their bloom before leafing out begins or is complete. Wild fruit trees splash clouds of white and pink along hedgerows, but most tree blossoms are usually small and often inconspicuous. The conifers present some interesting examples. Male flowers of pines produce clouds of yellow pollen; the element of chance with wind pollination demands a huge volume in order to insure reproduction. Sparkling with dew in the morning sun, the rosy female flowers of the larch are exquisite small jewels. The male flowers are insignificant yellow-green bumps on the same twigs. The spruce family also produce similar, though larger, upright purple flowers, which eventually become the seed-bearing cones. The complexity of all these

designs is worthy of close inspection. If you don't carry a camera with you, a small magnifying glass or hand lens will reveal the intricate details.

Fern croziers begin to push their way through the leaf mould early in the season. Like the woodland flowers, their growth must be well advanced before the leaf canopy reduces the amount of sunlight reaching the forest floor. Each fern species has its own individual characteristics, and as the fronds unfurl, they offer intriguing designs for the camera lens to explore.



Documenting the development of budding leaves can be another absorbing photographic project. One of the loveliest leaf buds is that of the striped maple. The glossy, cherry-red scales spread open to release a fat, pale green bud, its downy surface blushed with rosy colour. The leaves of many trees and shrubs emerge from their bud scales folded down like miniature parasols, which gradually expand as they open. The new foliage of maples, beech, birch, cherry and other trees each add a different hue to the blend of gentle tones in the forest canopy.

Viewed through a macro lens, the slim sporangia of hair-cap moss, on their orange-yellow stalks, look for all the world like miniature sky rockets about to take off. As they mature, the fizzy capsules grow fatter and eventually shed the hairy cover and the cap beneath it, to scatter their spores to the wind. Cushion moss, growing on rocks and old stumps, presents a forest of bright green capsules, each one drooping gracefully from the top of a shiny red stem. The translucent capsules and stems, backlit in the morning sunshine, make for a magical abstract composition — an opportunity to let your imagination run away with you.

Wherever we live across this broad land, nature's small wonders offer a visual feast of shapes and hues, a rich source of excitement and challenge for the photographer. And of course, thy are only a part of the complete picture. The land itself — mountains, prairies, arctic tundra, ocean shores, forests and farms, all laced together, with a web of rivers and lakes — responds to the new season in an infinite variety of ways, each of them inviting expression on film.



Neck-collared Canada Geese

Over 25,000 Canada Geese in the Atlantic Flyway have been marked using yellow neck collars with black letters. The lettering consists of a four digit code (two letters and two numerals) allowing the individual identification of each bird marked.

The banding is part of a flyway-wide study to learn more about the migration movements, wintering distribution, harvest patterns, and survival rates for migrant Canada Geese. Your assistance in reporting observations of marked geese seen in your area would be greatly appreciated. Please report date, locality, habitat, neck band colour and inscription, and size of flock in which the banded individual was seen, to: Myrtle Bateman, Canadian Wildlife Service, P.O. Box 1590, Sackville, N.B. EOA 3CO.



Christmas Bird Counts

1987-88

David Christie



"Experience the birds of Christmas" proclaimed Wildlife '87's brightly coloured sweatshirts, and over a thousand New Brunswickers did just that. Participating in the 88th annual Christmas Bird Count (CBC), they established provincial records in all measures of count effort: 38 count areas, 507 field observers in 243 parties, 1279 party-hours, 11,154 party-km, and 572 persons reporting from 552 bird feeders.

New counts were begun at Miscou Island and St. Stephen—Calais. At Edmundston, where CBCs had been conducted 1977-1979, a count was established in a different circle by the new Club des ornithologues du Madawaska. A much enlarged Fredericton count contributed significantly to establishment of many of the new records (see p. 52).

Fairly cold temperatures and heavy snow cover during the CBC period did not seriously hamper most counts. The record effort, combined with good crops of seeds, fruits and other foods¹ in certain areas, produced a record total and variety of birds: 108,848 individuals of 121 species. Eight additional species were reported during the count period. Record high tallies within a 24-km circle were established for 18 of the 121 species, while the old record was equalled for nine species.

Four species and one subspecies were reported for the first time in New Brunswick count history, a Red-bellied Woodpecker at Sackville, four House Finches (no surprise) at St. Stephen—Calais and one at Moncton (They were also seen during count period at St. Andrews.), a Boreal Owl in the count period at Lameque Island, and one of very few Eurasian Kestrels ever identified in North America [more about it next issue] in the count period at Sackville. Northern Orioles have been found before, but this year's bird at Fredericton during count period is unique in being the first record of the western subspecies, "Bullock's Oriole".

Counted for only the second time were a Gadwall and a Lesser Scaup at Saint John, a Tufted Titmouse at Bathurst, 2(!) Gray Catbirds at Fredericton, an American Woodcock during count period at Grand Manan, and a western subspecies, "Oregon Junco", during count period at Caraquet.

Winter bird populations fluctuate a lot from year to year. Taking the amount of observation into consideration, it was a great season for land birds. About three times as many species were found in above average numbers as those that were below. Among water birds, species more numerous than usual approximately balanced the number that were less common.

Miscou Island and Sackville reported two thirds of the total of 39 Snowy Owls counted, our best-ever CBC flight, registered in 12 areas. This winter's CBC also had the biggest-ever flights of

¹Fewer than half of the compilers reported the state of food resources in their areas (no reports came from northern coastal areas, only two from the lower Saint John valley). Conifer seed crops were mostly of small to moderate size but were reported as large at Pennfield, Minto and on the Upsalquitch. Birch and alder seed crops and fleshy fruits were greater, moderate to large in almost all areas. The upper Saint John valley had moderate to large amounts of maple seeds. Available weed seeds, which varied greatly, were largest at Sackville and in 3 areas on the U.S. border. Moderate to large mouse populations were reported along the Bay of Fundy. Snowshoe Hares were moderately common in the southeast, numerous on the Upsalquitch and at Eastport-Campobello, scarce elsewhere.

Northern Shrikes and Bohemian Waxwings. Among resident birds we had the highest totals for Ring-necked Pheasant, Mourning Dove (increasing steadily since the early 1970s), and Pileated Woodpecker (increasing the past four years)

Good numbers of Red-tailed Hawk, Black-capped Chickadee, Red-breasted Nuthatch (most since 1974), White-winged Crossbill, Pine Siskin, American Goldfinch, and Evening Grosbeak (although down from 1986) were counted. Notably low in numbers were Horned Lark, Boreal Chickadee, Common Grackle, Brown-headed Cowbird, Purple Finch, and House Sparrow (dwindling since 1975).

Among water birds, Common Eider, Herring Gull, and Bonaparte's Gull were the three species seen in particularly good numbers. Common Loon, Mallard, Common Merganser, Iceland Gull, and Black Guillemot were somewhat more common than they usually are. Although Great Cormorants were down, the counts featured several Double-crested Cormorants lingering late in four areas. Bufflehead, Purple Sandpiper, Great Black-backed Gull, and Black-legged Kittiwake were less common than in recent years, and numbers of Greater Scaup, Surf Scoter, Red-breasted Merganser, and Razorbili were especially low.

Looking through the results, it is obvious that many species winter in highest numbers in southern parts of the province. However, Oldsquaw, Snowy Owl, Gray Jay, Boreal Chickadee, and Snow Bunting were relatively more common in the north, while such birds as Downy and Hairy Woodpeckers, Blue Jay, Raven and Evening Grosbeak were fairly evenly distributed across the province. Pine Grosbeaks were moderately common in west-central New Brunswick but very scarce elsewhere (see map).

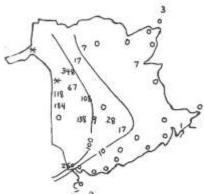
When there were 30 or fewer CBCs each year, a single table was adequate for presenting the results. This year, to avoid the minute print of last year's report, we are dividing the results into two tables, first the inland counts, second the coastal areas and provincial totals.

In closing, I would like to thank Hilaire Chiasson, who rewrote my translation of the Christmas Bird Count forms and instructions, so that we could have materials in French for use in predominantly francophone areas.

Weather Words

"Too cold to snow" — Sometimes it is said that it is much too cold to snow. That is not true, Actually, if it is extremely cold not very much snow can fall because the amount of moisture which the air can hold depends on its temperature. The warmer the air is, the more moisture it can hold. Therefore, the heaviest snowfalls occur when it is relatively mild, and the snow comes down in rather large flakes. As the air becomes colder the snow flakes become finer and those which fall on very cold days are extremely fine indeed. However, no matter how cold the air gets, there is still a tiny amount of moisture in it, and this can fall out of the air in the form of very small snow crystals, thereby contradicting the saying that it can be too cold to snow.

[From Weather Facts and Fancies, by Reuben Hornstein, Atmospheric Environment Service meteorologist and broadcaster; reprinted from Environment Canada's Atlantic Region Newsletter No. 10, 1985.]



Numbers of Pine Grosbeaks seen per 100 party-hours, 1987-88 CBCs.

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Jemseg (Jem) 25th year

Jan. 3; 0715-?; Clear, no precipitation; temp. -21° to -4°C; wind SW, 0-8 km/h. fields snow-covered; almost all surface water frozen.

Mike Casey, Rod Currie, Jim Edsall, Nev Garrity (compiler), Don Kimball, David Myles, Diane Myles, Marven Palmer, D. Soudek, Rudy Stocek, Owen Washburn, Susan Washburn, Blair Wood.

Minto (Min) 2nd year

Dec. 26; 0800-1600; Cloudy; temp. ?; wind W, 5

km/h. 50 cm snow cover; water frozen.

Loris Boucher, Ann Boucher, Lionel Girouard (compiler), Edward Gallant, Alan Gallant, Lionel LaPointe, Ted Murphy, Georgina Murphy, Vincent

Fredericton (Ftn) 32nd year

Dec. 20; 0715-1700 + sev. hours before light and after dark. Clear in a.m., gradually clouding over, snowing by 1530; temp. -22° to -6°C; calm, wind E 14 km/h after dark. 34 cm snow cover (+ 5 cm later in day). Alison Adams, Peter Adams, Sheila Andrew, Bill Ayer,

Brian Bartlett, Lester Bartlett, Dan Baudette, Ken Belanger, Joseph Blais, Wendie Blais, Amie Boer, Raymond Breau, Imelda Brown, Dan Busby, Ann Caferty, Don Cafferty, David Campbell, Eric Carr, Mike Casey, Nicole Clarke, Gerry Clayden, Susan Clayden, Steve Clements, Tim Cooper, Jeff Cotter, Merlene Crawford, Stan Crawford, Rod Currie, Donna Davis, Greg Davis, Jack Davis, Andy Didyk, Barb Douglas, Wayne Donaldson, Lucy Dyer, Jim Edsall, Horst Eiselt, Marianne Eiselt, Paul Estabrooks, Margaret Forster, Jeremy Forster, Don Fowler, Al Francis, Greg Gamble, Robert Gamble, Nev Garrity, Blanche Gay, Don Gibson, Doug Gibson, Margaret Gibson, Lionel Girouard, Marion Gollings, James Goltz, Gayle Greer, Heidi Grein, Eloise Harding, Vernon Harding, Harold Hatheway, Barb Hildebrand, Hal Hinds, Henry Holland, Barry Hunter, Lynn Insley, Philip Iverson, Bruce Judah, Donald Kimball, Dave Kristmanson, John Lavigne, Morris Lemire, David Lounsbury, Cathy MacLaggan, Theresa Madigan, Scott Makepeace, Milda Markauskas, Sue Martin, Steve McAllister, Brian McEwing, Michael McEwing, Jamie McLaughlin, Moira McLaughlin, Kevin McQuinn, Monique Michaud, Albert Morais, Doug Morrison, Dale Morton, Sean Morton, David Myles, Paul Nicholson, Lisa O'Hara, Steve Oliver, Marg Olive, Mike Oudemans, Marven Palmer, Robert Palmer, Peter Papoulidis, Peter Pearce (compiler), Therese Pearce, Earlin Philips, Mark Phinney, Doug Quiring, Gerry Redmond, Lionel Richard, Boyd Richards, Mark Roberts, Fran Robinson, Dwayne Sabine, Kim Saunders, Bev Schneider, Marc Schneider, Shirley Sloat, George Smith, Georgette Smith, Lorna Smith, Dusan Soudek, Jennifer Soudek, Anne Spencer, Alfred

Steeves, Rudy Stocek, Rudy Stocek Jr. Jane Tarn,

Morina Thomas, Tony Thomas, Don Townsend, Glenda Turner, Owen Washburn, Swan Washburn, Bob Watt, Ron Wilson, Blair Wood, Marg Wood,

Mactaquae (Mac) 8th year

Jan. 1; 0800-1700. Overcast, intermittent snow flurries; temp. -24° to -10°C; calm. 60 cm snow cover; most

water surfaces frozen.

Gerald Clayden, Jim Edsall, Don Gibson, Hody Gibson (a Golden Retriever!), Jim Goltz, Ed Keenan, Leona Keenan, David Myles (compiler), Peter Pearce, Owen Washburn.

Stanley (Sty) 13th year Dec. 19; 0800-1600. Cloud and sun in a.m., cloud in p.m.; temp. -23° to 0°C; calm. 10-15 cm snow cover; some open water in fast-running rivers (Tay & Nashwaak).

Harold Hatheway (compiler), Julie Singleton, Robert Whitney.

Woodstock (Wsk) 24th year

Dec. 26; 0900-1600; clear; temp. -10°C; calm. 25 cm

snow cover, water frozen.

Sheldon Anderson, Leona Avery (compiler), Louis Beatty, Rev. & Mrs. T. S. Bellis, Earle Briggs, Paul Carmichael, Ann Carr, Paul Clark, Gerald Demmings, Vernon Dewitt, Gerald Donovan, Blair Findlater, Nelson Flewelling, David Fry, Ruth Godwin, Adam Hadley, Mrs. & Mrs. Eric Hadley, Jean Hadley, Matthew Hadley, Harold Harley, Mrs. & Mrs. Ken Homer, Murray Hubbard, Lewis Irving, Charles Matthews, Charles MacDonald, Oliver Monteith, Walter Neal, Donald Nixon, G. A. Olmstead, Alex Patterson, Barbara Peabody, Wayne Pelkey, Eric Randall, Alma Speer, Mrs. Donald St. John, W. A. Stone, Mary Underhill, Mrs. James Yerxa.

Hartland (Hrt) 16th year

Dec. 26; 0800-1630; Sunny with cloudy intervals in p.m.; temp. -9°C; wind NW, ? km/h. Ground snow-

covered; some open water.

Bud Belyea, Pearl & Philip Boyd, Clarice Boyer, Elsie Briggs, Florence Britton, Arthur Bryant, Fred Burnett, Emery Campbell, Anna Canam, Diane Clark (compiler), Mrs. Wilmot Clark, Winnifred Clark, Pat Crouse, Kirk Davis, Neal & Marie Davis, Doug DeMerchant, Rod DeMerchant, Vera DeWitt, Charles & Dorothy Ginson, Mary Hallett, Clarence Hill, Jeff & Lorri Ann Horne, Jane Hovey, Mark Hunter, Winnifred Lawrence, Sheila Palmer, Donna Peterson, Charles & Lori Prosser, Blanche Rideout, Elta Rideout, Edith Schulze, Archie Shaw, Kathleen Shaw, Glenna Stephenson, Bert & Belle Swim, Geraldine Wallace.

Florenceville (Flo) 7th year

Dec. 26; 0800-1700; Clear, with few white clouds in p.m.; temp. -15° to -8°C; wind NW, nil to light, with

some gustiness in p.m. Ground frozen with 30 cm snow cover; river open from Beechwood Dam downstream, with drifting shell ice and ice at edges; streams open in rapids.

Walter and Alice Allison, Ford (compiler) and Jean Alward, Henry and Eleanor Arnand, Albert Bell, Archie and Vivienne Bishop, Theresa Brennan, Mrs. Elmer Briggs, Ansel Campbell, David Campbell, Ruth Cox, Mrs. Helen Crabbe, Robert Derrah, Larry & Ruth Dow, Mrs. Henry Giberson, Mrs. Charles Green, Jeanette Greene, Dwight Greene, David & Betty Hatt, Clarence Hayward, Don Hunter, Gordon Hunter, Franklin & Linda Kinney, Bernie Kearney, Frank & Eleanor Kearney, Holland Kearney, Mrs. Paul Leahey, Helen Lovely, Vaughn Lovely, Mrs. James McInnis, Robert G. McIsaac, Ronald McIsaac, Mott McLean, Pearl & Lloyd McNair, Bertha Mean, David & Alma Olmstead, John & Ella Patterson, Stewart Patterson, Tom & Jackie Petley, Mrs. Minnie Ebbett, Robert Pickle, Richard Poulin, Dean Prior, Lloyd Ripley, Drake & Trudy Rogers, Marie Sappier, Darlene Smith, Peggy Smith, John Snowden, William Stewart, Larry Sweet, Stanley Trafford, Charles & Joanne Upton, Reginald Wasson, Fred Welch, Philip & Helen White, Brian Wortman, Jasper Wyman.

Glassville—Juniper (G-J) 5th year Dec. 26; 0800-1700. Clear; temp. -12° to -16°C; wind light; 30 cm snow cover; river and lakes frozen. Brian & Sally McIntosh (compiler), Elsie McIntosh, Richard Poulin, Peter Puleston.

Perth-Andover (P-A) 19th year Dec. 26; 0800-1630. Clear, some snow flurries in p.m.; temp. -15° to 0°C; wind N, 5 km/h. 30 cm snow cover; rapids open.

Mary Jane Savoy, Frederick W. Tribe, Murray E. Watters (compiler), Dr. Lee J. White.

Plaster Rock (PR) 16th year Dec. 29; 0900-1645. Sunny with cloudy periods; temp. -15° to -10°C; wind NW, 25-30 km/h. Rivers & ponds frozen, with rare open spots.

Daphne & John Anderson, Yvon Beaulieu, Gwen Clyde, Doris Crawford, Mim Edmonds, Kate & Bob Finnamore, Irene Hollins, Bessie & Peter MacDonald, Diane Rabatich, Laverne Rabatich (compiler), Melissa Skinner.

Nictau—Riley Brook (Nic) 15th year Dec. 22; 0800-1500. Variable cloudiness (more sunny than cloudy); temp. -12° to +1°C; wind SE, 10 km/h. 22 cm snow cover; Tobique River open from Nictau to Riley Brook.

Roger Jenkins & his son, Marion & Erwin Landauer, Rudi Richter (compiler), Mary Jane Everett, Alex Fraser, Gladys Howard, LeRoy Johnson, Celia Knowlton, Diane McAskill, Rose McCallum, Francis McCarty, Leiola McDougall, Bill Miller Jr., Kathy Parish, Elizabeth Richter, Ursula Schmidt, Margaret Sutherland.

Edmundston (Etn) 1ière année (cette cercle) 2 jan.; 0800-1600. Clair 80%, neige-poudrerie 20%; temp. -18° à -9°C; vent NO, 40 km/h. Terre gelée, 35 cm de neige; eau gelée 95%.

Aline Albert, Roger Albert, Pierrette Bouchard (cocompilateur), Simon Bouchard, Carmon Dubé, Mae Hicklin, Bert & Colette Lavoie, Rolande Martin, Colette Michaud, Patricia Michaud, Danielle Nadeau, Tom Picard, Gilman & Huguette Smyth, Georgette Thibodeau (co-compilateur).

Mount Carleton Prov'l Park (MtC) 10th year Dec. 18; 0800-1600. Overcast; temp. -ll°C; wind NW, 6 km/h. 30 cm snow cover; running water open. Roger Jenkins, Erwin Landauer (compiler), Jeff Landauer, Rudi Richter.

Southeast Upsalquitch (SEU) 6th year Dec. 30; 0900-1430. Overcast, very windy; temp. -20° to -22°C; wind NW, 60 km/h. 36 cm snow cover; some open water on river. Gilles Godin, Jean-Claude Hachey, Chris Gauthier, Ron Gauthier (compiler).

Grand Manan Channel (GMC) 12th year
Jan. 3; 1215-1340. Mostly sunny; temp. -5°C; wind
NW, 20-30 km/h. Seas fairly calm.
Brian Dalzell (compiler), Rob Walker.

Grand Manan (GM) 17th year

Jan. 1; 0800-1630. Mostly cloudy in a.m., partly sunny
in p.m.; temp. +3° to +6°C; wind SW, 15-20 km/h.

15-45 cm old, crusted snow; fresh water frozen.

Vernon Bagley, Brian Dalzell (compiler), Halton

Dalzell, Diane & Joey Green, Virginia Greene, Frank

Longstaff, Rodger & Elaine Maker, Geraldine Nelson,

Alita Tatton, Charlotte Winchester.

Eastport-Campobello (E-C) 21st year Dec. 26; 0730-1615. Clear a.m., cloudy p.m.; temp. -4° to 0°C; wind NW, 0-5 km/h. 5-10 cm snow cover; freshwater frozen, salt water open. William Townsend (compiler); observers names not supplied.

St. Stephen—Calais (SSC) 1st year

Dec. 19; 0800-1630. Overcast in a.m., flurries in p.m.;
temp. -18° to -8°C; wind NE, 5-10 km/h. 20-35 cm
new snow cover; fast-flowing fresh water open, some
ice in St. Croix estuary.

Sally Comstock, Gary Cunningham, Brian Dalzell
(compiler), Muriel Doten, Roberta Gardiner, Bernice
Groom, Harold Hunter, Gray Ingersoll, Lillian Libby,

Daryl Linton, Ken Lister, Bob Mallory, Norma Manship, Doug Mullen, Bill Nelson, Carol-Ann Nicholson, Hubert Ross, Nellie Ross, Greg Thompson, Phil Vail.

St. Andrews (StA) 27th year

Dec. 28; 0830-1700. Clear; temp. -13° to -10°C; wind NW, 10-25 km/h. 25+ cm snow cover; all fresh water frozen; sea open.

Anne Bardou, David Clark (compiler), Dean Guthrie, Mr. & Mrs. Wilfred Langmaid, Francis & Don McLeese, Sandy Miller, Lonny & Lee Ryall, Millie Scott, Robin South, Maj. David Walker, Dick Wilder, Walter Williamson, Wil & Vladimir Zitko.

Pennfield (Pen) 25th year

Dec. 23; 0730-1700. Partly sunny; temp. 4° to +3°C; wind NE, <5 km/h. 20-35 cm new snow cover; fast-moving fresh water open.

Brian Dalzell (compiler), Ann Eldridge, Zetta Eldridge, Lena Morehouse, Charlotte & Norman Paul.

Lepreau (Lep) 24th year

Dec. 30; 0745-1605. Overcast, heavy sea smoke until late p.m.; temp. -17° to -14°C; moderate breeze. Some bare ground near exposed shore; all fresh water frozen, sea onen.

Chad Coles, Tim Fletcher, Donald McAlpine (compiler), Peter Wilshaw.

Saint John (SJ) 31st year

Dec. 28; 0800-1730. Clear, 5% cloud cover, light sea smoke in a.m.; temp -12° to -10°C; wind NW, 22 km/h. 10-30 cm snow cover; all fresh water frozen but for fast streams, sea open.

Mrs. A. Abell, Terri Anderson, Michael Bamford, Ruth Brown, Ian Cameron, David Christie, Ken Clark, Chad Coles, Mrs. Coughlin, Jan Dexter, Ralph Eldridge, Lloyd Foster, Kit Graham, Alan & Janet Gorham, Elizabeth Hoyt-Brown, Charlotte Hutchison, Christiughes, Jack Holway, Juliette Hickman, C.L. Johnston (compiler), Doris Johnston, Mrs. Jean Lambert, Isabel LeBlanc, Vivian MacDonald, Donald McAlpine, Doreen McIntosh, John McIntyre, Martha McLean, Gar Meltzer, Maizie Melvin, John Morrison, Tom Page, Joan & Ron Pearce, Emest Sawatsky, Dr. Sellers, Marion Sherwood, Dave Smith, Don Smith, Evan Smith, Molly Smith, Reg Smith, Peter Wilshaw, Jim Wilson, Frank & Mitzi Withers.

Fundy National Park (FNP) 23rd year

Dec. 18; 0715-1700. Cloudy a.m., clear p.m.; temp. -8° to -5°C; wind N, 0-24 km/h. 15-60 cm snow cover; still water frozen, moving water partly frozen, saltwater open.

Diane Alain, Yves Bossé, Marjorie & Max Bowron, Dorice Caissie, David Christie, Denis Comeau, Vincent Crowston, Elaine Eagles, François Granger, Shawn Hicks, Rod Lutes Angus & Stella MacLean, Mary Majka, Doreen Rossiter, Michelle Tanguay, Brenda & Eugene Taylor, Brian & Karen Townsend, Robert Walker (compiler).

Riverside-Albert (R-A) 19th year

Jan. 1; 0730-1730. Cloudy early, haze in midday, mostly clear late p.m.; temp. +1° to +4°C; wind SW, declining from 40 to 5 km/h. 45 cm wet snow cover; trees dripping melting snow; freshwater almost entirely frozen, salt water open with a few ice cakes.

Myrtle Beaman, Brian Blakney, Mildred Carpan, David Christie (compiler), Doris Hyslop, John Inman, Mrs. Inman, Angus MacLean, Mary Majka, Mike Majka, Jean Milburn, Sybille Wachs, Ulrich Wachs, Alma White, Don White, Doug Whitman, Phyllis Whitman, Bill Wood.

Sackville (Sck) 28th year

Dec. 19; 0730-1700; Clear; temp. -20° to -8°C; wind NW, 0-5 km/h. 50 cm fresh snow cover, windswept and drifted in open areas; freshwater frozen, salt water mostly open.

Paul Bogaard, Stan Bunker, Sandy Burnett, Roger Calkins, Janet & Tony Erskine, George Finney, Hinrich Harries, Stew Harris, Peter Hicklin, Ron Hounsell, Bill Murphy, Kathy & Harold Popma, Al Smith (compiler), Stu Tingley, Rob Walker, Rhianna Watt, Bill Wood.

Moncton (Mtn) 26th year

Dec. 20; 0800-1630. Overcast, no measurable precipitation; temp. -18° to -7°C; dead calm. 60 cm snow cover; streams running, Lake Petitcodiac frozen over, slushy ice in river.

Diane Allain, Chris Antle, Dave Arnold, Brenda Burzynski, Malcolm Campbell, David Christie, Don Cormier, Yves Cormier, Bob Cotsworth, Ted Currie, Halton Dalzell, Cheryl Davis, Richard DeBow, David Douglas, Mary Fownes, Madeline Gemmell, Ed Hughes, Lori Jodry, Ford Keith, Oscar LeBlanc, John Lech, Mary Majka, Mieczysław Majka, Janet McGuire, Gordon Mosher, Brenda Parsons, Ron Pellerin, Nelson Poirier, Pat Poirier, Winston Prince, Bill Quartermain, Allan Raegele, Teenie Roy, Bill Scott, Barbara Steeves, Barbara Swinamer, Dennison Tate, Stuart Tingley, Rob Walker, Alma White, Don White, Doug Whitman (compiler), Jerry Wigmore, Roy Wilks, Bill Weed, John Wright

Cape Tormentine (CT) 27th year

Dec. 22; 0730-1700. Clear; temp. -3° to -2°C; wind NW, 5-8 km/h. 40 cm fresh snow cover, windswept and drifted in open areas; freshwater frozen, salt water open with slush ice in many coves.

Paul Bogaard, Andrew & Roger Calkins, Tony Erskine, Hinrich Harries, Peter Hicklin, Randy Hicks, Ron Hounsell, Bill Murphy, Al Smith (compiler), Stu Tingley.

Kouchibouguac National Park (KNP) 18th year Jan. 3; 0800-1600. Clear; temp. -11° to -13°C; wind SW, 7 km/h. Snow cover up to 100 cm; rivers frozen, lagoons 85% frozen; offshore water open. Edouard Daigle, Mrs. Jos. T. Daigle, Gordon Delaney (compiler), Pierrette Robichaud, Harold Sock

Chatham-Newcastle (Mir) 16th year

Jan. 2; 0800-1700. Mostly sunny, a few clouds near mid-day; temp. -16° to -6°C; wind W, 15-35 km/h. 29 cm snow cover; practically all water frozen.

Margaret Adams, Sybil Anderson, Barbara Archibald, Mrs. William Arnoldus, Jeep Bosma, Mrs. Robert Bransfield, Monica Charnley, Timothy Clark, Phyllis Crowe, Barbara Digdon, Frank Garrish, Anne Goodfellow, Vernon Goodfellow, Tom Greathouse, Linda Hartlen, Don Hoddinott, Ida Holland, Joyce Hubbard, Phyllis Jardine, John Keating, Luc Lemieux, Robert Lisk, Hazen Lobban, David Lounsbury, Kathy Lounsbury, Sara Lounsbury, Lem McDonald, Gwen McKenzie, John McKenzie, Madeline Morissette, Ed Rawlinson, Mary Rawlinson, Theresa Ross, Delta Steeves, Maxime Tozer, David Tracy, Jean Ullock, Doug Underhill, Kelly Underhill, Bruce Walker, Harry Walker (compiler), Stewart Walker, Winnie Walker, Margaret Walker.

Tracadie (Tra) 2ième année

Jan. 2; 0800-1600. Ensoleillé; temp. -12° à -8°C; vent

N-O, 50-60 km/h. Enneigé et gelé.

Norbert Austin, Denise Benoit, Gérard Benoit, Hilaire Chiasson, Rose-Aline Chiasson, Léon Doiron, Jean-Yves Duguay, Ernest Ferguson (compilateur), Émile Ferron, Edmond Paulin, John-Yves Paulin, Yolande Paulin, Gertrude St-Pierre.

He Lamèque (Lam) 15ième année

Dec. 27; 0800-1600. Ciel couvert; temp. -10° a -12°C; vent N-O, 3-15 km/h. Eau gelée du côté nord et nord-ouest.

Norbert Austin, Denise Benoit, Gérard Benoit, Hilaire Chiasson (compilateur), Rose-Aline Chiasson, Hélène Daigle, Marcel David, Lucille Degrace, Jean-Claude Doiron, Jean-Yves Duguay, Émile Ferron, Audard Godin, Gabriel Lebreton, Jonathon Lebreton, René Noël, Grégoire Robichaud, Irène Robichaud.

Ile Miscou (Mis) lière année

Dec. 19; 0830-1545. Partiellement nuageux, légères averses de neige; temp. -8° to -7°C; vent N-O, 0-3 km/h. Eau libre de glace, sol couvert de 6-10 cm de neige.

Denise Benoit, Gérard Benoit, Hilaire Chiasson, Rose-Aline Chiasson (compilateur), Hélène Daigle, Ernest Ferguson, Émile Ferron, Julien Ferron, Louis Ferron, Arthur-William Landry, Claire Landry, Gabriel Lebreton, Jonathan Lebreton, Daniel Losier, Pierre Morin, Jean-Yves Paulin, Gertrude St-Pierre.

Caraquet (Car) 3ième année

Dec. 28; 0800-1600. Ensoleillé avec périodes nuageuses; temp. -11° à -17°C; vent NO, 50-60 km/h. 40 cm de neige, 40% de glace.

Denise Benoit, Gérard Benoit, Hilaire Chiasson, Rose-Aline Chiasson, René Cormier, Marcel David, Arthur DeGrace, Jean-Claude Doiron (compilateur) Albert Dugas, Bernard Dugas, Irène Gionet, Audard Godin, Jean-Paul Godin, Serge Godin, Victorin Godin, Milton Hall, Claire Landry, Gabriel Lebreton, Jonathan Lebreton, Luc Lemieux, Charles Losier, Daniel Losier, Pierre Morin, Réjeanne Morin, Claude Ouellette, Gertrude St-Pierre, Raymond Theriault.

Bathurst (Bst) 7th year

Jan. 2; 0730-1700. Clear most of day, some cloud cover during p.m.; temp. -12° to -6°C; wind NW, 10-25 km/h. 20-25 cm snow cover in woodland, little to no snow on beaches; inland water and Bathurst Harbour frozen, Nepisiguit Bay still open. Bob Allard, Joan Allard, Roger Arseneau, Elda Baldwin, Chris Gauthier, Lee Gauthier, Mary Gauthier, Ron Gauthier, Allan Gregoire, Jason Gregoire, Barbara & Arthur Huard, Arthur Kierstead, Jody Kierstead, Susan Kierstead, Gail MacMillan, Ronald MacMillan, Charlie McAleenan, James Meagher (compiler), Marie Meagher, Rita Meagher, Rolande O'Connell, Rod O'Connell.



The Seed Shop

Here in a quiet and dusty room they lie, Faded as crumbled stone, or shifting sand. Forlorn as ashes, shrivelled, scentless, dry — Meadows and gardens running through my hand.

In this brown husk a dale of hawthorn dreams, A cedar in this narrow cell is thrust, It will drink deeply of a century's streams; These lilies shall make summer on my dust. Here in their safe and simple house of death, Sealed in their shells a million roses leap; Here I can blow a garden with my breath, And in my hand a forest lies asleep.

(submitted by Molly Smith)

Notes on Tree Swallow Breeding Biology

Rudy Stocek

III- Nest Building and Breeding Success

This note reports on nest building in the Tree Swallow and how reproductive success may be related to the ability of a bird to build a sound nest. A small nest box colony in Fredericton, N. B. was monitored for 12 years, providing data on 88 nests used in this analysis. Excluded were those nests which suffered from predation or human disturbance.

Nest building can extend over a protracted period in early spring depending upon weather conditions. Sunny, warm days encourage the birds to stay at the colony site and build diligently; on cloudy, cool days, perhaps with rain, the birds are away from the colony or relatively inactive in nest building. Construction usually starts slowly with only a few pieces of grass or a feather added, perhaps just enough to establish ownership or breeding territory. Both sexes contribute to building the nest, but the females usually do the actual construction.

The swallows started building nests between May 6 and June 4, on average on May 16. Only 7% were late nests, including renests, started later in June; June 26 was the latest. The birds took an average of 11.2 days (range: 4-23) to complete a nest. A nest was considered complete when a depression in the base mat of grass was well formed and lined with finer grass (or in some cases, simply well formed). Feathers may or may not be present. A time lapse averaging 5.3 days (range: 1-14) occurred between completion of the nest and laying of the first egg. In total an average of 15.9 days elapsed between the start of the nest and the laying of the first egg.

Table I shows the progression of nest building during the breeding season. Nests started early in the season took about 25.5 days from start to first egg. That time period got shorter as the season progressed, swallows building in late May—early June taking only 4.0 days to accomplish the same thing.

Both coarse and fine grass were used in nest building. The bulk of the nests had the fine grass lining a distinct depression in the coarse grass mat. This depression or cup was located in any part of the nest fabric. Some nests were constructed wholly of fine grass. Feathers usually represented a prominent part of the nest. They were added any time before, during or after nest completion or, occasionally, not at all. Both chicken and pigeon feathers were used in colors of white, gray, black or any multi-color combination. Gray was the most used (48%) of the solid color feathers followed by white, then black. Gray and white feathers were most prominent (65%) among the various combinations seen. The type and color of feathers used may not necessarily indicate a preference, only what was available. Other items were occasionally utilized as part of the structure. Paper was used in 10 of 88 nests. Cellophane, tin foil, string, hare fur, birch bark, cedar bark, pine needles, or dried leaves were found in from one to three nests each.

Mature female Tree Swallows generally build better nests and line them with more feathers than do one-year-old females. In this study, immature females were more erratic in their nest building to the extent that 47% of their nests were incomplete at laying of the first egg compared to only 17% for the mature birds. Yet their overall success in producing young was at least as good as that of the older birds (Table 2).

¹One nest had two depressions with eggs laid in both by the same female.

Table 1. Average time taken by Tree Swallows at a colony in Fredericton, N.B. to build a nest from start to the laying of the first egg, by date.

Date	No. of Nests	No. of Days
May 5-9	4	25.5
May 10-14	20	17.6
May 15-19	27	16.1
May 20-24	10	13.6
May 25-29	2	6.5
May 30-June	3 3	4.0

Table 2. Percent reproductive success of mature and immature (first year) female Tree Swallows at a colony in Fredericton, for nests complete and incomplete at the time the first egg was laid. (Values in parentheses are numbers of nests).

Nest	Mature Females	Imm. Females
Complete	80 (54)	78 (9)
Incomple	te 45 (11)	67 (6)

Success of a breeding pair, that is whether or not they rear young to flying, may be related to the way the nest is constructed. Nests that were not complete by the time the first egg was laid were successful only 53% of the time compared to an 80% success rate when the nests were complete. Twenty two percent of the 88 occupied nests were structurally inadequate. Swallows that laid their eggs on the floor of the box in an incomplete nest were successful only 29% of the time.

Feathers used in nesting are important for their insulating qualities in maintaining uniform temperatures during incubation and the nestling period. However, it is doubtful whether their presence contributed to increased success. In the complete nests, those with and without feathers were both successful 80% of the time. For incomplete nests, the addition of feathers did nothing to increase the otherwise low (50%) success rate. Taken collectively, nests without feathers were successful only 58% of the time, incomplete nests with their low success rate being largely responsible. It appears that a well constructed, fully grassed- in nest may be more important to the reproductive success of the swallow than the presence or absence of feathers in the nest.



Volunteer Nature Guides Sought

The Tahoma Audubon Society is seeking naturalists will ing to be listed in the 9th edition of the society's Nature Guide, a directory of nature centres and of volunteers willing to be contacted by visitors who want local information on wild plants, animals and other natural features. If you'd like to be included, send your name, address, and telephone number, and state your special interests in nature, to Nature Guide, 34915 4th Ave. South, Federal Way, WA 98003. Information on ordering the book can be obtained from the same address. Ninety per cent of the listings are North American



Wildlife '87

Fredericton Naturalists Rise to the Occasion

19 General Resortion 87

Peter Pearce1

Winter struck with a vengeance a few days before the 28th annual Christmas Bird Count was held at Fredericton, low temperatures glazing over the river surface and heavy snow making for difficult off-road travel for those without snowshoes or skis. But local naturalists rose to the occasion, enthusiastically turning out in flocks to make their contribution to what was this year a special event, in the process reporting record high numbers of birds of no fewer than 17 of the 54 species seen. Nine of them were also records for the province.

The 1987 Christmas Bird Count was designated as the "Kick-on" to the second century of wildlife conservation in Canada. "Wildlife '87" was a year-long celebration commemorating 100 years of Canadian wildlife conservation, the first federally-constituted wildlife sanctuary having been established at Last Mountain Lake, Saskatchewan, in 1887. One of the goals of the kick-on was to increase awareness of and participation in this winter's Christmas Bird Counts. Fredericton and other centres across the land were challenged by Edmonton, Alberta, to out-perform that city in community support of this traditional holiday-season event. Several awards were up for grabs.

Victoria, B.C. spotted the highest number of species at 145. Thirty species with new high numbers earned them the Long Point Bird Observatory challenge. A Charlottetown lady, aged 86, was the oldest participant afield. Edmonton retained the title of having the most participants, 1,288. Fredericton was second with 330, including two senior politicians. Prince Albert National Park had the highest per capita participation, 28% of the 90 residents of the town of Waskesiu.

At Fredericton, three species — Black-capped Chickadee, European Starling, and Evening Grosbeak — each exceeded 1,000 individuals. The familiar Evening Grosbeak, a newcomer to New Brunswick in the early 1900s, was by far the most abundant bird; one wonders just how many thousand kilograms of sunflower seeds it will account for before the end of the winter. There were also considerable numbers of American Goldfinches. The female grosbeaks and the winter-plumaged goldfinches are so alike in colour, but not in size, that when they occurred together more than one observer was reminded of parents with young. There was yet another increase in the number of wintering Mourning Doves, unheard of here before the late 1970s.

There were several large roving flocks of Bonemian Waxwings, searching for fruit. We have noted that species on the count almost regularly since the mid-1970s, before which it was extremely scarce. A solitary Cedar Waxwing was properly scrutinized to be sure of its true identity. Unlikely lingering summer birds included two Gray Catbirds and a Chipping Sparrow, scratching out a living at feeders.

Whether in forest or at feeder, it was evidently a banner year for Red-breasted Nuthatches, which outnumbered their White-breasted cousins by a wide margin. Eighteen Pileated Woodpeckers, including two separate pairs, were noted, strengthening the impression that that spectacular bird is gradually increasing locally. Despite valiant efforts to call them up, only one owl was noted. One observer's comment was that as sub-division follows sub-division the kind of wilderness habitat required by the large forest owls is becoming more fragmented and the owls

¹Adapted from a letter published in The Daily Gleaner.

consequently becoming scarcer. But Christmas Bird Count records maintained at Fredericton since 1960 show that owls have not been more than occasionally reported.

Regarding aquatic birds, there was a record high number of Common Goldeneyes, which seemed to trade back and forth between open water near the islands at Douglas and the Mactaquac dam. Four species of gulls were observed, each year the Great Black-backed variety outnumbering the Herring Gull by a greater margin.

Activity at bird feeders was generally reported to be high before and after the count but not on the actual count day. It always seems to be like that! But there were quite a few exceptions where feeders were for one reason or another more strategically located. There, over 100 birds representing a dozen or more species were to be observed — quite an entertainment.

The Christmas Bird Count is not rigorously scientific but the enormous amount of information gathered is invaluable, representing one of the most continuous, long-term records of bird life anywhere. It is interesting to note that when the counts were initiated in 1900 two were conducted in Canada, one of those being at Scotch Lake, not far from Fredericton.

Since so many observers were involved in the Fredericton count this year, reports were compiled with particular care so as to avoid duplication. Where feeders were clustered, for instance, they were treated as one since they were probably sharing the same local bird population. By the same token, results were scrutinized for evidence of same-sized flocks of a given species being observed more than once in a sector or in contiguous sectors. As usual, details of weather and of observer effort were recorded so that in any examination of the long data base for population trends, appropriate adjustments can be made.

Appreciation is expressed to Mayor Brad Woodside for his interest in the count, and to Hon. Morris Green, minister of natural resources and energy, and Hon. Vaughn Blaney, minister of municipal affairs and environment, for allowing the good names of their departments to be associated with the event. I should especially like to thank Nev Garrity, Don Gibson, and Owen Washburn for their enthusiastic assistance in organizing, executing, and compiling the survey. As usual, one of the great pleasures of the count was talking with people — a record 330 this year — to enlist their support as observers in the field or at home tending feeders. Bird watchers are such nice people.

The knowledge generated by this activity, combined with information from some 1600 other counts conducted in North America, will help define the winter ranges of birds, indicate population trends, and contribute to an assessment of the health of the environment. Fredericton's 1987 Christmas Bird Count was a splendid effort. It will be a very hard one to follow. In the meantime, on to the second century of wildlife conservation in Canada.

Picoides

Picoides is the new Bulletin of the Society of Canadian Ornithologists. It is named for the Black-backed Woodpecker depicted in the Society's logo. The bulletin is designed to include some features of a newsletter but also to provide a publication worth keeping for its articles. Membership in SCO is open to all who have an interest in Canadian birds and in the state of ornithology in Canada. A check for annual membership dues of \$10 may be sent c/o Philip H. R. Stepney, Provincial Museum of Alberta, 12845 102 Ave., Edmonton, Alberta T5N 0M6.



Nature News

Spring-Autumn, 1987

David Christie



The summer of 1987 was a kind one for most wildlife, it seems. Warm, dry weather aided survival of nestling birds, especially swallows. Even waterfowl did well. There were a record number of ducklings at Shepody National Wildlife Area, about 200 broods versus a previous high of 140-160 (Al Smith and Peter Barkhouse). Trees and shrubs bore excellent crops of fruits, which provided lots of autumn food for birds and mammals that relish them.

Highlights to watch for in the account of the 8-month period reported here are New Brunswick's first breeding records of the Pine Warbler and House Finch and the first occurrence of Common Chaffinch, a visitor from Europe, that has been recorded only about half a dozen times in North America. There were also the province's second European Goldfinch (whether escaped or wild is debatable) and the third Red-bellied Woodpecker, Kentucky Warbler and Painted Bunting. Both White-eyed Vireo and Brewer's Blackbird have been reported a few times but the 1987 records are only the second of each that I have complete confidence in.

Mammals

Now, 15 years after their influx into New Brunswick, Coyotes are so well-established that seeing and hearing them is commonplace. So, Mary Majka was not surprised when, driving through Fundy N. P. May 15, she saw a Coyote crossing the highway with something in its mouth. Stopping to identify its prey, she discovered a female Coyote carrying one of its small pups - perhaps 7-8 weeks old. As a second pup appeared at the edge of the road, the mother dropped the first to let it walk the rest of the way, quickly carried the second across, and immediately returned for a third. It was a delightful experience for Mary.

As Coyotes increased, Red Foxes declined in many parts of the province but now there seems to be some recovery, at least in Fundy (Rob Walker) and the Saint John area (SJNC). Less easy to see is the Fisher, one of which was startled eating a mouse in the Fish Lake area, near Stanley, Oct. 28 (Mark Connell). A Lynx trapped at Ste-Marie-sur-mer about Oct. 20 is the first occurrence the Chiassons know of on Ile Lameque.

Among marine mammals, Harbour Seals increased to about 20 in Saint John Harbour, Mar .7, when the first alewives were breaking water (Ralph Eldredge). Whales as usual attracted a lot of attention at the mouth of the Bay of Fundy in late summer and early fall. Among them, Whitesided Dolphins were sometimes numerous, for instance about 150 east of White Head Island Aug. 17 (Peter Pearce et al.). A 42-foot decomposing Humpback Whale that washed up near St. Martins July 20 was buried to be dug up as a skeleton for The New Brunswick Museum in 3-4 years time (Don McAlpine). Scarcer was a white whale, presumably a Beluga, reported in Shediac Bay July 30 (various media). Belugas were more frequent off New Brunswick before the St. Lawrence estuary population began its current decline, believed to be due to pollution.

Birds

At least two Manx Shearwaters were picked out among the more common Greater and Sooty shearwaters in the Grand Manan area: 1 east of White Head Aug. 20 (Pearce) and 1 south of the Murr Ledges Sep. 16 (DSC et al.) A Greater Shearwater was spotted Sep. 22 at Petite-Lamèque, where they are less often seen (Gérard Benoit). An unfortunate Leach's StormPetrel, gone astray from the sea, killed itself, apparently by flying into the wall of a hangar, at CFB Chatham Sep. 18 (fide Luc Lemieux).

Two or more Great Egrets visited our province. The earliest, a magnificent adult in full breeding plumage at Saints Rest Marsh, Saint John, Apr. 2 (Cecil Johnston), flew off to the east and may have been the similarly plumaged bird seen at Daniels Marsh, near Riverside-Albert Apr. 4-13 (v.o.) and at Waterside Marsh two and a half hours later on the 13th (DSC & Mary Majka). One was again at Daniels Marsh May 17 (Lu Colpitts). A less beautifully plumaged Great Egret may have spent the summer at Musquash Marsh, where it was seen at least Apr. 19-23 and Aug. 6-26 (v.o.).

Single Snowy Egrets were reported at Red Head Marsh Apr. 18 (Tom Page), Waterside Apr. 19 (v.o.), Sackville May 3 (Stuart Tingley), Fundy N. P. May 13-14 (Walker et al.), and Castalia May 23 (Angus MacLean). In fall an adult and an immature were at Saints Rest Oct. 12 (Jim Wilson & Peter Wilshaw) and 2 at Castalia Oct. 16-19 (Wilson et al.). An adult Little Blue Heron was seen near Penobsquis May 5 (Bob & Mary Cotsworth) and one was found dead at Grand Harbour in the first week of May (fide Brian Dalzell). An adult Tricolored Heron, apparently at Castalia as early as mid-September, was seen there Oct. 16-17 (Wilson et al.). Three Cattle Egrets appeared in fall, at Paulin Road, Ile Lamèque Oct. 12 (Rose-Aline Chiasson), near Plaster Rock in the third week of October (Laverne & Stephen Rabatich), and at St. Andrews in mid-November (Tim Beatty).

No Glossy Ibises showed up at Saint John to nest as they did in 1986. In fact, there was only 1987 report, an individual at the mouth of the Digdeguash River Apr. 14 (B. Dalzell).

The spring flight of Snow Geese included 2 at Hartland at the end of March (Florence Britton), about 25 flying up the Petitcodiac at Hopewell Cape Apr. 5 (Cheryl & Clark Davis), and a blue phase adult at Carron Pt. Apr. 14 (Jim Meagher). In the fall, about 15 reported at Durham Bridge Oct. 3 (Peter Salonius) may have been the 17 which appeared at Fredericton Oct. 4 or 5 and remained there until Dec. 15 (v.o.). An immature, intermediate between the blue and white forms, frequented an East Saint John sewage lagoon Oct.20—early November (v.o.).

Northern Shovelers occur frequently in southern New Brunswick, less often in the north, where they were seen in May at Perth-Andover (Fred Tribe), Tracadie (Ernest Ferguson), Inkerman and Caraquet (CNPA). Gadwall observations included a pair at Sackville May 3 (Tingley), a pair at Musquash Marsh Oct. 3 (SJNC), and a male at Courtenay Bay from Nov. 3 (Wilson). For the second year, a male Eurasian Wigeon spent much of May in Courtenay Bay Saint John (Wilshaw et al.).

A Common Eider, scarce inland, was at Longs Creek May 6 (Pearce). The Harlequin Duck capital of New Brunswick is the group of Fundy islands known as The Wolves, where Peter Hicklin found 32 of these beautiful little ducks in a late April survey. At Grand Manan, two males were seen off Long Pond Beach May 23 (Wilson et al.) and a moulting male at Southwest Head from Sep. 15 to Oct. 29 (v.o.).

Turkey Vultures are slowly becoming more frequent here, as they increase in numbers in Maine. One was circling over Moncton May 2 (Bob Thiel et al.), one eating a road-killed porcupine 15 km SW of Fredericton May 3 (David & Kathy Lounsbury), and another was seen near Scotch Ridge May 10 (B Dalzell). Later, there were individuals near Norton in late June (fide Wilson), at Hopewell Cape July 8 and Harvey, Albert County, July 18 (Mike Majka). Also being reported more and more frequently are Golden Eagles. In 1987 there were one near Hart Lake, Gagetown, Apr. 19 (Dan Busby), an immature at Kedgwick River May 26 (Donald Kimball), one

near Nictau Lake in the first week of July (Ed Kettela), one at Grand Manan July 7-Aug.28 (Halton Dalzell et al.), and an adult at Caledonia Mountain Oct. 23 (DSC & Mary Majka).

If you get a good view of a perched Bald Eagle or Peregrine Falcon, give researchers a hand and look carefully for coloured leg bands. At Saints Rest Jim Wilson spotted two nearly adult Peregrines, wearing red bands, Sep. 3 and an immature Bald Eagle with an orange band on its left leg, Sep. 6. The Peregrines had been released as young, probably at Fundy N. P., and the eagle was one banded in southern New Brunswick by Rudy Stocek.

Among our rarer hawks, immature Cooper's were reported at Mary's Point, Harvey, Albert County, Apr. 19 (MacLean) and Sep. 4 (DSC), and at nearby New Horton Aug. 29 (Michel Masse). A pair of Red-shouldered Hawks were observed copulating at Lower Little Ridge, near St. Stephen May 3 (B. Dalzell) and a migrating immature passed Anthonys Cove, Saint John, Sep. 28 (Wilson). A fairly unusual summer occurrence was a Rough-legged Hawk near Hampton July 17 and 25 (Wilson).

Merlins seem to be increasing as a nesting bird in the province. At Harvey, Albert County, a pair was again present all summer. Two of their young were killed on the road in early August (v.o.). A pair seen at Waterside through much of the spring was also suspected of nesting (Walker, fide MacLean). A pair, reported at Rothesay in late June (Harold McQuinn) were carrying food July 5&12 (Wilson et al.), and apparently remained into August. A pair of Peregrine Falcons appeared at Point Wolfe, Fundy N. P., were seen at a potential nest-site but abandoned it without laying any eggs. Perhaps next year (Walker et al.). They were seen frequently all summer in the park and eastwards to Mary's Point. Away from the Bay of Fundy there was a Peregrine at Miscou Island May 21 (Gérard Benoit) and an immature at Upham Oct. 7 (Wilson). Gyrfalcon reports came from Miscou Island May 24 (Hilaire Chiasson), and Pointe à Bouleau, near Caraquet (CNPA), and Mary's Point (Mike Majka), both gray "phase" birds seen Nov. 11.

Attempts are being made to establish a new game bird in New Brunswick. Approximately 40 Wild Turkeys, of Ontario origin, were released on Grand Manan Island during the summer (fide B. Dalzell). Although Grand Manan has a milder winter climate than the rest of the province, it lacks oak forest, normal habitat for turkeys, so I don't expect them to survive for long without supplemental winter feeding.

Common Moorhens, formerly gallinules, bred again in the Germantown Marshes, near Riverside-Albert, 3 adults and 6 young being observed July 16 (Walker). American Coots, almost as scarce breeding birds in the province, nested at Ducks Unlimited's Hillsborough impoundment. Two adults and 5 almost full grown juveniles were seen there Aug. 29 (Walker). As many as 14 were at Hammond River Oct. 31 (Wilson). Sandhill Cranes are exceeding rare migrants in New Brunswick. One was seen at Castalia in the second week of September (Frank Longstaff) and an immature at Fredericton Oct. 5 (Kettela).

Anyone interested in seeing Willets should visit Bayfield and Cape Jourimain, for 20 years their main New Brunswick breeding area. On May 19 Chris Majka found 14 there, including a pair copulating. To the north, one was at Maisonnette June 1 (G. Benoit). An unusually small Willet was reported at Castalia May 24 (MacLean). In addition to being found in their usual location near Salisbury, Upland Sandpipers were found breeding at three new locations Maugerville (fide Pearce), Ste-Marie-de-Kent (2 or 3 young about the end of July, once 7 birds together—fide Donald Cormier) and, more surprisingly, in the northeast, at Boishébert, near Saint-Isidore (3 flightless young—Chiassons & Benoits). In spring 2 were seen at Jemseg May 4 (Henrik Deichmann), one at Whale Cove, G.M. May 24 (v.o.), and 3 at Mohannes Barrens, near St. Stephen, May 17 (B. Dalzell).

Early migrants, or rare overwintering birds were 7 Sanderlings at Long Pond Beach, G.M. Apr. 3 (B. Dalzell). There were 3 Baird's Sandpipers at Waterside Aug. 27 to Sep. 2 (Walker et al.), one at Saints Rest Sep. 3 (Wilson), and one at Castalia Sep. 17 (DSC et al.). An unusual spring occurrence of a very rare migrant in New Brunswick was a Curlew Sandpiper at Kouchibouguac N. P. May 24 (D. Lounsbury). Stilt Sandpipers were found at Castalia (3 the first weekend in Aug.— Jaakko Finne; 2 to 1 Oct. 16–27— v.o.) and at Waterside (adult Aug. 26–27 (MacLean & Walker). The Fredericton Nature Club's discovery of a male Ruff in non-breeding plumage at Lower Jemseg Apr. 18–19, created a bit of excitement for birdwatchers; later, a female was seen at Kouchibouguac N. P. Aug. 13 (Judy Kellogg Markowsky). An adult Longbilled Dowitcher still in breeding plumage was at Castalia Oct. 16 and an immature at White Head Oct. 19 (Wilson et al.).

Single Wilson's Phalaropes at Caraquet May 10 (Jean-Raymond Gallien) and Neguac May 23 (D. Lounsbury) were expectable but the occurrence of 14 (6 pairs and 2 individuals) at Saint-Louis-de-Kent sewage lagoon May 18 (Barry Spencer & Harry Beach) and of 6 pairs [the same?] at Inkerman May 24 (G. Benoit et al.) were unprecedented. The large numbers of Red-necked Phalaropes that normally congregate in Passamaquoddy Bay did not materialize. A few small flocks of 100-500 passed quickly through in late summer (Guillemot 16:34).

An immature and 2 adult Laughing Gulls frequented the Grand Manan Channel May 16— June 8 (v.o.) and three Common Black-headed Gulls, Courtenay Bay, Saint John, Mar. 31 through April (Wilson). A lovely, rosy-breasted Franklin's Gull was at Sussex May 1–2 (v.o.) and two adult Little Gulls were picked out among 5000 Bonaparte's Gulls at Deer Island Point Oct. 3 (SJNC). Lesser Black-backed Gulls are increasingly reported: an adult was at Moncton Apr. 16 (Tingley), 1 at McGowans Comer Apr. 18 (FNC); a 3rd-summer bird at Mary's Pt. Aug. 8—Sep. 20, an adult there Aug. 17 (v.o.), and 1 at Kent Island Sep. 13 (fide Norman Famous).

Brian Dalzell reports an adult and immature Common Murre Aug. 29 at the Yellow Murr Ledge, south of Grand Manan, a location where they were known to breed many years ago and may have been doing so undiscovered in recent years. An out-of-season but not unprecedented Dovekie was seen near Southwest Head, G.M., Aug. 20 (Pearce).

Single White-winged Doves were seen at Deer Island Point Aug. 20 (had reportedly present about 3 days — Jeff Wells) and at Lower Jemseg Nov. 12 (Cathy Westgate, *fide* Pearce). Sorry, Norman Chesterfield, but we didn't learn about them in time to call you.

A small flight of Yellow-billed Cuckoos included four Oct. 6 on Grand Manan, where only two had been seen Oct. 2-5 (v.o.). In the north, one was at Village St-Paul, near Grande-Anse, Oct. 7 (Arthur-William Landry). The latest reported was at Cambridge-Narrows Oct. 29 (Joyce & Niven Thorne)

Last bird of the good 1986-87 Snowy Owl flight was seen at South Tetagouche Apr. 23 (Ken Johnstone), the first of the even better 1987-88 flight at Maisonnette Oct. 25 (CNPA). It was followed by least 10 more in the Acadian Peninsula through Nov. 15 (CNPA), and individuals at Mary's Point Nov. 2 (DSC & Mary Majka), Sisson Lake, near Nictau, Nov. 6 (found shot in wing, later died — Roger Jenkins), New Denmark Nov. 7 (starving, kept a few days, then released — Jenkins), Saint John West Nov. 7 (fide Ian Cameron), and Dieppe Nov. 8 (Doug Whitman). Two Northern Hawk-Owls appeared, at Miscou Island Nov. 7-14 (Émile Ferron) and Inkerman Nov. 15 (H.Chiasson & G. Benoit). A rare Boreal Owl was found dead on a branch at Pokemouche, date unspecified (Jean-Claude Doiron).

Luc Lemieux found Common Nighthawks especially numerous at Chatham during the summer, especially around the last week July and first week of August, when he saw a number of groups of 35-45 and one of about 65, the latter after insects, along with 15 Ring-billed Gulls. By that time of year, flocks of nighthawks are apt already to be migrating south. The "hawking" behaviour by Ring-billed Gulls suggests that a flight of winged ants was their likely food. A particularly early Nighthawk was seen at Alma May 1 (Stella MacLean).

For the second year in a row, a male Red-bellied Woodpecker appeared in the province. It was seen at Sackville from about Nov. 18 into the early winter (v.o.). Earlier in November, a Red-headed Woodpecker had also been there (fide A. Smith). Other Red-headeds were at North Head Sep. 18 (DSC et al.), Alma Oct. 24 (Doreen Rossiter), and Fredericton for a few days around Nov. 22 (Dorothy Sleep). In spring, a more unusual time for them, a territorial male was seen near Scotch Ridge from May 17 till the end of the month (B. Dalzell).

It was perhaps the same Scissor-tailed Flycatcher that put in a brief appearance at Saint John West May 14 (Heather Dow, fide Johnston) that was at Titusville, near Upham May 17-22 (Yvonne Bourque & Mr. Titus). The lone Western Kingbird reported during the year was one at Pocologan Sep.11 (Wilsons & Jim Edsall).

A lone Sedge Wren and 4 or 5 Marsh Wrens were singing at Germantown June 3 (A. MacLean). The latter continued to be seen there into September and numerous dummy nests were found (Walker). A Marsh Wren was also reported at Saints Rest Sep. 6 (Wilson & Wilshaw). Single Blue-gray Gnatcatchers were found at Mary's Point May 18, Aug. 26 and Sep. 2 (DSC), White Head Island May 24 (Wilson et al.), Hopewell Rocks Sep. 25 (Vonnie Heron), Harvey, Albert County, Sep. 27 (Walker), and even in the northeast, at Pointe-Alexandre, near Lamèque, Oct. 26 (H. Chiasson).

It was a great spring for Eastern Bluebirds with reports near St Stephen Mar. 29 (B. Dalzell), at Lorneville (Edsall), New Horton (DSC & Mary Majka), Pennfield Ridge (4 pairs — B. Dalzell), Thomaston Corner (Pearce), near Alma, (5 — Sedgewick Sinclair), Rang St-Georges, near Paquetville, May 17 (Audard Godin), Miscou Island (Denise et Gérard Benoit), and Bartletts Mills (pair — May Bartlett). Successful nestings were reported during the summer at Hopewell Hill, near Riverside-Albert, (Walker et al.) and Ketchum Ridge, near Glassville (Sally McIntosh, fide Ansel & David Campbell). In fall, 3 were seen at Fredericton Sep. 27 (Margaret Gibson).

Northern Mockingbirds, widespread in May and June were reported at Grand Manan (v.o.), Pennfield, St. Stephen, Moncton, Black's Harbour (all by B. Dalzell), Titusville (Wilson), Maltampec (H. Chiasson), Douglas (Bev & Marc Schneider), Bayswater (Frank & Mitzi Withers), Lower Jemseg and Gagetown (Enid Inch). A pair was nesting in July at Coverdale (v.o.). Brown Thrashers were much less common, only at Alma Mar.28-30 (Sharon Harbidge & Jeff MacLean), Wicklow in May (Lorna Maddox), Mactaquac Jun. 30 (Bev Schneider), and Village St-Paul Oct. 12 (Landry).

Bohemian Waxwings returned in early November with 2 at Miscou Island Nov. 1 (Chiassons), 16 at Four Roads, near Inkerman, Nov. 11 (Chiassons & Benoits). The large flocks of Cedar Waxwings were feeding on abundant mountain ash fruits in September dwindled quickly in October. A late one was seen at Alma Nov. 9 (Doreen & Willis Rossiter) and 6 at Anthonys Cove Nov. 21 (Wilson). The first of a good flight of Northern Shrikes were seen at Rivière à la Truite Oct. 8 (Jean-Yves Paulin) and Ingalls Head, G.M. Oct. 16 (Wilson et al.).

Brian Dalzell remarked, with grudging admiration, on the determination of a pair of European Starlings, which spent two weeks excavating a hole in rotten wood around shingles he had used to cover an opening in an old building at Grand Manan. Enormous numbers were seen in the Saint John area in fall: "thousands feeding on mountain ash berries" behind the museum (F. Withers),

75,000-100,000 at Bayside Drive Nov.19 (Wilson), and 500,000(!) at Saints Rest a week or two earlier (Johnston).

The Swallowtail Road at North Head, G.M., was the place to be to see vireos last May. A Yellow-throated Vireo was reported there May 21 (Dr Richard Bowen), and a White-eyed Vireo, the second confirmed provincial record, May 22-24 (Tingley et al.). Solitary, Redeyed, Philadelphia and Warbling Vireos were also reported there that week. A northeastern Warbling Vireo was at Tracadie July 31 (v.o.).

The warbler of the year had to be the Kentucky, discovered at Fredericton by Peter Pearce. The third record of that species in this province, it was seen there by a number of people Oct. 17-20. Almost as rare were a Golden-winged Warbler at Eel Brook, G.M., Aug. 15 (Bob & Sandy Righter, fide Pearce) and a male Prothonotary Warbler at Lomeville May 25 (Edsall). Three Prairie Warblers were seen at Machias Seal Island Aug. 7 (Tingley), 1 at Saints Rest Sep. 3 (Wilson & Chad Coles) and one at White Head Oct 19 (Tingley & Wilson). Visiting Yellow-breasted Chats were spotted at North Head Sep. 13 (Wilson & Edsall), Southwest Head Oct. 6, Mary's Point Oct. 24 (DSC & Mary Majka), and Alma Nov. 5 (A. MacLean). A Northern Waterthrush reported at Lower Jemseg Mar. 27-29 (Willi & Max Wolfe) was so extremely early that I wondered whether it might not have been a Louisiana Waterthrush, an earlier migrant but a species not yet substantiated in New Brunswick.

A noteworthy discovery was the first record of breeding Pine Warblers in New Brunswick. Brian Dalzell, discovered a small population, perhaps as many as 15 pairs, in the big White Pines (30-40 m tall) of a cemetery just outside St. Stephen. On July 30, he heard 8 singing males and saw two groups of fledged young being fed by females. Knowing that they breed in eastern Maine, Brian had been hoping to find them here. One male was singing near Moncton about the beginning of June (Thiel). In New Brunswick, Pine Warblers are more often seen in fall but 7 on Grand Manan and White Head Islands Oct. 19 was a surprising number on one day (Wilson et al.).

A male Northern Cardinal was singing Grand Bay Mar. 29 (McAlpine) and a female visited a nearby feeder the next day (Linda Caron). There were several fall reports in southwestern areas. To the east a shy female attended Doreen Rossiter's feeder at Alma Nov. 4-6 and male was coming to feeders in Riverview in late November (fide Whitman). A particularly early Rose-breasted Grosbeak was seen at Westfield Apr. 10 (Allen Gorham). Nine males were at one feeder near Fredericton May 17 (Kettela) and a flock of 20-25 at Urney, near Waterford, May 24 (Harriet Folkins). A male Blue Grosbeak was reported in spring, at Saint John May 13 (Marg Riley). Less colourful immatures appeared at Grand Harbour Sep. 13 (2 — SJNC), Harvey Bank Oct. 9 to 12 (Walker) and White Head Oct. 19 (Tingley & Wilson). On discovering the attractively rusty brown grosbeak in his yard, Rob Walker suddenly realized that a puzzling bird he had seen fleetingly in Fundy N. P., years before, had been a Blue Grosbeak in similar plumage. For handy comparison with the grosbeak, Rob had three Indigo Buntings at his feeder. In the north, there was one at Pointe-Alexandre Oct. 3-10 (Chiassons).

A beautiful male Painted Bunting graced Alma and Don White's feeder at Moncton Nov. 11 and 12-15 (see also p.), three days before an even brighter one [according to birders who saw both] appeared in Halifax, N.S. The Moncton bird was the third New Brunswick record, the first documented by photographs.

Rob Walker's productive feeder played host to a minimum of five Dickcissels, recognized by plumage differences, between Sep. 12 and Nov. 15. 1.7 km away, I saw four at Mary's Point between Sep. 23 and Nov. 16. A bright male was at Alma Oct. 19-20 (Rossiter). Outside Albert County, one visited a feeder in Lamèque Oct. 25-Nov.10 (Denise Benoit). Single Rufous-sided

Towhees were seen at North Head May 23 (Tingley), Moncton Nov. 2 (fide Rossiter), Alma Nov. 19 (Rossiter), Hebron (possibly the same female) Nov. 24-25 (Brian & Karen Townsend), and Saint John West in November (Stan Winslow). An adult Clay-coloured Sparrow was found at Herring Cove, in Fundy N. P., Sep. 25 (DSC) and an adult Lark Sparrow at Saints Rest Sep. 6 (Wilshaw & Wilson).

Two male Brewer's Blackbirds paid a brief visit to David Clark's feeder at Chamcook Apr. 5, before moving on with the flock of Common Grackles and Red-winged Blackbirds they were accompanying. New Brunswick's first Brewer's was found at Grand Manan in the autumn of 1985. An adult male Yellow-headed Blackbird at Prince of Wales Oct. 20 (Allen Francis) was the only report of the year. Orchard Orioles were seen often at North Head, G.M., May 16-24 (v.o.). It was difficult to know how many were present, apparently at least four.

Certainly, the most surprising bird of this reporting period was a male Common Chaffinch, a first for New Brunswick and the second report in Canada of a very common European finch. Rob Walker discovered it Mar. 29 at his now-famous feeder at Harvey, where several people were lucky enough to see it that day and many more looked unsuccessfully later in the week. Its stay may not have been so short. A local resident, Ellen Brewster, saw an unfamiliar bird, answering its description, in Rob's driveway March 25 or 26, when he was away at work. An adult European Goldfinch visited the Shorecrest Lodge feeder at North Head Apr. 14 (Jill Malins). A few days later one appeared near Port Mouton, N.S. There is always controversy about whether those goldfinches are legitimately wild or have escaped from captivity. They are reportedly a common cage bird in the U.S.A. but there is a wild population in Bermuda.

House Finches finally have definitely bred in New Brunswick. Their presence in summer at Saint John, Florenceville, and Sackville in other years has suggested the possibility of nesting but conclusive evidence was lacking. From March 13-31 Brian Dalzell saw as many as 5 at once in St. Stephen, perhaps 13 birds in all. Later in the summer, he found adults feeding recently fledged young there. Elsewhere, at the Whites' feeder in Moncton, a male House Finch visited sporadically from May through November. Others appeared at Saint John Apr. 4 (David Smith), Fredericton Apr. 19 (Margaret Gibson), and Moncton in the 1st week of May (Brenda Burzynski).

It's customary to mention the returning date of spring arrivals, but since this issue is being mailed a year following the spring of 1987, I will select just a few conspicuous species to illustrate their spread throughout the province.

Great Blue Heron: Mar. 27 at Saints Rest (Johnston), Mary's Point (Mike Majka), and Bathurst (Ron Gauthier); Mar. 29 in Jemseg area (Pearce); Mar. 30 at Maces Bay (Jack Hollway) and Caraquet (Gallien).

American Kestrel: Mar. 26 near Florenceville (Alward); Mar. 29 at Fredericton (Lounsbury); Mar. 30 at Harvey (v.o.) and Bathurst (Eddy Hall).

Killdeer: Mar. 25 at Rivière à la Truite (Jean-Yves Paulin); Mar. 26 at Hillsborough (Mrs. Fred Steeves) and Saints Rest (Wilson); Mar. 27 at Florenceville (Alward), Mactaquac (Lounsbury) and Moncton (Nelson Poirier); Mar. 29 at Bathurst (Susan Kierstead); Mar. 30 at Maces Bay (Hollway).

Ruby-throated Hummingbird: May 9 at Oak Bay (B. Dalzell); May 13 at Mary's Point (DSC); May 18 at Hammond River (Wilson) and Blanchard Settlement (Gallien); May 27 in Carleton County (Jeanette Greene; David & Ansel Campbell).

Tree Swallow: Apr. 11 Oromocto—Jemseg (Lounsbury) and Florenceville (J. Snowden; Campbells); Apr. 12 at Hartland (Diane Clark; Arthur Bryant) and Centreville (Joanne Upton); Apr. 13 at Milltown (B. Dalzell); Apr. 16 at Fundy N.P. (A MacLean) and Mary's Pt. (DSC); Apr. 17 at Hammond River (Wilson); Apr. 20 at Rang St-Georges (Eric Savoie); Apr. 23 at Bathurst (Kierstead).

American Robin: Mar. 20 at Glassville (Marjorie Martinson); Mar. 23 at Hillsborough (Mike Majka); Mar. 24 at Harvey (DSC); Mar. 25 at Red Head (Wilson) and Saint John West (Johnston); Mar. 26 at Saint John (D. Smith) and on Kingston Peninsula (Allen & Janet Gorham); Mar. 28 at Fredericton (Lounsbury; Pearce); Mar. 29 at Bathurst (Kierstead).

Yellow-rumped Warbler: Apr. 12 at Fundy N.P. (Walker); Apr. 22 at Mary's Point (DSC); Apr. 25 at Cambridge-Narrows (Wilson); May 1 at Mactaquac (Lounsbury); May 5 at Saint-Simon (Marcel David); May 12 near Florenceville (Greene).

American Redstart: May 9 or 10 in St. Stephen area (B. Dalzell); May 13 at Hammond River (Wilson); May 14 near Florenceville (Campbells); May 16 at Rang St-Georges (A. Godin & Savoie).

Song Sparrow: Mar.17 at Mary's Point (50 on the 26th — DSC); Mar. 25 at Partridge Island, Saint John (400 on the 26th — Eldredge), Fairvale (MacAndrews), and Bayswater (Withers); Mar. 26 at Saint John (D. Smith), Hammond River (Wilson), Fredericton (Pearce), and Caraquet (J-P Godin); Mar. 28 at Mactaquac (Lounsbury) and Hartland (Bryant); Mar. 30 at Bathurst (Gauthier).

Red-winged Blackbird: Mar. 15 at Florenceville (Alward); Mar. 17 at Alma (Walker); Mar. 25 at Red Head (Wilson), Saint John West (Johnston), and Mary's Pt. (DSC); Mar. 26 at Caraquet (Gallien), Sheila (Guylaine Drolet), and Bathurst (Roger Arseneau); Mar. 27 at Partridge Island (Eldredge) and Fredericton (Pearce); Mar. 28 at Mactaquac (Lounsbury); Mar. 30 at Kennebecasis Park (Hollway).

A few immature Iceland Gulls routinely linger into early June in eastern New Brunswick but one at the St. Stephen sewage lagoon through the end of May was more noteworthy (B. Dalzell). A late Glaucous Gull visited the Alma River, at Fundy N. P., June 13 (A. MacLean). Latest American Tree Sparrows were reported May 4 at St-Simon (Marcel David) and May 11 at St. Stephen (B. Dalzell) and the last Snow Bunting May 20 at Caraquet (Jean-Paul Godin). Common Redpolls were down to only 3 at Halton Dalzell's feeder in Moncton in the third week of April and the last at Chatham was seen Apr. 15 (Lemieux).

"Herps" and "Bugs"

Wood Frogs were calling near Burtts Corner Apr. 14 (Jim Goltz et al.) and a single Spring Peeper at Mary's Point Apr. 11. There was a strong chorus of peepers at East Saint John Apr. 25 (Mitzi Withers).

An interesting report of turtle longevity comes from Bob Washburn who found one, presumably a Wood Turtle, during the summer on the Miramichi within 200 yds of where he and his father had carved their initials on it 41 years earlier.

Early butterflies were a Mourning Cloak at Sunpoke Lake, near Geary, Apr. 4 (FNC) and an unidentified reddish-brown butterfly, probably one of the commas, Apr. 3 at Caledonia Mountain (Jennifer Edwards & George Foster). Doris Johnston, having picked the last garden flowers for a bouquet Nov. 19, was surprised the next day by a European Cabbage Butterfly

flying around the house. Frequently, that butterfly will emerge indoors from a chrysalis on vegetables or flowers of the mustard—cabbage family.

Flowers

Cecil Johnston, as he often does found the first Coltsfoot flowers at Saint John. In 1987, it was on March 25. Other early wildflowers reported were Skunk Cabbage at Lake Utopia Apr. 12 (FNC), Trout Lily (Dogtooth Violet) and Red Trillium at Fredericton Apr. 18 (Goltz), Trout Lily at Carter's Point, near Crystal Beach, Apr.24 (Win MacAndrews), Spring Beauty at Germantown Apr. 26 (Alma White), and White Violets at Fairvale Apr. 28 (Sally Jackson).

A second colony of the rare Nodding Ladies'-tresses on Grand Manan, at Seal Cove in mid-September (Johnston).

Abbreviations

CNPA Club de naturalistes de la Péninsule acadienne

DSC David Christie

et al. and others

FNC Fredericton Nature Club

G.M. Grand Manan

N.P. National Park

SJNC Saint John Naturalists' Club

v.o. various observers



Federation News

Exploring Mount Carleton

That there are a wealth of things to discover in Mount Carleton Provincial Park can be vouched for by 24 members of the federation, from throughout the province, who spent three days in the park, observing the flora, fauna and environment, June 26-29, 1987. Events like the Mount Carleton gathering provide opportunities to observe and enjoy the outdoors, in the company of others with similar interests. The trip was organized by Wilma Miller of Nictau.

Having driven miles through the woods to reach the park, anticipation heightens on a narrow lakeshore road with steep mountain slopes looming overhead. At beautiful Bathurst Lake, a real sense of adventure is experienced as your car plunges into the water to ford "The Run", a shallow connection between two sections of the lake.

Arriving on Friday evening, everyone got settled into their camps, enjoyed a hearty supper, and spent the evening getting acquainted, sharing concerns and learning about the area. A brief history of Mount Carleton Park was presented. The campers were urged to explore and observe the wilderness—"a store of discovery"—"to take lots of memories, but leave only footprints."

Saturday morning, led by Rudi Richter, retired park interpreter, the group climbed up one trail to the summit of Mount Carleton — highest point in the Maritimes — and down another. Rudi was a great help to the participants who appreciated his expertise throughout the weekend. The evening was spent observing a slide presentation and exchanging ideas and notes about the plants and animals spotted during the day.

On Sunday, it was off to Pine Point by canoe, to explore a fire-origin red pine stand, which has never been cut. The trip back to camp was made on foot and, arriving earlier than scheduled, it was decided also to hike the trail to lovely Williams Falls on the north side of Nictau Lake.

Sunday evening was spent watching a slide presentation on logging operations and reforestation by Bob Clark, a Fraser Inc. retiree, and tallying observations, which included 72 different species of birds, along with moose, coyote, deer and bear, and innumerable plants.

A definite highlight of the weekend was the food — delicious, hearty meals, including porridge and bacon and eggs at breakfast, bean-hole-beans, chicken, and steak at night. There were also Wilma's "What's it" quizzes and mystery objects to keep members on their toes.

When Monday morning dawned, it was time to clean up, pack, and head home. As they drove out, the participants could reflect on the highlights of a memorable weekend. As organizer of the weekend, Wilma Miller summed it up, "What we stress during the trips are the flora and fauna — observing and sharing with each other. This was a really good trip. It was all in fun and everyone was very eager to take part."

Our thanks to Wilma and Bill Miller, Bob and Bert Clarke, and Rudi Richter for their splendid contributions to an outstanding experience. — Adapted from the Victoria County Record by DSC.

Fundy Footpath

For years, there have been calls for construction of a Fundy Trail, a scenic highway along the Fundy shore. Proponents argue that it would be a great tourist attraction and economic benefit for our province. On the other hand, it would be very expensive, especially to construct the section across the rugged terrain between St. Martins and Fundy National Park. The provincial government is now carrying out a technical study of that "missing link" in the proposed highway.

At its November meeting, the board of directors of the Federation decided to write Premier Frank McKenna, expressing concern about the environmental effects on the fragile coastal slope and steep-sided valleys of highway construction along that wildest portion of New Brunswick's coastline. The Federation's letter suggested that most of the highway follow a more inland route, from which side roads could lead to scenic lookout points and to a hiking trail, which would provide coastal access with much less impact on land and wildlife.

On behalf of the Premier and the Minister of Natural Resources, Stuart Jamieson, M.L.A. for Saint John Fundy, indicated that he would refer our letter to the study committee, which is considering two or three highway routes and the approximate cost of each. Mr. Jamieson expressed his personal hopes for a "natural undeveloped access highway, without any commercial developments... the best possible highway system, with the least amount of damage to an area already mauled over by progress [a reference to forest harvesting in the area]." Subsequently, the Federation's past president, Hal Hinds met with the study committee to point out the location of rare plant communities in the study area.

On March 5, about 40 interested individuals and representatives of various outdoor groups met in Sussex to discuss establishing a Fundy coast hiking trail, similar to the Bruce Trail, the Appalachian Trail, and the Dobson Hiking Trail that links Moncton with Fundy National Park. A steering committee was formed and the name "Fundy Footpath" chosen to avoid confusion with the Fundy Trail highway. Soon after, a funding request was submitted to the provincial Department of Tourism under the corporate sponsorship of Moncton Outdoor Enthusiasts. If funding can be obtained, the steering committee hopes to have a serviceable 50-km trail laid out within a year, from Little Beach, near St. Martins, to the Goose River Trail in Fundy National Park. — M.M. and D.S.C.

Nouvelles des clubs



Club de naturalistes de la Péninsule acadienne

La première réunion annuelle du Club avait lieu le 14 octobre. Malgré son jeune âge, le Club a beaucoup de projets en marche. On a vu 29 espèces d'oiseaux aux mangeoires rapportés par 21 observateurs. Les membres du Club ont rapporté avoir vu 35 espèces d'oiseaux rares durant l'année. Plusieurs membres ont participés au projet de l'Atlas et des cartes de nids. Jusqu'à maintenant, 19 membres participent au projet de l'Objectif 200. Gérard Benoit est en tête avec 183 espèces suivi de Hilaire Chiasson avec 182. L'assemblée fit l'adoption d'une constitution et d'une devise pour notre logo. La devise est "Connaître, apprécier, conserver". Le programme des réunions de l'année ainsi que les thèmes discutés fut remis aux membres. Le Club prévoit participer aux recensements des oiseaux de Noël des 3 régions et espère couvrir une autre région, soit celle de Miscou. — Rose-Aline Chiasson

You Can't Miss Your Cake and Eat It Too

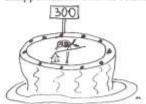
Mary Maika

You no doubt remember the story of The 300 Club of New Brunswick, which started almost as a joke and became an established entity. (Now, it is even mimicked on a less ambitious scale by some naturalists' clubs in the province.) In any case, we have some hilarious antics to add to the growing "saga" of that "prestigious" body.

Stuart Tingley became a member of the club over a year ago, as duly reported in an issue of the N.B. Naturalist, asking you to guess which bird was his 300th. Since nobody sent in an answer we would like to report that it was the Red-bellied Woodpecker, which as far as I am concerned should have been called red-headed, since it has only a lightly pink breast but a brilliant red crown. Stuart received his special, beautifully designed, certificate right away but then we wanted to surprise him with a party and a special cake.

Deep into the night, I laboured baking and decorating the cake. Next day, from as far as Saint John, people arrived for the celebration. Stuart had been expected but guess what? Unaware that it was to be his party, he didn't come! So, we took pictures of the cake, enjoyed the whole thing, and sent him a photograph with the advice he should eat it! Poor Stu was very remorseful. I guess we will forgive him, and when he reaches 350 he might get another cake, except someone else will have to use my recipe. I will be birdwatching with St. Peter.

Then there was that important letter that Jim Wilson, the club's self-appointed recording secretary, directed to all member's, with a copy to David Clark (an aspiring member now at 294 species). In it, Jim "officially" confirmed that it had been agreed to change the entry criteria from 300 species to 315 for all future members! You can imagine David's consternation and disappointment until he realized that it was all just a joke!



One has to be as lucky as Brian Dalzell to reach the 300 species goal with the most beautiful bird of the year, a Painted Bunting! Of course, he made sure to appear for the celebration. Guess what the decoration was on his cake?



Watch Those Ring-necked Doves

If you should see a dove with a black collar on the back of its neck, look it over carefully.

The Ringed Turtle-Dove, a common cage bird, occasionally has been seen in the wild in New Brunswick, including one that visited Sussex bird feeders over a two year period. During 1987, one was reported at Saint John April 28, another through the fall and early winter at Stanley, and two near Sussex on the Christmas Bird Count. Presumably, all were escaped captives. Breeding populations of Ringed Turtle-Doves are established in North America only around Tampa and a few other southern cities.

The situation has recently been complicated by the establishment of the similar Collared Dove in the Bahamas and southern Florida. Originally confined to southern Asia, it spread, as a breeding bird, from Hungary to Great Britain and Norway in only 25 years. It could easily reach the Maritimes from Florida, perhaps even from Europe, so be prepared.

The Collared Dove, treated by European field guides, is about 10% larger than the similar Ringed Turtle-Dove and has a proportionately longer tail (about one third its total length). It is usually a grayer bird with blackish primaries and a faint purple tinge to its breast, whereas Ringed Turtle-Dove (also called Barbary Dove) is usually buff-coloured with grayish primaries. (I've also seen nearly white varieties in local pet stores.) More helpfully, their voices are distinctively different: in the Collared, "coo-COO-coo", with the third note lower in pitch; in the Ringed, a rolling cooing, rising then descending in pitch, preceded by a sharp note, "cook krrrrooo". The alarm call of the Collared Dove is described as a rasping scream, usually given in flight, while the Ringed Turtle-Dove's jeering "hek-kek-kek" is always uttered while perched or on the ground.

It will be interesting to compare the spread of the Collared Dove from scratch in North America to that from a large well-established population in Europe. How will it affect our native North American doves? If you think you see one in New Brunswick, get in touch with an expert immediately. — David Christie

An apology is due to any Christmas Bird Count participants whose names were given incorrectly. Checking lists of names isn't pleasant, and this year it apparently was overlooked entirely. When it came time to paste illustrations in the printed version, the names "Swan Washburn" (Fredericton) and "Bill Weed" (Moncton) jumped out as errors. Sorry, Susan Washburn, Bill Wood, and anyone else similarly slighted. Our typist does her best to correctly interpret compilers' writing. If I didn't know Susan and Bill, I might have made the same errors too. — DSC

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