

N.B. Naturalist

Le Naturaliste du N.-B.

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On peut lire dans *Le Naturaliste du N.-B.* des rapports touchant l'histoire naturelle du Nouveau-Brunswick. Les articles seront acceptés dans français ou anglais pour être reproduits dans la langue d'origine seulement. Les opinions exprimées sont celles de leurs auteurs. Prière d'envoyer vos articles à:

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Cover Illustration

European Mistletoe, *Viscum album*
Drawing by Mary Majka.

Illustration de la couverture

Le Gui d'Europe, *Viscum alba*
Dessin par Mary Majka.

From the Editors



Here we are again, late as usual, but at least in time for Christmas!

We bring you a mixed bag of goodies, including a story of old Santa himself. We hope, as you sit by a "crackling fire" reading this magazine, that you won't forget your bird feeder and, to get that special feeling of accomplishment and burn off some holiday calories, that you will brave the cold, the wind and the snow and take part in the Christmas Bird Count. Find out who your local compiler is, and join in the fun.

This Issue contains a number of book reviews. You might find one or two of those books under your Christmas tree, or give one to somebody else – Hint, hint! By the way, did you ever think of giving a New Brunswick Federation of Naturalists membership to some budding naturalist as a gift? You can you know, and if you hurry and let us know before Christmas Day we will quickly send that person this issue of the *N. B. Naturalist / Le Naturaliste du N.-B.*

To you and all who are dear to your heart we send our warmest wishes in this festive season. Joyeux Noël à tous le monde!

Mary and David

Our July Cover Artist

The last issue of the *N. B. Naturalist* featured a lovely portrait of a Black-crowned Night-Heron on its cover. It was the work of a 13-year-old boy from whom we hope to get more art work in years to come.

Halton Dalzell's interest in birds was "born in," as he says. His grandmother, a teacher on Grand Manan, was a birdwatcher, but his keen interest was sparked mainly by his brother Brian's great knowledge of birds. When he was about 6 or 7 years old, Halton was observing birds at Brian's feeders. A year ago, with a little help from his mother, he saved enough from his allowance to buy a pair of binoculars. From then on, his "birdwatching career really took off". He has now identified 156 species.



About three years ago Halton started to draw pictures of birds. At first he took examples from books, but now he is beginning to draw them from life. Last year he embarked on a project to make an album of portraits of bird heads. His night-heron drawing is one of those portraits.

Halton's newest project is to follow his older brother's example by feeding birds in his backyard and seeing how many species he can attract by the end of winter.

M. M.

From Your President



I'm writing this column during one of the most spectacular mushroom seasons in several years. Giant puffballs¹ a foot high (3 dm) and weighing more than 12 lbs (5 kg) and great hauls of the highly esteemed chanterelles² and horse mushrooms³ have recently been reported. And the honey mushroom⁴ season has just begun!

I'm hoping many of you will take advantage of the loose sheet found in this issue to report and to ask questions about any nature observations.

The annual general meeting of the federation held jointly with the Conservation Council of New Brunswick was quite successful, although some (like myself) were unable to go whale watching Sunday afternoon because of high winds. The morning group did, however, have an exciting trip even though they did not see any whales.

During the banquet in Saint John, Will Astle was awarded an honorary life membership in the federation for his work on bird banding in the province and for providing encouragement to several budding New Brunswick naturalists. During his acceptance speech, Will had some warning words for the Minister of Municipal Affairs and Environment, Robert Jackson, concerning the mining of gold near his summer home in the Cape Spencer area.

Of the federation field trips in St. Andrews, the one at low tide to Indian Point was well attended. Tim Beatty from Sunbury Shores Arts and Nature Centre pointed out many fascinating creatures of the tide pools and their interesting habits. The talk by Jack Terhune, of U.N.B. Saint John, on the distribution and habits of seals in the Fundy area was of special interest to all who attended. Dr. Terhune provided considerable insight into the codworm/seal worm controversy.

During the federation's business meeting, Wilma Miller from Nictau was awarded an honorary life membership for her many years of support for the federation. The Millers have hosted naturalist get-togethers in the Tobique/Mt. Carleton area on many occasions.

Also receiving an award from the federation, Bob Rangeley, of Grand Manan, deserves congratulations for winning the George Stirrett Award for the best nature article published in the *N. B. Naturalist* during 1985 ("Good Press for the Lowly Barnacle", 14: 128-9). He won a prize of \$50.

Hal Hinds



1 *Calvatia gigantea*. 2 *Agaricus arvensis*. 3 *Cantharellus cibarius*. 4 *Armillariella mellea*.



O Christmas Tree!

Mary Majka

On your walk today you found a cone – soft, shiny, smooth. It fits the palm of your hand and has the smell of Christmas. You think of candles, carols, cookies and kids, and suddenly the snow is welcome!

In the warmth of your hand, the little cone becomes more fragrant and, on coming home, a little, winged seed flutters down through your fingers. A tiny, sticky droplet of pitch on angel wings – a Christmas tree baby! You think of chickadees and grosbeaks, crossbills and squirrels, and curiously lift the scales of the cone to discover a whole nursery. Snuggled against the cone's candle shaft, row upon row of seeds await a warm and windy day, when, released, they will whirl down to find a place, each to grow to a giant. The competition will be fierce and the survival low.

Looking over the forest floor, you will see a kindergarten of hopefuls, each a perfect miniature tree, lovely to touch, too beautiful to step on. Soon, those children of the forest will grow into strapping youngsters, but only those who find a ray of sun will prosper, sending tiers of radiating branches upwards toward the sky. With the precision of nature, they will bloom in spring and fruit in fall. Mists of yellow pollen, its security in numbers, waft through the forest en route to rosy pistils and immortality.

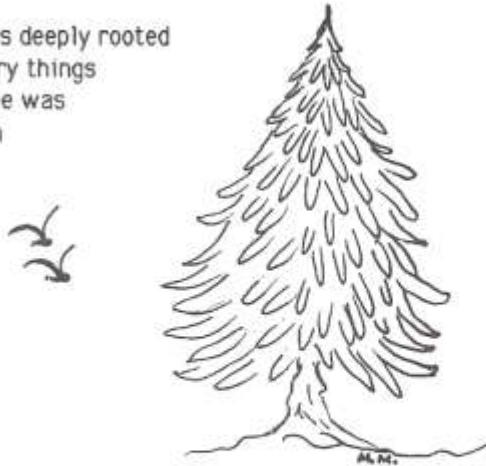
And so, the time has come for teenagers to be chosen. One of them may find its way to your home. The lovely balsam fir or the young red pine will likely be your preference, since both have the good manners to keep their needles to themselves.

One wintry day I brought a small tree to my firstborn son for his first Christmas and as I passed his tiny fingers through the soft needles he reached out towards a nest hidden in the branches – a gift from the tree to us! Many Christmases have passed since, but the magic of that moment can never be surpassed.

Why did we adopt a tree as a symbol of joy, peace and good will? Why does a tree in our home convey the meaning of the festive season, the coming of light, the birth of a Child?

Maybe because our own existence is deeply rooted in the simple, essential and elementary things akin to the rocky soil in which the tree was anchored. In its tenacity and strength is our hope; in its green radiance the assurance of sustenance; in its symmetry and growth the law and order of nature; in its seeds the continuity of life.

And so my wish to you, for this holiday season, is to find a cone on your walk and to look for a nest in your Christmas tree!



Notes on Tree Swallow Breeding Biology

Rudy Stocek

I – Aggression Directed Towards Human Disturbance

Most birds demonstrate a defensive mechanism when threatened on their breeding territory. Some swallows, notably Tree and Barn Swallows, exhibit both vocal and physical posturing towards other species, including man. Typically, the birds swoop down, or stoop, on an intruder, diving to within a few centimetres, often calling excitedly, all in an apparent effort to intimidate and chase away. Contact is infrequent and momentary if it does occur.

The purpose of this note is to explore some of the factors that affect reaction by Tree Swallows to humans when they enter their breeding space. The birds do not respond the same way throughout the breeding season.

Tree Swallow breeding biology was studied at a small nest box colony in Fredericton, N. B. over a 12-year period. The aggressiveness of individual nesting pairs was noted during nine years. The degree of aggressiveness was calculated as a percentage by comparing the number of observer visits to the nest boxes (territories) to the number of times aggressive action was exhibited, e.g. 10 visits to a nest site with six of them eliciting a hostile response = 60%. Not all pairs or individuals were equally hostile. Both male and female swallows were involved in this display, either singly or in pairs. Infrequently, a number of birds reacted in

common to create a noisy mob. Included among them, on one or two occasions, was a Barn Swallow.

A total of 730 visits were made to the nest boxes, 39% of which elicited an aggressive response from the swallows. Both mature pairs (with females over one year old) and pairs with first year females showed a 39% response.

The progression of the breeding season seemed to affect the aggressiveness of the birds, which were much more hostile in late June and July (Table 1). The phase of the breeding cycle suggests why that was so: When there were young in the nest, the birds were quite hostile. Even during late egg laying there appeared to be a more pronounced response.

However, there are perhaps more specific reasons why the birds reacted as they did. The time of day appears to be of some significance. A more-or-less gradual waning in aggression from morning to evening was evident (Table 2).

Weather conditions might also exert some influence on how Tree Swallows respond to human intrusion. When mean daily air temperatures at the swallow colony were compared to hostility it appeared that the response was appreciably greater in the higher temperature ranges (Table 3). That is shown to an even greater degree if only one phase of the breeding cycle, young in nest, is considered. When there were young in the nest, air temperature at the time the nests were checked also suggested that aggressive response increased with higher temperatures (Table 4).

Other weather factors, except perhaps wind, had little impact on Tree Swallow aggression. The amount of sunshine was unimportant and the occurrence of rain did not decrease aggressive activity. However, when the weather was described as "windy" at the time of observation, aggression was reduced to 24% compared to 43% when there was little or no wind.



Table 1. Degree of aggressiveness shown by nesting Tree Swallows, by date and by breeding phase. (Breeding phase figures represent four years of comparable data.)			Table 3. Degree of aggressiveness shown by nesting Tree Swallows, by mean daily air temperature, for all stages of the breeding cycle, and for the nestling stage only.		
Period of Season	No. of Visits	% Aggressive	Mean Temp. (°C)	No. of Visits	% Aggressive
May 5-14	23	35	5.0- 9.9	42	24
May 15-24	103	36	10.0-14.9	110	28
May 25-Jun 4	210	30	15.0-19.9	189	43
Jun 5-14	121	38	20.0-24.9	273	39
Jun 15-24	125	37	25.0+	92	51
Jun 25-Jul 4	54	65	(For visits with young in the nest)		
Jul 5-14	59	63	9.0-12.9		10
Jul 15-29	17	76	13.0-16.9		22
Breeding Phase			17.0-20.9		51
Nest building	139	35	21.0-24.9		71
Egg laying	81	43	25.0-28.9		68
Incubation	140	35			
Young in nest	138	62			
Table 2. Degree of aggressiveness shown by nesting Tree Swallows, by time of day.			Table 4. Degree of aggressiveness shown by nesting Tree Swallows, by air temperature at time of visit during the nestling stage.		
Time of Day	No. of Visits	% Aggressive	Temp. (°C)	No. of Visits	% Aggressive
0800-0959	68	62	10.0-13.9	7	42
1000-1159	94	46	14.0-17.9	10	50
1200-1359	217	42	18.0-21.9	20	90
1400-1559	258	33	22.0-25.9	49	69
1600-1759	94	33	26.0-29.9	18	56
1800-1959	7	14	30.0-33.9	8	75

To summarize, Tree Swallow aggression towards humans increased towards the end of their breeding season, especially when young were in the nest. A greater response was elicited earlier than later in the day. Ambient temperature seems to be an influencing factor, increased hostility occurring at higher temperatures. Wind may also be of some importance. Even though first-year females seem to press their attacks more closely, there appears to be no difference in the response rate of pairs with older or younger females.





Two Cases of Mephitis

L. K. Ingersoll



Two attacks of any malady hardly indicate an epidemic. Residents of Fredericton have taken some comfort in that fact, but have been on the alert lest there be more evidence of a quite mobile distress.

This has to do with the Striped Skunk, *Mephitis mephitis*, and its recent encroachment upon the north side of the capital city. While circumstances may vary in any given situation, the remedial treatment used to remove the intruders in these two instances may help other victims in their plight.

Case #1: Early in September there were signs that a then-unidentified animal was setting up housekeeping in our backyard. Our mini-barn sits on four corner blocks, leaving about a 7 cm clearance from the ground, in front, but that had been nearly doubled in one spot by some expert digging.

Several days went by without further clues. Then, one afternoon, when I was taking a break on the back verandah, a young skunk arrived in the yard, very sedately walked to the new burrow and disappeared. Having our worst fears confirmed did little to lessen our concern; in fact, it was increased a hundredfold.

Very shortly things started to warm up. Our beautiful tenant, with its formidable armour was making its presence felt – and smelt – around nearby homes. Most of the complaints were of night time visits, bearing out the usual belief that skunks are normally nocturnal creatures. More than that, it was confirmed that Tim Dilworth *et al.*, in *Land Mammals of New Brunswick*, were absolutely correct in stating that skunks "usually forage within about 0.8 km of their den". One friend within that orbit, a member of the armed forces, rudely awakened along with his family about 2 am, said he thought for a moment the area was being attacked with gas bombs. Their windows had been open, and it was concluded the intruder had fired a heavy charge at close range.

It was feared we might be charged with harboring a nuisance, so we tried to keep the location of the den a deep, dark secret. Nevertheless, something had to be done. Trapping was out, as was also any show of force, so we made a compromise with conservation philosophy; we would live and let live, but cohabit the same little plot of land – never. Finally, more or less in desperation, filling the open spaces around the barn with moth crystals, plus generous helpings of moth balls to last for more than a few days caused the specimen to leave the premises.

There is one positive fact concerning the skunk's own attitude and ethics. Like some "domesticated" mammals we know, notably house cats, it never once polluted its own erstwhile territory. For that we shall be always grateful.

Case #2: It is said that bar tenders hear the most of human woes, but barbers often serve in the same capacity. When a regular visit was made to the local shop later in September, and the friendly barber asked what was new, the above account was duly related. After suitable, sympathetic clucks, he asserted that was a most interesting coincidence; only a few days before another customer had told about his recent experience with a skunk.

The bungalow, scene of the action, located in yet another section of the city's north side, was being tidied up and aired out for the day. The outside cellar doorway and all windows in the basement were opened wide and left that way for the afternoon. On closing up the basement, however, the owner caught a glimpse of an uninvited, black and white guest hiding in one of the corners. What to do? Almost any type of forceful eviction would surely backfire and cause the family to evacuate for at least a month.

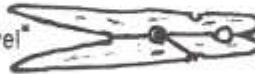
Much more wisdom prevailed than in Case #1. The man of the house quickly called a yard conference of members of the family and close neighbours, to discuss the emergency, and the following strategy was developed.

Two planks were brought in, one placed as a ramp up to the basement window sill, the other positioned outside from the sill to the ground. Two cans of sardines were opened, and several of the fish laid out at the junction of the two planks, with the remainder put enticingly at the very end of the makeshift exit.

It took a bit of time but, sure enough, the skunk "rose to the bait", ate the first lot of fish and hastened down the ramp to gorge on the larger pile. While it was so happily engaged, the owner sped to the basement, removed the inside plank and closed all the windows and the door. That left a well filled, but doubtless puzzled animal to seek other quarters for the winter.

Conclusion: It has been nearly two decades since we observed the last previous member of *Mephitis mephitis*. It was walking down the middle of Montreal Ave. in Saint John on a Sunday afternoon, during an early October snowstorm. On the alert, with tail on high, it apparently realized that even an army tank would be steered clear of such a tiny "giant" of the animal world.

Perhaps cities can be dangerous places for humans to live!



* Editors' Note: See review of *City Critters*, p. 113.



Rare New Brunswick Plants

Those Graceful Ladies'-tresses Orchids

Hal Hinds

At least four ladies'-tresses orchids are found in our province. Two are rare and two are more widely distributed. Each has a distinctive habitat and features that readily separate it from the others.

The Slender Ladies'-tresses, *Spiranthes lacera*, our most common and earliest species, is found in sandy grasslands or along the borders of woods' roads. Its graceful, slender stem is usually less than a foot high with a long, gentle spiral of white, fragrant flowers. The oval, pointed leaves at the base of the stem are usually gone at flowering time. You may walk through a field of these plants and not recognize them as anything more than grass stems!

The Shining Ladies'-tresses, *S. lucida*, is the next to see in bloom, if you can find it¹. Only a few localities are known for this species of limy shores. The large wide leaves and the flowers, whose lower lip has a distinct yellow spot, distinguish this species from all others.

The Hooded Ladies'-tresses, *S. romanzoffiana*, is our common autumn species of damp shores and ditches. It has grass-like leaves at the base of the stem and averages about 20 cm (8 inches) high. The spiral arrangement of the white flowers is more obscure than in the other species; the flowers appear to be in three rows. Their fragrance is slightly of almonds. The lower lip is deeply constricted below the dilated tip.



The rare Nodding Ladies'-tresses, *S. cernua*, apparently occurs only in the southern part of the province and closely resembles the Hooded. The lower lip of the Nodding is not, or scarcely, constricted below the crisped summit. This species blooms the latest of the ladies'-tresses orchids, sometimes being found blooming until mid-October during a mild autumn.

The following key should help separate these elegant wild orchids.

- A [Choose one] — Leaves mostly absent at flowering (pointed, oval, at base of stem); flowers in long spiral. Slender Ladies'-tresses.
 - Leaves present at flowering. Go to B.
- B [Choose one] — Flowers with conspicuous yellow spot in throat; plants of limey shores. Shining Ladies'-tresses.
 - Flowers without conspicuous yellow throat. Go to C.
- C [Choose one] — Lower lip of flower fiddle-shaped; plants fairly common and widely distributed the province. Hooded Ladies'-tresses.
 - Lower lip of flower not or scarcely constricted below summit; plants rare and southern. Nodding Ladies'-tresses.

I have usually found the Shining Ladies'-tresses first blooming in early July, the slender species later in that month. D.S.C.



Agreement on Ellesmere Park

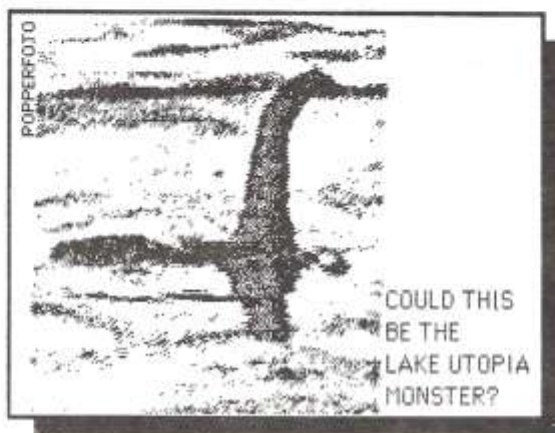
Federal Environment Minister Tom McMillan and Tagak Curley, Minister of Economic Development and Tourism, Government of the Northwest Territories, have announced the signing of an agreement to establish a national park reserve on Ellesmere Island. A national Park reserve has the same protected status as a national park, except that the land area in a reserve is subject to native land claims negotiations. Mr. Curley and Mr. McMillan signed the agreement within the park boundaries, on Saturday, September 20th.

Ellesmere Island National Park Reserve will protect almost 40,000 km² of the most northerly lands in Canada. When approved by Parliament, the park reserve will be Canada's 32nd national park. This agreement results from public consultations and inter-governmental negotiations that began in the late 1970s. The viewpoints and support of the residents of Grise Fiord and Resolute Bay have been extremely important to every phase in the evolution of this proposal.

From the Pages of the Journals

"HIDDEN ANIMALS"

Christopher Majka



One summer's afternoon ten years or so ago I packed my diving equipment into the car and drove down to Gordon Falls, a series of falls, rapids, and pools along the Pollett River in Albert County. I had always wondered how deep the pools were. I pulled on my wet suit, weight belt, tank, and other diving paraphernalia and walked like a black rubber Martian to the side of one of the most promising pools. Sticking the regulator in my mouth, I tumbled head over heels into the water.

The water was shuddering from the force of the waterfall, and tiny golden bubbles were being propelled deep into the water below. I descended into the abyss. The light grew dimmer and dimmer and finally, when my depth gauge indicated 32 feet (it was feet in those days) I touched the sandy bottom of the pool. As my eyes grew accustomed to the gloom I noticed the twisted form of a sunken tree in an even deeper nook below me. I also noticed a beer bottle lying among its branches so I swam over to rid that otherwise pristine place of its one piece of litter. As I reached for the bottle, a huge slimy tentacle suddenly reached out from the tree and grasped at my arm.

I experienced a sudden rush of adrenalin, thinking that I had made a significant cryptozoological discovery. Crypto-what, you might ask? Cryptozoology is derived from the Greek *kryptos* (hidden, as in crypt), *zoon* (animal, as in zoo) and *logos* (discourse, as in logic). The "science of hidden animals" was proposed in 1955 by Bernard Heuvelmans, in his book *On The Track of Unknown Animals*, as a contrast to zoology, the study of known animals, and paleontology, the study of extinct animals.

Hidden animals? Does that mean nasty little creatures lurking unknown in the back-most reaches of my closet or among the lint under the far corner the bed? While not ruling out such possibilities, cryptozoology concentrates on undiscovered, and possibly mythical, animals such as the Sasquatch, the Yeti or "abominable snowman"¹, the Loch Ness monster, and the Mokéle-Mbémbe².

For a long time no one paid serious attention to that peculiar offshoot of biology but the past few years have seen a resurgence of interest in that area with researchers like University of Chicago biologist Roy Mackal rushing off on expeditions down the Congo to search for Mokéle-Mbémbe. Are there really "hidden" animals out there? What are the chances that you might stumble across a Mastodon in your apple orchard while out on an evening stroll? Does Lake Utopia really harbour a distant cousin of "Nessie", the famous, supposed inhabitant of a Scottish Loch?

In a paper, entitled "Mammals and Cryptozoology", in the *Proceedings* of the American Philosophical Society in 1984, Dr. George Gaylord Simpson makes a strong case against the possibility that any new large mammals will ever be discovered on the planet. His argument runs as follows. If you examine the number of new genera of mammals which have been found since the turn of the century (Table 1) it turns out that during the first 30 years of the century many new genera were found but since that time the number has leveled off at less than one a year.

Table 1. Number of new genera of mammals found since 1900.

1900-09	1910-19	1920-29	1930-39	1940-49	1950-59	1960-69	1970-79	1980-82
42	22	20	8	7	8	9	8	2

1 Sounds like the thing the neighbour's kids built in my front yard this winter, I can hear you saying. Yeti is Tibetan, meaning "all devouring demon," which is actually closer to the kids themselves.

2 An amphibious dinosaur which is supposedly still at loose somewhere in the jungles of the Cameroons.

Even among those discoveries, most have been small inconspicuous animals such as shrews (10%), bats (18%), and rodents (54%). The other 17 orders of mammals account for only 18% of the new discoveries. The discoveries include only two new families, one of bats, the other of rodents. Many of the so called "hidden" animals pursued by cryptozoologists are supposed to be primates, but only two new genera of primates have been found in this century and no new species since 1907.

Simpson, reviewing the evidence for certain "hidden" animals, points out that either they have turned out to be well known species³ or there is not a shred of objective evidence for their existence. He concludes that on the basis of the evidence of the past century there is little probability that any new large mammals remain to be discovered. To be fair one must add that although a statistical argument of that kind is very compelling, it does presuppose that the future can be predicted on the basis of the past, whereas we all know that one of the important features of the future is that unexpected things will inevitably happen!

More popular articles have appeared too, such as "The Myth & Science of Cryptozoology" by Virginia Morell in *Equinox* (Sept./Oct., 1982) and "In Quest of the Wild and Weird" by Jared Diamond, a U.C.L.A. physiologist, in *Discover* magazine (March/1985).

Dr. Diamond looks at the whole gamut of possible "hidden" animals and points out that a number of surprising discoveries have been made in this century. The Komodo Dragon, the world's largest lizard, weighing up to 135 kg, was discovered in Indonesia in 1912. In 1938 the first coelacanth was captured – a species previously known only from fossils 65 million years old! In 1976 a completely unknown species (and, in fact, family) of shark was pulled onto a U.S. Navy ship after it had swallowed their sea anchor! It has been nicknamed "megamouth" for the size of its huge jaws. It wasn't until the 1930's that the "Kouprey", a giant forest ox weighing more than a ton, was found in the jungles of Cambodia. Nevertheless, Diamond concludes that recent evidence indicates that very few large species of animals remain to be discovered. As a result of field work in some of the most remote jungles of New Guinea he says,

"I can only conclude that accounts initially suggestive of mermaids and dinosaurs in New Guinea – or anywhere else – invariably have mundane explanations: misunderstood questions, questions answered "yes" in order to

³ The unknown African "nadi bear" has turned out to be a honey badger and the Sumatran "orang pendek" is probably a Malayan bear.

please the questioner, and natives amusing themselves at the expense of gullible westerners."

Virginia Morell is the most sympathetic reviewer. However, her article is popular journalism rather than science. In her interview with Dr. Roy Mackal, vice-president of the International Society of Cryptozoology, she accepts uncritically most of the claims of the cryptozoologists. Of particular interest to New Brunswickers is an insert about a creature called "Ogopogo", a supposed primitive sea-serpent-like whale, which has been reported from lakes in British Columbia, Manitoba and Quebec. Perhaps it is the same beast which has been reported from the waters of Lake Utopia in Charlotte County (Adams, 1873⁴; Ganong, 1907⁵).

Nevertheless, even from Ms. Morell's article, it becomes clear that the claims of cryptozoologists are principally composed of circumstantial evidence, oral testimony of natives, and wishful thinking and speculation about some of the less known areas of the globe, none of which rules out the existence of any of those animals, but neither does it provide compelling evidence that they are more than fanciful pipe dreams. Cryptozoologists, in fact, seem to have in them more than a little of the character of Dr. Challenger, the hero of Arthur Conan Doyle's novel *Lost World*, who stumbled upon a misty plateau of great beasts and fantastic plants.

So, keep your eyes open for an unusual shrew that may run across your path in the forest. There's always a chance it could be unknown to science. Or, if you fancy microlepidoptera (tiny moths) and are willing to spend hundreds of hours looking under a microscope, a new species could reward your labours. But if finding sea-serpents or sabre-tooth tigers is to your liking, be warned that the current zoological catalogue leaves rather slim pickings. The unknown animal at the bottom of Lake Utopia could be a primitive carnivorous whale, but it's much more likely to be a tiny snail!

Oh yes, and back to the pool at the bottom of Gordon Falls. After I had almost swallowed my regulator in panic I turned to see that the evil creature ready to pull me kicking and screaming into its lair was only a rather large eel. It was swimming rapidly away, and if the expression on its face was any indication, it was a toss-up which of us was more frightened.



4 Field and Forest Rambles with notes and observations on the Natural History of Eastern Canada. London.

5 On the Psychological Basis of New Brunswick Sea-Serpents. Bull. N.B. Nat. Hist. Soc. 26:36-39.



Nature News



Spring 1986

David Christie

Having spent the cooler half of the spring season enjoying Rufous Hummingbirds and Redwood Violets in more temperate climate on the Pacific coast I missed the cold, snowy weather in the first half of April. On my return the long dry spell that produced the province's worst forest fire season in 40 years had begun.

No one has sent any personal observations of the effects on wildlife of these fires. Certainly a lot of vegetation was destroyed, an unknown quantity of animal life lost and the reproductive cycle of early breeding species disrupted. Many birds, when they loose their eggs or young to a predator, start all over again and re-nest. In the case of the fire losses they would first have to locate and claim a suitable new territory in an unburned area already occupied by established pairs.

It is amazing how soon many burned areas are re-covered with vegetation. Many plants, including some trees, sprout from the roots if the heat has not been extremely severe. Buried or newly-blown-in seeds of others germinate and grow quickly in full sunshine on more exposed soil. After two or three years the area may become very attractive for species of wildlife that flourish in thickets and regenerating forest. Most animals are mobile enough to move into a burned area as soon as conditions are favorable for them but it will take very, very many years for many of the smaller flowering plants of mature forest habitat can re-colonize an area.

If you live near burnt land, why not keep notes of the animals and plants you see there as, year by year, they re-occupy the area.

Mammals



Very few reports have come my way of plants and of animals other than birds. There is, however, one very interesting one. On Apr. 16 Alma and Don White found a seal lying on the beach at Mary's Point. Concerned for its welfare they called Rob Walker to come and examine it. Rob was astounded to find a Harp Seal, a fact the Whites had forgotten to mention since, having lived most of their lives in Newfoundland, Harps were nothing special to them. It was decided that the seal would probably swim away on the next high tide but the tide flowed and ebbed and the seal, an old male, stayed and died. Now in the N. B. Museum collection, it is

apparently only the second modern Bay of Fundy record of a Harp Seal, which in New Brunswick you're more apt to see on the North Shore, where they are frequently blown in with pack ice from their Gulf of St. Lawrence breeding grounds.

An albino Porcupine was seen between Saint John and Jemseg Apr. 26 (S.J.N.C.).

In late May Angus MacLean watched a River Otter swim out of Castalia Marsh into the sea. There is no record of otters having been introduced to Grand Manan by man, so it is assumed that, being very capable swimmers, they colonized the island by swimming across the Grand Manan Channel. There were reports of them on the island about 1900 but they seem not to have become firmly established until about 1960, by which time the introduction of Beavers had resulted in an increased amount of suitable habitat (Ingersoll & Gorham 1979. *Jour. N. B. Museum* 1979: 117-118).

Birds



One of the most unusual birds of the spring was a Western Grebe seen by Mike and Chris Antle on Maquapit Lake, near Scotchtown, May 18. The grebe surfaced about 20 feet in front of their canoe, swam along the surface for about a minute and then dived. The Antles, who watched it between two more dives, were particularly impressed by the bird's long, thin, black and white neck and its long dagger like bill. Western Grebe has been reported three times previously in New Brunswick, in fall, May and June. Readers should be aware that the Western Grebe of their field guides is now regarded to be two species. The darker birds are still called Western Grebe *Aechmophorus occidentalis* but the lighter ones are known as Clark's Grebe *A. clarkii*. Both forms are illustrated in the National Geographic Society *Field Guide* and the 4th edition of Peterson's *Field Guide* but not in the Golden *Guide* by Robbins *et al*.

In spring a few egrets are expected north of their breeding range. Sure enough a Great Egret was at Castalia, and later at White Head, G.M., from May 2 onwards (Harriet Folkins *et al*). Another Great stopped briefly at Mary's Point May 7 (DSC & Majkas). Snowy Egrets were not so numerous as in recent years. One at Saints Rest Marsh, Saint John West, from April 16 into May (Johnston *et al*) may have been the same bird observed at Red Head Marsh late in May (Jim Wilson). At Grand Manan, a Snowy was seen at Whale Cove, Castalia and White Head from May 3 onwards (Frank Longstaff *et al*). Other southern visitors at Castalia were an adult Little Blue Heron May 3-12 (Wilson *et al*) and a Tricolored (Louisiana) Heron May 28 (Al Hobbs, *fide* Brian Dalzell).

The most newsworthy ornithological event of the spring, the occurrence of three White Ibis was covered in our last issue (p. 53-55). In summary, one bird frequented a wet field at Kierstead Mountain, near Berwick, April 13-28 (Gesner Clarke *et al.*). One, at Saints Rest Marsh April 15 through May 1 (Cecil Johnston *et al.*) was briefly accompanied by a second bird on April 16. A Glossy Ibis returned to Saints Rest May 7 (Johnston) and 4 were seen there on the 31st (Jaakko Finne).

Tundra (Whistling) Swans, for many years extremely rare in New Brunswick, have been seen more frequently since 1983. Two or three were spotted this spring - one at Gardner Creek Mar. 28 (Jane McLean, *vide* Frank Withers), one at Bloomfield, Kings Co., from Mar. 30 to Apr. 2 (Allan Francis *et al.*), and one at Darlings Lake Apr. 5 (Watts and Tina McIntosh). The first two were in company with Canada Geese, the last by itself. Several Snow Geese were reported: 2 at Fredericton Apr. 6 (Pearce), 4 at Courtenay Bay, Saint John, Apr. 9-11, one lingering till the 27th (Finne *et al.*), 6 flying NE at Hammond River, Quispamsis, Apr. 29 (Jean Wilson), and 2 at Pocologan May 4 and 12 (Jim Wilson). All those were of the white form but a dark "Blue Goose" was at Lower Gagetown Apr. 12 (Phinney).

Canada Geese were widely reported in small to moderate numbers, while Brant were seen in few places but in larger numbers. The earliest were 5 at Partridge Island, Saint John, Mar. 13 (Ralph Eldridge). On March 29 2500 were at Castalia and 1000 around White Head Island (R. Walker) and the next day 3000 were estimated at Maces Bay (Phinney). Farther up the bay a flock of 480 Brant paused on the beach at Waterside before continuing NE on their migration (R. Walker). Numbers at Grand Manan had dwindled to 300 to 400 in Grand Harbour May 3 (Wilson *et al.*) and 20 at White Head May 25 (MacLean).

Among ducks at least three males of the Eurasian subspecies of Green-winged Teal were spotted (females are indistinguishable from North American Green-wings): at Saints Rest Apr. 13 (Finne), Jemseg Apr. 20 (Pearce) and Long Pond, G.M., May 3 (Pearce *et al.*) Another European teal, a Garganey, was apparently seen near Saint John in April (Scott Gilliland, *vide* Pearce) but I don't have any details. The only previous one reported in New Brunswick was at Red Head Marsh in May, 1979. A male Eurasian Wigeon frequented Courtenay Bay, Saint John, Apr. 24-26 (Nancy Page *et al.*) Jaakko Finne writes that G. Gormley, a keeper at Saint John's Cherrybrook Zoo, says that a wild Eurasian Wigeon appears at the zoo for a few weeks each spring.

Of the less common North American ducks in our province a male Canvasback and a male Lesser Scaup were at Fredericton Apr. 13 (Pearce). There were several reports of Gadwalls at Courtenay Bay and Saints Rest Marsh in Saint John,

beginning Apr. 13 (Wilson) and including 4 at Saints Rest Apr. 19 (Ian Cameron). Elsewhere, 2 and then 3 were seen at Waterside Apr. 13 and 19 (MacLean). During winter, our observers rarely get to the rocky offshore ledges and islets that are prime habitat for the Harlequin Duck, so few are reported. However, Peter Hicklin arrived early in his study area at The Wolves, off Blacks Harbour, and during his first census of eiders counted 87 Harlequins there Apr. 2.

And what should we make of Cecil Johnston's report of "tons" of Am. Black Ducks at Saints Rest Mar. 25? At about 3 pounds each, each ton is more or less 667 Black Ducks, I suppose.

Four Turkey Vultures were reported: feeding on a dead cat between Douglstown and Neguac Mar. 24 (David Tweedie, *vide* Harry Walker), at Fredericton May 2 (Dan Busby), Saints Rest May 3 (Finne), and Kouchibouguac National Park May 18 or 19 (Harry Beach and Barry Spencer).

A good migration of hawks was noted at the head the Bay of Fundy. At Mary's Point, a Bald Eagle, 60 Sharp-shins, 40 Broad-wings, a Red-tail, 4 Am. Kestrels and a Merlin passed eastward in one hour Apr. 29. In the Alma-Fundy Nat'l Park area Angus MacLean says Kestrels were most common at the end of April and that Sharp-shins were "everywhere" May 10-25. Angus picked a couple of Cooper's Hawks out from the Sharpies at Alma, one Apr. 16 and another May 12. Other Cooper's reported were one at New Maryland Apr. 20 (Doug Gibson, *vide* Pearce) and one at Long Pond, G.M., May 3 (Pearce & Johnston). A Red-shouldered Hawk was spotted in the U.N.B. Forest at Fredericton Apr. 10 (Phinney).

There was promising news from the Peregrine Falcon reintroduction program at Fundy National Park. A female and two male Peregrines appeared at Point Wolfe in late April or early May. Courtship was observed between the female and one of the males and the birds were very attentive to a potential nest site on a ledge not far from the hack-box site, where several young Peregrines had been released in recent years (Woodley). Actual nesting did not take place, which was not surprising since the female bird was only a year old. A strong pair bond was formed between the birds which were seen together through mid-summer.

Rae and Jean Brown reported an interesting observation at Fredericton May 27. The Browns, while working in their garden, saw three very large birds flying overhead which they think were probably Sandhill Cranes. They are quite familiar with cranes in the west.

The most exciting shorebird of the spring was an American Oystercatcher seen very well by Angus MacLean at Castalia May 25. Unfortunately, the bird was

frightened off by some clam-diggers before other observers arrived on the scene. Castalia also attracted some shorebirds which, while regular in fall, are rare here during spring migration: a Lesser Golden-Plover May 9 (Stu Tingley & Wilson), 3 of them May 24-25 (MacLean), and a Lesser Yellowlegs May 2-3 (DSC *et al*). Good numbers of our winter shorebird, the Purple Sandpiper, were also seen there, 150 on May 19 and 250 on the 25th (Finne). As is usual in recent years, a few Wilson's Phalaropes appeared in the province in spring, a female at the Strawberry Marsh (3rd record there) in Newcastle May 10 (H. Walker), a female at Courtenay Bay May 16 (Wilson), a male at Saints Rest June 2 and a female there June 9 (Finne).

Two Parasitic Jaegers, both migrating to the northeast, were seen by Jaakko Finne, one from the Grand Manan ferry May 19, the other at The Whistle, G.M., May 24. He also saw an adult Laughing Gull at Castalia and an immature Sabine's Gull in the Grand Manan Channel May 24, and Common Black-headed Gulls at Courtenay Bay: 2 adults Apr. 12 and a subadult May 29-30. The last species was also reported at Campobello Island Mar. 29 (Charles Duncan, in *Guillemot*).

Jaakko Finne spotted Caspian Terns in the Saint John area, one on May 2 and two on the 27th, as well as 14 migrating Arctic Terns in the Grand Manan Channel May 17. The first reported Common Terns were seen May 17 at Hammond River (Wilson) and May 18 at Connell, near Florenceville (Jean Carmichael).

An out-of-season Dovekie, at White Head Island May 25 (MacLean) probably would not be migrating north for the summer. 90 Black Guillemots, all but one in breeding plumage, were on the water off Ashburton Head, G.M., Mar. 30 (R. Walker). At Pt. Lepreau 40 guillemots were seen passing towards the south May 10 (Finne).

Two White-winged Doves, a very rare vagrant here, were reported at a Dorchester feeder Apr. 24-25 (John Gibbard, *vide* Al Smith).

A very interesting owl report comes from Mr. & Mrs. David Tweedie, via Harry Walker. The Tweedies saw two Northern Hawk-Owls near Route 8 about 10 miles north of Chatham during the spring. On one occasion the owls were seen mating. However, after one of the mid-May forest fires passed close by, the owls were not seen again. Hawk-Owls are very rare breeders in New Brunswick. A couple of short outings were made to look for owls at Grand Manan. No Boreals, unfortunately, but it was relatively easy to locate N. Saw-whet Owls. Three were found at 5 stops between Anchorage Park and the Thoroughfare May 4 (DSC *et al*) and 4 at 5 stops along the Dark Harbour Road May 10 (Wilson & Tingley).

Austin Squires, in *The Birds of New Brunswick* (1976), reports observations in years past of large numbers of Chimney Swifts entering chimneys at Fredericton.

The same thing can still be observed today, for Peter Pearce estimated about 2200 entering a chimney at the Maritimes Forest Research Centre, on the U.N.B. campus in late May and early June. The earliest report of a swift during the spring was of one at Saint John May 2 (D. Smith).

Ruby-throated Hummingbirds returned in mid-May with singles at Hammond River May 17 (Wilson), Hardings Point May 18 (Gorhams), and Oakland (Campbells), Saint John (D. Smith) and Mary's Point (DSC) May 19, on which day 15+ were buzzing around a particularly attractive maple at Fundy Nat'l Park (MacLean).

A pair of N. Rough-winged Swallows appeared at White Marsh Creek, near Florenceville, May 13 but apparently did not remain there, as they did in 1985 (Jeanette Greene & Carmichael).

It was pleasing to receive a few more Eastern Bluebird reports than there have been in most recent springs. From the earliest one, at Juniper Apr. 17 (Yvon Beaulieu), there were reports from late April through May at Lake George, near Kings Landing (pair - Wayne Fairchild, *fide* Pearce), Charleston (pair - Vera DeWitt), Fundy Park (MacLean), Youngs Cove (Tingley), and Priceville, near McNamee (2 - *fide* Pearce).

The first migrant American Robins appeared Mar. 18 along the Bay of Fundy at Cape Spencer (Withers), Saint John (Milledgeville North High School students) and Waterside (R. Walker). Rob Walker called them "abundant" between Harvey and Alma Mar. 20 and reported "thousands moving north" at Harvey Apr. 21. In Carleton County, where migrants were first reported Mar. 28 at Oakland (Campbells), many Robins perished during the big April snowstorm (Valley Naturalists).

A flurry of Northern Mockingbird observations were reported during mid to late May, including individuals at Napadogan May 15 (Beaulieu), and Newcastle May 24 & 31 (Rod Currie). The only Brown Thrasher reported was seen by Canadian Wildlife Service biologists at Priceville late in May. A Blue-gray Gnatcatcher was seen in Alma May 28 and again June 13 (Doreen Rossiter).

There may have been Bohemian Waxwings around later, but the last ones reported were 100 at Fredericton Mar. 31. Mark Phinney reported a stray flock of 8 Cedar Waxwings at Lower Gagetown Apr. 12. Normal migrants of that species arrived May 28, when there were "great numbers" in the Alma area (MacLean) and 2 at Hammond River (Wilson). On the 30th they were seen in Williamstown (Carmichael).

Mid-April witnessed the last of the winter's Northern Shrikes. They were noted Apr. 13 at Saint John West (Finne), Apr. 14 near Bayswater (Withers), and Apr. 15 at Harvey (R. Walker). One Loggerhead Shrike, which is very much rarer in this part of the continent, was reported Apr. 17 at Keswick Ridge (Leona Keenan, *fide* Pearce).

A very early Northern Parula, at Fredericton Apr. 6 (Jim Goltz & Peter Papoulidas, *fide* Pearce), was more than a month in advance of the next one reported on May 10. Our normal April warblers, the Palm and the Yellow-rumped, returned to Albert County, Apr. 21 (R. Walker) and Apr. 26 (MacLean), respectively. Highlight among warblers was a male Cerulean May 19 at Castalia. Jaakko Finne succeeded in capturing, photographing, banding and releasing it, for the second photographically documented provincial record.

Four Summer Tanagers, all males, were an exceptional number of that wanderer from regions farther south. One was at Sussex May 20 (Anne Moffett), two at Cape Jourimain, near Bayfield, May 21 (photographed – Sara & David Lounsbury), and one at North Head May 24 (Duane West & Marguerite Richard).

A male Northern Cardinal that had been at Grand Manan all winter was reported by various observers during May. One early Indigo Bunting, a male, was seen in Sackville Apr. 24 (Jean Burns *et al*). A single Field Sparrow was reported, at the Whistle, G.M., May 3 (DSC *et al*).

Last reported Am. Tree Sparrow of the winter was Apr. 26 at Williamstown (Carmichael), Snow Buntings Apr. 11 at Saint-Simon (200 – Marcel David) and Apr. 12 near Hartland (150-200 – Ford Alward), Common Redpolls Apr. 3 at Saint-Simon (David). A Hoary Redpoll was identified by Jim Goltz & Peter Papoulidas (*fide* Pearce) at Fredericton Apr. 6, the same day as their early Parula!

The expected influx of House Finches is not developing very quickly. Only one was reported, a female visiting Ford Alward's feeder in Florenceville off and on between Apr. 17 and May 28. A few Red Crossbills, an erratic species seldom reported the last couple of years, were seen: 7 at Fredericton Apr. 10 (Phinney), a few at Moncton and Riverview in April (John Wright *et al*) and a pair at Saint John West May 25 and 28 (Molly Smith).

Here follows a selection of spring arrivals. Anyone who would like a more complete listing of the earliest reports received for spring 1986 may write or phone me to request one. (All sightings at Oakland were by the Campbells, at Hammond River by Wilson.)

Great Blue Heron Mar. 25 Saints Rest (Johnston), Mar. 30 The Whistle, G.M. (R. Walker), Musquash (3 - Phinney) and Jemseg (Pearce); Blue-winged Teal Apr. 4 Jemseg (Phinney); Osprey Apr. 12 Lower Georgetown (2 - Phinney), Apr. 13 Nauwigewauk (Wilson) and Apr. 15 Riverbank, near Florenceville (Campbells); Killdeer Mar. 23 Chance Harbour (Cameron); Greater Yellowlegs Mar. 31 Red Head (Phinney) and Apr. 16 Saints Rest (2 - Finne); Spotted Sandpiper May 10 Ingalls Head, G.M. (Wilson), May 11 Waterside (Delzell) and May 13 Florenceville (Greene); Com. Snipe Mar. 30 Oakland and Apr. 6 Jemseg (Pearce); Am. Woodcock Mar. 22 Steeves Mountain, near Berry Mills, (Pearce et al) and Mar. 30 Oakland; Belted Kingfisher Apr. 11 Crystal Beach (A. Gorham) and Apr. 15 Lakeville (Lori & Charles Prosser); Yellow-bellied Sapsucker Apr. 11 Oakland and Apr. 21 Harvey (R. Walker); N. Flicker Mar. 30 Castalia (R. Walker) and Musquash (2 - Phinney); E. Wood-Pewee May 19 Hammond River; E. Phoebe Mar. 31 Upper Brighton, near Hartland (Campbells); E. Kingbird May 14 Williamstown (Carmichael); Purple Martin Apr. 28 Florenceville (Hicklings); Tree Swallow Apr. 14 Westfield (Colpitts), Apr. 15 Hammond River (2 - Wilson) and Oakland; Barn Swallow May 2 Musquash (Wilson); Gray Catbird May 11 Seal Cove (Wilson & Tingley), May 17 Florenceville (Greene) and Oakland; Red-eyed Vireo May 19 Oakland; Nashville Warbler May 10 White Head (Wilson & Tingley), Oakland, and Lepreau area (S.J.N.C.); Yellow Warbler May 15 Florenceville (Alward; Greene) and Hammond River; Magnolia Warbler May 10 Florenceville (Alward); Am. Redstart May 15 Oakland; Ovenbird May 13 Oakland, Alma (MacLean), and Mary's Point (DSC); Com. Yellowthroat May 9 Swallowtail, G.M. (Wilson & Tingley); Chipping Sparrow Apr. 23 Oakland and Apr. 29 Mary's Point (DSC); Song Sparrow Mar. 18 Saint John (D. Smith), Mar. 21 Fundy Park (R. Walker), Mar. 23 Crystal Beach (Gorhams) and Mar. 24 Florenceville (Alward); Bobolink May 11 Florenceville (Alward); E. Meadowlark Mar. 29 Fredericton (Don Gibson); N. Oriole May 13 Lakeville (L. Prosser) and May 14 Fredericton (Pearce).



Errata and Addendum

Most readers probably realized that the "four Wood u" reported seen by Peter and Theresa Pearce in our last issue (p. 72), were of course Wood Ducks. Peter Hicklin's King Elder at St. Andrews Dec. 10 (p. 68) was a young male, not a female. The December Catbird (p. 70) was actually seen by Stephen Woodley. Rob Walker relayed the report. The Yellow-breasted Chat at St. Andrews was seen Dec. 4-14 (p. 70).

Abbreviations

DSC — David Christie G.M. — Grand Menan S.J.N.C. — Saint John Naturalists' Club



Go-pher Saskatchewan!

To help celebrate a century of wildlife conservation in Canada, the next Canadian Nature Federation conference will take place in Saskatoon, on the 100th anniversary of Last Mountain Lake Bird Sanctuary, June 5-8, 1987.

The symposium will emphasize conservation on the prairies, past and present. The banquet will feature saskatoon-berry pie and other local treats. Between June 2 and 15 there will be field trips to see prairie dogs and prairie birds and flowers in grassland, marshes, aspen parkland, boreal forest, as well as the Cypress Hills and arctic birds at Churchill. For more information and registration forms, write C.N.F. Conference 1987, Box 5094, Saskatoon, Sask. S7K 4E4.

Federation News



Members Honoured

Honorary memberships in the New Brunswick Federation of Naturalists have been bestowed on two widely known individuals. Here are a few highlights to acquaint you better with those remarkable naturalists:

Will Astle, a teacher from New York, has been a part time New Brunswicker for many years. In the 1930's he and his wife, Isobel, later joined by four children, built a summer place at Cape Spencer near Saint John. Will, a great enthusiast for nature delighted in the fresh, cool atmosphere of the Bay of Fundy and soon had a number of projects under way. Will, an amateur horticulturist, planted various flowers and shrubs to provide food and shelter for birds around their cottage. His biggest project, however, is banding birds (See *N. B. Nat.* 15: 6-8).

His interest brought him in contact with the New Brunswick Museum and local naturalists, many of whom remember exciting expeditions to Manawagonish Island, where they searched for young gulls in the thick and smelly underbrush or gingerly climbed crumbling trees, to be greeted at the nest by sharp-pointed beaks and equally smelly, flopping wings. It is quite an accomplishment, holding tight with one hand, to slip a band on the leg of a nestling heron or cormorant with the other. Will's banding, conducted for many years, has provided valuable information concerning those species of birds in the province.

Several young people, now grown up, such as Henrik Deichmann, David Christie, Chris Majka (and his mother Mary), Don McAlpine and others, have been inspired by the knowledge and dedication of this modest man. Now retired from his profession, Will still takes great interest in his on-going natural history projects. The federation is pleased to recognize his accomplishments.



Wilma Miller is one of those people you love the moment you meet them. Good-naturedness, kindness and genuine interest in people radiate around this warm, motherly naturalist. Wilma has always lived close to fields and forests, first in Plaster Rock and now at the "end of the road" in Nictau – a community of a few houses strung along the picturesque Tobique River.

Her interest in nature brought Wilma in contact with like-minded people and eventually the N.B.F.N. Together with her two Bills, husband and son, she has created a haven for a whole "flock" of naturalists, to whom they opened their home

and heart. Many a federation gathering has taken place at the Millers'. With excursions, canoe trips and never-to-be-forgotten bean-bakes, each of those meetings, skilfully organized and directed by Wilma, was a great success. Wilma was a director-at-large of the federation – "large director", as she called herself – for 12 years, retiring this year.

Wilma's knowledge and interest in nature has inspired others in her community to become interested in aspects of the outdoors other than hunting and fishing. [Bill Senior likes "birdwatchers"!]. Wilma takes Girl Guides and school teachers on hikes, encourages cleanup campaigns and generally is consulted on matters concerning nature.

Our federation is grateful to her and her family for their kindness through the years and is happy to have her as an honorary life member.

M. M.

1986 Annual General Meeting

The federation's annual meeting weekend was held, jointly with the Conservation Council of New Brunswick, at St. Andrews Sept. 13-14, except for the banquet and address by Hon. Tom McMillan, federal Minister of Environment, which took place Sept. 12 in Saint John. The whole affair had originally been slated for St. Andrews Sept. 5-7. That's a hazard of planning a program around a high profile speaker with such a busy schedule. As it was, Mr. McMillan arrived late that rainy evening, after a very rough flight in a very small plane.

Many of the weekend's business items and activities are mentioned elsewhere in this issue ("From Your President", p. 85; "Wildlife '87...", p. 109) or were treated in July ("Mapping Birds...", p. 50; "Check! A New Field Card...", p. 79). Other topics appear in the following pages.

McMillan Addresses Banquet

The federal Minister of Environment, Tom McMillan, spoke on groundwater problems. He warned the audience not to take the purity of water for granted and focussed particularly on the problems of leaking underground storage tanks. He illustrated his remarks with reference to recent dangerous incidents in the Maritimes, such as contamination of wells in Fair Vale by dry cleaning fluid, gasoline explosions in Saint John's sewer system, and the spill last Christmas of thousands of gallons of Irving gasoline into a Charlottetown river. Underground oil tanks and chemical industries are great offenders but even farming causes

problems. In some parts of New Brunswick and Prince Edward Island wells are contaminated by agricultural pesticides.

More than 25% of Canadians use ground water for their domestic needs and in New Brunswick that percentage is much higher, 60%. Mr. McMillan assured the provincial Minister, Robert Jackson, of his support for provincial efforts to preserve and enhance the groundwater environment and he praised the Conservation Council of New Brunswick for its efforts in that area. M.M.

Castalia Marsh Airstrip Proposal

Almost everyone who travels to Grand Manan uses the ferry system. An alternate method of travel to and from the island – the fast way in cases of emergency – is by small amphibious plane, normally using a private airfield at North Head. A disagreement between the owner of the landing strip and the operator of the air service led to a proposal last spring to construct an airstrip along the dune that separates Castalia Marsh from the sea. Federation members were appalled to learn of that plan – an inappropriate use of a unique wildlife habitat and of land in a small provincial park! A few telephone calls helped us determine that the North Head landing field would not be closed for emergency use, that the plan to construct a temporary landing strip on the beach would not likely gain Dept. of Transportation approval, and that within one to three years a permanent airport would be constructed near Grand Harbour. Letters to the ministers concerned ensured that the federation's views would be known in Fredericton.

Archival Records of the Federation

The New Brunswick Museum archives wishes to acquire past files of the N. B. Federation of Naturalists which, along with holdings of material from the Natural History Society of New Brunswick (1862-1932), will document the activities of natural history organizations in the province. Anyone possessing back records and information on the federation is invited to send them to our secretary, Ruth Rogers, Apt. A-9, 8 Wilmot Court, Fredericton E3B 2M8. Ruth will list the material and pass it along to the museum.

Living Rivers Program Scholarship

Once again our federation sent a youngster to the Living Rivers Program camp at Tabusintac. In the past our efforts to get nominations from our members have not been too successful so the Atlantic Center for the Environment simply selects a deserving student (and we are sure they do a good job of it). However, it would

be much nicer to know more about the scholarship recipient. If you have a candidate please ask for an application form.

(You can do that right on the observation sheet enclosed in this issue. Of course that does not absolve you from jotting down your observations and questions as well. In the next issue, we will comment on the feedback.)



Wildlife '87 – Gaining Momentum

On June 8, 1887, the first bird sanctuary in Canada was set aside at Last Mountain Lake in Saskatchewan. Today, all sorts of sanctuaries, refuges, reserves, and protected areas, as well as other programs, help to conserve and manage our wildlife. The Canadian Nature Federation is spearheading a nationwide celebration to commemorate that important event next year.

Environment Minister Tom McMillan announced at the C.N.F.'s annual meeting in St. John's, that 1987 has been designated as a special year for wildlife conservation in Canada. Somewhat similar to the recent centennial of national parks, Wildlife '87 is, however, not principally funded by government. It will rely on the enthusiasm and support of individuals and groups. It is envisioned that a wide range of groups will pick up the Wildlife '87 theme and add to the scope of celebrations around the country. We will rejoice, remember, and highlight for all Canadians the many facets of wildlife conservation.

The New Brunswick Federation of Naturalists would like to plan next year's events around Wildlife '87. The 1987 annual meeting tentatively will take place in or near one of our wildlife reserves or conservation areas. One issue of the magazine will be dedicated especially to the theme. Help us to think of some other wildlife related projects. We hope also that each local club will have wildlife conservation as the subject of at least one of its meetings, as well as making field trips to some of our wildlife areas. For pertinent material on Wildlife '87 write to the Canadian Nature Federation, 75 Albert Street, Suite 203, Ottawa, Ont. K1P 6G1

N B Federation of Naturalists – Financial Statements

General Account: July 1, 1985 to July 31, 1986

Opening Balance			\$5,109.43
Add Receipts:			
	Membership fees & subscriptions	\$2,955.86	
	Transfer from Scholarship Fund	\$174.25	
	Sales: N. B. Naturalist	\$703.37	
	Sales: Checklists, Birds of N. B.	\$149.00	
	N. B. Museum grant: N. B. Naturalist	\$500.00	
	N. B. Museum grant: checklists	\$300.00	
	Dept. of Tourism grant: checklists	\$750.00	
	Share of profit from 1985 A.G.M.	\$128.66	
	Kennebecasis Nat. Soc. donation	\$35.00	
	Donations & miscellaneous receipts	\$144.50	
	Bank interest	<u>\$120.00</u>	\$5,960.64
Total:			<u>\$11,070.07</u>
Less Expenditures:			
	N. B. Naturalist: printing	\$2,984.14	
	N. B. Naturalist: editorial expenses	\$419.12	
	N. B. Naturalist: postage	\$452.44	
	Bird Checklists: printing	\$1,769.65	
	Letterhead, envelopes	\$142.44	
	Postage: membership services, etc.	\$526.80	
	Canadian Nature Fed. membership	\$35.00	
	1984 membership drive: club rebate	\$14.50	
	Miscellaneous expenditures	<u>\$7.07</u>	\$6,351.16
Balance on Hand in Bank July 31, 1986			\$4,718.91
Total			<u>\$11,070.07</u>

Scholarship Fund: July 1, 1985 to July 31, 1986

Opening Balance			\$1,574.14
Add Receipts:			
	Donations	\$40.00	
	Bank interest	<u>\$79.73</u>	\$119.73
Total:			<u>\$1,693.87</u>
Less Expenditures:			
	1986 Living Rivers scholarship	\$125.00	
	Stirrett Memorial Award	\$50.00	
	Transfer for 1985 Living Rivers schol.	\$174.25	
	Bank service charges	<u>\$4.50</u>	\$353.75
Balance on Hand in Bank July 31, 1986			\$1,340.12
Total:			<u>\$1,693.87</u>

Harriet Folkins, treasurer

Nouvelles des Clubs

Un Nouveau Club



C'est dans la Péninsule Acadienne que ça bouge. Dans le Nord-Est du Nouveau-Brunswick, un nouveau club de naturalistes est crée, structuré at prêt pour son grand départ.

Ayant été inspiré et stimulé par le projet de l'Atlas sur les oiseaux nicheurs, un groupe de naturalistes a senti le besoin de se réunir pour échanger, mieux se connaître et découvrir le potentiel humain dans le domaine des sciences naturelles.

C'est le 1^{er} octobre qu'un exécutif de sept personnes représentatives des principaux centres de la Péninsule fut nommé. A cette première assemblée dont la publicité avait été bien préparée, on réussissait à regrouper cinquante personnes.

Avec un agenda bien rempli, c'est sous la présidence de Ernest Ferguson que se déroula la première assemblée à l'École des Pêches de Caraquet. Dans notre publicité, on mentionna que le club étudiera les oiseaux, la flore et la faune en général. Puisqu'il fallait commencer par un sujet, Rose-Aline Chiasson présenta un introduction à l'étude des oiseaux. Elle parla des différents guides pour identifier les oiseaux, de même que l'équipement de basse nécessaire sur le terrain. Elle expliqua brièvement quelques volumes sur la flore et la faune, suivit d'un e période de questions et discussion qui démontra un grand intérêt chez les personnes présentes.

Déjà, nous anticipons la réalisation de certains projets. Nous croyons participer à trois ou quatre centres du recensement des oiseaux de Noël. Plusieurs membres ont participé cet été à l'Atlas des oiseaux nicheurs pour les provinces maritimes et espèrent continuer pour les quatre années de la durée du projet. On parle d'une séance sur l'art de nourrir les oiseaux en hiver, de même que la construction de nichoirs au printemps. Nous prévoyons aussi des sorties de groupes que nous considérons comme une activité très importante. C'est dans la nature qu'on apprend à devenir naturaliste. Et cette même nature sait vite récompenser ceux qui s'arrêtent pour la regarder.

Hilaire Chiasson

Saint John Naturalists' Club

The annual meeting of the Saint John Naturalists' Club, was held at Harding's Point on a glorious, warm day in June. The members met at Allen and Janet Gorham's attractive property, from where Allen led the party to "The Bog," which was such a botanists' paradise, that the plant enthusiasts among us didn't even notice the black-flies!

A deer, standing under a pine with a big, untidy osprey nest on top, watched from the woods and bullfrogs gazed from the pond as we were learning names of the various flowers, grasses and sedges. The walk into and out of "The Bog" was a symphony of bird song and calls. The one I most vividly recall was a mostly upside-down nuthatch who ran up and down a half dead maple. Its back was a beautiful slate blue and its rosy-rusty sides, seen through the fresh greens of the leaves, were a vision to remember. About one o'clock, we were at Willa Colpitts' for picnic lunch, sitting in the grass just above the Saint John River. A much enjoyed treat for the members was delicious rhubarb crisp made by our hostess.

The club's business meeting followed, interrupted by tugboats, outboards and sailboats, and closed with a grand finale, when Allen Gorham called us behind the house to see a Pileated Woodpecker in full view in bright sunshine. The size of the chips he was taking out of a tree was amazing. It was a first sighting for several members.

Officers elected were: president, Alice Stover; secretary, Linda Caron; treasurer, Tom McAlpine; programme director, Jim Wilson; social convenors, Nan Camlin and Janet Gorham; bulletin editor, Sandy Webb; bulletin producer, Dorothy Schofield. The nominating committee, consisting of Isabel LeBlanc and Betty McAlpine, were thanked for their efforts.

A special vote of thanks goes to Allen, Janet and Willa for a splendid day.

Alice Stover

Flash! Flash! Flash! Flash! Flash! Flash!



Another person has reached the magic number, having seen his 300th species of bird in New Brunswick. Congratulations to Stuart Tingley of Sackville and more exotic places. More about it next time. Try to guess which species he saw Nov. 5.

Book Reviews

City Critters. How to Live with Urban Wildlife By David M. Bird. Eden Press, Montreal. 116 pp., paperback. \$8.95.

Reviewed by John D. Bone

City Critters is one heck of a book!

To a person like myself who loves being surrounded by nature but has difficulty putting a name to even a *Tamiasciurus hudsonicus* [Red Squirrel], let alone knowing anything about the intimate details of its personal life, David Bird's book revealed facts of which I was unaware and, I suspect, many "experts" don't know.

Even though he has limited the book to 12 mammals plus birds, amphibians, and reptiles the information can be understood by anyone. Each chapter starts with a short concise fact list of the animal's size, colour, habitat, food, breeding, and time when active. Bird then takes a more leisurely pace describing the animal in greater detail, covering varieties, habits, diseases carried (even whether transmissible to humans), abilities, and much more, usually ending with hints on how to encourage or discourage them, without harming or killing them. Many cartoons by Sandra Letendre add much to this delightful book.

Living in the country, I see many of the "city critters" mentioned in the book with the exception of a couple that don't occur in the Maritimes.

In summary, David Bird reminds us that we all share this planet and provides us with information on how some of our wild neighbours live, in a book that is an excellent purchase for young or old. Why wait for Christmas... get one now!



The Vascular Flora of Fundy National Park, New Brunswick By Michael P. Burzynski, Stephen J. Woodley, and Anne Marceau. 1986. Publications in Natural Science No. 4, New Brunswick Museum, Saint John. Iv + 77 pp., 1 map.

Reviewed by Hal Hinds

The New Brunswick Museum has recently published a new reference work as part of its Publication in Natural Science series. *The Vascular Flora of Fundy National Park* by Michael Burzynski, Stephen Woodley and Anne Marceau is an in-depth compilation of information concerning the major vegetational cover of Fundy National Park. This 77 page, soft covered and spirally bound book documents the vascular plants (all plants except the fungi, algae, lichens, mosses and liverworts) found growing in the park. It also provides information on the classification, dynamics and successional trends of the park's forests.

The annotated checklist, arranged by families and then alphabetically by genus, provides, in addition to the scientific name, French and English common names, information on habitat, abundance and documentation for each of the 545 recorded species of 84 families.

The dot matrix printing format for the book distracts slightly from its usefulness as the letters are very close to each other and tend to run together in some cases. This is not at an important distraction and *The Vascular Flora of Fundy National Park* provides an important reference to the vegetation of the east Fundy region. It should stimulate further exploration in the area and serve as a model for future vegetational surveys throughout the province.

Flora of New Brunswick By Harold R. Hinds, 1986. Primrose Press, Fredericton. 692 pp., illus., maps, plasticized paperback. \$30 (Available from the author, Biology Dept., U.N.B., Bag Service 45111, Fredericton, N. B. E3B 6E1.)

Reviewed by David S. Christie

Holding the *Flora of New Brunswick* takes me back to 1959, when my most treasured Christmas present was *The Flora of Nova Scotia*, the first book I had that would allow me to identify almost every wild plant I could find. Excitedly, I scoured the winter woods for clubmosses and evergreen ferns to identify. I read and re-read sections of the text, comparing my memories of neighbourhood plants with the descriptions and illustrations. How eagerly and impatiently I awaited the flush of new growth the following spring!

Now we have Hal Hind's *Flora of New Brunswick* and I'm excited again. The new *Flora* brings together the results of more than a decade of devoted study in herbarium and field by Harold R. Hinds, curator of the University of New Brunswick's Connell Memorial Herbarium. Now that the *Flora* is published, Hal continues his explorations. He had found a new plant for New Brunswick the day I got the book from him.

The *Flora* treats the known vascular plants (ferns and their allies, conifers, and flowering plants) of New Brunswick. Ten pages of introductory material include information on how to use the book, brief descriptions of New Brunswick's physiography, geology, climate and soils, a history of plant study (contributed by Dr. C. Mary Young) and acknowledgements. There is a list of references cited and a useful eight-page glossary of technical terms; over 70 line drawings help to make the terms more easily understandable to non-botanists. A 26-page index includes scientific, English and French names.

The bulk of the book consists of identification keys and species accounts (440 pages), illustrations (1449 plants on 121 pages) and distribution maps (1007 plants on 85 pages). The brief but informative text for each species is best illustrated by quoting a couple of typical examples. Where pertinent, information on synonyms, subspecies and varieties is also included:

***Viola lanceolata* L.** Fig. p. A83. Map p. B62.
 COMMON NAME(S): Lance-leaved Violet.
 FREQUENCY: Common in the southcentral and southwest of the Province.
 HABITAT: Moist shores and thickets.
 GENERAL RANGE: Ont. to St-Pierre and Miquelon south to Tex. and Fla."



VIOLA LANCEOLATA

***Tussilago farfara* L.** Fig. p. A121. Map p. B85.
 COMMON NAME(S): Coltsfoot. Pas-d'âne.
 SPECIAL NOTE: Eurasian; introduced on clay banks, brooksides and ditches throughout much of the Province. Known elsewhere in Canada from B.C., Ont. to Nfld., P.E.I. and N.S."



TUSSELAGO FARFARA

To identify an unknown plant users of this book have two aids, keys and illustrations. With an adequate specimen, the technically inclined can start from scratch, if necessary, at the initial key to families and work through numerous choices to the species. The less ambitious can match a specimen to the illustrations and, when in doubt, refer to the descriptive keys for the family or genus their plant resembles. Following the keys backward from the species level "provides a brief descriptive sketch of each species." The illustrations, most reproduced from Britton and Brown's 1913 classic, *An Illustrated Flora of the*

Northern United States and Canada, are useful although their reduction in size has caused a loss of detail in some drawings.

There are more than a thousand maps to fascinate the reader. I enjoy looking for clear-cut distribution patterns within the province, such as the entirely northwestern occurrence of *Angelica atropurpurea*, angelica, the decidedly southern occurrence of *Spiraea tomentosa*, steeplebush, or the close association of *Comptonia peregrina*, sweet-fern, with the extent of the Maritime lowland plain.

My main disappointment with the *Flora* is that more locations are not included on some of the maps. For instance, the map for *Trillium erectum*, red trillium, a relatively common plant in many areas, shows only 12 locations. Similarly, to me the map for *Sanguinaria canadensis*, bloodroot, does not adequately suggest "scattered throughout much of the Province but rare in the eastern half." Preparation of distribution maps is time consuming but I wish that the locations of more existing herbarium specimens would have been included on the maps.

With new discoveries and taxonomic revisions necessitating frequent changes, it's not surprising that there are some typographical errors, that occasionally the name on a drawing or a map does not match the one finally chosen in the text. Most are of little consequence, but the text for *Lupinus polyphyllus*, the lupine, is entirely missing and *Solidago* is not included in the index.

In summary I think the *Flora of New Brunswick* is a very good book, an important reference for field biologists or anyone else who wants to identify a broad range of New Brunswick's vascular plants or to know their status in the province. I intend to have two copies, one for my library and one for my car.

Geological Highway Map of New Brunswick and Prince Edward Island, by Laing Ferguson and Leslie R. Fyfe. 1985. Atlantic Geoscience Society, Special Publication Number 2. 66 cm x 98.5 cm, fan-folded map; \$5.00¹.

Reviewed by Randy Miller.

Maybe the time is right to consider putting away your tired old travel map for a new version. The Atlantic Geoscience Society has recently released a highway map that puts a new perspective on driving. Like their previous *Geological Highway Map of Nova Scotia*, it provides ample information on points of interest

¹ Available from Mineral Resources Branch, P.O. Box 6000, Fredericton, N. B. E3B 5H1, from Mineral Resources Branch offices in Sussex and Bathurst, the New Brunswick Museum in Saint John, and the Mount Allison University Bookstore in Sackville.

that urge you to pull over to the roadside for a better look. Designed and folded like a traditional road map, it contains almost all the information a traveller is accustomed to with the exception of a distance chart and an explanation of traffic signs! In exchange, there are 136 points of interest described and keyed to the map on one side and detailed panels on the reverse describing the geology of selected localities. There are also several geologic cross-sections to help illustrate why the surface rocks appear as they do.

The map has been put together by two New Brunswick geologists, who know the area well, with contributions and assistance from twenty-three others. The result is a map with the same accuracy as the provincial geology map, issued by the Department of Natural Resources and Energy, only in a convenient travel format. I have found it very useful as a field reference for my own work. The lighter weight paper and darker highway markings make it easy to use in the field.

Anyone who spends time travelling, whether a geologist or not, is sure to find the map both interesting and useful. The notes make good reading and include quite a lot of information, ranging from a synopsis of the geological history of both provinces to a description of potash mining in New Brunswick. Some might consider the price of \$5 high for a road map (after becoming accustomed to the free kind) but this map is sure to pay you back in entertainment value if you stop at some of the featured localities to take in a little of the geologic scenery. In all, the Atlantic Geoscience Society has done a very good job. Just one thing, you might want to keep your old highway map for those times when you get lost in downtown Moncton or Saint John. Those little city maps are still handy!

The Birds of Canada, Revised Edition, by W. Earl Godfrey. 1986. National Museums of Canada, Ottawa. 595 pp., 74 colour plates by John A. Crosby, 106 drawings by John A. Crosby and S. D. MacDonald; inside cover map and about 400 distribution maps. \$39.95.

Reviewed by David Christie



A new, revised edition of *The Birds of Canada* appeared in June, in time for the International Ornithological Congress held in Ottawa. Although of slightly larger format, 167 pages longer and containing five more colour plates, it is instantly recognizable as an updating of W. Earl Godfrey's classic published in 1966.

An introduction, short glossary, selected references, and index support descriptions of each family of birds and the species accounts, which describe each bird, its measurements, field marks, habitat, nesting, general range, subspecies,

and range in Canada. For most species which nest in Canada there is a map of breeding distribution. For certain familiar or important birds, a section of remarks allows Godfrey some room for interpretive writing, such as "Whoever saw a dejected chickadee? Even on the greyest day of midwinter... the chickadee is the personification of cheerfulness and good nature," which was quoted by Lt-Gov. Stanley, when he proclaimed the Black-capped Chickadee as our provincial bird.

The major change from the first edition is the treatment of 77 more species and the revision of maps and "Range in Canada" text. This edition includes 578 fully accepted and 37 hypothetical species recorded up to the end of 1984. English and scientific names are mostly from the 6th (1983) edition of the A.O.U. *Checklist* and French names from Quellet and Gosselin (1983 — See *N. B. Nat.* 14:147-150).

The number of species treated reflects changing taxonomic opinion, as well as discoveries of additional species in Canada. For example, the former Traill's Flycatcher is now split into Willow and Alder Flycatchers, whereas Myrtle and Audubon's Warblers are joined as Yellow-rumped Warbler. But Godfrey is his own man taxonomically. In 1966 he accepted recently published evidence and separated Thayer's Gull as a full species distinct from the Herring Gull. Now that the A.O.U. *Checklist* has taken that position, Godfrey, based on further studies in the Canadian Arctic, again leads the way and merges Thayer's Gull as a subspecies of Iceland Gull! The two "highly variable and unstable" subspecies of Iceland Gull, carefully described and pictured by Godfrey and Crosby, could easily drive a birdwatcher mad!

Much of the rest of the text remains unchanged. New information, especially on nesting, has been added here and there. The field marks section for certain difficult-to-identify species could have been expanded somewhat. I noted a few inconsistencies in the text, such as a reference to "three of the four" loons, whereas five are now recognized, and a paragraph which first reports that Least Bittern breeds "rarely, Nova Scotia" and then "but no proof of nesting in Nova Scotia is yet known." Common Moorhen is indicated as breeding in New Brunswick in the text but not on the map.

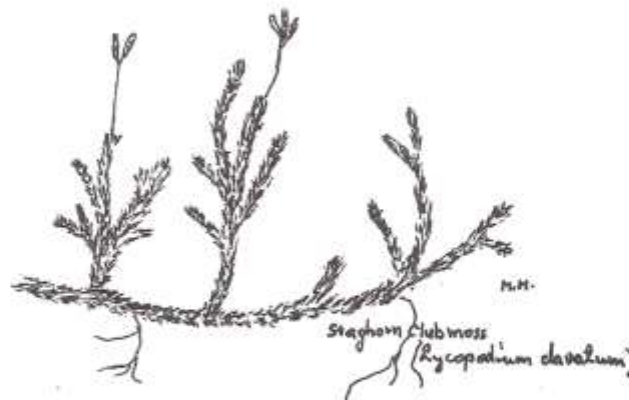
The author has not picked up all the species discovered in New Brunswick through 1984 (White-eyed Vireo, Orange-crowned and Worm-eating Warblers and Black-headed Grosbeak are missing) and sometimes gives a false impression of the status of our regular birds. For instance, Mourning Dove, described by Austin Squires (1976) as an "uncommon resident" a decade ago and which has increased considerably since, is listed as breeding "rarely in southern New Brunswick" and not mentioned as occurring in winter. Wood Thrush is indicated as nesting in southwestern New Brunswick instead of more widely, and Bohemian Waxwing as

occurring here "very rarely", whereas it is now regular and sometimes common. The extension of Northern Cardinal breeding to this province is omitted, and Godfrey follows Squires in understating the extent of Blackpoll Warbler nesting in northern New Brunswick, although his map shows a wider area. Possibly in error, Ruddy Duck is listed, although not mapped, as having bred here.

Many of John Crosby's former, widely-praised colour plates, have been altered to fit in more plumages or species (498 species are depicted in colour; 44 local or accidental species in black and white) and to improve some of the earlier portraits. Among changes I noticed were corrected beak shape of male Common Goldeneye, head shape of female Barrow's Goldeneye, and facial markings and tail of American Robin, whiter-tailed Forster's Tern, more extensively yellow Philadelphia Vireo, and a whiter eye-ring on the female Mourning Warbler. New colour paintings depict shearwaters and storm-petrels, buteos, falcons and eagles in flight, which were previously in black and white, the large gulls, and whole-bird portrayals of some birds for which only the heads were previously illustrated.

The rather stark appearance of the plates which previously had white backgrounds has been improved by a change to soft colours. The printing of the plates is improved. In 1966, some were a bit too green or too yellow in rendition. The plates are placed in groups of about eight each which makes them easier to locate. Species names are now marked on the plates, as is the text page number so that one no longer has to refer to the index to get to the text from the plate.

The Birds of Canada, revised edition, is an excellent book, well worth the fairly substantial price, although birdwatchers who own the first edition and don't mind the coverage of fewer rare species and the use of older names and distribution maps may decide to stick with the original which will still serve as an excellent reference for most Canadian birds.



Reports



First Heritage Rivers Proclaimed

The Alsek River in Kluane National Park Reserve, Yukon, and the French River in Ontario have been formally proclaimed Canadian Heritage Rivers in recognition of their special natural and cultural features.

The two rivers are Canada's first to be proclaimed under the Canadian Heritage River System. The announcement was made by Federal Environment Minister Tom McMillan and Ontario Minister of Natural Resources Vince Kerrio, based on recommendations by the Canadian Heritage Rivers Board.

The French River, near North Bay, Ontario, is an ancient river of the Canadian Shield flowing some 100 km from Lake Nipissing into Georgian Bay. Rich in natural and historical features, the French River ranks high as a tourist attraction.

The section of the Alsek River that has been proclaimed lies entirely within Kluane National Park Reserve, 160 km west of Whitehorse, Yukon. Fed by massive glaciers, the Alsek River is one of Canada's truly outstanding natural heritage rivers.

Another eight rivers, including the St. Croix on the border of New Brunswick and Maine (see p. 121), have been nominated for consideration as Canadian Heritage Rivers. The goal of the Canadian Heritage Rivers Board is to ensure that rivers included in its system are managed in such a way as to conserve their special heritage features while supporting the recreational opportunities they present. (Environment Canada news release.)

CBC Radio's "Birdwatchers' Round Robin"

About once a month since last May, Rosemary Curley, Ian McLaren and David Christie have been getting together on CBC Radio to chat about the comings and goings of birds and birdwatchers, in the Maritimes. The feature is usually broadcast on Wednesdays, sometime between 1 and 1:30 p.m. One listener, Verna Ehrhardt, wrote:

"I have just heard your imitation of the White-throated Sparrow on 'Radio Noon Two'. That particular bird song has eluded me and frustrated me for years. On this foggy, damp, gloomy day in Saint John your imitation of an old familiar bird song brings a good feeling of times to come — hot days, the smell of the salt sea air, the sound of the waves hitting the shore, and the cheerful voice from the tree tops — at last identified. Many thanks!"

The St. Croix Waterway Joint Advisory Commission

On July 21, 1986, Premier Richard Hatfield and Governor Joseph Brennan of Maine met at Loon Bay Lodge on the St. Croix River to sign an agreement that established the St. Croix Waterway Joint Advisory Commission. As president of the New Brunswick Federation of Naturalists, I was invited to sit on the commission along with 14 others representing various interests in New Brunswick and Maine.

The commission was established to study the feasibility of a coordinated effort at the provincial and state levels to manage the recreational use of the St. Croix Waterway and to identify and evaluate mechanisms and processes through which such coordination could be accomplished in the best interests of the people of Maine and New Brunswick.

The commission will have a total of four meetings, two each in Maine and New Brunswick, and will provide recommendations to the governor and premier in late November.

It has been my position during the commission meetings to represent the interests of those people who use or in the future might use the waterway for studying, viewing, or photographing wildlife or simply enjoying the natural scenery.

Hal Hinds

Friends of Mactaquac

Early in 1986 a group of concerned citizens met at Mactaquac Provincial Park to discuss the sorry state of the interpretive program and trails in the park. It was decided to organize under the name Friends of Mactaquac and work towards upgrading existing trails and developing more self-guiding trails.

To provide visitors with a recreational experience that did not depend on water slides, ATVs, motorboats or similar equipment, a series of weekend nature walks was organized and guided by volunteer local naturalists.

Mostly through the efforts of Sheriyn and Warren Coleman of Mactaquac Heights, funds and manpower have been allocated for considerable trail restoration and development. Once again it is a pleasure to walk the park trails.

Hopefully the efforts of the Friends of Mactaquac will indicate to government officials that funds used for nature interpretation are well spent and appreciated by concerned citizens.

Hal Hinds

New Brunswick Nature Trust To Be Formed

The New Brunswick Nature Trust is the proposed name for an organization that grew out of the work of a New Horizons Project. Seniors from Fredericton and Hatfield Point, funded by Health and Welfare Canada, worked on an inventory of critical natural areas in N. B. Those are undisturbed, or relatively undisturbed, places of natural beauty, rare plant or animal habitats, unusual geological formations or fossil sites.

The New Horizons Project is nearing completion. Its compiled and published information on significant or critical natural areas in our province will help guide efforts to protect those areas.

Towards that goal the N. B. Nature Trust is being organized. Several interested persons met at Conserver House on October 28 to review proposed by-laws and discuss the development of the trust. Any persons interested in serving on the committee, please contact me at the U.N.B. Biology Department, or call 453-4885 (work) or 455-6467 (home).

Hal Hinds

Museum News



Geologist Appointed

Dr. Randall F. Miller has joined the Department of Natural Sciences at the New Brunswick Museum on a 12 month contract as assistant curator of geology/paleontology. A 1984 graduate in environmental geology from the University of Waterloo, Randy is particularly interested in the use of fossil insects in predicting past climates.

During his stay at the museum, Randy will be organizing and developing the provincial research and display/education collections of geology and paleontology, as well as preparing a curatorial manual for the collections, which contain valuable scientific material but, through lack of funds, have been largely uncurated for the past 75 years. Portions of the collections will appear in the new natural science gallery now in the planning stages. (*NBM News*)

"Santa Finds His Mountain".
A New Brunswick Christmas Legend

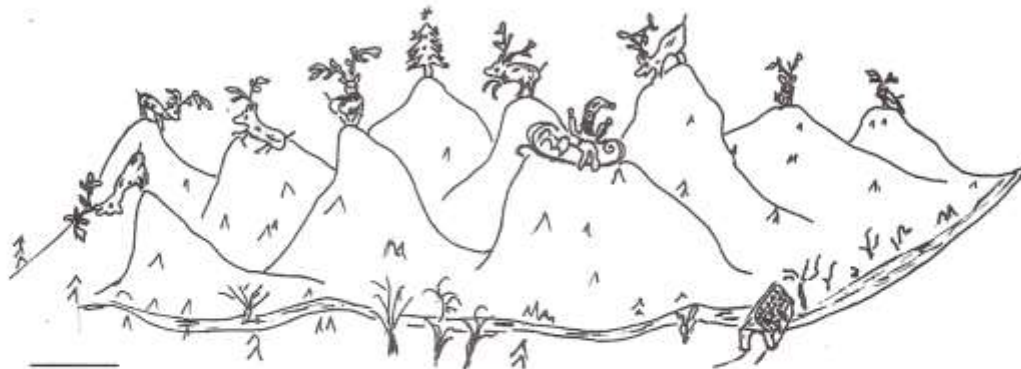
Mary Majka

In 1964 Santa was on his to Fredericton. The load of goodies he carried was particularly heavy. New Brunswickers are all such good people especially those naturalists who feed God's birds and take care of the environment. Just after he crossed the Quebec border in his heavenly sleigh he encountered heavy fog (coming from the Bay of Fundy of course) so he ordered his faithful reindeer to lower their flight and look for signs of life.

All was dark except for one single light. It was the Millers' home in Nictau, where Wilma was trimming the Christmas tree. "Whoa!" shouted Santa and the whole team plummeted down. What Santa couldn't guess was that the place was full of mountains!

Next morning there were eight reindeer, each stuck on a different mountain peak and on the ninth was Santa himself! And that was how our province got its Christmas Mountains¹, where Comet, Cupid, Donner, Blitzen, Dasher, Dancer, Prancer, Vixen, and St. Nicholas himself, crown the beautiful northern land – nine peaks along the North Pole Stream. To make Santa feel at home, the Canadian Committee on Geographical Names added a North Pole Mountain to the group.

Needless to say, the Millers got lots of presents that winter. Being only 30 km (19 miles) from Christmas all year round is quite an advantage.



¹ The Christmas Mountains, situated between the Miramichi and Tobique Rivers were named in 1964. A. F. Wightman, a surveyor with the provincial government and officially approved by the federal committee. It was Mr. Wightman's hope that the area would receive special management status.

Events Calendar

Dec. 18, 1986 – Jan. 4, 1987 Christmas Bird Count Period

The National Audubon Society has announced the dates for the 87th annual Christmas Bird Count. Counts should be conducted on one day during the period December 18 to January 4. Over 1400 North American Christmas Counts are reported annually in *American Birds*, a publication of the Audubon Society.

To participate in an established New Brunswick count, contact your local compiler as listed annually in the late winter issue of the *N. B. Naturalist / Le Naturaliste du N.-B.* To start a new count or for any further information, contact David Christie, RR 2, Albert, N. B. E0A 1A0 (tel. 882-2100).

The new club in the northeast is organizing counts at Caraquet and Tracadie, as well as in the traditional Ile Lamèque area. Contact Hilaire Chiasson, C.P. 421, Lamèque, N.-B. E0B 1V0 for details. Lena Morehouse is interested in passing the St. George-Pennfield-Letete-Beaver Harbour area on to someone else. If anyone is interested in organizing a count there please contact Mrs. M. C. Morehouse, Pennfield, N. B. E0G 2R0.

Jan. 17, 1987 – Tour of U.N.B. Herbarium

A Saturday morning program on identifying wildflowers and a tour of the Connell Memorial Herbarium led by Hal Hinds. Meet at 10:30 a.m. at the Herbarium in Loring Bailey Hall, U.N.B. Fredericton. Fredericton Nature Club.

June 26-29, 1987 Mount Carleton Provincial Park

Looking well ahead, a federation gathering is planned for the last weekend in June in our largest provincial park. The camps at Bathurst (Nepesisiguit) Lakes will be our headquarters for exploration of that northern wilderness on foot and by canoe. Bring your own towels and bedding. There is a limit to the number of people who can be accommodated. Indicate your interest in participating by writing to Wilma Miller, Nictau, RR 1, Plaster Rock, N. B. E0J 1W0, stating the number of people in your party.





NEW BRUNSWICK FEDERATION OF NATURALISTS

277 Douglas Avenue, Saint John, N.B., Canada E2K 1E5 Tel.: (506) 658-1842

LA FÉDÉRATION DES NATURALISTES DU NOUVEAU-BRUNSWICK

277, avenue Douglas, Saint-Jean, N.-B., Canada E2K 1E5 Tél. (506) 658-1842

The federation is a non-profit organization formed in 1972 to facilitate communication among naturalists and nature-oriented clubs, to encourage an understanding of nature and the environment, and to focus concern for the natural heritage of New Brunswick.

La fédération est une organisation sans buts lucratifs formée en 1972 pour faciliter la communication entre les naturalistes et entre les divers clubs axés sur l'étude de la nature, pour encourager une meilleure compréhension de la nature et de l'environnement naturel, et pour éveiller le souci pour le patrimoine naturel du Nouveau-Brunswick.

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