

N.B. Naturalist

Le Naturaliste du N.-B.

Vol. 12, No. 4 1983



IT'S TIME TO RENEW!

It's hard to believe, but another year has come and gone and it's time to renew your NBFN membership for 1984.

Please note that the membership rates have increased - largely a reflection of the printing and mailing costs of N. B. Naturalist - to \$10.00 individual or family, \$5.00 students under 18.

This past year has been one of growth and accomplishment for the Federation. We have a Provincial Bird (at last!), a bigger and better N. B. Naturalist, and the hosting of an immensely successful national CNF conference under our belt. Our membership has increased substantially, and our own NBFN annual meeting week-end drew participants from across the province.

Help us to strengthen even more our representation of the concerns and interests of New Brunswick naturalists by renewing your membership for '84 without delay!!

.....
NEW BRUNSWICK FEDERATION OF NATURALISTS
Membership, 1984

\$10.00 individual or family; \$5.00 students under 18; \$20.00 sustaining; library subscriptions - \$10.00

(Please make cheques payable to the NBFN)

NAME: _____

ADDRESS: _____

POSTAL CODE: _____ NEW: _____ RENEW: _____

THANK YOU FOR YOUR SUPPORT!!

Mail to: Dave Smith, 149 Douglas Avenue, Saint John, N. B.
E2K 1E5

C'EST LE TEMPS DE RENOUVELER!

On a du mal à y croire, mais une autre année s'est écoulée et le temps est venu de renouveler votre adhésion à la FNNB, pour 1948.

Veuillez prendre note du fait que les cotisations de membres ont augmentées, dû en grande partie aux coûts plus élevés d'impression et d'expédition de la revue Le Naturaliste du N.-B. Il en coûte maintenant \$10.00 pour les particuliers et les familles et \$5.00 pour les étudiants de moins de 18 ans.

Cette année a été une année de croissance et de grandes réalisations au sein de la Fédération. Nous avons enfin un oiseau provincial et une revue plus importante et améliorée, Le Naturaliste du N.-B., tandis que l'organisation et la tenue du congrès national de la FNC a remporté un immense succès, la liste de nos membres s'est allongée et notre propre assemblée annuelle de la FNNB a attiré en fin de semaine des participants de tous les coins de la province.

Aidez-nous à améliorer notre représentativité, pour mieux refléter les inquiétudes et les intérêts des naturalistes du Nouveau Brunswick, en renouvelant promptement votre adhésion à la FNNB pour '84.

LA FEDERATION DES NATURALISTES DU NOUVEAU-BRUNSWICK

Cotisations de membres, 1948

\$10.00, particulier ou famille; \$5.00, étudiant de moins de 18 ans;
\$20.00, cotisation de soutien. - Abonnement de bibliothèque - \$10.00

(Veuillez établir votre chèque à l'ordre de la FNNB)

Nom: _____

Adresse: _____

Code postal: _____ Nouveau membre: _____ Ancien membre: _____

Merci pour votre soutien!

Envoyez à: Dave Smith, 149, avenue Douglas, Saint-Jean, N.-B. E2K 1E5

Contents

FROM THE EDITOR	146
THE EASTERN COUGAR IN THE MARITIME PROVINCES By Gerry Parker	150
IN SEARCH OF THE ELUSIVE FOUR-TOED SALAMANDER By Stephen Woodley	156
IDENTIFACTS - LOONS By Rob Walker	158
"BUGS!" - TIGER BEETLES By Tony Thomas	161
NATURE NEWS By David S. Christie	163
RARE NEW BRUNSWICK PLANTS - GENTIANAS By Hal Hinds	170
PROJECT LEARNING TREE By Barry King	172
BOOK REVIEWS Ontario Birds, reviewed by David S. Christie Common and botanical names of weeds in Canada, reviewed by Molly Smith	173
RECENT TITLES OF INTEREST TO NEW BRUNSWICK NATURALISTS Compiled by Donald McAlpine	174
REPORTS	177
CLUB NEWS	183

Cover Illustration

Cougar. Pencil sketch by John Bone, from a mounted specimen at the New Brunswick Museum.

Illustration de la couverture

Panthère. Dessin au crayon d'un spécimen naturalisé du Musée du Nouveau-Brunswick, par John Bone.

From the Editor

In this, the final issue of the year, the split "Federation newsletter/natural history magazine" personality of N. B. Naturalist comes to the fore. "Keeping in touch" is vital to any organization, and is perceived to be an important function of this publication in its role as NBFN newsletter. Through their Representative Directors, Federated naturalists' clubs around the province were invited to let us know what they've been up to in the past year. If a report highlighting your club's activities isn't there, take it up with your elected NBFN representative; they were all asked - very nicely - twice! Further fulfilling the newsletter role, this issue also contains reports on several meetings of concern to the Federation.

On the magazine end of things, our feature article is an update on the elusive Eastern Cougar in the Maritimes - "unidentified feline object" as one wag put it - by Gerry Parker, scientist with the Canadian Wildlife Service who is currently compiling cougar reports as Bruce Wright did before him. At the risk of running a lost and found column, we also carry a report by Stephen Woodley of Fundy Park on the finding for the first time in New Brunswick of the equally evasive Four-toed Salamander.

The Salamander article, I can't resist telling you, came with one of the more risqué typos I've had a chuckle over editing. It's a racy little piece, anyway, with amorous amphibians thrashing about in the spring ditches, but when I read in the first line of the fourth paragraph that "...it was a perfect night for herpes", I really couldn't contain myself! (Such are the sensitivities of the 80's, in fact, that I am told an American East Coast Herpetological Society has been forced to de-list its telephone number to avoid constant calls from unfortunate sufferers of the near-epidemic social disease.)

We introduce two new features in this issue, "Recent Titles of Interest to New Brunswick Naturalists", compiled by Book Review Editor Donald McAlpine, and "Identifacts", by Rob Walker. "Recent Titles" is a listing of papers and articles with a bearing on New Brunswick natural history, gleaned from various journals and magazines. It is hoped that the compilation will make all of us more aware of the wealth of active scientific research being conducted into our province's flora and fauna. "Identifacts", conceived and begun by Chief Fundy Park Interpreter Rob Walker, goes beyond the field guide to help both amateur and professional with the identification of problem species. The space is offered to anyone with pointers

to share for distinguishing particularly troublesome species.

Finally, I would like to draw your attention to the George Stirrett Memorial Prize for Natural History Writing announced below. Competition for the annual \$50.00 cash award for the best article published in N. B. Naturalist begins with the next issue (Vol. 13, No. 1) and is open to all except the Federation Board of Directors, N. B. Naturalist Editorial Committee, and their immediate families. (Regular columns will not be judged; however, columnists may submit other articles for consideration.)

Announcement!

CASH AWARD

The NBFN announces the creation of the George Stirrett Memorial Prize for Natural History Writing. The \$50.00 prize will be awarded annually to the author of the best piece of natural history writing published in N.B. Naturalist during the year.

The competition is open to all students, researchers, professional and amateur interpretive writers. (Members of the Board of Directors of the NBFN, the Editorial Committee of N.B. Naturalist, and their immediate families are not eligible.) Selection will be made by representatives of the Editorial Committee and the NBFN Board, and the award presented each year at the NBFN annual general meeting.

By encouraging the semi-popular expression of investigations into the natural history of New Brunswick, the George Stirrett Memorial Prize for Natural History Writing is a fitting tribute to the late Dr. Stirrett, a New Brunswicker with a lifelong commitment to the interpretation and popular understanding of our natural heritage.

Mot de la Directrice

Dans ce dernier numéro de l'année, le double caractère de la revue Le Naturaliste du N.-B., soit le côté "lettre circulaire de la Fédération" et le côté "revue d'Histoire naturelle", est bien mis en évidence. Tout d'abord, rester en contact avec ses membres est perçu par la Direction comme indispensable au bon fonctionnement de tout organisme et est donc une importante fonction de cette publication. A cette condition seulement, la revue remplira adéquatement son rôle de lettre circulaire de la FNNB. Par l'entremise de leurs directeurs-délégués, les clubs fédérés des naturalistes de la province ont été invités à nous faire parvenir un aperçu annuel de leurs activités. Si vous ne trouvez pas de compte-rendu soulignant les principales activités de votre club dans ce numéro-ci, apportez le fait à l'attention de votre représentant élu de la FNNB. A deux reprises, on les a bien gentiment invités à nous faire parvenir de tels rapports. Egalement dans le but de remplir son rôle de lettre circulaire, ce numéro-ci contient des comptes-rendus de plusieurs réunions sur des sujets qui inquiètent la Fédération.

Quant au côté "revue d'Histoire naturelle" notre article-vedette est une mise à jour de l'information sur l'insaisissable Panthère de l'Est - cet objet félin non-identifié" comme lançait un farceur - écrit par Gerry Parker, scientifique à l'emploi du Service canadien de la faune qui rédige actuellement des rapports sur la panthère dans les Maritimes comme le faisait Bruce Wright, avant lui. Au risque de nous faire accuser de publier une page sur les objets perdus et retrouvés, nous publions également un rapport de Stephen Woodley, un scientifique du Parc Fundy, sur une première découverte au Nouveau-Brunswick de la toute aussi fuyante Salamandre à quatre doigts.

Ici, je ne puis résister à la tentation de vous raconter comment son article sur les salamandres est venu s'enchevêtrer avec une histoire de faute typographique au sujet de laquelle j'ai bien ri en éditant son article. Le style plein de verve du récit est en lui-même savoureux et l'histoire porte sur les amphibiens aux temps des amours, s'agitant au printemps dans les fossés. Quand je suis arrivée à la première ligne du quatrième paragraphe "...c'était la soirée idéale pour les herpès", en anglais "...it was a perfect night for herpes", je m'esclaffai. (Dans la langue de Shakespeare, "herps" signifie "reptiles", tandis que "herpes" se réfère à la maladie à caractère quasi-épidémique qui se répand aujourd'hui chez les homosexuels.) Les années '80 nous apportent une foule d'anecdotes plus cocasses les unes que les autres. De fait, croyez-le ou non, on me dit qu'une Société herpétologique américaine de la côte est a été forcée de faire rayer son numéro de téléphone de l'annuaire pour éviter de recevoir des appels répétés des pauvres victimes de cette maladie sociale à caractère quasi-épidémique.

Dans ce numéro, nous introduisons deux nouveaux types d'articles "Titres récents susceptibles d'intéresser les naturalistes du Nouveau-Brunswick" recueillis par notre directeur de la critique scientifique, Donald McAlpine et "Points d'identification" par Rob Walker. "Titres récents" constitue une liste de documents et d'articles ayant trait à l'Histoire naturelle du Nouveau-Brunswick recueillis dans diverses

revues savantes ou populaires. Espérons que cette compilation nous conscientisera tous sur la richesse et le sérieux de la recherche scientifique effectuée sur la flore et la faune de la province. La rubrique "Points d'identification" conçue et lancée par le Chef du Service d'interprétation du Parc Fundy, Rob Walker, va plus loin que le guide d'identification sur le terrain dans l'aide qu'elle apporte à l'amateur ou au professionnel dans ses essais d'identification des espèces-problèmes. L'espace réservée à cette rubrique est offert à quiconque possède des renseignements particuliers sur l'identification d'espèces-problèmes.

Enfin, j'aimerais attiré votre attention sur le Prix George Stirrett qui sera attribué à l'auteur d'un article sur l'Histoire naturelle tel qu'annoncé ci-dessous. Le concours pour le prix annuel en argent de \$50.00 décerné au meilleur article publié dans Le Naturaliste du N.-B. sera lancé avec la parution du prochain numéro (Vol. 13 No 1) et sera ouvert à tous, exception faite pour les membres du Conseil d'administration de la Fédération et pour ceux du Comité de rédaction du Naturaliste du N.-B. et leurs familles immédiates. Quant aux rubriques régulières, elles ne pourront pas être soumises au jury; les chargé(e)s de ces rubriques pourront par contre soumettre d'autres articles, s'ils le désirent.

PRIX EN ARGENT

La FNNB désire annoncer la création du Prix George Stirrett qui doit être attribué à l'auteur d'un article sur l'Histoire naturelle. Le prix de \$50.00 sera décerné annuellement à l'auteur du meilleur article qui aura paru dans Le Naturaliste du N.-B. pendant ladite année.

Le concours est ouvert à tous: aux étudiants, aux chercheurs, ainsi qu'aux écrivains de la vulgarisation scientifique, qu'ils soient des professionnels ou des amateurs; seuls les membres du Conseil d'administration de la FNNB et du Comité de rédaction du Naturaliste du N.-B. ainsi que leurs familles immédiates ne peuvent participer au concours. Le choix du "meilleur texte" sera fait par des représentants du Comité de rédaction et du Conseil d'administration de la FNNB et le prix présenté au gagnant, chaque année, à l'assemblée générale de la FNNB.

En encourageant les travaux de semi-vulgarisation sur l'Histoire naturelle du Nouveau-Brunswick, le Prix George Stirrett constitue un juste hommage rendu au mérite de Monsieur Stirrett, un docteur en biologie et un Néo-Brunswickois qui s'est dévoué toute sa vie à l'interprétation et à la compréhension générale de notre patrimoine naturel en faveur du grand public.

THE EASTERN COUGAR IN THE MARITIME PROVINCES

Gerry Parker

The cougar is a cat of many names. The first Europeans settling on the Atlantic Seaboard called the long-tailed cat "panther", a name given the Asiatic leopard. In the northeast it was called "Cat of the Mountain", shortened to "catamount", and in New Brunswick and Maine the "Indian Devil" or "Injun Devil". Later, as the frontiersmen reached the rockies, the name "Mountain Lion" was used; to the north in Canada it became "Cougar". In South America it was, and still is, known as "puma".

Although Young and Goldman recognize 15 subspecies of Felis concolor in North and Central America, there are few obvious physical differences. The subspecies recognized in northeastern United States and eastern Canada is Felis concolor cougari. The cougar was once the most widely distributed mammal in the western world. Ranging from the British Columbia-Yukon border to the tip of South America and from Atlantic to Pacific, it was equally at home in the tropical jungle, alpine boreal forest and desert badlands. With European settlement of North America, however, the cougar's eastern range shrunk dramatically until today the Florida subspecies is the only known extant population east of the Mississippi River.

Up to 1976 the existence of a viable population of Florida cougar, or panther, as it is often referred to, was in question. Evidence of its existence was present, such as scats, tracks and an occasional road kill, but the extent of its distribution and status was unknown. In 1976, as an outcome of a Florida Panther Conference convened by the Florida Audubon Society, the U. S. Fish and Wildlife Service appointed a Florida Panther Recovery team. In 1978 the Florida Game and Fresh Water Fish Commission (comparable to our provincial Wildlife Division) established a Florida Panther Record Clearing-house to catalog and investigate panther reports. In February, 1981, the first panther was captured, radio-collared and released. A second panther was radio-collared 10 days later. In the next 2 years the team radio-collared a total of 7 panthers.

How is the Eastern Panther distinguished from its western cousin? Apparently with difficulty. The Florida subspecies is characterized by a dark dorsal line running down to the tip of the tail and, where the shoulder and neck join, a triangular patch of approximately 150 white spots the size of small peas. It should be mentioned that only in South America is the melanistic phase of Felis concolor known, although in northeastern North America many cougar reports are of black animals.

The typical Florida panther, besides the color characteristics noted above, is usually a uniform rusty or tawny cinnamon-buff colour (deer color) on the back and whitish underneath. The tip of the tail, back of the ears and sides of the nose are dark brown or blackish. Female Florida panthers average 60-80 pounds and males 100-120 pounds, smaller than the western races.

Throughout its vast range the largest of North American feline predators requires deer to sustain a viable population. Other prey species, however, may also frequently be taken. A cougar killed several years ago near the Manitoba-Ontario border had the remains of skunk in the stomach, porcupine quills in the snout, and was shot while raiding a chicken coop.

Early numbers of cougar in eastern North America are unknown, but due to low densities of White-tailed Deer, and the presence of the Eastern Timber Wolf, its numbers were probably never very high. References to the Eastern Cougar date back to the mid-1700's and continue throughout the 19th century. By the turn of the century, however, a lack of evidence of this big cat led to the conclusion by many that it had become extinct.

In 1938 Bruce Wright heard of sightings of the species in New Brunswick and from then until his death in 1975 he systematically recorded observations, both current and historical, and compiled the records and evidence into several articles and books. He first published an article on the Little St. John Lake specimen in the Journal of Mammalogy in 1961 and followed it with several other articles on the possibility of the continued survival of the Eastern Cougar. The Little St. John Lake specimen was trapped



Bruce Wright and the Little St. John Lake specimen.

in Maine near the Quebec border in 1938 and apparently represents the last documented Eastern Cougar. The mounted specimen resides at the University of New Brunswick in Fredericton.

There are no records of cougars having once been distributed in Nova Scotia. This is not surprising. Records suggest that the White-tailed Deer became extinct in that province long before the arrival of the first European explorers and did not again enter the province until late in the 1800's. The absence in Nova Scotia of deer, the preferred food of the cougar, would almost certainly suggest an absence of the cougar.

Bruce Wright lists approximately 220 reports of evidence of cougars in New Brunswick from 1938 to 1971 and an additional 26 from Nova Scotia. He made plaster casts of tracks later identified as those of a cougar and photographed impressions left in the snow of tracks and tail drag. His evidence is impressive.

In 1977, Canadian Wildlife Service, Atlantic Region, recognizing the need for a central clearing-house for reports of cougars in the Maritimes, made such a proposal to New Brunswick and Nova Scotia. Both provinces agreed to the arrangement and provincial biologists regularly channel such reports to me at the Canadian Wildlife Service regional office in Sackville, New Brunswick. To facilitate the recording of information, I have designed and distributed a 2-page cougar report form.

Up to August, 1983, we have received 110 reports of cougars in New Brunswick and Nova Scotia. We have also received several reports from Newfoundland. Is there a pattern to these sightings? Not really. Although few reports come from southern Nova Scotia and quite a few from southern New Brunswick and eastern Nova Scotia, they are distributed pretty well throughout both provinces.

So what evidence have these 110 reports provided for the continued existence of the species in eastern Canada? Only the written testimony of so many persons who swear on a stack of Bibles that what they saw was a tawny-brown to black, 100-150 pound, long-tailed cat which, for those who had the opportunity to view it at close hand for more than several seconds, represented the most magnificent creature they had ever seen.

When most reports reach our office, they are more than several days old and many are made from moving vehicles. Unless the area in question is examined immediately following the sighting the opportunity to obtain casts of the tracks is usually lost. We do have a few casts which - although I, for one, hesitate to conclude are cougar tracks - do show characteristics which are unlike most other wild animals in the Maritimes.

Three occasions to photograph a suspected cougar have proven less than satisfactory. One proved to be a double exposure, the other two, taken with instamatic cameras, show only an unidentifiable dark speck in the background.

We have received reports of cougars attacking horses, eating dogs, harassing communities and, yes, chasing cars.

So what are all these people seeing? The fleeting glimpses from a car of a possible cougar crossing a road are the most suspect and could be anything from a house cat to a bear. But what about the one seen by the experienced hunter near Petitcodiac, New Brunswick? While sitting patiently in a hardwood stand waiting for a deer, a movement to one side caught his attention. Less than 30 feet away walked a large, tawny, long-tailed cat. Catching a glimpse of the hunter's movement, the cat wheeled and disappeared without a sound. In the same area, an R.C.M.P. officer, while deer hunting, watched a cougar for a minute or so through the scope of his rifle.

What about the experienced outdoors- and salmon fisherman on the Miramichi who, at the close of a day's fishing, was relaxing overlooking his favorite pool and enjoying the closing day when a cougar approached the stream below him, paused, then entered the water, swam across and disappeared in the forest?

What about the wildlife technician who, from the cab of his marked pickup, saw a deer bound across the road in front of the vehicle, followed by a cougar which paused, glanced at the truck, then, in one bound, cleared the road and bounded up a slope through a cutover. The wildlife technician had seen live and dead cougars in Alberta and was definite in what he saw. One year later, two wildlife students working with me identified a cougar on the road within 1/4 mile of that seen by the technician.

In the past 5 years, cougars have been reported by wildlife technicians, medical doctors, veterinarians, housewives, experienced naturalists, hunters, fishermen - a random assortment of the general population. On the other hand, one cannot discount the evidence that the cougar is not found here and that these reports are merely misidentified cats, dogs, bears, coyotes or some other common creature.

It is a fact that in over 50 years we do not have a confirmed specimen. That, in itself, is just reason for many to doubt the presence of Eastern Cougars, and perhaps they are right. Surely a specimen would have been shot by a hunter or hit by a vehicle. But perhaps one has been. It is doubtful that the hunter, most of whom realize that the cougar is a protected species in both provinces, would proudly display his trophy. Most likely the carcass would be left in the woods. As for road kills, the chances of a cougar being struck by a vehicle are slim, especially where their numbers must be so few. (They aren't nearly as stupid or slow of foot as a porcupine!) Of the thousands of bobcats in the Maritimes, not many road kills are reported each year. What about trapping? Why doesn't one show up in a snare or leg-hold trap? Other than a foot snare for bear, I doubt most

traps would hold a 150 lb. cat. Why hasn't a cougar been treed by cat hounds? A good question, and one for which I have no simple answer. Perhaps the occasion has just not presented itself. If cougars are here, their numbers are few. One cat hound owner, a district ranger, told me of tracking a suspected cougar in snow with his proven cat hound. Normally a vocal and free-spirited pooch, the dog would not leave his master's sight, continually checking to see if he was close behind. The track was left after several miles. And what of the carcasses of cougars which meet their fate in one manner or another? Why doesn't someone find the remains of one? Again, the chances are so remote of this happening that, unless the animal was killed on a highway or shot, it would be a rare opportunity to stumble onto the remains of a cougar in the wild.

On a 530 acre wilderness park at the end of a peninsula within the city limits of Seattle, a cougar was sighted in August 1981. The park was closed and for one full day three cat hounds combed the area to no avail. The following day the cougar was seen by police sunning itself on the main road so 6 more cat hounds were brought in. After another full day, no trace of the cougar could be found. The hounds never indicated a cougar was, or had been, in the area. It was seen again the following day, along with a track and scat, the first tangible evidence of its presence in three days of hunting. The six dogs were released again in the immediate area and after 9 hours a young male cougar was treed, tranquilized and removed from the park. This last hunt involved several Game Department people, half a dozen park employees, several Navy security personnel and numerous news people.

This shows how difficult it can be to obtain tangible evidence of a cougar, even by trained personnel and dogs in a relatively small area. It also helps to place in perspective the odds against one of the few cougars which may still inhabit the Maritimes being captured or killed.

So what can, or should, be done now regarding the Eastern Cougar in the Maritimes? The species presently receives full protection in both New Brunswick and Nova Scotia. As no specimens are showing up dead or alive, legally or illegally, it must be assumed, if you are an optimist, that the complete protection offered the species is effective (or, if you are a pessimist, that this merely provides further evidence that the cougar has long since vanished from the Maritimes). You may say that indirectly the survival of the cougar is being enhanced by the expanding deer population, so perhaps the provincial big game biologists deserve a pat on the back.

What about the loss of habitat? Is the continual loss of mature spruce-fir forest in the Maritimes detrimental to the survival of the species? I would suggest not. The changing forests

have contributed to increased deer numbers and for a large predator like the cougar the availability of suitable prey is primary to a viable breeding population. As the cougar is found in such a wide variety of habitats throughout its range in North and South America, it must be one of the more adaptable of large predators, capable of living in wilderness isolation and in close proximity to man.

I suggest that all that can be done is being done. That includes recognizing the possible survival of the species in the Maritimes and giving it complete protection, providing a central clearing-house for reports and sightings, and letting those people who believe they have seen a cougar know that, rather than being scoffed at, they just may have seen the rarest and probably the most impressive of the larger mammals of eastern North America. If and when the presence of the cougar is established then perhaps a federal-provincial research study could be justified, similar to that mentioned earlier in Florida. Until then the possible presence of the cougar "out there in the woods", and the controversy surrounding it adds an exciting dimension to the appeal of the outdoors of the Maritimes.

Canadian Wildlife Service,
Sackville, N.B.



RECOMPENSES

La FNNB a récemment conférer à Arthur (Cal) Callaghan de Musquash le statut de membre honoraire à vie de la Fédération. L'honneur lui a été conféré à l'assemblée annuelle générale par le Conseil d'administration de la Fédération en reconnaissance d'un appui de longue date à la FNNB, du rôle positif qu'il a joué dans le Club des naturalistes de Saint-Jean et de ses années de service bénévole au Département des Sciences naturelles du Musée de Nouveau-Brunswick.

Après la réception de sa carte de membre honoraire qui se fit sous les chaleureux applaudissements de ses amis et de ses confrères naturalistes, on lui a entendu dire que ce statut honorifique qui venait de lui être conféré était presque - mais pas tout à fait - aussi exaltant que le statut de grand-grand-grand-papa qui venait également de lui être conféré, il y a peu de temps passé.

IN SEARCH OF THE ELUSIVE

FOUR-TOED SALAMANDER

Stephen Woodley

What has four toes, is incredibly shy, and is a New Brunswick-er after all?

Snuggling deeper into my sou'wester, I winced as another rivulet of rainwater found its way down my back. Ahead, the flashlights of my two companions were barely visible through the fog and pelting rain.

"What a perfect night for herps", shouted Michael through the din. It was May 2, and Michael Rosen, Duane West and I were all slogging through the boggy margins of Marven Lake in Fundy National Park. Why? To add to the rather sketchy understanding of reptiles and amphibians within the park.

Indeed it was a perfect night for herps. The pond was alive with Red-spotted Newts and Spotted Salamanders. Spring Peepers screeched their high-pitched love calls from mossy hummocks. Red-backed Salamanders ran across logs and pathways. Wood Frogs quacked and toads trilled. The wet spring night seemed taken over by these odd creatures, hardly visible at other times of the year. Spring days had caused hormones to flow and the mating dance was in full swing.

Crossing a log in a bed of sphagnum, Duane's heavy boot just missed a small dark salamander.

"What's this one?" he shouted.

"Make sure you catch it", replied Michael. After a flash of hands we all stood peering into the murky depths of the dip net.

The catch was really quite exciting if you are at all interested in amphibians. It was New Brunswick's first and only record of the Four-toed Salamander (Hemidactylum scutatum). Although known from Quebec and a few scattered sites in Nova Scotia, a four-toed had never been found in New Brunswick. Stan Gorham, New Brunswick's foremost herpetologist, had accurately predicted



Four-toed Salamander

in his 1970 monograph that it would be found with more searching. It remained elusive until 1983.

The Four-toed Salamander is a lungless salamander, found throughout forested portions of eastern North America. Spotty in distribution, the four-toed ranges southward to the Gulf of Mexico. Identifying characteristics are an enamel-white belly marked with black spots, four toes on all feet, and a constriction at the base of the tail. The salamander is 5-9 cm in length.

Fundy National Park will be continuing the "hunt for herpetiles". This year's search was only a prelude to a more detailed study. Unfortunately, these "foul and loathsome" creatures are often ignored. Even though I was soaked through that night in early May, I couldn't help thinking how wonderful these creatures really were. What a great excuse for mucking about ponds on a rainy spring night!

Fundy National Park, N.B.

Awards

Arthur (Cal) Callaghan, of Musquash, has been awarded Honourary Life Membership in the NBFN. The honour was conferred at the annual general meeting by the Federation's Board of Directors in recognition of Cal's long-standing support of the NBFN, his active participation in the Saint John Naturalists' Club, and his years of volunteer service to the Natural Science Department of the New Brunswick Museum.

After accepting his Honourary Membership to the warm applause of friends and fellow naturalists, Cal was heard to say that the honorary status that had been conferred was almost - but not quite - as exalted as the great-great-great-grandfatherhood also recently bestowed upon him!

COUNTY BIRD RECEIVES INTERNATIONAL RECOGNITION

The Gray or Canada Jay, alias gorby, moosebird, and whiskey-jack, well known symbol of Victoria County, New Brunswick, (and sore loser in the provincial bird elections) is to gain international fame. The bird has been chosen emblem of the 19th International Ornithological Congress, to be held in Ottawa in 1986.

Eat your heart out, Chickadee.

Identifacts

This series is intended to aid both amateur and professional naturalists in naming rare, unusual and difficult-to-identify species by providing "state-of-the-art" facts not available in the current crop of field guides. Hopefully, with these aids at hand, naturalists will feel more confident in reporting their sightings, and their reports will contain more complete notes on the field marks essential for positive identification. This series will go beyond the field guides by compiling and outlining, as simply as possible, identification facts gleaned from professional journals and books on specific families and groups. I am beginning the series with birds because of their appeal to most naturalists, but hope that in the future other taxonomic groups will be covered.

Considering the ability of birds and other living things to wander far from "home" and to hide themselves, we can never be certain as to what animal or plant will next be reported as new in our province. For this reason the bird series will include species from the eastern side of the Atlantic and the western side of North America which have not yet been documented for New Brunswick.

Rob Walker

Some very important terms used to describe different plumages and ages of birds are given below.

Juvenal plumage - follows the downy stage of development and is worn when a bird fledges (starts to fly). This is the first plumage of true contour feathers. In Great Britain this is referred to as the juvenile plumage.

Immature - should not be used to refer to a plumage. This is a bird not yet fully developed sexually and therefore incapable of breeding. There is no clear-cut threshold of adulthood valid for all birds. Some immature birds are as large as or even larger than their parents. When used arbitrarily by some authors to describe a plumage it refers to any stage of development following the juvenal plumage which is different from that of an adult (sexually mature) bird.

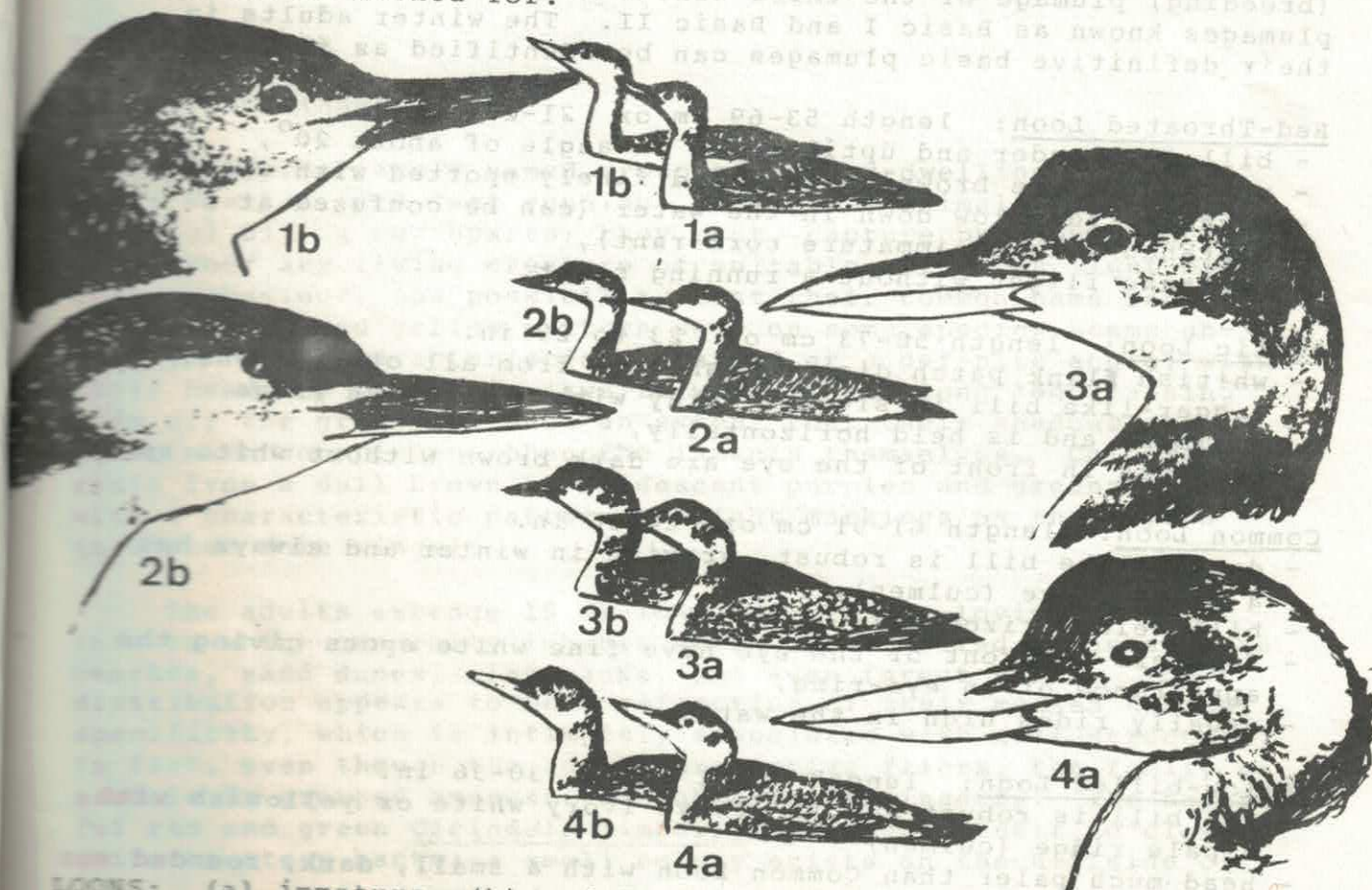
Basic plumage - is worn year round (for example by crows, geese, owls, chickadees) or outside the breeding season (for example by loons, ducks, sandpipers, warblers). This is referred to informally as the winter plumage, non-breeding plumage or non-nuptial plumage. When a basic plumage does not change further with age (that is to say, when it repeats itself in the same form year after year) it is known as the definitive basic plumage.

Alternate plumage - is a second plumage when two occur during a year on a bird. This is referred to informally as the summer plumage, breeding plumage or nuptial plumage. The alternate plumage is usually more colorful and ornate than the basic plumage. When an alternate plumage does not change further with age it is known as the definitive alternate plumage.
Sexual dimorphism - is a difference in plumage and/or size between males and females of the same species.

IDENTIFACTS NO. 1 - LOONS

Immatures and Adults in Winter

1. Red-throated Loon - in New Brunswick this is an uncommon migrant and winter resident on salt water; it is rare as a migrant on inland waters.
2. Arctic Loon - there have been a few observations on salt water but, as yet, no positively documented records in New Brunswick.
3. Common Loon - in New Brunswick this is an uncommon year-round resident on salt water; nests uncommonly on inland waters.
4. Yellow-billed Loon - not recorded in New Brunswick but should be looked for.



LOONS: (a) immature (b) adult in winter

1. Red-throated Loon
2. Arctic Loon
3. Common Loon
4. Yellow-billed Loon

Loons show no sexual dimorphism in plumage, but females are generally smaller than the males. The alternate plumages of all four species are easily identified (see standard field guides). The period of greatest challenge in identifying loons is from October to March when all birds are in plainer juvenal or basic plumages.

Field marks of greatest importance in identifying loons are: bill size, shape, and colour, angle of tilt at which bill is held; head color and pattern; back color and pattern; and flank color.

Immature loons of all species can be distinguished from the adults by the variously shaped subterminal bands of buff or gray on the back and scapular feathers which, in total, form a barred, scaled or marbled pattern on the upper parts. Also, immature loons have brown rather than reddish eyes.

All loons excepting the Red-throated require 2½ years to achieve their definitive basic plumage and 3 years to complete the full breeding plumage (the Red-throated Loon is able to do this in 1½ years and 2 years respectively). Between the juvenal plumage of the first fall and winter and the definitive basic (breeding) plumage of the third winter are two transitional plumages known as Basic I and Basic II. The winter adults in their definitive basic plumages can be identified as follows:

Red-Throated Loon: length 53-69 cm or 21-27 in.

- bill is slender and uptilted at an angle of about 20°,
- upperparts are brownish-gray and finely spotted with white,
- usually rides low down in the water (can be confused at a distance with an immature cormorant),
- can take flight without a running start.

Arctic Loon: length 58-73 cm or 23 to 29 in.

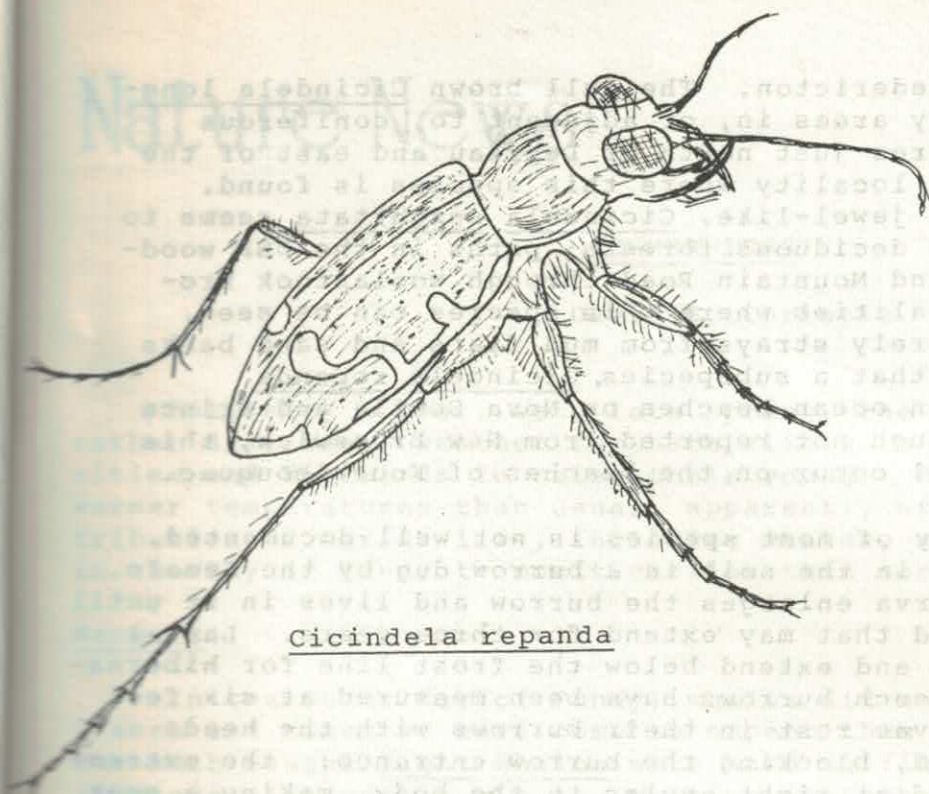
- whitish flank patch distinguishes it from all other loons,
- dagger-like bill is slender, gray with a blackish ridge (culmen) and is held horizontally,
- feathers in front of the eye are dark brown without white spots.

Common Loon: length 61-91 cm or 24-36 in.

- dagger-like bill is robust, grayish in winter and always has a black ridge (culmen),
- bill held horizontally,
- feathers in front of the eye have fine white spots giving the appearance of an eye-ring,
- usually rides high in the water.

Yellow-billed Loon: length 76-91 cm or 30-36 in.

- the bill is robust and is always ivory white or yellowish with a pale ridge (culmen)
- head much paler than Common Loon with a small, dark, rounded ear patch behind and slightly lower than the eye.



Cicindela repanda

"Bugs!"

Tony Thomas

TIGER BEETLES

Family: Cicindelidae

An appropriately named group of ground-dwelling beetles, Tiger Beetles are fast running, predaceous animals with large powerful biting mouthparts; they hunt, capture prey by pouncing, and devour any living creature of suitable size. In light of their behaviour, the possibility that their common name refers to the black and yellow pattern seen on some species seems unlikely. They characteristically stand at a definite angle, with their heads up and their jaws forward, their long legs raising them off the ground to such an extent that their shadows are often more conspicuous than the insects themselves. Colours range from a dull brown to iridescent purples and greens, often with a characteristic pattern of light markings on the elytra (hardened fore wings).

The adults average 15 mm long and are sun-loving, diurnal insects which generally inhabit sparsely vegetated areas such as beaches, sand dunes, clay banks, and even forest roads. Their distribution appears to be a reflection of their marked habitat specificity, which is intimately associated with soil structure. In fact, even though the adults are active fliers, the family as a whole is grouped amongst the subterranean insects. The beautiful red and green Cicindela limbalis restricts itself to clay soils on steep banks; a small colony exists on the hillside of

the UNB campus at Fredericton. The dull brown Cicindela longilabris selects sandy areas in, or adjacent to, coniferous forests; the sandy area just north of Lepreau and east of the Lepreau River is one locality where this species is found. The brilliant green, jewel-like, Cicindela sexguttata seems to prefer paths in rich deciduous forests; paths in the UNB woodlot at Fredericton and Mountain Road through Woolastook Provincial Park are localities where this species can be seen. Cicindela repanda rarely strays from mud flats and sand banks along rivers except that a subspecies, Cicindela repanda novascotiae, occurs on ocean beaches on Nova Scotia and Prince Edward Island; although not reported from New Brunswick, this subspecies might well occur on the beaches of Kouchibouguac.

The life-history of most species is not well documented. Eggs are laid singly in the soil in a burrow dug by the female. The newly hatched larva enlarges the burrow and lives in it until fully grown, a period that may extend for three years. Larval burrows are vertical and extend below the frost line for hibernation. In Manitoba, such burrows have been measured at six feet six inches. The larvae rest in their burrows with the heads flush with the ground, blocking the burrow entrance: the extremely large head is held at right angles to the body, making a neat plug which fits the opening of the burrow. Jaws extend upwards, ready to seize and drag into the burrow every insect that walks over the trap. Several morphological features help the larva resist being pulled out of its burrow. If the prey proves to be strong enough to resist the pull of the larva, the larva releases its hold and drops to the bottom of the burrow.

Adults dig short burrows in which to pass the night or to shelter from rain or excessive heat. This latter proposition is unlikely in New Brunswick as adults have been shown to withstand sand temperatures of 50°C. Adult overwintering burrows are of similar dimensions to those of the larvae. Adults loosen the soil with their jaws and pass it backwards, beneath the body, by means of the legs. Initially, the soil is kicked clear of the burrow, but as the burrow deepens the soil is simply packed behind the beetle as it descends. Burrows are made wide enough to allow the beetle to turn around. Hibernation is in a chamber at the end of the burrow, the chamber being sufficiently large to accommodate the soil which is pushed behind the beetle when it climbs out the following spring.

Tiger beetles are rather poorly represented in New Brunswick, although certain species are common in their preferred habitat. Of the 119 North American species, 28 are Canadian but only 9 have a range which includes New Brunswick. Because they are very difficult to catch, they are rare in collections. As identification of most specimens to species (except the distinctively jewel-like C. sexguttata) the distribution and habitat specificity of our New Brunswick species is virtually unknown.

Nature News

SUMMER 1983

David S. Christie

Following a cool, wet, late spring, the summer was warm and rather dry, ideal weather for naturalists to enjoy outdoor activities and for birds to raise their young. Sea water reached warmer temperatures than usual, apparently affecting the distribution of marine life, including whales, and causing lobsters in the Bay of Fundy to moult earlier than normal (Marina Collins).

Mammals

In the outer Bay of Fundy, whales did not arrive at the places and times we have come to expect them in recent years. The much sought Right Whales were hard to find off Grand Manan (various observers = v.o.). Writing in Sunbury Notes (No. 32, p. 1-3, 22 Sept., 1983), newsletter of Sunbury Shores Arts and Nature Centre, Peter Watts reports that few Harbour Porpoises came close to the mainland coast this summer and that Fin and Humpback Whales were late coming into the bay. He also notes the rather unusual occurrence of a nursery pod of Pilot Whales, about a dozen adults, most accompanied by a calf, south of The Wolves, as well as about 30 White-sided Dolphins off the east coast of Grand Manan (=GM). Those high-jumping dolphins mostly stay well out in the bay, such as on Northeast Bank about 35 miles south of Grand Manan, where there were at least 300 in mid-August (Jim Leslie). Humpback Whales were common on Northeast Bank then and, in late August followed large schools of Herring along the eastern shore of Grand Manan, where one became trapped in a weir at White Head for several days at the end of the month (Mary Lou Campbell et al.).

Birds

The warm water temperatures apparently resulted in a few Cory's Shearwaters at the mouth of the Bay of Fundy in late summer (Norman Famous, in Guillemot). I haven't got more details of the occurrence of this species, which is not firmly on the list of New Brunswick birds. Famous also saw scattered Northern Fulmars and estimated over 100,000 Wilson's Storm-Petrels in the lower bay, some of them in flocks of up to 15,000 birds. A Pomarine Jaeger was seen from the Digby ferry June 28 (Roy John, in N.S.B.S. Fall Flyer) and another off Grand Manan in mid-August (Famous). Skuas were reported in the lower Bay of Fundy August 21 and 22 (fide Famous).

Two reports this summer emphasize that one should be careful when identifying species far from their normal range. An American visitor reported a Black-throated Gray Warbler at Fundy National Park July 10 and two Maritimers identified a Vermilion Flycatcher at Parkindale, Albert County, August 27.

While it did resemble a male Black-throated Gray, the warbler was different in a number of features, leading us to believe that it was a hybrid, the result of interbreeding of an American Redstart with some other warbler, perhaps a Black-and-White. It was studied July 14-17 but could not be captured for close examination in the hand which would have helped a lot to determine what the other parent could be (Rob Walker, Eric Tull, DSC et al).

It was moult and behaviour that produced the appearance of a Vermilion Flycatcher. A male Scarlet Tanager had changed to olive green on the upperparts while still glowing red beneath, and was sallying forth, flycatcher-like, after insects from the top of a dead elm. A field guide cannot cover all the possibilities produced by moult, albinism, and so forth, so it's wise to be cautious with an unlikely species. In these two cases, the original observers were hindered because the birds were high up in treetops.

Readers may recall the Am. White Pelican on Miscou Island in 1981. This year, one was spotted there at Mal Bay South June 9 (Mike Malone & T. Currie). Great Cormorants are re-appearing as summer birds in the Bay of Fundy and have recently been found nesting in Maine (Guillemot). There were a few breeding pairs in the Bay of Fundy until about 60 years ago. More recently, they have been found principally in winter, with most summer records on the Gulf of St. Lawrence shore of the province. Double-crested Cormorants are also flourishing and the birds are being seen more regularly at points well inland, such as up the Kennebecasis to Sussex in July and August (DSC) and on the Miramichi near Doaktown in August (Marge Brown). On Manawagonish Island, off Saint John, large numbers now nest on the ground because most of the trees have been killed by the excrement of an increasingly large colony (Will Astle).

A number of Snowy Egrets were spotted, one at Hampton sewage lagoon June 12 (Mark Phinney), one at Jacquet River June 18 (Brian Dalzell), one at Red Head Marsh June 23 (Jim Wilson) and two at Kouchibouguac National Park (=KNP) June 26 (Tull). A Little Blue Heron was at Little Dipper Harbour in the last week of August (David Thompson) while the last of the good spring flight of Cattle Egrets was seen at Quaco June 8 (Ted Sears). There have been reports of two new nesting areas for Black-crowned Night-Herons, on an island in Head Harbour Passage (Famous, in Guillemot) and near Red Head Marsh, where an adult was feeding a poorly flying young July 25 (Ron Weir).

Gadwalls were seen regularly in ponds on the northern shore of KNP during June with a maximum of four on the 27th (Tull). Another was at Saints Rest Marsh, Saint John, June 13 (Wilson). Two pairs of scaup, believed to be Greater, stayed at Oromocto Lake throughout July (Harold Hatheway), a female Bufflehead arrived very early at Long Pond, G M, Aug. 27 (Dalzell) and two were at Rose Brook, eastern Saint John County, June 18 (Steve Woodley), while a male Ruddy Duck was on the Sackville sewage lagoon Aug. 13 (DSC et al). A variety of duck breeding records reported this summer included a female Hooded Merganser with her brood of seven half-grown young at Woodstock July 16 (Dalzell).

An adult female Cooper's Hawk, carrying prey, flew across the Pickwauket Road near Hampton July 29 (Weir). A subsequent search for a nest, or even the bird, was unproductive. The Cooper's is probably very rare in New Brunswick but similarity to Sharp-shinned Hawks and immature Goshawks complicates its identification. A pair of American Kestrels nested at Bancroft Point, the first ones Brian Dalzell has noted breeding on Grand Manan in the last ten years, and a Merlin remained all summer around Mary's Point, near Harvey, Albert County (DSC et al.). Two of the three young Peregrine Falcons released at Fundy Park apparently made the transition from hacking box to the wild successfully. One of them surprised everyone by appearing across the bay at the Peregrine release site at Cape D'Or, N.S. (fide Woodley). An adult Peregrine was harrying shorebirds around Shepody Bay in July and August, appearing at both the Grande Anse and Mary's Point roosts (Peter Hicklin et al.). Another adult was hunting the shore at Pocologan June 28-29 (James M. Day, fide R. Walker).

Both Parks Canada, at KNP, and the Canadian Wildlife Service, in northeastern New Brunswick, conducted surveys of Piping Plover populations this summer. Casual reports (Eric Tull and Bruce Johnson, respectively) indicate that this "threatened species" is doing quite well in some areas. Use of their nesting beaches by all-terrain vehicles and bathers is a serious menace to the plovers. The well-known Upland Sandpiper colony at the junction of Routes 2 and 112, near Salisbury, was mentioned by a number of people. Brian Dalzell found at least six pairs there June 19, while a bit farther east one was performing at Indian Mountain June 27 and 30 (Ruth Rogers). A fall migrant turned up at Castalia Aug. 24-25 (Ken Edwards) and Sept. 3 (Wilson). Willetts, slowly spreading along Northumberland Strait, have reached Buctouche Bar where five were seen June 12 (Tull and Harry Beach). One Willet wandered up to KNP, for the first park record, Aug. 23 (Tull).

Fall shorebird migration got underway quite early when Short-billed Dowitchers, Least Sandpipers and Greater and Lesser Yellowlegs were reported at a number of locations June 27 to July 2 (v.o.). One dowitcher appeared at KNP June 23 (Tull).

Four Ruddy Turnstones at Eel River Bar June 14 (Dalzell) may still have been going north, as were two Red Knots June 6 and a Dunlin June 10 at Kouchibouguac (Tull). The Knot was one species that was unusually scarce at Mary's Point this season, yet there were 90 at KNP July 30 (Tull). The predominant Semi-palmated Sandpipers reached a peak of 155,000 at Mary's Point August 1-2 (DSC and Majkas). The peak of Red-necked (Northern) Phalaropes was lower than usual at Head Harbour Passage, about 300,000 (Famous).

Some of the rarer shorebirds reported were: an adult Western Sandpiper in breeding plumage at Grande Anse July 14 (Stuart Tingley) and Mary's Point July 19 (Mary Majka); a Baird's Sandpiper at Saints Rest Marsh Aug. 27 (Wilson), one on Grand Manan during the last week of August (Peter Vickery) and another at Fundy Park in early September (Stephen Gawn); 1 to 2 Stilt Sandpipers at Saints Rest Aug. 3, 14 and 27 (Weir and Wilson), 1 on the KNP North Dune Aug. 7 (Tull), and from 1 to 5 at Castalia from Aug. 20 to near the end of the month (Peter Pearce and Vickery); a Buff-breasted Sandpiper at Castalia Aug. 24-25 (Edwards) and 2 at Lower Millstream, near Apohaqui Aug. 28 (Wilson and Cecil Johnston); 2 Wilson's Phalaropes at Sackville July 13 (Tingley), 1 there July 27 (Tony Erskine) and 1 at Saints Rest Aug. 27 (Wilson).

Ring-billed Gulls have become increasingly common in the Maritimes in the last 25 years. In 1965, Hilsaire Chiasson found the first breeding colony, on an island in Bathurst Harbour. Now two more have been discovered, a colony at Tabusintac Gully June 13 (Malone and Currie) and about 300 pairs, with fairly large yet mostly downy chicks, at Dalhousie June 19 (Tingley). The Dalhousie colony, which included about 50 pairs of Herring Gulls and 20 pairs of Great Black-backs, is located on a slash pile at the pulp mill, to which the birds had recently relocated from another site nearby, according to a guard at the mill.

Lingering from winter were a Glaucous Gull at Fredericton dump July 9 (Pearce) and another, a third year bird, at Saints Rest July 27 (Weir) and a second-year Iceland Gull there Aug. 4 (Weir). Rare gulls for New Brunswick were two Laughing Gulls, one at Tracadie Beach June 12 (Malone and Currie) and an adult at Gondola Point sewage lagoon Aug. 21-22 (Wilsons et al.), an adult Franklin's Gull at Grand Anse July 16 and 20 (Donald Kimball and Tingley), and a subadult Common Black-headed Gull at Castalia Aug. 12 (Pearce).

Due to favorable weather, survival of young at the Arctic Tern colony on Machias Seal Island was very high this year (fide Al Smith). Arctics were prominent among the terns near Deer Island July 28 - Aug. 10 (v. o.). Two Gull-billed Terns, very rare visitors to the province, appeared in late August, one at

may
6 and
one
season,
Semi-
Point
rthern)
about
lt
14
one
ery)
n);
(Weir
rom
nth
Castalia
aqui
s at
e) and
the
found
r.
h
pairs
ated
recently
t the
cton
nts
g. 4
ls,
ult
ld
ll
ctic
(fide
very
at

Red Head Marsh Aug. 22-29 (Wilson and many others) and one feeding on swarming ants at North Head Aug. 27 (Dalzell). A bird fitting the description of a Black Skimmer was seen by Vernon Bagley (fide Pearce) in the Grand Manan Channel about the end of July or beginning of August. Occurrence of skimmers in New Brunswick has usually been associated with the passage of hurricanes. Vernon also notes having seen one flying along with its lower mandible in the water, years ago between Grand Manan and Machias Seal Island.

Mourning Doves are doing well in most settled areas of the province. Ten were at Dorothy Sleep's bird feeder in Fredericton July 20-21. The first of what was to become a big fall flight of Yellow-billed Cuckoos was seen at the Anchorage Park during the Aug. 5-8 C.N.F. trip to Grand Manan (Dalzell). Common Nighthawk migration was reported by several observers Aug. 11-28, including a "constant stream" between Newcastle and Buctouche Aug. 16 (55 counted in one mile - Johnston), 200 to 300 feeding on swarming ants at Greendale, Saint John, Aug. 14 (Shirley Dalquette) and 130, also after ants, at North Head Aug. 27 (Dalzell).

Unusual was an adult Red-headed Woodpecker near Eel Lake, Grand Manan, June 20 (Dalzell). At Mercury Island, on the Miramichi, Marge Brown saw both species of three-toed woodpeckers, two (Northern) Three-toed June 20 and Black-backs nesting in July.

Eastern Kingbirds were conspicuous throughout the summer and especially during migration in August, when Brian Dalzell saw 28 at North Head on the 27th. A Western Kingbird was at Machias Seal Island Aug. 6 and the second provincial record of Willow Flycatcher (the "fitz-bew" Traill's) was a bird at Turtle Creek June 8 (both by Dalzell).

Young Gray Jays appeared at Wilma Miller's feeder at Nictau June 3. Two oddly coloured Common Ravens have been seen at St. Martins, a chocolate-coloured bird for the past year and one with all white primaries during the last week of July (Sears).

Winter Wrens seem to have recovered from the effects of hard weather on their wintering grounds a few years ago, if we can judge by 30 recorded on the Grand Manan Breeding Bird Survey (Dalzell) and my general impressions in Albert County. A House Wren was seen at North Head Aug. 25 (Nora and Gerald Losey, fide Pearce). A very rare visitor was a well-described Northern Wheatear at Silver Falls, Saint John, Aug. 16 (Mrs. Gordon Chittick). Eastern Bluebirds were reported in four areas; an adult with three young near Chipman June 11 (Dalzell), four immatures at Elgin Aug. 28 (Wilson and Johnston), a male and two immatures near Water-side, Aug. 30 (R. Walker), and two adults with two juveniles at Pouchsquis Sept. 9 (Harriet Folkins and Margaret Broomhead).

Northern Mockingbirds continue to increase. Double nestings were reported in three areas. In West End Moncton, four young fledged June 25 and three more August 3 (Dalzell). At Fredericton, a first nest was abandoned but at least two young flew from the second (Pearce). At Harvey, Albert County, one young was raised in the first nest and four eggs laid in a second (Rob Walker). Brown Thrashers are less common than the Mockingbirds but six reports are at hand: one at Wolfe Lake, June 9 (DSC), one at Goose River, also in Fundy Park, June 13 (Sedgewick Sinclair), one at West River, east of Alma, June 27 (R. Walker), two at Cap-St.-Louis, KNP (Tull), one at Dorchester July 21 (Tingley) and one at Gagetown Aug. 17 (Enid Inch).

Warbling Vireos are scattered about the province in small numbers where there is suitable habitat. Two pairs were located in the Hampton area (Wilson), where a pair were seen feeding two flightless young July 19 (Weir). Others were reported singing near Doaktown (Brown), at Richibucto from June 8 (Tull) and at Bartibog Bridge June 23 (Dalzell). Vagrant warblers reported were an immature Prairie at Machias Seal Island Aug. 6 (Dalzell), a Prothonotary at North Head Aug. 26-29 (Vickery et al.) and a Connecticut at Ashburton Head, Grand Manan Aug. 6 (D. G. Garratt, fide Dalzell).

A Northern Cardinal, very rare in southeastern New Brunswick, was seen for a week around June 20 at Cap-des-Caissie (Mr. Caissie, fide Mike Majka). Indigo Buntings were found breeding in two areas. There were probably two pairs along the Pickwauket Road (Wilson), near Hampton, where Ron Weir found a nest containing two young July 21. A pair at Cambridge were carrying food to the nest July 8 but the nest was discovered tipped over on the 13th (Marion Belyea). A Rufous-sided Towhee paid a brief visit to Art Callaghan's garden at Masquash June 12. A Seaside Sparrow, reported at KNP Aug. 11 (Belex and Spencer Inch), had apparently been seen a couple of days earlier by other visitors (fide Gerry Bennett).

An impressive fall movement of Bobolinks was 2500 migrating southwestward at Moncton Aug. 23 (Dalzell). At Mercury Island, Marge Brown observed young Brown-headed Cowbirds being fed by three "Foster parent" species: Yellow-rumped and Magnolia Warblers and American Redstart.

Butterflies

Monarchs appeared quite early at Mary's Point this year. On June 13 two or three were visiting lilac blossoms in company with four Tiger Swallowtails and at least a dozen pugnacious Painted Ladies, which spent most of the time chasing the larger butterflies or each other.

News in the insect world is the rapid spread of the Ringlet butterfly Coenonympha inornata inornata (not the subspecies nipisiquit which is found only at Bathurst). I found it on the Restigouche River in 1978 and Tony Thomas later found it at Bathurst and two or three years ago at Fredericton. This summer Chris Majka reported them in Queens County. A similar southward extension is occurring in the State of Maine where there is indication of an unusual second generation emerging in late August and early September. The main flight is in late June and early July. Please check your butterfly guides and report when the Ringlets reach your area.

CHRISTMAS BIRD COUNT, 1983-4

This year a Christmas Bird Count should be conducted on one calendar day during the period December 17, 1983 through January 2, 1984. To participate in an established count, contact the compiler as listed in the N. B. Naturalist Volume 12, Number 1, pages 24 to 28. A new count in the Minto-Chipman area is being organized by Lionel Girouard and Vincent Poirier of Minto. For information on establishing a new count, contact David Christie, R. R. 2, Albert, N. B. EOA 1A0



CORRECTION

In the report on the meeting of the NBFN Board of Directors of 27 February 1983 (N. B. Naturalist 12(2):95), the false impression may have been given that CWS is planning to produce a series of pamphlets on different aspects of the natural history of New Brunswick. In fact, the only involvement by CWS will be preparation of a birdwatching guide to the province. It is hoped that it will be produced by N. B. Tourism and suggested that it could be a prototype for a series on other natural history topics.

Peter Pearce,
CWS Fredericton

Rare New Brunswick Plants

GENTIANAS OF NEW BRUNSWICK

Hal Hinds

Where have all the gentians gone? Is it simply that there are not many people looking for them? Or have they suffered destruction of their habitat due to the exploits of man? Both situations probably prevail in New Brunswick, but perhaps a brief note concerning these blue beauties will awaken interest in better preserving our wildflower heritage.

Three species of gentian are found in New Brunswick, the Felwort (Gentianella amarella), Closed Gentian (Gentiana linearis) and Pale Gentian (Gentiana rubricaulis). Each of these is rare in the province and only a few locations are known for each.

The tiny Felwort was once found at Reversing Falls in Saint John (1892) and on nearby Goat Island (1882), but has not been seen since in that area. Elsewhere in the province, it occurs near Campbellton (Morrissey Rock) and on the Grande Pleine of Miscou Island.

The Closed and Pale Gentians have been confused in the past, although they are quite distinctive (see Key). The Closed Gentian occurs mostly in the northern and north-central parts of the province and the Pale Gentian more in the southern part.

The first time I found the Closed Gentian was in the Fowler Lakes area, a few kilometers north of Plaster Rock-Renous Highway and close to the South Branch Renous River. It was late summer (19 August) and I found them growing in an open boggy swale, their porcelain-blue flowers conspicuous among the sedges and sphagnum. I was thrilled with this find, but my elation was soon somewhat dampened. While researching the distribution of New Brunswick rare plants, I discovered a specimen of this plant in the E. C. Smith Herbarium at Acadia University that was collected by R. Fielding, August 4, 1955 near the South Branch Renous River! My find was not that unique. Then I discovered a specimen at the New Brunswick Museum collected September 6, 1965 by Dr. Austin Squires near Fowler Lake! Had any botanists exploring our province missed it!

The Pale Gentian was last collected September 14, 1923 by Louise H. Coburn in Nauwigewauk, Kings County, and was first discovered in New Brunswick by James Robb in July, 1842 near Fredericton. John Moser collected this gentian in Nashwaaksis

in 1881 and perhaps this was the same population found by Robb. In Charlotte County, James Vroom collected it in 1886 at Saint James and W. F. Ganong found it along the Digdeguash River in 1887.

The Pale Gentian had not been seen in the province for 60 years until I found a population this summer (1983) growing along a roadside rill near Waweig in Charlotte County. This was an especially lucky day because a few steps away, I also found a 10 dollar bill on the roadside! So you see, it really pays to WALK, WALK, WALK. I had passed that same roadside many times, and had even stopped nearby to botanize, but I really had not walked.

If you want to see more of our marvelously varied wild-life then your chances are immeasurably increased by getting out and walking. Walk old logging roads, back roads of all kinds, railroad tracks, trails, and do some bushwacking across the country. Only then will you be able to spot these elusive rarities.

The following key will help you separate our New Brunswick gentians.

KEY TO THE IDENTIFICATION OF NEW BRUNSWICK GENTIANAS

- CHOOSE
EITHER
1a OR 1b
- 1a: Flowers open, small (10-15 mm long), the corolla lobes acute, simple, without plaits, folds or smaller alternating lobes, and minutely fringed within the throat.
Felwort (Gentianella amarella)
- 1b. Flowers closed, larger (25-40 mm long), the corolla lobes alternating with plaits and smaller lobes and unfringed within the throat
...Go to 2
- CHOOSE
EITHER
2a OR 2b
- 2a. Middle and upper leaves with rounded or heart-shaped bases (1.5-3 cm broad); corolla lobes acute, 3-5 mm longer than the plaits; flowers pale blue to nearly white.
Pale Gentian (Gentiana rubricaulis)
- 2b. Middle and upper leaves all narrowed to base (0.3 - 1.5 cm broad); corolla lobes rounded or broadly obtuse, 1-2 mm longer than plaits; flowers mostly bright blue.
Closed Gentian (Gentiana linearis)

PROJECT LEARNING TREE

Barry King



I was fortunate last year to have the opportunity to participate in a training workshop for an environmental education program known as "Project Learning Tree". Workshops like the one I attended are presented by the Canadian Forestry Association of New Brunswick and are available to teachers and others interested in this type of programming. Project Learning Tree is designed to help students develop an awareness and understanding of our natural environment. It provides the opportunity for teachers to step out of the classroom and into the forest.

As the name suggests, the program's focus is trees. Trees act as a familiar base from which students can develop an appreciation for the inter-relationships between living and non-living things. The activities are multi-disciplinary, exploring the social sciences, humanities, communication, natural sciences, mathematics and physical sciences.

Project Learning Tree was developed to provide a program which would help students understand their interdependency with the forest community and develop the knowledge and skills needed to use these resource lands wisely. The program, developed in the 1970's, was sponsored by the American Forest Institute and the Western Region Environmental Education Council. In 1977, the Project Learning Tree program came to Canada when the Canadian Forestry Association introduced the program to British Columbia. The first workshop for New Brunswick teachers was given in the fall of 1979. All teachers participating in the introductory workshop conducted by a qualified E.L.T. facilitator receives a Project Learning Tree Manual and Resource Kit free of charge.

The workshops are six hours in length and involve sample exercises and discussions on the techniques used in the program. If you are interested in environmental education and would like to have an opportunity to participate in this excellent program, call the Canadian Forestry Association of New Brunswick, 65 Brunswick Street, Fredericton, N. B., E3B 1G5, (455-8372) for more details.

New Brunswick Museum,
Saint John, N.B.

Book Reviews

Ontario Birds. A semi-annual journal edited by Chip and Lindaeseloh and published by Ontario Field Ornithologists, P.O. Box 204, Station B, Burlington, Ontario, L79 3S9. Membership fee: 10.00 per year.

Reviewed by David S. Christie.

The first issue (April 1983) of Ontario Birds is a tastefully designed and well edited 40 pages (14 x 21 cm), illustrated with several black and white photos and line drawings. Although primarily of interest in Ontario, the articles on identification (in this issue, shrikes) and behaviour (probable nest construction by Great Horned Owls; Boreal Owl feeding on flying squirrels; crepuscular fall flight of woodcock; a notable migration of hummingbirds) are of considerably wider interest. Other subjects included are notes on the establishment of the publishing organization, 1982 report of the Ontario Bird Records Committee, distributional records, a birdwatching guide to a woodlot, a local bibliography, a book review and announcements of coming events. I recommend this new journal to anyone with a strong interest in the birds of eastern Canada.

Common and botanical names of weeds in Canada. By Jack F. Alex, Richard Cayouette and Gerald A. Mulligan. Agriculture Canada Publication 1397. 1980. 132 pp. \$6.95.

Reviewed by Molly Smith, Past President, Saint John Naturalists Club.

If you were one of those who received and enjoyed A Book of Lists for Christmas several years ago, then this bilingual revision (1980) of common and botanical names of weeds may be for you.

It replaces the 1969 Department of Agriculture Common and botanical names of weeds in Canada and the 1964 Noms des mauvaises herbes du Quebec from Agriculture Quebec (expanded and revised 1971 and 1975) with a single volume. Intended for use by those engaged in writing technical or non-technical material relating to weeds or involved in the labelling of herbicides, its aim is to impose conformity of common names in French and English across Canada and thereby reduce confusion. Preference appears to be given to those common names in French and English which are direct translations of latin taxons. It may well be that these do indeed have greatest usage across the country, but some seem unfamiliar in this region. For example, though there are two forms of cross-reference used in the alphabetical list of English

common names there is no connection made between "Bilberry" and "Shadbush", nor indeed does "Merisier" (a local French name for Shadbush) appear in the French index.

For the amateur naturalist then this book would seem to be of limited use, but if you like lists it will give you these at a glance (not counting the code numbers used in the computerized abstracts of the Expert Committee on Weeds).

Recent Titles

OF INTEREST TO NEW BRUNSWICK NATURALISTS

Compiled by Donald McAlpine

- Appy, R. G. and M.J. Dadswell. 1983. Transmission and development of Capillospirura pseudoargemontosa (Appy and Dadswell 1978) (Nemotoda: Cyticolidae). Canadian Journal Zoology 61(4): 848-859. [Two species of amphipods are shown to be suitable intermediate hosts for a nematode parasitic in St. John River estuary Shortnose Sturgeons.]
- Balph, D.F. and M.H. Balph. 1983. On the psychology of watching birds: the problem of observer-expectancy bias. Auk 100(3): 755-757. [An interesting commentary well worth reading by all serious observers of natural history phenomena.]
- Boiteau, G. 1983. The arthropod community of potato fields in New Brunswick 1979-1981. Canadian Entomologist 115(7): 847-853.
- Bourgeois, C.E. and W. Threfall. 1982. Metazoan parasites of three species of Scoter (Anatidae). Canadian Journal Zoology 60(10): 2253-2257. [175 birds from four localities - N.B., B.C., Labrador and Norway - were examined.]
- Corey, S. 1983. The life history of Diastyllis quadrispinosa (Sars 1871) (Crustacea: Cumacea) in Passamaquoddy Bay, New Brunswick. Canadian Journal Zoology 61(1): 108-111.
- Daborn, G.R. and R.S. Gregory. 1983. Occurrences, distribution and feeding habits of juvenile lumpfish, Cyclopterus lumpus L. in the Bay of Fundy. Canadian Journal Zoology 61(4): 797-801.
- French, T.W. and G.L. Kirkland. 1983. Taxonomy of the Gaspé Shrew, Sorex gaspensis and the Rock Shrew S. dispar. Canadian Field Naturalist 97(1): 75-78. [Examination of New Brunswick material shows these two species should be considered distinct.]
- Hinds, H.R. 1981. Vascular plants new to the flora of New Brunswick. Le Naturaliste Canadien 108(2): 139-142.

- Jennings, D.T. and H.S. Crawford. 1983. Pine Siskin preys on egg masses of Spruce Budworm (Choristoneura fumiferana; Lepidoptera: Tortricidae). Canadian Entomologist 115(4): 439-440 (Observations in Maine but obviously applicable to New Brunswick.)
- Maltois, P.M. and E.A. Ouellet. 1983. Helminth parasites of Snowshoe Hare, Lepus americanus in New Brunswick. Le Naturaliste Canadien 110(1): 103-105.
- McAlpine, D.F. 1982. Map surveys of New Brunswick Solution Caves. Canadian Caver 14: 26-31.
- Reeves, R. 1982. What hope for the North Atlantic Right Whales? Oryx 16(3): 255-262 (Summarizes status of Bay of Fundy Right Whales.)
- Rigby, M.D. 1982. Clutch-size and prefledgling survival in Red-winged Blackbirds at Williamstown Lake, New Brunswick. Wilson Bulletin 94(4): 569-571.
- Watson, A.P. and D.E. Gaskin. 1983. Observations on the ventilation cycle of the Harbour Porpoise Phocoena phocoena (L.) in the coastal waters of the Bay of Fundy. Canadian Journal of Zoology 61(1): 126-132. (Work carried out at Deer Island, New Brunswick.)
- Warwick, S.I. and R.D. Sweet. 1983. The biology of Canadian Weeds 58. Galinsoga parviflora and G. quadriradiata (G. ciliata). Canadian Journal Plant Science 63(3): 695-709. [The latter species, the Hairy Galinsoga, occurs in southern New Brunswick.]
- Whitaker, J.O. Jr. and T.W. French. 1982. Ectoparasites and other associates of some insectivores and rodents from New Brunswick. Canadian Journal Zoology 60(11) 2787-2793.

(I would be grateful to receive recent relevant titles for inclusion in this section from any readers who might be scanning the literature or authoring papers.

D.F.M. - Book Review Editor)

DEADLINE FOR NEXT N.B. NATURALIST ... 1 JANUARY, 1984

FOR "NATURE NEWS" ... 1 DECEMBER, 1983

News Release

... CANADIAN NATURE FEDERATION

CONSERVATIONISTS HOPE TO AVOID INTERNATIONAL INCIDENT

A tiny speck of land off the New Brunswick coast is the centre of a growing controversy involving sea captains, the governments of Canada and the United States and naturalists from both countries. Machias Seal Island is a 15 acre (6 hectare) patch of rock and sparse vegetation, with birds everywhere.

The big problem is that the island's birds are too attractive to birdwatchers, photographers and curiosity-seekers. The site is designated a Canadian federal migratory bird sanctuary, and regulations limit visitors to 25 per day. For several years, two sea captains, one from New Brunswick and one from Maine, have brought visitors to the island, sharing the 25-person quota between them. In recent months however, two more American captains have been bringing tourists, and a number of private boats have been visiting the site. Arctic terns, the most numerous birds on the island, are sensitive to disturbance and have been declining in numbers. The island also provides a home to puffins, razorbills, petrels, sandpipers and swallows. Its puffins are the southernmost colony within reach of large numbers of Canadians and Americans.

The situation is complicated by a dispute between Canada and the United States over ownership of Machias Seal Island. Canada, which has maintained a lighthouse on the island for 151 years, claims sovereignty, but concern over fishing and mineral rights in the area has led the U. S. to dispute this claim. Canadian wildlife officials have attempted to enforce controls on access. However, some of the sea captains have taken the position that the site is within U. S. waters and freely available to American visitors. The situation has led to unpleasant confrontations between the sanctuary warden and those attempting to land visitors.

The Canadian Nature Federation, which has an observation blind on the island is trying to bring a halt to the conflict and eliminate the threat to the bird colonies. Gregg Sheehy, spokesman for the Nature Federation, said, "The island may look pretty small on the map, but to the birds that breed there it is a vulnerable home. Overuse by tourists threatens the sanctuary, and it is vital that we have enforced standards for controlling visitors."

The Nature Federation is working with conservation groups in New Brunswick and the U. S. to resolve the conflict among users and control access to the island. Sheehy stated, "I feel confident that with cooperation all around we can work out a fair agreement that will protect the birds while allowing naturalists from both countries to enjoy the beauty of the area."

For further information, please contact:

Gregg Sheehy
Canadian Nature Federation
75 Albert St., Suite 203
Ottawa, Ontario K1P 6G1

Mary Majka
Mary's Point Rd., R. R. 2
Albert, New Brunswick
E0A 1A0

Reports

CANADIAN NATURE FEDERATION ANNUAL MEETING, Donald McAlpine

The Annual General Meeting of the CNF was called to order at 3:25 p.m. on Friday, August 12 in Crabtree Auditorium on the campus of Mount Allison University, Sackville. Some 100 members and guests were in attendance.

A report on the meetings of the CNF French Language Policy Committee noted that at this time the CNF will not follow a bilingual publishing policy with respect to Nature Canada, largely due to financial considerations. This decision was strongly criticized from the floor by a number of members who felt that the CNF should be openly striving to offer bilingual services. The CNF bookstore will expand its French offerings, however, and CNF administrators will continue to work in close co-operation with French groups which have recently received a grant to launch a French language counterpart to Nature Canada. Some crossover in the contents of this magazine and Nature Canada is anticipated.

The Treasurers Report revealed a deficit for the 1982-83 fiscal year of \$67,870.00, principally the result of a decrease in corporate donations due to the economic recession. Membership has continued to rise, however, and grew by over 1,000 members last year to 19,300. The CNF bookstore showed a healthy profit of \$12,000.

The members of the new CNF executive committee were elected by acclamation including New Brunswick's Mary Majka.

The CNF Conservation Director, Mr. Gregg Sheehy reported that the CNF continues to monitor government activities and performance in wildlife conservation and is currently preparing to undertake a survey of such activities. Mr. Harold Batheway (N. B. Conservation Council, NBFN) suggested that the new NBFN, as well as other regional conservation organizations, could be of assistance in providing information at the local level for such a survey.

Members were then treated to an entertaining slide presentation by Peggy Heppes, CNF Managing Director, on the activities of the CNF Head Office such as membership drives and the preparation of promotional material.

Mr. John Willms, CNF President, reported that although the CNF occupies a unique place in the Canadian conservation movement, confusion with other environmental groups has occurred among the public. He stressed the need for new members, the need for the support and participation of the membership and

the political value of coalition with groups of similar aim.

A move into the Special General Meeting was called at 4:43 p.m. to consider one by-law amendment and six resolutions. Briefly these were as follows.

By-law Amendment

By-law read- Quorum: Eight directors shall form a quorum for the transaction of business at any meeting of the board. By-law now reads - Eight directors who are resident in at least four provinces shall form a quorum for the transaction of business at any meeting of the board.

Resolutions

- (1) CNF urges the Government of Canada to give permanent protection to the Yukon Territory north of the Porcupine and Bell Rivers
- (2) CNF urges the Federal and Provincial Governments to protect nest sites and undertake research on the endangered Piping Plover in those provinces where it nests.
- (3) CNF urges the N. B. Government to review the Ecological Reserves Act to determine lack of progress in the designation of reserves, place the management of the reserves under the N. B. Dept. of the Environment and give priority to the protection of Wilson Brook Gypsum Cliffs.
- (4) CNF urges the N. B. Dept. of Education to put more emphasis on environmental education in the curriculum.
- (5) CNF urges the immediate preparation of a management plan for Kouchibouguac National Park.
- (6) CNF urges the N. S. Government to remove Chezzacook Salt Marsh from consideration as a route for trunk highway 107.

All resolutions were passed with little discussion. Last minute changes in the Piping Plover resolution saw the central Canadian population included along with the Atlantic Coast birds. Some objection was raised to resolution (3) with the suggestion that N. B. was being singled out unfairly. It was pointed out that a review of environmental education in schools nation-wide would be more useful. A last minute motion to this effect was presented by a Newfoundland delegate and passed unanimously. The meeting adjourned at 6:15 p.m.

NATURAL AREAS PROTECTION WORKSHOP, Atlantic Center for the Environment

"Natural Areas Protection" was the theme of a four-day workshop sponsored by the Atlantic Center for the Environment, a di-

vision of the Quebec-Labrador Foundation. The conference, which was held at the University of Maine at Fort Kent, lasted from August 21 through August 24 and drew participants from eastern Canada, New England, and as far south as Washington, D.C. and Tennessee. Participants from New Brunswick included David Christie and Mary Majka of the New Brunswick Federation of Naturalists; Harold Hinds and Cynthia Stacey of the University of New Brunswick; Allan Smith of the Canadian Wildlife Service; and Steven Woodley of Pandy Park.

The purpose of the workshop was to promote an exchange of information and ideas between representatives from various regions in both countries who are concerned with the wise use of natural resources and the protection of unique natural areas.

Participants came from both the private sector and governmental agencies and included biologists, administrators, naturalists, educators, and political scientists. Presentations contrasted American and Canadian national approaches to natural areas protection and also looked at state and provincial levels of protection.

Themes included the identification, acquisition, and management of natural areas, cooperative conservation strategies between public and private sectors, and building public support for natural areas.

In addition to the working sessions, field trips to both government and privately-owned natural areas were a highlight of the workshop. Old growth forests in New Brunswick and Furbish Housewort sites in Allagash, Maine, provided a first-hand look at the natural areas that were the basis of the workshop. In addition, there was a full-day field trip to the site of a potential conservation park along the St. Lawrence River, near Rimouski, Quebec.

The workshop is one in a series sponsored by the Atlantic Center for the Environment. A connecting theme of this series has been how support for environmental conservation can be developed in rural areas. The workshops seek to promote the sound management of natural resources by encouraging inter-regional communication, as well as coordination among agencies and organizations serving each region.

NBFN BOARD OF DIRECTORS, Gayl Hipperson, Secretary

The NBFN Board of Directors met September 17, 1983, at the New Brunswick Museum, Saint John.

To help defray the cost of printing and mailing N. B.

Naturalist, it was recommended that the NBFN membership effective January, 1984 be set as follows: \$5.00 student, \$10.00 individual or family, \$10.00 library subscription, \$20.00 or more sustaining.

The guidelines drawn up by Harry Walker for use of the Scholarship Fund were discussed. It was decided to create from the fund a prize of \$50.00 to be awarded annually for the best piece of semi-popular writing in the natural history field published in N. B. Naturalist. The award, to be called the George Stirrett Memorial Prize for Natural History Writing, was seen to be a fitting tribute to a man dedicated to natural history interpretation.

As a further use of the Scholarship Fund, David Christie was appointed to devise a selection procedure whereby a deserving young naturalist might be sent by the Federation to a nature camp. It was moved by the Board that in recognition of his years of volunteer service to the Natural Sciences Department of the New Brunswick Museum, his long-standing support of the NBFN, and his active participation in the Saint John Naturalists' Club, Arthur (Cal) Callaghan of Musquash be presented Honourary Life Membership in the New Brunswick Federation of Naturalists.

NBFN ANNUAL GENERAL MEETING, Harry Walker

The NBFN's annual meeting was held at the New Brunswick Museum in Saint John from September 16 to 18. My wife Winnie and I attended.

We recognize that much work is involved in preparing for such an event, and a thank-you is in order to the Saint John Club and to the New Brunswick Museum staff for organizing and conducting this interesting and informative meeting.

Besides taking part in the scheduled events, there was, of course, the added bonus of meeting old friends and making the acquaintance of new ones.

Most of you, like myself, are not biologists. We do not earn our bread and butter from the study of nature. We simply enjoy nature as a diversion from our regular line of work. However, this enjoyment is enriched when we realize that our observations are a valuable contribution to the scientific community, and this point was brought out by a number of speakers at the meeting. For instance, the New Brunswick Museum collects and keeps information from people like you and me. This information is then made available to others, and is often useful to people who are involved in scientific studies of one kind or another. As Peter

Pearce pointed out, we amateurs have made especially valuable contributions to the science of ornithology through such activities as Christmas Bird Counts, Nest Record Schemes, and individual observations.

To top off the weekend, Winnie and I saw two new species of bird during one of the field trips - the Green-backed Heron and the Marbled Godwit. The Green-backed Heron might not be particularly unusual to a Saint John bird watcher, but for a couple of Miramichiers, it was a first.

I heard some disappointment expressed at the turn-out at the meeting; but, without counting heads, there appeared to be about the usual number for an annual meeting. The number present is not necessarily the best indicator of its worth. I thought that it was a very good meeting. I am glad that I attended and I hope to see you at the next one!

NBFN ANNUAL GENERAL MEETING, Gayl Hipperson, Secretary

The Annual General Meeting was held Saturday, September 17 at the New Brunswick Museum, Saint John, with 29 people in attendance.

The Treasurer's report to September 16, 1983, showed a balance of \$1072.13 in the current account and \$816.06 in the scholarship fund for a total of \$1888.19. The Federation had 162 paid members, 8 library subscriptions and 1 student membership.

A motion of thanks was made to the New Brunswick Museum for its support of N. B. Naturalist.

Business of the Board of Directors' meeting was presented to the membership:

- The fee structure recommended by the Board was approved.
- The establishment of the George Stirrett Memorial Prize for Natural History writing was announced.
- Cal Callaghan accepted Honorary Life Membership in the NBFN to hearty applause from friends and fellow naturalists.

The President reported on a very successful hosting of the Canadian Nature Federation conference in Sackville, reading the warm thanks of CNF Managing Director Peggy Heppes. The President was relieved to announce that the Provincial Bird Campaign had at last been brought to fruition at the CNF Conference, where the Lieutenant Governor himself had made the official proclamation.

The membership passed a special vote of thanks to Mary Majka and David Christie and all those who had helped in so many ways to make the Sackville meetings, field trips, and social events something the Federation can truly remember with pride.

The Nominating Committee presented its slate of officers for the upcoming year:

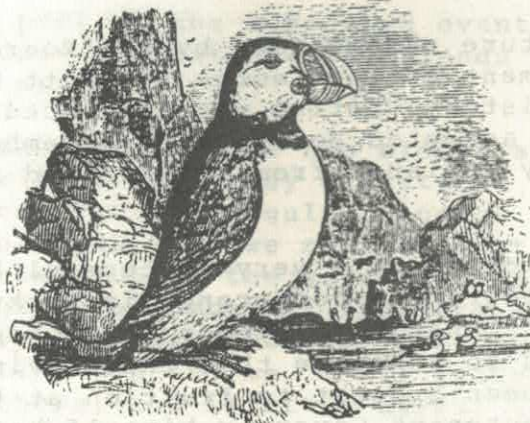
President	- Mary Majka
Vice President	- Gayl Hipperson
Secretary	- Stephen Clayden
Treasurer	- Dave Smith

With no nominations from the floor, the slate was adopted as read.

Stu Tingley, contracted by the Canadian Wildlife Service to produce a bird-finding guide to New Brunswick, reported the manuscript was nearing completion and a publisher was being sought.

A concern was expressed that N. B. Naturalist exert more of an effort to reach the French Community, perhaps by appointing a French Editor and striving to increase the French language content.

The President announced future plans for the Federation to work co-operatively with the Environmental Council in the areas of Ecological Reserves and environmental education, and to continue its involvement in the debate over restricted access to Machias Seal Island.



Club News

PLASTER ROCK AREA, Wilma Miller, Director-at-large

The Canadian Nature Federation pre-conference trip to Bathurst Lake and the climb up Mount Carleton was enjoyed by 16 people from Florida, Illinois, Ontario, Nova Scotia and New Brunswick. The weather co-operated and we all shared in preparing the meals and clean-up. This left lots of time for hiking the trails and canoeing on the lake. We observed 36 species of birds, with Arlene Stone getting the prize for the most seen.

The evenings were spent viewing slides on forestry in the area with commentary by Bob Clarke of Edmundston, plus bird slides by Park Ranger Rudi Richter, and general nature slides by Fred Tribe of Andover.

Our canoe trip and picnic lunch at Pine Point was a highlight; we saw deer, beaver, moose and osprey.

Would you care to join us on another trip July 1984? Please let us know by the end of this year as arrangements have to be made early. Call or write: Wilma Miller

Plaster Rock, R. R. #1, N. B. EOJ 1W0
Telephone Number 506-356-2409

SOUTHWEST NEW BRUNSWICK, Daryl Linton, Director-at-large

As there is no federated NBFN Club in Charlotte County, I shall endeavour to provide some news from observations in the area. The other wet spring (and a possible insect predator) seemed to retard the tent caterpillar infestation, although the rather dry summer placed a stress on some trees resulting in poor foliation in July. Some trees never recovered their leaves fully. The Chairman for Environmental Concerns of the Schoodic Chapter of the Maine Audubon Society stated that he was concerned over the use of the herbicide "eldpar" by blueberry growers in that it might reduce edge habitat for songbirds. This product is widely used by blueberry producers in New Brunswick and Maine. The herbicide's function is to kill all vegetation leaving only blueberry bushes.

On a different vein, Yellow-rumped Warblers were abundant in late September and early October, and seemed to be in many places not normally frequented by them in summer - yards, lawns and wood piles. They also were very tame. I came upon a tail-less individual one rainy evening roosting on a horse manure pile (possibly attracted by the heat). It appeared to be hypoventilating as its feathers were puffed out. Other birds, such as kinglets and juncoes, have been seen in our woods in larger than usual numbers, too.

KENNEBECASIS NATURALISTS' SOCIETY, Harriet Folkins

The highlight of our Club's activities was an excursion to Martin Head. Six vehicles transported us and our rain gear down ever-narrowing and rutted roads for a day-long exploration of the island.

Last fall we hiked on the Shaded Maple Trail and enjoyed, after our pot-luck supper, the numerous deer gathered around the apple trees. Members also took part in the Great Coastal Hike from Point Wolfe to the swimming pool in Fundy National Park. We had an outing to the Hammond River Area to look for spring warblers, and a trip to the Game Farm at Magnetic Hill gave everyone an eyeball-to-eyeball view of all kinds of birds and animals. The Club accepted invitations to a lodge on Pleasant Lake and a cottage on the Belleisle Bay, where we enjoyed some boating and a corn boil. Featured speakers at our meetings were Michael Burzynski, who visited on two occasions to tell us about Fundy Park and the Peregrine Falcon and Atlantic Salmon experiments being conducted there, and Mary Majka and David Christie, who presented a program on whales in the Bay of Fundy.

SAINT JOHN NATURALISTS' CLUB, Isabel LeBlanc

The Saint John Naturalists' Club was formed in May 1962; membership now stands at 150. Meetings are held the second Wednesday of each month, September through May, at the New Brunswick Museum.

The major undertaking for the club so far this season was the hosting of the NBFN Annual Meeting held at the Museum September 16 to 18. The conference was an unqualified success and enjoyed by all who attended. Some of the credit must go to our social convenors Nancy Page and Betty McAlpine who provided delicious food for receptions and meals.

The speaker for the first fall meeting in September was world-traveller and photographer extraordinaire, our own club member Kit Graham, who gave an illustrated talk on his recent trip to the Galapagos Islands. Michael Burzynski from Fundy National Park was speaker at our October meeting, with an interesting account of his hiking trip over the rugged country along the Bay of Fundy from Martin Head to Goose River.

Club outings included a visit to historic Caton's Island in the St. John River, and our annual favorite to Deer Island.



FOR CHRISTMAS



Why not give the gift that lasts all year? N. B. Naturalist for Christmas, yours for a friend with \$10.00 gift membership in the NBFN.

Perfect for Christmas, too, is the "Estuary Wildlife" limited edition linocut by Bob Percival featured on the cover of the last issue of N. B. Naturalist. With 20% of the \$50.00 purchase price going to the NBFN, you can give an attractive work of art and support the Federation at the same time.

Finally, for your Santa List, the Federation has purchased a limited number of W. A. Squires' Birds of New Brunswick and is selling them for half the bookstore price: \$3.00 plus \$.75 postage. The books are imperceptibly water-damaged, in no way detracting from their usefulness. A welcome gift for any New Brunswick birder.

Books, artwork, and gift subscriptions are all available from Dave Smith, 149 Douglas Avenue, Saint John, N. B. E2K 1E5.

.....

GIFT SUBSCRIPTION
N. B. Naturalist, 1984

Please send four issues of N. B. Naturalist to:

NAME: _____

ADDRESS: _____

_____ POSTAL CODE _____

From (a card with your name will accompany the first gift issue in March)

NAME: _____

ADDRESS: _____

Mail to Dave Smith, 149 Douglas Avenue, Saint John, N.B. E2K 1E5



POUR NOEL



Pourquoi ne pas offrir un cadeau qui sera apprécié plus d'une fois au cours de l'année? Un abonnement à la revue Le Naturaliste du N.-B. offert à Noël vous coûtera \$10.00 et sera accompagné d'une carte de membre de la FNNB.

Egalement un excellent choix de cadeau de Noël serait la linogravure "Estuary Wildlife" (Faune des estuaires) à tirage limité par Bob Percival qui apparaît sur la couverture du dernier numéro du Naturaliste du N.-B. Vous avez ainsi l'occasion d'offrir une attrayante oeuvre d'art en plus d'aider à la Fédération puisque 20% du \$50.00 que vous payerez ira à la FNNB.

Enfin, sur la liste destiné au Père Noël, la Fédération a placé un nombre limité de livres "Birds of New Brunswick" par W.A. Squires qu'elle s'est procurés pour vous. Elle les vend pour la moitié du prix de librairie, soit \$3.00, plus 75¢ pour les frais d'expédition. Les livres sont très légèrement endommagés par l'eau, mais on ne peut presque pas s'en apercevoir. Ils gardent donc leur pleine valeur et leur utilité. Un cadeau qui sera fort apprécié des ornithologues de tous crins du Nouveau-Brunswick.

Vous pouvez vous procurer les livres, les oeuvres d'art et les abonnements-cadeaux en vous adressant à Dave Smith, 149, avenue Douglas, Saint-Jean, N.-B., E2K 1E5.

ABONNEMENT-CADEAU

Le Naturaliste du N.-B., 1984

.....
Veuillez envoyer quatre numéros du Naturaliste du N.-B. à:

Nom: _____

Adresse: _____

_____ Code postal _____

Hommage (Une carte portant votre nom accompagnera le premier numéro-cadeau en mars)

Nom: _____

Adresse: _____

Envoyez à: Dave Smith, 149, avenue Douglas, Saint-Jean, N.-B., E2K 1E5