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This issue of the N. B. Naturalist includes the regular news of nature observations plus an article about the natural history of Mount Carleton Provincial Park, as seen by the federation's secretary Henrik Deichmann. We feel that Hank's article is very appropriate right now because of the forthcoming field trip to that region of the province. Here, then, is some insight into the character of the upper Tobique and surrounding mountains.

Editorial Committee

THE LANDSCAPE, FLORA AND FAUNA OF THE NEW MOUNT CARLETON PROVINCIAL PARK

Henrik Deichmann¹

A New Provincial Park is Designated

By Order-in-Council in February 1970 a 72 square mile block of crown land situated in the central highlands of New Brunswick was designated a Provincial Park. It will be the first really large park in the provincial system.

The park will include a relatively wild and as yet completely undeveloped section of north-central New Brunswick. Mount Carleton (2,689 feet), the province's highest point is the dominant feature of the park. Also included are many other associated mountains, seven major lakes and the headwaters of two attractive river systems.

At the time of writing the park is not officially open to the public. However, active planning for the rational use and management of the area is in progress.

The legal action in 1970 culminated a long history of theretofore unsuccessful attempts to recognize and protect the special values of that area. One-time Provincial Surveyor Edward Jack recommended, in 1881, that about 1,900 square miles of the central highlands be set aside as a "Centennial Park" commemorating the landing of the Loyalists about 100 years before. From that very ambitious proposal followed a series of modified suggestions during the next half century. The Natural History Society of New Brunswick recommended the establishment of a 900 square mile park in 1901. Then in 1919 the Minister of Lands and Mines urged creation of a 400 square mile game refuge. The area he envisioned approximated that investigated and ultimately rejected as a potential national park in 1930.

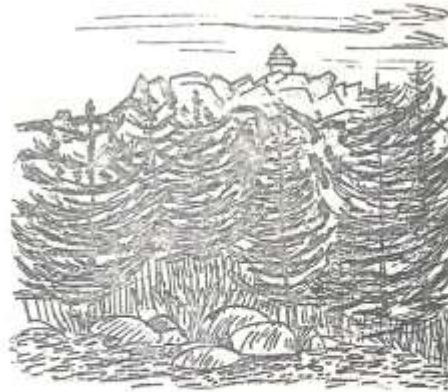
How the Landscape Developed

Granite and argillite rocks, composing the higher elevations in the park, have been in place for about 400 million years. What we see today are much

1. Interpretive Planner, New Brunswick Department of Tourism.

worn-down stumps of once lofty peaks. Structurally, those mountains are akin to the Appalachians of New England.

The hills and valleys have been subjected to several periods of glaciation. The most recent such onslaught of ice was during the Pleistocene which terminated about 10,000 years ago, a mere moment in geological time. Cirques, kames, moraines and dumped till are the persisting evidence of that visitation of the ice sheets. In pre-Pleistocene times what is now called the Tobique River drew water from as far east as the lower Nepisiguit Lakes, but an ice-deposited gravel dam between those lakes and the Nictor group beheaded the pre-Tobique, and turned the Nepisiguit Lakes east to flow into the Bay of Chaleur.



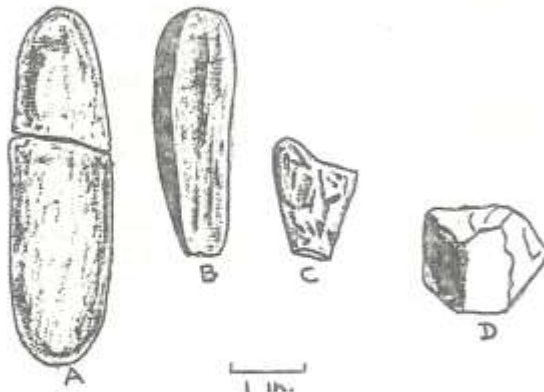
Near the summit of Mount Carleton. Note the abandoned fire lookout cabin.

The soils are shallow, relatively youthful and quite infertile. Some idea of the local character of the landscape is gained by inspecting the types of streams present in different parts of the park. (Bald) Mountain Brook, which receives waters from the top of Mount Carleton itself, is a rough cascading stream with a bed of boulders. By contrast Moose Brook, which flows through the rather gently rolling country in the northeast sector of the park, meanders a great deal and has a muddy bottom.

Climate

To put it simply, the climate is severe. Minimum January temperatures often go down to the -40 to -50°F range. In late winter there may be as much as five feet of snow on the ground. The temperature on a summery June day may reach a maximum of 90°F, but the evenings are cool. In fact, frost may occur in any month. Local variations in weather within the park are remarkable; the higher

elevations may be cloaked in mists while the valleys bask in sunshine.



Some Indian relicts discovered on Nictor Lake by the author in 1971; A & B - adzes, C - chipped knife, D - a massive quartz scraper. Identifications by Christopher Turnbull, archeologist.

Human History

The discovery of an assortment of Indian tools, such as adzes and spear and knife points, indicate use of the park during the past. One might conjure up images of Indians spearing salmon or hunting the throngs of caribou which must certainly have been present during those times. The most recent Indian tribes to have used the region were the Micmas (in the east) and the Maliseets (in the west). Actually the park was a route of travel between the Saint John system and the Bay of Chaleur via the Nepisiguit.

In the late 1800s many geologists who were also interested in natural history visited the region. The chronicles of those visitors are the first detailed descriptions of much of that previously relatively unknown area. Taylor (a skilled photographer), Ganong (a physiographer), Bailey and Ellis (both geologists), Peters (a surveyor) and Hay (a botanist) are a few of those who contributed significantly to our knowledge of the park.

Coincident with the students of nature came first the outfitters, to guide sportsmen hunting big game, and the trappers and then the lumbermen. Pine masts cut near Nictor Lake were floated singly to Fredericton from where they were rafted to Saint John, over 300 miles downstream.

Vegetation



This old growth White Pine on the south shore of Nictor Lake was estimated to be over 90 feet tall in 1971.

In order to visualize what the forest looked like in the central highlands, including the park, one must now study remnants of old growth along the lakes or in the valleys. Modern day relicts of that forest contain Usnea-draped specimens of white pine and spruce that tower up to 90 feet in height. Some of those trees could have been well established when the Loyalists arrived in the Saint John basin in 1783.

Logging and budworm attacks, followed by the two disastrous fires of 1923 and 1933, have left us with a vast forest of white birch with scattered red and white pine and aspen. Where the fire burnt extremely fiercely and left virtually no soil, such as on the tops of peaks and on glacial boulder pavements, only stunted black spruce have become established.

Throughout most of the forest the expected ground plants, such as bunchberry, Clintonia and twinflower, are to be found. Shrubs such as Amelanchier and the blueberries are prevalent, especially at the higher, most exposed elevations. The hazelnut is uncommon, but raspberries

flourish in any disturbed open space.

Although no point in the park is above the timberline, no trees grow at the very top of Mount Carleton. They once did, before the fires, and will again, if the succession through lichens, mosses and blueberries progresses without interruption. Those trees which now grow on the flanks of the mountain demonstrate very clearly the difficulties of tree establishment under the severe conditions existing there. Those trees are characterized by dense basal branching and a naked trunk topped by a tassel of growth that must, to survive, resist the scouring of drifting snow and ice.

The natural open areas in the park are the lichen-covered scree slopes and the small sedge meadows associated with ericaceous heaths often bordering the ponds. Man-made openings at existing or abandoned campsites have become solidly pioneered by lush carpets of grass, thus providing a valuable habitat encouraging a further diversity of animal life in the park.

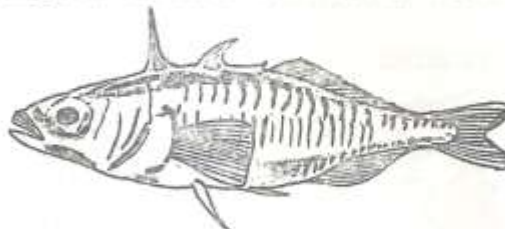


Odd shaped conifer typical of exposed locations at the higher elevations of the central highlands. (After Ganong, 1903).

Lakes and water sources have the usual aquatic vegetation associated with them, such as manna grass, yellow water lilies and several kinds of Potamogeton.

Fishes, Amphibians and Reptiles

Salmon once reached Nictor Lake from the Bay of Fundy, but that was before the construction of Mactaquac dam and the general decline in the population of that species. Being clear and cold, Big Nictor Lake is an ideal environment for brook trout, as are streams such as Mountain Brook and Big Brook on the Nepisiguit drainage. In Nictor Lake species of minnows, such as dace and chub occur. A race of the three-spined stickleback reaches a length of up to more than three inches and appear to be giants among their kind. White suckers and yellow perch are also present in the Nictor system. Brook trout and white suckers are the only fishes in the Nepisiguit chain of lakes and streams.



Three-spined Stickleback Gasterosteus aculeatus. (Adapted from Scott, 1967).

Most of the park provides less than ideal habitat for amphibians, and in that group we found only the two-lined salamander and the American toad. It may be worth noting that the toads there are quite rusty in colour compared to those farther south in the province. The garter snake is present, but it must be quite local and rare; we did not find any during our field work in 1970 and 1971.

Birds

Over 100 species of birds have been recorded in the park. Species typical of the "north woods" are common, e.g. olive-sided flycatcher, gray jay, gray-cheeked thrush, solitary vireo, raven, blackpoll warbler, rusty blackbird, pine grosbeak and fox sparrow. It seems very likely that the gray-cheeked thrush and possibly the fox sparrow breed within the park, one of the few places in the province where they are suspected of nesting.

The variety of habitats available permits a commensurate variety of birds. That is demonstrated by the thrushes (genera Hylocichla and Catharus), as five species may be encountered from the top to the foot of Mount Carleton, a distance of about two miles.

Warblers, too, are well represented (18 species), as well as the Fringillidae (16 species). In 1971 both the evening grosbeak and the pine grosbeak were regularly observed; the evening was most abundant at the lower elevations while the pine seemed to prefer, in summer at least, those areas above 1200 feet. The white-throated sparrow was noted to be the commonest bird in the park and the slate-colored junco was abundant too. However, the savannah, chipping and song sparrows seemed restricted to man-made openings.



The typical song perch of the Gray-cheeked thrush is a low branchy Black spruce on the summit of Mount Carleton.

Although nine species of raptors (including bald eagle, osprey and barred owl) were observed during my work in the park, none seemed particularly regular.

The black duck, common goldeneye and common merganser were the most regularly occurring species of waterfowl.

At the turn of the century, when big timber was plentiful, both species of three-toed woodpeckers were regularly observed (Squires, 1952). During extended periods of fieldwork during the summers of 1970 and 1971 I did not encounter either species.

Visitors Island in Big Nictor Lake held a loon nest in 1971. Herring gulls, common terns and great blue herons observed were probably irregular visitors to the area.

By far the most common swallow was the tree swallow. Ravens were more regularly seen than crows. Both blue and gray jays appeared to be quite common. Boreal chickadees seemed slightly more common than the black-capped species.

Robins were almost ubiquitous, being met with even in fairly heavy timber. Swainson's and hermit thrushes could both be termed common. Both solitary and red-eyed vireos were frequently observed. The Philadelphia vireo seemed to be restricted to the higher elevations.

Of the dozen and a half warblers listed during the fieldwork, the following 11 species were the most common: black-and-white, parula, myrtle, black-throated green, bay-breasted and blackpoll, ovenbird, northern waterthrush, yellowthroat, Canada warbler and American redstart.

Another interesting feature, ornithologically, of the park is the occurrence of red-winged and rusty blackbirds in about equal numbers. In most localities the former far outnumbers the latter species.

Mammals

For a variety of reasons two mammals, the wolf and the woodland caribou, which were once regular and even common in the region of the park are no longer found. The wolf was gone before the 1900s and the last caribou probably by 1930. Caribou were reported "common" as late as 1915. White-tailed deer began infiltrating the Tobique from the southwest by the 1890s.

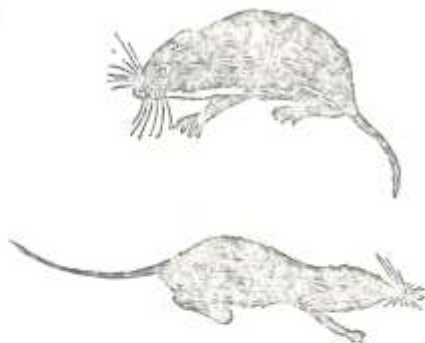
Mineral licks, which attract both moose and deer, occur in several places on tributaries of the Little Nictor immediately west of the park. The licks have their highest allure in late spring and early summer. An early summer canoe trip down the Tobique from the park often provides the opportunity to see deer feeding on aquatic vegetation while they stand up to their bellies in the stream. One suspects the offspring of the year are hiding in a nearby alder bed.

The same species of rodents that are present throughout the wooded areas of the province also occur in the park. However, two species of small mammals, the rock vole and the Gaspé shrew, have to date been collected only from this section of New Brunswick.

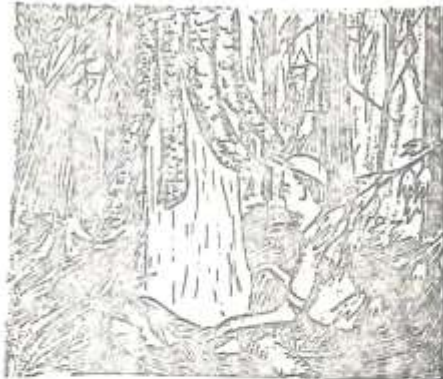
A female woodchuck particularly endeared herself to our party in 1971. Each evening she appeared on the lawn in front



White-tailed deer are often seen feeding in the channel of the Tobique, particularly in June and July.



Both the yellow-rosed rock vole (top) and the Gaspé shrew have been collected from the Mount Carleton area, but nowhere else in the Province. (After Pogany in Peterson, 1966).



The bark has been stripped from the lower trunk of this big spruce, indicating spring sap feeding by a Black Bear.

of the Nictau Fish and Game Club Home Camp on the Nictor Lakes. At those times she would pose willingly for the camera when proffered soda crackers. Late in June she brought out three little 'chucks' one of which had a distinctive white nose patch.

The main lodge of the camp at Nictor Lake harboured one of the largest colonies of little brown bats I have known. At dusk on the evening of June 15, 1971 we counted 189 emerging during a period of just 10 minutes!

Members of the mink family (Mustelidae) are well represented in the park. There are reliable recent records of mink, marten, fisher, otter, short-tailed weasel and striped skunk. The wolverine may have occurred in the region many years ago, but that has not been confirmed.

There are several active beaver colonies in the park, and we saw a few muskrats.

Black bears were probably at least seasonally abundant when blueberries and other bush fruits covered vast areas following the big fires. In 1970-71 we noted considerable sign, mainly in the form of bark stripped by bears from the trunks of large spruces so that they could obtain sap in the spring.

Of the cats, only the bobcat is reasonably common. The Canada lynx was common up to 1930, but since then the populations appear to have crashed. There has been at least one panther sighting, near Nepisiguit Lake in the 1950s.

The red fox is apparently present in fair numbers. Two species important in predator food chains, the red squirrel and the varying hare, are both common. Both the raccoon and chipmunk occur, but in my opinion very locally. We noted very little sign of porcupine activity, possibly due to the hunting efficiency of the fisher.

Postscript

Although in New Brunswick there are parts wilder than the proposed Mount Carleton Provincial Park, that area is on the border of one of the last tracts of unbroken forest remaining in the province. In the park some rather special habitats will be preserved and with them their associated inhabitants. Coincident with this is the opportunity to preserve some of our province's finest and most interesting landscapes.

Editor's Note: A selected bibliography and a list of birds of the park are available from the Federation. Space limitations prevented including them here.

NATURE NEWS

David Christie

"What happened to the Fox Sparrows?" was a frequently asked question this spring. The usual heavy migration along the Bay of Fundy was not noted, presumably because of the lack of snow cover during April. The birds appear to have moved through New Brunswick very quickly. Those that did stop in the province were widely distributed and inconspicuous. In most years, snow depths concentrate them along roads and in residential areas. The same thing may have accounted for reports that other birds, such as Robins, were scarce during April. Only along the Bay of Chaleur and in the northern highlands was there much snow during that month.

April's weather highlight was the flooding of rivers at the end of the month. The Saint John River, especially, produced the highest freshet levels for many years in many parts of its valley. May was particularly distinguished by its lack of sunshine. At Fredericton, a record low of only 105 hours of bright sunshine was observed during the month. A cool, wet spell May 21-26 caused considerable mortality of Purple Martins in some localities.

Mammals

Looking out of Moncton's City Hall on May 13, Bob Cameron observed a large, black animal thrashing about on the mudflats of the Petitcodiac River. To be noticeable at such a distance rules out the probability of it having been a fish. Probably the creature was a Blackfish (Pilot Whale) that had come up the river and been stranded when the tide dropped. That small whale has been found in the Petitcodiac a few times previously, most notably in September 1922 when at least 100 of them reached far up the river and some were stranded at Salisbury.

Road construction broke into a Red Fox den at Grand Bay April 10. The fox carried away to safety her four pups, two red ones and two black (Jim Dryden). The black colour phase is rare in the province. Likely that red vixen's pups had a black sire.

What was probably a small Cougar (Eastern Panther) was seen crossing a road between St. Stephen and St. Andrews about May 20 (Hester Page, *vide* Tom Page). A cow Moose with her very young calf appeared on the highway at Kyle Flat in Fundy Park May 26 (T. Page *et al.*).

A report, received belatedly, of a Gray Squirrel, noted well outside its usual range, was of one seen by John Kenting near the Chatham golf course in Summer 1972 (*vide* John Bethell).

Birds

Spring always brings with it unusual birds. This year some were exceedingly so. A Stanley Crane (Paradise Crane) spent Apr. 24 to May 1 feeding on a farm at Welsford (Mrs. Johan Eichhorn *et al.*). That large, white-crowned, bluish-gray crane which hails from southern Africa must have escaped from a zoo in the United States. From Welsford it moved northward, being seen by many people at Geary on May 5 (*vide* Peter Pearce) and appearing May 6 at Cross Creek where it remained a few days (Hal Hinds *et al.*). At Aulac on April 1 Stuart Tingley observed a distinctively marked songbird at his feeding station. Unable to locate it in his field guides, he eventually consulted a friend with a book on European birds and determined that it must have been a Great Tit. That large "chickadee", which has a greenish back and bright yellow belly may have escaped from captivity or have crossed the Atlantic on a ship. A third oddity is more likely to have reached New Brunswick by its own means. That was a Black-billed Magpie, discovered Apr. 22 at Saint John West by Gordon Dow. It was last seen there by several observers about 8 a.m. April 26. At 5 p.m. that day what may have been the same bird appeared at Cape Enrage, 70 miles to the east, and remained all day the 27th (Francis Bennett). Did that bird round the head of the Bay and move southwest down the Nova Scotia side? A magpie was seen for several

days during May at Brier Island, N.S. (Wickerson Lent, fide Jim Wilson).

After being very common on the Saint John River last spring, Double-crested Cormorants were scarce enough this year to prompt the following statements: "none at Fredericton as of Apr.30 - most unusual" (Nettie Moore); and "very few this year" (Enid Inch). However, an unusually large group of 100+ were on Lake Petitcodiac, at Moncton, Apr.25 (Dr. J.W. Dobson, fide Doug Whitman). The first reported Double-crests were seen Apr. 7 at opposite ends of the province, 2 at Saint John (David Smith) and 1 at Dalhousie (Jean-Paul Lebel).

A few Great Blue Herons appeared early: 1 at Albert Mar.25 and 5 at Moncton Mar.26 (Mary Hajka); 2 at Callander Beach in Kouchibouguac Park Mar.29 (Eric Tull); and 1 at Woodstock Mar.31 (Marjorie Gray). By April 6-8 they had arrived in most southern districts, but were not seen till Apr.15 at Bathurst (Blake Maher) and Apr.16 at Dalhousie (Lebel). 15 Black-crowned Night Herons roosting in trees beside Bathurst Harbour May 2 (Maher) suggests that there might be an undiscovered breeding colony there. 30+ were at the Edmundston colony May 1 (Christie).

It was an unusually good season for southern herons, especially Snowy Egrets, of which perhaps twelve were seen. Herons beyond the northern limits of their breeding range were - Cattle Egrets: 1 at Sheffield May 20 (Enid Inch et al.) and 1 at Bayfield May 25 to June 1 (Andy McInnis et al.). Great Egret (Common/American Egret): 1 at Hammond River Apr.20 (the Hardings, fide Wilson); 1 at Newnamcook Apr.16 & 25 (Reid McInnis); and 1 at White Head, Grand Manan, from about May 1 until at least the 29th (Nancy Small). Snowy Egret: 1, freshly dead, at Hay Island, Grand Manan about Mar.25 (Chuck Huntington); 1 at Gardner Creek Apr.7-10 (Beth Forbes, Ted Sears et al.); 1 at Waterside Apr.20-25 (John MacFarlane et al.); 2, later 3, later 4, at Red Head and then at Saint John West, from Apr.20 on into June (many observers); 2 at Harvey, Albert Co., Apr.25-28 (Chris Hajka et al.); 2 at White Head from about May 1 till the 22nd (Small); and 1 near Jonseg May 15 (Henrik Deichmann). Louisiana Heron: 1 at Cape Jourimain, near Bayfield, May 11 (Andy McInnis) and 1 at Castalia May 14-15 (Ken & Mary Edwards). Yellow-crowned Night Heron: 1 at Saint John West May 26 & 28 (Cecil Johnston, Jan Dexter & Christie).

Glossy Ibises appeared in several localities for the third year in a row but their numbers were less than in 1971 and 1972. The earliest one appeared at Charlo in late March according to Lucien Bébin. Father Lebel observed it there Apr.29 to May 7. Other ibises were 1 at Temperance Vale Apr.30 and May 1 (Ford Alward); 1 at St. Andrews May 7 (Wills MacCoubrey); 1 at Rivière au Portage, near Fontaine, May 8 (Tull); 2 at Jolicure, near Sackville, May 9-11 and later (Al Smith); 3 at Lower Sheffield May 11 (N. Moore, MacCoubrey, Harold Ferguson & Charles Hamwell) and 1 there till May 20; and 1 at Saint John West May 29-31 (Wilson et al.).

Aerial surveys along the Atlantic coast last winter revealed a great decrease in the number of Brant from recent years. Our observers have not mentioned it, although the largest concentration reported was only 600, at Haces Bay Mar.19-20 (Davis Finch). At times up to 2000 have been seen there and at Grand Harbour. Two inland reports were of 1 at Oromocto Island Apr.15 (Deichmann) and 3 flying over Cambridge May 23 (Joyce & Niven Thorne). On May 6 one was at the Reversing Falls, Saint John, where they are not normally seen (D. Smith). The last migrant Brant were detected May 23 at Deep Cove, Grand Manan (Elmer Wilcox), May 25 at Kouchibouguac Park (Tull) and May 26 at Cape Tormentine (Don MacDougall) and Eel River Bar (Lebel).

Because of high water levels Canada Goose and most ducks were not observed in as large concentrations as they often are in the lower Saint John valley. Both colour phases of the Snow Goose were observed. Of the white phase, one and then 2 were at Eel River Bar Apr.15-17 (Lebel), 1 at Lower Cambridge Apr.20 (Inch et al.), 1 at Oak Point Apr.21 (Nettie & Melvin Moore) and 5 very late ones flew up the coast at Lorneville May 27 (T. Page). Two of the rarer, predominantly western, dark phase, the

so-called "Blue Goose", were noted, 1 at Oromocto Island Apr. 17 (Deichmann) and 1 at Gagetown Apr. 23 (H. & M. Moore). The latter individual also was seen just across the river, at Lower Jemseg on May [date?] (Belyea & Thorne). There were three reports of Gadwall, an increasingly frequent western species. Two males were at Saint John West May 13 (Johnston et al.), a pair at Cape Jourimain May 17-26 (McInnis et al.) and two males at Eel River Bar June 2 (Lebel). Cecil Johnston added two more to the list of "Eurasian" Green-winged Teal (i.e. Common or European Teal) he has found, with sightings of single males at Chance Harbour Apr. 8 and Saint John West Apr. 16. Several Shovelers were seen in the lower Saint John valley and in Westmorland County. There was also a male at Eel River Crossing May 14 & 23 (Lebel). Wood Ducks, primarily found in the southern counties, made appearances in the north at Charlo Apr. 29 (male) and at Eel River Crossing (pair; Lebel).

Two large concentrations of Greater Scaup were seen: 2200 at Oak Pt. Apr. 21 (Christie, Tull & Dr. H. Hajka) and 2500 at Callender Beach Apr. 26 (Tull). Father Lebel reports that "one pair at Eel River Bar seems to be nesting," which if proved would be a first for the province. Barrow's Goldeneyes were reported from Mar. 25 to May 1, at Shediac (Léo Martin), Callender Beach (Sandy McLain, fide Tull), Oak Pt. (Stan Gorham), Somerville and Hartland (Donald Kimball & Michael Rigby), Rivière au Portage (Tull), Dalhousie (Lebel) and Beechwood (Christie). Numbers observed ranged from 2 to 20. Oldsquaws inland were a male at Oromocto Apr. 14 (Deichmann) and 7 at Lower Jemseg Apr. 21 (Christie et al.). The only Harlequin Ducks reported were far from their ocean habitat, a pair at Fredericton May 13 (Deichmann). The King Eider, rare here, was found at Pt. Lepreau where David Smith saw a subadult male Mar. 25 & 31. Nettie Moore and Wille MacCoubrey saw 2 of them and a possible third King Eider there on the 26th. A male Ruddy Duck, unusual in spring, was at Saint John West May 15-20 (Johnston & Christie).

Scoters and eiders annually migrate along the coasts of New Brunswick in great numbers. Some concentrations seen this spring were "hundreds and hundreds of Black (Common/Am) Scoters, in flocks of 15 to 40" passing Pt. Lepreau Apr. 8 (Johnston); 5000+ Common Eider, 10,000+ Surf Scoters and 5000+ Black Scoters at Waterside Apr. 24 (Bruce Bradbury et al.); 8000 Surf and/or Black Scoters in Richibucto Harbour May 9 (Tull); 4500 Black Scoters at Dalhousie Apr. 16 (Lebel); "hundreds and hundreds of Surf Scoters pouring in day after day and spreading into the Restigouche River" at Dalhousie, beginning Apr. 18 (Lebel); and finally, 150,000 scoters, virtually all Black Scoters, in the Restigouche River May 1 (Christie). The last-mentioned raft extended upriver 8 1/2 miles from just above Dalhousie.

Turkey Vultures, virtually unnoticed in recent years, were seen in several areas in Maine this spring (fide Bill Townsend). Three reports are at hand in New Brunswick: 3 near Burton Apr. 18 (Mrs. W.R.D. McNeill et al.), 5 there about May 30 (Charlie Nelson, fide Johnston) and one near Fontaine May 14 (Tull & Tingley). The earliest reported Osprey was seen in Charlotte County Apr. 14 (Bob Dunbrack). Singles were seen on the 19th at Eel River Bar (Lebel), on the 20th at St. Andrews (MacCoubrey) and at Chambers Settlement, near Waterford (Deichmann) and on the 21st at Memramcook (McInnis). Four were at Peters River, near Bathurst, Apr. 21 (Heber).

Cecil & Doris Johnston were lucky enough to see 2 adult Peregrine Falcons simultaneously in pursuit of teal at Saint John West Apr. 7. One falcon, possibly a Peregrine, at Cape Jourimain May 6 & 14 (McInnis et al.) was the only other report. Merlins (Pigeon Hawks) were noted most frequently Apr. 16 to May 2. The Am. Kestrel (Sparrow Hawk) was most common during the same period, with a peak of 35 at Waterside Apr. 24 (Bradbury, MacFarlane & Jocelyne Hullen). Andy McInnis notes that some 25 to 30 male Kestrels were present at Cape Jourimain for about two weeks during mid-May.

Two Virginia Rails were found at Eel River Bar May 16-30 (Lebel). At least six were heard calling at Hildig, near Sackville, May 27 (MacDougall). A very early Sora was seen at Daniel's Marsh, near Hopewell Hill, on Apr. 14 (Mary Hajka and Gavin Henderson). 1 was discovered at Eel River Bar May 18-30 (Lebel).

Last issue we reported some Killdeer and Am. Woodcock. Some other early Killdeer were singles at Prince William (Darrell Kitchen) and Douglas (Beverley Schneider) Mar.17. In more northern parts one was at Newcastle Mar.25 (Herry Walker), 1 at Oxbow-on-Tobique Apr. 3 (Deichmann) and 1 at Eel River Bar Apr.15 (Lebel). Some additional Woodcock arrivals were 6, performing their courtship flight, in the Haces Bay-Dipper Harbour area Mar.20 (Inch) and 1 at Saint John Mar.22 (fide Christie). Woodcock are noted for their early nesting. Roy Forrester found eggs at East Saint John Apr.23. Four eggs in a nest at Rockwood Park, Saint John, May 4-8, had hatched by the 11th (Don Carter). A nest at Musquash contained 4 eggs May 20-22 (Art Callaghan).

The Upland Sandpipers (Upld.Plovers) returned to the large fields where they have been nesting near Salisbury - 2 were seen May 16 (Theresa & Peter Pearce). Three singles were noted elsewhere: at White Head May 5 (Smaill), at Jolicure in the first half of May (Al Smith) and at Salem, near Hillsborough May 16 (Mary Majka). Shorebirds of unusual occurrence here in spring migration were a Whimbrel at Bayfield May 18 (Mary Majka & Christie); a Lesser Yellowlegs at Eel River Crossing May 4 (Lebel) and another at Saint John West May 11 (Johnston); 3 Knot at St. Andrews May 25 (Deichmann) and 10 at Eel River Bar May 29 (Lebel); a Pectoral Sandpiper at Saint John Apr. 8 (Deichmann), another at Dipper Harbour Apr.14 (Saint John Naturalists' Club = SJNC), 3 and later only 1 at Waterside Apr.20-29 (Bradbury et al.) and 1 at Eel River Crossing May 14 (Lebel); a Stilt Sandpiper at Dipper Harbour Apr.14 (Johnston & Dexter); a Marbled Godwit at Saint John May 13 & 14 (Johnstons et al.); 9 Sanderling at Eel River Bar May 29 (Lebel); and a female Wilson's Phalarope at Castalia May 13 (Edwards). All tend to migrate through the centre of the continent in spring, but the Stilt Sandpiper, phalarope and especially the godwit are unusual here even in fall.

A lingering Glaucous Gull was at Saint John West May 29 (Pearce et al.) and there were still 6 Iceland Gulls at Moncton as late as May 18 (Whitman). A Great Black-backed Gull had moved upr ver as far as Hartland by Mar. 22 (Kimball) and 2 Herring Gulls were there Mar.25 (Rigby). Black-headed Gulls at Saint John reached a peak of 5 on May 7 (Christie) and 1 immature was present till May 13 (Christie & Johnston). An adult at Eel River Bar May 15-25 was the tenth species of gull recorded there (Lebel). An adult Laughing Gull Apr.21 was the second record at the bar and in the northern half of the province (Lebel). One Bonaparte's Gull arrived very early at Dalhousie on Apr.18. The next ones, 3, were at Eel River Bar May 5 (Lebel). An immature Little Gull present at Eel River Bar since May 18 was the highlight of the federation's field trip there June 2 (Lebel et al.). An adult Franklin's Gull, a western species seldom seen this far east was at Haces Bay May 31 (Joyce Golden). An unusual inland record of an Arctic Tern was one seen at Sheffield May 18 (Pearces). There were two reports of Caspian Terns: 1 at Cocagne Apr.30 (Christie) and 5 at Monramcook Lake May 1-5 (McManus).

Our second record within a few months of the rare (here) Screech Owl was of a red phase bird at Notre-Dame May 1 (Mary Majka). A pair of Great Horned Owls had 2 young in their nest near Bathurst Apr.20 (Haheer). Two Whip-poor-wills at Cap Saint-Louis May 17 were the first of several found in Kouchibouguac Park (Tull et al.). The first Chimney Swift reported was at Douglas Apr.20 (Schneider). Single Ruby-throated Hummingbirds were seen at St. Andrews May 15 (MacCoubrey), Hartland May 17 (Rigby) and at Caledonia Mountain and Harvey May 20 (Dr. Majka). A Belted Kingfisher at Pt. Wolfe in Fundy Park Apr. 7 (Bradbury) was 10 days in advance of the next one reported. Single Flickers Apr. 1 at Douglas (Schneider) and Apr. 7 at Fundy Park (Bradbury) were similarly ahead of the main influx which arrived Apr. 17 in several districts.

There are again reports of both three-toed woodpeckers. The uncommon Black-backed was seen at Somerville Apr.14 (Kimball) and Pt. Wolfe May 25 (Simon Lunn), while the very rare Northern Three-toed was seen at Cambridge May 17 (J. Thorne). Ruth Cleg-horn saw our most spectacular woodpecker, the Pileated, at Harvey Station, York Co., May 8.

Mid-May was the time of E. Kingbird arrivals with singles at Cambridge (J. Thorne) and near Moncton (Doreen Carter) on May 13 and 10 at Saint John West (Johnston) and 1 at Kouchibouguac (Tull) on May 15. Great Crested Flycatchers must have occurred elsewhere but the one seen by Amos Kelly at Andover May 22 is the only report submitted.

A few Tree Swallows arrived well before the main movement of Apr. 15-22: 2 at Riverside Apr. 1 (the Henry Cormiers), 2 at Fundy Park Apr. 6 (Bradbury), 1 at Alma Apr. 8 (Doris Hatt), and 1 at Rousesay Apr. 8 or earlier (Harley Jolly). Rough-winged Swallows which have been spreading into the province were reported at two localities. Four were discovered at Saint John East sewage lagoon May 10 (Wilson) and were still present there several days later. Near Hoyt, at Hill Settlement, where one was seen in May 1971 and 1972, a pair found May 12 (Christie & Dr. Hajka) were carrying dry grass into their nest-hole in a sandbank beside the stream. The Pearces, observing there May 20 or 21, suspected the presence of at least 3 Rough-wings. A Barn Swallow at Douglas Apr. 29 (Schneider) was the earliest report. They were seen May 5 at as widely separated points as Walsford (Christie), Upper Woodstock (Rowena MacDonald) and Bel River Crossing (Lebel).

Purple Martins returned Apr. 23 at Hartland (Rigby) and Apr. 25 at Hammond River (Charlie Wilson). The cold weather of late May was apparently responsible for the death of martins at several localities, although some colony owners suspected budworm spraying operations, which occurred at the same time in some areas, as being the cause of difficulties. Enid Inch paints a grim picture of conditions at colonies around Washademoak Lake. Writing from Cambridge May 30 she says:

"Last week was a sad one for the many people on the Washademoak (and probably elsewhere in the province) who had martin houses, as they watched helplessly as their martins died as the result of the cold wet spell. Dead birds began to show up first on the 24th - and many died between then and Sunday. I only had 5 at my house to begin with - they went away when the weather became so miserable but one came back on the 25th, very weak, and died after I took it into the house. Have none at the moment. Ronald Perry of Lower Cambridge had 80 around his two large houses. He just found 1 dead bird, but had only 4 yesterday. However, a few more appeared this morning. Whether these are new arrivals or survivors no one knows. Gerald Smith of Lower Cambridge had 30 before the spell of bad weather. He found 5 dead on Saturday and another too weak to survive. 5 were left on Monday but something climbed his pole Monday night and left only ten wings. This morning he had one! Niven Thorne's had about 25 at four houses - 5 died in one house, 8 more were found under the house and 2 died after attempted revival. Others were seen flopping weakly in the fields and probably fell prey to cats. They had 4 left, but a few more appeared on the scene this morning, so perhaps the colonies will rebuild."

Both Red-breasted Nuthatches and Red Crossbills were "very much in evidence" on Grand Manan in mid-May (Edwards). The only other place many were noted was at Deer Island where a flock of 40 crossbills and 8 nuthatches were seen Apr. 14 (SJNC). In both areas they were cleaning up the last of the 1972 spruce cone crop.

Three of the quite local Long-billed Marsh Wrens were found: 1 near Jolicoeur May 17 (Christie & Deichmann), 1 at Cape Jourimain May 26 and 1 at Midgie May 27 (MacDougall). Single Mockingbirds were noted at Torryburn, St. John Co., May 17-18 (Paul & David Clark), at Cap Saint-Louis May 22 (Tull) and at Gunningsville May 23 (Mrs. L.H. Rice). Two, perhaps three, Brown Thrashers were at Cap Saint-Louis May 22 (Tull et al.) and others were seen at St. Andrews May 16 (McCoubrey) and at Pt. Wolfe (Lunn), Caladenia Mountain (Dr. Hajka) and Dalhousie (Elizabeth Hott & Lebel), all on May 27.

Robins, some of which appeared as early as Mar. 13, arrived in several localities in southern N.B. Mar. 30 to Apr. 1. The main influx throughout the province seemed to take place about Apr. 16. Wood Thrushes, noted first on May 12 at Lower Jonesog (Pearces), were seen in some localities on the edges of their range, such as at Fox Creek (Paul Germain), Blackville and Upper Blackville (Pearce) and Pt. Wolfe (Lunn).

Gray-checked Thrush, seldom found off its nesting grounds in the province, was seen well at Cambridge May 27 (Belyes & Inch) and even rewarded its observers with a song. A pair of Bluebirds were seen by the Talbot Carpenters at Cambridge through most of May. That was the same area where they had been observed last fall.

A Blue-gray Gnatcatcher, always a casual visitor here, was at Hill Settlement May 6 (Mary Hajka & Christie). Ruby-crowned Kinglets made their appearances Apr. 20 at Hartland (Rigby), Cambridge (Inch) and Caledonic Mountain (Dr. Hajka) and further north on Apr. 26 at Kouchibouguac Park (Tull) and Eel River (Lebel). Last of the winter's small invasion of Bohemian Waxwings were 6 at Lower Coverdale Mar. 28 (Dr. Hajka). The Cedar Waxwing, always a late migrant, was reported May 29 at St. Andrews (MacCoubrey) and Moncton (Wes Knappor).

Two unusual warblers were discovered this spring, a Prothonotary Warbler at St. Andrews May 20 (MacCoubrey) and a Yellow-breasted Chat at Pt. Wolfe May 27 (Lunn). The first reported warbler was the Myrtle which was seen Apr. 19 at Douglas (Schneider), Apr. 22 near Hopewell Hill (Christie & Mary Hajka) and Apr. 23 at Fundy Park Headquarters. In northern areas it was seen May 2 at Kouchibouguac Park (Tull) and May 5, when 20 were seen in the Dalhousie area (Lebel). The Palm Warbler was the only other reported during April, the first being at Fundy Park Apr. 23 (Bradbury), at Saint John West (Dexter) and Cap Saint-Louis (Tull) on April 30 and at Whites Brook, Restigouche Co. May 1 (Christie). Black-and-whites were next, 7 being seen at Saint John (Don McAlpine & David Ekstrom) and 1 at Hill Settlement (Christie & Mary Hajka) on May 5. Four species were noted first May 9-10 and ten others May 12-15. By month's end only the Mourning Warbler had not returned. Northern New Brunswick dates were for the most part about four to five days later than those in the south.

Bobolinks of which the first individuals were seen May 11 at Upper Woodstock (MacDonald) and May 12 at Douglas (Schneider) very quickly became numerous throughout. First E. Meadowlark was reported from the Newcastle area Mar. 31 (John Bethell, Harry & Ian Walker). Several Scarlet Tanagers were reported in southern areas beginning May 20; a male was in Newcastle May 29 (Walker) and two were reported in Dalhousie late in May (vide Lebel). Summer Tanagers, beyond their breeding range here, were seen May 11 at Fredericton (a moulting male; Marguerite McHair) and East Saint John May 30 (almost adult male; Molly & Sandy Smith et al.).

A pair of Cardinals were seen at Lower Coverdale May 30 (Winston Prince). Rose-breasted Grosbeaks were generally reported to be more conspicuous than usual this spring. Although several Blue Grosbeaks visited Miramichi (end), only one, a male, was reported in New Brunswick and that was at White Head May 30 (Small). Male Indigo Buntings were reported May 15 at Moncton (Betsy Innes), at Alma May 20-22 (Norman Gray et al.) and at Cambridge May 20-22 (Mrs. Charles Thorne & Mrs. Bruce Chase).

Evening Grosbeaks, Purple Finches and Pink Siskins were all noted as especially common in several parts of the lower Saint John valley. The last Common Redpolls of a poor winter flight were 12 at Woodstock Mar. 29 (Kimball).

Highlight of the sparrow reports was a Clay-coloured Sparrow, a species never before reported in the province. Harry Walker both saw and heard an individual of that species at Newcastle May 26. Unfortunately the bird did not linger in the area and the observation could not be confirmed by others. However, the combination of visual field marks and song lend strong credence to the report of that western sparrow. Fox Sparrows have already been mentioned as having passed through quickly without being noticed. All reports added together would not make a hundred birds, whereas usually single flocks of 100 or more might be observed. First dates for some other sparrows were Savannah, Apr. 21; Vesper, Apr. 20; Chipping, Apr. 26; White-crowned, Apr. 26; White-throated, Apr. 18; Swamp, Apr. 23.

Single Leapland Longspurs were at Escuminac Apr. 12 and Aldouane Lake Apr. 16 (Tull). Snow Buntings were scattered in Kouchibouguac Park till Apr. 26 (Tull) and a lone male, in breeding plumage, was at Cape Enrage as late as Apr. 29 (Bennett et al.).

Amphibians

Spring is the active breeding season of amphibians, some of which are only conspicuous at that time of year. Some first dates reported this year for amphibian activity are - Spring Peeper: a lone individual calling at Moncton Apr.13 (Christie & Mary Hajka), calls at Oak Point Apr.17 (Gorham), at Hartland Apr.24 (Rigby) and Riverside Apr. 23 (Tull); Wood Frogs: calls at Saint John West Apr.14 (Chris Stubbs), Oak Point Apr.16 (Gorham), Rothesay Apr.13 (Alan Howard), Douglas Apr.23 (Schneider) and Hartland Apr.24 (Rigby); Leopard Frogs: 2 at Moncton Apr.13 (Mary Hajka), calls at Portobello Creek Apr.21 (Deichmann), 100+ dead at Westfield Apr.28 (Gorham); Am. Toad: calls at Saint John May 9 (Christie). Adult Spotted Salamanders, three of them, appeared in the ditches at Oak Point Apr.17 (Gorham). An interesting find there was the discovery of two overwintering larval Spotted Salamanders on Mar.31. In many regions Spotties transform to adults before hibernation.

Invertebrates

Some butterflies emerged early this year. One Hourning Hawk was out at Sackville Mar.31 (Kimball) and 2 were seen at Hartland Apr. 8 (Rigby). Later, 1 was at Hackettville Apr.16 (N. Moore) and 6 at Moncton Apr.13 (Mary Hajka). Early Cabbage Butterflies were individuals at Hackettville Apr.16 (N. Moore) and Saint John Apr.19 (Christie).

A wild bee was visiting crocus flowers at Fredericton Apr.19 (N. Moore) and a Bumblebee was observed Apr.24 at Upper Woodstock (MacDonald). Elmer Wilcox reports that black fly season began at Deep Cove, Grand Manan May 14. At Caledonia Mountain it commenced May 20 (Hajkas). Mosquitoes were noted first at Woodstock May 24 (Gray).

Elmer Wilcox discovered many shells of marine molluscs, washed out of Pleistocene gravel deposits at Red Point, Grand Manan, this spring.

Flora

The first Coltsfoot blossom, our earliest wildflower, was found at Saint John East Mar.25 (Marjorie Janes). At Seal Cove, it was seen in bloom Apr. 8 (Wilcox). Last year's date at the same place was Apr. 4. Dandelion flowers made early appearances Apr.15 at Hillsborough, Saint John (Betty McIlpina) and Apr.16 at Petitcodiac (Mary Hajka). Both were in sheltered, warm locations. At Woodstock they were seen as early as Apr. 26 (Gray), the same day that Dogtooth Violet (Trout Lily) and Red Trillium were blooming there. Anne Dean found Dogtooth Violet at Fredericton on Apr.24. Another April flower was the Shunk Cabbage, of which Elmer Wilcox saw many in the known location at Lake Utopia Apr.25. Flowers in May bloomed at average dates early in the month but were somewhat retarded later on.

***** Summer reports (May 25 - July 31) due by August 5 for next issue.*****

CALL FOR NOMINATIONS

The one-year terms of office of the president (David Christie), treasurer (Eric Tull) and one director-at-large (Alan Smith) expire Sept. 8, the date of the federation's first annual meeting. Nominations for these positions should be made in writing by any two members of the federation and sent to the secretary (K.H. Deichmann, Fundy National Park, Alma, N.B.) by July 23. Nominations should include consent of the nominees.

Any member of the federation may be nominated as president or treasurer. Any member who is not also a member of one of the federated clubs, or resident within the area of a federated club, may be nominated as director-at-large. The area of a federated club is subject to interpretation by the board, but could be considered to include points within 15 miles of a club's focal city or town. Current federated clubs are the Fredericton Field Naturalists' Club, Moncton Naturalists' Club and Saint John Naturalists' Club.

CONSTITUTIONAL AMENDMENTS

For consideration at the annual meeting of September 8, proposed amendments to the constitution must be submitted to the secretary (K.H. Deichmann, Fundy National Park, Alma, N.B.) by July 28. Copies of the constitution may be obtained from the federation office, 277 Douglas Avenue, Saint John.

EEL RIVER BAR FIELD TRIP

Unfortunately June 2, the day of the federation's field trip at Eel River Bar, was a poor day for birdwatching. The very strong NW winds did not deter the 15 people who turned out for the event. They were rewarded by the sighting of an immature Little Gull, a European species very rare in the Maritimes. Alan Madden and Jean-Paul Lebel were trip leaders. For distribution to the participants, Father Lebel prepared a list of the 197 species of birds he has found in the Dalhousie-Eel River area. Other members who would like a copy may write to the federation.

BULLETIN BOARD

UPPER TOBIQUE, July 7-8

Weekend on the Upper Tobique with headquarters at Nictau. Highlights: Bald Peak, Tobique Forks, Miller canoe shop, Mount Carleton Provincial Park. See info on last page.

SUNBURY SHORES ARTS & NATURE CENTRE, ST. ANDREWS, July & August

Lectures, workshops, outings throughout July and August. Write Sunbury Shores, Box 100, St. Andrews for information.

BAY OF FUNDY CROSSING, August 5

Saint John to Digby, N.S. aboard the "Princess of Acadia" in search of whales, seabirds. Leaving Saint John 10 a.m., return docking about 4:30 p.m. CP passenger fare due.

C.N.F. CONFERENCE, WOLFVILLE, N.S., August 24-25

The Canadian Nature Federation meets in the Maritimes, an excellent opportunity for New Brunswickers to get to know other Canadian and Maritime naturalists and to take part in some interesting programs. Friday programs are on the natural history of the Maritimes, Saturday on man's impact on the sea. The C.N.F. annual meeting takes place Saturday. Pelagic boat trips are available on Aug. 23 and Aug. 26, an early morning bird walk Aug. 25 and a day trip in the Cape Blomidon area Aug. 26. Write C.N.F., 46 Elgin Street, Ottawa for information. Also of interest is the display of Canadian Nature Art that will be opened there. Later, in mid-November that exhibit will come to the New Brunswick Museum, Saint John.

N.B. FEDERATION ANNUAL MEETING, FREDERICTON, September 8-9

Saturday field trips and meetings based at the Odell Park Centre, Fredericton. Keynote speaker, Gerald McKeating, executive director of the Federation of Ontario Naturalists. Follow-up field trips further afield on Sunday. Send in coupon from the next page to indicate your interest in attending, and to be sure to receive finalized agenda as soon as it is available.

New Brunswick Naturalist is published bi-monthly by the New Brunswick Federation of Naturalists, 277 Douglas Avenue, Saint John, N.B. (Editorial Committee: David Christie, Peter Pearce, Mary Hajka).

It is sent to members of the federation and to library subscribers. Memberships: \$ 2 per individual or family, \$ 1 for students to age 18. Library subscriptions: \$ 2 per year. Fees should be sent to the treasurer, Eric Tull, Dépt. de Biologie, Université de Moncton, Moncton, N.B.

APOLOGIE

Nous faisons nos excuses aux naturalistes francophones du défaut de résumés en français. C'est à cause de la hâte d'éditer.

***** The Upper Tobique, July 7-8

Wilma and Bill Miller are our hosts for a weekend outing in the upper Tobique valley July 7-8. Camping space is available at their property in Nictau. Bring all your necessary food, camping gear. Insect repellent is extremely important since it is black fly season there. Commercial accommodation might be available in Riley Brook, 7 miles to the south. Check with your travel bureau.

Highlights of the weekend will be an excursion to Bald Peak which, though only 2086 feet high, is one of the province's most spectacular mountains, standing as it does quite isolated from other high ground. Other points of interest are the mineral licks often visited by deer, the possibility of going to the Mount Carleton Provincial Park area, the Forks of the Tobique, the Millers' canoe manufacturing shop, the lovely Tobique itself and all the animals and plants that inhabit the area.

Distances from major provincial centres are Edmundston, 92 miles (via routes 2, 108, 385); Campbellton, 170 (via 11, 17, 2, 108, 385) or 95 (via 11, 17 and the Fraser Companies road from St. Quentin to Nictau); Bathurst, 134 (via 8, 109, 385); Newcastle, 135 (via 8, 109, 385); Moncton, 210 (via 126, Barnaby River Rd., 110, 8, 109, 385); Saint John, 235 (via 7, 2, 109, 385); and Fredericton, 170 (via 2, 109, 385).

The planned schedule is:

Friday evening - arrivals, setting up camp at the Millers', Nictau.

Sat. 9 am - leave by car for Bald Peak

9:30 am - meet late-comers at the Tobique Bridge in Riley Brook. (Some persons from long distances may wish to stop Friday night in western Victoria County and rise early enough the next morning to reach Riley Brook by 9:30 and join the rest of the group.)

noon - lunch on Bald Peak (Necessary to carry your food & drink up trail).

4 pm - tour of canoe shop; possibly a short canoe trip.

7:30 pm on - relaxation; evening slide program

Sun. 6 am - early morning bird walk.

9 am. - choice of activities, one for morning only (perhaps Tobique Forks exploration) for those who wish to head for home early, and one for most of the day (perhaps Mount Carleton, depending on weather and road conditions). Or perhaps a short canoe trip.

ANNUAL MEETING, FREDERICTON, SEPT. 8-9

If interested in attending the annual meeting in Fredericton, please clip the coupon below and send to Dr. B.J. Schneider, RR # 4, Fredericton. There will probably be advance registration and a social get-together (with slide?) on Friday evening for early arrivals. Saturday morning and afternoon programs will involve the annual business meeting, short field trips in Odell Park and/or the U.N.B. Woodlot, films and talks (some aimed at helping the beginner's developing interest in nature). A banquet (moderate cost) is planned for the evening and the special speaker will be Gerald McKeating from the F.O.N., our sister group in Ontario. Sunday will feature field trips (a choice) further afield.

TO: Dr. B.J. Schneider, RR # 4, Fredericton.

___ Yes, I am interested in attending the annual meeting.

I would attend programs on Friday ___, Sat. ___, Sun. ___.

___ I would attend the Saturday evening banquet.

* Name: _____

* Address: _____

* _____

* Probable No. of persons: _____

* _____