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N. B. FEDERATION OF NATURALISTS / FÉDÉRATION DES NATURALISTES DU N.-B.
277 Douglas Avenue, Saint John, N. B., Canada E2K 1E5 Tel. 693-1196

The federation was formed in 1972 in order to

- develop an understanding interest in nature among amateur naturalists
- serve as a means of communication and cooperation among nature-oriented groups and individuals
- promote ecologically sound policies and programs of resource management
- foster public awareness of the relationships between man and nature.



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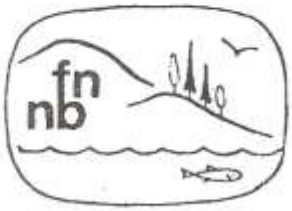


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Barry King, *editor*

Advice to Contributors
Preferred articles are those from one-half to two pages in length, having relevance to the natural history of New Brunswick. Authors of potentially longer articles are invited to contact the editors. Drawings and cover illustrations should be in black ink and in the same size and proportions they would occupy in the N.B. Naturalist. Observations for "Nature News" should be submitted promptly after March 15, May 31, August 15 and November 15, or more frequently.

Aux Naturalistes Francophones
Nous avons besoin d'articles en français, aussi de volontaires qui voudraient écrire des résumés en français des articles en anglais.

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Correspondence
Re the N.B. Naturalist to editor, N.B. Naturalist, 277 Douglas Ave., Saint John, N.B. E2K 1E5. Articles and reports are always welcome.

Re federation policies and programs to Mary Majka, Mary's Point, Albert Co., N.B.

# COMMON EDIBLE PLANTS IN NEW BRUNSWICK

Reprinted from N.B. Museum's Museum Sheet #14

The following is a list of some of the more common wild edible plants found throughout New Brunswick. It is by no means a complete list of the edible plants found throughout the province.

A few important points:

When gathering edible plants, please be sure you are gathering the right plant. Never eat a plant that you have not positively identified. There are many plants which are toxic and some resemble edible species.

Always check a book to confirm how to prepare an edible plant species. Some, for example, must be boiled in two or three waters or be collected at a particular time of year.

As plants get older they often become more fibrous and less palatable.

When gathering be careful not to gather uncommon or species which are not locally abundant. Plant populations can be destroyed by overzealous gathering.

Note: A few plants, such as Wintergreen, contain substances which can cause violent allergic reactions. Although uncommon, always keep this in mind and if in doubt, check a book.

COMMON EDIBLE WILD PLANTS
IN NEW BRUNSWICK

1) White water lily — Nymphaea odorata

- unrolling leaves of unopened flowers boiled as greens
- seeds can be ground into flour
- tubers prepared like potato

2) Arrowhead — Sagittaria spp.

- tubers prepared like potato

3) Labrador-tea — Ledum groenlandicum

- leaves steeped for tea

4) Bunchberry — Cornus canadensis

- berries are edible

5) Shepherd's purse — Capsella bursa-pastoris

- young leaves used in salads or prepared like vegetable
- seed pods dried for a pepper-like seasoning

6) Horseradish — Armoracea lapathifolia

- young leaves added to salads
- grated roots mixed with vinegar or sour cream

7) Chickweeds — Stellaria spp.

- leaves and stems added to salads
- boiled and served as a green

8) Common wood-sorrel — Oxalis montana

- fresh leaves excellent in salads and have a characteristic sour taste

9) Wild strawberries — Fragaria spp.

- fresh or dried leaves make a nice tea.

Note: Do not use leaves which have wilted as these contain a toxin. Only use absolutely fresh or very dry leaves.

10) Caraway — Carum carvi

- young leaves used in salads or as a boiled green
- first year roots can be prepared like parsnips
- seeds (fresh or dried) used as a seasoning.

Note: The foliage of this plant can be easily confused with poison hemlock and fool's parsley, which are poisonous.

11) Queen Anne's Lace — Daucus carota

- first year roots prepared like garden carrots

Note: Do not confuse with Poison Hemlock.

12) Plaintains — Plantago spp.

- young leaves added to salads
- leaves boiled as vegetables
- goose tongue greens can be prepared as a pickle

13) Japanese knotweed — Polygonum cuspidatum

- young shoots steamed and boiled
- older shoots made into jams

14) Wild mint — Mentha arvensis

- leaves (fresh or dried) steeped for tea
- used as seasoning

15) Clovers — Trifolium spp.

- the whole plant is edible
- clover honey can be made from blossoms

16) White sweet clover — Melilotus alba

- young leaves boiled or added to salads
- seeds used to flavor soups
- dried leaves give vanillalike flavoring

17) Ox-eye daisy — Chrysanthemum leucanthemum

- young leaves added to salads
- blossoms used to make wine

18) Wild chamomile — Metricaria chamomilla

- dried flowers make a delicate tea

19) Chicory — Cichorium intybus

- leaves edible
- roots roasted make a coffee substitute

20) Yellow pond lilies — Nuphar spp.

- rootstalks prepared like potatoes
- seeds fried like popcorn
- winnowed seed kernels made into flour

21) Winter Cress — Barbarea vulgaris

- used in salads and as a cooked green

22) Wild mustards — Brassica spp.

- young leaves used in salads or as a cooked green
- ripe seeds used as seasoning
- unopened flowers boiled as vegetable

23) Comfrey — Symphytum officinale

- young leaves steamed or boiled as green
- dried leaves steeped for pleasant tea

24) Silverweed — Potentilla anserina

- root roasted or boiled as vegetable

25) Evening primrose — Oenothera biennis

- first year taproots boiled in two or three changes of water

- new leaves used as peppery addition to salads or boiled in two or three changes of water

26) Pineapple-weed — Matricaria matricarioides

- fresh or dried flowers make an excellent tea

27) Common mullein — Verbascum thapsus

- dried leaves steeped for tea

28) Northern Fly-honeysuckle — Lonicera villosa

- fruit eaten fresh or cooked

29) Clintonia — Clintonia borealis

- young leaves added to salads or cooked as a green

30) Indian cucumber — Medeola virginiana

- tuber excellent for pickles or salads

Note: This plant should only be gathered when found in abundance

31) Coltsfoot — Tussilago farfara

- fresh leaves boiled to make cough drops
- dried leaves steeped for tea
- burned leaves provide a salt-like residue

32) Sweet goldenrod — Solidago adora

- fresh or dried leaves and flowers brewed into a tea

33) Common dandelion — Taraxacum officinale

- young leaves gathered and cooked as green or used in salads
- young flowerbuds boiled and served with butter or pickled

Common dandelion (cont'd.)

- flowers used to make fritters
- flowers used to make wine
- roots roasted, ground and used for a coffee substitute

34) Day lily — Hemerocallis fulva

- early shoots used in salads or boiled green
- young unopened flowerbuds are excellent steamed and served with butter
- tubers found early in the year, added to salads or boiled as a vegetable
- dried flowers used to flavour stews

35) Fireweed — Epilobium angustifolium

- young shoots and leaves cooked as vegetable
- mature leaves dried and used for teas

36) Sea Rocket — Cakile Edentula

- leaves and young seed pods added to salads
- plants boiled as vegetable

37) Cranberries — Vaccinium spp.

- fruit edible

38) Partridgeberry — Mitchella repens

- berries edible

39) Wild Roses — Rosa spp.

- rose hips used in jams and teas
- petals (fresh or dried) used in teas

40) Live Forever — Sedum purpureum

- young leaves used for salad or boiled greens
- tubers pickled or boiled as vegetable

41) Sheep sorrel — Rumex acetosella

- cooked green
- ice tea
- added to salads

42) Violets — Viola spp.

- young leaves boiled as a green or eaten raw in salads
- dried leaves used in tea
- flower can be eaten candied

43) Pickerelweed — Pontederia cordata

- young leaves used in salads or cooked as a green
- the fruit can be eaten raw, dried and added to granola or roasted and ground into flour

44) Glasswort (Sandfire) — Salicornia spp.

- eaten raw in salads
- stems can be pickled

45) Nettles — Urtica spp.

- young shoots and leaves can be used as a cooked green, an additive to soups or to make a refreshing tea

46) Lamb's quarters (Pigweed) Chenopodium album

- tender leaves and tips used as cooked green
- the seeds can be boiled to make a breakfast gruel or ground into flour

47) Cattails Typha spp.

- young shoots and stalks cooked as a green
- immature flower spikes cooked and eaten like corn on the cob
- pollen used to make flour
- starchy core of rootstalks eaten and cooked as vegetable

48) Ostrich fern Pteretis pensylvanica

- young uncurling fronds cooked as a vegetable

**Plants causing allergic reactions or which should be eaten in small quantities.**

1) Wintergreen (Teaberry) — *Gaultheria procumbens*

- fruit edible
- leaves used for tea

2) Yarrow — *Achillea millefolium*

- dried leaves steeped for tea

3) Curled Dock — *Rumex crispus*

- young leaves added to salads or boiled in two or three changes of water
  high tannic acid content

4) Beach Pea — *Lathyrus japonicus*

- cooked vegetable (peas)

5) Burdocks — *Arctium spp.*

- young leaves added to salads or boiled in several changes of water

Trees and shrubs of which parts are edible:

| | |
|---|---|
| Eastern Hemlock | Tsuga canadensis |
| Balsam Fir | Abies balsamea |
| Tamarack | Larix laricina |
| Pines | Pinus spp. |
| Spruces | Picea spp. |
| Elderberry | Sambucus canadensis |
| Maples | Acer spp. |
| Wild Raisins | Viburnum spp. |
| Highbush Cranberry | Viburnum trilobum |
| Mountain Ashes | Pyrus spp. |
| Basswood | Talia americana |
| Birches | Betula spp. |
| Hazelnuts | Corylus spp. |
| American Beech | Fagus grandifolia |
| Chestnut | Castanea dentata |
| Oaks | Quercus spp. |
| Bayberry | Myrica spp. |
| Sweet Gale | Myrica gale |
| Sweetfern | Comptonia peregrina |
| Gooseberries | Ribes spp. |
| Hawthorns | Crataegus spp. |
| Wild Cherries | Prunus spp. |
| Saskatoon Berry | Amelanchier spp. |

Poisonous Plants to watch for

| | |
|---|---|
| Wild Lupine | Lupinus perennis |
| Nightshade | Solanum spp. |
| Blue Flag Iris | Iris spp. |
| Dogbanes | Apocynum spp. |
| Common buttercup | Ranunculus acris |
| Water-Hemlock | Cicuta Maculata |
| Poison Hemlock | Conium maculatum |

Happy gathering!

Barry King

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From The Editor:

Correction : In issue 10 (4) January 1981 , page 94 the news release attributed to the Canadian Wildlife Service was actually from the Canadian Nature Federation. Our apologies.

## GEORGE STIRRETT HONOURED

Mary Majka

Recently, Dr. George Stirrett of Grand Falls was honoured by Heritage Canada for his contribution to the protection and interpretation of Canada's natural heritage. Governor-General Ed Shreyer presented the award in Ottawa on Heritage Day, 16th February 1981.

We are very proud to have such a special person in our midst. To those who are interested in plants and concerned about environmental issues, conservation and national parks, Dr. Stirrett has been a great inspiration and a guiding light. He is a familiar figure and a friend to readers of The Cataract Weekly in which his column on nature subjects is not only informative but often develops concern for places and living things in need of protection.

It was his particular interest in a small plant that led to "a first" in Canada, the unprecedented official designation of an endangered plant species, the Saint John River Wood-Betony, or Furbish's Lousewort, Pedicularis furbishiae. New Brunswick followed suit. Growing only on or near the banks of the Saint John River in New Brunswick and Maine, the wood-betony was discovered in 1880. It grows nowhere else in the world. Through Dr. Stirrett's efforts, a New Brunswick ecological reserve is now being considered, and he hopes that an international reserve could be established on both sides of the border since the plant continues to grow beyond the Canadian border into Maine. The U.S. Government already declared the species endangered in 1978. It is the plant that stopped the Dickey-Lincoln Dam project.

George Stirrett was born in Ontario and attended the Ontario Agricultural College. He did post-graduate work in the United States where he received a Ph.D. in biology. For 22 years he was head of the Dominion Entomological Station at Chatham, Ontario. Subsequently, working for the Canadian Wildlife Service as chief biologist in Ontario, he was involved in extensive studies of geese, especially Blue Geese in the James Bay area, which resulted in many scientific papers. An important phase of his life began when, while still working for the Canadian Wildlife Service, he developed the concept for naturalist's programs in Canada's national parks. Today it is difficult to imagine a national park without an interpretive program but in those days it took much persistence for Dr. Stirrett to have his proposal accepted. He became the first Chief Park Naturalist and for six years guided its development.

Although well acquainted with other parts of Canada, to the benefit of our province, on his retirement Dr. Stirrett decided to settle in Grand Falls and devote much of his time to environmental issues. Today his life is, as ever, filled with productive endeavours, plans and projects, all concentrating on saving our precious heritage. One of his current projects is to achieve park protection for Grand Falls gorge.

An honorary member of the Federation, Dr. Stirrett is our staunch friend and supporter. We congratulate him on his recent award, but most of all we thank him for being a New Brunswicker.

This is your newsletter. Anyone having articles, sightings or other contributions, send them to:

Barry King, Editor
New Brunswick Museum
277 Douglas Avenue
Saint John, N. B.
E2K 1E5

# nature news.

NATURE NEWS

David Christie

The Christmas Bird Counts (CBCs) provided a good picture of early winter bird populations but later there were some changes in response to weather patterns and the declining availability of food, as well as observation of a few species missed at Christmas.

Winter packed most of its punch into the first two months, but temperatures moderated in February and even became rather spring-like in the last two weeks of the month when deep snow cover in southern N.B. declined considerably and a few birds, mammals and insects showed signs of spring activity.

In general, the variety and quantity of birds visiting feeders was especially great in December and January, but attendance declined somewhat in southern N.B. when milder weather began. Surprisingly, several people in the Saint John area reported a big drop in the number of birds at their feeders following the snowstorm of January 13, although sometimes other feeders in their neighbourhood remained well attended. To the contrary, in my rural area, the largest numbers and variety appeared while the snow was deepest in the last half of January. Apparently birds reacted differently in urban-suburban areas vs. rural areas, in areas with many feeders vs. areas with few. Did feeders farthest from heavy cover or those with marginal offerings experience the decline? If more details were available, intelligent speculation might be possible, which prompts me to mention an idea I've had in mind for a few years.

I think a feeder survey would be an interesting and worthwhile project. It would be an opportunity for federation members and others to report the birds at their feeders for a specific purpose, other than just the CBC, and over a number of years it should reveal behavior and distribution patterns that would be of interest to all participants. I'd be willing to help get it started and the museum and/or federation could print and distribute report forms. Anyone interested in coordinating the project drop me a line.

There was not indication that the Band-tailed Pigeon might be an escape and local fanciers were not even familiar with the species. However, a Ringed Turtle Dove, a bird commonly kept in captivity, that spent the winter at Sussex (Mrs. E.S. Hutchinson), presumably escaped from a dovecote somewhere. Feral populations of those birds have become established in parts of California and Florida. Sussex is the only location from which word has come on the survival of Mourning Doves this winter. At least 18 were still present late in March (Harriet Folkins). Four of them were at St. Martins in late December (Ted Sears) and record numbers were seen on CBCs along the Fundy Coast.

A Barn Own with an injured wing was found dead at Maugerville, December 22 (Mrs. J. Craft) and forwarded to the museum by John Baird. It is the third provincial specimen of a species very rarely reported in New Brunswick. Besides the areas with Snowy Owls on the CBC there were observations of single Snowies at Havelock Dec. 23 (John Corey), Newcastle Feb. 1 (Rick Larmond) and Prince William, York Co., Mar. 1 (Reg Tweeddale, Nashwaaksis on Feb. 1 (M.B. Moore). During the period of heavy snow cover Saw-whet Owls seemed to be having problems finding sufficient food. There were late January reports of Saw-whets hunting during the day at Mary's Point (Mary Majka), Caledonia Mountain (DC) and Saint John (Florence Christie) and one was found dead at Fundy Park Jan. 15 (Barry Spencer).

Hawks were reported frequently throughout the winter. Big numbers at Jemseg - 15 Roughlegs and 13 Redtails Dec. 14 (Peter deMarsh) -- declined late in December and by Feb. 14, when the fields were bare, Northern Ravens were catching mice but no hawks were to be seen (DC et al). A Northern Harrier (Marsh Hawk) at Willow Grove, Saint John County, Jan. 30 (Sears) is the only acceptable report this winter. In addition to nine CBC areas reporting Bald Eagles, an adult was seen off and on all winter at Stoney Creek, Albert Co., (Al Fownes), an adult was seen off and on all winter at Stoney Creek, Albert Co., (Al Fownes), an adult at Mary's Point Dec. 18 (DC), one at St. Martins Jan. 26 (Sears) and one at Mt. Pleasant, Charlotte Co., Jan. 22 (David Baird).

A dark, immature Peregrine Falcon, noted on the Sackville CBC remained about the Tantramar Marshes until at least late January (Al Smith & Stu Tingley). Perhaps it was the same bird that visited Mary's Point Feb. 28 (Mike Majka). A number of Gyrfalcons were seen: a gray bird heading SW at Mary's Point Jan. 14 (DC & Mary Majka), a similar one at Saint John Jan. 28 & Feb. 9 (Jim Wilson & Hugh Cunningham), a white bird at Saint John West Feb. 9 (Johnston) and one (dark?) at Upper Sackville Mar. 10 (Tingley).

In addition to the lone CBC record at Grand Manan, a Great Blue Heron was at Mary's Point Dec. 13 (DC) and, surprisingly, three mid winter birds, one at Waterside Jan. 27 (Karen Townsend) and two (returning?) inland at Martinon, near Saint John, Feb. 19 (Kenneth Ellick).

The stress of cold and the difficulty of finding food in deep snow reduced the numbers of several of the less hardy birds as winter progressed. The Carolina Wren that was coming daily to Mrs. Claude Bursill's feeder at Fredericton and apparently sheltering in a garden shed when not at the feeder did not last long into January (fide Peter Pearce). Two of the Pine Warblers at Moncton were also spending at least some time indoors, in Francis Richard's open garage, and they were still doing quite well early in February (fide Brian Dalzell). However, none of the Northern Orioles reported survived past the middle of December. Early in the month individuals were at feeders at Westfield (Kit Graham), Grand Bay (fide Cecil Johnston), Grand Manan (Dalzell), and Gondola Point (Howard & Kim Mann). Because of its gray back and whitish belly the Manns thought the last bird might be a "Bullock's Oriole" but from the photos they took I believe it is intermediate between the western subspecies and the eastern "Baltimore Oriole".

Some finches moved out after they exhausted the supply of wild foods. Before leaving though, a considerable number of Pine Grosbeaks flooded into Saint John during January and, as they fed on the seeds of ornamental trees and shrubs, would often allow approach within arm's reach (Bert Burgoyne, Gayl Hipperson et al.) In addition to the CBC reports, many small flocks of this species were seen in the Grand Falls area December 7-10 (George Stirrett et al).

Probably a lot of Common Redpolls left the province but others just settled in at bird feeders for the duration of winter. In the Saint John area they began appearing at feeders in the second week of January (Maisie Melvin, Loraine Shonaman et al). At Moncton some people had flocks of over 100 (Roy & Ellen Wilke, Dalzell et al). In conjunction with the good flight of Common Redpolls a few of the very rare Hoary Redpoll were reported. Actually, two of them were all by themselves, one at Millidgeville in northern Saint John Dec. 13 (Allen Sellars) and another at New Maryland, York County Jan. 1 (Mrs. Adam Wilson, fide Pearce). The remaining birds were spotted in redpoll flocks; one at Moncton several times in early February (Dalzell) and a female at Mary's Point, Albert Co., Mar. 17-19 (DC & Majkas).

Highlight of the winter was a Band-tailed Pigeon, a species not previously reported in New Brunswick although there have been single records in Nova Scotia and Maine. Given the variability of local Rock Dove plumages and the unexpectability of Band-tailed Pigeon, it may have passed unnoticed for weeks in Fredericton, for a western stray would ordinarily be expected to turn up during fall, not mid winter. On Feb. 9 Marven Palmer was intrigued by the strange dove he saw at his feeder and decided it must be a Band-tailed Pigeon, a fact soon confirmed by Peter Pearce, Dan Keppie and others while the bird faithfully resided at or near the neighbouring Palmer and Gregg feeders through Feb. 15. Then, for over a month its whereabouts were unknown until Mar. 17 when it returned during the snowstorm and again began to visit the Winslow Street feeders, although less constantly than before.

Late migrant Canada Geese included a flock of 300 to 400 passing W over Moncton Dec. 17 (Harry Doak) and about 50 heading S over the bay from Saint John, Jan. 2 (Jean Klaussen). Presumed spring arrivals were 15 over Saint John West Feb. 14 (Johnston), 7 at Grassy Island near Oak Point Feb. 23 (Stan & Renie Gorham) and 100 over Musquash (Heinz Wassel) and a few at the Shepody Marshes (fide Mary Tingley) in the last week of February. Thirteen Brant were back at St. Andrews Mar. 7 (David Clark).

Barrow's Goldeneye is rarely reported in Albert County but a few females were seen this winter: one and three, respectively, in the Alma River Feb. 3 and 9 (DC, Mary Majka & Henrik Deichmann) and one at Albert Mar. 8 and 10 (DC).

The Common Flicker at Fredericton was seen again on January 26 (Marguerite McNair) and an immature Red-headed Woodpecker visited Mrs. Carl Beaman's feeder at Riverside-Albert during the first two weeks of December. Pileated Woodpeckers in areas where they were not reported on the CBCs were four at Nictau in late December (Wilma Miller), one all winter (two since Mar. 3) at Chamcook (Clark) and one at Rothesay Feb. 26 (Fred Long).

All but two (at Plaster Rock) of the numerous Red-winged Blackbirds reported on the CBCs were in the southern third of the province. Other more northern birds were singles at Grand Falls Dec. 22 (  ), Argosy, Victoria Co., December 27 (  ) and Bath for two weeks during January (Alice Lockhart). At St. Martins, a non-CBC area, there were 42 Brown-headed Cowbirds in late December (Sears).

One White-crowned Sparrow was seen on the Saint John CBC but a second bird was also present there, from before Christmas until at least Jan. 7 (David Smith & Hipperson). Another was at a Nashwaaksis feeder to Dec. 6 and from Jan. 6 through February (C.N. R. Brown). The only Swamp Sparrows reported this winter were two at Grand Manan Dec. 8 (Dalzell).

Because of the mild February weather a few songbirds began to migrate earlier than normal. The number of European Starlings increased noticeably in the Albert to Hopewell Cape area Feb. 18 and three days later 12 male Red-winged Blackbirds and 14 Brown-headed Cowbirds (mixed sexes) appeared at Albert (DC & Mary Majka) but apparently did not stay very long. Movement of Common Grackles was indicated by one at Brown's Flat Feb. 23 (Renie Gorham) and four at Saint John Mar. 3 (Hipperson). About 20, along with 40 Redwings, were at Alma Mar. 11 (DC). American Crows were probably on the move earlier than Feb. 27 when 16 were at Mary's Point where only two had been present all winter (DC). The earliest observation of American Robin migrants received so far was also at Mary's Point, where a flock of seven stopped briefly Mar. 13 and then flew off to the northeast (DC).

Several birds in abnormal plumage have been reported. Most of the albinistic birds are partial albinos with patches of white in their plumage, such as an American Robin at Saint John East Dec. 3 (Mr. Barkhouse) and a Northern Junco at Mary's Point in mid December (Majkas). Another junco at Mary's Point had pale brown upperparts and a white tail with a dark band at the tip, while one at Grand Bay and Martinon in December (Mrs. Galbraith, Miss Fowler & Mrs. Ward) was entirely white except for its dark eyes and bright yellow bill. A startling Pine Grosbeak, feathered in white except for its bright golden head and rump was at Hopewell Hill Jan. 1 (Mike Majka) white Jan. 19 at Nictau, Wilma Miller, had a male Evening Grosbeak with a normal yellow eyebrow on the left but a completely dark head on the right side. A pale buff (Brown Thasher) with unmarked underparts was a great puzzle until Stan Gorham identified it. It remained at Mrs. L. Lambert's feeder at Woodman's Point, near Westfield, from Nov. 24 till the middle of December.

Mammals, Insects & Flowers

The deep snow made life difficult for White-tailed Deer this winter. Fortunately its depth declined and crusts formed during February. The Chignecto Naturalist Club bulletin notes that Nova Scotia wildlife staff are expecting about 45% mortality among deer in that province.

The March 1981 issue of Audubon magazine contains an interesting article on Coyotes in Maine where many hunters are demanding that a bounty be placed on them because "they are killing off our deer". Biologists counter that most of the deer killed by Coyotes would not survive the winter anyway and that a good number of purported Coyote kills probably died of other causes and were just being fed on by the Coyotes. Here in New Brunswick, at Fundy Park Dec. 16, several ravens were feeding on two deer thought to have been killed by Coyotes (Deichmann & George Sinclair).

Mild midwinter weather brought some mammals out of their dens. In Kings County, Stan Gorham saw both Raccoon and Striped Skunk in mid February. A skunk out Feb. 18 at Harvey, Albert Co., should have stayed in bed or at least been more alert; it died on the road three nights later (Mary Majka). Much more unusual at that time was an Eastern Chipmunk seen by David Baird at Saint John Feb. 17.

Tony Thomas writes that "a few species (of moths) hibernate as adults and are probably the first insects to be active in spring. Normally they are not seen until late March, however, the warm weather in the third week of February brought these moths out of hibernation with three species of noctuids coming to my light trap in the Fredericton area." I noticed a few moths in February too, beginning with one flying in front of my car at Hopewell Cape the evening of the 17th.

Skunk Cabbage just beginning to bloom at Hammond River March 12 (Dick Filliter & DC), may have beat Coltsfoot as the first flower of spring this year. Most spathes were small and tightly closed but one I examined shed pollen from its ripe spadix when I touched it. In

New Brunswick, Skunk Cabbage has a very scattered distribution. The two best known colonies, both large, are on floodplains at the outlet of Lake Utopia and by Colton Brook at Hammond River.

Errata & Addenda

I hope that errata won't become a regular feature of "Nature News" but when an error of substance does occur I like to correct it. Please write if any of your reports are misquoted. In the last issue (p.92) I erroneously reported that Tom Page had seen three Cardinals in Rockwood Park, but actually it was three Otters, which I jotted down in the wrong place when I was making notes. On Page 89 the number of Marsh Hawks seen by Jim Wilson should be 6, not 5, and on pages 87-88 the Blue-winged Warbler and Blue Grosbeak were only seen at Kent Island, not banded. An even rarer bird at Kent Island last fall was a Worm-eating Warbler seen Sept. 20 and recently reported by Peter Cannell.

Tom French wrote again about his small mammal project at Mount Carleton Park. The skulls of the Bog Lemmings (p. 87) have now been closely examined and it turns out that four of the nine from the park were Northern Bog Lemmings and five were Southerns. The tenth, a Southern Bog Lemming, was actually taken at Moose Mountain, Carleton County.

# announcements.

NEW RELEASE FROM CANADIAN NATURE FEDERATION

The Canada-United States Environmental Council has called on both nations to take decisive steps to curb acid precipitation, including prompt agreement on an air-quality treaty designed to reduce sulphur and nitrogen oxide and toxic metal emissions to 1955 levels.

The council also has urged congressional extension and strengthening of the United States' Clean Air Act, which expires this year.

The actions of the binational nongovernmental body were taken Sunday at a meeting at the Shoreham Hotel in Washington, D.C. The four day meeting was attended by delegates from 35 environmental organizations in the two countries.

In its acid precipitation resolution, CUSEC said both nations should immediately institute requirements for the washing of all coal being burned in existing facilities and use of the newest anti-pollution devices before resorting to older equipment. Government agencies also were called on to grant unrestricted public access to all emission data.

The council pointed out that deadly acid precipitation is threatening thousands of lakes in both nations.

The delegates also called for steps to curb carbon dioxide emissions and long-range transport of other pollutants and steps to maintain air quality in national parks, wilderness and other pristine areas. Other anti-pollution resolutions called for stepped-up actions against toxic wastes in the Great Lakes and a ban on ocean nuclear-waste dumping.

CARDINAL BREEDS IN NEW BRUNSWICK

Gayl Hipperson

They've done it! The Cardinals that we have been seeing in New Brunswick with increasing regularity have nested. More correctly, someone has finally caught them at it. It is very likely that a few have nested in the province before this, but until the pair that had been at Reg Smith's feeder in West Saint John since January 1980 arrived one day the following August with two young in tow, no one knew for sure.

Mrs. Smith says the young birds were as big as their parents and still being fed when the adults brought them right up to the house. The Smiths had the thrill of watching the "kids", a male and a female, gradually assume their adult plumage. They were particularly fascinated as the male turned red and started to grow its scarlet crest.

The Smiths had suspected something was up even before the youngsters were presented at the feeder. The adult birds had been carrying nesting material into a thick cedar hedge near the garden plot, and would raise a ruckus whenever the Smiths intruded to tend the vegetables. They were never able to find the nest in the dense shrubbery, but were gratified to have their suspicions confirmed when the family made its debut.

By fall, the two young had flown further afield, but both adults stayed in the neighbourhood, visiting the feeder throughout the winter until mid-March when, sadly, the female disappeared.

In the past half century, the Cardinal has been pushing northward from its breeding range in Connecticut, extreme southern Ontario and southern Dakota south to southern Florida and northern Mexico. It first nested in Canada at Point Pelee, the southernmost tip of Ontario, in 1901. In 1974 the birds bred in Yarmouth, Nova Scotia, and now, in 1980, New Brunswick has become an official nursery.

Reports of Cardinals in New Brunswick go back to 1900, when one was seen at Scotch Lake, York County. Although there are scattered records for the ensuing years, W.A. Squires writes in The Birds of New Brunswick that in 1952 there was a decided movement of Cardinals into the northeast, with a few reaching New Brunswick through Maine. It was not until 1973, however, that this striking bird began invading the province in earnest, becoming established as a rare but regular winter resident. By 1976 they had appeared three years in a row on

the Christmas Bird Count. In summarizing the 1979-80 count, David Christie wrote in the N.B. Naturalist "there was apparently an influx of Cardinals last fall as ten were reported in six areas, including Plaster Rock and Chatham-Newcastle in the north .... They were the legacy of a big flight .... which probably followed a very successful nesting season in the northeastern parts of the Cardinals' breeding range."

A few Cardinal reports in New Brunswick have been of spring and summer birds. One observer in Saint John was drawn to his backyard last July by the clear, commanding "hurry, hurry, hurry" call of a male Cardinal. More often, however, the birds are seen at feeding stations in the winter. Without food supplied at feeders they could not survive our northern chill. Because of their winter reliance on feeders, and their habitat preference for thickets, bushy areas around houses, and hedges bordering woods or fields, Cardinals tend to settle in the suburbs or other areas where they are likely to be seen.

The crested birds construct a loosely woven nest of twigs, bark, plant stems, rootlets and grasses five to eight feet up in a tangle of tall shrubbery or small trees. Cardinals usually disappear from feeders in the spring, but chances are they have not gone far. Probably just back into thicker bush and probably, we can now safely say, to nest.

CHRISTMAS BIRD COUNT CARDINAL REPORTS

1967-68 - 1, Fredericton

1968-69 - 1, Fredericton (count period)

1969-70 - 0

1970-71 - 0

1971-72 - 0

1972-73 - 0

1973-74 - 3, Saint John
1, Sackville

1974-75 - 1, Saint John

1975-76 - 1, Eastport Campobello
2, Saint John
3, Sussex

1976-77 - 1, St. Andrews
1, Pennfield
1, Saint John

1977-78 - 1, Saint John

1978-79 - 1, St. Andrews
1, Newcastle-Chatham
1, Fredericton (count period)

1979-80 - 1, Pennfield (count period)
3, Saint John
1, Chatham-Newcastle
1, Hammond River-Hampton
2, Fredericton
1, Plaster Rock

1980-81 - 2, Grand Manan
1, St. Andrews (count period)
6, Saint John
1, Jemseg (count period)
1, Fredericton
1, Plaster Rock

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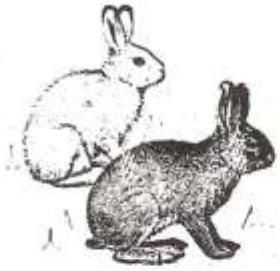

Barry King

One of our most common forest animals is the Snowshoe Hare or "bush rabbit" as it is called throughout Canada. This shy and secretive animal often goes undetected in summer but its distinctive tracks become conspicuous with the first snow fall.

The Snowshoe Hare grows long hairs on his large hind feet as winter approaches. The shortening of day length is the signal. These large well-formed hind feet act as snowshoes allowing the hare to move easily over snow. The gray-brown color of its summer coat changes to an almost pure white in winter. This change is also caused by the changing day length.

The hare's diet consists of a variety of herbaceous plants during summer including vetch, strawberry, raspberry and fireweed. In winter small twigs, buds and bark of maple, birch, rose, hazel, willow, jack pine, white pine, larch, and cedar make up its diet.

The New Brunswick woods have no rabbits. The "Snowshoe Hare" is the "rabbit" of our woods. Hares are born fully-furred, open eyed and capable of hopping almost immediately. Young rabbits are born naked and blind. The adult weight of a Snowshoe Hare is 3-4 lbs. There are usually four litters a year with anywhere from 1-9 young per litter.

Snowshoe Hares are susceptable to a great many diseases - viral, bacterial and parasitic. They also have many predators including the lynx, fox, coyote, mink, owls and goshawks. The survival rate of one year old hares varies from 3-40% and adults 12-50%. The weather and availability of food also takes their toll on hare numbers.

Hares rest quietly during the day and are active between sundown and dawn. Keep a look out for them.