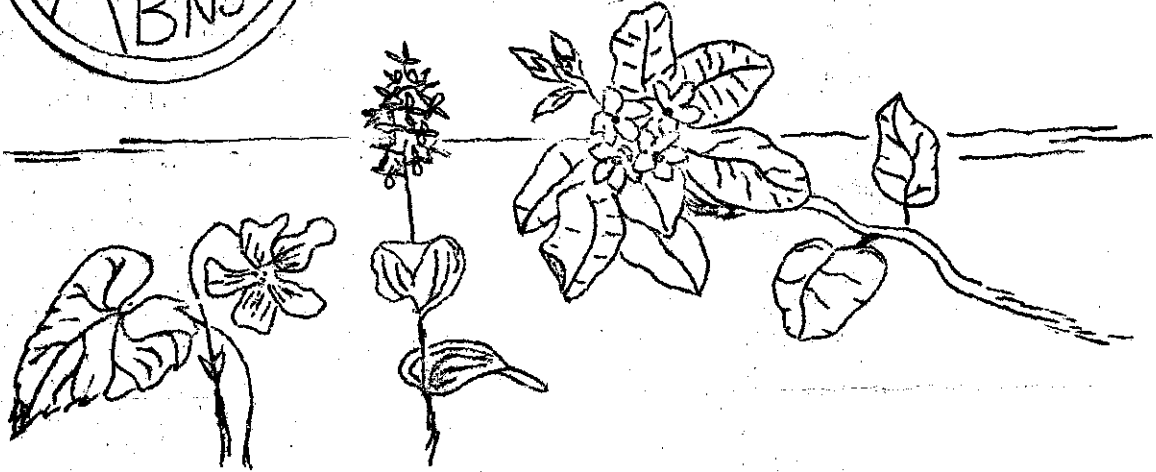
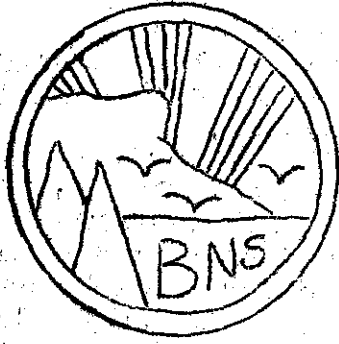


# BLOMIDON

## NATURALISTS'

### SOCIETY

#### NEWSLETTER



Vol. 9, No 1

March, 1982

The BNS Newsletter is published on the equinoxes and solstices.

Editors: Jean Timpa and Lynn Coldwell

Art Production: Lynn Coldwell

Typist: Lynn Coldwell

The primary objective of the Society shall be to encourage and develop in its members an understanding and appreciation of nature. For the purposes of the Society, the word "nature" will be interpreted broadly and shall include the rocks, plants, animals, waters, air and stars.

From the BNS Constitution

#### - SPRING PROGRAM -

All meetings will be held in Room 244 of the Beveridge Arts Centre, Acadia University, beginning at 8 p.m.

1. Monday, April 19: "Lichens and Their Use in Textile Dyeing" - Karen Polish Casselman, writer, broadcaster, and weaver, from Cheverie, Hants County, will talk on her experience using lichens in her weaving business. She has studied at the N.S. College of Art and Design, and recently studied lichens in Britain. She will present slides on the topic, and hopefully will have copies of her book, "Craft of the Dyer" on hand. The book includes discussion of 150 indigenous plants (northeastern North America).
2. Monday, May 17: "The Beautiful Mushrooms Hiding in Our Forests" - Ken Harrison, with marvelous slides to kick off another great season!
3. Monday, June 21: "Spring and Summer Wildflowers" - Jim Welford, will present a colourful assortment in a slide format.

- FIELD TRIPS -

1. Monday, April 26: Owl Trip - Bernie Forsythe will attempt to call up several species of owls in the evening. Meeting time and place will be discussed at the April meeting; also, you may call Jean Timpa at 542-5678 for further information.
2. April ??: Amphibian Outing - Jim Wolford, will lead you enthusiasts of spring sounds and sights, meaning peepers and other frogs and salamanders. Wear warm clothing, rubber boots, and bring a flashlight. This activity depends on the occurrence of warm rains so the date is undecided. This trip will be discussed at the April meeting; or call Jean Timpa at 542-5678 for the update.
3. Saturday, May 8: Lichen Field Trip - Karen Leigh Casselman, has extended an invitation to all to travel to her home in Cheverie where she will lead us on a tour of the area. We will not only be looking at lichens, but also birds and other aspects natural history. This is an excellent opportunity to share knowledge of different subjects. Everyone please bring their lunch; Karen will provide the beverages and dessert. She will fill us in at the April meeting, including directions to her home.
4. Saturday, June 5: Cape Split Trip - Sherman Williams will lead the group on a late spring trek along this most beautiful trail. Time and place of meeting to be determined later. Call Jean Timpa for further information as the time nears.

Other trips are tentative, such as the Search for Yellow Lady Slippers, a Geology Trip, and a Shorebird Trip in early August (for peak numbers) and in late August for diversity of shorebird species. Jim Wolford will lead these popular and memorable field trips.



ACKNOWLEDGEMENTS

Thank you go out to the guest speakers: Roy Bishop, Peter Hope, and Gordon Wilson. We also thank those who shared in the leadership of field trips or tours: Jim Wolford, the Thextons, Merritt Gibson, and Reg and Ruth Newell. All events were thoroughly enjoyed.

To those who have contributed in one way or another to the March BNS Newsletter, grateful thank yous, also!

THE BNS DEADLINE - NEWSLETTER

Your contributions in the way of observations, new places to explore, interest in areas of natural history not covered well in the Newsletter so far, or ideas for guest speakers are most welcome!! Deadline for contributions is June 21, 1982.

AMPHIBIANSSalamanders:

- red-spotted newt (Notophthalmus viridescens)
- adults and larvae aquatic, common in weedy ponds; breeding in May
  - juveniles or subadults, called "red efts", are terrestrial
- yellow-spotted salamander (Ambystoma maculatum)
- common, breeding in ponds and ditches in April, at night
  - adults terrestrial and infrequently seen in other months
  - larvae often must overwinter
- )blue-spotted and Tremblay's salamanders (Ambystoma laterale and A. tremblayi)
- same habits as yellow-spotted salamander
  - not yet recorded for Kings County
  - A. laterale known to occur in Windsor area
- red-backed salamander (Plethodon cinereus)
- common, usually in letter or under logs, etc. in wooded areas
  - completely terrestrial (eggs laid on land, no aquatic larvae)
- four-toed salamander (Hemidactylium scutatum)
- not yet recorded for Kings County
  - adults terrestrial in moist woods, usually associated with wet mosses, especially Sphagnum
  - eggs and larvae aquatic

Frogs and Toads:

- American toad (Bufo americanus)
- spring peeper (Hyla crucifer)
- wood frog (Rana sylvatica)
- all three above species very common
  - all terrestrial for most of year
  - toads everywhere, wood frog on forest floor, peepers apparently mostly up in alders and other trees
  - all breeding in ponds and ditches in April and May, often in more temporary waters than those used by salamanders and other frogs
  - larvae aquatic, metamorphosis in mid- or late summer

HERPTILES cont'd

leopard frog (Rana pipiens)

- adults common in ponds and grassy meadows near water
- breeding in April/May
- metamorphosis of larvae in late summer of first year

pickerel frog (Rana palustris)

- adults common in or near lakes with rocky shores
- breeding in late spring
- metamorphosis in second summer (tadpoles overwinter)

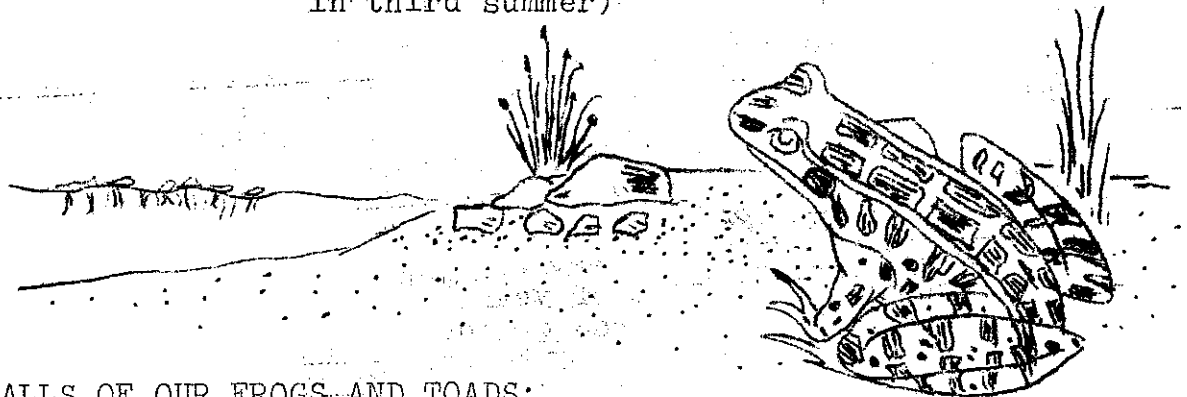
green frog (Rana clamitans)

- common in permanent ponds and bogs and lakes
- breeding in summer months
- tadpoles must overwinter, metamorphosis in second summer

mink frog (Rana septentrionalis)

bull frog (Rana catesbeiana)

- these two species restricted to large ponds or lakes or slow rivers, usually associated with water lilies
- breeding in mid-summer
- tadpoles must overwinter (twice for those of bullfrog, in which metamorphosis occurs in third summer)



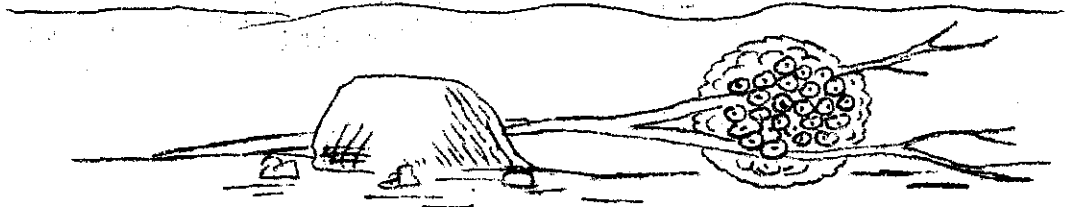
CALLS OF OUR FROGS AND TOADS:

- American toad - long high trill on one pitch  
spring peeper - short high-pitched whistles, frequently slurred or given in a rising comb-like series  
wood frog - hoarse chuckling notes (a bit suggestive of barnyard pigs or ducks)  
leopard frog - mixture of drawn out rattling snores plus chuckles and grunts (not much carrying power)  
pickerel frog - low-pitched rattling snore (with very poor carrying power, since often delivered while completely underwater)  
green frog - single or repeated "clunk" notes, explosive (note Latin name) and like a loose banjo string  
mink frog - loud series of "clackety-clackety-clack" notes  
bull frog - well-known drawn out bass notes, like "jug-o'-rum"

HERPETILES cont'd

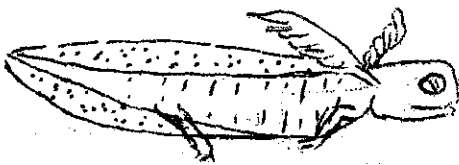
EGGS OF OUR AMPHIBIANS:

- whitish; on land (inside rotten logs): red-backed salamander-
- laid singly and therefore seldom seen: red-spotted newt, spring peeper
- laid in long strings: American toad
- laid in small to large clumps of various shapes:
  - egg-batches oval to rectangular to spherical, outer membranes usually clear but inner membrane milky-opaque: yellow-spotted salamander (often many batches together; may become green with algae during development)
  - egg-batches usually spherical and approximately fist-sized: wood frog (often many batches together), leopard frog, pickerel frog
  - egg-batches form flat floating rafts on surface of water: green frog, bullfrog, mink frog(?)



TADPOLES (LARVAE) OF OUR AMPHIBIANS

salamander larvae: -recognizably different from frog or toad larvae by general body form, external gills, and two pairs of equal-sized legs (and predacious)



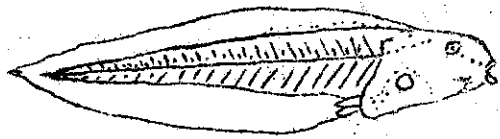
yellow-spotted salamander and red-spotted newt

frog or toad tadpoles: -distinct "head" and "tail" divisions; no externally visible gills; progressive growth-stages from no legs to large hind legs and finally to two pairs of legs just before metamorphosis  
-herbivorous

- tadpoles of toads and spring peepers blackish in colour and small-sized (less than 40cm or 1½")
- tadpoles of true frogs (*Rana* spp.) are brownish in colour and relatively large (commonly up to 75cm or 3", but up to 150cm or 6" for those of bullfrog)

## HERPTILES cont'd

-tadpoles of true frogs...



-identification to group depends upon detailed microscopic examination of mouth structure, especially the arrangement of papillae around the edges of the oral disc and the rows of horny labial teeth above and below the beak

spring peeper:-oral disc round(not indented on sides)  
-papillae interrupted only at top of disc  
-only two rows of labial teeth below beak  
-anus on right side from tail fin

toads:-oral disc indented on sides  
-papillae interrupted both above and below beak  
-three or more rows of labial teeth below beak  
-anus median in position

true frogs(*Rana* sp.):

-oral disc indented on sides  
-papillae interrupted only above beak  
-three or more rows of labial teeth below beak  
-anus on right side from tail fin

## REPTILES

### Freshwater Turtles:

painter turtle (*Chrysemys picta*)

-common and widespread in lakes, permanent ponds, and slow streams or rivers  
-most often seen when basking on logs, banks,  
-lays eggs on land in mid-summer

snapping turtle (*Chelydra serpentina*)

-very aquatic, emerging only to lay eggs  
-much less frequently seen than painter turtle and probably not common in Kings Co.

wood turtle (*Clemmys insculpta*)

-not common in Kings Co.  
-as name suggests, probably most of its life spent on land  
-usually lays eggs near water

HERPTILES cont'd

REPTILES

Sea Turtles:

leatherback turtle (Dermodochelys coriacea)

Atlantic Ridley (Lepidochelys olivacea)

- usually seen offshore in open sea, possibly some move inshore in late summer
- these two species recorded in or near Kings County, but other possibilities would include loggerhead, green, and hawksbill turtles (all of these known to wander northward with the Gulf Stream)
- leatherback is most frequently seen species (and is easy to recognize) in Maritime waters, feeds on jellyfish and associated crustaceans

Snakes\*\*:

common garter snake (Thamnophis sirtalis)

- common, and widespread in varied habitats: meadows, edges of bogs or marshes, deciduous woodlands, etc.
- delivers living young (does not lay eggs)

smooth green snake (Opheodrys vernalis)

- common, usually found in grassy meadows or clearings
- does lay eggs

red-bellied snake (Storeria occipitomaculata)

- common, usually found hidden under stones, logs, etc.
- bears live young

ring-necked snake (Diadophis punctatus)

- not common here, usually hidden under rocks or logs in damp woodlands
- lays eggs

Finally, just for completeness, two other reptiles occur in Nova Scotia but not in Kings County: Blanding's turtle and ribbon snake. This province has no lizards.

---

A P R I L

Robie Tufts  
Wolfville, NS

Bursting buds and melting snows,  
Piping frogs and boisterous crows.  
Brooks made glad by midday sun  
Run and hide when day is done.  
Willows purr at winds' caress  
Through their shimmering catkin dress.  
Winnowing call of meadow hen\*  
Now here - now there - o'er misty fen:  
White-throats' whistle - tremulous clear,  
Winter's retreating, Spring is here.

\*local name for Common Snipe

\*\*All N.S. snakes are  
non poisonous

FIELD TRIP REPORTS

Canning Field Trip - February 13, 1982

Jim Wolford  
Wolfville, N.S.

Mother Nature provided us with just enough fresh snow for this exercise. While Bill Thexton led a small caravan of 5 birdwatchers in cars, another gang met in Canning. There were 12 people equipped with cross-country skis and 4 others with snowshoes. Merritt Gibson took us to some woods NW of Canning at the foot of the North Mountain.

The snowshoers were soon left behind by the skiers, and we all just leisurely enjoyed ourselves for an hour or so. Not much was seen -- ravens soaring and interacting over the North Mountain, an occasional immature Bald Eagle, rare tracks of snowshoe hare and squirrel. The snowshoers found one place where a hawk or owl had landed in the snow (hunting?). And the snowshoe gang also had a highlight -- we broke through some thin ice-and-snow crust over a running stream and very nearly got wet feet and legs.

The entire gang (plus others) then had a post-excursion get-together at Acadia's biology building. There we were the beneficiaries of numerous generous people who donated heaping quantities of fish chowder and brownies and cookies and rolls, etc. Finally we had a short show of slides from several different people.

A few of the people came all the way from Halifax (the Halifax Field Naturalists). Perhaps we should consider more inter-club activities in the future. Special thanks to the Gibsons and to all of the many goody-providers!





Gaspereau Field Trip - January 23, 1982

Jim Wolford  
Wolfville, N.S.

Perhaps because many people forgot the date, only a committee of four (Timpa, Thexton, Austin-Smith, and I) was on hand for what is becoming an annual event -- a short trek over the Ridge to Cyril Coldwell's farm at Gaspereau to see the wintering Bald Eagles.

It was a beautifully sunny and crisp winter morning, but only about eight eagles were seen, about half of them being adults (a far cry from the 52 seen last year). Also seen was the usual mixed bag of large and small birds at Cyrils' various feeders: Ravens and crows, Red-tailed Hawk, Downy Woodpecker, juncos, Song Sparrow, Blue Jays, etc.

We also were shown Cyrils' current menagerie of captive birds: 9 Bald Eagles (their plumage changes are being watched and noted), 2 Red-tailed Hawks, 1 Rough-legged Hawk, 8 Great Horned Owls, 1 Barred Owl, and several Ravens.

Up to this date Cyril had seen up to 16 eagles per day. However, as a postscript, about a dozen people conducted Sunday morning surveys for eagles on Feb. 21 and Feb. 28. The weather was lousy for the first count, but on the latter date we saw a total of 36 Bald Eagles -- 13 were adults -- from Canning to White Rock to Gaspereau to Avonport. Of these 36, 16 were at Cyrils' farm.

Tour of the Acadia Biology Building - March 23, 1982

Lynn Coldwell  
Wolfville, N.S.

Eighteen people participated in this enlightening activity which covered most all of Patterson Hall. The first stop was the E.C. Smith Herbarium with over 100,000 collections. Ruth Newell demonstrated the uses of collecting equipment, how to use a plant press, and how plants are mounted. A number of specimens were out for viewing.

Jim Wolford then led the group through Sherman Bleakney's Lab where he had numerous living plants on display. His tarantula was then inspected by the group. Next on the tour was the Vertebrate Lab where a selection of bones were compared, passed around, and marvelled at.

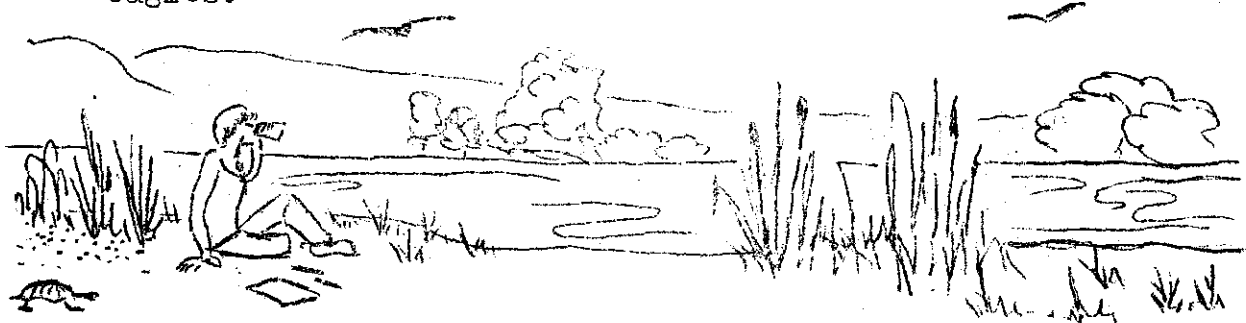
Onwards to the top floor and the Wildlife Labs, where Reg Newell took over as guide. We examined a new nest collection compiled by Bernard Forsythe, and the 80 year old Austin Rand Bird Collection which was donated to the University by Robie Tufts. Another bird collection was viewed at the opposite (south) end of the floor; it is the Downs Collection. In the Ornithology Lab we looked at an assortment of bird skins, including about 20 eagle specimens.

The evening closed with a slide presentation by Andreé Dubois, which illustrated the research projects in progress.

The projects include the following:

1. Marsh Hawk - Bob Simmons; Breeding Behaviour and ecology.
2. Arctic Tern - Reg Newell: on Machias Seal Island  
Work on Puffins planned
3. Petrel - Colin McKinnon: Bon Portage Island  
Breeding Success, Parental Behaviour
4. White Tailed Deer and Moose - Janis Brown: looking  
at the relationship with regard to  
the worm Paralimnstrongylus tenuis,  
otherwise known as P. tenuis
5. Woodland Jumping Mouse - Dr. Herman: feeding, social  
behaviour, and movements
6. Microtus/Peromyscus - Barb Jolly: island populations  
vs. mainland populations
7. Flounder - Brian Scully; intertidal area use in the  
Southern Bight and the Minas Basin
8. Least Sandpiper - Peter MacDonald: competition between  
these and the semipalmated sandpiper?
9. Black-bellied Plover - Andre  Dubois: feeding ecology
10. Water column and Organisms in the Annapolis River -  
Anna Redden
11. Cornwallis River - Gail Brown assisted by Peggy  
Crawford: mainly looking at the  
microorganisms

Other regular events include the bird banding with the use of mist nets on Erier Island and Bon Portage Island. Some slides also depicted the work being done on the Bald Eagle; that is, the plumage changes are being watched to use this method to determine age in eagles.

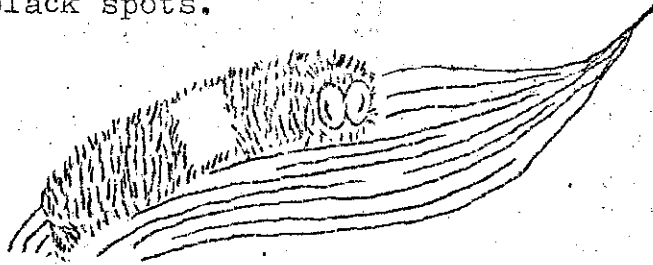


MAY

Robie Tufts  
Wolfville, N.S.

A lovely maiden called me day,  
I asked her name, she said, "'Tis May".  
Her flowing hair the wind had fanned;  
She carried violets in her hand.  
A heavenly song at twilight's hush  
Told me she'd brought a Hermit Thrush.  
My cherry tree now's covered in white;  
'Tis though it happened over night  
And whirring there, I saw and heard  
A Ruby-throated Hummingbird.  
The haze of green that graced the trees  
By now has grown to full-blown leaves,  
And turning 'round I heard her say  
"Good-bye my friend, I'm on my way;  
But you will find, when I am gone  
I've left a robin on your lawn".

"On March 14 a black-and-brown "woolly bear" caterpillar was found at Arnold by Bernard and Darlene Williams. The winter is spent in the caterpillar stage by these insects, which are especially conspicuous in late fall and early spring. After the return of warm weather they spin cocoons, from which they issue, later in the summer, as handsome "Isabella moths", which often flutter against lighted windows. The wings are pinkish-yellow and the abdomen is orange, with three rows of black spots.



### ISLAND BIRDING

Cyril Coldwell  
Gaspereau, N.S.

The Biology people from Acadia did their usual offshore island visitations during 1982. They started off with the annual trip to Boot Island to band Black-backed Gulls which ended up with 174 juveniles tagged. This has been an ongoing project for approximately ten years and so far banding returns show that the Black-backed Gull does not wander a great distance from its place of origin. The northern most return coming from the Gaspé peninsula in Quebec and the southern most from the New Jersey coast in the U.S. Numbers of Herring and Black-backed Gulls still remain high with all of the available nesting areas being used. Counts of other birds nesting here were as follows; 20 Great Blue Herons, 100 Double-crested Cormorants, 1 Long-eared Owl, 1 Raven, 2 Ring-necked Pheasant, and a small number of crows.

During the early fall a small banding crew worked on Brier Island. About 900 of the smaller passerine species were banded, along with about a dozen Sharp-shin Hawks. New to the banding scheme were two of the larger hawks - 1 Goshawk, and 1 Broad wing. A Field Sparrow was banded for the first time also. A Turkey Vulture put in an appearance for several days and then disappeared.

Three trips were organized to conduct banding operations on Bon Portage Island which lies off the south west tip of Nova Scotia. The first was early in July which was primarily a Petrel banding scheme. These birds were taken during the dark hours of the night while they were returning to or going out from their nesting burrows. In all some 1700 Petrels were captured and tagged. Forty-two birds were recaptured that had been banded previous years. Also 2 Petrels were caught that were banded on Kent Island, U.S.A., by personnel from Cornell University, where a project similar to ours is being conducted. Two more trips in early and late October were made to band all species but of particular interest were the Saw-whet Owls which appear to be migrating across the island toward the open sea. A total of 74 Saw-whets were captured and banded during 4 nights. Some of the other birds taken were 11 Long-eared Owls, 14 Sharp-shins, 3 Merlin, and 1 Brown Thrasher. Some rarities banded were 1 Chuck-wills Widow, 2 Orange-crowned Warblers, 1 Prairie Warbler. Many other common species too numerous to mention were banded as the nets were tended on a 24 hour basis.

## WOLFVILLE CHRISTMAS BIRD COUNT

Peter Smith  
Wolfville, N.S.

On December 27, 54 individuals in 18 field parties and at 18 feeders participated in the Wolfville Christmas Bird Count. Although conditions were raw with the light to moderate easterly winds and afternoon snow everyone appreciated being out for the day, and in getting together to greatly enjoy the warm hospitality of the Gibsons that evening.

The count resulted in remarkable diversity in spite of relatively poor visibility in the afternoon. Sixty-five species were observed (a goshawk was added after the list had been circulated) including some birds which are quite unusual in winter, and a few which are uncommon in any season. Cormorant, White-winged Scoter, Hooded Merganser, Gyrfalcon, Killdeer, Palm Warbler, and Chipping and Vesper Sparrows are in these categories. In the count period, six additional species were seen. The Peregrine Falcon and Meadowlark are of particular note.

Rarer birds such as those indicated above always attract immediate attention. However, longer term trends in the frequency of occurrence and relative abundance of all species are of greater value provided these types of information are treated with solid, common sense. In this connection it has been suggested again that we place the results into a broader context by submitting the Wolfville count to American Birds. Each year, one issue of this publication is largely devoted to Christmas Bird Counts throughout North America. I would be grateful to receive your views on this matter.

Thank you again for your participation.

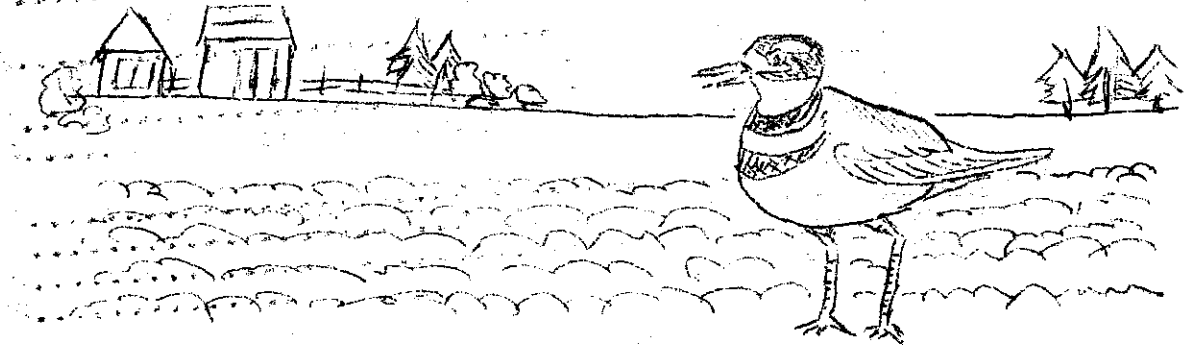
Cormorant sp.	2	Ring-billed Gull	5
Canada Goose	700	Rock Dove	1007
Mallard	3	Mourning Dove	127
Black Duck	1798	Long-eared Owl	1
Greater Scaup	30	Pileated Woodpecker	2
Common Goldeneye	3	Hairy Woodpecker	6
White-winged Scoter	42	Downy Woodpecker	31
Common Merganser	2	Horned Lark	206
Hooded Merganser	1	Blue Jay	395
Goshawk	1	Common Raven	438
Sharp-shinned Hawk	5	Common Crow	16,730
Red-tailed Hawk	28	Black-c. Chickadee	348
Rough-legged Hawk	8	Boreal Chickadee	17
Bald Eagle adult	8	White-breasted Nuthatch	6
immature	9	Brown Creeper	4
Marsh Hawk	2	Mockingbird	2
Merlin	1	American Robin	34
American Kestrel	1	Golden-cr. Kinglet	32
Gyrfalcon	1	Bohemian Waxwing	29
Ruffed Grouse	3	Northern Shrike	3
Ring-necked Pheasant	208	Starling	3012
Gray Partridge	49	Palm Warbler	2
Killdeer	1	House Sparrow	2365
Common Snipe	3	Common Grackle	3
Great Black-backed G.	542	Brown-headed Cowbird	906
Herring Gull	2360	Evening Grosbeak	291

cont'd...

Christmas Bird Count cont'd

Purple Finch	19	Chipping Sparrow	5
Pine Grosbeak	7	White-throated Sparrow	14
Common Redpoll	461	Song Sparrow	71
American Goldfinch	97	Vesper Sparrow	2
White-winged Crossbill	3	Lapland Longspur	13
Savannah Sparrow	2	Snow Bunting	151
Dark-eyed Junco	725		
Tree Sparrow	54		
		<hr/>	
		TOTAL Individuals	33,436
		Total Species	65

Other species in count period: Common Loon, Short-eared Owl, Cedar Waxwing, Meadowlark sp., and Red-winged Blackbird.



COMMON LICHENS

John Erskine

Here we print the remainder of the article which appears in the Nova Scotia Museum publication titled "In Forest and Field". Part I was printed in the last BNS Newsletter (December, 1981).

KEY TO COMMON LICHENS

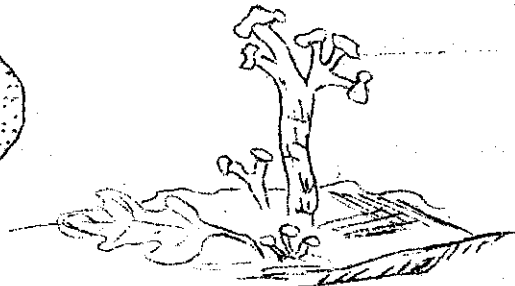
Flat Papery Lichens

- Large sheets, more than one inch undivided.
  - Underneath smooth or with harsh rootlets.
    - Dark brown to black.
      - Circular smooth brown wafers.....1
      - Similar but blistered.....2
      - Grey to black, edged with yellow.....3
      - Grey--to yellow-green, a network of raised ribs with pits between.....4
    - Underneath soft felted.
      - Brown to greenish, the lobes at edges tipped with fruits like brown dog-teeth.....5
      - Grey to green, large soft sheets with blackish studs scattered on them.....6
  - Divided rosettes, nowhere with an inch undivided.
    - Whitish to shades of grey, 3" or more across.....7
    - Small, much divided, applied to the bark or rock except at tip.
      - Tips swollen, tan underneath when fruiting, grey..8
      - Olive-brown.....9
      - Orange to yellow-green.....10
  - Little divided, holding to twig only at base of lobe.....11
  - Blackish flabby masses of low frills, tree-trunks...12
  - Under water, greenish lobes drying to grey.....13

Key to Common Lichens cont'd

Beards (on bark or rock, not soil)

Hanging.	
Blackish.....	14
Grey.....	15
Standing up or out from bark.	
Grey with large discs of fruits.....	16
Whitish, soft, thin stems much branched and split	17
Whitish, rather stiff, largish hollow stems.....	18
Shaped Like Bare Trees (on soil)	
Prickly to the touch.	
Whitish.....	19
Blackish, on sand.....	20
Stubby trees with branch tips like a hardened	
froth of grey bubbles.....	21
Softish, grey to white, about 3" tall.	
With drooping finger-tips.....	22
With finger-tips turned inward to form heads.....	23
Shaped Like Cups and Candelabra	
Goblet-shaped.....	24
Crowned with scarlet fruits.....	25
Crowned with brown fruits.....	26
Grey Crust on Soil, with Pink Mushrooms.....	27



SPECIES

1. Smooth Rock-tripe, Umbilicaria Dilleni, is fairly common on granite boulders, especially near water.
2. Blistered Rock-tripe, Umbilicaria pustulata, is rather less common in the same habitat as No. 1.
3. Gold-edged Lichen, Sticta crocata, is frequent on tree trunks on the Atlantic slope of the province.
4. Lung Lichen, Sticta pulmonaria, is the commonest large lichen on tree trunks and is found throughout.
5. Dog Lichen, Peltigera canina, is abundant on the ground in hardwood forest.
6. Studded Lichen, Peltigera apthosa, can be very ornamental, a broad leaflike thallus on shady rocks, clear green above when damp but fading to a nondescript grey when dry.
7. Shield Lichen, Parmelia perlata, is offered as an example of a group of flat, large, white to grey rosettes, common on trees and rocks. One common lichen will probably be put here by mistake. It is rather large and little lobed, leathery, grey and has abundant bright-tan discs of fruits. This is Leather Lichen, Sticta amplissima, of smooth tree-trunks.
8. Puffed Lichen, Parmelia physodes, is extremely common, furring dead twigs of spruce, covering bark and rocks, and even crawling on the sand of Sable Island. There are many nearly related species.
9. Olive Lichen, Parmelia olivacea, is frequent on fence posts and rails.

Species cont'd

10. Wall Lichen, Teloschistes parietina, is common and conspicuous, decorating rocks and tree trunks and shingles with its orange rosettes which turn to a dingy yellow-green when wet.

11. Twig Lichens, of the genus Cetraria, form papery rosettes on the dead twigs of trees, but no one species is commoner than another.

12. Pulp Lichen, Collema rupestre, is one example of a group of black pulpy lichens fairly common on rocks and ash-trunks.

13. Brook Lichen, Dermatocarpon aquatilis, is not uncommon on boulders submerged in streams. Until it was pointed out to me, I had taken it for an alga, but it dries to grey.

14. Brown Mane Lichen, Alectoria jubata, is particularly common on the dead branches of evergreens growing in bogs.

15. Old Man's Beard, Usnea barbata, hangs in woods and is short and scrubby in windy places, long and slender where sheltered. Parula warblers nest in these beards.

16. Flowering Beard Lichen, Usnea florida, is stiffer and usually stands out or up from the trunks of trees and is decorated with whitish fruiting discs.

17. Oakmoss, Everina prunastri, is fairly common on the trunks of shade trees, where it forms soft white patches two inches tall.

18. Ragged Lichen, Ramalina pollinaria, is superficially like the last but is smaller, with more trunk and usually has convex white fruiting discs. It is usually stiffer, but this character varies greatly with dampness and exposed position.

19. Thorn Lichen, Cladonia uncialis, is a common reindeer-moss which forms shrubby patches on poor soil. When dry, this is stiff and prickly to the touch, as its twigs are thorny and erect.

20. Spiny Lichen, Cetraria aculeata, has been found on barrens and sand-dunes from the Cape Breton Highlands to Shelburne County. It grows usually in isolated tufts.

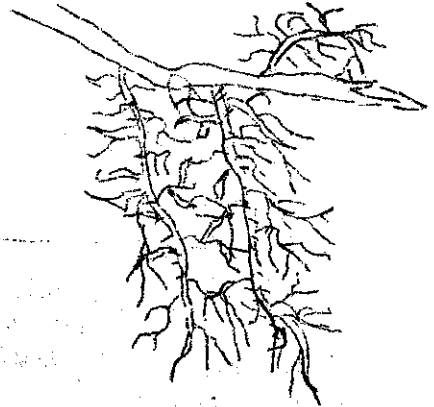
21. Easter Lichen, Stereocaulon paschale, forms stiff frothy grey lumps an inch or so tall. When these are divided, they show a trunk and branches.

22. Reindeer Moss, Cladonia rangiferina, is usually greyer than No. 19 and the twigs of its branches are soft, and droop. It is abundant in woods and bogs and on poor soil.

23. Alpine Reindeer-moss, Cladonia alpestris, is found in the same habitats as No. 22. The in-turned branch-tips form it into compact heads or columns which are conspicuous.

24. Pyxie-cups, Cladonia pyxidata, is a good enough name to cover a variety of greyish goblet-shaped lichens, usually about one inch tall. They are common on poor soil in woods.

25. British Soldier, Cladonia cristatella, is so brilliantly scarlet on its fruiting tips as to have attracted public attention and to have secured it a popular name. It is abundant on poor soil, rocks and dead wood everywhere.



Species cont'd

26. Funnel Lichen, Cladonia squamosa, is a common representative of a welter of species varying from two-tiered goblets to goblets with candelabra springing from their margins, and to quill-like and branching whitish species with green leaflike flakes. They are vary abundant and difficult to separate.

27. Pink Earth Lichen, Baeomyces roseus, is found on the poorest of soils as a greyish crust which can be identified with certainty only when it sprouts fruiting mushrooms, half an inch tall, of brilliant pink. Then it is unmistakable.

#### BNS GUIDE TO KINGS COUNTY NATURE

At the March 31 meeting of the Executive it was decided to hold regular meetings to complete the editing of the manuscript. Copies are available from Roy Bishop. Members of the Editorial Committee are Merritt Gibson, Larry Bogan, Lynn Coldwell, Jim Wolford, Roy Bishop, and Peter Austin-Smith. Jim and Roy will ask Sherman Bleakney to join the "team". ALL BNS members are invited to offer suggestions with regard to this effort.

#### FIELD TRIP UPDATE:

The Cape Split Hike, slated for Saturday, June 5, will commence from the trail head in Scotts Bay at 10:00 a.m. Those who wish to may meet at the Acadia University Gym parking lot at 9:30 a.m. The latter will help those who desire to go in a car pool. A hike to the Split is one not to be missed as the natural history topics included are so varied and they provide inspiration to all.

#### EDITORIAL COMMITTEE MEETING

The first regular editorial committee meeting to proceed with the natural history guide was held on April 8, in Huggins Science Hall. Peter Austin-Smith, Roy Bishop, Merritt Gibson, and Lynn Coldwell were in attendance.

Many pieces of the manuscript have been forwarded to a variety of persons for final scrutinization. It is intended that weekly advances be achieved in order to offer you and the general public this quality publication sometime within the year.



"Otters, though comparatively uncommon, arouse strong interest in many people. Probably this is due to the fact that otters are fun-loving. They delight in play and are particularly noted for their custom of sliding repeatedly down a steep bank for the pleasure of doing so.

About the first of March, Carlyle Bower had an unusual opportunity to watch an otter at work on the Roseway River. He was not far from the animal and, with the aid of a binocular, could plainly see such details as its whiskers and eyebrows.

At that time this otter was busily feeding on eels, which it presumably caught as they lay torpid in the mud at the bottom of an ice-covered cove of the river. To reach them the otter dived in the open channel of the river and must have swum into the cove beneath the ice. It was observed to catch and eat four eels in 45 minutes. One successful dive only lasted three minutes, but another submergence continued for ten minutes.

After reaching the surface of the river with an eel, the otter carried it on to the ice in the cove and devoured it. The eel was not swallowed whole, but was thoroughly chewed, beginning with the head. During this process the eel's tail thrashed violently about and repeatedly struck the otter in the face. While this was endured, it apparently was not enjoyed, for the otter was heard to grunt from time to time and was seen to close, now one eye, now the other, for protection from the eel's blows.

Skin, flesh and bones of the eel were chewed together, but it seemed that the skin was so tough that a single chewing did not separate all the flesh from it. So, when an eel was partly devoured, the otter, using both forepaws together, would, with repeated thrusts, push the masticated fore part of its victim out of its mouth, then slowly take it in again, with further chewing!"

From "Nature Quizzes for  
Canadians"

SPIDERS - Can you pass this one??

Match each spider group with its most appropriate habitat and/or behaviour:

- |                                       |   |
|---------------------------------------|---|
| Crab Spiders(Thomisidae)              | a) Wait for prey at the narrow ends of funnel-shaped webs.  |
| Grass Spiders(Agelenopsis spp.)       | b) Common in woods or gardens, n on or near webs built of numerous radii crossed by spirals of sticky silk. |
| Daddy-long-legs Spiders (Pholcidae)   | c) Do not build webs, but run over the ground hunting insects.  |
| Orb-weavers (Araneidae or Argiopidae) | d) Rest concealed in flowers, with legs outstretched, waiting in ambush for passing insects.                |
| Wolf Spiders (Lycosidae)              | e) Hang upside-down from loosely constructed webs in dark corners of basements.                             |

1 . d . 2 . a . 3 . e . 4 . b . 5 . c