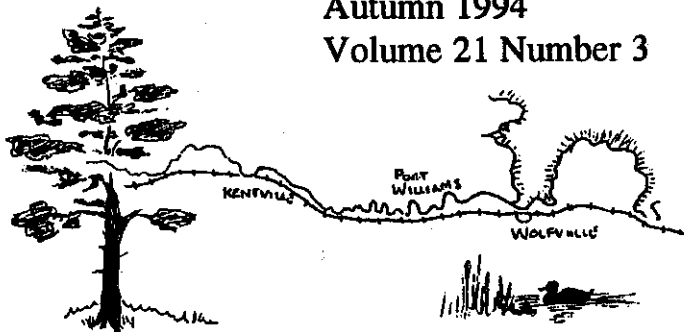


# **Blomidon Naturalists Society Newsletter**

Autumn 1994

Volume 21 Number 3



## **NOTES FROM THE EDITOR**

by Mark Elderkin  
Wolfville, N.S.

The fall edition of the Blomidon Naturalist Society Newsletter continues to expand upon the theme of essays contained in the summer issue (Summer 1994, Volume 21, Number 2): The Cornwallis River Corridor: Stewardship and Planning for the Future. I would like to thank the numerous authors within and outside the society, who worked so hard to pull this comprehensive series together. Response from the readership has been very positive and the editorial board is currently exploring the possibility of compiling these and other articles in the form of a special publication on the Cornwallis River watershed. If you have an article on this theme which you would like to

contribute to the special publication, please contact a member of the editorial committee.

Some of you have pointed out the absence of a deadline in the summer newsletter for submissions to the fall issue. Please accept my apologies for this oversight. The deadline for submissions to the forthcoming winter issue of the newsletter will be January 6, 1995.

Many of the articles we receive for the newsletter are handwritten or are typed on a typewriter. In order to incorporate such articles into the newsletter format they must be retyped on a computer using standard word processing software like Word Perfect or Microsoft Word. The newsletter committee desperately needs assistance with word processing (retyping) articles for the newsletter. I have learned (through personal experience) that this is far too big a

task for one person to bear alone. If you use a word processor and would like to volunteer to retype even a couple of articles per issue - this would be a tremendous contribution. I will be happy to provide volunteer stenographers with blank 3.5" diskettes for this purpose. If you can help

out, please phone me at 542-1964 or 679-6091.

I hope you enjoy the fall issue! If you have notices or suggestions for the upcoming winter issue please feel free to contact any of the members on the newsletter committee - we appreciate your comments.



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## Late Autumn - Early Winter Programme

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### Monday Evening Meetings

All meetings will start at 7:30 p.m., unless otherwise indicated, will be held in Room 244 of the Beveridge Arts Centre at Acadia University. All meetings are open to the public and BNS members are encouraged to bring friends and neighbours. Any changes in the place, time, or subject are announced on posters, Kings Kable notice board and The Kentville Advertiser and the The Hants Journal.

**NOV. 21** "Undersail to Greenland" by Branimer Gjetvaj - Natural History observations from a sailing vessel along the Southwest coast of Greenland.

**DEC. 12** "The Galapagos Islands- Wildlife at your Feet" by Jim Wolford. Jim visited these unique, isolated islands on the equator in August 1993 and will share his experiences and slides with us.

**JAN. 17** " Bird Migration Local and Regional" by Richard Stern - Richard, will describe the movement of our local and others birds across North America as the seasons change.

**FEB. 20** "Show and Tell" Members and Guests are invited to present their own interests, collections, and/or slides. Please meet in Patterson Hall, Room 308.

## BNS Winter Field Trips

**Tuesday Nov 8 Sky Observations:**

A young moon, Saturn and Fall constellations. Dress warmly and bring binoculars. 6:30 pm at Grand Pre parking lot. If cloudy, meet at the same time on the Wednesday the 9th. Roy Bishop, leader, 542-3992

### CHRISTMAS BIRD COUNTS:

**WOLFVILLE: Saturday, Dec. 17**

If the weather is bad on the 17th, the count will be on Sunday, Dec 18th. Angus MacLean, organizer 679-5878. After a day outdoors, we'll get together for our traditional chowder supper and count tally at the Acadia Biology Wildlife Museum in Patterson Hall.

**KINGSTON: Monday, Dec 26**

Those interested in participating should contact Patrick or Barbara Giffen (765-8688) before December 15th.

### BRIER ISLAND:

Contact Richard Stern at 678-1975 for time and arrangements.

**Jan. 22, Sunday. 9 am** A Winter Walk/Ski to look at tracks and winter birds. A North Mountain woodlot with lots of trails. Bring walking gear - snowshoes, skis, or boots. A sandwich, etc. for lunch. (dress warmly) Larry Bogan - 678-0446

**February - Eagle Watch** - In conjunction with the Sheffield Mills Eagle Day - watch for the time and date.

## ACADIA BIOLOGY SEMINAR CLUB PRESENTS:

**Nov.3 Dr. Perry Johnson-Green Ecology of mycorrhizae in inland boreal salt pans**

**Nov. 10 Dr. Max Blouw Evolution of social behaviour in stickleback fish**

**Nov. 17 Dr. Martin Willison Marine protected areas**

**Nov 24 Dr. Merritt Gibson The History of Patterson Hall**

Everyone is welcome!! The seminars are usually held in Patterson Hall room 308 at 4:00pm. Drinks and munchies are available!! Any changes to any of the seminars are always posted on the doors of Patterson Hall.

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## PROGRAMME IDEAS AND CONTRIBUTORS REQUESTED

The programme committee would like to have your suggestions for future programmes and field trips. Also, if you have a presentation on natural history or would like to share one of your special places with the members, we would like to know.

John Harwood

(chairman) 582-3320

Terry Powers, 679-3028

Larry Bogan, 678-0446

## Editorial Board

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The **Blomidon Naturalists Society Newsletter** is published quarterly, in January, March, June, and October, by the Blomidon Naturalists Society, P.O. Box 127, Wolfville, N.S. B0P 1X0. Printed in Canada. For subscription information, see "1994 Membership Fees and Form". Send change of address notification to the above address.

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

### from the BNS constitution

The Blomidon Naturalists Society is a member of the Federation of Nova Scotia Naturalists, an Affiliated Member of the Canadian Nature Federation and a member of the Nova Scotia Trails Federation.

The Blomidon Naturalists Society is a registered charity. Receipts for income tax purposes will be issued for all donations.

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# Society Business and Notices

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## CONSERVATION COMMITTEE REPORT

by Peter Austin-Smith  
Wolfville, N.S.

In early July, Tom Herman and Peter Austin-Smith met with representatives of the Nova Scotia Nature Trust for a field trip through the Kentville Ravine. Nominated by the Blomidon Naturalists as a site of special interest, the ravine is a candidate for designation as a protected place under the auspices of the Nature Trust. Following the trip, the Trust members agreed that the site had much to offer of biological interest and that steps should be taken, with the agreement and assistance of the Federal Department of Agriculture, to formally designate it as a protected area under the terms of the Protected Places plan. Additional information on boundaries, adjacent landholdings and zoning, together with plant and animal lists is now underway with the help of Ruth Newell, John Pickwell and others.

Also in July, we received the unexpected word that a group of young people from the NS Youth Conservation Corps would be available for work on the Gaspereau River Trail. With the invaluable assistance of Jack Andrews, NSP and Scott Cook, Kings County Wildlife Association, the footbridge which had been dislodged by spring floods, was

placed back in position and other parts of the trail rebuilt. Our thanks to this group of enthusiastic people for their work which was much appreciated.

Meetings of the Friends of the Cornwallis River Project were held throughout the summer with members of the BNS in attendance at the July meeting. There is much interest in expanding the project to include the entire watershed, a rather ambitious undertaking that may prove quite difficult for a new venture such as this. Unfortunately, no one representing BNS could be at either the August or September meetings.

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## SHORT-EARED OWL PROJECT UPDATE

by George Alliston  
West Brooklyn, N.S.

Thanks to the efforts of about 30 BNS members and with financial support from the James L. Baillie Memorial Fund we have completed a second year of censusing breeding short-eared owls on the dykelands of eastern Kings County. This year our survey efforts were concentrated strictly on the three major dykeland areas: Grand Pre, Canard River and Wolfville - Port Williams.

The season appeared to get off to a good start with short-eared owls being observed at east Grand Pre

during our first survey of this area (mid-April). Numerous "stake-outs" in this area were not successful in finding any nesting short-eared owls and, indeed, were almost totally unsuccessful in seeing any short-eared owls at all. The few sightings of short-eared owls (or just "owls") that we made were widely spaced in time (April and May) but all were made in the immediate vicinity of dykes adjacent to the Guzzle and opposite Boot Island.

We speculate that if territorial short-eared owls were present in the Grand Pre area their territory must have centered on Boot Island with the birds foraging only occasionally on the mainland. Since short-eared owls were not observed in other parts of the Grand Pre dykelands it seems unlikely that our sightings were of non-breeding non-territorial birds. One wonders what the chances of success would be for short-eared owls sharing nesting habitat with several thousand nesting herring and black-backed gulls albeit in an area undisturbed by human activity. Perhaps better than on the adjacent dykelands with intensive human activity and high populations of other predators such as foxes (three separate litters produced on east Grand Pre in 1994)? It has now been six years since the last short-eared owl nest was found on the Grand Pre dykelands and nine years since the last successful nest was recorded here.

There were no nesting short-eared owls found on the Canard River

dykelands in 1994 and indeed not a single owl sighting was reported from this area. It was here that our only short-eared owl nest was found in 1993.

No nesting short-eared owls were found on the Wolfville - Port Williams dykelands in either 1993 or 1994.

Needless to say we were most disappointed with the results of our 1994 surveys. While we can state with a high degree of confidence that no short-eared owls nested in the areas surveyed in 1994, this is not what we hoped to find.

In addition to the owl surveys we again mapped the prevailing agricultural regimes in the study areas in the spring of 1994. This fall we will again be working in cooperation with Tom Herman's mammalogy class to assess the relative levels of raptor prey populations (i.e. mice and shrews) in the various agricultural regimes.

A full report detailing all our work on this project during the last two years will be completed by January 1995. Should you wish to review this report, please call me (542-3651) and I will arrange to loan you a copy.

---

## INTERESTED IN ASTRONOMY?

If so, you are invited to attend the first meeting a new Astronomy Group **Saturday, November 12 at 8pm, Huggins Science Hall Room 141, Acadia University.** Roy Bishop will present a review of

upcoming events in the night sky plus a short talk on astronomical aspects of the Minas Basin tides. The main purpose of the meeting is to see if there is sufficient interest in having future meetings, especially observation sessions. The intent is to keep organizational details to a minimum and "do" astronomy. Anyone interested in the sky is invited to attend and help shape the goals of this new group.

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## **FRIENDS OF THE WEST HANTS CHRISTMAS BIRD COUNT**

**by Karen & Ted Casselman  
Cheverie, N.S.**

The 8th Annual West Hants Christmas Bird Count was our last. It was an historic event: after 8 years of compiling data, we have reached 90 as our total species to date (We added red-winged blackbird, northern cardinal and common grackle to the overall total this year).

Remember those early years? The Tuft's red-headed woodpecker highlighted our very first count; there was Jim and Janos' 1990 plethora of spruce grouse and, the same year, Blake and Fulton's clay-coloured sparrow. Every year Frank delivered what became our famous "one of's" - this year, the Woolaver team produced 1 (ONLY) American robin. In 1991, the Cheverie northern mockingbird was the first bird of the day

for Clarence and Lou, and Merritt Gibson's 1990 hooded merganser co-operated again in 1991. That was a great year - the MacLeod/Waldron team found a northern shoveler on the Windsor sewage pond, across town from where Jim Wolford's troupe got this year's 2 female northern cardinals. The search each year for certain birds was always exciting. The Thextons and/or Bev Shanks and Art Crowell managed to find gray partridge by following tracks; Sherman Williams beat the bushes with sufficient enthusiasm to always add (like Frank) just the bird we needed - his overwintering northern flicker and merlin were firsts for our count. The Tuft's infamous purple sandpipers on the rocks off Kip's Beach Road were always ephemeral - we got 20 this time, thanks to the sharp eyes of a UK racing photographer who became intimately familiar with Minas Basin ice floes.

Owls do not call in the wind; in 1991 several intrepid counters helped us to maximize ideal weather conditions to produce an all time high: 10 barred, 5 great-horned, and 3 saw-whet owls. Richard Stern and Azor Vienneau politely discussing the field marks of a bird of prey that was itself observing with great interest a flock of 60-odd snow bunting, twittering in a nearby tree, remains high on our personal list of memorable outings. Snow buntings in a tree are one thing, but the sharp-shinned hawk versus merlin debate (guess which won?) provided a valuable lesson in observation.

At ages 61 and 51 respectively, we are ready for new challenges. Ted is a regional director of the Bed & Breakfast Association; he is doing volunteer work, highly-specialized photography, and some computer consulting. Karen has lichen field projects underway in other parts of Nova Scotia; she is writing another craft book and weaving a series of museum textiles. Already there are B & B reservations for 1994.

We have decided the time (250 person hours) and the money (several hundred dollars in phone calls, gas, food, mailings, etc.) we happily invest in compiling the West Hants CBC, would serve our community better if we redirect our efforts from birds, to people. At Christmas, we are never without food or gifts. Others in our community are not so fortunate. This year we had the serendipitous opportunity to make Christmas a happier time for two local families. This was a modest beginning, but we want to provide this help again. By redirecting some time and resources during the holidays, we hope we can help others to have what we have always known, a happy Christmas.

We cannot thank enough those of you who shared our love of winter, our passion for birds, and our pleasures in getting together in the warmth and cheer of Beth and Frank's charming home to celebrate the season. Their contribution to 4 of our 8 counts, has been enormous. The warm welcome the Woolavers extended to stranger and friend alike, always made for a happy ending to a

rigorous day. What a delight that (at least after lunch), our very last CBC was under sunny skies! Both of us want to thank each and every one of you who helped us to do the West Hants Christmas Bird Count. To those "core counters" who helped us most years without fail, we are especially grateful - without your support, there would have been no West Hants CBC. And a special thanks to Judy Tufts, who put us up to it in the first place.

We will continue to feed birds, to try to learn more about their behaviour, and to observe, photograph and enjoy them. Birds have always, and will continue, to brighten our lives. We hope YOU will stay in touch - call us when interesting birds come to your feeder, or stop by when you're passing through.

We will continue to give natural history and textile programs for adults and children. Karen has several public events upcoming - a talk about textiles and dyes for the West Hants Historical Society on Thursday, April 7; a lichen slide presentation for the Annapolis Field Naturalists on Wednesday, April 13, followed by a lichen field trip (Kedge area) on April 14. An Owl Prowl for the Nova Scotia Bird Society is scheduled for Saturday April 30. We welcome you to join us at any of these events: please call us for details regarding time, location and (for the Owl Prowl) cancellation date, if applicable.

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# REPORT ON WOLFVILLE HARBOURFRONT AND WEST DYKELANDS OPEN SPACE STUDY

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In the fall of 1993, the Society in conjunction with the Wolfville Business Development Corporation commissioned Environmental Design and Management Ltd. and Sperry & Partners to conduct an open space study pertaining to Wolfville's harbourfront and the adjacent west dykelands. A copy of their report has been deposited at the Wolfville Memorial Library (21 Elm Street). We invite members of the Society and the public to peruse this worthwhile document at the Library.



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# The Cornwallis River Corridor

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## FISHES OF THE CORNWALLIS RIVER

by Terry Power & Barry  
Sabean

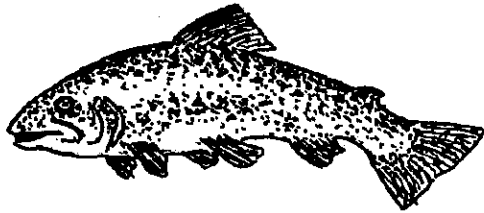
Kentville & Mount Denson,  
N.S.

The drainage area of the Cornwallis and some adjacent Rivers is widely known as the "land of Evangeline" from whence the Acadians were expelled in 1755. But did you know that there was also in this area, many years earlier, an expulsion of fishes?

Just a few thousand years ago, there were no fishes at all in the Cornwallis river. In fact, there were no fish in Nova Scotia as we know it today. Beginning about 2.5 - 3 million years ago, glacial ice many metres thick inundated Nova Scotia. A series of glaciations followed and the ice reached its greatest extent about 17 - 18,000 years ago. This deep freeze changed the climate over the entire continent, altered drainage patterns, created lakes and eliminated aquatic life from present day Nova Scotia, including fish (1).

As a newly fashioned Cornwallis River in a much transformed Annapolis Valley emerged from the ice, the fish began to return. But from where did they come? And how did

fish which only survive in fresh water today suddenly appear in the Cornwallis? This is a complex story beyond the scope of this article, but the evidence indicates that fish, along with a host of other life forms, survived glaciation in several refugia or "ice free areas" along the east coast of our continent (1). As the climate moderated and the ice melted, water was in abundance. During this "fluvial" period, the abundant water



Brown Trout

aided many species in their dispersal and colonization of rivers like the Cornwallis. With a few re-adjustments and some additions by man, we arrive at the present complement of species in the river today.

The Cornwallis River has a watershed area of approximately 370 square kilometres, most of which is situated on the fertile floor of the Annapolis Valley. It has its source in Caribou Bog near Aylesford and flows about 35 kilometres to Kentville where it becomes tidal. The tidal portion is a world of turbid, silty, nutrient rich waters in great contrast to the clear mountain streams near

the source. The Cornwallis is a meandering stream, passing through marshes, meadows and oxbow ponds along its route, creating a diversity of opportunities for many species. From the upstream end, it receives rain water and run-off water, field run-off and forest run-off, municipal storm water and domestic waste water, ground water and dish water, animal waste and industrial waste. From the down stream end, it welcomes the tides twice daily. Unfortunately, today, much of the river is heavily silted and organic loading from municipal waste and run-off from agricultural lands results in progressive eutrophication as one proceeds down the system.

A qualitative assessment of available salmonid (trout, char and salmon) habitat carried out on the Cornwallis River in the late 1970's (by then Department of Lands and Forests for Nova Scotia and Department of Fisheries and Oceans) revealed very little good spawning and rearing habitat except the feeder streams on the side of the North and South Mountains. With the exception of Mill Brook, the best spawning habitat was in tributary streams which were too small for Atlantic salmon. Salmon rearing habitat was very limited with the exception of the Mill Brook watershed. Trout rearing habitat was abundant and initial surveys suggest spawning habitat may be limiting.

Electroseining was also carried out in the Cornwallis river during the late 1970's and early 80's, indicating

quite large populations of brown and speckled trout, with browns being predominant in the lower part of the river. Atlantic salmon were present only in the Mill Brook watershed where they occurred in fairly high numbers. Three fish identified as coho salmon fry were taken in a tributary of Tupper Lake Brook. Although none have been reported recently, adult coho have been reported on a number of occasions. Sabean angled one near Mill Brook in the mid-1980's. Although electroseining was directed at the best salmonid habitats, a number of additional species were identified (Table 1). These include American eel, northern redbelly dace, lake chub, creek chub, white sucker, banded killifish, fourspine stickleback, threespine stickleback and ninespine stickleback. The presence of white sucker and the sticklebacks is also indicated by records from the Nova Scotia Museum. In addition to those species which tend to occur above tide, a number of fishes which occur in the Minas Basin, occasionally venture into fresh water (2). Of at least 24 species known to inhabit the basin, Atlantic tomcod, Atlantic silverside, gaspereau, winter flounder, herring, striped bass and Atlantic sturgeon may migrate into the Cornwallis. And there are probably others.

Lake surveys were conducted in two headwater lakes of the Cornwallis River, Silver (Lakeville) Lake and Tupper Lake, in 1978 and 1984 respectively. Seining revealed an abundance of ninespine stickleback in Lakeville Lake. In addition, banded

killifish, golden shiners, yellow perch, white perch and stocked speckled trout are also reported to occur there (2). Minnow-trapping in Tupper Lake indicated both northern redbelly dace and banded killifish were present.

The Cornwallis has long been recognised as an important river by sport fishers, both locally and abroad. Of greatest interest, not surprisingly, are the salmonids and most particularly the brown trout. This fish was introduced to the Province in 1923 and has since become resident in the Cornwallis River (2,3). Brown trout presently occur in at least 22 rivers in Nova Scotia (4). The Cornwallis is one of the best in the Province, capable of producing trophy-sized fish. According to some local fisherman, it is one of the best in eastern Canada. Some of the reasons for this are the shallow gradient, together with the relatively high number of springs which feed into the river. These two factors both contribute to higher water levels and cooler temperatures so crucial to the salmonid fishes during the summer. Fished by as many as 200 bait-fishers in the spring and a small but dedicated group of late summer fly-fishers, the river is, according to one resident aficionado "alive and well and the

fish are holding their own if not increasing".

The Cornwallis River is important to the fish and to the other life that thrives within its varied habitats and along its banks. It has had a long and fascinating history. In one form or another, it saw the coming and going of the glaciers. It saw the expulsion of the fishes by the ice and many years later, the expulsion of the Acadians by the English. It was known by the Micmac as "chijkw-took" or "the narrow river" and later named the "Grand Habitant" by the early french settlers (5). In 1903, historian Robert R. McLeod, marvelled at the natural beauty of Kings County. He wrote: "It is not dependent on forests that can be chopped away, nor on rivers that may be largely diverted from their courses, or on any other feature within the vandal tendency of human nature, and thus its fine views are safe while the present order of the world endures"(5). Outwardly, this county and its dominant river, the Cornwallis, appear to have fared well at our "vandal" hands, but perhaps in spite of us. We need to take great care that these days of our history are not a black mark on the history of this river.

#### References cited

- (1) Hocutt, C. H. and E. O. Wiley (Eds). 1986. The Zoogeography of North American Freshwater Fishes. John Wiley and Sons. New York. 866p.
- (2) The Blomidon Naturalists Society. 1992. A Natural History of Kings County. Acadia University. Wolfville, Nova Scotia. 196p + viii.
- (3) Gilhen, John. 1974. The Fishes of Nova Scotia's Lakes and Streams.

Nova Scotia Museum. Halifax, Nova Scotia. 49p.

(4) Anon. 1989. Fishing Guide to Nova Scotia. Nova Scotia Departments of Fisheries, Tourism and Culture, and Lands and Forests.

(5) Mcleod, Robert R. 1903. Markland or Nova Scotia, Its History, Natural Resources and Native Beauties. Markland Publishing Company.

### Some known and potential Fishes of the Cornwallis River.

Common name	Scientific name
<b>Sturgeons</b>	
Atlantic Sturgeon <sup>4</sup>	<i>Acipenser oxyrinchus</i>
<b>Freshwater Eels</b>	
American Eel <sup>1</sup>	<i>Anguilla rostrata</i>
<b>Herrings</b>	
Blueback Herring <sup>4</sup>	<i>Alosa aestivalis</i>
Gaspereau <sup>4</sup>	<i>Alosa pseudoharengus</i>
American Shad <sup>4</sup>	<i>Alosa sapidissima</i>
<b>Trouts</b>	
Coho Salmon <sup>1</sup>	<i>Oncorhynchus kisuth</i>
Rainbow Trout <sup>1,6</sup>	<i>Oncorhynchus mykiss</i>
Atlantic Salmon <sup>1</sup>	<i>Salmo salar</i>
Brown Trout <sup>1,6</sup>	<i>Salmo trutta</i>
Brook Trout <sup>1</sup>	<i>Salvelinus fontinalis</i>
<b>Smelts</b>	
Rainbow Smelt <sup>3</sup>	<i>Osmerus mordax</i>
<b>Minnows</b>	
Northern Redbelly Dace <sup>1</sup>	<i>Chrosomus eos</i>
Lake Chub <sup>1</sup>	<i>Couesius plumbeus</i>
Golden Shiner <sup>5</sup>	<i>Notemigonus crysoleu</i>
Creek Chub <sup>1</sup>	<i>Semotilus atromaculatus</i>
<b>Suckers</b>	
White Sucker <sup>1,2</sup>	<i>Catostomus commersoni</i>
<b>Codfishes</b>	
Atlantic Tomcod <sup>4</sup>	<i>Microgadus tomcod</i>
<b>Killifishes</b>	
Banded Killifish <sup>1</sup>	<i>Fundulus diaphanus</i>
<b>Silversides</b>	
Atlantic Silverside <sup>4</sup>	<i>Menidia menidia</i>
<b>Sticklebacks</b>	
Fourspine Stickleback <sup>1,2</sup>	<i>Apeltes quadracus</i>
Threespine Stickleback <sup>1,2</sup>	<i>Gasterosteus aculeatus</i>
Ninespine Stickleback <sup>1,2</sup>	<i>Pungitius pungitius</i>

Temperate basses

White Perch<sup>5</sup>

*Morone americana*

Striped Bass<sup>4</sup>

*Morone saxatilis*

Perches

Yellow Perch<sup>5</sup>

*Perca flavescens*

Righteye Flounders

Winter Flounder<sup>4</sup>

*Pseudopleuronectes americanus*

<sup>1</sup> Nova Scotia Department of Natural Resources data

<sup>2</sup> Nova Scotia Museum data

<sup>3</sup> Federal Department of Fisheries and Oceans data

<sup>4</sup> some Minas Basin species known to migrate into fresh water

<sup>5</sup> known from Silver (Lakeville) Lake

<sup>6</sup> introduced species

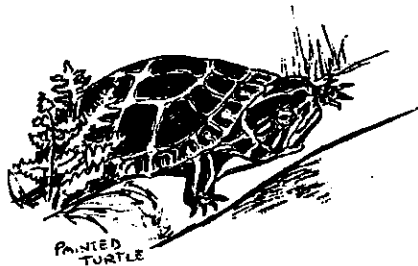
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## THE CLEAN ANNAPOLIS RIVER PROJECT

An Example of  
Community Environ-  
mental Management  
by Stephen Hawboldt,  
Program Director, Clean  
Annapolis River Project  
Clementsport, N.S.

The Clean Annapolis River Project (CARP) is a charitable, community owned, non-governmental organization incorporated in 1990 to actively promote, encourage and assist with the wise use of the resources of the Annapolis River and its watershed. That watershed rises in the Berwick/Aylesford area and extends about 100 kilometres to Digby Gut.

CARP was created when two unrelated events converged - rejection of the Annapolis system as a candidate for designation as a heritage



river and its selection as demonstration site for an innovative environmental management initiative .

For thousands of years, the abundant resources of the Annapolis system supported a rich and vibrant Mi'Kmaq society. In 1605 Samuel de Champlain founded the first European settlement in Canada at Port Royale. It was against this rich cultural heritage that the Annapolis Valley Affiliated Boards of Trade (AVABT) sought to have the Annapolis River designated as the first Heritage River in Canada. That effort failed, in part because after nearly 400 years of European settlement, the waterway had suffered too many developmental and environmental indignities. In response, the AVABT

hosted a number of public forums to raise public awareness of the problems. It was due to this community awareness that the Annapolis was selected as a demonstration site for community based environmental management by the Atlantic Estuaries Cooperative Venture (AECV). The AECV was an informal group of private and public scientists concerned about the environmental degradation of river estuaries in the Maritimes.

Building on this historical pattern, CARP takes a constructive, positive approach to environmental problem solving. The group is interested in pro-active responses to genuine community and scientific concerns. Rather than wasting community energies and resources blaming this or that sector for our problems, it is assumed that each of us have contributed to the problems and have a duty and responsibility to seek solutions. Activities are directed toward positive, constructive solutions that recognize the economic and societal strengths and limitations of all stakeholders.

Following successful implementation of several projects in 1990 and 1991, CARP was one of the first groups in the region invited to participate in the Atlantic Coastal Action Program (ASAP) an initiative of Canada's Green Plan. ACAP grew from the principles upon which CARP and the Atlantic Estuaries Cooperative Venture were founded.

CARP is administered by a Board of Directors elected annually by the

membership. That Board is presently composed of 15 volunteers drawn from many occupational and geographic sectors of the watershed. The Board sets the policy and operating parameters for the society. For each of the over two dozen projects which have been initiated by CARP, specialized project teams have been formed. These project teams composed of non-technical and technical volunteers who have an interest in a particular issue, are charged with the final design, implementation and evaluation of the project.

In carrying out its mandate, CARP employs a four prong approach composed of action projects, public awareness programs, problem definition efforts and environmental planning initiatives. Projects are grouped into these four broad, arbitrary and inter-related classifications.

The action projects are aimed at participants who are most interested in efforts that will immediately lead to environmental improvement. These efforts include stream bank reforestation, private stewardship to protect wetland, water and energy conservation programs, shoreline clean-up, fish habitat restoration and the utilization of constructed wetlands to manage agricultural wastes.

As informed decision making requires an aware public, CARP has initiated a number of public education efforts. The *Annapolis River Issues* series describes some of the ecological features of the region. Other efforts include the Annapolis River Guardians, likely the first



volunteer based water quality monitoring program in Atlantic Canada, a newsletter, Conservation Times and several projects aimed at schools.

To ensure that public awareness programs are based on the best information available, CARP has initiated a number of problem definition projects. These range from soil erosion studies, to coastal zone modelling, to environmental quality assessment to continuous flow model development and to geo-chemical testing.

The CARP process will lead to the development of a community based conservation strategy and remedial action plan for the Annapolis watershed. This is the thread that binds the various activities undertaken by the organisations. These efforts include several projects to expand our understanding of the resources that have been exploited in the recent past and to derive a community vision of how the resources should be used in the future.

CARP has received considerable local, regional and international recognition for its efforts. The group

has been awarded regional and international environmental awards. CARP has been an invited participant and resource in community based environmental management efforts around the world. Wide participation by area residents, the university community, all orders of government, private foundations, other non-governmental organisations and industry is another measure of recognition. Several projects undertaken by the organisations have resulted in direct improvements to environmental quality in the watershed. The CARP model is working in the Annapolis region and it is suspected that similar efforts could be utilized in other regions of the province.

For further information, please contact Stephen Hawboldt, Program Director by mail at Clean Annapolis River Project, P.O. Box 118, Clementsport, NS, B0S 1E0, by phone at (902) 532-7533. by fax at (902) 532-7036 or by e-mail at shawbold@fox.nstn.ns.ca.



# LAND STEWARDSHIP

by Terry Power

Kentville, N.S.

The concept of "land stewardship," or "care-taking" must be an old one. It is at least as old as the concept of land ownership, but undoubtedly much older. In Nova Scotia, the first human stewards we know of were hunter gathers. The Mi'kmaq have been present in this province for centuries. According to author, Eleanor Johnson, "...most words in the Mi'kmaq language describe a relationship between the people and nature. Respect for nature is an extension of tribal awareness, for the Mi'kmaq knows that nature is an integral part of his existence(1)." We are all stewards of the environments in which we live and the simple lifestyle choices we make from day to day have profound implications and impacts. In this century, with our increasing awareness of the delicate balance in natural systems, we have become more concerned with becoming better stewards. Wild lands have been set aside and there has been increased effort to reduce human impacts everywhere. In addition, we have assumed the onerous task of restoring and enhancing habitat both for the benefit of the environment and wildlife which it supports.

The Oxford English Dictionary defines a steward as: "a person entrusted with the management of another's property, especially a paid manager of great house or estate."

This definition appears to be very much a product of its time and culture. Upon examination however, it is obvious that this definition could apply equally to all land managers, including owners. First, as owners of real property in this country or any other, we are merely managers and temporary ones at that - in geologic time, only for an instant. Secondly, the word "entrusted" appears in the "Oxford" definition. In the context of a paid manager the connection is easily made - the manager is bound by trust to heed the wishes of the landowner.

But to whom are we as landowners bound? Most obviously, we are bound to our human society which has entrusted land in our care. We are also bound, by trust or by conscience, to all whose welfare depends on the care we give our lands. And these are many. They are the multitude of voices from the present - those of the life with which we share the land in one way or another today. And they are the voices of the future, those of our daughters and sons, and of the descendants of all the other plants and animals, which will one day occupy our favourite haunts in our absence. If we can occupy land for a time and somehow leave it in a condition as good or better than when we found it, then perhaps we can say that we have practiced good "stewardship."

Awareness of environmental issues and the importance of conservation is increasing. It is heartening to see that

strategies are developing in both the public and private sectors to conserve habitat for wildlife on private lands. Within the past decade particularly, such initiatives have adopted the word "stewardship" as the theme and title for their programs. In this context, stewardship could be defined simply as care given to the land based on a commitment to conservation.

Stewardship programs, as they apply to landowners, are based on the principle that the owner should be directly responsible for maintaining a standard of conservation on their property. Such programs recognize that landowners have an attachment to their land and that well informed landowners can be the most effective stewards. The programs work through education programs and through agreements with land owners. Landowners need to understand the role and importance of wildlife habitat and the impacts their activities may have on natural systems. Through stewardship agreements, landowners make a personal commitment to habitat conservation. In some jurisdictions, participation in stewardship programs can provide direct economic benefits to landowners through, for example, income tax benefits or alleviation of property taxes.

Governments and a growing number of private conservation organizations continue to shoulder the responsibility for conservation. In the area of wetlands conservation, for example, stewardship programs were recently initiated in all four Atlantic provinces under a larger initiative, the Eastern Habitat Joint Venture. With

focus, comprehensive strategies are beginning to evolve in all four provinces which emphasize both private land agreements and education. On the local level, the Clean Annapolis River Project (see article in this issue) has received international acclaim for its efforts to promote conservation in that watershed.

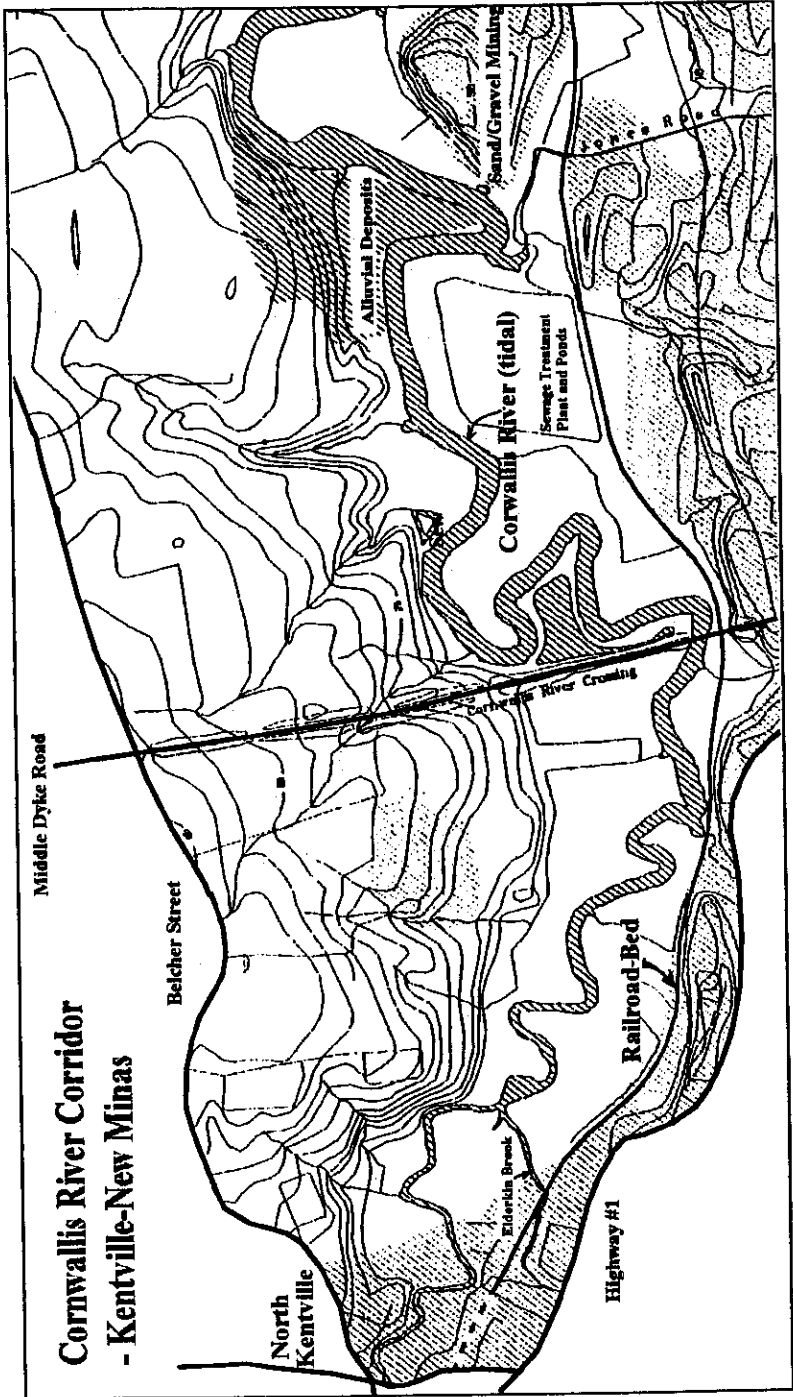
Notwithstanding the importance of both government programs and private conservancy initiatives, ultimately, each of us must take responsibility for our own actions. In Nova Scotia about 73% of the land is in private ownership - private landowners must be directly involved. Collectively, we are all responsible for the condition of our local environment, and by extension, the global environment. We are each a steward in some fashion. The challenge facing all of us is to become better stewards.

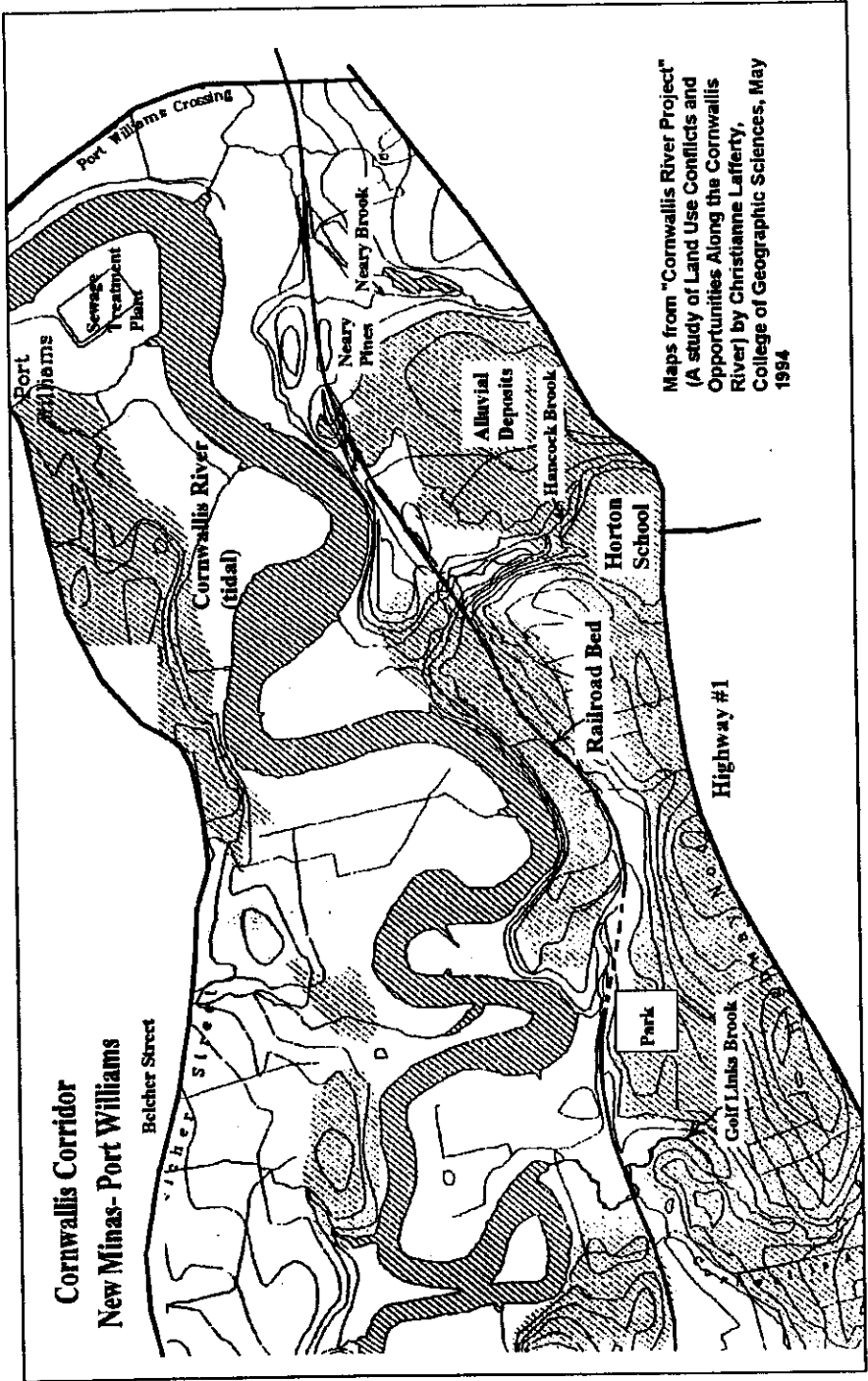
**References:**

Johnson, Eleanor. Mi'kmaq tribal consciousness in the twentieth century. In Inglis, S., J. Mannette and S. Sulewski. 1991. Paqta-tek. Volume 1, Policy and consciousness in Mi'kmaq life. Garamond Press, Halifax, NS. 89 p.



On the following two pages are the east and west parts of a map of the glacial deposits and other features along the Cornwallis Corridor from Port Williams to Kentville.





Maps from "Cornwallis River Project"  
 (A Study of Land Use Conflicts and  
 Opportunities Along the Cornwallis  
 River) by Christianne Lafferty,  
 College of Geographic Sciences, May  
 1984

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## Field Trip Reports

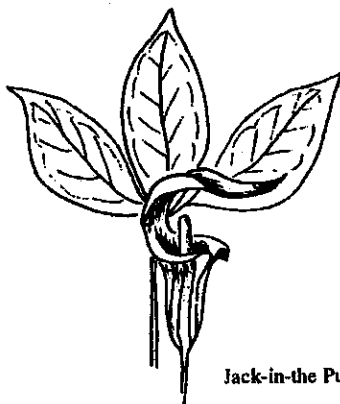
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### MEANDER RIVER WILDFLOWERS

by Marion Zinck  
Halifax, N.S.

The Meander River intervales represent remnant old-growth forests found only in scattered localities in Nova Scotia. On May 15, 1994, eight of us "meandered" along the wooded paths of Smileys Provincial Park (Hants County) in search of spring flowers associated with this habitat. In particular, we hoped to see the showy bloodroot (*Sanguinaria canadensis*), a white poppy family representative. Colonies of this plant may be seen along the Meander's floodplain. As in previous years, I have tried to catch the best display of bloodroot - but we were about one week late! Possibly, the heavy rains during the few days prior to our visit, ensured their demise. Nevertheless, the yellow violets (*Viola eriocarpa*), Early blue violets (*Viola septentrionalis*) and white violets, (*Viola sp.*) provided splashes of colour beneath the hardwoods. Several red baneberry plants (*Actaea rubra*) were also in flower.

On the stream side of the picnic area, several blue cohosh (*Caulophyllum thalictroides*) had yet to show their tiny brown flowers. However, the blue berry-like fruits of last year were still present (On a trip I made two weeks earlier, their were flowers



Jack-in-the Pulpit

on the same plants). In the vicinity were nodding trilliums, just beginning to bloom.

The garden escape, columbine caused some momentary confusion as to its identity. The leaves had not yet unfurled; imaginations overextended! Also, only beginning to appear were jack-in-the-pulpits (*Arisaema stewardsonii*) and poison ivy (*Rhus radicans*) vines. Ferns encountered included the evergreen christmas fern (*Polystichum acrostichoides*) and the oak fern (*Dryopteris disjuncta*). One grass-like plant that drew some attention was woodrush (*Luzula acuminata*). Although one of the earliest flowering plants, it is often overlooked, maybe due to its grass-like habit. It is common in deciduous and mixed forests, in damp soil.

The hardwoods were not fully clad but we managed to identify the native american elm (*Ulmus americana*), sugar maple (*Acer saccharum*) and

beech (*Fagus grandifolia*).

A second stop took some of us upstream to Retreat Valley Farm where the river flows along the private lane. There were more blood-root flowers remaining on the plants. In addition, the emerging anemones could be seen, but were too small for identification. As well, several small liliaceous herbs were spotted, which may or may not have been Canada lilies. Across the lane from the river, it was interesting to note the scouring rushes (*Equisetum hymale*) on a steep slope above the road - but under the trees! Unusual for me, that is, for I associate it with low-lying ground. Also seen in thickets along this trail were the live-forevers (*Sedum telephium*), one of our stonecrop species.

All and all, a pleasant walk through one of our botanically significant sites and all-round "special place".

A further note: In 1984, 9 hectares of private land along the Meander river floodplain was designated as a Site of Ecological Significance, under the Nova Scotia Department of Education's Special Places Program.

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## **BALANCING ROCK FROM TIVERTON, LONG ISLAND**

**June 5, 1994**

**by Bernard Forsythe  
Wolfville, N.S.**

Fifteen people joined me for this day-long outing. Perfect weather and light traffic gave us enough driving

time for a stop at a marsh on Digby Neck. The usual ring-necked and black ducks were present. As we studied a large ragged looking buteo soaring overhead (probably a moulting immature red-tailed hawk), two turkey vultures joined it. I could not have asked for a better beginning for the day.

After the short enjoyable ferry trip to Tiverton, we located the trail to the shore. The winding route, muddied by all terrain vehicles passed through a variety of habitats. At the start, large skunk cabbage leaves covered the ground below various shrubs. This soon changed to a stand of mature white and red spruce followed by a corduroy road that took us over a bog containing many ferns and other bog plants. Pressing on, we crossed a cut over area of young trees and bushes. This changed to mixed growth woods before we reached the slope down to the shore. The climb down proved a bit of a challenge, however there was a rope in place to help maintain one's balance.

The steep cliff along the shore was made up of volcanic basalt columns. Many have toppled from the power of the sea and lay as rubble at the water's edge. Everyone stood amazed as we spotted the object of the outing. The huge 20 ft. column stands perfectly balanced on just a few square inches of the ledge it rests on. This setting made a perfect place for our lunch break. On the hike back to the cars, several from the group entered the bog and soon found

heart-leaved twayblade in full bloom. Finding this tiny orchid is always a lift for those interested in this family of plants.

Many in our party had not been to Brier Island before, so most of us took the second ferry for a quick look at this island often visited by naturalists. There was only time for a tour of the roads, but it made a nice ending for the day's outing before the final ferry rides and the long drive back to the Annapolis Valley.

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## FIELD TRIP, FERNS AND MOSSES

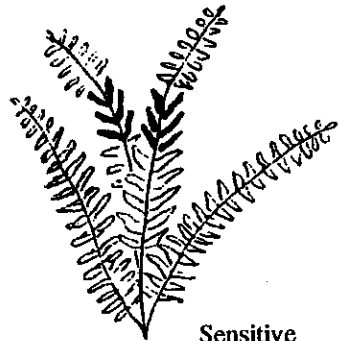
June 11, 1994

by John Pickwell  
Kentville, N.S.

At 8:30 A.M., I picked up a woman and her son at the Robie Tufts Nature Centre and we drove over to Exit #12 on highway #101 to join the rest of the field trip participants. Four more people were waiting for us there and we then all proceeded to a point just below the New Minas Water Tower, where we parked our cars. We then crossed the road on foot to the woods on the other side of the highway. On the right as we entered the woods, is what I call the first lower swamp, where we stopped to examine some of the ferns growing there. All around us were sensitive fern (*Onoclea sensibilis*), and cinnamon fern (*Dryopteris*), *D. intermedia*, and *D.*

*cathusiana*. Also I was able to show two of the hybrids, *D.X. boottii*. (*D. cristata* X *intermedia*), and *D.X.slossonae*. (*D. cristata* X *D.marginalis*). On higher rocky ground close by, we found *D. marginalis*. Between the rocks was growing the common polypody (*Polypodium virginianum*). In Cobb's Field Guide this is called *P. vulgare*, the name used in Europe. Over the years there has been much discussion as to whether it is the same, or two different species. While looking at ferns, we noted some of the mosses including two species of broom moss, the (*Dicranums*) *D. scoparium*, and *D. polysetum*. Broom moss is so named because the leaves grow over to one side like an old broom. Back on the path we stopped to look at two of the commonly called "hair-cap mosses" both of which have hairy calyptra, the covering for the capsule; *Polytrichum juniperinum* and *P. piliferum*. These mosses grow on drier ground, where most other mosses cannot survive.

Walking up the path we came to



Sensitive  
Fern

the second lower swamp and stopped to look at some of the sphagnum mosses. Though most species of sphagnum grow in bogs, about five or six species grow in wet depressions in the woods. We managed to find *S. squarrosum*, *S. palustre*, *S. girgensohnii*, and *S. capillifolium*.

From here we moved on, up to what I call the West Slope Path. On our way we looked at the interrupted fern, (*Osmunda claytoniana*). On the banks on either side of the path, as in most woods in our area, we found lots of red stemmed feather moss (*Pleurozium schreberi*). In some of the damper places we found, rough necked moss (*Rhytidiadelphus triquetrus*), and its cousin (*R. subpinnatus*), along with step moss (*Hylocomium splendens*). Each year *H. splendens*, adds new growth in a small arch on top of the previous years growth, hence its name step moss. As we went along, Dr. Nancy Nickerson came up with a hooker's orchid (*Platanthera hookeri*). While I have found a group of these orchids in another part of this area, it was a very nice find. This area also holds a great many species of the genus *Lycopium*, found in Nova Scotia, however, on our walk that day we were only able to see one of the species of tree clubmoss (*L. dendroideum*). Later, as we came out onto the hydro right-of-way, we saw ground pine (*L. tristachyum*) and wolf's claw clubmoss (*L. clavatum*). Although these are called club-mosses, they are not true mosses, but are more closely related to ferns. From the hydro right-of-way we

came into a long gully, where we looked at more ferns of the genus *Dryopteris*, including *D. campyloptera*, as well as three of the little grape ferns of the genus *Botrychium*. Both *B. simplex* and *B. matricariifolium* are very small, while *B. virginianum* is larger .

The bottom of the gully opens up into what is known locally as Hidden Valley. In the valley we studied a number of lichens growing on trees and on the ground; also a number of other ferns, lady ferns (*Athyrium filix-femina*) along with silvery spleenwort (*A. thelypteroides*). Time did not permit us to climb the water fall, which was a shame, as above the falls is a whole different environment. We crossed the stream and as we walked along the trail leading back to the centre path, we did make time enough to go into the swamp to look at one more *Dryopteris* hybrid, *D.X uliginosa* (*D. cathusiana* X *D. cristata*). I tried to show another hooker's orchid, however an ATV had run it down, and there was not much left of it. On the centre path, before leaving the woods we took a look at the New York fern (*Thelypteris noveboracensis*), the beech fern (*Phegopteris connectilis*), the little oak fern (*Gymnocarpium dryopteris*) and hayscented fern (*Dennstaedtia punctilobula*).

This area is a gold mine of natural history, and I was only able to show only a small part of it. A number of fern hybrids are found here that have not been recorded before elsewhere in Nova Scotia. Although they may



exist in other locations, they have yet to be found. This area has a great diversity of habitats, and the fact that Kings County Council has earmarked it for "DEVELOPMENT", is not good news. I am keeping an eye on the situation. It may become necessary to remove these hybrids to another location.

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## GASPEREAU RIVER WALK

July 2, 1994

by George Alliston  
West Brooklyn, N.S.

Saturday began as a clear, warm, humid day, typical of the summer of '94. Margaret and I arrived at the Nature Centre at 8:00 a.m. to find only one person waiting. Since the walk had been decided upon only at the last BNS meeting and the *Newsletter* had been mailed only two days prior to the trip I was anticipating a small turnout. As the three of us chatted, two more people arrived and, at 8:15, the five of us left for White Rock where we found 15 more people waiting -- our group included two who had come from Lunenburg County and one from Annapolis County! Obviously our publicity machine works quite effectively!

We began by viewing the general topography from White Rock bridge and discussing how the Black River, which thousands of years ago had flowed through what is now Deep Hollow Road to its delta where Horton District High School now

stands, had been "captured" by the Gaspereau River as it slowly eroded its way southwestward. From the bridge we could also see the impact of more recent environmental forces -- specifically the spring freshet of 1994. This had been particularly severe with ice debarking or felling many large trees and grinding, tearing out or flattening most of the shrubs and saplings along the river bank.

The trail we were to follow extends to the southwest along the north side of the Gaspereau River. This trail had been greatly improved in 1993 through the cooperative efforts of Nova Scotia Power, the Nova Scotia Youth Conservation Corps and the Blomidon Naturalists. A few minutes along the trail provided us with another example of the force of the spring freshet. The attractive and robust foot bridge that had been built by N.S. Power and the Youth Corps lay twisted and crumpled on the bank of the river -- the pylons, consisting of rock-filled cribs made of spiked 6x6's, had been no match for the force of the river.

Near the bridge we encountered our first "exotic" plants -- the large,

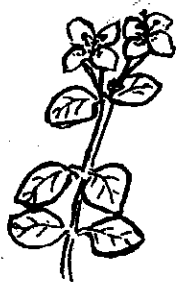


Shin Leaf

purple-blotched hawkweed, common here but rarely found in other parts of Nova Scotia, and white (when ripe) strawberries that we were able to both see and taste. The strawberries were introduced by the Acadians.

Fortunately for all of us (and particularly me), Bernard Forsythe was present for most of the trip and it was not long before he was pointing out to us (amongst other things) spotted coral root, tall leafy green, tubercled and helleborine orchids.

The trail led us through a mature forest dominated by red maple, red oak, American beech, white ash, yellow birch, hop-hornbeam (ironwood), striped maple, hemlock and white pine. Ferns were a dominant feature of the herbaceous understory. Rockcap (*Polypodium*), oak, bracken, ladyfern, Christmas, evergreen and marginal wood ferns (and hybrids), New York, sensitive, ostrich, royal, interrupted and cinnamon ferns were present and most were abundant. Flowering plants included purple trillium and clintonia (both long past flowering), jack-in-the-pulpit (a few specimens still in bloom), meadow rue (blooming in profusion), shinleaf and partridge berry (blooming) and



PARTRIDGEBERRY

joe-pye weed (not yet blooming) to name just a few. Notable understory shrubs were hobblebush and, in some areas, an abundance of yews.

Along the trail we were, of course, constantly reminded of the impacts, past and present, upon this area by man. We encountered rock piles, dug channels and wooden cribwork, now overgrown by large trees, that are believed to be the site of a sawmill. Rock rip-rap, still in good condition and buttressing a substantial portion of the trail, attests to (amongst other things) a failed attempt at hydroelectric power development early in this century. Recent impacts consist of the logging (fall 1993) of a portion of an intervale area for firewood. A strange, newly-constructed tent-frame like apparatus in the river baffled all of us as to its function. Many were suspicious that it may have been used in the illegal harvest of fish.

By 11:00 a.m. the heat and humidity were making most a bit weary but we pushed on to find a colony of tall leafy white orchids. Well before we could see them, their wonderful fragrance hanging in the damp still air made us aware of their presence. The sight and fragrance of this colony of several hundred plants was indeed a special reward for those that completed this walk.

As we hiked back along the trail enjoying the soothing sound of the running river and the beauty of this lush mature Acadian forest, it was clear that those who had not previously visited this area would be coming back again.

# A WALK ALONG THE CORNWALLIS RIVER - NEW MINAS TO KENTVILLE

August 13, 1994

by Larry Bogan

Cambridge Station, N.S.

In the past, the BNS has had walks along the railroad tracks from Wolfville to New Minas. This trip continued from the place the first left off and continued into Kentville. It was a trip appropo of the recent interest in this corridor as a possible linear park.

Most traffic through New Minas follows route one and as a result mainly sees the town's commercial activities. That is not the best way to see New Minas as we were to find out. There were ten of us walking from ACA Co-op westward along the railroad right of way. We soon came to the end of the westward progress of the rail line in the form of a barrier and torn up track. Only a short section of rail have been removed there and we had to contend with the awkward task of walking on rail ties the rest of the way.

The environment along the tracks is one of tree covered drumlins and open dyke land beside the tidal part of the Cornwallis River. Some of the richest areas for wildlife were the intervalles bordering small streams that flow into the River. As we walked west we encountered Golf Links Brook, Elderkin Brook, and Mill Brook. In all of these areas we

heard sharp-tail sparrows.

The flora beside the railroad track is dominated by introduced species such as Queen's Anne Lace, Milkweed, Evening Primrose, Hoary Alyssm, Purple Sedum, and Dogbane. At amany places there were lots of brambles from which we picked and ate ripe, delicious, blackberries.

We were all observed Monarch caterpillars munching away at the milkweed and identified an Assassin Bug before it flew away. This late in the year we saw only one yellow warbler, but lots of young Kingbirds and Song Sparrows. One Northern Harrier was seen flying away and over the dykeland. Surprisingly, there were a variety of peeps, wading, and feeding in a couple of shallow, algae-covered, puddles among excavated soils piled near the New Minas Waste threatment plant. We identified a Solitary Sandpiper, a Greater Yellow-legs, many Killdeer, and other 'peeps'. On the sewage pond we could see but not identify several different size 'brown' ducks enjoying the water.

The end of Jones Road is the least attractive area for naturalist, because of the gravel pits gradually eating away at the sizeable glacial features along the river. As we walked under the Middle Dyke Road bridge that crosses the Cornwallis River, we had a good view of the steep bluffs on the north side of the River.

We ended our stroll 2 1/2 hours after we started. It had been a sunny, warm morning so when we reache the end, we did not hesitate to find

rest on picnic tables under the towering elm trees?beside the Municipality of Kings offices.

I would urge every one to take this walk by themselves to enjoy a more natural New Minas. I hope that this corridor is not lost for use by persons wishing to travel slowly and pleasantly from Wolfville to Kentville. It would make an excellent bicycle - pedestrian path when the track are all removed and the railroad bed smoothed appropriately. At present one must contend with the awkward spacing of railroad ties when walking the tracks.

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## **GRAND PRE SHOREBIRD FIELD TRIP**

**August 20, 1994**

**by Judy Tufts**

**Wolfville, Nova Scotia**

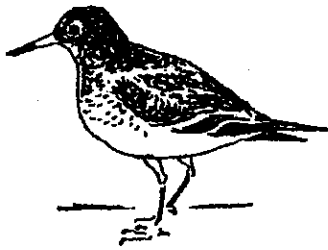
What began with eight cars and ended up with a dozen or so, conveyed a great interest in a trip to look for late August shorebirds around Grand Pre. It was a cloudy, rather muggy day with the possibility of light showers as we set out for Wolfville Harbour. Although we saw a couple of vocal spotted sandpipers and a handful of 'peeps' flitting back and forth, the fast incoming tide had dispersed the earlier flocks of sandpipers that had been observed searching out tasty morsels on the mud banks of the harbour.

We progressed to Grand Pre on

the east side to some grass-sod fields where a large roost of around 350 black-bellied plovers, several lesser golden plovers, 4 hudsonian godwits, a few short-billed dowitchers, semi-palmated plovers, 'peeps' and one ruddy turnstone awaited us; with more arriving as we watched. It was a sight worth waiting for - especially to see some of the larger shorebirds as they migrate through the Minas Basin in late summer with a good variety of the unfamiliar species for some of the birdwatchers in our group. By this time our ranks had swelled to thirty people as late comers joined us.

Then it was over to the west side of Grand Pre, to the Wolfville sewage ponds that we journeyed next, following a suggestion from the Thextons who had been experiencing good birding there lately. It proved very worthwhile as we found on the tidal side of the dyke a good sized flock of roosting 'peeps' - perhaps 10,000 sheltering on the rocks, periodically some wheeling out over the high tide in wonderful precision flight before circling back to alight in one silvery fluid movement - so fascinating to watch. We also enjoyed seeing close-up views of peeps, mostly least sandpipers, almost at our feet as they foraged among the tidal grasses along the base of the dyke.

Across the sewage ponds, a new holding pond area divulged the presence of many ducks including five blue-winged teal, black ducks and green-winged teal, plus about 30 yellowlegs (Both lesser and greater),



Purple Sandpiper

some more short-billed dowitchers and another spotted sandpiper. The ducks hastily dispersed as did the majority of the shorebirds and we were left with a handful of yellowlegs and dowitchers to observe at close quarters, the highlight here being a 'territorial' display between a pair of lesser yellowlegs with much bobbing, jumping and flapping of wings. Thanks Bill and Brenda for that suggestion.

We then headed to Evangeline Beach to await the change of tide and sat on the lawn of the Bearne's cottage and had our lunch, enjoying the reappearance of many large flocks of shorebirds flying back and forth off shore, some low - some high, anxiously searching for exposed beach surfaces to resume feeding or rest. A young merlin's noisy appearance from the woods behind us added a little spice to our lunch-stop, as it landed in a nearby tree, allowing us close looks before disappearing through the trees.

As the tide ebbed, large flocks of shorebirds approached the beach but were restless, flowing in and out in

rhythmic unison, with only a few landing near us. It became obvious that they were not going to settle in our area, whether due to swimmers or dogs being exercised on the beach, it would be difficult to judge what drives these migrants from one location to another in their search for survival. At this point it was decided to end the field-trip as many of the participants had other afternoon commitments. It had been a most rewarding day for everyone and the weather had also improved.

Finally, I would like to thank Joan and Bob Bearne for their continued kindness in allowing BNS members to use their property for these occasions.

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## Cloud Lake Canoe Trip September 4, 1994

Larry Bogan  
Cambridge Station, NS

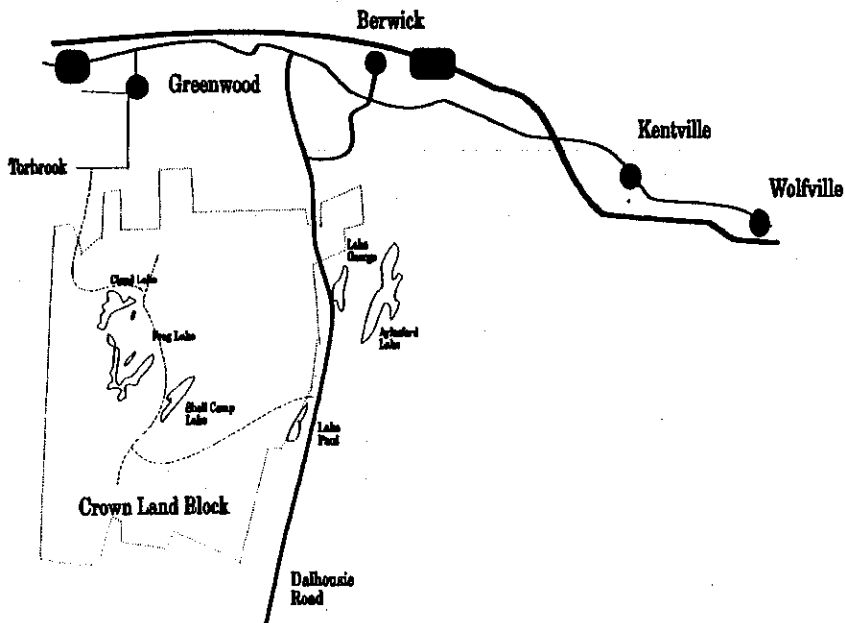
On a pleasant Sunday afternoon with a high overcast, and a light breeze, eight of us were sitting quietly watching a mink scurry along the shore, stopping once in a while to gaze back at us. Earlier the same group was again sitting in another spot and watching a flock of Yellow-rumped warblers fly-catch and chase each other in and out of the birches. In fact almost all of our nature observation that day was done in the sitting position. Our flotilla of four canoes and a kayak would bunched up in a quiet cove along Cloud Lake to watch wildlife by the shore. The

wildlife on shore seemed not to mind us as much as if we were standing tall on shore.

Cloud Lake is a medium sized lake (3-4 km in length) in a block of Crown land at the border of Annapolis and Kings County. All of this block is on the granite, southern uplands and is entirely forested (except where contractors have clear cut). There is access to these lands using Department of Natural Resources roads from Lake Paul on the Dalhousie road and from Torbrook in Annapolis County. (See the accompanying map for location and access.) There are many undeveloped and attractive lakes in this area but two of the most attractive are Cloud Lake and Frog Lake. The land around these latter two lakes have been selected as special for possible protection by the Province.

The Cloud Lake area is one of 31 candidate Protected areas mentioned in "A Proposed Systems Plan for Parks and Protected Areas in Nova Scotia". It has been selected as a representative landscape of interior granite rolling plain landscape. The proposal states that its special features are: - outstanding wetland/ glacial feature complex - wilderness travel associated with interconnecting lakes - heavy local and traditional use This Fall there are to be public meetings by a Public Review Committee to receive submissions and comments on the plan and its proposed areas for protection. In order to make intelligent comments on this area we took a field trip to the area.

The area is certainly heavily used. We put our canoes in the water at a beach built as part of a camp for air cadets at Greenwood. Sunday morn-



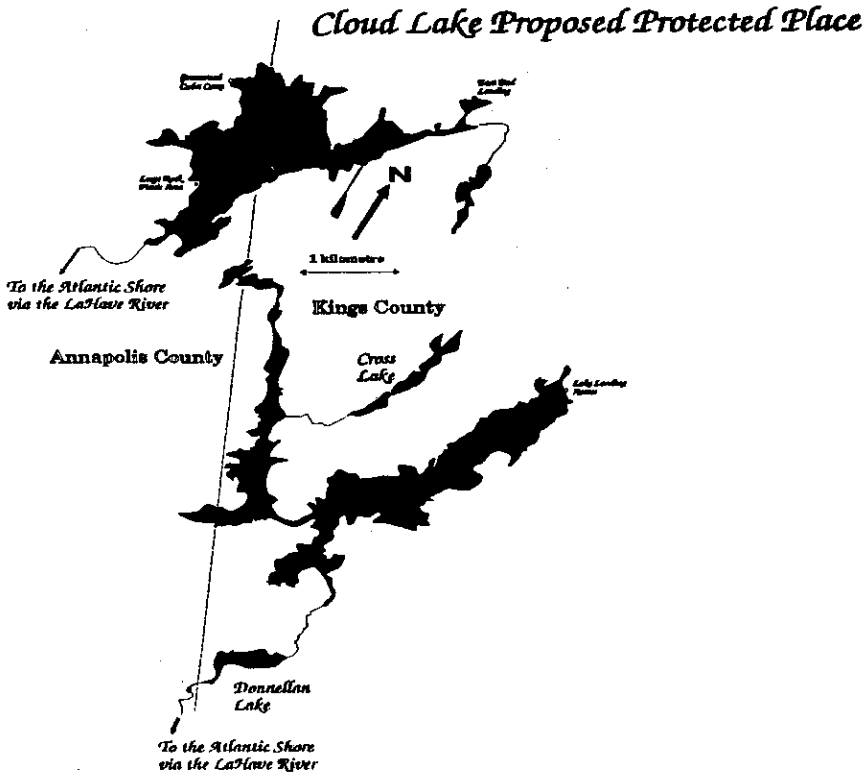
ing there were three families camped beside the beach and a motorized rowboat in the water when we arrive. At the lake's east-end landing built by the Natural Resources, there were also campers parked. Residents of the araca use the lake through-out the week. (I had visited the lake the previous Thursday and had the lake to myself but it was a cloudy, showery day)

There is a possibility of inter-lake travel with Frog Lake across a 1/2 kilometre separation. We looked for the existence of a portage therebut saw none. We traveled the entire lake on the field trip. There is an abundance of islands in the western part of the lake which makes for interest-

ing if not confusing canoeing. It is very helpful to have a 50,000:1 topographical map to guide you (Gaspereau Lake 21A/15). On the islands are several camps marked by fire-pits, docks, or temporary shelters. There is at least one cabin on the lake but these will be removed in the future as leases run out. Other parts of the lake have small coves which offer added protection from any wind and seem to attract wildlife.

My list of wildlife encounters during the approximately eleven kilometre trip (10 am to 2:30 pm) includes;

- a flotilla of nine Common Mergansers (adult and eight young) - five



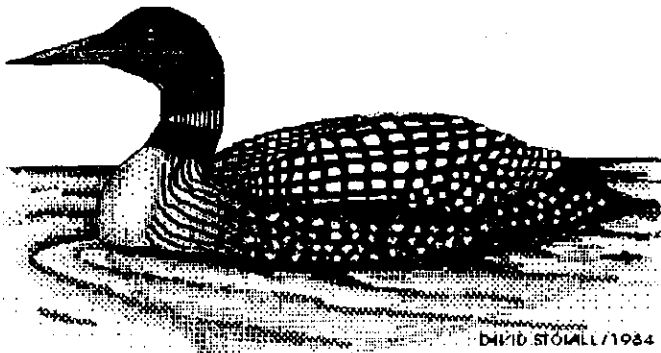
loons all in breeding plumage - one mink (observed for 1/2 kilometre along the shore) - red tail hawk sitting in a tree by the shore - three beaver lodges along the shore - an abundance of yellow-rumped warblers - common yellow throat warbler - blue jays, nuthatches, kingfisher, chickadees - delicious huckleberries along the shore - Witherod (Viburnum) berries attracting warblers - attractive Royal Fern along the shore. - a Nashville warbler among the yellow-rumped (Jim Wolford)

Although we did not canoe Frog Lake, I have been on it a few times and it too is pleasant. The Society should have a trip to it in the near future. It is not blessed with as many large islands as Cloud Lake is but it has enough to provide character. Frog Lake is two lakes connected by a narrow channel and provides extended travel. If I remember correctly, it takes an hour to canoe from the

landing at the east end to the northern tip in the northwest arm (approximately 6 kilometres). The outlet of Frog has a long stillwater at its southern end which is great for wildlife. The stillwater is not navigable by canoe to Donnellan Lake at low water. The lake also has many large and small coves along its sides which should provide shelter for wildlife. Cross Lake is a smaller lake nestled between the two arms of Frog Lake which I am eager to visit but it will require a portage of a kilometer up a small stream.

A map of the area is included to show the islands and relative position of the lakes in the proposed protected area.

\* This proposal is available along with a comment sheet, from the Department of Natural Resources offices. (Provincial Building, Exhibition Street, Kentville)





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# Natural History Articles and Regular Features

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## **SOCIETY MEMBER MAKE INTERESTING ARCTIC SIGHTINGS**

by John & Jacqueline  
Connelly

Kentville, N.S.

In mid-August, John and Jacqueline Connelly, society members who have made Kentville their home, had an opportunity to visit the Arctic shore of the Yukon, the Mackenzie Delta and the Tuktoyaktuk Peninsula and the nearby Eskimo Lakes. They report some interesting wildlife sightings.

On the canyon walls of the northern Richardson Mountains on the Yukon-Northwest Territories boundary three groups of approximately 10 to 30 rarely sighted dall mountain sheep were located. The largest group was on the valley wall of the Rat River.

While visiting Hershel Island, the Yukon's only Arctic Ocean island, they observed what is believed to be the Yukon's only colony of black gullimots. This nesting colony of approximately 100 have taken over for the last number of years the now abandoned and dilapidated mission house. These birds, with their distinctive white wing patches, are usually thought of as belonging to the Eastern Canadian Arctic and Atlantic coast. They are very rarely found in

the Western Arctic. Their normal breeding sites are holes under rocks. This colony's adaptation to using an abandoned building for nesting is unusual if not unique. (Publications by the Yukon government note the presence of this colony.) The birds feed in the ocean 150 meters away in a very localized but what must be a rich feeding area. There was constant traffic between the nesting site and the feeding grounds. Even the passage of several pods of large whales, possibly bow heads, through the feeding area did little to disrupt the activity.

After flying east some 300 km. across the Beaufort Sea, the delta of the Mackenzie and the Tuktoyaktuk Peninsula the Connellys reached the Eskimo Lakes. Circling over the large lakes, which are connected to the ocean by a channel through a series of intermeshing spurs of tundra, a pod of some 120 beluga, including calves, was observed. These white whales were swimming parallel courses separated by 20 to 40 meters. They were not in the least disturbed by the noise of the chartered Aklak Air Twin-Otter's turbo-prop engines



Black Gullimots

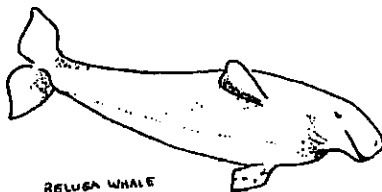
less than 100 meters above them.

Upon landing at Saunatuk, an isolated and wonderful fishing lodge on the Eskimo Lakes, James and Sharon Gruben, the owners, explained they understood that in "the old days" pods of beluga would enter the lake and the local inuvialuit would put up a string of whale bones across the narrow exit so that the noise of the bones clinking together would stop the beluga from returning to the ocean. As the lake froze over the open area available became very small making hunting of the beluga for food much easier. A few years ago a pod of these whales accidentally trapped themselves in the lakes and a great effort was made to attempt to entice them out. This rescue attempt attracted national press attention. After that a string of whale bones was placed across the entrance of this natural trap by officials to prevent beluga from entering the lake and trapping themselves. Obviously the system as installed by the government did not work.

Sharon Gruben related how three weeks previously she saw a few beluga enter the lake passing the point on which the fishing lodge is built. She watched as they returned swimming past the point towards the ocean end of the lake "as if they had been on a scouting expedition." After a short time she saw large numbers of beluga swimming past the lodge from the direction of the lake's connection to the ocean.

Saunatuk Lodge is noted for the

lake's exceptionally large (and tasty) trout and the large catches which guests at the lodge usually can be assured. However the intense beluga activity did not help produce good for the anglers during the all too short visit of the Connellys. At this writing it has not been learned whether or not the beluga have been able to return to the ocean.



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## THE 1 PERCENT NATURALIST

by Trevor Goward

Reprinted with permission  
from Nature Canada, Spring  
1994

It is said that the Duke of Cumberland once complimented the British playwright Samuel Foote with the following bouquet: "Mr. Foote, I swallow all the good things you say."

"Indeed, sir," replied Mr. Foote, "then Your Royal Highness has an excellent digestion, for you never bring any of it up again."

Recently I found myself lodging a similar complaint with the readers of "The Enlichenment," a column I

write from time to time in the B.C. Naturalist. After nearly a decade of writing into what had often seemed a vacuum, the time had come to ask: Was anybody listening? Had anybody heard me say, yes or no, that naturalists ought to pay closer attention to the little things of this world?

Over the years I have repeated this admonition, in various guises, more times than a birdwatcher has sunflower seeds. Yet for all that, the BC naturalist community seems to me no more "enrichened" in 1994 than it was in 1984, when my column premiered.

This impression was confirmed by a thumb-through of back pages of the B.C. Naturalist. Tokenism aside, the same old themes cropped up issue after issue, year after year: birds, wildflowers, birds, wetlands, birds, weeds, birds, whales, and birds, birds, birds.

While our naturalist preoccupations seem to have changed little over the past decade, Canadian societal values have changed rather a lot. Somehow, for example, old-growth forests aren't quite as decadent as they used to be. Nor are varmints, on the whole, quite as varminty.

Even the sacred term "wildlife" now officially encompasses not only the 1 percent of animals you can eat, but also the 99 percent of plants and animals (including wolf spiders, slime molds, liverworts and, of course, lichens) utterly unworthy of the privilege. Will the meek inherit the earth? I doubt it, but at least it's encouraging to see them invited to

the reading of the will.

Given this impressive broadening of conservation mandates, one wonders why naturalists haven't similarly broadened their knowledge mandates. By definition, naturalists are - or ought to be - caring knowers. But where are the caring knowers of wolf spiders and ladybugs, of slime molds and lichen crusts, of liverworts and freshwater algae? Where are the local experts on bracket fungi and pondweeds, on molluscs and geometrid moths? The answer is simple: they're out watching birds.

I hope I may be forgiven for pointing out that birdwatching, for all its merits, is something of a mixed blessing. For though the watching of feathered lizards has recruited tens of thousands into the naturalist fold, it has also continuously distracted attention from other living things perhaps more in need of being watched. On the balance, we are certainly better off with birdwatchers than without them. But even Roger Tory Peterson would (and does) admit there are other things to study.

Perhaps it comes down to this: naturalists, no less than the rest of humanity, are addicted to the obvious and the flashy. As in the shopping mall, so in the forest. Demonstrate this to yourself by checking off in your mind the number of songbirds you can identify. Now repeat the same exercise for lichens. I rest my case.

Do we actually believe, as the binoculars dangling from our necks would seem to suggest, that song-

birds are somehow more "real" than lichens? I hope not. Value judgments of this sort are not only sheer biological illiteracy, they are unbecoming of naturalists. Better to recognize that everything living has descended from a long and remarkable tradition of close calls and epic escapes. Better to admit that life at whatever scale is a miracle worthy of attention.

If there is opportunity in the present declining state of world affairs, surely it is, as David Suzuki has pointed out, to reorient our personal and social priorities to greater balance with the natural world that supports us. Achieving this balance, however, will require new

and deeper allegiances to all living things, not just the obvious and flashy.

In 1994, it is no longer enough for 99 percent of Canada's naturalists to focus on 1 percent of this country's biodiversity. There is simply too much at stake. Given society's admittedly periodic, but ultimately growing concern for the maintenance of biodiversity, the time has come for us to accept the one role it is given to naturalists alone to play: to monitor, in full living detail, the well being of the forests, fields, rivers, and lakes around us.

Goodbye, 1 percent naturalist.  
Hello, 100 percent naturalist.

## SUMMER 1994 WEATHER

by Larry Bogan Cambridge Station

Summary of Weather Statistics - Kentville, Nova Scotia

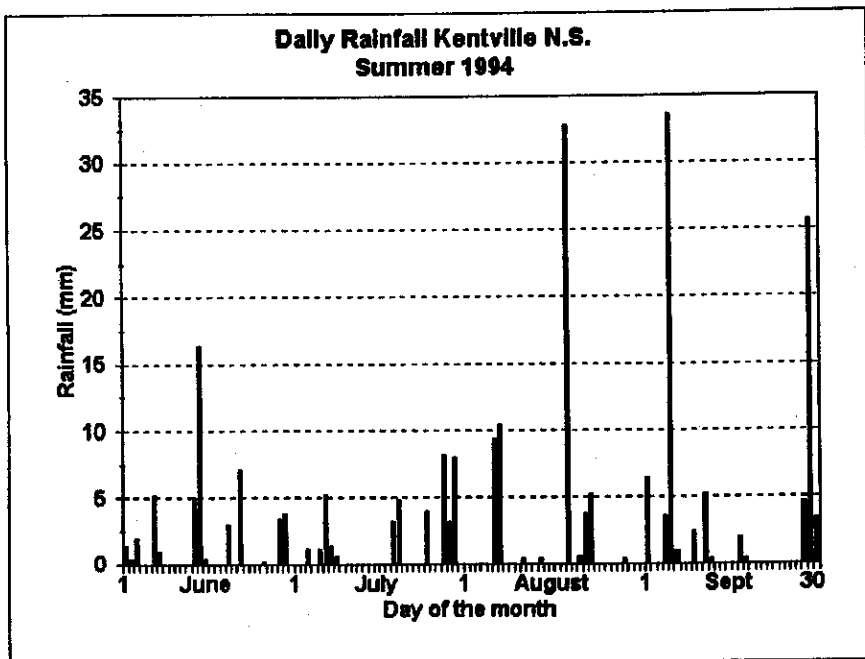
Agriculture Research Station

Month	Monthly Mean Temp	Rain Fall (mm)	Sun shine hours
June	18.0 (15.9)	49 (81)	251 (219)
July	21.5 (19.3)	41 (82)	228 (232)
August	19.1 (18.7)	63 (91)	223 (227)
September	13.9 (14.3)	89 (87)	172 (176)
Total	18.2	242	874
30 yr averages	(17.1)	(341)	(854)

The total Growing Days above 5C for the four months was 1604 compared with 1475 for the 30 year average.

The four months of June through September were warm and dry. June and July had only 90 mm of rain and by the end of the period we were 100 mm short of the normal rainfall for the period. I have plotted the daily rainfall for the period and as you can see, from June through mid-August although the rainfall was small, it was evenly distributed. Of the 29 days with some rainfall, 20 of the 29 had falls of 1/2 cm or less.

The sunshine hours were only slightly above normal for the period.



## TRIVIAL TIDBITS OF LOCAL NATURAL HISTORY

Late May to End of  
August, 1994

Selected & Compiled  
by Jim Wolford  
Wolfville, N.S.

## FUNGI

July 31 - lots of "scaly vase  
chantarelles" (*Gomphus*) along  
first half-mile of Cape Split trail -  
Audubon field guide says: "edible  
but not recommended." (JW)

## FLOWERING PLANTS

July 3 - **goutweed** (*Aegopodium*) (alias Bill Thexton's garden  
nemesis!) in bloom and abundant  
along stream in Wolfville (JW).

July 25 - water hemlock very abundant in Kingston area (JS).

July 27 - purple loosestrife in bloom and abundant along highway 101 at Bridgetown exit/entrances and also just sw. of Digby exit (JW).

July 31 - lots of Canadian burnet in bloom west of Scots Bay (JW) and sea lavender in bloom in Kingsport salt-marsh (JSB, JW).

Aug. 27 - bladderwort (*Utricularia cornuta*) in bloom along boggy trail in Kejimikujik Adjunct (Port Joli) (RN, JW).

Aug. 30 - Japanese knotweed very nearly in bloom in Wolfville (JT, JW).

## INVERTEBRATES

Aug. 31 - a smallish Portuguese man-of-war found alive at Conrad's Beach (West Lawrencetown) - was still alive at the N.S. Museum the next day (LPP, FS).

June 23 (approx) - 30 baitworm or bloodworm diggers counted in two very loose groups from near Boot Island to Avonport Beach (TM).

Aug. 29 - lots of intertidal "sea maps" of eggs of long-finned squids at both Kingsport and Scotts Bay (MG).

May 28, June 3 - in response to my



Water  
Hemlock

question in TRIVIA about ticks in Kings County, Mark Elderkin reports that he found single dog ticks on himself this past spring. Ticks were picked up while he was hiking in the Black River Lake area (ME).

Note To Observers: Ticks should still be collected and reported with date and location to Colin Bell, Biology Dept., Acadia Univ., or to Jim Wolford.

July 2 to 10 - three sightings of large "fishing spiders" (nursery-web spiders) - two reports at Three Pools, White Rock (TC, KZ, SZ), and one at Long Tusk Lake near New France (Digby Co.) (ED).

Aug. 27 - sand-colored wolf spiders (*Arctosa*) seen on white beach sand at Kejimikujik Adjunct (Port Joli) - these frequently jump like jumping spiders (JW).

## INSECTS

July 27 - at Gibson's Lake near West Dalhousie, large darner-sized dragonflies, probably "dragonhunters" (Hagenius), seen to prey on damselfly and then a monarch butterfly - we watched the monarch being eaten in a poplar tree for over an hour, and collected two of the wings that floated down (PF, RS, JW).

Aug. 4 - sharp-eyed Dave Burton, in his house in Wolfville, noticed a small lump of lint that was moving - this was a nymph of the "masked hunter" (an assassin bug).

July 18 - cicadas began calling in Wolfville (JW).



Cicada

July 13 - in Wolfville, a large fishfly was attracted to a porch light at night (JE, TS).

Aug.8 - a gold-and-brown rove beetle found near a compost pile in Wolfville - this beetle has an interesting defense-display of bright yellow wasp-like markings (DB).

Aug.14 - on Gaspereau Mountain, in wood cut last fall, Dean Spencer heard chewing noises - inside the wood he found several flat-headed borers, larvae of metallic wood-boring beetles.

Aug.27 - lots of active tiger beetles on sand of dunes and beach, Kejimikujik Adjunct (Port Joli)(JW).

June - lots more tiger swallowtails than in previous years - same for viceroy butterflies - also a couple of rosy maple moths attracted to baits smeared on tree trunks - Aylesford area (TJD).

July 28 - caterpillar, probably of tiger swallowtail, found associated with wood brought in Wolfville area, pupated in a jar the next day (DT, JW).

Aug.13 - several caterpillars of black swallowtails on dill plants in a Wolfville garden (LH).

July 15 - a tattered, worn adult

question-mark butterfly seen very probably laying tiny eggs on elm leaves in Wolfville (JT).

Aug.24 - a question-mark caterpillar pupated on Jean Timpa's house in Wolfville - soon thereafter there were four chrysalises, and emergence of new adults began on September 9(JT).

June 30 - an adult viceroy seen in white lilac flowers in Wolfville (JW).

July 31 - lots of fritillaries, 2 worn painted ladies, and a fresh male monarch seen at Cape Split(JW).

June 14 - one adult monarch seen flying along coast at Black Rock (Canada Creek)(JW).

Mid-July - 2 adult monarchs seen near Aylesford (RS).

July 25 - 2 adult monarchs seen together in Wolfville (BBT).

Aug.1 - an adult monarch seen at lower Blomidon Provincial Park, on elecampane flowers (Inula)(JW).

Aug.13 - 2 caterpillars of monarchs found on common milkweed plants in New Minas area - don't tell the



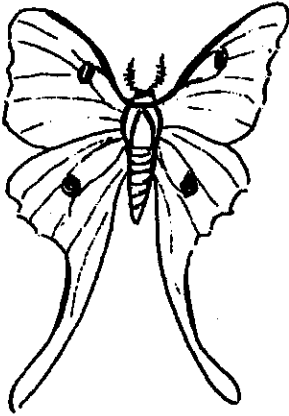
weed inspector!(JW,BNS).

Aug.23-24 - lots seen, mostly moving south to north, on Bon Portage Island (off Shag Harbour)(MG).

July 31 - lots of **satyr butterflies** (marsh satyrs?) in Kingsport salt-marsh (JSB, JB).

Aug.27 - the Payzants report that Brier Island has a colony of **in-ornate ringlets**, probably seeded from Maine(LPP).

June 17 - a dying **luna moth** found on the ground on North Mountain west of the Lookoff(HO).



Luna Moth

June 29 - an adult **4-horned sphinx moth** (or elm sphinx) emerged from its underground pupa in Wolfville - the caterpillar had been found last Sept.20, shown to BNS that night, when it burrowed into loose soil to pupate (JT).

July 7 - about a dozen large **sphinx moths** were seen at dusk in a Victoria Beach garden, among honeysuckle flowers, flying just like hummingbirds(HE).

July 15 - a large, very pink caterpil-

lar, probably of a waved sphinx, found crossing paved road in Wolfville - when placed on loose soil, it quickly burrowed, presumably to pupate (MT, JT, JW).

July 16 - a very pretty small adult **sphinx moth** with eyed, bright pink hindwings, found in Wolfville (JT).

Aug.20 - at Evangeline Beach, two children found a "parasitized" **sphinx moth caterpillar** with about 15 white cocoons of tiny wasps attached - the caterpillar died soon, but on Aug.31 the ichneumon wasps emerged from the pupae (BNS, DR, JW).

Aug.29 - a **4-horned sphinx caterpillar** was found at Port Williams (DB).

Aug.30 - a large green "hornworm" with no horn! (i.e. a sphinx moth caterpillar with no posterior spine), of a **big poplar sphinx**, found in Wolfville on the ground (JW) - this caterpillar looked ready to pupate, but did not do so until Sept.5, and without burrowing (JT).

Early June - 2 reports of **hummingbird moths** (small, clear-winged sphinx moths) seen at Wolfville and Woodside - latter moth (seen by CA) was described as having red-brown wings - these have colored wings only for one day after emergence from pupa.

July 1 - another **hummingbird moth** seen at Lake George (LJM).

June 27 - a **rosy maple moth** spending day on panels of Robie Tufts Nature Centre, Wolfville



(BBT).

June 27 - about 15 pupal cases of **bagworm moths** on ceiling of Wolfville porch (GT).

June 29 - a few dozen **bagworm** pupal cases stuck on Robie Tufts Nature Centre, Wolfville (JW).

July - more **bagworm** pupal cases noted on various leaves in Wolfville (JW).

Aug.22-27 - 3 sightings of banded **woolly bear caterpillars** (*Pyrrharctia isabella* moths) east of Wolfville (BBT).

Aug.27 - lots of conspicuous webs of fall **webworms** (small tiger moth caterpillars) on shrubs from Kentville to New Ross (JW).

Aug.29 - 2 red-humped caterpillars (or **oakworms**) found on bayberry leaves along dyke east of Wolfville - they pupated on Aug. 31(DB).

July 27 - biting blackflies present at Gibson's Lake, near West Dalhousie (JW).

Aug.28 - "wall-to-wall flies" covering surface of Lumsden Reservoir - took all the fun out of swimming! - they were all gone the next day (SM) - this was probably a mass emergence of midges (non-biting mosquito sized flies)(GD).

Aug.7 - a paper nest of bald-faced hornets conspicuous among mowed grasses on the ground along the dyke just east of Wolfville (DB, JW) - according to the Advertiser (Sept.16/94), hornet nests on the ground mean the coming winter will have little snow (and if you'll buy that, .....).

Aug.10 - at Hantsport, a small hole in the wall of a farmhouse allowed access for yellowjackets (**striped hornets**) to build a large paper nest on a bookcase stored in a closet (first noticed in mid-July)(GM).

Aug.20 - medium-sized **yellowjackets** were entering and leaving a presumed underground paper nest at the top of the shore bank at Evangeline Beach(JW).

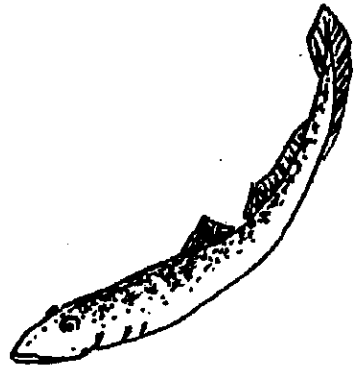
Aug.20 - in evening, at my doorstep in Wolfville, I witnessed the mass emergence of winged reproductive ants, attended by tiny excited workers(JW).

## FISHES

June 16 - several adult sea lampreys seen near the headwaters of the Annapolis River near Aylesford (JW & class).

June 29 - a 2-metre, 90 kg. "**mako-shark**" (porbeagle? or mackerel shark?) caught by Wayne Boyd off Scots Bay (The Advertiser, July 15).

July 10 - lots of 15-16 cm elvers of



Sea Lamprey

**common eels** migrating by crawling up wet rocks at Three Pools, White Rock (KZ).

## AMPHIBIANS

June 9 - 2 very blue-colored **green frogs** found along West River, Kejimikujik National Park (TH et al.).

Mid-August - a **pickerel frog** seen in Port Williams skating pond (where Jeff Franklin found a tadpole in spring '94 (IP).

## REPTILES

June 7 - I and my class were extremely surprised to find a smallish adult **snapping turtle** looking very out of place on a seaweed-covered intertidal rock at Risser's Beach! (these are not sea turtles! (JW).

June 22 - a smallish **ring-necked snake** found in New Minas woods (near highway 101) (JP, JW, et al.).

## MAMMALS

Aug.3 - at 1:30 p.m. in Blomidon Provincial Park lower picnic grounds, a presumed **little brown bat** was seen flying and then landing on roofs of picnic shelters and a tree-trunk (CNF, JW).

June 7 (approx.) - a **red squirrel** with a litter of 6 youngsters appeared (nest was inside barn) and then were very entertaining for a few days, on Wolfville Ridge (MP).

Aug.25 - a **mink** seen swimming on seaward side of dyke east of Wolfville (BBT).

July 11 - an **otter** was seen in a pond off Grandview Drive in Wolfville (reported to DT).

Aug.18 - a full-grown **red fox** pup

seen on eastern Grand Pre dykelands (JW).

July 9 - a small **seal** seen swimming in channel of Wolfville Harbour (JL).

Late June & early July - a **beluga whale** was seen in Chedabucto Bay (reported by Jim Johnson to Ron Arsenault).

July 21 - a 4.5-metre **pilot whale** nearly grounded off an island near Lunenburg (ATV-News).

Aug.2 - about a dozen **harbour porpoises** seen closely just north of Brier Island; 10 or more **humpback whales** seen and heard closely - lots of feeding and 2 breaches seen; and one **minke whale** seen, on BIOS cruise (CNF, JW).

Aug.8-11 - on boat trip from Yarmouth to Bar Harbour and return, 8 **finback whales**, 4 **humpbacks** (seen closely), and 400 or more **white-sided dolphins** seen, plus **harbour porpoises** near Maine (JSB, MD, MO).

Aug.31 - a very small **pilot whale** found freshly dead on shore of Bon Portage Island (PM).

July 4 (approx.) - a doe **white-tailed deer** seen in early morning off Sherwood Drive in Wolfville (KM).

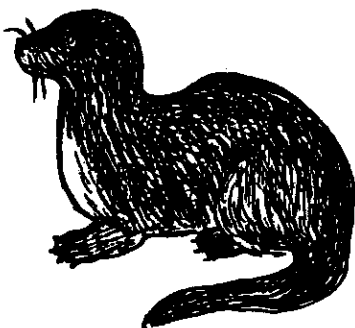


NOTE TO POTENTIAL CONTRIBUTORS \*\*\* HELP! The following long list of "contributors" is extremely misleading! Only one couple (BBT), and indirectly two other people, have provided written cards! All I ask is to jot down "what, where, when, how many, and your name and phone number!" How hard is that? This is your column - please help. - JW.

### Contributors To Trivial Tidbits

CA - Carole Allain  
 RA - Ron Arsenault  
 JSB - Sherman Boates  
 DB - Dave Burton  
 TC - Tim Chipman  
 ED - Mrs. Ernest Doty  
 GD - Graham Daborn  
 MD - Marc Ducharme  
 TJD - Twila & John DeCoste  
 HE - Helen Ellis  
 JE - John Enzinas  
 ME - Mark Elderkin  
 CNF - Can. Nature Federation  
 PF - Paul Findlay  
 MG - Merritt Gibson  
 LH - Lorna Hart  
 TH - Tom Herman  
 JL - Joan Lloyd  
 GM - Glenn MacDougall  
 KM - Keith Meerman  
 LJM - Laura & Jeff Monchamp  
 PM - Phil Montford  
 SM - Shirley Marston  
 TM - Terry Murphy  
 RN - Ruth Newell  
 HO - Helen Orr  
 MO - Mike O'Brien  
 IP - Ian Paterson  
 JP - John Pickwell  
 LPP - Linda & Peter Payzant  
 MP - Mary Pratt  
 DR - Dick Rogers  
 BNS - Blomidon Nat. Soc.  
 DS - Dean Spencer  
 FS - Fred Scott  
 JS - Jerry Schofield  
 RS - Rob Smith

TS - Troy Saulnier  
 BBT - Brenda & Bill Thexton  
 DT - Dianne Thorpe  
 GT - Gerry Trueman  
 JT - Jean Timpa  
 MT - Margie Tuttle  
 ATV - ATV News  
 JW - Jim Wolford  
 KZ - Kassim Zebian  
 SZ - Sue Zinck



## BNS BIRD NEWS SUMMER-EARLY FALL 1994 by Richard Stern Kentville, N.S.

After a hot dry summer, a cool fall is once again upon us. There have been plenty of good birds to see, if one looks carefully. Once again it would be nice to have better coverage from the western end of our area.

### Pied-billed Grebe

One of these rather uncommon pond birds was on the Saxon St. pond on 11 Sept., still with the head stripes of a juvenile bird.(RBS).

## **Double-crested Cormorant**

3 young were begging for food in the top of a willow along the side of Canard Pond on 30 August, and 1 adult was attending them, although no actual feeding was observed (RBS).

## **Green Heron**

Up to this year, this species has been called the Green-backed heron, but authorities have now "split" it into a North American species, the Green heron, and a Mexican species, the Striated heron. So our version has again reverted to its old name. In any case, this small dark heron is a rarity in our area, but one was present at Elderkin's Pond in Wolfville (PE) on June 13, which unfortunately did not stick around for others to enjoy it.

## **American Wigeon**

14 were at Harris's Pond, Canning, their most reliable local spot, Sept. 16-17 (JCT).

Teal Spp.

Green-winged numbers in particular were building up on the local ponds by Sept., and there were 4 Blue-winged with them at the Wolfville sewage plant Sept. 12. (RBS).

## **Wood Duck**

A female of this most attractive species was present on Woolaver's Pond, Brooklyn, with 7 ducklings 20 June, and they were still present 7 days later. (BM).

## **Northern Goshawk**

Pairs nested again in the usual sites in woods north of Kentville (RBS

etc.) and between Gaspereau and Lumsden (BLF).

AAM was attacked by an adult, with a young bird close by, in the woods close to his house (Coldbrook) on June 28, but the birds did not stay around to be found again.

## **Bald Eagle**

3 large nestlings were jumping and flapping on the Greenwich nest June 29 (JWW).

## **Osprey**

Once again a pair nested on the platform provided on the far side of Aylesford Lake (RBS etc.).

## **Merlin**

Once again a pair nested in Wolfville, near the hospital (now the clinic), and raised 3 young (PCS, BLF etc.).

## **Sora**

The only sighting this season of this fairly common but very shy and hard to see reed-bed species was of one on Aug. 22 at Harris's Pond, Canning (AAM).

## **Shorebirds**

The great flocks of Semipalmated Sandpiper have as usual fed and roosted on and over the tidal flats at Grand Pre and the Windsor causeway. It seems that with each year recently the proportion of birds at Windsor has increased compared to Grand Pre, e.g 10-15,000 there July 18 (JCT). However the number of birds on this side of the Bay of Fundy has apparently increased this year at the expense of the New Brunswick side. Much smaller numbers of Semipalmated Plovers, Least

Sandpipers etc. have as usual accompanied them. Several people feel that with the increased use of the Grand Pre meadows for sod farming and increased haying, the large flocks of Godwits, Dowitchers, Golden Plover etc. that used to be seen there have markedly diminished. There were 3 Lesser Golden Plover with the Blackbellies on Aug.18 (JWW), and subsequently 30 (BLF). However on 14 August JCT found 400+ Black-bellied Plover and 2 Hudsonian Godwit on a field near a farm close to the Hortonville Road at high tide. The Godwits had increased to 8, 4 days later (JWW). There were also 2 at Kingsport in early Sept. (MAG). KLC reports a banner day for several of the above species at Cheverie on August 8, including 200+ Ruddy Turnstones and 10 Red Knot. 10 more of the latter were at Grand Pre Sept 4 (JCT). A rather uncommon Stilt Sandpiper was at the Wolfville sewage plant in early Sept (KM, RBS), and a Solitary Sandpiper was at Canard Pond July 29 (JCT).

### **Ruffed Grouse**

5 were seen by SLH in the Tremont area July 18 (? a family).

### **Spruce Grouse**

A female of this elusive but rather tame deep- woods species was seen by BLF, with several young, in the Methals area on July 12.

### **Black-billed Cuckoo**

GWT heard one calling near Berwick during July and August. The Maritimes Breeding Bird Atlas project found a few breeding records of this locally uncommon and secretive

species in the Valley.

### **Great Horned Owl**

Decidedly uncommon these days in our region, KLC heard a pair serenading on the night of 8 August, and BLF rescued a young bird that had got into some porcupine quills, and it was subsequently released back into the wild by DNR. IV-S flushed one from bushes near the Lovatt Road bridge at dusk on 8 Sept.

### **Barred Owl**

3 young were begging for food around JCT's back yard in mid-July, and then continued to hoot well into the late Summer. At the time of writing (early Oct.), the family of 4 that have been hooting all Summer around RBS's (Kentville) yard are still active. One has called in Col-dbrook every night from June 1 to Sept. 28! (AAM).

### **Common Nighthawk**

Summer numbers seem reduced to a fraction of their former abundance in the Valley, but migrating flocks are holding their own in late Summer/ early Fall. RBS saw 8 or 9 flying west over Kentville at dusk on July 15, and about 50 on 9 August. SLH saw 4 over Tremont July 20, and JT reported a large flock over Bear River in early August. There were 25+ over central Kentville on 20 August (RBS).

### **Chimney Swift**

To date the maximum number I have for the Front St. chimney is approx. 350 on several dates in late May (JWW etc.). Numbers remained around 100 through till early August,

and then started to drop off till just the odd lone bird was present by the last week of the month. 450+ were seen entering a chimney at Middleton High School Aug 2 and 16, at dusk as expected. Once again, BLF found a nest (as against all the above, which are roosts), in a dead tree stump on Methals Lake, containing 3 well-feathered young on Aug.27. This is the type of habitat used by this species before chimneys existed!

### **Ruby-throated Hummingbird**

Common as usual this summer, at appropriate plants, feeders etc. As usual, the males arrive first in mid-May to set up territories, but after fertilising the females, they take no further part in nest-building, raising young etc. By August most of the birds seen are females and immatures, without the black/red throat. Virtually all had left our area by Labour Day.

### **Yellow-bellied Sapsucker**

GWT, RBS and AAM found several back in the woods on June 20 - often calling loudly, and flying in response to simulated Barred owl calls.

### **Willow Flycatcher**

SW found one, identified (of course) by song, in the same spot as last year's pair, together with some Alder flycatchers. Again, this is a major rarity for Nova Scotia, and may be becoming a Valley speciality.

### **Black-capped Chickadee**

JCT had 2 nest boxes in her backyard, Wolfville ridge, out of which 17 chicks fledged, from 21 eggs laid.

### **Boreal Chickadee**

Normally quite rare in the area, there were hundreds at Blomidon Provincial Park, one of the traditional haunts, on 12 August.(RBS).

### **Red-breasted Nuthatch**

A large movement was noted on Sept 4 by JCT through the woods around Wolfville Ridge.

### **White-breasted Nuthatch**

An adult fed several young in AAM's backyard (Coldbrook) June 22, and the family stayed around till independent.

### **Golden-crowned Kinglet**

Large numbers at Blomidon Provincial Park 12 August.(RBS).

### **Blue-gray Gnatcatcher**

One was present in the woods behind Evergreen Nursing home, Kentville on May 31 (RBS). This is an annual visitor to Brier and Seal Islands etc. from points much farther south and west, but as far as I can ascertain this is only a 2nd record for King's County.

### **Wren Spp.**

CH observed a large Wren for 2 weeks around a house in Bear River in August. It appeared to have all the field marks of a Bewick's Wren, a western species not so far definitely recorded in Nova Scotia. He then found that it was inhabiting an old Robin's nest, and on further inspection found 5 cold and obviously infertile eggs. These were removed, and subsequently examined by RBS and BLF, who after comparing them with pictures and descriptions in various texts, felt that they were

eggs of a Carolina Wren, a species recorded occasionally in the Province but with no previous nesting records. They were then sent to Fred Scott at the N.S.Museum, who measured them, and felt that they were the size of a Bewick's, but the description of a Carolina! Carolina wrens may apparently lay smaller eggs than normal in their first year, so that could be the explanation. Several experts tried to re-locate the bird for photo I.D. but without success, so it remains a bit of a mystery.

As a postscript, New Brunswick had its first confirmed Bewick's Wren at Mary's Point in early Oct. (AAM).

### Northern Mockingbird

One was singing and "on territory" at Chipman Corner in late June (JCT etc.), and the same observer noted one at Prescott House, just up the road July 5. SLH also saw one at C.F.B. Greenwood July 21.

### Vireos and Warblers

A rare Warbling Vireo was at White Rock July 2 (BLF) - could it have been the same bird that has been singing (in vain) in Wolfville for the last few years, but not in 1994?

AAM noticed Palm Warblers breeding in the Xmas tree plantations near New Ross this summer. Several observers noted a marked lack of Tennessee this summer. Black-throated Blue Warblers could be found deep in the woods near Greenfield as in previous years (GWT etc.).

As usual in late Summer and Fall numbers of these birds were best

seen in "waves" on migration, or when numbers of young have fledged and are dispersing. They are classically more difficult to identify in late summer and fall than in spring, but given good views, most bear enough resemblance to the spring-plumaged birds not to cause too much difficulty, and to make identification more of a fun challenge. There was a group of several dozen warblers just beyond the entrance to Blomidon Provincial Park on 12 August just after dawn; none were left by noon. Most were Black-throated Green, together with several Bay-breasted, Black-and-white, American Redstart, Yellow-rumped, Cape May and one well seen out-in-the-open Mourning (RBS). GF was amazed when what appeared to be a Worm-eating Warbler popped out of the bushes in Port Williams on 21 August. This major rarity from the S.E. USA has only 2 or 3 recorded sightings in Nova Scotia. Searching the spot the next day failed to turn up the bird again. All through mid- and late- August and early Sept, good numbers of our breeding species, such as Yellow, Yellow-rumped, Black-and-white, Magnolia etc. were easy to find in appropriate habitats throughout the county. Wilson's were seen in Kentville Aug 29 and Sept 14 (RBS). MAG noted numerous Common Yellowthroats going through his Canning property on 11 Sept. A late Red-eyed Vireo was seen in Kentville woods 1 Oct. (RBS).

### Northern Cardinal

We are beginning to get used to

seeing a few of these at winter feeders, but a bright male flying through RC's backyard in west Kentville July 25 was an unusual surprise.

### **Savannah Sparrow**

As usual large numbers of individuals and small flocks could be seen along weedy roadsides, railway tracks, meadows, dykes etc. by Fall. It would be interesting to estimate the total number in our area, as they may outnumber shorebirds if totalled up!

### **Northern Oriole**

King's County seems to be a persisting stronghold for breeding of this species in Nova Scotia, although I am aware of several traditional sites that have become abandoned even within the last 5 years. At least one pair nested in the usual spot behind the Kentville tennis court (RBS), and JWW reports a male calling loudly in Wolfville May 25.

### **Red Crossbill**

BLF reported a "large influx" into King's Co. in early August. There were certainly numerous flocks of up to 20 birds each roaming around Blomidon Provincial Park on August 12 (RBS), accompanied in a few cases by much smaller numbers of White-winged Crossbill.

### **Purple Finch**

"Many" were in CR's back yard in New Ross on July 20, eating at her feeder and feeding their young.

### **Contributors to Bird News**

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PE Paul Elderkin

BLF Bernard Forsythe

GF George Forsyth

MAG Merritt Gibson

CH Chris Hawse

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SW Sherman Williams

JWW Jim Wolford

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Next Issue To:

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# BLOMIDON NATURALISTS SOCIETY

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Members may also subscribe to *FNSN News*, the newsletter of the Federation of Nova Scotia Naturalists; the subscription fee is not tax-deductible.

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**Harold Forsyth**  
R.R. 2 Wolfville, N.S. BOP 1X0

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# Sources for Local Natural History Information

(compiled by Blomidon Naturalists Society)

<i>Information</i>	<i>Source</i>	<i>Office</i>	<i>Home</i>
Rocks & Fossils	Geol. Dept., Acadia Univ.	542-2201	
Fish	N.S. Dept. of Natural Resources	679-6091	
Flora - General	Ruth Newell	542-2201	542-2095
Flora - Fungi	Darryl Grund	542-2201	542-9214
	Nancy Nickerson	679-5333	542-9332
Flora - Lichens	Karen Casselman	424-7370	633-2837
Flora - Seaweeds	Darryl Grund	542-2201	542-9214
Flora - Mosses & Ferns	John Pickwell		681-8281
Birds - General	Bernard Forsythe		542-2427
	Richard Stern	678-4742	678-1975
	Gordon & Judy Tufts		542-7800
	Jim Wolford	542-2201	542-7650
	Jean Timpa		542-5678
Birds - Hawks & Owls	Bernard Forsythe		542-2427
Birds - Falcons & Eagles	Peter Austin-Smith		542-2109
Mammals	Tom Herman	542-2201	678-0383
Amphibians & Reptiles	Sherman Bleakney	542-2201	542-3604
	Jim Wolford	542-2201	542-7650
Seashore & Marine Life	Sherman Bleakney	542-2201	542-3604
	Jim Wolford	542-2201	542-7650
	Graham Daborn	542-2201	542-5373
	Michael Brylinsky	542-2201	582-7954
Indian Prehistory	Ellis Gertridge		542-2816
& Archaeological Sites	James Legge		542-3530
Astronomy	Roy Bishop		542-3992
	Sherman Williams	542-3598	542-5104
	Larry Bogan	542-2201	678-0446

NOVEMBER 1994						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Exceptionally High Tides on this Date		1	2	3	4	5
6	7	8 6:30 pm Astronomy Field Trip	Moon at Perigee	9	10	11
13	14	15	16	17	18	19
20	21 BNS Evening Meeting	22	23	24	25	26
27	28	29	30	L. Bogan		

DECEMBER 1994						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Exceptionally High Tides this date				1	2	3
4	5	6	7	8	9	10
11	12 BNS Evening Meeting	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JANUARY 1995						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16 BNS Evening Meeting	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

