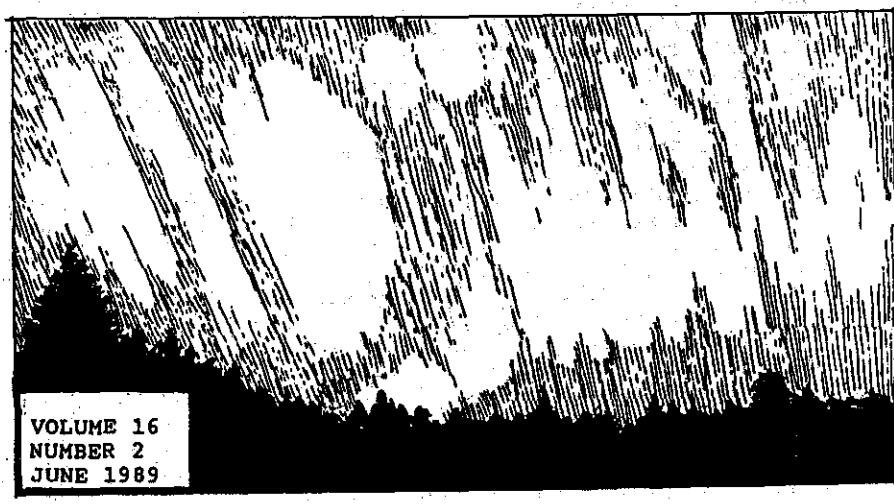
BLOMIDON NATURALISTS SOCIETY NEWSLETTER



VOLUME 16
NUMBER 2
JUNE 1989

SOCIETY ACTIVITIES

BNS Summer and Early Fall Programme

MONDAY EVENING MEETINGS: All meetings will start at 7:30 p.m. and, unless otherwise indicated, will be held in Room 241 of the Beveridge Arts Centre at Acadia University. All lectures and field trips are open to the public and BNS members are encouraged to bring friends and neighbours. Any changes in the date, time or subject of meetings are announced on posters, the Kings Kable notice board and in The Kentville Advertiser and The Hants Journal.

1. September 18 -- "The Greenhouse Effect" with Larry Hughes of the Technical University of Nova Scotia, Halifax.

2. Late September -- watch for announcements of events associated with the opening at the Nova Scotia Museum of the "Birds of Prey" exhibit. For information about the exhibit itself, see the March 1989 Newsletter.

3. October 16 -- Robert Ogilvie, Curator of Special Places, Nova Scotia Museum, Halifax, will speak on "Special Places in Nova Scotia".

4. November 20 -- "Pest Management in Fruit Trees" by staff members of Agriculture Canada at the Kentville Agricultural Centre.

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The BNS Newsletter is published on equinoxes and solstices.

Editors: George and Margaret Alliston
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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 an Affiliated Member of the Canadian Nature Federation.

Address correspondence to:
Blomidon Naturalists Society
P.O. Box 127
Wolfville, Nova Scotia, B0P 1X0

Field Trips

Unless otherwise noted, all times are given for meeting at the Acadia Gym parking lot. Leaders' telephone numbers are included to allow those without access to local news to confirm trips.

1. Sunday, July 16, 7:30 a.m. -- Delaps Cove Walking Trail with Bernard Forsythe (542-2427). All day. Alternate meeting place: Delaps Cove Trail parking lot at 9:30 a.m.

2. Sunday, July 30, 11:30 a.m. -- Carpets of Sandpipers at Evangeline Beach. Leader: Jim Wolford (542-7650). Alternate meeting place: Grand Pre Park parking lot at 11:45 a.m.

3. Wednesday, August 23, 8:00 p.m. -- Chimney Swifts then Planets and Stars with Larry Bogan (678-0446). Alternate meeting place: Stile Park, Wolfville Ridge, at 9:00 p.m.

4. Sunday, August 27, 7:00 a.m. -- Tusket River Special Place and Coastal Plain Plants. Leader: Nick Hill (678-8109). Bring provisions for all day and rubber boots.

5. Sunday, September 17, 8:00 a.m. -- Old Annapolis Road Hiking Trail, a "pocket wilderness" of Bowater Mersey Paper Co., near St. Margaret's Bay. Two trails will be walked. All day. Leader: to be announced. For information, phone Jim Wolford (542-7650).

6. Sunday, October 1, 8:30 a.m. -- Hayes Cave and Bats. Leader: Fred Scott (429-4610, N.S. Museum). All day. Participants must be fit. Bring rubber boots, flashlights, work gloves, warm clothing with waterproof outerwear and a hard hat, if possible. Alternate meeting place: South Maitland General Store at 10:00 a.m.

Acknowledgements

Our thanks this time to:

David Patriquin for a challenging talk about the ecology of agricultural systems;

Tom Herman and Terry Power for providing us with some exotic information (and myths) about turtles in general and Blandings turtles in Kejimkujik Park in particular;

our field trip leaders: Larry Bogan, Bernard Forsythe, Tom Herman, Ruth Newell, Sherman Williams, and Jim Wolford;

all of our Newsletter contributors.

BNS Receives Award

by Sherman Williams
Avonport, N.S.

As part of the Town of Wolfville's recognition of its volunteers, the Blomidon Naturalists Society was presented with a certificate to "represent the Town's salute to the members of your group who have donated countless hours of their time in the past year". The presentation was made on May 10, 1989, at a reception held at the Legion Hall. Our Treasurer, Judy Tufts, accepted the certificate on behalf of the Society.

We wish to express our thanks to the Town of Wolfville for their recognition. We assure them that we will continue to offer our services in natural history interpretation to both citizens of, and visitors to, this area.

I would like to sincerely thank all of those members who have donated so freely of their time thus enabling the Blomidon Naturalists Society to achieve its objectives.

BNS Celebrates Environment Week

As part of our celebration of Environment Week, June 4 - 10, The Blomidon Naturalists Society scheduled a series of morning and evening nature walks as well as a public forum. The schedule of events was as follows:

June 4	6:30 a.m.	Mud and intertidal life of Evangeline Beach
	1:00 p.m.	Coldbrook pine woods walk to view lady's-slipper orchids and oxbow ponds of the Cornwallis River
June 5	5:45 a.m.	Nature walk in Kentville Ravine
	7:00 p.m.	Nature walk in Wolfville
June 6	6:00 a.m.	Nature walk on the Wolfville dykes
	7:30 p.m.	Public forum on "How to reduce waste" at Huggins Science Hall. Panel included representatives of the Kings Environmental Group, the Ecology Action Centre, Kings Recycling and the Kings County Blue Box Project.
June 7	5:45 a.m.	Nature walk on Wolfville Ridge
	6:30 p.m.	Nature walk at Akin Marsh near Falmouth
June 8	5:30 a.m.	Nature walk in Canning
	6:30 p.m.	Nature walk along Brooklyn Street in Kentville
June 9	5:30 a.m.	Nature walk in Kentville
	7:00 p.m.	Nature walk on the Wolfville dykes
June 10	8:00 a.m.	Day-long nature walk to Cape Split
June 11	8:30 a.m.	Nature walk to Poplar Grove, Hants Co., to see lady's-slipper orchids.

In addition to the above activities, at our May meeting a hat was passed (literally) and $ 100 was collected. This money was donated to the Guardian of the Rainforest program to be used to protect four acres of rainforest in either Mexico or Guatemala.

The Robie Tufts Young Naturalists Award

The Robie Tufts Young Naturalists Award was established by the Blomidon Naturalists Society in 1983, in memory of Dr. Robie Tufts, to encourage an interest in natural history. Winners have been:

1984	Tammy Ashley of Newtonville
1985	Paul Fairclough of Coldbrook
1986	Kasia Muldner of Wolfville
	Sean Timpa of Wolfville
1987	Michael Jodrey of Hantsport
1988	Stephen MacPhee of Wolfville
	Jelmer Wiersma of Bishopville

Any resident, of Kings or Hants Counties, fifteen years of age or younger, may enter the competition. Projects entered may cover any subject concerning natural history: for example, a wildflower collection, descriptions of local bird observations, an essay on a natural history subject, a project describing the life cycle of insects, a geological collection, etc. The candidate should display an ongoing interest in the subject.

Questions concerning the competition should be addressed to:

Mr. Sherman Williams
President
Blomidon Naturalists Society
P.O. Box 127
Wolfville, N.S. B0P 1X0
Telephone: 542-5104

Nominations should be submitted to Sherman Williams by August 31, 1989.

Entries will be judged by the Executive Committee of the Society and the award(s) presented at the annual meeting in October. The prize will be one year's membership in the Society and a field guide of the recipient's choice.

Members of the Society are urged to nominate suitable candidates and/or encourage young people to enter the competition.

BNS Membership Renewals

In the past, Blomidon Naturalists Society membership fees for the upcoming year were due on September 1st. This left us with a bit of a "problem" with new members, particularly those who joined late in our year, being charged another membership fee after just a few months. As a result, membership fees are now due on the anniversary of your joining. A notification that fees are due will be included with the fourth Newsletter you receive after paying your dues. Of course, for all our "old" members, your 1989-1990 membership fees are still due September 1, 1989, the anni-

versary of your last payment. If you have not paid by then, a reminder will be sent with your September Newsletter. Please use the form at the back of the Newsletter to remit your fees.

BNS Newsletter Submissions Deadline - September 1, 1989

Please send or give all contributions to the Newsletter to:

George Alliston (542-3651)
R.R 3
Wolfville, N.S. B0P 1X0

or to other members of the BNS executive.

For "Trivial Tidbits" only, send your written observations (in chronological order) to Jim Wolford at:

Biology Department
Acadia University
Wolfville, N.S. B0P 1X0

Last-minute observations can be phoned in to 542-2201, ext. 334 (leave a message).

The editors would greatly appreciate all submissions, even those typed or word-processed, being at least double-spaced to facilitate both editing and word processing. Sketches or diagrams should be submitted in final form, preferably on a separate page.

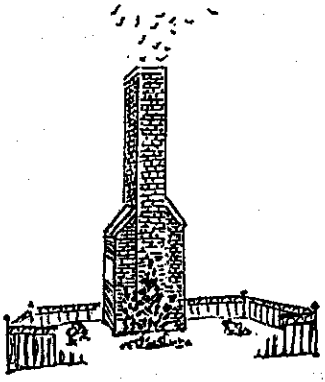
NATURAL HISTORY NEWS

The Front Street Swifts: An Update

by Tom Herman
Kentville, N.S.

As most BNS members are aware, the Farmer's Dairy on Front Street in Wolfville is scheduled to be demolished shortly, to make way for a parking lot and liquor store complex. The loss of the dairy chimney, an important summer roost site for hundreds of chimney swifts, was a matter of concern to many of us. Voicing that concern to individuals involved with the development or on Town Council has led to a dramatic change in plans.

It appears that the chimney will now be left standing and the building will be carefully dem olished around it. A small ad hoc committee has been formed to keep an eye on the swifts during demolition, which should take place in the latter half of June. When demolition is complete, a small park-like environment will be created around the chimney.



I see this as more than an isolated conservation success. Perhaps the process by which it was achieved is more important than the achievement itself. The process was dominated by a spirit of cooperation rather than confrontation. The

Development and Works Committee of the Wolfville Business and Development Corporation and the Wolfville Town Council are to be commended for their part in adopting an environmentally friendly development approach.

Acadia Nature Trail

by Marian Zinck
Canning, N.S.

The Department of Biology at Acadia University is developing a nature trail bordering the intersection of University Avenue and Skyway Drive. The trail meanders over nearly 38 acres of field and forest. This summer the Acadia Nature Trail will be officially opened to the public. A small parking lot is available at the entrance on University Avenue.

The easy walk can be accomplished in an hour and covers three-quarters of a mile.

Along the trail, many of the trees, shrubs, ferns, mosses and flowers are identified with small signs. Descriptive notes about natural history topics are distributed along the trail. Some notes describing the history of the area are also included. (There are also signs posted to keep you pointed in the right direction!)

At this time (May 28), the hawthorn and cherry trees are dressed in fragrant blooms, a few mayflowers are lingering about and the ferns are unfolding delicate green fronds beneath the tree cover. The blue jays are busily trying to defend their nests from marauding crows and sharpies. Near the brook, a winter wren's notes can be heard above the chuckle of running water. The scolding of a red squirrel startles those who pass too close. Intrigued? Then make plans to visit the Acadia Nature Trail this summer.

For further information, contact Dr. Merritt Gibson or me.

The Nova Scotia Trails Federation

by Sherman Williams
Avonport, N.S.

Larry Bogan, Jim Wolford and I attended the first annual meeting of the Nova Scotia Trails Federation, held on May 6, 1989, at the Fairbanks Center in Shubie Park, Dartmouth, N.S. This is a new organization that hopes to serve as an umbrella group for provincial recreation groups and individuals interested in promoting the development and sensible use of trails for the benefit of its members and the general public.

Events leading to the founding of the Nova Scotia Trails Federation began over two years ago at the "Trails for Tomorrow" conference. The Federation was legally registered under the Societies Act on March 22nd of this year. Its purpose, as stated in its Memorandum of Association, is "to further communication, understanding, and cooperation among

the trail users and user groups of Nova Scotia and to work toward the wise development, high standard maintenance and responsible use of trails in the province". It is intended that the Federation will provide the trail-using community with a strong unified voice.

Various presentations were heard, including one by Rick Gilbert, N.S. Co-ordinator of Outdoor Recreation entitled "Nova Scotia Trails - Where Are They? Where Are They Going?".

The main business of the meeting included drawing up a list of potential functions of the Nova Scotia Trails Federation and establishing a list of priorities on which to begin. To establish a trails inventory and a newsletter were high on the list of priorities.

Presently there are eight federated members and several associate members. Each federated member is a trail user group organized at the provincial level with the exception of the Field Naturalists group. Presently there is no Nova Scotia Field Naturalists Association. Until such a group is formed, this position on the board of directors is being held by the Halifax Field Naturalists. It is my understanding the our Blomidon Naturalists Society could become an associate member as can any one of its individual members. Indidvidual associate membership is $10.00 and should be sent to:

Nova Scotia Trails Federation
P.O. Box 3010 South
Halifax, N.S. B3J 3G6.

Nova Scotia's New Parks Act a Disappointment

As of New Year's Day, a new Provincial Parks Act came into force in Nova Scotia. But contrary to what one might think, naturalists are not celebrating the event.

The Halifax Field Naturalists are leading the attack, and with good reason. They feel the Act has three fundamental weaknesses: it neglects to make a clear distinction between sites of natural, historical or aesthetic value and sites to be used merely for outdoor recreation; it fails to assign top priority to conservation; and it allows too much administrative discretion.

More specifically, the Act does not offer provincial parks real protection. It favours recreational developments and permits mining, logging, hunting and other related activities within park boundaries. It even allows the minister of lands and forests to withdraw land from parks or eliminate parks completely without any public consultation.

The CNF has a definite interest in the concerns expressed by our Halifax affiliate. Several years ago, the federation acquired a piece of property at Conrad's Beach, east of Dartmouth, in an area designated to become a provincial park. The transfer of the property to the province to facilitate park establishment was being considered. However, the CNF is not willing to relinquish title to the land if its protection cannot be guaranteed.

The Halifax Field Naturalists are calling for the expansion of the parks system to include examples of all major Nova Scotia habitats. Further, they would like to see large areas designated as wilderness parks. Although they agree

with the need to provide services adequate to support enjoyment of a site's intrinsic features, they deplore the concept of development for development's sake.

On the positive side, the Halifax Field Naturalists whole-heartedly support provisions for expanded volunteer involvement in park operations, as well as rigorous enforcement of park regulations designed to protect resources.

The above is reprinted from Canadian Nature Federation Almanac, Spring 1989. Like the Halifax Field Naturalists, the Blomidon Naturalists Society is an affiliate of the CNF.

FIELD TRIP REPORTS

Annapolis/Digby Area Waterbirds
March 12, 1989

by Jim Wolford
Wolfville, N.S.

Wet snow fell all day; the morning was mostly windless but the afternoon was windy and cold. Sharon Hawboldt, the trip leader, met the six BNS'ers and three members of the Annapolis Field Naturalists at the Annapolis Causeway Tidal Power Plant. We had perhaps the trip's "best" sighting here: two male and two female Barrow's goldeneyes which were with 70 greater scaups, ten common goldeneyes, a beautiful male common eider, and five American black ducks. The four Barrow's goldeneyes were accompanied by a female common goldeneye which provided an instructive comparison for us all.

Then we drove to the Fundy shore where, at the Parker's Cove wharf, there were great cormorants, a red-necked grebe, white-winged and surf scoters, a red-breasted merganser, and a bufflehead. There was also an unidentified living fly on the snow - it warmed up in my hand and flew away.

Next we went to the Hawboldt's home in Clementsport for a very pleasant lunch. At their feeders were a pine siskin, American goldfinches, dark-eyed juncos, and evening grosbeaks. But the deer mouse that was a frequent daytime visitor at one feeder was not seen.

At the mouth of the Bear River we saw a group of about 150 bufflheads, 20 oldsquaws (some calls heard), etc. A harbour seal was observed pushing around a big spherical pink buoy/marker.

At the Digby wharf, we obtained close looks at greater scaups but the most memorable part of that stop was the bitterly cold wind and the driving rain and snow. Despite a search for the famous Digby lesser black-backed gull, no "interesting" gulls were seen. Finally we drove along Digby Harbour north to the ferry terminal. Normally this is a

productive area for waterbirds, and viewing there is very easy, but the wind-driven wet snow so reduced our visibility that we were able to see little of interest.

Many thanks to Sharon and Steve Hawboldt for leading our trip on such short notice and for opening up their home to a group of cold and wet naturalists.

Canada Geese at Wellington Dyke
April 4, 1989

by Jim Wolford
Wolfville, N.S.

Our very impressive gaggle of 25 vehicles (perhaps 75 people) assembled on the Wellington Dyke at about 7:30 p.m. The evening was overcast with a moderate, but chilly, breeze. Visibility was good and a couple of small flocks of Canada geese were observed but some fog soon developed. The fog then receded a bit and a light rain drove some people to their cars. Judy Tufts pointed out a small isolated tree in which American crows were building a nest.

The sky gradually darkened and for a long time the only observations of interest were a few (probably green-winged) teal flying over, a calling killdeer, and lines, V's and other groupings of gulls flying eastward over us.

At about 8:05, a flock of 75 geese finally lifted up and, noisily honking, flew right over our heads on their way to their night roost on the water at the mouth of the Canard River. A few people then departed but many remained in the growing darkness. Until at least 8:35, more Canada geese continued to fly over in groups of from 10 to 80 birds. The total number of Canada geese seen was only about 250 to 300.

I later discovered (confirmed by Merritt Gibson) that most of the approximately 1500+ Canada geese (and the eight snow geese) using the Habitant River Valley were roosting in a flooded field northwest of Canning. Ah well, we'll get it right next year!

Owls and Woodcock
April 25, 1989

by Bernard Forsythe
Wolfville, N.S.

The intermittent snow showers and cold weather did not dampen the spirits of the 15 or so carloads of people who went on this outing. Meadow vole populations were low in the Grand Pre dykelands this year resulting in the absence of short-eared owls. We caravaned across the dyke anyway and were rewarded with the sighting of 100-plus brant grazing on marsh grass.

The next stop was at a great horned owl nest in Gaspereau. This nest contained two healthy young that each received a numbered leg band as their anxious parents flew into view to the delight of the crowd witnessing the banding

procedure. By now it was getting dark so we drove to a woodland swamp in Greenfield. Probably due to the recent cold spell we only heard one woodcock and one common snipe performing their courtship flights. An attempt to call a saw-whet owl did not bring any response. During March I had heard saw-whets calling in five places on the South Mountain but they seemed to have disappeared by early April.

We then tried to get a response from the barred owls nesting in one of my nestboxes near Hell's Gate. For some reason they refused to cooperate and remained silent. Because of the late hour some of the group left for home while the rest of us visited another barred owl nestbox. This time several brave souls from the crowd assisted me with the calling and we soon had the male owl answering us. As we left the area the female owl joined her mate in a long series of hoots, yells, and shrieks. A perfect way to end a successful owl outing.

Amphibians in Gaspereau Ponds

May 1, 1989

by Jim Wolford
Wolfville, N.S.

Forty-two people, including lots of exuberant children, gathered in the Acadia Gym parking lot on this warm, pleasant evening. In the parking lot I played taped calls of frogs, peepers, and toads and also displayed information brochures, available free from the Nova Scotia Museum, on frogs and salamanders. I then proceeded to explain the trip "rules" which were soon to be broken or ignored by most, including myself: no collecting or capturing, everyone should stay behind me (talk about wishful thinking!), everyone should stay out of the water and use flashlights as pointers to show others what they had found.

The first stop on our journey was to listen at a pond on Skyview Drive at Basin View where we heard several loud spring peepers and a "chuckling" wood frog.

We next stopped at a temporary pond on Wolfville Ridge where peepers and wood frogs were calling. Several of each were seen. However, I forgot to point out what I had found there the previous day: hatching clumps of wood frog tadpoles with the egg-envelopes bright green from symbiotic algae - great leader, eh?

Next we went to "Toad Dugout", a stream-fed man-made pond, just east of Gaspereau. Here we heard an American toad trilling in the distance, but peepers and wood frogs were calling fairly strongly. Most people saw a few peepers but we needed some rain and a stronger chorus to be able to watch them in the act of calling. Some saw a few adult yellow-spotted salamanders plus a mass of their undeveloped eggs. One or more adult green frogs were seen and a few of their large, overwintered tadpoles were netted, placed in a shallow pan, viewed by the group and then released. Various

aquatic insects, like water boatmen and a large dragonfly nymph, as well as many snails were observed.

Our final stop was at a pond I call "Bleakney's Pond", west of Gaspereau. It is stream-fed and probably spring-fed and on the south side of the valley; the north-facing exposure plus cool springwater result in later and slower amphibian activity. Tonight the water was warm, about 7 deg. C. Wood frogs were calling and several adult yellow-spotted salamanders and lots of their conspicuous white spermatophores were seen. A few smallish, overwintered green frog tadpoles were netted in the extensive mat of green algae. Other aquatic life seen were a black planarian flatworm, snails, a tiny thin worm, "water fleas" (copepod crustaceans), a small mayfly nymph, water boatmen, and active comma-shaped pupae of mosquitoes.

Some of our youths spotted an unknown small mammal - mole or shrew or mouse or vole - in the alders at the pond's edge.

Bonus: somehow I managed to get not even one foot wet - incredible!

Thank-you's go to Tom Herman for sharing the leadership of this large group and to Harold and George Forsyth and others for their sharp eyesight.

Blomidon Park Hike
May 14, 1989

by Sherman Williams
Avonport, N.S.

Approximately 24 hardy adventurers of all ages turned out for the treck along the trails in Blomidon Park. The weather was, to say the least, varied: overcast, drizzle, fog and even a little sunshine. The moisture did not dampen the hiking spirit; if anything, it gave a special atmosphere to "Glooscap Country". This was especially true when we paused by a very small lake located along the trail to Indian Springs. We stopped to listen as water dripped from the overhanging mossy trees into the misty stillness of the pond. It was at this stop that Jim Wolford pointed out fairy shrimp swimming in the water. This is apparently the only location in the area where this tiny crustacean has been found.

The mist did, however, obscure the views of the surrounding countryside normally seen on a clear day from the various lookouts along the Indian Springs trail. Instead, one got a sense of bottomlessness that sent a chill up the spine as one cautiously ventured to peek over the cliff.

Those who had come to see the red trilliums and the Dutchman's britches were not disappointed; these showy plants were well represented and in full bloom. Several places were carpeted with spring beauties; however, due to the lack of sunshine, their blooms were closed.

Lunch was enjoyed in the company of some fine specimens of red spruce. One of the spruces was at least a metre in diameter and stood very tall and straight. The sound of the downhill rush of running water below us signaled that Indian Springs was not far off.

Two converging streams mark Indian Springs; they merge

into one and the waters rush down a gully, eventually ending up on the beach at the foot of Blomidon. Apparently one can gain safe access to the beach at this point. We stopped where the trail crosses the streams to read the small cairn erected to the memory of Roy Jaudrey who donated several acres on this part of Cape Blomidon to be included in Blomidon Provincial Park.

At this point the adventurers began the return trip by taking a loop that would eventually lead back to the campground area from which we had set out. This part of the trail passes through a stand of old hardwood trees, mostly yellow birch and maple. The understory of this stand contains several species of ferns.

Unfortunately the return part of the hike was not without incident. One of our company lost footing on a slippery patch and gave her ankle a nasty turn. When it was discovered the ankle was too painful to walk on and with yet another two kilometres or so to go, resourceful first-aiders fashioned a four-person carry seat from poles and a jacket. With others taking turns at carrying, the remainder of the trip was completed with little delay.

As we came out of the woods the sun began to shine. Spirits were running high and our hiking adventure had nearly reached its end. The sights and sounds in the mists of Blomidon and the first aid action along the trail will no doubt make this field trip a memorable one for those who attended. (As far as is known, the ankle injury was not serious.)

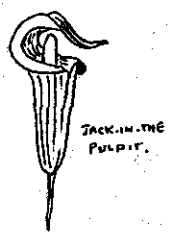
Gaspereau River Walk
May 27, 1989

by Bernard Forsythe
Wolfville, N.S.

A dozen people joined Ruth Newell and me for a leisurely stroll along the path following the river up from the White Rock bridge. Many stops were made to observe and identify the great variety of plants, bushes, and trees found in this area. The large beds of ferns were especially impressive. Several species were identified, such as sensitive, royal, ostrich, and cinnamon fern. Shadbush and hobblebush were past flowering; however, the chokecherry bloom was just beginning. A witch-hazel next to a hazelnut made a nice comparison.

The rich belt of plant life along the river contrasted greatly with the plants found under the heavy woods canopy a few feet away. Some avens sported small yellow flowers but others not yet in bloom had to be looked at carefully to separate them from the similar-looking agrimony also not yet in bloom. A few late red trilliums were found, plus a nodding trillium with its pretty flower held below its leaves. This habitat needs to be visited every two or three weeks to observe the variety of plants that mature throughout the summer.

Because of the leafout more birds were heard than seen. There was a gray catbird at the start of the trail while several species of vireos, warblers, and thrushes were listened to throughout the afternoon. The loud song of the northern waterthrush was heard at several locations. At one spot we listened carefully to detect the soft "che-lek" call of a yellow-bellied flycatcher.



Other life observed included a garter snake, a toad, hatching spotted salamander eggs, and a newly-emerged adult dragonfly. There was even a wild apple tree in bloom deep in the woods: fitting since it was "apple blossom weekend". The walk was enjoyed by all and comments about return visits were heard, a sign of a successful outing.

NATURE REPORTS

Northeast Goes Finchless

Cornell Laboratory of Ornithology

This past winter left people all over the eastern United States wondering where the birds were. Feeders went unoccupied and bags of seed bought in anticipation of flocks of winged guests gathered dust in garages and back hallways. But, for the first time ever, North American ornithologists can answer "where are the birds?" even as the winter snows linger on the ground. According to data compiled for Project FeederWatch, a continent-wide bird feeder survey run by the Cornell Laboratory of Ornithology and Canada's Long Point Bird Observatory, many birds appear to have stayed north this winter in the boreal forests of Canada. However, bird numbers at feeders across the continent's midsection and in the west were on par with last winter.

The biggest gap in feeder attendance occurred among the aptly named "winter finches". This group includes such popular feeder visitors as the evening grosbeak, pine siskin, and purple finch. Both evening grosbeaks and pine siskins showed decreases of 75-100 % at feeders in the northeastern and southeastern United States where last winter flocks of hundreds stretched the birdseed budgets of many families. These decreases, however, were offset by dramatic increases in the numbers of pine siskins in the northwestern U.S. and Canada and of evening grosbeaks in the northern Great Plains.

"Both siskins and grosbeaks are boom or bust species that wander nomadically across the continent, stopping wherever food is plentiful," says Erica Dunn, coordinator of Project FeederWatch. "Last year was a boom year for them across the entire eastern third of North America. This winter they have definitely stayed north in Canada where there appears to have been an excellent supply of the tree seeds they feed upon. The relatively mild, snowless winter experienced in much of the East also probably contributed to these birds remaining further north than in other years."

According to Dunn, "Last winter there were enough siskins for an average of seven to be counted at every bird *feeder in North America throughout* the entire winter. But what a difference a year makes. A few people in the northeast who were entertaining flocks of over 300 siskins every day last winter had none this year."

With some surveys estimating that 80 million people in the United States feed birds, the presence or absence of these winter finches attracts a great deal of attention. And, with annual birdseed sales now topping $1 billion, winter finches even produce economic repercussions for seed companies and farmers!

Project FeederWatch is already enlisting participants to help monitor feeder birds in the winter of 1989-1990. [For details on how to participate, see the March 1988 issue of the Newsletter. Ed.]

A Tale from Wartime England

by Bill Thexton
Wolfville, N.S.

In wartime, a pair of extremely rare European birds, Tawny Pipits, began nesting on a piece of wasteland outside an English village. Instantly the protection of these tiny visitors took precedence over mere military problems. As part of the festivities, the lady poet of the district wrote an anthem dedicated to the pipits and ran over the words with the vicar for his approval. The final couplet read as follows:

It's a very great honour, we're all agreed,
That they came to Lipsbury Lea to breed.

The vicar nodded his blessing but the lady poet was worried. She asked him if he didn't think the word "breed" was "a little strong".

Averting his eyes, the good man blurted, "Well, that's what they're doing, whether we like it or not."

And the lady poet, her doubts at rest, told him cozily, "I always think it's all right as long as it's just eggs."

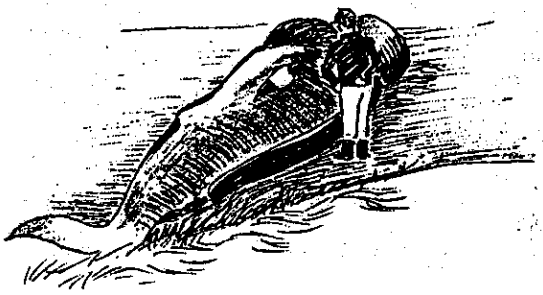
A Whale of a Story

by Tom Herman
Kentville, N.S.

News of a stranded whale travels quickly. The Minke Whale that came ashore at Wolfville in early May was no exception. I received a call from Merritt Gibson in the early afternoon of Saturday, May 7, and immediately went out to have a look. By that time, the whale, which had probably washed up on the high tide late Friday night, had already attracted a group of curious onlookers.

The whale lay on its back along the edge of a tidal drainage channel. From its aroma, I would guess that it had

died several days previously. Its tongue was grotesquely bloated by gases of decomposition. These had forced the lower jaw open and expanded the pleats along the throat. It certainly did not look the shape that its scientific name (Balaenoptera acutorostrata) implies!



Although the tissue around the genital opening had deteriorated somewhat, nipples (one on each side) could still be seen in the lengthwise folds of tissue on either side of the opening. The animal measured 7.5 m in total length; this places it near the lower end of the size range for reproductive age females of this species.

The cause of death is unknown. When I first saw the whale, it was still intact. There were no obvious wounds (from "oar boats" or otherwise), except for some superficial scrapes. However the entire back was not visible because of the whale's position on the mud. By Sunday the carcass had been poked and lacerated and one forelimb had been hacked off. Rumours of major collisions with large boats began to circulate.

Although the whale was adult, it was probably not old (based on its size). We cannot rule out disease or contamination as a cause of death. Recent strandings of small toothed whales along shores of the Northwest Atlantic have shown a large number of animals with systemic bacterial infections. Whether these are primary or secondary causes of death is not clear.

The Minke Whale is the smallest of the baleen whales, a group that includes right whales, gray whales, humpbacks and rorquals. Most baleen whales rely on plankton for their major food source. Ironically, the Minke, the smallest of the rorquals, relies on the largest food items. It frequently pursues schooling and bottom-dwelling fish in shallow coastal waters. Such behaviour can get it in trouble.

Some cetologists (whale biologists) believe that whales may become disoriented in shallow waters, particularly those with gently sloping bottoms. These features, in combination with a huge tidal amplitude, may make the Minas Basin a navigation hazard from a whale's perspective. Although Minkes are occasionally seen in the Basin, they are far more common in the lower Bay. Once stranded, a baleen whale of that size cannot normally support its own weight out of water. Even if it can, if the animal settles on its side, it can drown on the next incoming tide before it is buoyant enough to right itself.

Whatever the cause of mortality in this particular case, the carcass continued to attract attention. Defying the predictions of a local tidal expert, it disappeared from its

Wolfville mooring Sunday night. Monday it was sighted on the Cornwallis River, riding the incoming tide under the Port Williams bridge. By Thursday it had been sighted as far upriver as the Kentville side of the new bridge between Commercial and Belcher Streets. Local health officials became concerned about the potential problems posed by such a large volume of decomposing flesh. Local municipalities became concerned about where both the whale and the buck stopped.

By mid-week I had received numerous phone calls from media about the whale. All sorts of rumours were flying, so when I heard that it had acquired an "offspring" during its travels up and down the Cornwallis River, I dismissed it as a product of overactive imagination. It was not until the end of the week that I began to wonder. I received a phone call late Friday night from a woman whose son had just seen the Minke carcass accompanied by "its baby" on the Cornwallis River near the new bridge. When I spoke to the son, he described in detail the morphology and behaviour of an animal that he had seen close to the whale carcass and apparently travelling with it. His description was clearly that of a Harbour Porpoise (although he claimed not to be a naturalist, he was certainly a good observer!).

I anxiously awaited the high tide Saturday evening, in hopes of catching a glimpse of the whales. I arrived at about 8:00 p.m. just as the tide was slack. I was more than a little surprised to find well over one hundred people along the dike just downstream of the new bridge! Cars lined both sides of the road, the Mounties directed traffic, and a carnival atmosphere prevailed. All this to watch a very dead whale...and its "baby". The "baby" did indeed turn out to be a Harbour Porpoise: a whale, albeit an adult of a very different species.

I watched the porpoise for nearly an hour until it and the Minke carcass disappeared downstream on the outgoing tide. It swam, 50 - 75 m downstream from the carcass, in wide arcs the full width of the river, gradually moving downstream. The porpoise surfaced at fairly regular intervals, mostly less than 30 seconds. At one point a small school of smelt-sized fish broke the surface just ahead of it but there was no obvious response by the porpoise. Was the porpoise attracted somehow to the Minke carcass and, if so, why, or were the two simply 'tracking' the same water mass? I have no way of knowing. Epimeletic behaviour (helping other individuals in distress) is widely reported in dolphins and porpoises, even among different species. But I saw no indication that the porpoise was trying to interact with the carcass. On the other hand, porpoises are rarely seen that far up the Cornwallis River (but how many people look?). It will remain a mystery.

I last spotted the Minke the next night; the tide was not as high and it had only gotten as far upstream as the New Minas sewage lagoons. There was no sign of its week-long companion.

The next day I left town. By the time I returned, the Minke had been dragged from the water and buried. Perhaps a few years from now, after it has contributed sufficiently to local nutrient enrichment, it can contribute a little something to the museum at Acadia.

Nova Scotia Bald Eagles Nesting in Massachusetts
An Update

by George Alliston
West Brooklyn, N.S.

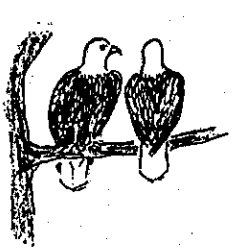
In the September 1988 issue of the Newsletter, we described the program undertaken by the Commonwealth of Massachusetts to reestablish the bald eagle as a nesting bird in that state. From 1982 through 1988, 42 eaglets were hand-reared and released in the Quabbin Reservoir area near Boston. Thirty-six of these eaglets had been obtained from wild eagle nests in Nova Scotia. At the time of writing the original article, three mated pairs of eagles, two of which had constructed nests in 1988, were present at the Reservoir. No eggs or young were produced in 1988.

The following is from a press release by the Massachusetts Division of Fisheries and Wildlife dated 19 May 1989:

"Wildlife biologists from the Massachusetts Division of Fisheries and Wildlife are pleased to announce the hatching of a baby eagle at Quabbin -- which occurred on Mother's Day, Sunday, May 14. It is a [sic] historic event, the first eagle hatched in Massachusetts since 1910 and a confirmation of the state's eagle restoration project which has been underway since 1982.

Although no one has yet seen the eaglet, Eagle project leader Bill Davis and photographer Bill Byrne have been keeping close watch on two nesting pairs of eagles which have been sitting tight, evidently incubating eggs.

On May 16 they noted that the behavior of one pair had changed dramatically. "Ross", a bird released at Quabbin in 1982 and his mate, a bird released in 1985 [a Nova Scotia bird. GA], were spending more time hovering and shifting and bringing food to the nest. The adult eagles tore pieces of fish into small bits and were seen offering the morsels to the tiny newcomer. Both appeared to be especially careful when settling down on the nest, evidently brooding the chick(s). While no one has yet seen the eaglet(s) the change in parental activity is strong circumstantial evidence that something has hatched. Withing a week or two, according to Dr. Tom French, Assistant Director in charge of the Natural Heritage and Endangered Species Section, they expect to see one or more small heads over the rim of the nest and a few weeks later they will make one sole ascent to band the nestlings. Ross and his mate built a preliminary nest during the spring of 1988 but produced no eggs.



A watch is also being maintained on another eagle nest located at the reservoir where a pair of birds (one from the 1985 release [another N.S. bird. GA] and another of undetermined origin) are incubating one or more eggs. These birds had been spotted in spring of 1988 engaging in preliminary nesting activity and they had placed a half dozen sticks in a tall spindly pine tree. Knowing that the pine could not bear the weight of an eagle nest, Davis and Byrne located a more suitable tree over the winter and, with the help of Metropolitan District Commission

biologist Paul Lyons, created a better nest site. The birds opted for the improved nest site on their return this spring and have been on their nest for nearly 33 days prompting French to explain that a hatching at this nest could occur any day."

It was subsequently confirmed that there was at least one young in the second nest.

It has also been confirmed that a third pair is constructing a "practice" nest in an aspen tree on the Quabbin Reservoir. It is not believed that this aspen is sound enough to support a completed eagle nest so biologists intend either to reinforce the structure or move it this winter. Both members of this pair are Nova Scotia birds.

A fourth pair of eagles is constructing a "practice" nest outside the Reservoir area on the Connecticut River. The male of this pair is a Nova Scotia bird and the female is a fourth-year bird of unknown origin.

With the successful nesting of these released eagles, the objective of establishing a self-sustaining population of eagles in Massachusetts comes a giant step closer to being achieved.

Sunshine and Spring Weather 1989

by Larry D. Bogan
Cambridge Station, N.S.

In mid-May, we had two weeks of unsettled weather with mostly cloudy days. At the time, I would have predicted that the weather records for May would show lower than average bright sunshine hours for the month. Now, at the end of May, we have had a week of uninterrupted sunshine and I would no longer make that prediction. This illustates how difficult it is to predict the average weather for a month.

How did May turn out? We had nearly normal sunshine hours for May but that sunshine was unevenly distributed throughout the month. May 6th through May 14th had only 13.7 hours of bright sunshine while May 15th alone had 13 hours. The sunny period of May 15th through the 24th had 108.5 hours.

The precipitation was normal for the period. There was uneven rainfall associated with the cloudy weather in May. 36.4 mm of rain fell on May 6th and accounted for 37% of the total precipitation for the month.

Table I - March, April, and May Statistics from the Agricultural Research Station, Kentville, N.S.
(statistics in parentheses are the 30 year averages)

	Mean Temperature (C)	Total. Preciptation (mm)	Bright Sunshine hours	Snow
March	-2.7 (-1.0)	111 (99)	163 (128)	50 (50)
April	4.9 (4.4)	58 (83)	168 (152)	-
May	14.3 (10.4)	98 (77)	197 (202)	-
Total		267 (259)	528 (482)	

March was a cool month, being a full 1.7 degrees below the norm while April was warmer by a half degree than average.

May showed the most variation from normal temperatures with a mean temperature four degrees above average! The blanket of cloudy skies in early May kept us warmer in the evenings and prevented the usual frosts. The sunny skies and warm air later in May boosted our growing heat units. Gardeners were delighted with May since it had 137 growing degrees days above 10C when only 55 can normally be expected. We had to heat our homes much less in May because there were less than half the normal heating degree days. (114 versus 238 degree days).

Both March and April were sunnier than "normal" and so was the spring period. Over the years since I have been writing these comments on the weather, I had the impression the winters have been sunnier than in the past. I decided to check the trends. Old Envirnoment Service records give the following averages for three overlapping thirty-year periods

Table II. 30 year averages of bright sunshine hours normals for the months November through April. Kentville, N.S.

1931-1960	575 hours
1941-1970	586 hours
1951-1980	632 hours

Notice the trend of increasing sunshine hours in recent 30 year periods. The 1988-1989 November-thru-April period had 679 bright sunshine hours. One might be tempted to say that next year will be even sunnier and the Greenhouse effect is showing its stuff, but -- in 1987-1988 over the same period there were only 600 bight-sunshine hours, less than the average for the 1951-1980 period. Statistics are fun to examine but one has to be careful in using them for predictions over the short term.

The Aurora

by Roy Bishop
Avonport, N.S.

One of the most beautiful and mystical sights in nature is the aurora. As viewed in the northern regions of our planet, it is referred to as the aurora borealis, or northern lights; in the Southern Hemisphere, the aurora australis, or southern lights. The visible aurora ranges from a faint white glow near the northern horizon (for Nova Scotians), to bright coloured rippling sheets of light that flash rapidly over much of the sky.

The light of the aurora originates high in Earth's atmosphere, far above the regions occupied by clouds and aircraft. At heights of 80 to 400 kilometres, where the last traces of our atmosphere merge into the vacuum of space, molecules of air (primarily nitrogen and oxygen) are exposed to high speed electrons and protons which are continually being blown out through the Solar System by the Sun.

This spray of electrons and protons is the expanding outer fringe of the Sun's gases and is referred to as the solar wind. These subatomic particles stream outward past the planets into interstellar space at speeds near 1000 km/s, or more than a million kilometres per hour. Fortunately Earth's magnetic field shields it from this dilute but energetic solar blast. The solar wind is deflected by our planet's magnetic field much as the air rushing past the pilot in an airplane is deflected by the outer shell of the airplane. This protective magnetic capsule is called the magnetosphere. Some particles from the solar wind become entangled within Earth's magnetosphere and concentrate in regions such as the famous van Allen radiation belts. Usually, however, few of these high speed particles reach Earth's atmosphere.

Despite how steady and placid the Sun appears to our eyes, occasionally it ejects particularly intense and energetic showers of particles. These emerging bursts are called solar flares and are usually associated with large sunspot groups on the Sun. When such bursts arrive at Earth a day or so later, they cause complex disturbances within the magnetosphere and some of the particles tangled within the magnetosphere may penetrate inward and collide with the upper atmosphere. These collisions of solar electrons with the air molecules excite and dissociate the molecules, which respond by emitting light.

Because of the influence of Earth's magnetic field, the electrons penetrating down to the atmosphere can usually do so only at high latitudes, in regions such as Canada, Siberia, and Antarctica. Auroral activity is most frequent in broad circular regions, known as auroral ovals, centred on Earth's magnetic poles. Aurorae are very rare in the tropics, but are visible on most clear nights in places such as northern Manitoba.

The flashing dance of a bright aurora directly reveals the motion of showers of high speed solar electrons as they penetrate and collide with Earth's upper atmosphere. If the light is intense enough to excite our colour vision, the light emitted by excited nitrogen molecules appears blue, while oxygen can emit light which produces both green and red hues. Depending on the mix of these hues, an unlimited variety of colours can be generated by a bright aurora. (For more information, a recent article on the aurora appears in the May 1989 issue of Scientific American.)

Auroral activity follows the eleven-year sunspot cycle. The Sun is currently increasing in activity (the last minimum was in 1986). Beginning last March 6, several extremely energetic flares associated with a large sunspot group occurred on the Sun. One or more of these caused bright coloured aurorae which were widely observed on the nights of March 12/13 and 13/14 (only the latter night was clear in Nova Scotia). But such bright coloured aurorae are rare, only one or two being generally visible per decade.

The aurora seems to an exclusively visual display. One cannot smell, taste, touch, or hear it... although over the years there have been reports of sound associated with bright aurorae. Nevertheless, no instrument has ever recorded the reported faint crackling hiss of the aurora.

If there really is sound associated with aurorae, several things are clear: such sounds are rare (few people have

reported them); the sound cannot come directly from the dancing lights since the atmosphere at such altitudes is too thin to transmit sound efficiently; if sound could propagate down to the ground, it would not be synchronized with the flashing aurora since it would take many minutes for sound to travel this far; furthermore, sounds composed of crackling hisses (i.e. high frequencies) are strongly absorbed as they travel through air (this is why distant thunder consists of only low rumbles), thus even if the aurora generated such sounds, the sounds could not propagate a hundred or more kilometres to the ground. If there occasionally is sound associated with bright auroral flashes, most probably it is generated by small creatures in the underbrush near the listener reacting to the light... or perhaps by the observer's own hair rising in excitement and scraping on a nylon collar! On a frosty winter night, possibly the electric fields associated with an auroral disturbance (such as upset Hydro Quebec's power grid last March) might cause ice crystals on objects nearby to fracture and crackle. What is needed is more data, and good data!

As the Sun increases in activity over the next few years, we can expect to see aurorae more frequently. Unfortunately, in towns and cities light pollution obliterates all but the brightest aurorae, while even in the countryside, mercury and sodium-vapour yard lights increasingly cut people off from the aurora and stars. At the very least, yard lights should have manual switches so those living under them can exchange the otherwise perpetual artificial glare for the beauty and mystery of the natural sky.

1989FC - An Asteroid Flyby

by Larry Bogan
Cambridge Station, N.S.

In early April, an asteroid named 1989FC briefly made the news because in late March it had come closer to Earth than any other large body in recorded history. This event was not observed directly but deduced from the orbit measured by astronomers as the asteroid moved away from the Earth.

In science fiction stories where an asteroid hits the Earth and creates a catastrope, astronomers see it coming and humankind gets a warning which is either ignored or not taken seriously. Because 1989FC was relatively small (200 to 1000 metres in diameter) and moved towards us from the sunward direction, it could not have been detected even if we had looked in the right location at the right time.

In the figure on the opposite page, I have plotted both the orbits of the asteroid and the Earth. You can see how the orbits are different and the points where they cross. Let me briefly describe planetary (and asteroid) orbits to give you a feeling of the tremendous coincidence it was that the two bodies came as close as they did in March.

All orbits lie in a two-dimensional plane. The plane of 1989FC's orbit is inclined to the Earth's by 5 degrees (see Figure 1, side view). During half the orbital cycle the asteroid is below the Earth's orbit and during the other half, it is above. It is only at the line of intersection of

the two orbital planes that the objects can come close to each other. Astronomers call this the "Line of Nodes". Even though the orbital planes intersect, two other conditions must be satisfied before the asteroid can come anywhere near the Earth. First the two bodies must have orbits that have the same radii at the Line of Nodes and, second, the two bodies must be at that precise point in their orbits at the same time.

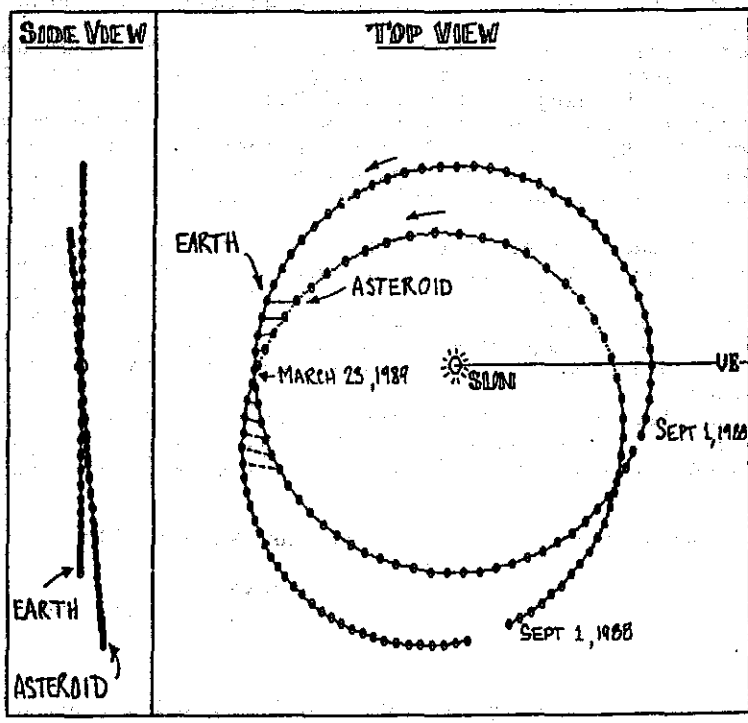


Figure 1. The orbits of asteroid 1989FC and the Earth from June 1988 thru June 1989. The position of each is shown at 5-day intervals. Two views are shown; the top view is from the North while the side view is that looking towards the Vernal Equinox. The top view indicates the asteroid's orbit is below (south) of the orbital plane of the Earth (ecliptic).

The asteroid's average distance from the Sun is 2.4 % larger than the Earth's. If both objects had circular orbits around the sun they would never get any closer than 3.6 million kilometres. The asteroid has an orbit which is elliptical and moves both closer to and farther from the Sun than the Earth does. At two points in its orbit it will be at the same distance from the Sun as the Earth's orbit. But the elliptical orbit must have just the right orientation in order that at least one of these points coincides with the Line of Nodes. 1989FC has such an orbit but only at the left node do the orbits have the same radii. At the right node the asteroid is much closer to the Sun.

The Earth completes its orbit once every year, while the asteroid has a period of 1.024 years. Since the asteroid *requires 13.33 more days to complete its orbit* it falls behind the Earth at every revolution. In about 27 years the Earth will lap the asteroid and it will be close again but not as close as in March 1989. On March 23, 1989, 1989FC passed by at a distance of 0.005 Astronomical Units or 750,000 km. (The distance to the Moon is 238,000 km.) In 27 years it will pass by at a distance of about 14 million kilometers.

Every 142 years the two objects will get reasonably close to each other. If the assumption is made that the orbits do not change, in March of 2131, according to my calculations, the asteroid will pass at more than twice the distance (1,750,000 km) of closest approach in 1989. Using the same methods, I deduce that the asteroid was closer 142 years ago in March 1847 and only missed the Earth by 250,000 km!

1989FC was a small asteroid with a mass of about one billion tonnes. When sighted it was moving about 11 km/s relative to the Earth and if it had impacted on the Earth it would have hit with about a 60 billion billion Joules of energy. That is equivalent to about 200,000 Hiroshima nuclear explosions or about 4000 one megatonne nuclear explosions.

As an illustration of the effects that asteroid or comet collisions could have with Earth, see the article, "March to Extinction" in the June 1989 issue of National Geographic.

A Brief Astronomical Calendar for Summer 1989

by Larry Bogan
Cambridge Station, N.S.

JUNE

24th - **Uranus** at Opposition (5th magnitude and due south at midnight).
- **Saturn** (0th magnitude) and **Neptune** (8th magnitude) only 2/3 a Moon diameter apart. Use binoculars or a telescope. (To find these dim planets use the finder chart shown on the opposite page).

26th - 28th **Mars** (2nd magnitude) passes through the Beehive Cluster in Cancer. Use binoculars to watch it move among the stars of the cluster. Mars will be very low in the west at this time and must be observed just after sunset.

JULY

2nd - Both **Saturn and Neptune** at opposition.
4th - **Earth** farthest from the Sun.
28th - delta Aquarid meteor shower. This is less intense than the Perseids but the sky is dark in the early evening because the Moon is near last quarter. Certainly, there will be more meteors than other nights.

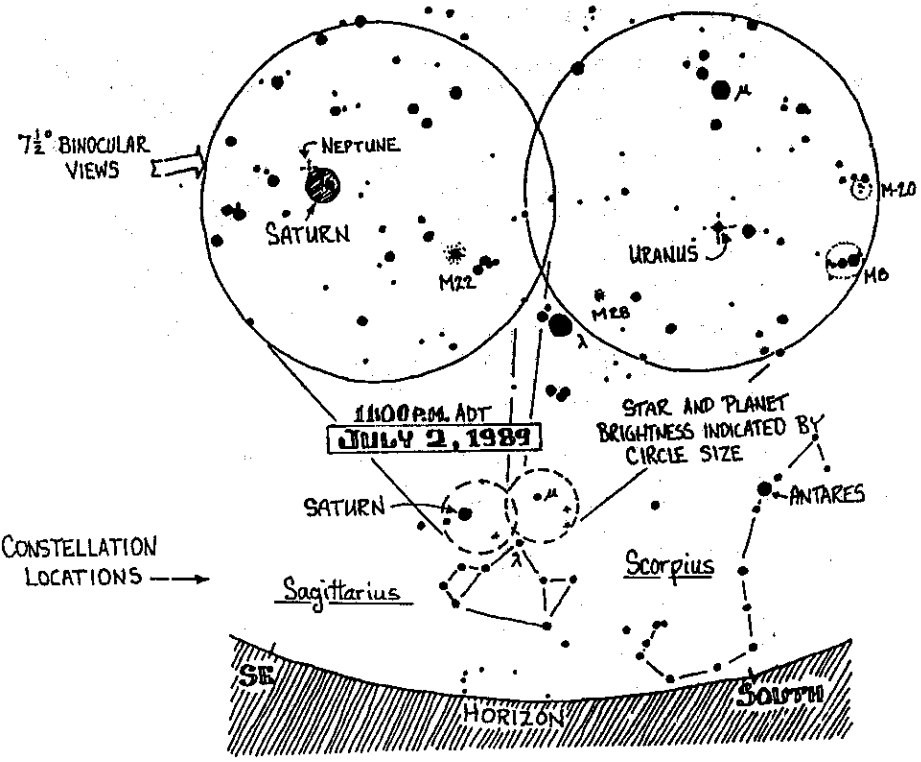
12th - **Pereid Meteor showers.** Unfortunately, this year the Moon is waxing gibbous on the 12th and will destroy the show until it sets at about 1:30 am on the 13th. The shower occurs only slightly less actively on the 11th and the Moon will set at 12:30 am on the 12th. The shower is better in the early morning anyway.

16th-17th - **TOTAL ECLIPSE OF THE MOON** - This is the first total Lunar eclipse in many years that is visible from our area and we get to see all of it between sunset and sunrise.

Start Penumbral eclipse	9:24 pm ADT
Start of the Umbral eclipse	10:21 pm ADT
Beginning of Totality	11:20 pm ADT
Mid-Eclipse	12:08 am ADT 17th
End of Totality	12:56 am ADT
End of the Umbral eclipse	1:56 am ADT

The best part of the eclipse is the Umbral eclipse since it is much darker than the Penumbral phase. During totality notice the color of the Moon and its darkness. As an example of the variations, the following is a scale used by astronomers to classify the eclipse:

0. Very dark eclipse, Moon almost invisible.
1. Dark eclipse, gray or brownish coloration.
2. Deep red or rust color. Center darker.
3. Brick red eclipse in center with yellow rim.
4. Very bright copper-red or orange with bluish rim.



TRIVIAL TIDBITS
of Local Natural History
March 1, 1989 to June 1, 1989

selected and compiled
by Jim Wolford
Wolfville, N.S.

Date (1989)		Obs

Astronomy/Climate/Geology

Mar 11, Mar 13, Mar 24, May 4, May 6 - spectacular *aurora borealis* displays RB,MT,JW,SW,EGZ et al

Plants - Earliest Flowering Dates

Feb 22	-snowdrops in Wolfville (next noted Mar 14)	HT
Mar 23	-crocuses in Wolfville	JT
Mar 28	-coltsfoot at Gaspereau	JW
	-winter aconite, a heather, and pansies! (garden)	BY
Apr 4	-hazelnut or filbert in Gaspereau Valley	EG
Apr 7	-in Wolfville, open catkins on alder (planted?)	JW
Apr 15	-daphne bush at Mosherville	SAC
Apr 18	-lots of common dandelions in Wolfville	JW
Apr 20	-American elm and red maple in Wolfville	JW
Apr 21	-aspen poplar in Wolfville	JW
Apr 23	-two people carrying enough mayflowers to fill two four-quart baskets, Mosherville	SAC
May 2	-carpets of bloodroot at Smiley's Provincial Park, Brooklyn	SP
May 6	-starflower at Mosherville	SAC
May 7	-ironwood (hop-hornbeam) at Smiley's Park	BLF MT JW
May 8	-Norway maple and pussy-toes at New Minas; thyme-leaved speedwell in Wolfville	JW
May 9	-sugar maple in Wolfville	JW
	-wild white violets at Avonport	SW
May 11	-wild alder & bigtooth aspen-poplar in Wolfville	JW
May 12	-shadbush and sweet fern in Wolfville	JW
May 13	-garden forget-me-not in Wolfville	JW
May 14	-Blomidon Park: i trout lily, red trillium, spring beauty, Dutchman's breeches, strawberry, fly-honeysuckle, golden saxifrage, paper birch	BNS
May 15	-common chickweed in Wolfville	JW
May 16	-Wolfville: pin-cherry, ground-ivy, wood rush and wire birch	JW
May 17	-staghorn sumac at Windsor	SAC
	-mouse-ear chickweed in Wolfville	JW
May 18	-blueberry at Mosherville	SAC
May 20	-Wolfville area: red elderberry, cuckoo-flower, horse-chestnut	JW

May 21	-nodding trillium and baneberry at Mosherville	SAC
	-Greenwich: wild lily-of-the-valley, Clintonia, bunchberry, starflower, striped maple, wild sarsaparilla, blueberry	MT,JW
	-rhodora and carpets of cuckoo-flower "down the Valley"	BBT
May 26	-beech at Kentville	JW
May 27	-Gaspereau River area: choke-cherry, jack-in-the-pulpit, tall leafy green orchid, nodding trillium, a buttercup, yellow avens, dewberry, mountain maple, mountain ash, orchard grass	BNS

Plants - Miscellaneous

Mar 19	-several beech trees with lots of husks (from successful fruiting?) near Sunken Lake	BNS
May 14	-in Blomidon Park, shiny club-moss with sporangia visible	JW

Insects and Other Invertebrates

Aug 1988	-Remember our reports of the "inchworms" that were devastating the floating bog at Methal's Lake? Thanks to Harold Stultz, who reared some to adulthood, they have been identified as chain-spotted geometers, whose larvae eat leaves of larch and a variety of shrubs.	JW
Mar 20	-Avonport?: "snow-fleas" (springtails), spiders, and strider-like insects on a snowy ski track	SW
Mar 28	-angel-wing butterfly flying at White Rock	JT,BBT
Apr 6	-a mourning cloak butterfly at Grand Pre	MP,JGT
Apr 7	-earthworms on Wolfville pavement after rain	JT
Apr 9	-wolf spiders abundant and conspicuous	JW
Apr 30	-bumblebee flying, Mosherville	SAC
May 16	-a very large bald-faced hornet (overwintered queen?) in Wolfville	JW
	-yellowjacket wasp in Wolfville	JW
May 27	-a newly emerged adult cecropia moth (captive)	BLF

Fish and Herptiles

Apr 4	-first activity of yellow-spotted salamanders in Gaspereau ditch	JW
Apr 6	-chorus of spring peepers on Wolfville Ridge	BLF
Apr 10	-wood frogs calling at Wellington Dyke	JW
Apr 12	-2 basking painted turtles at Greenwich	JW
Apr 22	-a few smelt being caught in Gaspereau River	JW
Apr 30	-gaspereau (and a shad) in Gaspereau River at Gaspereau!	CKC
	-wood frog egg-masses hatching on Wolfville Ridge	JW
May 1	-a toad trilling at Gaspereau	BNS
May 11	-a blueback herring caught at Gaspereau	CKC

Mammals

Mar 2	-a weasel on a porch at Mosherville	LP
Mar 12	-6 raccoons under riverbank feeders, Mosherville	SAC
Mar 15	-a muskrat eating under a Wolfville feeder	KT
Mar ?	-2 coyotes howling near Newtonville (S. Mtn.); a coyote killed and ate a calf at Woodside	IHS

Mar 28	-a humpback whale seen from Hall's Harbour	RBD
	-encounter between fox and raccoon: raccoon puffs up, fox sits and yawns, raccoon backs away - at Mosherville	SAC
Mar 29	-near Canard Poultry: a mink dragging a large, dead and very bloody muskrat across a field and into a hole	BBT
Apr 1	-invasion of red squirrels (from 3 to 6) at Wolfville Ridge feeders	JGT
Apr 2	-a chipmunk	BLF
Apr 6	-3 white-tailed deer in the open dykeland at Grand Pre	MG
Apr 12	-3 raccoons sleeping together high in a tree next to a farmhouse in Canning	RS,HF,JW,MZ
Apr 14	-groundhog active at Mosherville	SAC
Apr 20	-2 nestboxes occupied by flying squirrels at Tobeatic Wildlife Management Area	RM
Apr 26	-a treed raccoon in Port Williams	JC,JGT
Apr 28	-a fox with 4 pups near Scotch Village	SAC
Apr 28, Apr 29	- a treed raccoon in Wolfville stayed in same tree for two days	JT,JW
Apr 30	-about 10 freshly road-killed porcupines from Kejimkujik Park to Wolfville	GPi
May 4	-2 road-killed groundhogs from Wolfville to Hfx.	JW
May 5	-1 treed raccoon w. of Port Williams; 1 treed raccoon w. of Greenwich (plague of raccoons?)	MT,JW
	-muskrats taking food provided by humans at pond edge in Wolfville	KT,BBT
May 11	-dead seal on sandbar, Meander River, Mantua	LP
May 29, May 30	- odoriferous whale carcass in Kennetcook River	SAC

Birds - Earliest Sightings of Migrants

Mar 10	-a northern flicker (overwintered?) along road from Chester to Windsor (flickers also heard Mar 24 and Apr 4 by PCS & MZ)	MD
Mar 11	-purple finches singing in several localities	BLF
Mar 13	-8 Canada geese at Mosherville	SAC
Mar 15	-325 Canada geese in Canard Valley	JW
Mar 18	-3 common grackles and a red-winged blackbird in Wolfville	BBT
Mar 20	-2 American wigeon and a northern pintail at Greenwich	GF
Mar 22	-a great blue heron at Greenwich	GF,JGT
Mar 23	-a pair of hooded mergansers at Clementsvale	GP
Mar 24	-a killdeer at Greenwich	JW
Mar 26	-fox sparrows at Port Williams and on North Mountain	GC,MT,JW
	-an American kestrel at Canning	MZ

Mar 28	-in Gaspereau area: American robins everywhere in big flocks (lots more, I believe, than overwintered)	JW
Apr 4	-an American woodcock in a Wolfville garden	ECS
	-a ring-necked duck at Mosherville	SAC
Apr 6	-14 brant at Grand Pre	MG,JGT
Apr 8	-a winnowing common snipe heard	BLF
	-50 ring-necked ducks at Annapolis Royal	RS
Apr 9	-2 wood ducks near Canning	JGT
Apr 10	-8 snow geese near Canning	MG
Apr 12	-a blue-winged teal at Canard Poultry Pond	JW
Apr 20	-a tree swallow at Mosherville	SAC
Apr 21	-tree swallows at Gaspereau and Cherry Hill	CKC,JGT
Apr 22	-a barn swallow at New Minas pond	RS
Apr 26	-2 belted kingfishers at Canning	MZ
	-a greater yellowlegs at Port Williams	PM
Apr 28	-single eastern phoebes in Kentville and Wolfville	RS,MZ
	-willets in Wolfville	JGT
Apr 29	-a broad-winged hawk at East Dalhousie	DC
May 1	-a palm warbler	GF
May 2	-20 cliff swallows at Annapolis Royal	RS
May 5	-7-8 yellow-bellied sapsuckers on Melanson Mountain were attracted by BLF's barred owl hoots!	BLF
May 6	-Halifax: a solitary vireo, a black-and-white warbler, 2 hermit thrushes and a ruby-crowned kinglet	JW
	-a bobolink at Advocate	GT
	-single chipping sparrows at Gaspereau and Lower Canard	CKC,RS
May 7	-45 chimney swifts in Wolfville	JW
	-a northern parula warbler at Centreville	RS
May 11	-a rose-breasted grosbeak at Falmouth	JM
May 13	-first female red-winged blackbird noted (Drain Lake), 3 black-bellied plovers at Chezzetcook	MT,JW
May 14	-probable solitary sandpiper, Blomidon Park	PJC,BLF
	-sora heard at Mosherville	SAC
May 15	-a northern oriole in Wolfville	GT
May 16	-2 yellow warblers at Port Williams	MT,JW
	-a ruby-throated hummingbird and a white-crowned sparrow on North Mountain	GC
May 17	-a least flycatcher in Kentville	RS
	-common yellowthroat at Mosherville	SAC
May 18	-a gray catbird at Falmouth and an eastern kingbird in Wolfville	BBT
May 22	-2 flocks each of 100 bank swallows at Sheffield Mills	JW
May 23	-a scarlet tanager in Kentville Waterfowl Sanctuary	BLF,CS
May 25	-5-6 Tennessee warblers at Mosherville	SAC
May 26	-red-eyed vireo in Kentville	RS
May 27	-a sharp-tailed sparrow along Wolfville dyke	JT

Winter Birds and Transients

Mar 10	-guess at last sightings of Bohemian waxwings	EG
Apr 6	-last report of dark gyrfalcon at Grand Pre	JGT
Apr 13	-last report of blue grosbeak at Bridgetown	MGr
Apr 30	-last report of Canada geese (13), Canning	JW
	-last report of tree sparrow (1), Wolfville	BBT

-last report of "white-winged gulls" (3), at least 2 of them glaucous gulls, Canard Poultry JW

May 27 -very late report of rough-legged hawk still at Grand Pre BLF

Birds - Sightings of Rarities

May 3 -a sandhill crane seen near Scotch Village LP

May 6 to May 28 - a male yellow-headed blackbird at Hantsport SAC,MT,PV,JW

May 13 -a ruff at Chezzetcook Inlet BBT,MT,JW

May 14 to May 25 -a pair of house finches at Port Williams LT

May 21 -a turkey vulture at Hillaton PJC

May 22 & May 23 - a turkey vulture over Long Island (Digby Neck); an orchard oriole on Brier Island RS

May 24 -an indigo bunting at 2 Wolfville feeders LCa JG

May 25 -a scarlet tanager seen and heard at Avonport EU

-a male house finch in Wolfville (and definitely different from Port Williams male) BL

May 27 -pair of scarlet tanagers near Paradise RS

May 28 to Jun 4 - an indigo bunting at Kentville TH

May 28 -a yellow rail seen & heard at Amherst Point BLF,JPH

May 29 -separate sightings of single male house finches at Wolfville Ridge and West Brooklyn MP,GA

Birds - Nesting Activities

Mar 21 -2 adult bald eagles together at Hall's Harbour, one carrying a large stick RBD

Mar 29 -at Gaspereau, (presumably Cyril Coldwell's) great horned owl, incubating 2 eggs CKC,BLF

Apr 2 -a black-capped chickadee excavating a cavity at Centreville PJC

-barred owls quite early in egg-laying (and 8 completed clutches averaged 2.75 eggs - there must be lots of prey around) BLF

Apr 12 -at Centreville, a pair of barred owls mated twice (probably for the benefit of the photographer - not camera shy!) RS

Apr 16 -an American robin nest with 1 egg in Wolfville BLF

Apr 17 -a mourning dove nest with 2 eggs in Wolfville BLF

Apr 20 -occupied nestboxes in Tobeatic Wildlife Management Area: 3 wood duck nests (9,9,1 eggs), 2 hooded merganser nests (8,12 eggs) RM

Apr 24 -killdeer nest of 4 eggs on Wolfville Ridge JGT

Apr 26, Apr 27 - 2 pairs of white-breasted nuthatches going in and out of cavities in Wolfville (seen feeding young May 16) BBT,JW

Apr 30 -American crow nest in New Minas has 3 eggs JB

May 14 -a common raven nest in lone tall spruce on Westwood Avenue, Wolfville BLF

May 15 -first tree swallow egg in orchard nestboxes JSBo

May 17	-bald eagle nest near St. Croix probably has young nestling(s)	BS
May 24	-Kentville Ravine: dark-eyed junco nest built under edge of roof of picnic shelter, on top of old eastern phoebe nest	JW

Birds - Miscellaneous

Mar 4	-14 gray partridge near Wellington Dyke	ER
Mar 11	-Acadia Biology's Annual Eagle Count: 69 bald eagles (25 ad., 44 imm.) in Canning, White Rock, Grand Pre areas	7 observers
Mar 15	-an immature bald eagle carrying a stick, at Blomidon	SS
Mar 16	-a red crossbill road-killed near The Forties	KLC
Mar 16, Mar 18, Mar 24	- 3 different colour-marked (by whom?) black-capped chickadees at a feeder at Clementsvale	GP
Mar 20	-5 dark-phase rough-legged hawks at Greenwich-seen in courtship?	GF
Mar 22	-a gray catbird seen and heard in Wolfville	MZ
Mar 25	-a chipping sparrow at my Wolfville feeder (must have overwintered)	JW
Mar 28	-a singing yellow-rumped warbler (overwintered?) in Wolfville	MZ
Mar 30	-6 rusty blackbirds (with other blackbirds) at Mosherville	SAC
Apr 4	-an immature pine warbler at my Wolfville feeder (almost certainly overwintered locally)	JW
Apr 8	-cock ring-necked pheasant crowing at top of a maple (8-9 metres up)	JT
Apr 9	-3 Canada geese with numbered yellow neck-bands near Canning	JGT
Apr 11	-a snowy owl at Grand Pre	JGT
Apr 16	-a pair of bald eagles frolic overhead at Mosherville	SAC
Apr 21	-2 male wood ducks at Mosherville	SAC
Apr 22	-a bobwhite (quail) at Scots Bay	MS
May 4	-pair of bald eagles cavort on high, Scotch Vil.	SAC
May 8	-2 gray partridge at Hillaton	RS
May 14	-a pair of adult bald eagles at Cambridge Station	LB
May 17	-6 red crossbills near Windsor	BS

BOBWHITE

Contributors

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RB	Roy Bishop	SP	Shelley Porter
JSBo	Sherman Boates	GPi	Gigi Pitoello
DC	Donna Crossland	ER	Elizabeth Rand
GC	Gordon Callon	BS	Bev Shanks
JC	John Churchill	CS	Clarence Stevens
LC	Lana Churchill	MS	Merville Steele
LCa	Leigh Carson	RS	Richard Stern
CKC	Cyril Coldwell	SS	Sean Smith
KLC	Karen Casselman	BNS	Blomidon Naturalists Soc.
PJC	Pat and Joe Clifford	ECS	Chalmers Smith
SAC	Sheila Connell	IHS	Ian Hope-Simpson
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HF	Harold Forsyth	KT	Kimberly Thorpe
BLF	Bernard Forsythe	LT	Linda Thomson
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MG	Merritt Gibson	BBT	Brenda & Bill Thexton
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"It is difficult to imagine an issue with more global impacts on human societies and the natural environment than the greenhouse effect. The signal is unclear but we may already be witnessing examples, if not actual greenhouse effects, in Africa.

The ultimate potential impacts of a greenhouse warming could be catastrophic. It is our considered judgement that it is already very late to start the process of policy consideration. The process of heighting public awarness, of building support for national policies, and finally for developing multilateral efforts to slow the rate of emissions growth will take taime to implement.

The greenhouse issue is an opportunity as well as a challenge; not surprisingly, it provides another important reason to implement sustainable development strategies."

Irving Mintzer
World Resources Institute
from World Commission on Environment and Development
Public Hearing, Oslo, 24-25 June 1985

Sources for Local Natural History Information
(compiled by Blomidon Naturalists Society)

Information	Source	Office	Home
Rocks & Fossils	Geol. Dept., Acadia Univ.	542-2201	
Fish	N.S. Dept. of Lands & Forests	678-8921	
Flora - General	Ruth Newell	542-2201	542-2095
Flora - Trees	Merritt Gibson	542-2201	582-7569
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	Kenneth Harrison	542-2201	678-4890
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	Cyril Coldwell	542-2201	542-2854
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	Michael Brylinsky	542-2201	582-7954
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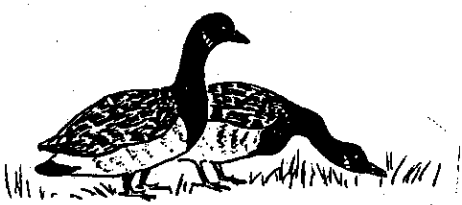
& Archaeological Sites	James Legge		542-3530
Astronomy	Roy Bishop	542-2201	542-3992
	Larry Bogan	542-2201	678-0446
	Sherman Williams	542-5137	542-5104

"Intensive agriculture may quickly exhaust the soil cover, causing its degradataion, unless some special soil protection measures aimed at constant restoration and expanded reproduction of fertility are taken. The task of agriculture is thus not confined to obtaining the biological product but extends to constatnt maintenance and augmentation of soil fertility. Otherwise we will very quickly consume what by right belongs to our childrenn, grandchildren, and great-grandchildren, to say nothing of more distant descendants. it is this misgiving -- that our generation lives to a certain extent at the expense of the coming generations, thoughtlessly drawing on the basic reseerves of soil fertility accumulated in the millennia of the biospheric development, instead of living off the current annual increment -- that causes the increasing concern of scientitsts dealing with the state of the planetary soil cover."

B.G. Rozanov
Moscow State University

from World Commission on Environment and Development
Public Hearing, Moscow, 11 Dec. 1986



BRANT GEESE

BLOMIDON NATURALISTS SOCIETY
1989 - 1990 Membership Fees

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Mrs. Judy Tufts
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