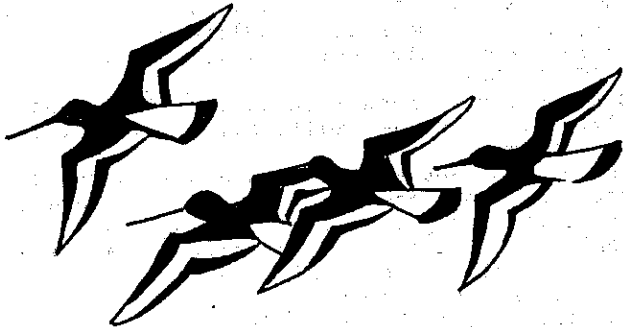


BLOMIDON NATURALISTS SOCIETY NEWSLETTER



VOLUME 16
NUMBER 3
SEPTEMBER 1989

SOCIETY ACTIVITIES

BNS Fall and Early Winter Programme

MONDAY EVENING MEETINGS: All meetings will start at 7:30 p.m. and, unless otherwise indicated, will be held in Room 244 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. October 16 -- Robert Ogilvie, Curator of Special Places, Nova Scotia Museum, Halifax, will speak on "Special Places in Nova Scotia".
2. November 20 -- "Pest Management in Fruit Trees" by staff members Canada from the Kentville Agricultural Centre.
3. December 11 -- "Birdwatching Around the World - A Fun Talk" by Stuart Tingley.
4. January 15 -- "Show and Tell" in Room 308, Patterson Hall (Acadia University Biology Building). Share your natural history interests with other enthusiasts. Bring interesting finds, slides (10-15), display collections, books, etc. The BNS Newsletter is published on equinoxes and solstices.

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Editors: George and Margaret Alliston
 Art: Mary Pratt
 Production: Larry Bogan
 Distribution: Lana Churchill and Brenda Thexton

"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, September 24, 1:00 p.m. -- Mushrooms at Kentville Ravine with Twila Robar-DeCoste and Nancy Nickerson (542-9332).
2. 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.
3. Saturday, October 14, 1:00 p.m. -- Black Hole (Baxter's Harbour) with Sherman Williams (542-5137).
4. Sunday, October 15, 8:00 a.m. -- Canoe lakes or still-water in Crown lands on the South Mountain to see the fall colours, etc. Bring canoes, appropriate clothing and lunches. Larry Bogan (678-0446). Alternate meeting place: fruit stand at the intersection of Highway 1 and the Berwick Road at 8:30 a.m.
5. Sunday, October 22, 8:15 a.m. -- Cape Split and Shoreline Geology with George Stevens (542-3426). Wear warm clothing and hiking boots and bring a lunch. Alternate meeting place: Scots Bay at the beginning of the trail at 9:00 a.m.
6. Sunday, October 29, 10:00 a.m. -- Walk to Little River Falls with Bernard Forsythe (542-2427) and Ruth Newell (542-2095). Bring your lunch.
7. Wednesday, November 1, 7:45 p.m. -- Night Sky Observation Session with Larry Bogan (678-0446). Alternate meeting place: Stiles Park at 8:00 p.m. Cloud date: November 2.
8. Saturday, December 16 -- Wolfville Christmas Bird Count. If interested, call Acadia University Biology Department (542-2201) and leave your name and number or contact Jim Wolford (542-7658), Peter Smith (542-5998) or Sherman Boates (542-2361).
9. Sunday, January 21, 1:00 p.m. -- Walk, Ski or Snowshoe to Moosehorn Lake. Leader: Sherman Bleakney (542-3604).

Acknowledgements

Thanks to:

Roy Bishop for an illuminating talk on stars (pun intended);

our field trip leaders: Larry Bogan, Bernard Forsythe, Nick Hill, Fred Scott, and Jim Wolford;

all of our Newsletter contributors;

and a special thanks from everyone who likes to walk along the Grand Pre dykes near the Guzzle to the person(s) who cleaned up the garbage that had been dumped there. It is difficult to know why, when we have landfill sites and door-to-door garbage pickup, some people go to such trouble to create an eyesore. We sincerely appreciate your major effort in cleaning up this one.

BNS AFFAIRS

Apology from the Editors

Please accept our apologies for the late publication of this Newsletter. Many family and other responsibilities interfered and we were unable to give it the timely attention it deserved.

December BNS Newsletter

Again this year, to avoid the problems associated with publishing the Newsletter immediately before Christmas and, especially, to allow the inclusion of Christmas Bird Counts, the "winter solstice" Newsletter will be published in January.

Contributors, please see BNS Newsletter Submissions Deadline below.

BNS Newsletter Submissions Deadline - December 1, 1989

Please send or give all contributions, except Christmas Bird Counts, to the Newsletter to:

George Alliston (542-3651)

R.R 3

Wolfville, N.S. BOP 1X0

BY DECEMBER 1, 1989. Compilers of Christmas Bird Counts should make special arrangements with the editors.

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

Biology Department

Acadia University

Wolfville, N.S. BOP 1X0

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

The editors would greatly appreciate submissions being at least double-spaced to facilitate both editing and word processing. If you are able to submit articles in word-processed form, please contact the editors for technical details. Sketches or diagrams should be submitted in final form, preferably on a separate page.

1989-1990 Membership Fees

Fees for Individual Adult and Family memberships in the Blomidon Naturalists Society have had to be raised to \$10.00 and \$12.00 respectively to cover increased costs of printing and mailing the Newsletter. Individual Junior memberships remain at \$1.00. Please use the form at the end of the Newsletter to remit your fees when you are notified they are due.

NATURAL HISTORY NEWS

West Hants Fourth Annual Christmas Bird Count

by Karen and Ted Casselman
Cheverie, N.S.

The fourth annual West Hants Christmas Bird Count is scheduled for Sunday, December 31, 1989. If you wish to participate please contact one of us as early in December as possible so we can mail out your materials. We look forward to seeing our "regular troops" as well as newcomers who would enjoy helping us count this remarkably diversified territory. Please telephone 633-2837 and be nice to the answering machine.

CNF Affiliate Explodes Balloons (1)

Congratulations to the Brier Island Ocean Study Society! Probably the smallest CNF affiliate with only 13 members, this Nova Scotia group convinced the federal government to abandon plans for a Canada Day balloon launch on Parliament Hill. The society pointed out that balloons have to land somewhere and many come down in the oceans where they present a hazard to the environment and wildlife. They argued that it was contradictory for the Canadian government to be promoting environmental protection while at the same time participating in such a damaging activity. And they won!

The Brier Island group has succeeded in drawing national attention to a growing environmental problem. The proliferation of marine debris is a recognized problem along the US Atlantic seaboard where media reports of syringes and medical waste on the beaches have caused alarm. However, virtually all forms of garbage end up in our oceans and pose danger to wildlife and the environment.

Another organization that has taken action is the US-based Defenders of Wildlife. It established the Marine Entanglement Alliance to campaign on the issue. The World Society for the Protection of Animals, an international animal welfare organization, will also begin a campaign against marine debris this fall. For further information on these efforts contact:

Defenders of Wildlife
1244 Nineteenth Street NW
Washington, DC 20036

OR

World Society for the Protection of Animals
215 Lakeshore Blvd. E., Suite 113
Toronto, Ontario
M5A 3W9

(1) Reprinted from the Canadian Nature Federation Almanac, Vol. 3, No. 1, Fall 1989, included in Nature Canada, Vol. 18, No. 4, Fall 1989.

Editors' Note: The Blomidon Naturalists Society is also an affiliate of the Canadian Nature Federation.

FIELD TRIP REPORTS

Coldbrook Pine Woods and Oxbow Ponds
June 4, 1989

by Jim Wolford
Wolfville, N.S.

Tom Herman and I met about 20 people on this overcast afternoon that later turned rainy. There were lots of mosquitoes plus a few blackflies and deerflies so everyone (except Bernard Forsythe) put on insect repellent.

There were oodles of pink lady's-slippers in the woods; we saw at least five all and several very pale specimens. Ellis Gertridge spotted an early coral-root orchid in bloom. Wild lily-of-the-valley was in carpets everywhere (and, I was told, very fragrant). Bunchberry was abundant, and blueberry and twinflower were also in bloom. Green-flowered pyrola was widespread and not quite in flower. Last year's stalks of Indian pipe and pinesap were common.

Two small "queen nests" of hornets or yellowjackets were found. One contained assorted ages of wiggling larvae and a couple of sealed pupae.

Tom then led us to the nearby woods along the Cornwallis River. In bloom were nodding trillium, goldthread, sarsaparilla, caraway, blue flag, ragged robin, cuckoo-flower, pussy-toes, starflower, false Solomon's-seal, chokeberry, buttercups, cinquefoils, yarrow, etc.

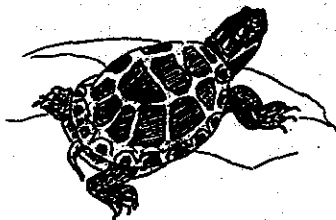


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Birds seen or heard included a singing brown creeper and a loudly begging fledgling raven.

Tom caught a painted turtle in a very shallow oxbow pond. Its very long front claws identified it as a male. Other aquatic life netted were damselfly and mayfly nymphs, crawling water beetles, a fly larva, amphipod shrimps, a water mite and fishing spiders.

A steady rain began and raincoats were donned (except mine which was in my car). Finally, in a frog-pond along the railroad tracks, lots of flimsy, green, floating, frog egg-masses had apparently already produced hatchlings. There were lots of caddisfly larvae, in cases of two kinds, but nobody cared by this time. Everyone trudged back to the cars to dry off!



Kingston Sand-barrens and Bog Complex June 18, 1989

by Jim Wolford
Wolfville, N.S.



Only four people came out on this overcast and rainy morning. We first drove past Aylesford to an area about two km west of West Kings High School. I was disappointed to see very few blossoms of "golden heather" (*Hudsonia*) - apparently most of the plants had flowered earlier. We noted the other abundant sand-barrens plants: broom-crowberry, bear-berry, sweet fern, bracken fern, hawkweeds, blueberry, poplar, etc. Ants were very abundant, especially the very tiny ones; their small craters were everywhere on the sand.

We walked to a bog and associated pond where we found the following species in bloom: cow lily, Labrador tea, sheep laurel, rhodora, pitcher-plant, witherod, and small bog cranberry. False holly was ripening fruit and common and bog huckleberry were almost ready to bloom.

We drove east of Aylesford to a bridge over a stream on the road to Morrystown where we saw lots of ragged robin, blue flag, streamside forget-me-nots and bedstraw, all in bloom. An eastern phoebe had a nest under the bridge and we also saw a chipmunk with bulging cheek pouches.

Then we drove on in the rain to another area of sand-barren-bog complex. We parked and walked around, just long enough to run out of woods roads and get lost. We had to retrace our steps to get back to the car.

Oodles of hungry mosquitoes made any pauses difficult, but otherwise we had a pleasant stroll noting red and white pines, occasional moccasin-flowers, lots of twinflower, and many flowers of common huckleberry that had been galled by a fungus.

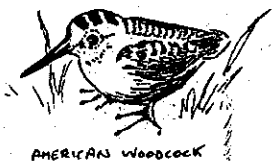


Delaps Cove
July 16, 1989

by Bernard Forsythe
Wolfville, N.S.

A manageable-sized troop of eager hikers gathered at the Delaps Cove Trail parking lot on this perfect day for an outing along the 12 km of public trails. Besides several from the Wolfville area, we were pleased to be joined by others from Windsor, Truro and Victoria Beach. White-tailed deer provided a highlight on the drive down the Valley. Along Highway 101 some of us saw a doe with two spotted fawns, a dead deer (hit by a vehicle), and two deer at another site. The short dirt road to the parking lot was lined with a striking show of daisies in full bloom.

As we strolled along the old road to Charlie's Trail, many stops were made to enjoy the various birds heard and seen including several species of warblers, thrushes, a family of ruffed grouse and even an American woodcock at midday. There were flocks of white-winged crossbills everywhere. Heavily streaked young red crossbills being fed by their mother provided me with my first 1989 look at this not often encountered species. At one point a mouse-like form creeping away turned out to be a mother black-and-white warbler trying to draw us away from her nest of four newly hatched young on the ground under a fir sapling. During our lunch break at the mouth of Charlie's Brook, a dark-eyed junco nest containing four eggs was discovered in a clump of grasses on a rock ledge. As we watched a couple of fishing boats, several common loons in first year plumage were seen quietly feeding among the lobster trap markers.



The great variety of plants, shrubs and trees encountered produced much discussion and double checking of field guides. Daphne, with bright red berries, was found at a couple of sites. Small purple-fringed orchids were beginning to flower including an almost white specimen showing just a hint of pink. The great difference in the plant species found along a narrow strip above the high water line along the shore, and those found just a few metres inland past the stunted spruce never ceases to amaze me. It was here that we spotted a small, white five-petalled flower from a mat of short thin leaves. From the field guides we identified it as a mountain sandwort, a new species for me.

On most outings someone is able to help out with the ferns. However, on this outing we were a bit rusty so a few species such as cinnamon, interrupted, and sensitive were identified while the rest were just admired. By now it was mid-afternoon and time to return. As we were about to leave the Bohaker Trail two helleborine plants were found. As I have been following the spread of this orchid around the province it was a perfect way to end the hike. The way helleborine is spreading in Kings and Annapolis Counties it will soon no longer be a novelty. As we left I wondered what we might have been able to find if time had permitted us to explore areas off the beaten path.

Shorebirds at Grand Pre / Evangeline Beach
July 30, 1989

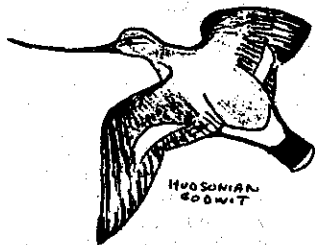
by Jim Wolford
Wolfville, N.S.

Sunny, breezy weather greeted 24 people in about 10 cars. First, Ellis Gertridge showed us an open plowed field on the Wolfville Ridge where a flock of about 3000 peeps (small shorebirds) were roosting during high tide.

Then we drove to another plowed field on Mitchell Hill (Grand Pre) where, just before our trip began, there had been no peeps at all. Our timing was unintentionally perfect and we arrived to find two "gray carpets" of peeps, a total of perhaps 15,000 birds. Several times the flocks took off, swirled, banked and landed making a very impressive show. The panoramic view of the Grand Pre dykeland was a beautiful bonus.

As usual our last stop was at Bob Bearne's cottage site east of Evangeline Beach. We could see several roosts of peeps on the upper beach. We finished our lunches and swatted "greenheads" (salt-marsh deerflies) for a while before walking the beach.

As we began the walk toward The Guzzle and Boot Island, we saw several more flocks of peeps flying to the beach from the dykeland fields. Toward the east end of the beach we saw, in addition to oodles of semipalmated plovers, perhaps 100 dowitchers, 50 black-bellied plovers, at least 5 red knots, 3 Hudsonian godwits and 2 ruddy turnstones.



Swifts and Bats in Wolfville
August 23, 1989

by Jim Wolford
Wolfville, N.S.

The weather was very poor for this trip as the evening sky was heavily overcast and threatening rain. About 15 or 20 vehicles of hopeful swift-viewers (mostly not from BNS) sat in the drizzle and finally one, or perhaps two, chimney swifts appeared. Is it possible to have a funnel of one swift? Well, one went into the chimney. Nobody went to Stile Park to look for heavenly objects. (Early next morning, six swifts flew out of the chimney. On August 26 at dusk, there were at least 90 swifts that went into the chimney.)

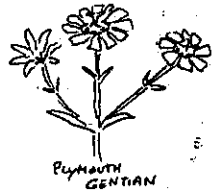
Tusket River
August 25, 1989

by Nick Hill
Kentville, N.S.

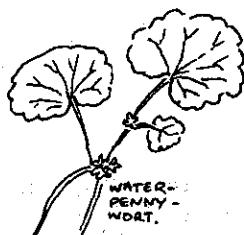
Twenty people and one dog in eight cars left the Acadia Gym parking lot at 7:00 a.m. and proceeded to the Tusket River, picking up more field trip members en route. A short foray was made to investigate the Wentworth Lake Pocket Wilderness at Mickey Hill. Here garlands of *Apios americana*, the Ground Nut, hung over the shrubs along Wentworth Lake. This lake drains into the Wentworth River, a small tributary of the Tusket River. We followed the Wentworth and then the Carleton Rivers and reached the Nature Reserve on Wilson's Lake. Water from these tributaries and the Silver, Quinan, Cold Stream, East Tusket and Tusket Rivers all flows into Wilson's Lake.

The Wilson's Lake Nature Reserve was designated in 1988. It is part of an expanding network run by the Special Places committee of the Nova Scotia Museum. The Wilson's Lake site protects a collection of rare coastal plain plants. Such plants thrive on the shores of big river-system lakes (e.g. Tusket, Mersey and Medway) which undergo large annual fluctuations in water level. It seems that these plants flourished during the Pleistocene on what is now the Continental Shelf. This must have been a boggy place and when continental glaciers melted, coastal plain plants took refuge in Massachusetts and environs and, to our good fortune, in Nova Scotia. Today, Nova Scotia is a refugium for these plants, many of which are rare in Canada and several of which are globally rare and/or endangered.

On reaching the Nature Reserve, one could appreciate the difference between the narrow, shrub-dominated shoreline at Wentworth Lake and the wide shore at Wilson's Lake with its diversity of rushes, sedges and flowering plants. Here naturalists could examine any of four rare species of plants, all of which were in flower. These were *Sabatia kennedyana*, the Plymouth Gentian; *Coreopsis rosea*, Pink Coreopsis; *Hydrocotyle umbellata*, Umbilical Water Pennywort; and *Platanthera flava* var. *flava*, a greenish Fringed Orchid. As we went along the shore, where children were fishing at the water's edge, we saw Water Lobelia, Sundews, Pipewort and Screw-Stems. We ate lunch under the trees and afterwards added two more rare plants to our list. One was *Panicum longifolium*, Long-leaved Panic Grass; the other was *Utricularia subulata*, Awl-shaped Bladderwort. This bladderwort has one or two tiny yellow flowers at the end of a thin leafless stalk. It does not have the bladders on the roots, like the other bladderworts that use the bladders to trap small crustaceans. How it gets by is a mystery.



We then proceeded to Louis Lake to see *Clethra alnifolia*, the Sweet Pepperbush, that Charlie Allen of Tusket found in 1987. This lake, and the similar Belliveau Lake where Pierre Taschereau first found the species in the sixties, are the only places in Canada where this plant is known to occur. It is a tall shrub with spikes of sweet-smelling white flowers. Many bees and wasps were at work when we arrived. Where it grows, it seems to replace alder but why it does so well at Louis Lake and is not found in neighbouring lakes is another mystery.



When the party left Louis Lake, several people went on with Ruth and Reg Newell to see *Drosera filiformis*, the Thread-leaved Sundew, in a bog near Barrington.

Old Annapolis Road Hiking Trails September 17, 1989

by Jim Wolford
Wolfville, N.S.

Here was another example of how weather-oriented the bulk of our "naturalists" are! Steadily falling rain held the number of stalwart participants to three.

The two walking trails, each about three km long, are near St. Margaret's Bay and managed by Bowater Mersey. We were met at the Bowater base-camp on Highway 103 by an employee who gave us brochures and then showed us the trails.

As it turned out, we were fortunate because the rain stopped after we had walked the Island Lake Trail. After lunch, while walking the Rafter Lake Trail, very distant rumbling gradually became closer and closer, and the skies opened to a downpour just as we got back to the car.

A quote from my journal reads as follows: "our walk in the drizzle in the morning was very peaceful, and the greens of the shrubs and mosses were beautiful and varied, lichens nicely textured and colourful, etc." I will mention only three highlights. There were large numbers of caterpillars of spotted tussock moths and dagger moths. We all had a very good look at a boreal chickadee calling its nasal "sick-a-dee" notes in a maple tree! And spring peepers were calling in the rain as they always do in the autumn.

The three of us agreed that these trails, especially the Rafter Lake Trail, deserve another visit, perhaps next spring instead of Blomidon Park or Cape Split.

NATURE REPORTS

Highlights of the 1989 Upper Bay of Fundy Peregrine Release Program

by George Alliston (1)
West Brooklyn, N.S.

In 1989, the eighth year of this program, 25 young peregrines were released; 10 at Blomidon Provincial Park (see article below for details), 10 at Five Islands Provincial Park, and 5 at Quaco Head, New Brunswick. This brings the total number of peregrines released under this program to 143; 64 in New Brunswick and 79 in Nova Scotia (22 of which were released in Blomidon Provincial Park during the past three years).

Certainly the highlight of the 1989 program was the first known successful nesting of peregrine falcons in the Maritime Provinces in 34 years. One pair nested under the Saint John Harbour bridge. This pair fledged two young; however, one was killed by bridge traffic on June 27, a few days after it made its first flight. The male of this pair is from a 1986 Fundy National Park release and the female is probably from a Fundy National Park release (band could not be read completely).

A second pair nested in Fundy National Park and were successful in fledging three of the four young they had hatched. The first flight by these young occurred on July 23. The male of this pair is from a 1984 Fundy National Park release and the female is of unknown origin.

A third pair that had been observed near Mary's Point in June and July was observed with one immature bird on August 1. The origin of these two adults is unknown although one was observed to be wearing a red band similar to those used in the release program.

At least two other lone peregrines were observed in New Brunswick in 1989 including an immature banded bird that landed on the Quaco Head hack box on July 21. This bird was probably from the 1988 release at this site.

At Cape Blomidon a lone male (band 6N2) again occupied a territory adjacent to the hack site (see article below for details). This bird is a six-year-old from the 1983 release at Cape d'Or, N.S.

Another male peregrine (band 2T?), believed to be from the 1987 Cape Blomidon release, was first observed at the Five Islands hack site on July 21 and was observed again several times in August.

Other reports of peregrines were received from locations around the Bay of Fundy including Grand Manan, N.B.

With the re-establishment of successfully-nesting pairs of peregrines in the Maritimes, the success of the Upper Bay of Fundy Peregrine Release Program seems virtually assured. It is currently planned that the release program be continued for another two years. (For a brief summary and background of the the Bay of Fundy Peregrine Release Program, see the Newsletter, Vol. 15, No. 2, June 1988).

(1) From information provided by Peter Austin-Smith and Bruce Johnson, Nova Scotia Department of Lands and Forests.

Cape Blomidon Peregrine Releases - 1989

by George Alliston (1)
West Brooklyn, N.S.

1989 was the third successive year that peregrine falcons were released at Cape Blomidon as part of the Upper Bay of Fundy Peregrine Release Program. (For a summary of this program, see the Newsletter, Vol. 15, No. 2, June 1988.) The 1989 releases consisted of two "hacks" each of five birds.

On June 22 the first shipment of birds arrived at Halifax International Airport from the Canadian Wildlife Service raptor breeding facility in Wainwright, Alberta. Allison Foster, the 1989 hack box attendant, and Peter MacDonald, the 1988 hack box attendant, were on hand at the airport to receive the birds. An inspection of the four-week-old birds indicated three female and two male peregrines all looking in good physical condition. Four were very alert and vocal and only one, a female, appeared a bit groggy from the long flight. The birds were then transported to Kentville, fed, and placed in a cool and quiet location in Peter MacDonald's home to recover from the traumas of the trip.

The next morning the birds were moved to the hack site in Blomidon Provincial Park. As in 1988, interested members of the public and the media were given an opportunity to view the birds briefly at the park campground gate. The birds were then placed in the hack box at the cliff edge on Cape Blomidon (the same site used in 1987 and 1988).

It was not without some hesitation that the scientists in charge of this project (Peter Austin-Smith and Bruce Johnson) used the same hack site in 1989. In 1988 a very aggressive adult male peregrine falcon (band 6N2), released at Cape d'Or in 1983 and thought to be responsible for the deaths of three of the five young peregrines released at Cape d'Or in 1987, established a territory adjacent to the hack site on Cape Blomidon. His aggressiveness led to some rather tense moments during the 1988 Cape Blomidon hacks and, without human intervention, could have resulted in the death of at least one of the fledglings (for details, see the Newsletter, Vol. 15, No. 3, September 1988). However, since an alternate hack site of equal quality was not available in the area and visits to the hack site earlier in the season had not revealed the presence of the aggressive adult, it was decided to stick with this site.

Within a couple of days the young peregrines became acclimated to their new surroundings and fed heartily on the pieces of quail that were provided for them.

On June 26, at 9:00 a.m., as Allison Foster arrived at the hack site, he could hear a peregrine calling from the trees above the site. An adult male peregrine then appeared and circled the hack box several times, vocalizing loudly. The aggressive male (band 6N2) had indeed returned to claim his territory!

The young peregrines prospered on their diet of quail and by July 10 were ready to be released. At 9:30 a.m. Peter Austin-Smith, Peter MacDonald, Allison Foster and a television crew arrived at the site to witness the release of the young birds. The adult male peregrine was not present at the site and had not been seen for several days. The bars of the hack box were removed at 10:00 a.m. and immediately one of

the young males (band OU) flew from the hack box, attempted to land on a tree, missed, and glided off over the edge of the cliff. By 10:40 all of the four remaining peregrines had left the hack box but remained in the vicinity. By 3:45 p.m. all the young peregrines had flown from the hack site. By 5:00 p.m. (when Allison Foster left the site) none of the young had returned. It is at this time, when the young are newly-fledged, that they are most subject to accidents and predation.

The next morning when Allison arrived at the hack site no peregrines were present. However, at 9:50 a juvenile female was seen flying along the cliff and by 2:00 p.m. four of the five released juveniles had visited the site. Only the male that had fledged first (band OU) was not seen. In addition, the adult male returned to his perch near the site. He flew over two of the young falcons but did not vocalize or otherwise threaten them. In the following several days the four juvenile peregrines returned regularly to feed at the hack site and the adult male frequented his nearby perch sites. The adult male sometimes gave chase to the young birds as they flew along the cliff and in one case indulged in a vigorous harassment and pursuit of one of the young birds that lasted for more than an hour. However, his pursuits appeared less vigorous than in 1988 and he made no attempt to strike the young birds. Indeed on July 13 one of the young females chased the adult male from the site!

On July 15, five days after fledging, a rather thin, bedraggled and apparently exhausted juvenile male (band OU) returned to the hack site where he remained all day without eating. By the next day OU was eating and apparently in much better condition.

At 6:00 p.m. on July 20 Allison picked up the second hack of five peregrines at Halifax International Airport. Three of these birds had come from Wainwright and the other two from MacDonald College in Montreal. He was very distressed to discover that the Alberta birds had arrived (unbeknownst to anyone at the Nova Scotia Department of Lands and Forests) at 10:00 a.m. and had been sitting in the hangar since then. An inspection proved the birds to be alive and presumably well but not very alert. The birds from Montreal were alert and vocal. Allison moved the birds to a relatively quiet corner of the parking lot, fed them quail and gave them time to settle down. The Alberta birds fed ravenously and appeared much brighter afterwards. At 10:00 a.m. on July 21 the birds of the second hack were installed in the hack box.

The rearing of the second hack proceeded without incident. The five young from the first hack continued to visit the site regularly and feed on the chicken that was placed for them on the feeding platform. Red mud on their feet, breast and wings, blood on their bills and extended crops suggested that these birds had also been successfully hunting shorebirds. Two of the females from the first hack did, on occasion, harass the birds in the hack box. The adult male still frequented the site and would sometimes give chase to the hacked birds but overall was quite tolerant of them. One of the females (band AM) was noted frequently visiting a site on the cliff face also frequently visited by the adult male (potential nest site? potential pair?). On two occasions in late July (July 27 and 30) the adult male

(6N2) was observed chasing what appeared to be another adult male from the area.

On August 2 the second hack was released. The hack box was opened at 9:52 a.m.; by 10:04 a.m. four of the five birds had ventured outside and by 11:00 a.m. all the birds were outside. By 4:00 p.m. all but one of the birds remained at the site. The adult male was diving at a particular site on the shore, possibly harassing the one bird that had left the site (band 8B0). Although it took three days, 8B0 did return to the site to feed and appeared in excellent condition.

Between August 2 and August 10 four of the birds from the first hack and the five birds from the second hack frequented the feeding platform and the adult male frequented his perches nearby. No serious altercations occurred between any of these birds during this time.

Between August 13 and August 16 the four remaining birds from the first hack were seen for the last time at the feeding platform. On August 10 one of the birds from the second hack was last seen at the site. The remaining four birds were last seen between August 22 and August 26. Food was not placed after August 26 although the site was monitored until August 31. On the last day of monitoring the adult male was seen on one of his perches.

Sightings were made near Port Williams of two peregrines on August 31 and a single peregrine on September 11. On September 5 a female peregrine from the first 1989 hack was found near Port Williams alive but with a broken wing. The wing could not be repaired and the bird was euthanized. It now resides as a mounted specimen in the Acadia Museum.

Overall the 1989 peregrine releases at Cape Blomidon went very smoothly. With only a little luck peregrine falcons could again be nesting on Cape Blomidon in the very near future.

(1) Prepared from field notes taken by Allison Foster and from conversations with Peter Austin-Smith, Nova Scotia Department of Lands and Forests.

An Autumn Comet by Roy Bishop

What promises to be the best comet of 1989 was discovered on the evening of August 24 by a graduate of Acadia University, David Levy (Acadia, B.A.'72). Levy was talking to a friend on the telephone when he made the discovery (he has a phone in his observatory)! A native of Montreal, presently Levy lives near Tucson, Arizona. This is the fifth comet he has discovered in as many years. His latest find came after 350 hours of careful, systematic searching of the night sky with his telescope on the Arizona desert. He has discovered more comets than any other Canadian.

The official name of this visitor from the outer reaches of our solar system is Comet Okazaki-Levy-Rudenko (1989r). Levy was the first to report the comet; however, Okazaki, an astronomer in Japan independently discovered it a few hours before Levy, and another independent discovery (a day after Levy's) was made by Rudenko, an amateur astronomer in New

England. Thus all three names (the maximum number permitted) have been attached to the comet. The designation 1989r indicates that during 1989 this is the 18th comet to be either discovered (in the case of a comet never recorded before, as is this one) or recovered (in the case of a known periodic comet).

The main part of a comet is a mountain-sized lump of ice and dust. There are believed to be millions of these huge, cold "dirty-icebergs" on the outer fringes of our solar system, remnants left over from the formation of the Sun and its planets some 5 billion years ago. Most are too far from the Sun to be seen, but occasionally one will pass through the inner solar system. Here the Sun's heat causes the surface ices to evaporate and produce a large cloud ("coma") of vapor and dust surrounding the comet's core ("nucleus"). The Sun's light and solar wind (an outward-blowing stream of electrons and protons) sweep part of the coma away to form a glowing tail pointing away from the Sun.

I have been observing Comet Okazaki-Levy-Rudenko since September 7. It is getting steadily brighter as it draws nearer to both Earth and the Sun; however, through September and October the comet is still too faint to be seen with the unaided eye.

One remarkable feature of this comet is that the plane of its path is almost exactly at 90 degrees to the plane of Earth's orbit. It is coming in high over the north pole of the Sun and will plunge directly southward through our orbit on November 23rd, like a thread through the eye of a needle. In the process it will pass relatively close to Earth in late November (it will be about half the distance of the Sun from us). This will occur about two weeks after it has passed perihelion, its closest point of approach to the Sun, and hence it should then be at its best, with a well-developed tail.

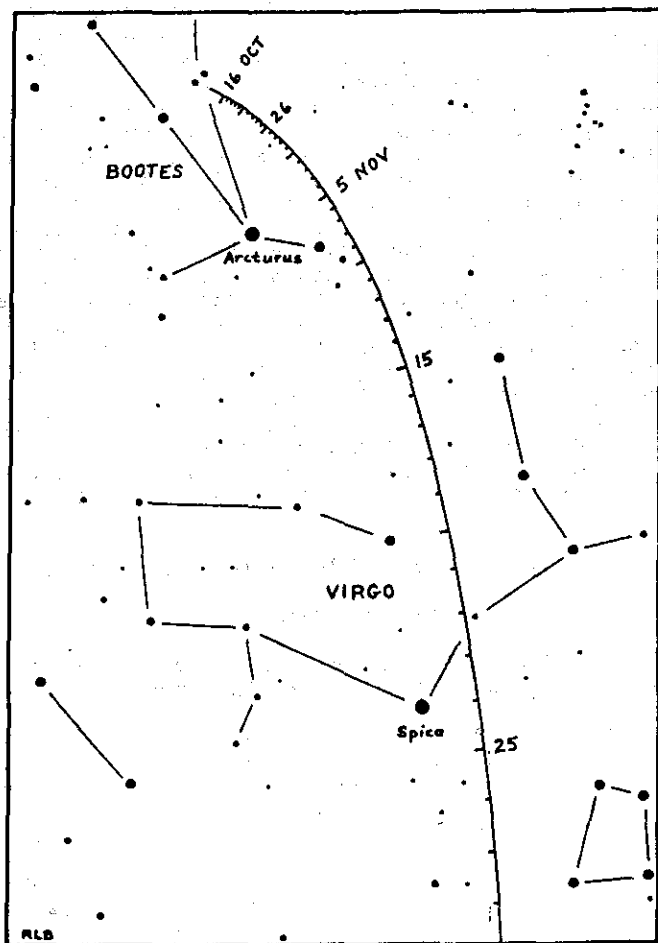
For users of binoculars and telescopes, the comet will be visible low in the northwest moonless sky at the end of evening twilight during the period October 17 to 25. It will be in the lower portion of the constellation Bootes at the time. After that it will be in a dark pre-dawn sky up until November 11 as it moves slowly to the right about 7 degrees above the bright star Arcturus. During the week of November 6 to 11th, it should be visible without optical aid provided one is observing from an area free of light pollution (i.e. far away from towns and cities). As morning twilight begins on November 11, the comet will be about 20 degrees above the eastern horizon and about 9 degrees to the right of the bright star Arcturus. (As a reference, the angular width of one's fist held at arm's length is about 10 degrees).

The brightness of comets is somewhat unpredictable. We will not know until it goes by whether Comet Okazaki-Levy-Rudenko will be brighter or dimmer than expected. It is predicted to reach nearly magnitude 4 (like a moderately dim star) in late November.

Moonlight interferes from November 12 to the 24th, but, after this, on the mornings of November 25, 26 and 27 the comet should be seen at its best. As dawn twilight begins on November 25, the comet will be about 16 degrees above the southeastern horizon and 6 degrees to the right of the bright star Spica. A slender crescent Moon about 11 degrees to the

lower left of the comet will add to the beauty of the scene. A few days later Comet Okazaki-Levy-Rudenko moves too far south to be seen from our latitudes anymore.

The diagram on the next page shows the path of the comet relative to the stars during October and November. For evening viewing in October, rotate the diagram about 45 degrees clockwise to orient it to the stars; for morning viewing in November, rotate it 45 degrees counter-clockwise.



The path of Comet Okazaki-Levy-Rudenko (1989r) from October 16 to November 28, 1989. The comet's position is marked at one-day intervals with every 5th day having a longer mark. Through November, the positions are for the beginning of morning twilight.

1989 Summer Weather Commentary

by Larry Bogan
Cambridge Station, N.S.

Overall, we have had a rather "average" summer. I am referring to the weather statistics of course. July's cooler and cloudier weather was offset by August's hotter and sunnier weather. By the end of the season the growing degree days above 10 C and the bright sunshine hours were both only five percent above the 30-year average.

Total precipitation for the summer was almost identical with the 30-year average but its distribution was such that much greater than average rainfalls occurred in June while in August rainfall was considerably less than the 30-year average. Even the distribution of rain in August was uneven with over half of August's 51 mm of rain falling on August 14th. I'll let you examine the table below to draw your own conclusions about this summer's weather.

I have included plots of the daily statistics for rainfall and maximum and minimum temperatures for the three-month period to show the distribution that is hidden in the monthly averages. For example, on the rainfall graph, you can easily pick out the eight days throughout the summer which had more than 12 mm (1/2 inch) of rain. Likewise, the graph of temperature maxima and minima makes it easy to locate the periods of hot days and nights as well as those few days when the temperature dropped below 10 C.

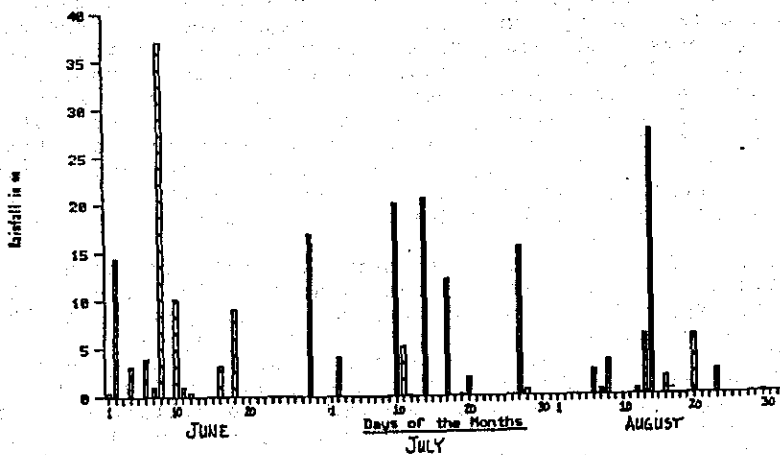
June, July and August 1989 Weather Statistics

Monthly Averages

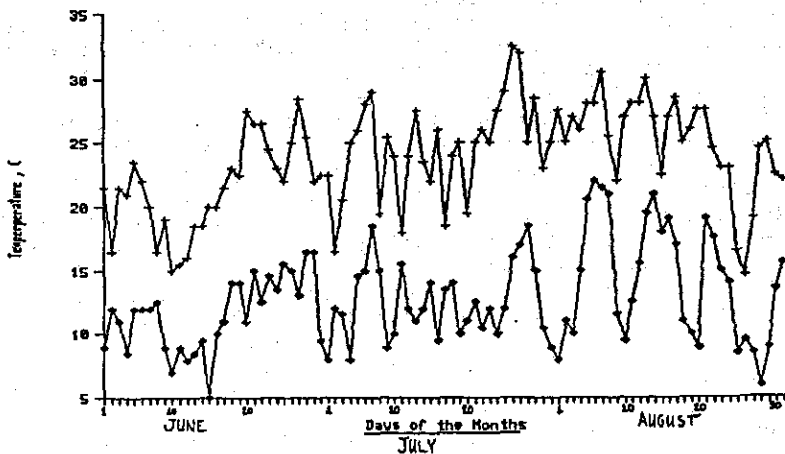
from the Kentville Agricultural Research Centre
(30-year averages are given in parentheses)

| | Average temp. C | Rainfall mm | Growing degree- days above 10C | Bright sun- shine hours |
|--------|--------------------|----------------|-----------------------------------|----------------------------|
| June | 16.6 (15.9) | 101 (71) | 198 (178) | 198 (209) |
| July | 18.5 (19.2) | 80 (70) | 263 (284) | 259 (239) |
| August | 19.7 (18.4) | 51 (98) | 302 (262) | 254 (225) |
| Total | | 232 (239) | 762 (724) | 711 (673) |

Daily Rainfall June, July, August 1889



Daily Maximum and Minimum Temperatures June, July, and August, 1889



Do New Coyote Hunting Regulations Pose an Added Risk to Naturalists?

by George Alliston
West Brooklyn, N.S.

At the September BNS meeting, Richard Stern expressed his concern about recent changes, relating to coyotes, in Nova Scotia hunting regulations that might increase the risk of firearm-related injury to anyone travelling in the woods in winter. The change in regulations was news to most of us and since neither Richard, nor anyone else present, knew the details of the changes, I decided to pursue the matter further. I dropped by the Nova Scotia Department of Lands and Forests (NSDLF) offices in Kentville, picked up a copy of the hunting regulations and spoke briefly with Barry Sabean (Manager, Wildlife Resources- Furbearers and Upland Game).

Below I have attempted to summarize briefly the hunting regulations as they have applied, and still do apply, to the use of "permitted weapons" throughout the year and then reviewed the new regulations pertaining to coyote hunting.

Coyotes are classified by the NSDLF as "non-protected wildlife" and can therefore be hunted year-round with no bag limit. Coyotes share this unenviable classification with mice, rats, voles, shrews, porcupines, rock doves, crows, European starlings, house sparrows, groundhogs, reptiles (excluding Blandings turtles and ribbon snakes), amphibians and red squirrels. Non-protected wildlife (including coyotes) may be hunted without a license provided they are harvested using firearms that are legal at that particular time of year.

Throughout the entire year, non-protected wildlife can be hunted using a shotgun loaded with shot not having a diameter greater than 0.24 inches (AAA or No. 4 buckshot) or a bow and arrow with or without broadhead.

During the period from the end of the deer hunting season (early December) through the end of the snowshoe hare hunting season (February 15), non-protected wildlife can also be hunted using a rim-fire rifle of .22 calibre or a muzzle-loaded rifle of .40 calibre or less.

Of course, a hunter who is the holder of a valid hunting license may, during the open season for big or small game, hunt non-protected wildlife with a firearm, bow and arrow or ammunition permitted during those open seasons.

As of 1989, a hunter may obtain, without charge at NSDLF offices, a Special Coyote Hunting Permit. A special permit holder can hunt coyotes from the end of the deer hunting season (December 2 in 1989) until March 31 of the following year using "a rifle with a cartridge having a bullet which weighs 80 grains or less or any muzzle loaded rifle of a calibre of .45 or less". Thus hunters carrying higher-powered rifles will now have a legal right to be in the woods during the winter months.

However, Barry Sabean made two interesting points regarding this matter:

- 1) The rifles permitted for hunting coyotes under the Special Coyote Hunting Permit (so-called "varmint-rifles") are of smaller calibre than those used for big

game hunting in Nova Scotia and, indeed, these rifles are quite uncommon here. Presumably, a hunter would have to be relatively serious about hunting coyotes to incur the expense associated with such a limited-use gun.

2) The most successful coyote hunters are "predator callers" i.e. using full camouflage and calls meant to sound like an animal in distress, hunters attempt to lure coyotes within shooting range. The "random search" technique of hunting does not work well at all with coyotes.

Coyote hunters have also been exempted from wearing hunter orange at any time except during the deer hunting season.

An Early Morning Observation of Chimney Swifts June 17, 1989

by Susan and David Hall
Edmonton, Alberta

On the evening of June 11, we had witnessed the spectacular "funneling" of Chimney Swifts into the Farmer's Dairy chimney in Wolfville, N.S., where they roost for the night. This morning, at 4:12 a.m. we were once again at the Front Street parking lot; this time to observe the early morning activity of these inhabitants of the chimney. The weather was cool, about 9 C, and the air was more misty than rainy. The sky was dark and heavy with clouds.

At this time, other birds were out singing their morning songs. Between 4:12 and 4:30, the sky began to lighten; we began to hear chirping and scratching from the chimney but saw no evidence of the Swifts. At 5:18 a.m., Susan saw a single Swift dive into the chimney.

A delightful lady in a red car drove into the parking lot and told us she had counted 300 Swifts entering the chimney a few nights previously. She too wanted to know how the birds came back out. About the time of her arrival, a police officer checked the periphery of the Farmer's Dairy on his morning beat.

At 5:23, we all saw another single Swift dive into the chimney. Then, at 5:25, the Swifts started their exit. Finally our questions would be answered... Would the Swifts fly out singly, in a huge funnel or in small groups?

Out they came, as rapidly as they had entered the chimney, in groups of twos, threes and fours. After one group had flown away the next group would rise. (One Swift tried several times to re-enter the chimney but appeared to misjudge the entry point. Perhaps confused by the dark sky? Put off by the exiting flocks? It did, however, manage to get in at last.) The air was filled with their gentle chitter. The pattern of flight was as follows: a rapid wing-beat ascent of 6 to 8 feet; a gliding descent of 12 to 15 feet; the wings in motion again for another ascent to fly off into the horizon - away for the day.

We stayed long enough to count over 150 Swifts but were overcome with the morning "growlies" so we left before the exodus was complete. The "morning watch" was well worth it and was the perfect way to end our visit to Nova Scotia!

Two Recent Inland Encounters with Storm-Petrels

by Jim Wolford
Wolfville, N.S.



On September 11, 1989, while Pat and Bill Martell were canoeing on Kejimikujik Lake, they noticed a strange bird on the water. They approached it closely, identified it as a Wilson's storm-petrel and managed to get some pretty good photographs. It could fly only weakly and mostly sat on the water and swam, which is very unusual for a storm-petrel. Was this misplaced bird a victim of Hurricane Gabrielle?

At Aldershot on September 25, 1989, two children discovered a rather sick-looking bird in some bushes and took the bird to Fred Bond. It was a Leach's storm-petrel that had come in contact with oil; its bill was sealed shut with the sticky oil residue and its plumage oiled and smelly. Fortunately, Fred is one of those rare people who "has a way with animals". He painstakingly rehabilitated the bird by frequent bathing in weak detergent, feeding it shrimp, sea fish and trout (the petrel prefers the latter), and giving it lots of tender loving care.

This petrel is kept in an open box in Fred's living room and, after two days, began flying around at night; nocturnal activity is normal for these birds. As of October 4, the petrel seems to be quite healthy and it will probably be released soon on Bon Portage Island, "home" for many thousands of nesting storm-petrels. Thank you Fred, and three cheers!

Two Wildlife Rescue Stories

I Happiness is a Rainstorm and a Toad

by Jean Timpa
Wolfville, N.S.

How often it is proven that one person's curse is another's blessing.

At approximately 5:45 a.m. on a very windy, rainy September 15, I was miserably delivering increasingly soggy newspapers about halfway up Hillside Avenue in Wolfville. As I crossed the street in the inky wet blackness of the storm, I saw a faint movement in the very dim light of a distant



street light. A rather large American toad was in the middle of the pavement happily soaking up the most beautiful warm rain the poor fellow had experienced in some weeks. Not wanting to see it made into road pizza, I removed him to a friend's nearby flower garden and hoped it would still be wet enough for him to stay in this safer locale. I discovered, too, through an ugly, warty toad, that I was glad after all that it was raining - hard- and the drought was over.



II Z-Z-Z-Z Goes the Weasel

by Jim Wolford (1)
Wolfville, N.S.

At Mosherville on August 24, 1989, Sheila Connell found a young weasel that three cats had trapped in the middle of a plowed field. She removed her rubber boot and placed it in front of the weasel which immediately took refuge inside it. She took the boot, with weasel inside, to a quiet spot in the woods and left them there. Four hours later, the weasel was still in the boot and sound asleep! After three more hours, Sheila needed her boot, so she shook out the weasel which then disappeared among the tall grasses.

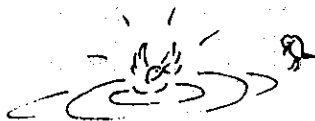
(1) Based on information provided by Sheila Connell.
(Editors' Note: we couldn't help wondering if Sheila was hopping on one foot all the time the weasel was in her boot.)

The Story of the "Upstart" Redstart, and Others ...

by Judy Tufts
Wolfville, N.S.

Have you ever experienced the fascination of watching a wild bird take a bath? One sunny midmorning in June a few years ago, I was using our lawn sprinkler to dampen a newly-seeded wildflower bed; the sprinkler rotated back and forth in a rhythmic pattern. Never tiring of looking at our new surroundings of garden and woods, Gordon and I had taken our cups of coffee outdoors and, of course, had our binoculars at our side.

We noticed a male ruby-throated hummingbird land on a maple tree branch, not more than three feet off the ground. The spray from the sprinkler reached this branch so we were curious to see what the hummingbird would do. He ruffled up his feathers, shaking himself vigorously to get maximum coverage of moisture, obviously enjoying the opportunity to clean his feathers. Once the spray passed he busily preened himself. This sequence was repeated for the next five min-



utes or so, much to our delight, as we watched through our binoculars. It would appear that this tiny bird had carefully chosen this location to take advantage of a free bath. We were intrigued by his ingenuity.

It still brings a chuckle when I think about another unusual experience. We were enjoying a summer evening stroll through our local woods, listening to bird songs, watching birds flitting through the trees. As we rounded a bend in the road we were confronted with a charming sight - a veery (thrush) was about to take a "bath" in a puddle in the middle of the road just ahead of us. We paused and waited...

The thrush was not shy for, after checking to see we were not coming closer, it waded into the puddle and began enthusiastically splashing water over its feathers. While we watched, fascinated, we became aware of colourful movement at the side of the puddle; a female American redstart had appeared and was preparing to ... step ... into... the water too! The water looked so inviting but the veery was not about to share his puddle with any little "upstart" redstart! He stopped his splashing, shoo-ed the redstart out of the puddle, then returned to his ablutions. The little redstart remained meekly at the edge, awaiting her turn...

Finally the veery left, much to the pleasure of the smaller bird, who promptly got into the puddle and began her splashing antics. We waited for her to complete her dainty bath and leave before we resumed our stroll, knowing that we had enjoyed a special glimpse of Nature that few see.

One other experience is so memorable to me. I looked after an injured Savannah sparrow through one winter, keeping him in a regular birdcage and feeding him various small, commercial bird-seeds. The cage was kept on top of high wall book-shelves where the sparrow could watch our activities but be safe from the deft paw of my curious cat.

As the days rolled by and he adjusted to his new home, I discovered that the sparrow looked forward to each dish of fresh water I put in his cage; the "dish" was the plastic top of a large jar of instant coffee, neither too deep nor too shallow. Almost before I had closed up the cage, the Savannah would hop down and perch on the lip of the lid and dip his bill in the water, splashing the water over his feathers, repeating this action until he was satisfied. Then he would shake vigorously! Water would fly in all directions. We first discovered his enthusiasm while puzzling over water droplets suddenly landing on us if we were sitting in that area and on hearing strange little noises coming from the cage area. Of course there were times when we would look up and the bird would be sitting still, looking "all innocence" but gradually his shyness eased and he didn't mind us observing his bathing. Whether his bathing ritual had anything to do with it we don't know but, by mid-January, our friend came into full breeding plumage, a joy to behold. He began to chip occasionally. This dear little bird remained with us until late May when I felt he was ready to go back to his old breeding grounds. He was allowed freedom of our greenhouse on occasion to build up his flight strength and he took advantage of it. I have often wondered how he fared but at least he survived another winter which he surely would not have done without our help and it had been most rewarding for everyone.

Without Prejudice!

by Jean Timpa
Wolfville, N.S.

As some of you know, my children and I are "owned" by three lovely black and white house cats, Herman, Mischief and Sylvester, who have come to us through my association with W.A.A.G. (Wolfville Area Animal Group) which cares for stray and neglected animals and helps owners with spaying fees. My children and I have taken in many cats of other colours but our rule is that we don't permanently keep a cat unless it is black and white - a carry-over from my first and only other cat, a black and white Tigger.



In late August I had agreed to care for the neighbour's cat, Mitch. About 10:30 in the evening of August 30, I realized that Mitch hadn't come for his evening meal. I went flying out the door and onto the sidewalk calling his name as I went; he didn't appear. I whipped around the corner and coming towards me on

the side of the road about ten feet away was a black and white cat. I started talking to it in the usual "come hither kitty" fashion of all doting cat owners, bent down and reached out to pick it up when suddenly, despite the poor light, my brain registered two white stripes running down the back and a small narrow head unlike Mischief's big broad head. The tail was going up but fortunately was still pointed away from me.

Well, Ben Johnson, steroids or not, couldn't have caught me as I made the 100-yard dash back to the safety of our house, on the way scooping up Herman and Mischief coming towards me and the skunk! Poor Mitch was not fed that night!

This was not to be the last of my encounters with the skunk or skunks, however. Very early in the morning of September 9 our house was filled with skunk perfume! Something (not my cats who were in) had aggravated him or her in my driveway. Who says it's healthy to sleep with your windows open?!!! Phewwwww!



I am out very early in the mornings on my paper route and at this time of year it is dark. On September 12, a young woman on my route was waiting for an early morning ride to work when a skunk walked across the street right in front of her; I just missed seeing it. Two mornings later I watched as a skunk sauntered across Highland Avenue from Fairfield Street and disappeared behind a parked car and hedge. In the faint morning glow on September 23, I noticed one hunting in a garden on Fairfield so I watched until it wandered off behind a neighbouring house. On the morning of September 29 just as I went out the door I watched a skunk walk across Gasperau Avenue and slowly work its way up the lawns and turn onto Prospect Street- just where I had to go in a few minutes. I did not, however, see it again.

This morning, October 2, in the poor dawn light, a skunk

suddenly appeared from behind a row of bushes near a house on Highland Place. I had to stop while it crossed the road and followed a fence into a backyard.

Skunks are lovely animals and don't seem to be spooked that easily but they sure do keep one awake and on one's toes early in the morning!

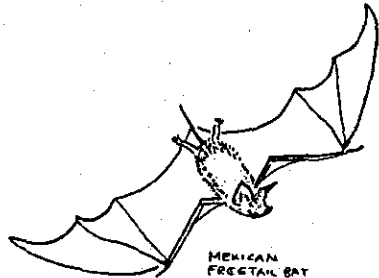
A Trip to a Bat Cave in Texas

by Judy Tufts
Wolfville, N.S.

Those of you who know me know that nothing will induce me to go down into the depths of Hayes Bat Cave, near Windsor, to see the roost of Little Brown Bats. I must admit, though, that I did participate in one of Tom Herman's bat field trips around the Wolfville Tourist Bureau and was fascinated by hearing the bats' sonar signals which Tom monitored on special electronic equipment. Some bats that have, for several summers, attempted to roost in the eaves of my home still make me shiver when I hear their squeaky chatter but I have become more tolerant and far less apprehensive now, partly due to an extraordinary experience I had with bats earlier this year in Texas.

We were part of a bird-watching group visiting a private ranch on the Edwards Plateau, in the "hill country" of Texas, to see Mexican Free-tailed Bats (*Tadarida brasiliensis*) leave their limestone cave roost shortly before dusk and, as the bats left, to see Cave Swallows go into the same cave to roost or attend nests. There are several entrances to the cave though one is by far the largest being about 30 feet wide and not much more than six feet high. In years gone by, the limestone was excavated for market but, as demand lessened for the product, the cave was abandoned and the bats discovered it. For a while, but no longer, the bat "guano" was collected for fertilizer. The caves now privately owned and protected and only invited groups are allowed to view this daily spectacle.

That evening, as we climbed up a rough track through rocks to the cave site, we could see some of the Mexican Free-tailed Bats flitting around the area. Then more appeared, rather sporadically at first, all milling about as if they were adjusting to the last of daylight or simply anxious to get started but waiting for more to join them. Cave Swallows appeared, intermingling with the circling bats, each species with a purpose - the bats to go out for nocturnal feeding, the swallows to enter the cave to join young in nests or to roost for the night. Now some of the bats began leaving the area, forming a loose column, all flying in one direction, numbers increasing, following. Shortly after we reached the main entrance of the cave, the tempo picked up and bats poured out, as if drawn by a magnet, like a rushing torrent of water. It was a noisy



departure - one had to shout to be heard above it - and the air was becoming quite pungent too. Occasionally someone, especially when taking a photo, would be bumped by a bat in its hurried flight. It was a rather strange sensation. The air was thick with bats; the departing column, ever increasing, extended for miles. It was almost unbelievable and, still, bats poured forth, smaller groups using the other exits. While daylight held and we could still take photos, we moved around to various vantage points and were intrigued to see how deftly the Cave Swallows manoeuvred through the swirling bats to enter side entrances to the cave, taking up positions on anything offering support, sometimes jockeying for roosting space, some flying to "active" nests. While the number of Cave Swallows was probably no more than three or four hundred (it was hard to tell in that swirling mass), it has been estimated that as many as three million Mexican Free-tailed Bats live in this cave alone. Some of them leave at dusk and others through the night; we probably saw more than a million.

At last the flow of bats ceased, one or two stragglers struggling to catch up with the rest as the immense, elongated column gathered momentum and pressed onward over the Plateau, the moving line pulsating with energy, stretching out over the miles until at last they faded from view. These little creatures of the night awed us with the magnitude of their exodus.

There are 32 species of bats found in Texas; only ten additional species are known from the rest of the United States and Canada combined. Texas is the home of the world's largest bat colony, 20 million Mexican Free-tailed Bats, living in Bracken Cave in Central Texas. As everyone knows, bats eat night-flying insects. But how many? Ponder this: in Austin 750,000 Mexican Free-tailed Bats live under a bridge over the Colorado River; it has been estimated that they eat 15,000 pounds of insects nightly!

TRIVIAL TIBITS

EXTRA
TRIVIAL TIDBITS
of Local Natural History
March 6, 1989 to May 3, 1989

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

Editors' Note: This information was accidentally misplaced by the author until after the publication of the last News-letter. Because all the sightings are rareties, we have published it late rather than not at all. For the contributors, see the end of the "regular" trivia.

Date
(1989)

Obs

Birds - Sightings of Rarities

| | | |
|-----------------|--|------------|
| Mar 6 | -a Carolina wren and a brambling in Yarmouth area | MG,MT,JW |
| Mar 9 | -a varied thrush at St. Margaret's Bay | JGT |
| Mar 11 | -2 "common teal", the European race of the green-winged teal, at Greenwich | JW |
| Mar 12 | -a blue grosbeak at Bridgetown | MP,JW |
| Mar 21 | -last sighting of overwintered field sparrow at Greenwich | HF |
| Mar 22 | -a varied thrush at White Rock | RRN |
| Mar 23 | -a male yellow-headed blackbird in Berwick | JH,GW |
| Apr 4 | -a common black-headed gull at Brier Island | RS |
| Apr 8 | -a male yellow-headed blackbird at Upper Dyke | AO,HF,BLF |
| Apr 8 to Apr 10 | -a male purple martin at Falmouth | PK,JM |
| Apr 11 | -a female house finch with one eye at Centreville | PJC |
| Apr 12 | -a male yellow-headed blackbird in Port Williams | LC et al |
| Apr 13 | -blue grosbeak (now known to be a male) still in Bridgetown | MGr |
| Apr 15 & Apr 16 | -a male yellow-headed blackbird in Wolfville | FK,BBT,JGT |
| Apr 22 | -a little egret (African/European) at Sambro | MT,JW |
| Apr 27 | -a male house finch at Wolfville feeder | BBT |
| May 1 | -a great egret near Port Mouton | DA,RD |
| May 3 | -little egret seen again at Sambro, this time not only foot-stirring but also flycatching! | BLF |

TRIVIAL TIDBITS
of Local Natural History
June 1, 1989 to August 31, 1989

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

Date
(1989)

Obs

Astronomy/Weather/Climate/Geology

| | | |
|-----------------|--|------------|
| Jun 9 | -aurora borealis at Mosherville | SAC |
| Jun 14 | -aurora borealis at Wolfville | JW |
| Jul 8 | -rainbow in evening at Mosherville | SAC |
| Aug 8 | -a dykeland pond, nearly dry, has lots of tiny silvery fish; muddy edges attract 50-60 sandpipers plus 2 American black ducks | SAC |
| Aug 16 | -the same dykeland pond full again, now has 5 great blue herons | SAC |
| Aug 16 & Aug 17 | -total eclipse of the moon | Everybody! |
| Aug 28 | -aurora borealis show - no colour but the northern half of the sky was lit up by radiating broad spokes of light from the zenith | JW |

Plants - Earliest Noted Flowering Dates

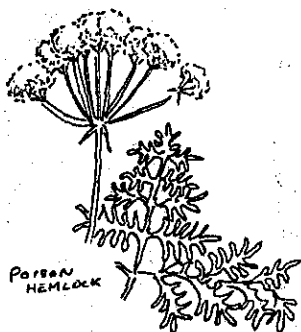
Our editors requested reports and, there being virtually none, I conclude there is no interest. The following are from Sheila Connell at Mosherville: June 1 - apple; June 2 - blue-eyed grass; June 4- blackberry; June 5 - comfrey, knapweed; June 12- bloodroot; July 20 - Canada lilies.

Jack Herbin and Bernard Forsythe report that a couple of yellow lady's-slippers were in bloom May 28 at Black River Lake.

Bernard Forsythe found lots of blooming Arethus or dragon's-mouth orchids in his favourite floating bog at Methal's Lake on June 24.

Gini Proulx reports show lady's-slippers still in bloom July 21 (since late June) in Smiley's Park near Brooklyn, Hants County.

On July 26 I noticed huge amounts of poison hemlock conspicuously in bloom all over the Grand Pre and Avonport areas - much, much more than I've ever seen anywhere.



Plants - Miscellaneous

Jun 14 -a few specimens of maidenhair fern found in Smiley's Provincial Park near Brooklyn, Hants County

SP

Insects and Other Invertebrates

May 30 -a tick found on a dog from Wolfville? or from Lunenburg County?

MZ

Jun 7 -wasp, possibly a long-tailed ichneumon, released safely from a porch at Mosherville

SAC

Jun 9 -a dog tick found on a human at Wolfville (Acadia Nature Trail)

BBT

Jun 15 -a hawkmoth (sphinx moth) sips from ornamental onion at Mosherville

SAC

Jun 23 -long-horned wood-boring beetle on screen door at Mosherville

SAC

Jun 25 -3 engorged dog ticks on dog, from Acadia Nature Trail? or from elsewhere?

MZ

Jun 26 -huge numbers of ovipositing damselflies (Enallagma) at Port Williams sewage ponds

JW

-a dying male luna moth in Wolfville

JT

Jul 5 -living flatheaded borers (larvae of metallic wood-boring beetles) making loud chewing noises in woodpile, in Wolfville

HW

-a fresh-looking luna moth near Hall's Harbour & lots of captures plus reports of others in that area this year

RM

Jul 10 -a luna moth laying eggs in lawn on Wolfville Ridge

JGT

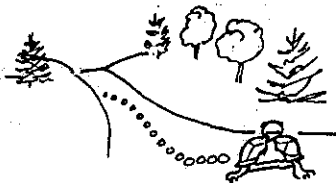
-report of a recent fresh-looking luna moth at Pereau

MG



- Jul 17 -a cicada calling in Kentville JW
- Jul 19 -report of a house in New Minas partly covered
with small cases of bagworm moths AW
-at least 5 separate black-and-yellow mud-dauber
wasps seen foraging or found in building in Wolf-
ville- 2 had spiders in their jaws WM, JW
- Jul 21 -a cricket "singing" in Wolfville JSBo
- Jul 24 -lots of drowned and living sap beetles or "pic-
nic beetles" at my hummingbird feeder JW
- Aug 2 -2 webs of fall webworms in Port Williams JW
-bald-faced hornets beginning to attend and dom-
inate my hummingbird feeder JW
- Aug 9 -insect on window screen at Mosherville identi-
fied by N.S. Museum as a xylophagid fly (slender
and wasp-like) SAC
- Aug 12 -lots of conspicuous webs of fall webworms along
New Ross Road and at Lunenburg MT, JW
- Aug 13 -a viceroy butterfly on blackberry leaf SAC
- Aug 14 -2 different kinds of adult carrion beetles asso-
ciated with decomposing fish from Canard Valley DK
- Aug 18 -a caterpillar of smoky tiger moth on alder leaf SAC
-a caterpillar of spotted tussock moth in Wolf-
ville - this year I've seen many more of them
than I'm used to, in several localities JW
- Aug 20 -tiger moth caterpillar on withered garlic
stalk at Mosherville SAC
- Aug 24 -lots of armyworm moths in Blomidon Park TS, BW

Fishes and Herptiles



- Jun 15 -a Blanding's turtle
laid 14 eggs along
the main road in
Kejimikujik Park TH, EM
- Jul 4 -a living leatherback sea turtle caught in a
mackerel net at West Dover and released CBC
- Jul 13 -tiny transformed toadlets at Centreville bog JW
- Jul 25 -a small bat appeared during noon-hour and hung
on wall of outer chamber of Royal Bank in Wolf-
ville (and was removed by JSB) DJ
- Jul 31 -a larva of red-spotted newt, from Gaspereau, has
transformed in a lab aquarium into a red eft
(terrestrial juvenile) NH
- Aug 3 -garter snake in garden at Mosherville SAC
- Aug 10 -a painted turtle with an ice-cream cone was
chased by another jealous turtle, at Greenwich JW
- Aug 11 -a toad on driveway at Mosherville SAC
- Aug 20 -a leopard frog in garlic field at Mosherville SAC
- Aug 21 -a doe white-tailed deer with two fawns grazing
new clover, at Mosherville SAC
- Aug 22 -coyotes howling twice overnight; then in morn-
ing a coyote-killed carcass of a ewe found,
at Mosherville SAC
- Aug 24 -young weasel rescued from 3 cats at Mosherville SAC

- Aug 25 -3 right whales off Brier Island
 Aug 27 -buck white-tailed deer found dead under wild
 apple tree along a fenceline, with antlers caught
 in barbed wire, at Mosherville SAC
 -bear scat in Dug Woods on Wolfville Ridge JGT
 end of Aug -road-killed skunks in Port Williams and else-
 where have become common occurrences JW et al

Mammals

- Jun 21 -3 red squirrels in an elm tree rubbing their
 faces with brown leaves (sawfly mines?), then
 nibbling the same leaves, in Wolfville DC1, MZ
 -whale carcass floating in Kennetcook River at
 Mosherville, 2 ravens aboard and pecking at it,
 nose-holding required (see May 29 in last News-
letter - was odiferous then) SAC
 -groundhog eats first ripe strawberries at
 Mosherville SAC
 Jun 24 -raccoon kills or injures 14 Pekin ducklings
 overnight at Mosherville SAC
 Jun 27 -2 young foxes playing and exploring on dykeland
 at Mosherville SAC
 Jul 9 -a coyote seen well at Black Hole BLF
 Jul 16 -a porcupine foraging on hop-clover flowers
 near South Maitland MT, JW
 Aug 4 -a bat roosting on house wall behind a post
 of a trellis at Mosherville SAC
 Aug 10 -a road-killed mink at Greenwich JW
 Aug 11 -a skunk carried a mouse to babies under an old
 shed at Mosherville LP
 Aug 12 -a coyote along river at Mosherville, walking
 and occasionally scent-marking LP

Birds - Reports of Rarities

- May 30 & 31 -a little blue heron near Mary Joseph,
 Halifax County MPU
 Jun 4 -a singing male indigo bunting in Kentville TH
 Jun 7 -an unidentified all-white heron or egret
 at New Minas MH
 Jun 11 -a great crested flycatcher in Kentville RS
 Jun 14 -a sora calling through the night at Mosherville SAC
 Jun 14 & Jun 15 -a pair of house finches still in Port
 Williams LC, LT
 Jun 24 -3 Lincoln's sparrows singing at Methal's Lake BLF
 Jun 25 -an adult cattle egret in breeding plumage
 at Grand Pre BLF
 Jun 30 -a cliff swallow seen closely at Mosherville SAC
 -a pair of house finches at an Avonport feeder BMC
 Jul 6 -a pair of house finches at a Wolfville feeder BBT
 Jul 9 to 12 -a northern mockingbird, displaying to show
 its wing-markings, on Ross Creek Road, North
 Mountain GC
 Jul 12 -a single horned lark at Coldbrook HF
 Jul 23 -a yellow-crowned night heron near Lunenburg JGT
 Jul 28 to Aug 1 -a cuckoo (unspecified- black-billed?)
 at Mosherville SAC
 Aug 7 -a male prothonotary warbler at Hartlen's Point,
 Dartmouth JGT

| | | |
|-----------------|--|---------|
| Aug 7 to 10 | -a reeve (female ruff) and 2 stilt sandpipers in Conrad's Beach salt-marsh | JGT |
| Aug 9 | -a juvenile peregrine falcon, wearing a red leg-band, presumably from the Blomidon Park releases, at Grand Pre | BBT |
| Aug 10 | -report of somewhat regular sightings of an osprey at Blomidon Park | AFO |
| Aug 20 | -an adult sora at Canard Poultry Pond | MT, JW |
| Aug 21 | -a green-backed heron at Greenwich | HF, JGT |
| Aug 23 & Aug 24 | -a long-billed curlew (with whimbrels) at Cole Harbour | RBA |
| Aug 25 | -an adult sora at Canard Poultry Pond | JGT |
| Aug 27 | -a Kentucky warbler at Hartlen's Point, Dart. | RBA |
| Aug 29? | -a long-billed curlew on Brier Island | SJC |

Birds - Nesting Activities

| | | |
|--------|---|----------|
| Jun 15 | -a spruce grouse with chicks near Black River L. | MG |
| Jul 22 | -bald eagle nest with one nestling near Scotch Village; nest visited by house sparrows and black-capped chickadee | SAC |
| Jul 23 | -cliff swallows with active nests near Lunenburg | JGT |
| | -a very agitated male merlin, then a second agitated merlin, near Bridgewater | JGT |
| | -2 adult piping plovers with 4 immatures, at Cherry Hill Beach (or two separate families perhaps?) | BLF, JGT |
| Aug 4 | -a family of boreal chickadees on Wolfville Ridge | JGT |
| Aug 5 | -a least flycatcher feeding insects and berries to a fledgling! (on Wolfville Ridge?) | JGT |

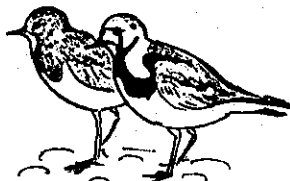
Birds - Migrational Reports

| | | |
|--------|---|--------|
| Jun 1 | -Canada warbler seen closely at Mosherville | SAC |
| Jun 12 | -3 common nighthawks at Mosherville | SAC |
| | -9 pine siskins in Wolfville | JW |
| Jul 9 | -3-4 common nighthawks at Mosherville | SAC |
| Jul 12 | -2 dunlin, 50 short-billed dowitchers in Wolfville Harbour | JGT |
| Jul 15 | -an injured or sick immature gannet at Port George | MDO |
| Jul 18 | -3 common nighthawks together in Wolfville | FS, JW |
| Jul 20 | -an upland sandpiper at Grand Pre | BLF |
| | -a record "guesstimate" of 880 chimney swifts in the Front Street Dairy chimney in Wolfville | JW |
| Jul 23 | -about 20 common nighthawks in a tight flock over one area of river and dykeland, Mosherville | SAC |
| | -6+5 common nighthawks along New Ross Road | JW |
| Aug 5 | -more than 300,000! semipalmated sandpipers at Evangeline Beach at high tide | JGT |
| Aug 7 | -2 common nighthawks near Annapolis Royal | JGT |
| Aug 8 | -410 ruddy turnstones at Cheverie | KLC |
| | -a very small merlin chasing rock doves on Acadia University campus | JW |
| Aug 10 | -6 common nighthawks at Mosherville, occasionally calls heard | SAC |
| | -a palm warbler at Mosherville | SAC |
| Aug 14 | -a merlin "ineptly" chasing shorebirds in Wolfville Harbour | JGT |

- | | | |
|--------|---|-----|
| Aug 15 | -a wave of birds (warblers, flycatchers, etc.) between showers at Mosherville | SAC |
| Aug 18 | -98 greater yellowlegs at Harris' Pond, Canning | JGT |
| Aug 19 | -an American kestrel unsuccessfully chasing shorebirds in a field in Grand Pre | JGT |
| | -a peregrine falcon captured a shorebird in a field in Grand Pre | JGT |
| | -4 Hudsonian godwits at Evangeline Beach | JGT |
| | -8 lesser golden-plovers at Grand Pre | JGT |
| | -4 broad-winged hawks riding thermals with gliders from Stanley Airport, at Mosherville | SAC |
| Aug 20 | -800 black-bellied plovers in a Grand Pre field | JGT |
| | -3 solitary sandpipers at Canard Poultry Pond | JW |
| | -a semipalmated sandpiper, wearing a coloured band (from Shepody Bay, N.B., in 1987), at Evangeline Beach | JW |
| Aug 31 | -still at least 47 chimney swifts roosting in Wolfville's Front Street chimney | JW |

Birds - Miscellaneous (Behaviour, Predation, etc.)

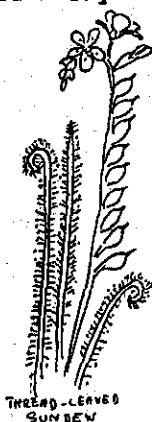
- | | | |
|--------|---|-----|
| Jul 5 | -bald eagle being chased by common terns at Tern Island, Kouchibouguac National Park | PJC |
| Jul 6 | -many American robins feeding on ripening serviceberries at Mosherville | SAC |
| Jul 16 | -a white-breasted nuthatch on Wolfville Ridge (where there have been only 3 sightings in 7 years) | JGT |
| Jul 23 | -male magnolia warbler, killed by a cat, at Mosherville | SAC |
| Jul 24 | -2 Swainson's thrushes on Wolfville Ridge, with one trying to mimic the other (in a partial song and call-note) - parent and offspring? | JGT |
| Aug 3 | -a calling common loon flying southeast at Mosherville | SAC |
| Aug 13 | -a yellow warbler brought in by a cat but released unharmed, at Mosherville | JGT |



BUDDY TURNSTONE

Contributors

| | | | |
|------|---------------------------|-----|-----------------------|
| DA | Diane Amirault | PK | Pearl Kinsman |
| RBA | Rare Bird Alert | EM | Erich Muntz |
| JSB | Nancy & Sherman Bleakney | JM | Jane McConnell |
| JSBo | Sherman Boates | RM | Reg Melanson |
| GC | Gordon Callon | WM | Wanda Melvin |
| LC | Lana Churchill | BMC | Beverly MacIntosh |
| LCa | Leigh Carson | RRN | Ruth & Reg Newell |
| DC1 | Debbie Clark | AO | Ardythe O'Leary |
| CBC | CBC Radio | GP | Gini Proulx |
| KLC | Karen Casselman | LP | Lolita Parker |
| PJC | Pat and Joe Clifford | MP | Mary Pratt |
| SAC | Sheila Connell | SP | Shelley Porter |
| SJC | Shirley & John Cohrs | MPu | Mark Pulsifer |
| RD | Richard Daury | BPR | Betty & Paul Rockwell |
| MDo | Martha Dodge | FS | Francis Schwab |
| HF | Harold Forsyth | RS | Richard Stern |
| AFo | Al Foster | TS | Tom Smith |
| BLF | Sandra & Bernard Forsythe | JT | Jean Timpa |
| MG | Merritt Gibson | LT | Linda Thomson |
| MGr | Marion Graves | MT | Miriam Tams |
| JH | Jacinta Harvey | BBT | Brenda & Bill Thexton |
| MH | Maxine Hill | JGT | Judy & Gordon Tufts |
| TH | Tom Herman | AW | Al Wills |
| JHe | Jack Herbin | BW | Barry Wright |
| NHo | Nancy House | GW | Garnet West |
| JPH | J.P. Huang | HW | Harold Woodman |
| DJ | Dave Jones | JW | Jim Wolford |
| DK | Dave Kristie | MZ | Marian Zinck |
| FK | Fred Kelley | | |



"How long can we go on and safely pretend that the environment is not the economy, is not health, is not the prerequisite to development, is not recreation? Is it realistic to see ourselves as managers of an entity out there called the environment, extraneous to us, an alternative to the economy, too expensive a value to protect in difficult economic times? When we organize ourselves starting from this premise, we do so with dangerous consequences to our economy, health, and industrial growth.

We are now just beginning to realize that we must find an alternative to our ingrained behaviour of burdening future generations resulting from our misplaced belief that there is a choice between economy and the environment. That choice, in the long term, turns out to be an illusion with awesome consequences for humanity."

from the submission by Charles Caccia, Member of Parliament, House of Commons, World Commission on the Environment and Development Public Hearing, Ottawa, May 26-27, 1986.

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Membership Type (please check one):

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Address _____

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Phone Number(s): Home _____ Office: _____

Membership Type (please check one):

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

| <u>Information</u> | <u>Source</u> | <u>Office</u> | <u>Home</u> |
|---|-------------------------------|---------------|-------------|
| Rocks & Fossils | Geol. Dept., Acadia Univ. | 542-2201 | |
| Fish | N.S. Dept. of Lands & Forests | 678-8921 | 542-2095 |
| Flora - General | Ruth Newell | 542-2201 | 582-7569 |
| Flora - Trees | Merritt Gibson | 542-2201 | 542-9214 |
| Flora - Fungi | Darryl Grund | 542-2201 | 678-4890 |
| | Kenneth Harrison | 542-9332 | 542-9332 |
| | Nancy Nickerson | 678-2171 | 633-2837 |
| | Karen Casselman | | 542-9214 |
| Flora - Lichens | Darryl Grund | 542-2201 | 678-8281 |
| Flora - Seaweeds | John Pickwell | 542-2246 | 542-2427 |
| Flora - Mosses & Ferns | Bernard Forsythe | 678-4742 | 678-1975 |
| Birds - General | Peter C. Smith | 542-2201 | 542-5998 |
| | Gordon & Judy Tufts | | 542-7800 |
| | Jim Wolford | 542-2201 | 542-7650 |
| | Jean Timpa | | 542-5678 |
| Birds - Hawks & Owls | Bernard Forsythe | 542-2427 | 542-2854 |
| | Cyril Coldwell | 542-2201 | 542-2854 |
| | Mark Elderkin | 542-2201 | 542-3731 |
| Birds - Falcons & Eagles | Peter Austin-Smith | 678-8921 | 542-2109 |
| Mammals | Francis Schwab | 542-2201 | 542-3473 |
| Amphibians & Reptiles | Sherman Bleakney | 542-2201 | 542-3604 |
| | Jim Wolford | 542-2201 | 542-7650 |
| Seashore & Marine Life | Sherman Bleakney | 542-2201 | 542-7650 |
| | Jim Wolford | 542-2201 | 542-3604 |
| | Graham Daborn | 542-2201 | 542-7650 |
| | Michael Bryllinsky | 542-2201 | 542-5373 |
| | Ellis Gertlidge | 542-2201 | 582-7954 |
| Indian Prehistory & Archaeological Sites | James Legge | 542-2201 | 542-2816 |
| Astronomy | Roy Bishop | 542-2201 | 542-3530 |
| | Larry Bogan | 542-2201 | 542-3992 |
| | Sherman Williams | 542-5137 | 678-0446 |
| | | | 542-5104 |