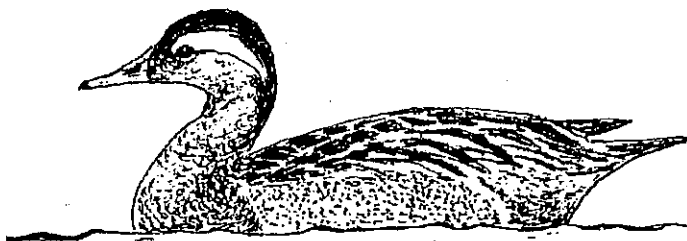


BLOMIDON NATURALISTS' SOCIETY NEWSLETTER



Volume 18 Number 3
September 1991

BNS Fall 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.

3. November 18 -- "Photographing Nature" by Mark Elderkin and John Horton. These two excellent local nature photographers will show their work and provide us with insights into the art and techniques of using a camera.

4. December 9 -- "Conservation of the Piping Plover in Atlantic Canada" by Stephen Fleming. Stephen did his MSc research at Acadia on Osprey. He is now completing doctoral studies at Queens University. Stephen has been working on the Piping Plover for many years and will discuss his research on this endangered species.

3. January 20 -- "The Esthetic Muds of Minas" by Dr. Sherman Bleakney. Sherman is a long time member of the BNS and proponent of the muds of Minas as a fascinating habitat. We can expect an entertaining, informative and unique presentation on the Minas Basin.

4. February 17 -- Natural-History-is-for-Everyone Night. Patterson Hall room 308 (Biology Building at Acadia University). This annual tradition is always popular with members and non-members alike. Bring your slides (limit 10-15), photographs, videos, artwork, observations, collections or anything that might be of interest to your fellow naturalists - or simply come and enjoy.

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The BNS Newsletter is published quarterly.

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

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

Address correspondence to:

Blomidon Naturalists Society

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Wolfville, Nova Scotia

B0P 1X0

Field Trips

Fall Field Trips

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

Lists of trips scheduled prior to publication of the Newsletter are available at BNS meetings; trips are also publicized in local media. Trips already completed at the time of publication of this Newsletter are listed without details for the record.

Everyone, BNS member or not, is welcome on all field trips.

1. Saturday, September 21 -- The Shorebirds of Grand Pre and Evangeline Beach - a joint BNS/Halifax Field Naturalists field trip with Jim Wolford.

2. Saturday, September 28 -- Landfill and Sewage. A tour of the Kings County landfill site and the New Minas sewage ponds led by Ken Redden, Director, Environmental Services, Kings County.

3. Tuesday, October 1 -- Saturn and Other Celestial Wonders. The night sky at the Wolfville Ridge Stile Park with Sherman Williams and Larry Bogan.

4. Sunday, October 6 -- My Grandfather's Walk. The natural and cultural history along the D.A.R. from Wolfville to Sunnyside (east boundary of New Minas) with George E. Forsyth.

5. Saturday, October 12 -- An Autumn Hike to Cape Split led by Sherman Williams.

6. Sunday, October 20, 1:00 p.m. - Little River Falls. Bernard Forsythe (542-2427) will lead us on a woodland hike through a typical area of the South Mountain. A beautiful waterfall will be our destination. What better way to spend a Sunday afternoon in autumn?

7. Wednesday, November 20, 7:00 p.m. at Patterson Hall, Acadia University -- Cyril Coldwell (542-2201) will again show the Acadia Biology Department's tremendous collection to children (even if only at heart) and offer some insights about some of the items. Meet in the wildlife lab on the top floor of Patterson hall. If you are planning to bring a group of children, please call the Secretary of the Acadia Biology Department (542-2201) first.

Acknowledgements

Many thanks to:

Colin Bell for introducing us to the world of microbes at the June meeting;

our field trip leaders: Bernard Forsythe, George Boyd, George Forsyth, Peter C. Smith, Richard Stern, Jim Wolford and Gary Yeo;

and everyone associated with the Newsletter.

Other Events of Interest to Naturalists

Christmas Bird Counts

The **Blomidon Naturalists Christmas Bird Count** will be held on Saturday, December 21, 1991. For further information or to volunteer, contact Merritt Gibson or Sherman Boates (both at 542-2201).

The **Hants County Christmas Bird Count** will be held on Sunday, December 29, 1991. For further information, contact Karen Casselman (633-2837).

Acadia Biology Seminar Club

Weekly Seminars

The Acadia Biology Seminar Club meets weekly on Thursdays, in Room 308, Patterson Hall, at 4:45 p.m. All interested persons, including members of the public, are encouraged to attend. Refreshments are served prior to the lecture. Following is a partial list of upcoming seminars. A ? after the topic indicates that the topic still must be confirmed.

Oct 31 Mark Forbes, PhD Candidate

"Effects of Parasites on Behavior and Fitness in Odonates (Dragonflies)"

Nov 7 Dr. Kathy Fuller

"Molecular Mystery Tour: Scallops Mitochondrial DNA"

Nov 14 Dr. Barbara McKinnon

"Sea Life" (?)

Nov 21 Cliff Drysdale, Ecologist, Kejimikujik National Park

"Resource Management in an Atlantic Region National Park"

Nov 28 Peter Austin-Smith, Nova Scotia Department of Natural Resources

"Wintering Bald Eagles in Kings County

Dec 5 Dr. Tom Herman, Acadia University

"Global Change at the Local Level: Assessing the Vulnerability of Vertebrate Species in Nova Scotia to Climatic Warming

Jan 9 Dick Rogers, Agriculture Canada

"From Buckfast Abbey to the Nova Scotia Mitey Bee"

Jan 16 Gordon Helm / Lewis Hinks, Cumberland County River Enhancement

"Salmon" (?)

Mozart's Starling Seminar

Meredith J. West, author of "Mozart's Starling" reprinted in the last **BNS Newsletter**, will be coming from the University of Indiana to give a seminar on Mozart's starling at Dalhousie University. The seminar, sponsored by the Department of Psychology and Life Sciences, Psychology Section, Dalhousie University, is tentatively scheduled:

Date: Friday, November 29

Time: 3:30 p.m.

Location: Room 4258 (fourth floor)

Psychology Wing

Life Sciences Centre

Dalhousie University

To confirm, call the Newsletter editors (542-3651) or Wanda at the Psychology Department (1-494-3603).

Everyone is welcome.

Sustainable Development Strategy for Nova Scotia

Eight workshops are being held around Nova Scotia to solicit public input to create a sustainable development strategy for Nova Scotia. The workshops for our area will be held on Thursday, October 24, in Salon B, Wandlyn Inn, Coldbrook, from 1:30 to 5:00 p.m. or 6:30 to 10:00 p.m.

The final workshops will be held in Halifax on Wednesday, October 30, in the Acadian Room, Halifax Hilton Hotel, at the same times as in Coldbrook.

Information packages are available by calling 1-800-665-9961.

BNS SOCIETY NEWS AND BUSINESS

Notes from the BNS Directors

by Tom Herman

Kentville, N.S.

The BNS Executive held meetings on June 11 and September 25, 1991. Regular items of business were reviewed in each. These included reports from the Treasurer, Newsletter Editor, Program Committee and the Nature Centre Committee. A number of additional items were discussed.

More than modest progress has been made on The Natural History of Kings County due, in part, to the assistance of Gawen Thompson, our SEED summer student, and, in part, to continued harassment of the authors by an unnamed member of the Executive. Although I don't think that this epic work will make the Christmas market, I am hopeful it will emerge with Spring.

The Executive would like to acknowledge the contribution of Gawen Thompson, whose primary role over the summer was to serve as an interpretive naturalist at the Robie Tufts Nature Centre. In that capacity, he helped to develop a new panel on Robie Tufts for the Centre, led a series of dyke walks and counted chimney swifts.

Over the summer, BNS participated in the 1991 "Parks are for People" interpretive program at Blomidon Provincial Park. These joint ventures

with the park have been well received by the public. Next month the Executive plans to meet with a representative from the Parks Division of the Nova Scotia Department of Natural Resources (formerly Lands and Forests) to discuss additional ways in which our Society can contribute to interpretive programs at Blomidon and other Provincial parks.

On August 10, the BNS co-hosted with the Wolfville Business Development Corporation "Swifts Day" activities at the Robie Tufts Nature Centre. Unfortunately the weather did not co-operate and, as a result, the barbecue and large crowd did not materialize. Nevertheless, we dedicated a new panel on Robie Tufts and enjoyed some outstanding music. We later ventured to University Hall at Acadia University, where we marvelled through the raindrops at the swifts. Slides by Jim Wolford (to a select audience) completed the evening.

In our September meeting, the Executive discussed at length possible activities for the BNS during the 1993 Wolfville Centennial Celebrations. Although we are committed to contributing in some way, we have not yet decided how. We feel that since the BNS is a regional rather than a Wolfville organization, it would be most appropriate to sponsor a project that fits into a regional profile. Over the next few months, the Executive and the Conservation Committee would welcome any suggestions for projects.

In June, while exploring project

possibilities, we met with the representatives from the Clean Nova Scotia Foundation and the Town of Bridgetown to discuss a possible EnviroTowns programme for Wolfville. For those unfamiliar with the concept, EnviroTowns is a programme sponsored by the Clean Nova Scotia Foundation to raise environmental awareness within communities. It does so by involving the community in a series of practical hands-on projects that contribute positively to the state of the local environment.

Since each EnviroTowns programme is entirely within local hands, possible projects are identified and chosen by the residents themselves, rather than by some outside agency. In other communities, projects have included protection of local sites with high biodiversity or unusual natural features, household waste reduction programmes, improved sewage treatment schemes and litter reduction campaigns. Although the EnviroTowns programme requires endorsement of the local municipality, it is essential that it be initiated by a non-government group. In Bridgetown, which has enthusiastically participated in the programme and is now a recognized "EnviroTown", involvement was initiated by the local Lions Club.

We feel that this programme would be an ideal one for the Town of Wolfville, especially during the Centennial year, and would encourage BNS members to get involved. However, we feel that it should be sponsored by a Wolfville-based

organization, rather than by BNS. I would be pleased to discuss this programme in more detail and share the information I have with anyone who is interested.

BNS Newsletter News

Theoretically, the BNS Newsletter is published quarterly, on equinoxes and solstices. However, for a number of years, the December issue has been delayed to include the Christmas Bird Count results and, for a variety of reasons, the September issue has been late. To facilitate Newsletter production, the publication dates have been changed to:

January

March

June

October

Meeting programmes and field trips for September and October will be included in the June issue.

BNS Newsletter Submissions **Deadline - December 1, 1991**

Please send or give all contributions to the Newsletter to:

George Alliston (542-3651)

R.R 3

Wolfville, N.S. B0P 1X0

Send submissions for "Trivial Tidbits" only 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) or 542-7650 (late evening to midnight).

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.

FIELD TRIP REPORTS

Blomidon Park Field Trips

This summer, in cooperation with the Nova Scotia Department of Lands and Forests (now the Nova Scotia Department of Natural Resources) summer program "Parks are for People", the Blomidon Naturalists Society organized three Wednesday evening field trips in Blomidon Park. Reports on the "Parks are for People" field trips follow.

Nature Walk in Blomidon Provincial Park

June 5, 1991

by Jim Wolford

Wolfville, N.S.

On this cold, darkly overcast, drizzly, and very windy evening, I was joined by one brave family of three.

We hurriedly walked the trail that parallels the cliff. Our destination was the large woodland pond which

is present in spring but then dries up in the summer. Nova Scotia's only known fairy shrimp population was discovered in this pond several years ago.

With my dipnet I was able to capture only a few adult fairy shrimp. At this time of their life cycle, most of the adults had died leaving only their eggs, which are resistant to summer drying and winter freezing but hatch during early spring after the pond is again flooded.

Other pond critters seen were: both large and small adult diving beetles, large larvae of phantom midges, large mosquito pupae, a caddisfly larva, damselfly nymphs, water mites, tiny "water fleas" (crustaceans), a hatchling salamander larva and a fairly large tadpole.

Very few birds were active - American robins, Swainson's thrush, ovenbird. We saw a snowshoe hare near the park headquarters.

When the trip was completed I hurried home to finish my Trivia for the June Newsletter.

Creatures of the Mud

July 31, 1991

by Jim Wolford

Wolfville, N.S.

Since Sherman Boates' social secretary had him scheduled to lead two field trips on this evening, I substituted on this "Parks are for People" outing at Blomidon Park while he did his annual Dyke Walk for the Nova Scotia Museum. On this cool, overcast, and intermittently rainy evening, I was joined by seven participants.

In the upper intertidal zone only a few steps from a small waterfall, the mud was riddled with holes made by three species of mud creatures. Most obvious were those of the soft-shelled clams, which are harvested so frequently by man that only small specimens can be found (another overfishing story).

Much smaller clams found with the soft-shelled clams are *Macoma baltica*, whose burrow entrances show



SOFT SHELLED CLAM

The Geology of Blomidon

June 19, 1991

No report was available for this field trip led by Gary Yeo who has moved to St. Francis Xavier University in Antigonish.

characteristic radiating lines. These are caused by the clams' long siphons, one of which vacuums the mud's surface for freshly deposited particles of organic matter ("bacteria-coated yuk", wrote Sherman Bleakney). In other words, it's a

clam that acts like a deposit-feeding worm.

The smallest and most abundant holes belonged to the "mud shrimp", *Corophium volutator*. These 1.5-cm amphipod crustaceans live in U-shaped burrows, which are easy to see if you dig up a sample of mud and look at it in cross section. *Corophium* is another example of a deposit-feeder, like many of the worms that inhabit the mud. Unfortunately, we didn't see any of those worms on this short walk.

Natural History of Blomidon

August 14, 1991

by Bernard Forsyth

Wolfville, N.S.

Thirty eager participants began the outing at 7:00 p.m. sharp. By mid-August the evening daylight has been shortened considerably from the long bright hours we enjoy in June and July. We were forced to keep moving in order to cover the areas I wished to look at.

At this time of year our forest birds are not very conspicuous, especially in the evenings. This shortened our bird list to a few golden-crowned kinglets and chickadees. The only other bird of note was a singing white-winged crossbill. Crossbills have flooded into our area this year to take advantage of the super cone

crop on the spruce and fir trees.

We hiked part way back down the mountain studying the flora along the way. Many plants were heavy with fruit. There was interest in comparing the edible chokeberry, pincherry, and raspberry with the poisonous red and white baneberries growing in the mixed woods. Later I learned that I had misidentified the white baneberries. They were supported on slender stalks making then the rare white form of the red baneberry. It pays to take a close look.

Naturally, we looked for orchids. On the steeper slopes four species were identified: tall leafy green, ragged fringed, spotted coral-root still in bloom, and, one of our newest orchids, broad-leaved helleborine. Helleborine has become well established on both the North and South Mountains in just a few short years.

Next we took one of the park trails through the woods making a loop back towards our cars. A few plants noted were wild sarsaparilla, wild leek, and Indian cucumber-root. A

gold thread plant was sacrificed to show its bright gold-colored roots. They are said to have been used in the past for their medicinal properties. Some

of us tried chewing a small piece of root. The bitter taste is disagreeable to most, although I find it soothing



CHOKEBERRY

especially if I have a bit of a sore throat. The taste is bad enough to cure anything.

Often while scouting an area prior to a field trip I am rewarded by finding something that I have not seen before. This time was no exception for, poking out of the leaf litter, I spotted a tiny grape-fern. This one had its stalkless leaflike blade attached near the top of the plant, quite unlike the grape-ferns I was introduced to last year on the Butler Road that had their stalked blades joined near the base of the plant.

It was getting quite dark as we headed for our cars. Everyone seemed to have enjoyed the evening. While talking with the group, I discovered two people, from different parties, that I had known but not seen for thirty years. Quite a coincidence!



PIN-CHERRY

BNS Field Trips

Ducks Unlimited Impoundments

June 2, 1991

by George E. Forsyth

Port Williams, N.S.

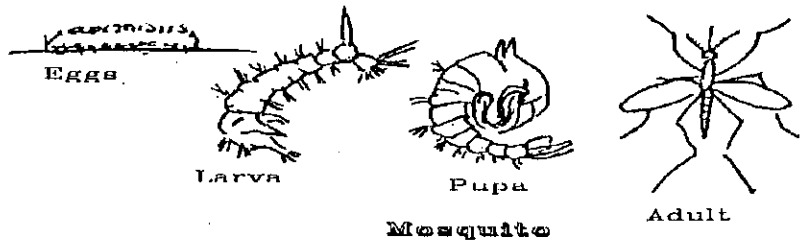
While the turnout was small, the enthusiasm was big! A group of six humans and one canine (a six-month-old German short haired

pointer) joined leader George Boyd to see why and how human-influenced marshes work.

Before beginning our trek we watched the chimney swifts morning performance at the Robie Tufts Nature Centre. Between 8:30 and 8:45 a.m., roughly 400 swifts left the chimney, stretched their wings, flew once around the park and fluttered off in every direction. The evening performance of "the wheel" seems to be followed by a morning performance of "the spokes".

Our first stop was at the Port Williams sewage ponds. Here George Boyd explained the necessary elements that all living things need for survival: food, water, shelter, space, sunlight, soil and air, all in proper juxtaposition. The sewage pond seems to provide these for ducks and George was quick to point out that this "pollution", with man's help, becomes a very fertile and productive habitat. The erection of swallow boxes this spring by the Boy Scouts in Port Williams seems to have provided the missing survival basic (shelter) for a healthy tree swallow population. In the past, tree swallows have used these ponds for feeding but now, with the placement of these nest boxes, five families call this "home".

George next showed us how the absence of one survival basic can prevent the use of a habitat by ducks. The sewage treatment ponds at Upper Canard are exactly the same as the ones in Port Williams except that the maintenance of the Upper Canard ponds includes the



mowing of the grass around their perimeters. Whereas the ponds in Port Williams had already produced one brood of eleven mallards and contained loafing black duck and mallard drakes, whose mates were presumed to be nesting nearby, there were no ducks in the ponds in Upper Canard. In the past the Port Williams ponds have produced 50 or more ducklings per season while the ponds in Upper Canard produced none! George believes that not mowing the perimeters of the Upper Canard ponds would provide nesting cover and shelter for newly hatched ducklings that would permit duckling productivity as great as that at Port Williams.

At Dean Hennigar's in Sheffield Mills we were shown a Ducks Unlimited water control structure that, by damming a brook, has created a wetland in a swale. This control structure has a fish ladder to allow movement of the fish populations. We also got a first hand look at duck food. We used a very fine-meshed dipnet to obtain samples of organic material from the water, in a manner similar to the way a duck sieves the water for its food. Although the "critters" will remain nameless, we were able to find a good assortment of snails, fish, insects and

other"things". Our rough calculations suggested that food was not a limiting factor for ducks in this area.

The final stop was at Dewey Creek in Canard to see a control structure of a different type. This structure did not allow fish to travel past the barrier. It illustrated how marshes can age and the manmade, and even natural, marshes need "change" to bring a diversity of life-forms back to them. This "change" could occur naturally by several seasons of dry weather to dry out the marsh, followed by wet seasons to recharge the water supply, or by beavers constructing dams that would flood the marsh. In manmade marshes, draw downs create drought conditions and "cookie cutters" (huge aquatic rototillers) break up cattail mats. This Ducks Unlimited project is in need of recharging and will, in the future, be "drawn down" to allow plant life to flourish, followed by reflooding to create a more productive marsh.

During this field trip, we saw four quite different marshes, and were treated to a very informative, down-to-earth, and sometimes humorous, explanation of the reasons for their differences.

Woodland and Breeding Birds of Kings County

June 9, 1991

by Richard B. Stern

Kentville, N.S.

On a beautiful, hot, sunny Sunday morning, 18 people representing the Nova Scotia Bird Society and the Blomidon Naturalists Society met in Kentville for this joint field trip. A more accurate description of the trip might have been "birding around Kentville" as a complete exploration of all the habitats of Kings County would have been impossible in one day. Nevertheless, we did see a total of 58 species, most of which (as advertised) were "breeding and woodland birds". I tried to aim for some Valley specialties and, I believe, succeeded as all the "target birds" except two were seen.

The caravan of cars set off as Chimney Swifts fluttered over the parking lot. Our first stop was "Camelot Woods", a lovely area of mature mixed woods on the southern outskirts of Kentville. The hoped-for Barred Owl was not to be seen at its nest, however the first bird seen was our next "target", a beautiful male Scarlet Tanager which, by now, had been singing on territory for a week. Close by we were mobbed by a screeching Northern Goshawk and, almost immediately, saw its nest which contained at least one chick. To avoid further disturbing this nesting raptor, we left the area immediately; on the way back to our cars we saw Black-throated green and Parula Warblers and a Bank Swallow

colony. We then headed for the now unused railway line in the middle of Kentville. Here, in some Poplar trees adjacent to the tennis courts, were two bright male Northern Orioles, Catbirds, American Redstarts, Cedar Waxwings, etc.

Following a walk in the woods behind Palmetor's Nursing Home, looking for Alder and Least Flycatchers and Eastern Wood-peewees, we had lunch at Coldbrook Picnic Park to the accompanying strains of an Ovenbird. After lunch we drove to White Rock in the hope of finding some more open-country species. We had beautiful views of a singing male Rose-breasted Grosbeak as well as Northern Flickers and a soaring Great Blue Heron. We then looked at two Bald Eagle chicks sitting on their nest, visible from the road at Greenwich, but struck out with the next "target", the Warbling Vireo which had been present before (and since) in Wolfville. The trip ended after a visit to the Canard and Saxon Street ponds in the hope of picking up some waterfowl or Rails (which we didn't) or some breeding Red-winged Blackbirds (which we did). The weather couldn't have been better and I would like to thank Keith Allsebrook for his interesting tree identification, which kept us all amused.

Post-script

Early the next morning, I returned to the Northern Goshawk's territory to check on the bird and attempt to take some pictures. As I approached to within about 30 metres of the nest

tree, the bird came screeching out of the nest like a bullet aimed straight for my head. The only way I could defend myself was to roll on the ground with my camera raised above my head. The bird kept doing this until I was well away from the tree and then sat on a branch like a gray wraith glowering at me with its baleful red eyes and screeching until I was well out of range, thus further enhancing my respect for this most magnificent of raptors and reassuring me that we had not unduly disturbed the nest the previous day.

Nights in the Enchanted Forest

A Visit to Bon Portage Island

June 29 - July 1, 1991

by George Alliston

West Brooklyn, N.S.

At 10:45 a.m. on this beautiful sunny morning eight BNS members assembled on the Shag Harbour wharf eager to spend the holiday weekend exploring Bon Portage Island. Dr. Peter Smith, of the Acadia Biology Department, had arranged for a fishing boat to transport us and our luggage the three miles to Bon Portage and the skipper was ready and waiting for us when we arrived. While we loaded our luggage onto the boat (it looked like we had enough with us to stay the rest of the summer), Peter arrived from Bon Portage in his small boat to greet us and accompany us back to the island. After making the crossing and moving our luggage into the two dormi-

tories built by Acadia University, Peter gave us a briefing on the Acadia facilities and their use, pointed out some of the biological and physical features of the island, provided us with a map of the island and then left us with the promise that he

would lead us on a rather special outing during the wee

hours of Sunday morning. We gulped down our lunches and set

out to spend the remainder of the day becoming familiar

with the island.

Bon Portage (called Outer Island on the road maps) is approximately two miles long, less than half a mile wide and is oriented more-or-less north-south along its long axis. A few miles to the east, the larger Cape Sable Island juts out farther into the Atlantic affording Bon Portage some protection from the east. From the west, only a rocky bar affords minimum protection from the full force of Atlantic storms. The island displays little relief and rises only a few



feet above the sea. The lowest relief is near the constriction at the centre of the island; this area is a large quaking bog that is best avoided by the inexperienced. The slightly higher north and, particularly, south portions of the island are dominated by coniferous forest (white spruce and fir). The only cleared fields remaining on the island are at the southern tip where the old lighthouse and associated buildings stand (Acadia University is now the owner of these buildings.)

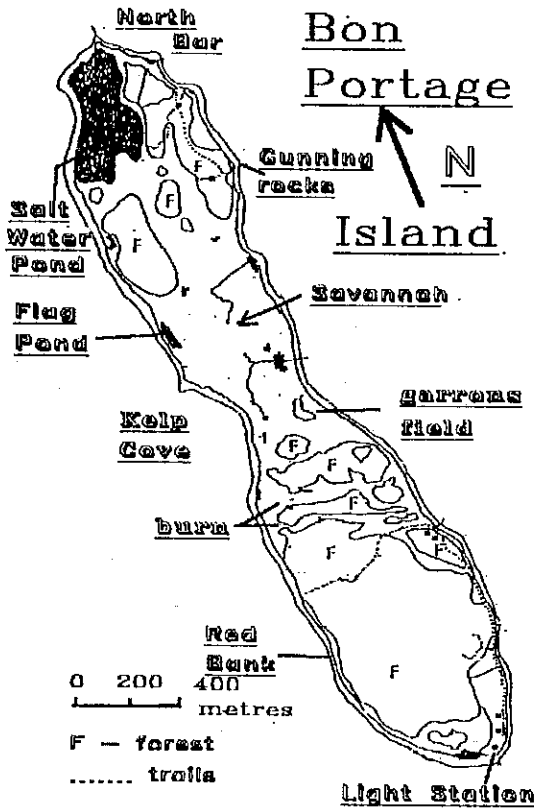
Along the western edge of the island, the forests bear testimony to the severity of the storms that lash the island from this direction. A narrow line of stunted and deformed conifers with gnarled interlocking branches that reach to the ground form a first line of defense against the winds; behind them other trees can grow straight and tall. These mats of deformed interlocking trees (krumholtz to botanists; tuckamore to Newfoundlanders) form an impenetrable barrier to human passage. In places it is possible (but not recommended) to walk over them but never through them.

Once inside the forest (via a cut path) the scene is very different. The most remarkable feature of the forest is the lushness of the understory. In more open areas, where a shrub layer had developed (mainly toward the eastern side of the island), the lushness of these plants would be the envy of any gardener. There were beautiful specimens of chokeberry, bayberry, Labrador tea, sheep laurel (to name just a few), and specimens

of our native yew growing as tall as a person. In areas of the forest where the canopy was more closed and a shrub layer had not developed, the forest floor was thick in moss and sphagnum. Scattered liberally over the forest floor were small flowering plants including wood sorrel (in full bloom) and three species of orchid: blunt-leaved orchid, heart-leaved twayblade and checkered rattlesnake plantain. Bernard Forsythe, who has spent much of his spare time over the past six or seven years searching for orchids throughout western Nova Scotia, was amazed by the numbers of these three species.

Erring on the side of safety, we explored the quaking bog only with our binoculars. Blue flag was in bloom at the time of our visit and this added a beautiful wash of blue over this large expanse of bog.

Walking along the rocky beaches of the east side of the island, we were impressed by the large masses of herb Robert growing in the open at the top of the beach. Thick clusters of this plant, with its red stems and beautiful small pink flowers, were everywhere. Beach pea, which also was in bloom, was quite abundant along this shore. On the beaches around the southern tip of the island, patches of sea lungwort, with its prostrate creeping stems, silver-green almost succulent leaves and bicoloured blue and purple flowers, against a background of surf worn rocks was indeed a beautiful sight. Places where the sea lungwort, beach pea and herb Robert grew together would strike envy in the heart of a gardener and awe in the



black-backed gulls nest on the beaches, on the bog and along the edges of the woodland. A colony of great blue herons nests in the forest at the south end of the island and Nova Scotia's only colony of black-crowned night herons occupies a sight near the northern tip of the island. From the beach we were able to watch adult black-crowned night herons feeding their fledged young. Snowy egrets have summered in Bon Portage during the past few years (we saw several) but nesting has not been confirmed. Creches of female common eider and young were

everywhere in the waters surrounding the island. Raptors are represented by a single pair of ospreys (we observed only one bird) and a single pair of great

heart of a naturalist.

Vertebrate populations on the island consist almost entirely of birds. Mammals are represented only by the ? shrew, meadow vole, muskrat and varying hare. The most numerous species of bird utilizing the island is Leach's storm-petrel. It is estimated that at least 50,000 pairs nest on the island in burrows excavated in the forest floor. When walking through the forest on the south end of the island, these burrows are evident everywhere. Perhaps the next most numerous species are the gulls. Thousands of herring and



Methal's Pond

July 7, 1991

by Bernard Forsythe

Wolfville, N.S.

At 8:00 a.m., as we discussed our plans for the day at the Robic Tufts Nature Centre, we were treated to the spectacle of several dozen chimney swifts boiling out of the Centre's chimney. A great beginning for the five of us in three canoes that headed out on this beautiful windless day. Our paddle up the Methal's Pond was accompanied by a variety of bird songs. Several species of warblers were singing, including a couple of black-throated blue warblers. The varying trills from white-winged crossbills came from all sides. Their sudden appearance after an absence of several years is no doubt a result of our heavy cone crop this year. The flutelike songs from Swainson's thrushes were also common.

At the bog the delicate pink of the calopogon and rose pogonia orchids contrasted nicely with the rich greens of other bog plants such as Labrador tea. Rose pogonia was especially abundant and is spreading in uncountable numbers over the grassy area of the bog. A common snipe put on a long aerial show for us and then landed on a dead branch high in a tree. Adult rusty blackbirds, palm warblers, and other species were busy feeding young. Probably the rarest species we sighted was a pair of Lincoln's sparrows scolding us while carrying food. It was good to see them back in this bog after their absence last year.

We then enjoyed canoeing around the edge of Methal's Lake and we had our lunch at the far end. A common grackle nest containing four young was found in a dead stump in the lake. A stop was made to watch a young eagle standing on its nest while its parents perched nearby. Although the leader managed to stay dry, everyone else somehow got their feet and, later, other parts of themselves wet. I am still puzzled how that possibly happened. Thus ended a successful outing.



Labrador Tea

An International Spectacle of Shorebirds

August 10, 1991

by Jim Wolford

Wolfville, N.S.

On this overcast day, our eight-car caravan headed across the Grand Pre dykelands where, at high tide, we found roosting shorebirds in only one field: black-bellied plovers, dowitchers, pectoral sandpipers and "peeps".

On the dykelands we also saw a kestrel, ring-billed gulls, and smoke-

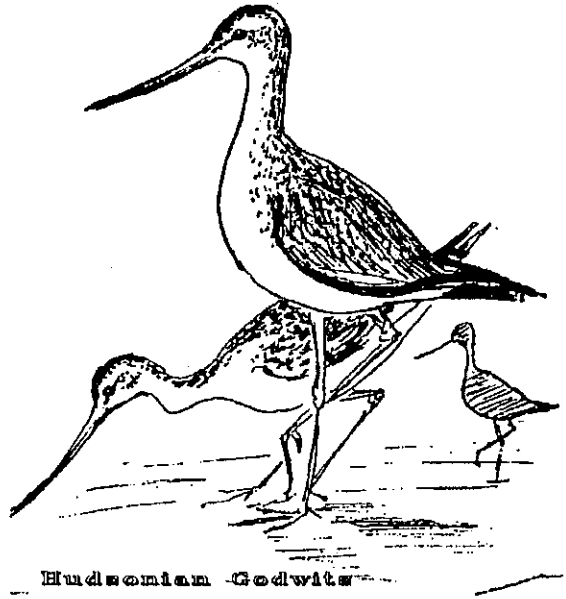
like clouds of distant flying peeps over the beach area.

When we arrived at the Evangeline Beach cottages, we were treated to a truly awesome display. The high tide covered all of the beach, so that shorebirds had to be either flying or roosting in inland fields. There were many flocks, several of them very large, of peeps (mostly semipalmated sandpipers with small numbers of least sandpipers and semipalmated plovers) flying back and forth along the shore (as well as inland and back).

Their aerobatics were indescribable but involved splitting up and rejoining of flocks, orchestrated changes of direction that were simultaneous or wavelike, etc. It was quite a show, both in terms of numbers of birds and their aerobatic skills.

Just before we arrived at the beach, Kim Gilliland, an Acadia University student studying these shorebirds, observed several large flocks that had literally just arrived from the north. New Brunswick had had a large influx the previous day. Later, when the tide ebbed a bit, Kim carefully estimated 50,400 roosting peeps on Evangeline Beach.

After watching the aerobatics for a long time, we walked east on the beach. A moulting adult ruddy turn-



Hudsonian Godwits

stone landed and posed for us on a rock. At the Boot Island end of the beach there were 100+ black-bellied plovers, 25+ dowitchers and three Hudsonian godwits.

President's Field Trip

Meander Intervale, Hants County

July 21, 1991

This field trip was cancelled due to the ban on woods travel as a result of the drought this summer.

NATURAL HISTORY ARTICLES

Highlights of the 1991 Upper Bay of Fundy

Peregrine Release Program

by George Alliston *

West Brooklyn, N.S.

1991 marked the tenth and final year of the Upper Bay of Fundy Peregrine Release Program. During the entire program, 178 young peregrine falcons were released: 69 in New Brunswick and 109 in Nova Scotia. This year only ten birds were released: all in Nova Scotia. The success of the program in establishing a successful breeding population in New Brunswick made it unnecessary to continue with releases in that province.

The initial plan was to release ten birds in two separate hacks at the Five Islands hack site. This site was chosen because it was the only one of the three established hack sites where severe harassment of young birds (which was believed to have resulted in the deaths of several of these birds) by an adult male peregrine (band number 6N2) had not occurred (see September issues of the Newsletter for 1988, 1989 and 1990).

The first release of five peregrines at the Five Islands site occurred on July 15. An adult male peregrine was present in the area and proceeded to vigorously harass the newly-released

young. While a positive confirmation was not made, it is believed that the offending adult male was no other than 6N2! Attempts were made to live-trap the adult male but to no avail. The harassment resulted in all five of the young abandoning the feeding station at the hack site within a week of their release. One of these birds was found in Prince Edward Island (approximately 200 km from the release site!) eight days after its release. This bird, which was in very poor condition, was captured, returned to Nova Scotia where it was nursed back to health at the Kew Raptor Centre and released near Grand Pre on August 22. The fate of the other four birds was not known; however, it seems most unlikely that these birds could fend for themselves lacking, as they did, any hunting experience. It is assumed that they perished.

In the hope that 6N2 was focusing his activities in the Five Islands area, it was decided to move the second hack to the Blomidon site. Five young peregrines were installed at the site on July 30.

On August 2 the adult male 6N2 (positively identified this time) arrived at the Blomidon hack site. Attempts were again made to live-trap 6N2 but again these attempts failed. The young were released on August 9. Over the ensuing two weeks, 6N2 occasionally chased the young birds but not with the in-

tensity and aggressiveness observed at Five Islands earlier in the season. All five returned regularly to the feeding station for several weeks and all survived to achieve independence.

The highlight of the 1991 program was the confirmation of successful nesting by all five peregrine pairs at the five New Brunswick sites identified in or prior to 1990! (In 1990 young were produced at three of these sites.) At least ten fledged young were produced by these five nesting pairs. The Fundy Park pair produced three young for the third consecutive year. The female of this pair was identified (in 1991) as a bird released from Blomidon, in 1987.

At least two fledged young were produced by the pair that nests on the Saint John Harbour Bridge (one produced in 1990). At least one fledged young was produced by each of the Mary's Point (two in 1990) and Petitcodiac River (none in 1990) pairs. The pair at the Grand Manan site produced three fledged young (none in 1990).

The success of the Upper Bay of Fundy Peregrine Release Program is now essentially confirmed by these most encouraging results from New Brunswick. While it is disappointing that no nesting territorial pairs have yet been confirmed in Nova Scotia, it seems likely that this will happen in due course.

As stated previously, 1991 is the last year of the release program. In future years the program will focus upon monitoring the known nest sites in New Brunswick and surveying

all historic and potential nest sites in Nova Scotia.

* Based on information provided by Bruce Johnson, Canadian Wildlife Service, and Peter Austin-Smith, Nova Scotia Department of Natural Resources.



Peregrine Falcon

Wolfville Chimney Swifts Update

by Jim Wolford

Wolfville, N.S.

and

George Alliston

West Brooklyn, N.S.

In our update in the June Newsletter, we reported that the first migrant chimney swifts had arrived in Wolfville on May 7, that peak numbers of migrants (540 birds) had been recorded on May 19 and, at the time of writing (June 3), about 400 swifts were using the communal roost. We were also pleased to report that, to that time, the swifts had confined their roosting to the Robie Tufts Nature Centre. Based on the meager information available on the breed-

ing biology of swifts we went on to speculate what we might expect from the swifts in terms of fluctuations in numbers over the remainder of the spring and summer. We did not, however, attempt to predict the swifts' allegiance to the two chimneys they are known to use in Wolfville.

How closely did the swifts follow our predictions? Firstly, we predicted that by mid-June the spring migration of swifts would be complete, that nesting birds would have dispersed into nesting habitat leaving only immature, non-nesting birds to inhabit the chimney from mid-June through late July. Thus by mid-June the numbers of swifts using the chimney should have become substantially smaller than the numbers observed during spring migration; these numbers should have remained stable until mid-July (assuming these birds exhibit a fairly high degree of fidelity to their roosting sites). By June 18 the count had fallen from about 400 in late May and early June to about 125 and indeed did remain quite stable for the period June 18 to July 18. So far so good!

We predicted that by mid-July the communally-roosting non-nesting birds could be joined by adults that had failed to nest successfully thus increasing the numbers of birds observed. On July 20 the numbers of swifts using the chimney jumped from about 125 to about 225 and these numbers were maintained through early August. Again, so far so good!

Our next prediction was that by early August the numbers of swifts would

increase rapidly as adults that had successfully nested, along with their young, joined the non-nesting and failed nesting birds. With this prediction our luck ran out! The numbers of swifts did not increase dramatically in early August and indeed our highest summer count of swifts was only 290 birds (August 10).

We predicted that from mid-August through early September there would be a rapid decline in swift numbers as they migrated out of our area to their wintering grounds in South America. By August 17 the number of roosting swifts had fallen to two. On August 21 an apparent influx of swifts brought the count up to 180 but no roosting swifts were observed after August 23.

Interpretation of the numbers of swifts observed through our rather simple-minded model would suggest that in 1991 spring migrants made greater use of the Wolfville chimneys than autumn migrants. However, since we have no idea of turnover rates of migrants, and whether these differ between spring and fall and among various segments of the population (non-nesters, failed-nesters, successful nesters, young-of-the-year), it would not be entirely appropriate to draw such a conclusion. These data do, however, suggest a relatively high degree of fidelity by roosting (presumed) non-nesting birds during the 1991 nesting season.

In 1991 the swifts are believed to have used the Robie Tufts Nature Centre almost exclusively for roosting from their first arrival in Wolf-

ville on May 7 through July 28 when birds roosted in both chimneys. From July 29 to August 20 virtually all roosting occurred at the University Hall chimney. The last wave of fall migrants that arrived on August 21 did, however, confine their brief visit to the Robie Tufts Nature Centre.

Two cases of swifts nesting were documented in our area this year. Swifts nested in the chimney of Jane Wallace's home in Kentville. On August 1 the young swifts were making so much noise that the racket emanating from the fireplace forced a party to move to other quarters. The young had fledged by August 8.

At East Dalhousie a pair of swifts nested in a barn belonging to the Errol Crossland family. The young did not fledge until August 15 and 16.

It has taken considerable effort by many people to perform the (almost) daily counts of roosting swifts as they entered chimneys at the Robie Tufts Nature Centre and at University Hall. To all of you a hearty "Thank you!" Special thanks are extended to Jake MacDonald who was at the Nature Centre virtually every evening in 1990; Paula Magwood, Earl Paynter who was present on 52 evenings in 1991, and Gawen Thompson, our swift project SEED student, who fulfilled his obligations very well.

Project FeederWatch Counts Birds Killed In Window Collisions

What's ubiquitous, nearly invisible, and deadly to birds? The windows on your house. Birds often fly full tilt into unseen windows; some are killed, others are left stunned and vulnerable to predators. A recent study by Project FeederWatch provides insight as to just how many birds meet death by collision each year.

Project FeederWatch, launched in 1987, is a long term survey of the numbers and kinds of birds at backyard feeders all over North America. Over 7,000 volunteers participated in 1990-91. Scientists at the Cornell Laboratory of Ornithology in Ithaca, New York and Long Point Bird Observatory, Port Rowan, Ontario -- the organizations that sponsor FeederWatch -- use the data to track changes in resident songbird populations.

During the winter of 1989-90 FeederWatchers recorded the number of birds killed in window collisions at their homes. Nine percent of all FeederWatchers reported finding one or more window-killed birds, with an average of 2.0 deaths per home reporting kills.

Homes where window kills occurred typically had above-average numbers of bird feeders (and therefore large numbers of birds visiting). Window kill sites were usually located in rural areas close to woods and open water, and the yards had plenty of vegetation.

FeederWatchers documented 66 different species of birds killed in window strikes. Most common were feeder visitors; Pine Siskin, American Goldfinch, and Dark-eyed Junco together accounted for almost 44 percent of all window-killed birds.

The most frequently killed species died approximately in proportion to their abundance at feeders. A few species, however, seemed to be unusually unlucky. For example, Purple Finches make up 4.1 percent of all window-killed birds but accounted for only 1.8 percent of all the birds counted at FeederWatch sites.

All of the over-represented window-killed birds (Pine Grosbeak, Purple Finch, Downy Woodpecker, Hermit Thrush, and Cedar Waxwing) are woodland or tree-loving species; thus, these birds are often present at the homes FeederWatch has identified as being prone to window strikes.

Most window strikes probably happen because a bird just isn't paying attention. FeederWatchers don't always witness the events leading up to a window strike. But in 16 percent of the window strikes reported, observers saw a panic-stricken bird escaping from a raptor. In an additional 1.5 percent of window kills, the victims had been chased by other birds or startled by loud noises or passing cars.

The exact number of birds killed in window strikes each year is difficult to determine. Predators and scavengers quickly remove stunned or dead birds; in this study, for example,

some FeederWatchers saw hawks grab birds as they bounced off the window. But extrapolating from the 1989-90 study period, scientists estimate that 0.55 birds per FeederWatch home per year are killed in window collisions.

How does that compare to other window kill studies? To date, the best estimate of total annual window-strike deaths in the United States comes from Dr. Daniel Klem at Southern Illinois University. He believes that one to ten birds are killed annually for every building in the country, for a total of 95 to 950 million victims. Our data suggest that Klem's lower estimate may be the more realistic one.

Still, 95 million birds is one to two percent of the estimated total autumn production of birds in the United States -- not a trivial number. We should strive to prevent window kills, particularly because the birds that die have been lured close to our houses by our feeders.

Recently, Klem also published the results of the first rigorous study of window-strike prevention devices: the hawk silhouettes, wind-socks, one-way films, and screens that are sold by many bird feeding supply outlets. Under Klem's experimental conditions, these commonly used deterrents did not reduce window strikes. The most effective window guard turned out to be a closely spaced grid of adhesive strips.

Few people, however, want to obscure their windows to this extent. FeederWatcher participants who

have had problems with window strikes recommend a less intrusive contraption: black plastic garden-protection netting mounted on frames installed about a foot away from the window. At one Feeder-Watch home where as many as seven collisions a day had occurred, bird mortality went down to a total of only nine over the entire winter after the netting was installed.

Project FeederWatch coordinator Dr. Erica H. Dunn presented the data on window strikes at the 1991 meeting of the Association of Field Ornithologists; an article is now being prepared for publication in an ornithology research journal.

To participate in Project Feeder-Watch's ongoing bird research in the 1991-92 season, send \$12 for materials and a newsletter to:

Project FeederWatch
Cornell Lab of Ornithology
159 Sapsucker Woods Road
Ithaca, New York 14850
U.S.A.

Make cheques payable to Cornell Lab of Ornithology.

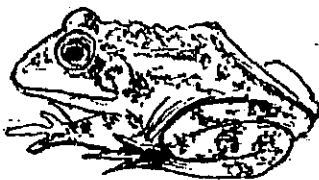
Declines in Canadian Amphibian Populations: Report from a Workshop

To Design a National Monitoring Strategy

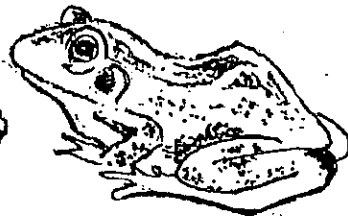
by Tom Herman
Kentville, N.S.

On October 5 and 6, I attended a workshop in Burlington, Ontario, to discuss and develop a national monitoring strategy to address declines in Canadian amphibian populations. The event was jointly sponsored by the Canadian Wildlife Service and the Metropolitan Toronto Zoo, and was attended by approximately 60 people. All provinces except Newfoundland, P.E.I. and Saskatchewan were represented. Participants came from museums, universities, federal and provincial government agencies and the private sector. Despite their diverse backgrounds, all shared a common concern for the wellbeing of our native amphibians.

Saturday was dedicated to formal but brief paper presentations on a variety of topics. Jim Vial, coordinator of the International Union for the Conservation of Nature (IUCN) Task Force on Global Amphibian



Bullfrog



Green Frog

Declines, described the IUCN programme to document the apparent decline worldwide in many amphibian species.

Regional status reports from coast to coast were presented. In B.C. there has been a disturbing decline in Spotted Frogs, Spadefoot Toads, Leopard Frogs, Pacific Giant Salamanders and Tailed Frogs. Spotted Frogs, Spadefoot Toads, and Leopard Frogs have also apparently declined in Alberta. There is also evidence of decline for the latter two species in Saskatchewan. Manitoba experienced a tremendous die-off of Leopard Frogs in the mid-1970's and numbers have never fully recovered. In Ontario local reductions in Fowler's Toad and Blanchard's Cricket Frog (this species had a very restricted range to begin with), as well as a possible widespread decline in Bullfrogs, were reported. In Quebec, Striped Chorus Frogs and Pickerel Frogs seem to be declining, while Leopard Frogs appear to be holding their own. No evidence of declines in any species were reported from the Maritimes.

While some declines are without apparent cause, others can be easily explained. The most obvious cause is degradation or wholesale destruction of habitat. Drainage or modification of wetlands, contamination of aquatic habitats from air- or water-borne pollutants, introduction of exotic predators for sportfishers, and disturbance by all-terrain-vehicles have all contributed. Diseases have been implicated in some of the more mysterious declines, like those of the

Leopard Frog.

Perhaps most disturbing is our almost total ignorance of the population dynamics of any of our native amphibian species. This quickly became clear during the workshop. If Canadian amphibians, like some species elsewhere in the world, are declining, how would we know? How could we distinguish a sustained decline from normal population fluctuation? Of all our vertebrate groups, we have the least population information on amphibians.

In light of this, we spent the remainder of the workshop discussing ways to quantify amphibian populations across the country, and approaches for establishing a national monitoring network. This network would include extensive and intensive monitoring, as well as an analysis of the historical data base for our amphibians, lifestyles and distributions. They include: Bullfrog, Mink Frog, Green Frog, Wood Frog, Gray Treefrog, Tailed Frog, Redback Salamanders (Eastern and Western), Newts (Eastern and Roughskin), and Mudpuppy. In addition, a number of protected sites suitable for such intensive monitoring were suggested. In the Maritimes, Kejimikujik National Park was identified as a candidate site,

Extensive monitoring would involve broad-scale (many species and habitats) and largely non-invasive sampling of abundance by natural resource agencies and volunteer groups. This might include surveys of singing males (in some frogs), permanent roadside transects, egg mass

and larval counts in selected ponds, mudpuppy by-catches, etc. It could also involve establishment of herpetofaunal atlas projects (like the Maritime Breeding Bird Atlas) across the country. Such a project has been underway in Ontario since the mid-1980's, and has been tremendously successful.

By the end of our workshop, much remained unresolved. The thorny problem of funding came up more than once in our discussions. However, in two short days we

accomplished a lot. We established a Canadian Task Force on Amphibians, developed an information network for amphibian enthusiasts, identified the major gaps in knowledge, and designed a workable scheme for filling those gaps. We plan to meet again next year in Montreal to report progress and maintain the momentum. Proceedings of the workshop should be out before Christmas. If you are interested in a copy, let me know.



Wood Frog



Common Tree Frog

Weather Statistics for the Summer of 1991

by Larry Bogan

Cambridge Station, N.S.

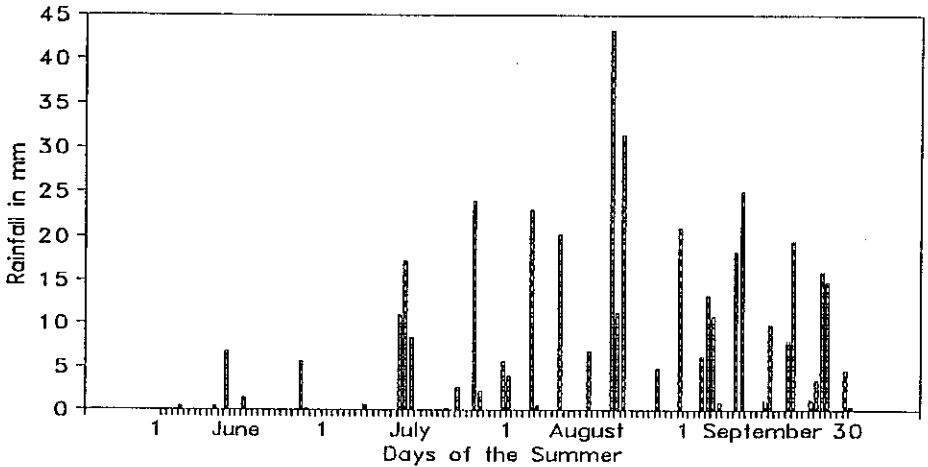
The summer of 1991 will probably be remembered for the drought-like conditions that prevailed in June and July. Naturalists will certainly remember the band on forest travel during most of July and August; it restricted many of their favourite activities. In June we received only about 20 percent of our average rainfall. While rainfall in July was just about average, much of it came toward the end of the month making it a much drier month than the

monthly statistics indicate. The heavy rains of August and September completely eliminated the deficits in rainfall for the summer. In the end the accumulation was above average by 25% and erratic in distribution during the period.

During this summer and last, mean temperatures were above the average of the previous 30 years. On average each month this year was about 1 degree above the norm. This is reflected in the greater growing degree-days and bright sunshine hours.

Daily Rainfall - Summer 1991

Kentville Agriculture Research Centre



Weather Statistics from the Kentville Agriculture Centre (30 year averages in parentheses)

Month	Mean Monthly Temp C	Rain Fall mm	Bright Sunshine Hours	Growing Degree Days above 10 C
June	16.7 (15.9)	15 (71)	267 (209)	203 (178)
July	20.0 (19.2)	74 (79)	258 (238)	309 (284)
August	19.8 (18.4)	176 (98)	237 (212)	303 (262)
Sept	14.7 (14.3)	153 (86)	162 (163)	146 (134)
Total	17.9	418	924	961
or Ave.	(17.0)	(334)	(822)	(858)
percentage excess over 30 yr norm		+25%	+12%	+12%

Chipmunk Eats Dragonflies

by Erich Muntz

At 1330, on May 30, 1991, at Grafton Lake, Kejimikujik National Park, I observed a full grown eastern chipmunk (*Tamias striatus*) feeding on emerging dragonflies.

On the dam at the western end of Grafton Lake (near the park offices), at least three species of dragonfly were emerging from their exuviae. After the dragonflies had emerged and were drying their wings, a chipmunk killed and ate at least 20 dragonflies. There were hundreds of emerged and emerging dragonflies along the length of the dam offering a very abundant food source as well as a very vulnerable one. The predation I witnessed occurred on the area of the dam closest to the hardwood forest immediately north of the dam. I counted 80 wings on the rocks around the dam as well as many legs; all other parts of the insect were eaten. This may have been the work of more than one animal, as there are several chipmunk dens close to this area. However, I saw only one chipmunk actually killing and eating dragonflies. The possibility that the chipmunk was eating nymphs before emergence also exists.

I looked for similar behaviour sub-

sequently but (as of June 13, 1991) have not seen any chipmunks feeding on dragonflies. However, I have not witnessed a "hatch" of dragonflies approaching the size of the one on May 30.

Farewell to Powder Horn Hill *

by Irvin (Bud) Johnston

Blomidon, N.S.

I used to like the autumn hills

When chain saws I did not hear,

And the sounds of dozer-timberjack

Were foreign to my ear.

The lumbermen used saw and axe,

How sweet that frosty sound,

And squirrels, jays and chickadees

Seemed always to abound.

The trails were made for horse and man,

How softly I could tread,

They seemed a part of nature's plan;

Their sight I did not dread.

Now hills are scarred by gravel roads,

My senses they assail,

No more the parklike hardwood ridge,

For clear-cut slopes prevail.

How I long for those fonder days

When fall colours I did scan.

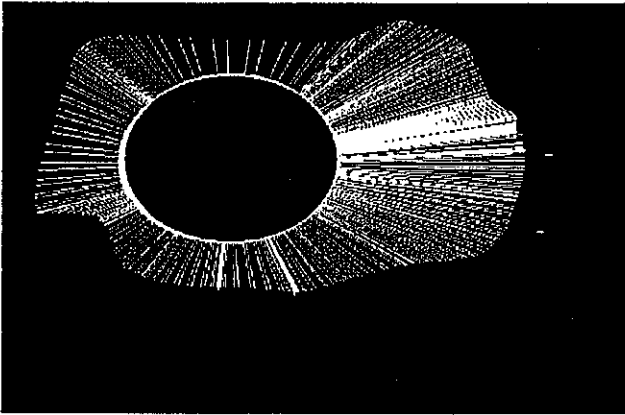
But I know progress will be served,

It's sad I am, it's sad I am.

* Bud Johnston had a cottage near Powder Horn Hill which is located about ten miles from highway #7 on the Tangier River.

The Newsletter editors thank Nature Niagara News for making us aware of Mr. Johnston's poem.





Nova Scotia Astronomers Travel 5000 km

to be in the Dark

by Dave Lane *

Halifax, N.S.

It seems like an odd thing to do but, nevertheless, eight members of the Halifax Centre Chapter of the Royal Astronomical Society of Canada (R.A.S.C.) did, in fact, travel to Baja California, Mexico, to be in the dark for the longest total solar eclipse until the year 2132.

The eight lucky members (myself, Bill Thurlow, Dan and Michael Falk, Roy Bishop [BNS], Sherman Williams [BNS], Murray Cunningham and Paul Harrington [Grade 12 student at Horton District High School]) joined about 165 National R.A.S.C. members under the direction of veteran eclipse chaser Michael Watson.

We travelled from Toronto to Puerto Vallarta on the Mexican mainland aboard our Mexican charter airline, La Tur (which I was told means "the plane"). The plane was a new one (which relieved many of us !) but, because of the large number of seats

that were crammed into the aircraft, the flight was very uncomfortable. (Is there fourth class?)

We landed in the early afternoon, went through customs, which turned out to be easier than getting into a bar in downtown Halifax, were bussed to our hotel and spent the

rest of the afternoon dipping in the pool, eating, enjoying the scenery and patronizing the nearby shops. Some of us, myself included, tried a dip in the ocean, even though the DANGER signs were up. Michael Falk measured the ocean temperature of 33 deg C! Bill and I went window shopping (most of the stores were closed for the afternoon siesta); we had to look twice at the prices because everything cost thousands (of pesos, that is). In the evening we had an information meeting focusing on different aspects of the eclipse and the next day's itinerary.

The eclipse day (July 11, 1991) started very early with a wake-up call at 3:00 a.m. After a quick breakfast, we were bussed to the airport for our short flight to the Baja peninsula. There were **lots** of clouds along the way but the sky seemed to be clearing as we approached Baja. We landed at San Jose de Cabo which is on the southern tip of the peninsula. Again we boarded busses to travel to our observing site which was 41 km north of the

airport. Our site was a fenced-in soccer field in the town of Santiago (population 2,000).

We were greeted by about a dozen machine gun carrying foot soldiers apparently provided by the Mexican government to guard our site! They were very successful at protecting our equipment and restraining the local villagers but a domestic pig did get through their defenses.

By the time we reached our site the skies were clear. What a relief! Our site was a very good one with excellent views of all of the horizons and lots of room to set up equipment. Several of us selected sites near the centre of the field. Roy, Paul and Sherman were to the west. Bill and I had brought telescopes with which to view and photograph the eclipse; the rest brought binoculars.

The first contact (the point when the Moon first starts to cover the photosphere of the Sun) began at about 10:30 a.m. local time. The partial phases occurred very slowly, allowing plenty of time to observe sunspots becoming covered by the Moon and to take some photographs. At around 11:30 things started to get interesting. The temperature had dropped to a comfortable 32 deg C. (it had been 40 deg C.). The light level had also begun dropping rapidly and there were now clouds over us! They didn't appear to be moving, only getting thicker.

As totality approached, the clouds thinly covered most of the sky over our heads, leaving clear sky all around us. Most of those around me,

myself included, had our heads low in disbelief, as we were preparing ourselves for the likelihood that, after travelling so far, we would not see totality!

At a few minutes before totality, things started getting very interesting. I lost touch with those around me so I can't say what they were doing at all. I had my left eye glued to the eyepiece of my Genesis telescope. I had been using the solar filter but then, when there was only a thin sliver of the photosphere [i.e. portion of the sun visible to the naked eye] left, off came the filter. I was watching intensely as the remaining sliver broke and formed two Bailey's beads. [Bailey's beads are seen just prior to and just past totality; they are caused by "leakage" of light from the Sun through irregularities (i.e. valleys) on the surface of the Moon.] The sliver broke again, and again, and again! I estimate that there were about 20 of them before, one by one, they started to disappear behind the Moon.

During this process, I briefly looked up at the sky. The sky brightness seemed to be dropping exponentially! The sky in the west was particularly dark, since the shadow of the Moon was approaching from this direction. Back at the telescope, I watched the last dot disappear. At that moment totality was upon us. It was just as if the sky had fallen. Unless you have witnessed it, you cannot imagine the difference in brightness between the smallest part of the photosphere being visible and totality.

The Sun completely disappeared

behind clouds! Bill and I were grumbling about our bad luck when the crowd around us started to liven up. The Sun was beginning to appear through a hole in the clouds! I went right back to the telescope to soak up the photons. A few seconds later the corona appeared. The sound from the crowd (I assume it was the crowd; I know I definitely contributed to it) must have gone up by 30 decibels with cheers and screams!. The Sun showed incredible detail in the corona: more than will show in any photograph. To the surprise of all, two large prominences appeared on either side of the Sun. They were incredibly red and just as visible as the corona. After a minute or so, the Sun went behind a cloud briefly then returned for a second time.

The onset of the clouds caused my previously well-thought-out plans for photographing and observing the eclipse to go out the window. After the Sun disappeared for a second time, I decided to prepare to take some photographs if the Sun reappeared. I grabbed for a camera and attached it to the telescope; it fell off and hit the ground. I picked it up and attached it again. The Sun appeared. I focused on the edge of the Moon and used the entire range of shutter speeds from 1/1000th to 1/2 second to maximize the possibility of obtaining something printable.

The Sun was still visible when the photosphere began pecking through marking the end of the total phase. The diamond ring effect was spectacular. After a couple of seconds, the Sun became too bright to look at, so I immediately went back to the

camera to take a few shots to see if I could capture the diamond ring. I was successful! As the Sun began to return from behind the Moon, many noticed that the clouds were also starting to disappear. It immediately occurred to me that we had nearly been done in by a phenomenon actually caused by the eclipse itself. When I asked Roy if that was what he thought, he said, "Well, of course." It was settled.

We broke for lunch, then observed the final phase of the eclipse which ended with the fourth contact terminating the event. On our way south to the resort town of Cabo San Lucas, we stopped to view a large rock which marked the Tropic of Cancer; it reminded us how far south of Canada we were.

On a dinner cruise that evening, Bill was able to point out some of the southern constellations. It was especially nice to see Sagittarius so high in the sky. We were able to observe the five brightest planets (Mercury, Venus, Mars, Jupiter and Saturn) all at the same time which, I understand, is quite rare.

Overall the trip was very enjoyable and well worth the cost. It was planned and executed perfectly due to the efforts of Michael Watson. My photographic efforts were not award winning but were not disappointing given the conditions. They will make a permanent record of this great event. I am sure that, before the decade is out, I will go again as I am told that these trips are addictive and the lure to be in the dark is very strong indeed.

* Excerpted from NOVA NOTES [a publication of the Halifax Centre Chapter of the R.A.S.C.], July - August 1991, pp. 71-74, with permission of the author. Information in [] added by the BNS Newsletter editors.



A Visit to Horne Lake Caves

by Janet Pope

Hantsport, N.S.

On a recent trip to British Columbia with my mother, we took the opportunity to visit the Horne Lake Caves on Vancouver Island. Although not as highly publicized as many of the attractions on the island, they are a must on the naturalist's itinerary. The caves are protected by the province and the crystalline calcite formations inside remain in a nearly pristine state.

To get there we drove from Victoria, about 60 km north of Nanaimo, then bumped and jolted our way along a 15 km gravel road until we reached the Horne Lake Caves Provincial Park. This is a 71 acre park consisting of two smaller limestone caves and one large one. Hikes of different lengths and degrees of rigour are offered throughout the summer and

are led by experienced and knowledgeable guides.

With all this before us it was hard to know where to start. The five-hour expedition down a series of vertical pits into the 70-foot Rainbarrel sounded intriguing but, when we discovered we'd have to sign a liability waiver on our lives, my mother developed a decided preference for the shorter hike,

This was the two-hour Riverbend Cave Trail and, although some climbing and crawling were involved, it could not be considered dangerous. Ten of us were given hard hats with lights and, after a briefing, we took a twenty-minute walk on a corkscrew path up the mountain.

At the mouth of the cave, the guide unlocked a small gate, just large enough for a human body to squeeze through. The cave has been gated since 1971 to preserve it from vandalism. Once inside the cave we climbed down an iron ladder to the rocky floor, uneven and strewn with boulders. The temperature inside was cool, about 10 deg. C., and the only light was the flickering glow from our lighted helmets. We looked like an ancient ceremonial procession carrying its votive candles as we descended, single file, deeper and deeper into the cave.

Along the way, we stopped to examine the calcite formations, creating spectacular shapes on the roof and walls. Directly above us was a series of stalactites known as "bacon strip". These were bunched together and each strip looked as curled and crisp as if it had just been taken from the

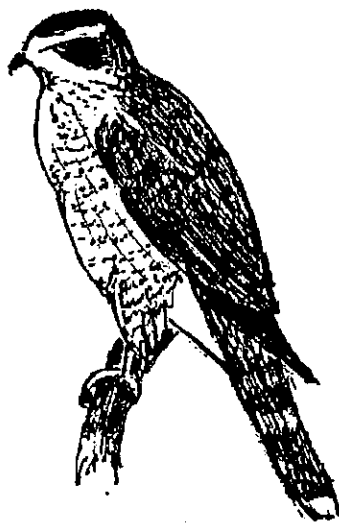
frying pan. A large formation was pointed out to us as the "ice cream soda": a mineral deposit built up in foamy layers. In many places there were calcite pearls and the more standard icicle-shaped stalagmites and stalactites. But the most impressive thing we saw was a formation the guide referred to as "the Buddha". The deposits had settled into an almost perfect likeness of a seated Buddha statue, set in a cavernous niche with a pool of cavewater in front. With the collective gold light from our helmets gleaming on the dark water and the polished calcite, the most jaded naturalist couldn't help but gasp.

We continued 160 m into the cave, descending 60 m. Though so short a distance, the ground was rough in places and our speed, not to mention our physical appearance, was reduced to a crab-like crawl. If the natural contours of the cave could have been used to help us forward the going would have been easier, but the park guides had an almost fanatical, and certainly laudatory, zeal for keeping the formations free from human touch. We were warned that the lightest fingerprint on a fragile spiral stalactite would change the direction of the waterflow and distort its shape.

So, in semi-crustacean fashion we inched our way down to the lower level of the cave, to the point where the "mild" tour stopped and the "wild" tour, that we had opted not to take, began. We paused for a minute to experience the total silence and pitch darkness of the cave before we began the journey back.

Climbing upwards proved to be much easier than coming down. In fact I was surprised to see my mother racing ahead so quickly towards the gate. I preferred to linger and climb slowly, my thoughts full of the stories from different mythologies that describe the first humans journeying upwards through underground caves from the centre of the earth and emerging onto the planet's surface. As I stepped out into the soft, moist day, I couldn't help feeling a primal thrill in having made it into the light.

The caves at Horne Lake Park are only three out of a thousand known caves on Vancouver Island. Guided hikes have been offered to the public only in the last couple of years. I would strongly recommend a subterranean walk at Horne Lake as a pleasant way to spend a summer afternoon.



GOSHAWK

TRIVIAL TIDBITS

TRIVIAL TIDBITS of Local Natural History

mostly June 1, 1991 to August 31, 1991

selected and compiled

by Jim Wolford

Wolfville, N.S.

Weather

On June 27, our early morning skies darkened dramatically and then turned a weird orange colour. The cause was a lot of black smoke from two big forest fires in Quebec (CBC et al).

Fungi

My untrained eyes tell me that there were lots of mushrooms in late summer and fall despite the extended summer drought. The only record before September was of small giant puffballs in various stages of development Aug 17 in Canning (JWW).

Plants

Lots of moonwort ferns were found, in a grassy swale between dunes, at Conrad's Beach (W. Lawrencetown) on May 23 (RB,AW).

Other plants reported were: columbine with double flowers at Delaps Trail Jun 23 (BLF); creeping juniper at Martinique Beach Jun 29 (GEF); Canada lily in bloom, blue cohosh (fruit), and feverwort (fruit) at Hopewell (BLF); lots of water hemlock at Three Fathom Harbour Jul 28 (JWW); hemp-nettle with

white flowers at Blomidon Park Aug 17 (BLF); and seaside angelica at Evangeline Beach Aug 18 (JWW).

Insects

At dusk on Jun 3 in Wolfville, a large flying moth (probably a polyphemus or cecropia) (JWW). A hummingbird hawk-moth was attending blueberry blossoms Jun 11 in late afternoon at Kentville (MT).



Water Hemlock

About 10 monarch butterflies were seen on North Mountain Jun 17-19 (EBM); two were along the shore at Three Fathom Harbour Jul 28 (JWW); and there were at least eight on Bon Portage Island in mid-Aug -- one shared a single bull thistlehead with three bumblebees (JWW).

Lots of giant ichneumon wasps were laying eggs in trunks of dead trees along the Herbert River south of Scotch Village Jun 20-22

(KC,TBH,JWW).

Other reports: two luna moths on Wolfville Ridge Jun 30 (JGT); a mud-dauber wasp "rescued" from a Wolfville home Jun 25 (BBT,JWW); a large winged ant in Wolfville Jun 26 (JWW); extensive damage to alders (brown and skeletonized leaves) in several large areas in late July -- culprits were adults and then larvae of alder flea beetles (BLF,RBS,SW,JWW); webs of fall webworm (moth caterpillars) common on roadside shrubs and trees in New Ross area Aug 8 (JWW); two very large horseflies in Wolfville in mid-Aug (CC,LHV); finally, a colony of yellowjacket wasps built their nest inside a "bat-box" on North Mountain (EBM,JWW).

Fish

A fisherman at Scots Bay twice hooked, but did not land, an unidentified two-metre shark Jun 9 (OH). A two-metre ocean sunfish was found dead at Scots Bay Aug 15 (ABD) -- recall last year's ocean sunfish at Hortonville (SW,JSB).

Herptiles

On Jun 6 at Sherbrooke Lake, a very shallow, drying, pond held thousands of tadpoles (probably wood frogs); Doug Holland and I observed several feeding frenzies in which injured or weak tadpoles were being consumed by other tadpoles of the same kind!

On Aug 26 a yellow-spotted salamander was seen on Brier Island (TBH).

A dead leatherback turtle came ashore near Pug-

wash in mid-June (DW).

Mammals

In early Aug in Wolfville at night, a bat flew to the ground and stayed there (KLW). On Aug 18, two bats roosted in doorway of Chuckie's store in Wolfville (KLW).

A mother and three tiny baby skunks emerged from an Avonport garage (their "den") for an early-morning walk on Jun 14 (EU).

On Wolfville Ridge BLF was picking blackberries on Aug 20; five raccoons walked by him and began feeding at close range.

On Jun 24 north of New Minas a red fox was trying to feed on a road-killed raccoon carcass; the fox's tail had very little hair (JWW). Another red fox was watching roosting black-bellied and golden plovers at Grand Pre Aug 16 (BLF).

The only coyote reported was north of New Ross in mid-morning Jul 13 (JGT). A smallish female black bear with two large cubs was seen near the Tobetic Wildlife Management Area Jun 5 (HS,KLW).

On Jun 7 at Kingsport, Gary Boates saw a large (probably gray) seal that reared up in the water to see him. On a reef 200 metres offshore near Chester, on Jun 16, an adult harbour seal was with a whitecoat pup (AFR). Several harbour seals were



seen "porpoising" while apparently foraging at Brier Island in late Aug (TBH).

Sherman Boates' annual Dyke Walk was well-timed to see four porpoises or dolphins at Wellington Dyke. Later that evening, (perhaps the same) four white-sided dolphins were stranded on the mud at low tide at Porter's Point (MG,HS); on the next rising tide in very early morning, Hank Sweeney freed the four dolphins with some difficulty; sadly, a single white-sided dolphin was found dead at Porter's Point the next day (GD).

Surprisingly there were two reports of belugas or whitewhales: one was at Ballantyne's Cove from early Jun to Jun 22 (HCH); and Carl Hay-

saw a partial albino white-tailed deer near Kingston Jun 23; it was all white except for a bit of brown on its ears and top of its head.

Birds

Common loons somehow managed to nest successfully and raise two young on Sunken Lake despite lots of boating activity (BLF,AWi). A pied-billed grebe was at New Minas Aug 21 (JGT).

Mark Elderkin reported a Wilson's storm-petrel at Black River Lake Aug 21. Another surprise was hearing the nocturnal calls of Leach's storm-petrels at burrows on Brier Island near the end of Gull Rock Road, Aug 1-3 (OM,MZ).

An immature gannet was very much



Minke Whale

cock's whale-watch saw one off Long Island, adjacent to Brier Island, on Jun 30.

Terry Power reports a probable minke whale well up the Annapolis River at Upper Granville on Jul 29. The eight- to ten-metre whale was there from 5:00 to 9:00 p.m. It was possibly feeding on some sort of schooling fish close to one bank of the river (AC,TP).

Finally, Bernard and Sandra Forsythe

out of place in someone's garden near Victoria Beach (?) Aug 7 (HE). A double-crested cormorant was soaring high at Kentville Jun 9 (RBS).

A bittern was foraging in a grassy sod field at Grand Pre Aug 15 (JGT). A great blue heron was soaring at White Rock Jun 9 (RBS). A noisy commotion in mid-June over the Thextons' yard in Wolfville was a great blue heron closely pursued by a bald eagle (plus several noisy crows).

Two great egrets were reported near Lunenburg Jun 23 (HT), and at Crescent Beach, Lun. Co., Jul 13 (JGT). An immature little blue heron was near Wallace Jul 28 (JGT, NSBS).

Wood ducks were seen at Drain Lake Jun 7 (2-JWW) and at Canard Pond Aug 9 (1-JGT). A week-old brood of blue-winged teal was seen near Avondale Jun 26; the presence of an adult male there is very strange -- coincidental? (MP,JGT).

The DUCK-OF-THE-YEAR has to be the male GARGANEY (an Old World teal) well described and sketched by Terry Power -- it was in Allain's Creek marsh at Annapolis May 31, Jun 1 and Jun 17.

A male lesser scaup was at the Port Williams sewage ponds Aug 28 (GEF). A hundred male common eiders flew west past Kentville Jul 22 (RBS) and 30 moulting males were in the river mouth at Wolfville Jul 30 (JWW).

A huge brood of 20 common merganser ducklings was near Martock Jul 7 (JGT,NSBS). Bernard Forsythe reports three broods of hooded mergansers for Kings County: seven ducklings at "Mud Lake" bog May 31; 12 newly hatched on Bishop Pond near Sunken Lake Jun 11; and three young on Sheffield Lake Aug 3.

Two ruddy ducks were seen near Wallace Jul 28 (JGT,NSBS).

There were three sightings of single turkey vultures: at West Brooklyn Jul 2 (WGA), at Black River Jul 11 (BLF) and at Port Williams (GEF).

The bald eagles at Greenwich and

Black River Lake very probably fledged two young per nest (BLF,GEF,PMA,PAS,JWW); the one at Wallbrook probably fledged one (WGA). Two nests in Hants Co. held two young each Jul 7 (RBS).

On Brier Island on Labour Day weekend, Richard Stern saw a northern harrier with brilliant orange painted (?) on one shoulder.

On Aug 11 at Grand Pre, an immature kestrel was keeping company with an immature merlin (JGT). Other merlins were seen at Grand Pre hunting shorebirds Jul 30 and Aug 7 (JGT) and chasing each other Aug 25 (JWW).

One or two peregrine falcons were seen at Grand Pre Aug 25 and 26; a juvenile with a white leg-band seen on Aug 26 had been released at Blomidon the previous week (RBS,BBT,GDi).

Possibly a bright note for our gray partridge was the finding of a nest with 21 eggs (!) on a lawn in the Canard Valley Jun 16 (BS).

Two spruce grouse were seen Aug 9 along the West Dalhousie Road (RBS). A wild (or escaped?) turkey was seen at Falmouth Jun 21 and 23 (CD, JMc); this big dark bird jumped up on a bird feeder and broke the pole!

I have two reports of crowing northern bob-whites: Jun 20 at Grafton (JWW) and Aug 19-20 at Falmouth (JMc).

Two Virginia rails responded to taped calls at Wallace Jul 28 (JGT,NSBS) and two soras were near Burlington Jul 7 (RBS,JGT,NSBS).

The northern lapwing at Point de Bute, N.B., was present from early May to at least Aug 22, when MG saw it. Up to 1,000 black-bellied plovers were at Grand Pre in mid-Aug (RBS,JGT) and 2,000+ Aug 28 (RBS).

The flat top of the Wolfville School again was used by nesting killdeers; three very young chicks were rescued from the ground there on Jun 16 (EW).

Small numbers of lesser yellowlegs were reported from Jul 4 to Aug 21 at Canard, Sheffield Mills and Grand Pre (JGT,JWW). Solitary sandpipers were seen Jul 24 and Aug 18-22 (JGT,JWW); then on Aug 23 Sherman Bleakney found four at west Gaspereau at a manure-pile mud hole (yuch!).

A downy chick and eight adult willets were at Martinique Beach Jun 29 (GEF). At least 35 willets were at Wolfville Harbour Jul 3 and 55 at Crescent Beach Jul 13 (JGT).

A whimbrel was in Shelburne Co. Jul 17 (RRN,MZ) and up to six were in Grand Pre in mid-Aug (JC,RBS,JGT,JWW). Up to eight Hudsonian godwits were seen at Grand Pre Aug 7 to 23 (JC,RBS,JGT,JWW). The same observers reported up to 15 ruddy

turnstones at Grand Pre Jul 26 to Aug 14; I saw 45 on Aug 14 on Bon Portage Island.

Up to three red knots were seen Jul 26 to Aug 17 (JC,JGT). A hundred sanderlings were at Grand Pre Jul 27 (RBS).

A rufous-necked stint (Eurasian) was at Three Fathom Harbour Jul 27 (PM,BSa). Semipalmated sandpipers were reported from Jul 3 through Aug, with peak numbers on Aug 2 (126,400 counted by KMG) and Aug 20 (KMG,CWS).

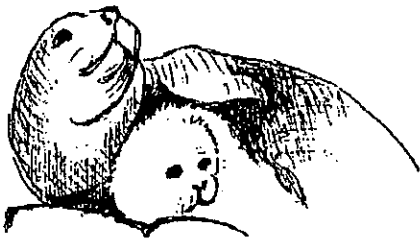
Blake Maybank estimated 1,000 white-rumped sandpipers at Evangeline Beach Aug 28. Five Baird's sandpipers were on Bon Portage Island Aug 12 (PS,PCS) and singles at Grand Pre and Cherry Hill on Labour Day weekend (GEF).

Two CURLEW SANDPIPERS were seen. First was a beautifully coloured adult at Grand Desert Jul 21 (RBA). Then, among the thousands of "peeps" at Evangeline Beach, Judy Tufts spotted a moulting adult and showed it to lots of birders from Jul 26 to Aug 2.

An immature stilt sandpiper was spotted by Jeff Crolla at a pasture mud-hole Aug 15 and then seen by many to Aug 18. A buff-breasted sandpiper was in a Grand Pre dyke-land field Aug 11 (JC,JGT).

Does anyone know anything about a RUFF having been seen at Evangeline Beach in late Aug (fide HCH)?

Short-billed dowitchers were in Wolfville as early as Jul 3, 150 were there Jul 18, and 335 were at Grand Pre Aug 14 (JGT,JC). At least 15 common snipe and probably many



more were in marshy fields along the N.B./N.S. border Aug 22 (CKC, MG, JWW). Two woodcock flew at dusk at Gaspereau Lake Aug 1 (BLF, JWW).

On Aug 11 off Brier Island there were 250+ red-necked phalaropes and 500+ red phalaropes (RBS); also present was an unidentified skua (RBS).

Two juvenile Bonaparte's gulls and a Caspian tern were at a Ducks Unlimited impoundment along the N.B./N.S. border Aug 22 (MG, JWW). Hurricane Bob apparently delivered several southern terns to Nova Scotia: two royal terns and a Sandwich tern on Brier Island Aug 24 (IAM, ELM); and a gull-billed tern at Evangeline Beach Aug 24-27 (JC, BBT, JWW).

An immature yellow-billed cuckoo was killed by hitting a window on Brier Island Aug 9 (RBS).

Of the 13 nest boxes occupied by barred owls in the Wolfville area, 11 produced 23 banded young (from 28 eggs for all nests -- super success); one female is at least eight years old -- she refuses to leave the box so that her band can be read (BLF). Also BLF saw a barred owl sitting on the centre-line of the New Ross Road at 4:00 a.m. Jun 9.

An early nighthawk was at Brier Island May 19 (RBS). I was excited by a calling nighthawk over the Acadia campus Jun 22 but, otherwise, Wolfville passed another summer without resident nighthawks. Probable migrants numbered seven at Falmouth Jul 29 (JGT et al), two near Bridgewater Aug 11, and seven

near New Ross Aug 16 (JWW).

On Jul 5 at Greenfield the Tufts saw at least 12 yellow-bellied sapsuckers, including fledglings being fed.

A spectacular fork-tailed flycatcher from the tropics spent a week on Bon Portage Island in June and attracted birders from afar (PCS).

Olive-sided flycatchers were along the Butler Road Jul 3 (RBS) and in Hell's Gate woods Aug 23 (BLF). A very probable willow flycatcher was repeatedly giving "fitz-bew" calls in a Margaretsville swamp on my breeding bird survey Jun 20.

At White Rock May 31, an agitated eastern phoebe had a nest under the bridge (JGT). Also at White Rock, great crested flycatchers used a nest box and fledged four young by mid-Jul (BLF, JGT).

Of 40 newly arrived bank swallows at Port Williams May 23, several were foraging on a gravel road -- for food (JWW)? Ten nests of cliff swallows were inside large tin cans nailed to a barn at East Dalhousie (EC, BLF, JWW).

A nearly bald and very ugly blue jay (moulting) was at a Wolfville feeder Jul 25 (BBT, JWW).

The male eastern bluebird at Methal's Reservoir remained unmated to the end of June (BLF). But at Falmouth a pair of bluebirds took over a nest box occupied by tree swallows on Jun 22 and successfully raised their own young there; they were still feeding in the box Jul 29 (FG, RBS, JGT, JWW).

Bernard Forsythe reports a mockingbird nest holding three young

and an egg Jun 18 in a New Minas residential yard.

Judy Tufts found two water pipits at Grand Pre very early, Aug 11. Cedar waxwings were feeding fledged young as early as Jun 26 near Avondale (JGT,MP).

Very probably the same warbling vireo as in 1990 was singing in Wolfville from May 29 until Jun 21; then it was heard again only on Jul 15 (BLF et al).

Richard Stern noted warbler migrations in his Kentville yard Aug 14 (black-throated green, black-burnian, bay-breasted) and Aug 21 (Nashville, black-throated blue, Canada). Apparently a worm-eating warbler was seen Aug 22 on Bon Portage Island (Clarence Stevens' column).

A male scarlet tanager sang in Camelot Woods at Kentville Jun 3 to 17 (RBS).

A song sparrow surprised some of us by gathering nest material Jul 27 at Grand Pre (BLF,JGT,JWW). Once again Lincoln's sparrows nested (at least two pairs) in Methal's Reservoir floating bog -- adults seen carrying food on Jul 7 (BLF).

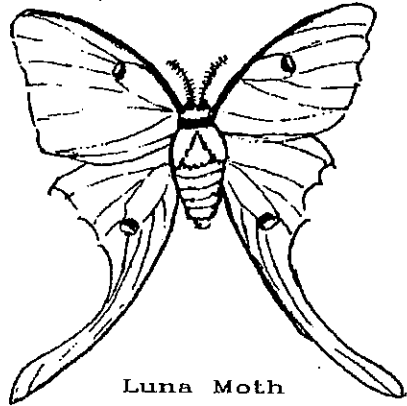
Several family groups of bobolinks were seen at Grand Pre Jul 2 (RBS). Many fledged grackles were in Kentville Jun 1 (RBS). On Jun 3 in Wolfville I listened to the loudest and most musical northern oriole I've ever heard.

At Falmouth Jul 20-25, six pine grosbeaks visited a feeder (JMc). A single male house finch at feeders in

Port Williams was seen through the summer until at least Jul 29 (MT).

Ten red crossbills were in Kentville Jun 1 (RBS). At Sunken Lake Aug 20, BLF saw a family of red crossbills with streaked juveniles; that was his only sighting of red crossbills in Aug but white-winged crossbills were "everywhere this summer". In Sep BLF saw lots of both species in several locations.

Pine siskins were feeding young at an Avonport feeder Jun 11 and the next day evening grosbeaks were doing the same (EU).



Luna Moth

Contributors

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GB Gary Boates
RB Rick Ballard
JSB Sherman Bleakney
AC Andy Curr
CC Carol Carpenter
EC Errol Crossland
JC Jeff Crolla
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CD Claude Davison
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JGi John Gilhen
DH Doug Holland
OH Oscar Huntley
HCH Halifax Chronicle Herald
TBH Tom Herman
EM Erich Muntz
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Rocks & Fossils	Geol. Dept., Acadia Univ.	542-2201	
Fish	N.S. Dept. of Natural Resources	679-6091	
Flora - General	Ruth Newell	542-2201	542-2095
Flora - Trees	Merritt Gibson	542-2201	582-7569
Flora - Fungi	Darryl Grund	542-2201	542-9214
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	Bernard Forsythe	678-4742	542-2427
	Richard Stern		678-1975
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	Sherman Bleakney	542-2201	542-3604
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Each member receives four issues yearly of this Newsletter. The Blomidon Naturalists Society is a registered charity. Receipts for income tax purposes will be issued for all donations. The membership fee itself is not tax-deductible. Members may also subscribe to the newsletter of the Federation of Nova Scotia Naturalists; the subscription fee is not tax-deductible.

Please enclose a cheque or money order payable to "Blomidon Naturalists Society" and forward to:

Harold Forsyth
R.R. 2
Wolfville, N.S. B0P 1X0

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