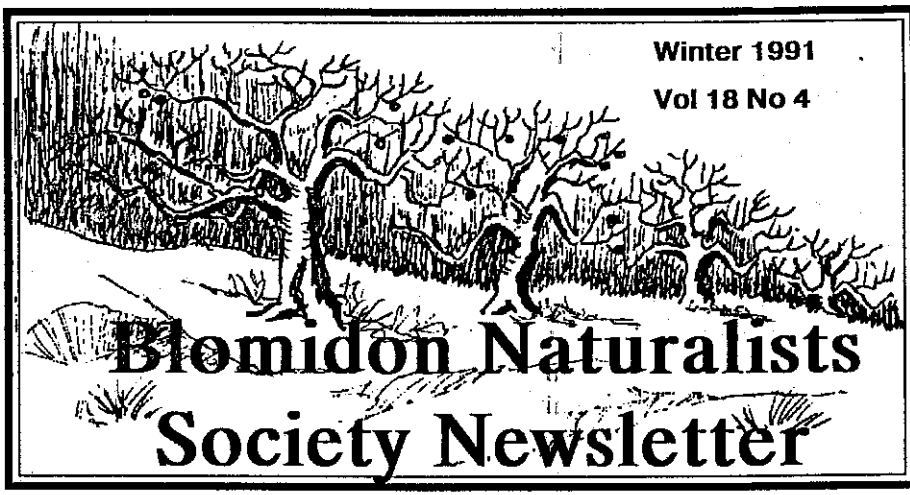


Winter 1991
Vol 18 No 4

Blomidon Naturalists Society Newsletter

BNS 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.*

January 20 -- The Esthetic Muds of Minas
Dr. Sherman Bleakney, 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.

February 17 -- Natural-History-is-for-Everyone Night
Patterson Hall (Biology Building, Acadia University), Room 308
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.

March 16 -- Conservation of Shorebirds and Terns
Kim Galliland and Judah Bunin, students at Acadia University, will talk about their research work on shorebirds and terns. Expect an interesting double-bill.

April 27 (Note date) -- Wildlife Stewardship in Nova Scotia
Peter MacDonald, Nova Scotia Department of Natural Resources, will outline

the wildlife stewardship program now being developed by the Department. Stewardship is an exciting opportunity for the public, industry, and government to take an active role in wildlife conservation.

May 18 (Note date) -- Birding the Australasian Region
Peter Paysant, who has been in many parts of the world during his twelve years of birding, will present the bird sights and sounds of Australasia, including Australia and Papua New Guinea.

Winter 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.

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

Saturday, January 25 -- 10:00 a.m.

Eagles and Wintering Raptors of Kings County. Sponsored by the Nova Scotia Museum and led by Peter McLeod (454-2006). Dress warmly and bring a lunch to be eaten at the Acadia Biology Museum.

Sunday, January 26 -- 10:00 a.m.

Eagles and Wintering Raptors of Kings County. A joint BNS/HFNS led by Jim Wolford (542-7650). An all day trip. Dress warmly and bring a lunch to eat at the Acadia Biology Museum.

Saturday, March 7 -- 11:00 at the Annapolis Legion

Maple Sugaring at Clement Comeau's Sugar Bush. A tour of sugar bush country and the maple sugar operation. Contact number is 532-5369. Sponsored by the Annapolis Field Naturalists Society.

Wednesday, April 8 -- 7:30 p.m.

Owls! Owls! Owls! A repeat of Bernard Forsythe's (542-2427) very popular owl prowl. Wear waterproof footwear, dress warmly, and bring a flashlight. Trip will not be held if it is windy.

Sunday, April 26 -- 10:00 a.m.

Spring Birds, a Pond Hop with Jim Wolford (542-7650). An all day trip to various ponds in Kings County to observe migrating aquatic birds. Bring your lunch, waterproof footwear, and binoculars. A joint trip with the NSBS.

* This is not a typographical error; there **are** two field trips with the same title on two successive days.

Table of Contents

The *BNS Newsletter* is published quarterly.

Editors: George Alliston
Margaret Alliston
Art: Mary Pratt
Advertising: Carol Bradley
Production: Larry Bogan
Distribution: Lana Churchill
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
P.O. Box 127
Wolfville, Nova Scotia
B0P 1X0

The expiry date of your membership is shown on your mailing label.

Acknowledgements

Many thanks to:

our speakers:

Martin Willison for showing us his lovely slides of New Zealand and outlining New Zealand's efforts to preserve some of their unique habitats;

Blake Maybank for his informative and entertaining talk on his trip to India (the *Newsletter* editors were particularly interested in his comments about "George and Margaret");

Mark Elderkin and John Horton for their instructional and inspirational talks about photographing the natural world;

Stephen Fleming for outlining the plight of the piping plover;

our field trip leaders: Larry Bogan, Cyril Coldwell, George E. Forsyth, Bernard Forsythe, Ken Redden, Sherman Williams, and Jim Wolford;

all of the contributors to the *Newsletter*;

and all of the *Newsletter* production

The *BNS Newsletter* is printed on 100 percent recycled paper.

BNS News and Business

Notes from the BNS Directors

BY TOM HERMAN
Kentville, N.S.

The BNS Executive met on December 3, 1991. Regular items of business, including reports from the Treasurer, Newsletter Editor, Program Committee and Nature Centre Committee were reviewed. A number of additional items were also discussed.

The Natural History of Kings County continues to ripen. It is now in the final editing stage. Would you believe next year's Christmas market?

We had planned to meet with Brian Kinsman from the Parks Division of the Nova Scotia Department of Natural Resources, to discuss ways in which our Society can contribute to interpretive programs at Blomidon and other provincial parks. They are anxious to expand cooperative ventures between our two organizations. Unfortunately a snowstorm on the day of our Executive meeting prevented Brian from attending. Hopefully the weather will improve for our next meeting.

The Executive is still discussing activities for the BNS during the 1993 Wolfville Centennial Celebration. As I pointed out in my

"Notes" in the last *Newsletter*, it would be most appropriate to sponsor a project that fits our regional profile, rather than something that is only identified with Wolfville. One possibility, proposed by the Robie Tufts Nature Centre Committee, is the development of a dykeland trail beginning near the Nature Centre and incorporating a small freshwater impoundment.

The Program Committee (George Forsyth, Jim Wolford and Sherman Boates) has agreed to serve another year. They would welcome any ideas for topics or speakers from the membership.

We discussed the possibility of discontinuing June meetings of the Society. In some years, attendance in June has been low, particularly when weather was nice. However, average attendance over the past ten years exceeded fifty. We decided to continue to hold our regular meetings during June, and will do our best to insure that it rains!

The Executive considered a proposal from the Digby Fish and Game Association to introduce wild turkeys to Digby County. This proposal had previously been reviewed in detail by the Conservation Committee and, after considerable discussion, we decided that the Society should not support the proposal.

The Wildlife Advisory Council, which has been charged with drafting a wildlife strategy for Nova Scotia by the Minister of Natural Resources, will be holding a series of workshops throughout the province on wildlife issues, beginning late in January. The BNS has been invited to participate in these workshops, and will be represented by Merritt Gibson. Anyone wishing further information or to participate should contact Merritt (582-7569).

Winners of the Robie Tufts Young Naturalists Award, both past and present, will soon be receiving formal certificates in addition to their book prizes. The Executive felt that it would be appropriate to recognize these individuals in both a symbolic and practical form.

Finally, the cock pheasant mounted by Robie Tufts, and so kindly donated to the Society by Ralph Winter, will be displayed in a glass case with an inscribed plaque and placed in the new library at the Wolfville Railway Station.

Conservation Committee Report

BY PETER J. AUSTIN-SMITH
Chairman

The Conservation Committee met on November 13, 1991, to discuss several issues of interest to the BNS including the proposed introduction of wild turkeys into Nova Scotia and the fate of the Kentville Bird Sanctuary. The wild turkey introduction has been proposed for some time by the East Digby Fish and Game Society. Before the Nova Scotia Department of Natural Resources would entertain such a proposal, however, it requested the Digby Society to canvas other con-

cerned organizations for their responses. The Conservation Committee had briefly discussed this issue at a previous meeting and a report, prepared in 1985 by Acadia students, on such an introduction had been made available to the Committee. During our discussion there were several important points raised including the following: game farm turkeys had already been released unofficially in some areas of Nova Scotia although released game farm stock is not usually successful in a establishing a wild population (wild captured and released birds are much more successful); wild-caught turkeys have been released in other areas of the north-east where they once existed; there is no evidence that wild turkeys ever inhabited this area; there is probably good turkey habitat at the base of the North Mountain but this is mostly private land; hunting takes place in both fall and spring; the hunt is very ritualized (e.g. hunters dress in camouflage, use turkey calls, blinds, etc.); with potential climate changes we may have turkeys here in fifty years time anyway.

All Committee members present expressed mixed feelings about such an undertaking, with some concerns about hunting creating sociological problems (potential conflicts with landowners, potentially restricting naturalist activities), and also the potential effects of competition on existing pheasant populations as well as the ethics of introducing exotic species. Finally, it was agreed that specific information was required on the introduction procedure, how the project will be assessed, and whether there will be provisions to terminate the project if problems develop. Overall, the Committee could not, **on biological grounds**, either reject the proposal or fully endorse it. Therefore, it was proposed that the Committee recommend to the BNS executive that the BNS guardedly support the proposal to introduce wild turkeys providing that the following conditions would be fully met: (1) techniques of introduction and source of wild stock be clarified; (2) a monitoring program be put in place to observe the impact of the introduction on the ecosystem and on humans; and (3) a strategy be developed for the termination of the project and removal of the turkeys should the monitoring program demonstrate that ecological or sociological problems exist.

The current status of the Kentville Bird Sanctuary was then reviewed and, after a short discussion, it was agreed that the BNS should investigate the possibility of becoming involved in a scheme to protect the area through cooperation with the Town of Kentville, the Municipality of Kings, private landholders and other stake holders. It was noted that the project could be expanded beyond this area to incorporate a corridor along the Cornwallis River, and include land from Coldbrook to Grand Pre. A "master plan" could be developed to demonstrate how the area could be managed and maintained. The corridor would include the floodplains, steep slopes and the D.A.R. rail bed. Peter MacDonald indicated that the Eas-

tern Habitat Joint Venture* could become involved in technical aspects of such a project. Contact with other interested parties will be initiated.

Other business involved the Kings County Land Use Plan which apparently is being revised but no correspondence on this matter has been received from the County. A request from Merritt Gibson to consider areas to be set aside for protection in the County led to the suggestion that BNS members be given the opportunity to nominate their favourite areas as candidate sites for protection. Forms for this purpose would be made available at monthly meetings and distributed with the *Newsletter* (see enclosed).

The Town of Wolfville's dykeland development proposal was then brought up and concern was expressed that such development, if not restricted, would encroach on existing open space qualities of the dykeland. Of particular concern was possible future development of the dykelands immediately north of the Robie Tufts Nature Centre, where the BNS had previously considered establishing a viewing area and nature walk. The Committee will contact the Wolfville Business Development Corporation to express its concerns and to request clarification of dykeland development plans.

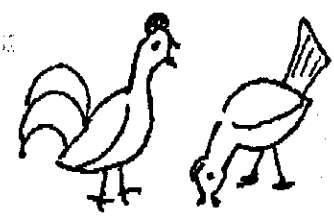
* For further information, see "Wetland Stewardship in Nova Scotia" in this issue of the *Newsletter.*

Treasurer's Report September 1, 1990 - August 31, 1991

BY HAROLD FORSYTH
Greenwich, N.S.

Thanks to donations and the sale of advertisements in the **Newsletter** the Society was able to show a profit for the past year; hence the membership fees will not be increased. Our Robie Tufts Nature Centre account also showed a profit and these funds will be used for the production of more interpretive panels and for new projects associated with the Centre.

Special thanks are extended to the following who made donations to the Society: Don and Joan Keddie, Maggie Kenny, Douglas Snow, Karen and Ted Casselman, Alexina Proctor, Raca Marinkovic, Helen Shaw, Lillian Tufts, Mrs. Wietske Gradstein, Jack and Alice Hyslop, Grand Pre Park Recycling Project, Sheila Connell, Kate Van Nostrand, J.A.C. and Mavis Kaulback, and Curtis Chipman.



Blomidon Naturalists Society
P.O. Box 127
Wolfville, Nova Scotia B0P 1X0

AUDITED FINANCIAL STATEMENTS - 1990-1991
GENERAL ACCOUNT
STATEMENT OF INCOME AND EXPENDITURE
September 1, 1990 - August 31, 1991

INCOME	
Membership Dues	$1,864.00
Bank Interest	100.89
Donations	551.00
Federation of N.S. Naturalists	10.00
Advertisements	680.00
Bus Fares - Field Trips	45.00
Transferred from Robie Tufts Nature Centre Account	39.04
Donation Box at Robie Tufts Nature Centre	7.20
Cheque #99 not cashed	15.00
	3,312,13
EXPENSES	
Awards and Meetings	61.51
Newsletter and Programmes	1,822.38
Administration	148.12
Memberships Canadian Nature Federation	65.00
Nova Scotia Trails Federation	10.00
Fed. of N.S. Naturalists	100.00
Donation to Guardian of the Amazon	206.00
Robie Tufts Nature Centre	39.04
Cheque #99 re-issued	15.00
Transfer to Robie Tufts Nature Centre donation	7.20
Bus Rental - Field Trip	107.00
EXCESS OF INCOME OVER EXPENSE	$730.88

STATEMENT OF FINANCIAL POSITION

ASSETS	
Cash	$1,990.06
LIABILITIES	
Outstanding cheque	$10.00
SOCIETY'S EQUITY	
Balance September 1, 1990	$1,249.18
Add: Excess of Income over Expense	730.88
	$1,990.06

ROBIE TUFTS NATURE CENTRE ACCOUNT
STATEMENT OF INCOME AND EXPENDITURE

September 17, 1990 to August 31, 1991

INCOME	
Donations	$410.32
Grants	4,331.00
Bank Interest	244.71
Canada Post Refund	94.36
	$5,080.39
EXPENSES	
Administration	$30.02
Exhibit Panels	98.85
Signs	349.58
Summer Student	3,229.24
	$3,707.69
EXCESS OF INCOME OVER EXPENSE	
	$1,372.70

STATEMENT OF FINANCIAL POSITION

ASSETS	
Cash	$4,236.80
LIABILITIES	
Outstanding Cheques	$323.38
SOCIETY'S EQUITY	
Balance September 17, 1990	$2,567.72
Add:	
Excess of Income over Expense	1,372.70
	$4,263.80

My examination of the records of the Blomidon Naturalists Society included such tests as I considered necessary in the circumstances. The statements represent the financial position of the Society at the year end 1991.

(signed)

B.H. Mason

My examination of the records of the Blomidon Naturalists Society

Baillie Fund Grants Available for Bird Projects in 1992

Are you planning an individual or club project on birds that needs some extra funding? The **James L. Baillie Memorial Fund for Bird Research and Preservation** may be able to help. You are invited to apply for a grant.

Two types of grants are offered:

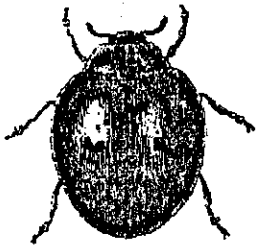
(1) Project grants for support of research, conservation or educational projects on Canadian birds; and,

(2) Travel grants for participants in high priority fieldwork for breeding bird atlas projects. Travel grants are open to both residents and non-residents.

All projects must be conducted in Canada or on the wintering grounds or migration routes of Canadian birds. Applications may be submitted by individuals or organizations. The Fund aims to support projects conducted by amateurs, projects using data collected by volunteers, and projects generally not eligible for other funding. As a result, graduate research is not the priority of the Baillie Fund. Grants are usually in the range of $200 - $2,000 and average about $1,000. Grants are made annually, but multi-year support will be considered.

Applications must be submitted on forms available from the Secretary of the Fund and should be received by **31 January 1992.** Application forms and instructions may be obtained from Mark Stabb, Secretary, James L. Baillie Memorial Fund, Long Point Bird Observatory, P.O. Box 160, Port Rowan, Ontario N0E 1M0 (Tel: 519-586-3531).

The James L. Baillie Memorial Fund is funded primarily by Long Point Bird Observatory and co-operating naturalists' clubs from proceeds from Canada's annual Baillie Birdathon. By taking part in the Birdathon, individuals and clubs support the Fund and raise money for their own club projects. Information on participation in the Birdathon may be obtained from the Birdathon Co-ordinator, at the Long Point Bird Observatory, P.O. Box 160, Port Rowan, Ontario N0E 1M0 (Tel: 519-586-3531).



President's Report

BY TOM HERMAN
Kentville, N.S.

Last year our Past-President, Peter Austin-Smith, went to great lengths to establish a new tradition of not presenting the annual report of the President at a fall meeting of the Society. I have chosen to continue that new tradition, but not in such a dramatic fashion!

Not only is our Past-President a hard act to follow, but in many ways so is the 1989-90 Blomidon Naturalists Society year. That year saw the opening of the Robie Tufts Nature Centre and the inauguration of the Federation of Nova Scotia Naturalists. Those two events continued to touch us over the past year, and I predict will continue to do so for years to come.

On May 8, 1991 the Blomidon Naturalists Society received a Nova Scotia Environmental Award (Citizens Group category) in recognition of the Chimney Swift Project. The award is on display on the BNS panel at the Robie Tufts Nature Centre. This project was truly a group achievement. Not only was it a conservation success story, but it also served to illustrate that environmental problems can be solved in a cooperative rather than confrontational spirit. This project and the events that have followed also signified a fundamental and irreversible change in the vision and self image of the BNS.

The Federation of Nova Scotia Naturalists, after a somewhat erratic start, is beginning to mature. With the continued support of our organization and similar groups across the province, the Federation will eventually provide the province-wide network and voice that Nova Scotian naturalists need to protect our natural heritage and instill an appreciation for it in the general public.

A number of events, from local to global, have served to bring home to our members the urgency of this task. From concerns about global declines in biodiversity, to endangered spaces across Canada, to selection of sanitary landfill sites in Kings County, it is clear that this appreciation and protection is an active process.

It is no mere coincidence that the Blomidon Naturalists Society decided to establish a Conservation Committee at this stage. Charged with disseminating information about natural history and environmental concerns, seeking the advice and expertise of our members, and evaluating conservation-related policies that are brought to its attention, the Committee has its work cut out for it.

The Committee has recently become involved in a project about which I am particularly excited. This involves an assessment of and land-use plan for the open space corridor extending from the Kentville Bird Sanctuary to Grand Pre. This area, which includes the lower Cornwallis River Valley and the old D.A.R rail bed, contains many features of great natural history value that deserve protection. On a recent visit to the

Robie Tufts Nature Centre, the Director of the Environmental Partners Fund (Environment Canada), which generously supported the Nature Centre venture, expressed a great deal of interest in this corridor project.

It is particularly timely that significant natural areas be identified as Kings County draws up its land-use plan. To that end the Conservation Committee has also embarked on the Kings County Special Places Survey, a county-wide program designed to identify and describe specific areas that our membership feels deserve recognition and protection. The success of this venture is clearly in the hands of our membership. I urge you to participate. *

From the perspective of regular Society events, the year has also been busy and successful. The Program Committee (Sherman Boates, George Forsyth and Jim Wolford) is to be commended for its interesting and diverse array of monthly lectures and regular field trips. These are the events that hold our Society together, and to which we all look forward. They also make us the envy of many other organizations who wish that they could match the enthusiasm and level of participation of our members. As in 1990, the Program Committee also co-ordinated excursions in Blomidon Provincial Park, as part of the Department of Natural Resources "Parks are for People" program. It hopes to expand these activities in 1992. I convey my appreciation to all the speakers and field trip leaders, who so kindly shared their time and expertise with us.

While field trips and monthly programs allow us to communicate visually and verbally, the *Newsletter* provides an essential link for our Society. The quality continues to be superb, and the editors, George and Margaret Alliston, deserve our special thanks for their extensive efforts and extreme patience. The assistance of Mary Pratt, Carol Bradley, Larry Bogan, Brenda Thexton and Lana Churchill is also greatly appreciated. I would also extend my thanks to all regular (where would we be without Wolford's "Trivial Tidbits"?) and occasional contributors to the *Newsletter*.

Our member in charge of special publications, Merritt Gibson, continued to amaze us through the year with his breadth and productivity. Not only was he able to meet the weekly deadlines for the "BNS Nature Notes" column in *The Advertiser*, but he and his co-editors have also managed to bring nearly to completion the long-awaited epic work *The Natural History of Kings County*.

The members of the Board of Directors were enthusiastic and cooperative, and understanding of the President's idiosynchrosies. It has truly been a pleasure for me to work with this group. Special mention goes to Bill Thexton, who worked his usual magic as a stabilizing influence, and Harold Forsyth, who provided financial wizardry when necessary.

I would like to thank all members of BNS committees for their contributions of time and ideas. The Christmas Bird Count, Robie Tufts Young Naturalists Award, and activi-

ties at the Robie Tufts Nature Centre are the result of these efforts. Finally, I would like to thank all BNS members for their participation and support throughout the year. I have enjoyed serving as your President, and look forward to continuing in that capacity for another year.

* For members who live in or adjacent to Kings County, a form has been included with this *Newsletter* to assist you in submitting your nomination.

Blomidon Naturalists Society Executive -- 1991-1992

At our annual meeting in October, the following executive was elected for 1991-1992.

President
Tom Herman
40 Elm Avenue
Kentville, N.S. B4N 1Y9
Home: 678-0383

Vice President
George E. Forsyth
Box 268
Port Williams, N.S. B0P 1T0
Home: 542-7116

Past-President
Peter Austin-Smith
Box 294
Wolfville, N.S. B0P 1X0
Home: 542-2109

Treasurer
Harold Forsyth
R.R. 2
Wolfville, N.S. B0P 1X0
Home: 542-5983

Secretary
Bill Thexton
Box 991
Wolfville, N.S. B0P 1X0
Home: 542-3722

Directors
J. Sherman Boates
N.S. Department of
Natural Resources
P.O. Box 516
Kentville, N.S. B4N 3X3
Home: 542-2361

Peter MacDonald
Box 1328
Wolfville, N.S. B0P 1X0
Home: 542-5958

Mary Pratt
R.R. 1
Wolfville, N.S. B0P 1X0
Home: 542-4220

Jim Wolford
Department of Biology
Acadia University
Wolfville, N.S. B0P 1X0
Home: 542-7650

Barry Yoell
R.R. 1
Wolfville, N.S. B0P 1X0
Office: 542-3633

Newsletter Editors

George and Margaret Alliston
R.R. 3
Wolfville, N.S. B0P 1X0
Home: 542-3651

Pamphlets and Special Publications

Merritt Gibson
Box 35
Canning, N.S. B0P 1H0
Home: 582-7569

BNS Newsletter News

Our last *Newsletter* featured a radical change in layout: one that, we think, makes the *Newsletter* more attractive and easier to read. However, you may have noticed that some of the headline formats were a bit strange and a field trip report ended in mid-sentence (and mid-report). We had some problems using our new desktop publishing software the first time but, hopefully, have avoided the problems in this issue.

Larry Bogan, who does the layout of the *Newsletter*, and his wife, Alison, will be leaving for a sabbatical year in Victoria, B.C., in the late summer of 1992. We are looking for someone to fill in for Larry during his absence. You must have access to and experience with an IBM-compatible computer equipped with a mouse and an optical scanner. You also need access to a laser printer. The *Newsletter* text is first created in *WordStar* 5.5, then the page images are created using the desktop publishing software, *Publish It!*. The scanned illustrations are added during the page creation step. Finally, the camera-ready copy is printed on a laser printer.

We are sure there are hundreds of you out there with experience and access to the necessary equipment just waiting for this chance! Please call the *Newsletter* editor if you'd like to be the lucky person to replace Larry for a year. An apprenticeship with Larry can be arranged for the spring and summer issues of the *Newsletter*.

BNS Newsletter Submissions Deadline - March 1, 1992

Please send or give all contributions to the Newsletter to:

George Alliston
174 West Brooklyn Road
R.R 3
Wolfville, N.S. B0P 1X0
542-3651

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.

Bill and Brenda Thexton Honoured by the Blomidon Naturalists Society

BY TOM HERMAN
Kentville, N.S.

At the October 21, 1991 meeting of the Blomidon Naturalists Society, Honourary Life Memberships were awarded to Bill and Brenda Thexton. These awards are reserved for individuals who have contributed extraordinarily to the Society and/or to Nova Scotian natural history.

Throughout their long association with the Society, Bill and Brenda have contributed tremendously to its operation and well being. Bill has served dutifully as Secretary on the Executive for countless years. His quiet but efficient organizational skills have not gone unnoticed. As behind-the-scenes social organizer at BNS functions, Brenda is unsurpassed. In addition, Brenda and Bill's archival activities have insured that the Society's early and present history will be preserved. For that we are, and future BNS generations will be, most appreciative.

The Thextons deservedly join a select group of previous Honourary Membership awardees: Robie Tufts (1981), John Erskine (1981), Ken Harrison (1983), Rachel Erskine (1983), Albert Roland (1985), Jean Timpa (1988), Cyril Coldwell (1988), C.R.K. Allen (1989), and Margaret and Curtis Chipman (1990).

NOTICES

Federation of Nova Scotia Naturalists Annual General Meeting

The 1992 annual meeting of the Federation of Nova Scotia Naturalists will be held in Annapolis Royal on May 22-24 and will be hosted by the Annapolis Field Naturalists Society. Plans for the program are nearly complete. Presentations will include: Rare Plants of Nova Scotia by Alex Wilson, The Annapolis River by Graham Daborn, Wetlands by Peter MacDonald, Game Farming by Tony Rogers, Coastal Plain Flora by Nick Hill, and Keji Park by Cliff Drysdale. Each day there will be early morning walks and, following the formal meeting (Sunday, May 24), an outing at Keji Park. The complete schedule and registration forms will be enclosed with the next *Newsletter* but mark your calendar and reserve the May 22-24 weekend now!

BNS Seeks to Identify "Special Areas" in Kings County

The BNS Conservation Committee is preparing a list of "special areas" within Kings County that are potential candidates for protection. Candidate sites should be of some natural (or historical) significance but need not be large or well known. **The Committee would like your help in preparing this list.** Please submit your nominations to:

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

Residents of Kings County and adjacent areas will find a form enclosed in this *Newsletter* to assist in preparing your nominations(s).

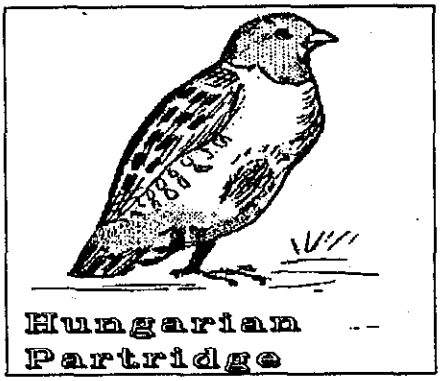
Hungarian Partridge Census Underway

BY BARRY SABEAN
Manager, Wildlife Resources
Department of Natural Resources

The Department of Natural Resources is once again seeking the assistance of the public in conducting a winter survey of the Hungarian or Gray Partridge.

Anyone spotting any of these birds is asked to call the Kentville Wildlife Division office at 679-6091 and let them know the date, number of birds and location.

Last winter's request for help was well received and enthusiastic observers helped Natural Resources locate 20 flocks totaling 150 individuals. Eight of the flocks were located in the Windsor area with the remainder in a triangular area bounded by



Canning, Port Williams and Waterville.

About the size of a rock dove (pigeon), Hungarian Partridge appear almost round when standing. They are brown and gray with a horseshoe-shaped dark brown patch on the breast. In flight, the tail is reddish. On winter the birds travel in flocks or coveys and spend all their time feeding or roosting on the ground.

Originally introduced to the province from Europe in the 1920's and 1930's, a strong population established itself in the Annapolis Valley as well as around the Truro and Amherst areas. The Amherst population has since disappeared and the Valley birds have been at low levels

in recent years.

Huns, as they are commonly called, prefer an open landscape and can do well in areas with extensive agricultural activity, particularly the growing of grains and hay. They survive and reproduce well on the "leftover" habitat normally associated with modern agricultural activities. The nests, located on the ground, are well concealed by vegetation and made entirely of grass. Clutches are large with 15-27 eggs being normal for Nova Scotia.

During the winter, Huns are usually found in flocks of up to 20 individuals. These family groups rely on grain and weed seeds at this time of year. They also seek out windswept knolls or bare areas around trees where they can find green grass. In soft snow they may tunnel to find food or to seek shelter from cold winds.

Severe winter weather - notably heavy snow and sleet storms - have been reported as being partially responsible for the overall provincial decline. Reasons for the continuing low population are unclear and Natural Resources biologists are anxious to monitor their progress.

People lucky enough to have a flock of Huns wintering in their neighbourhood can assist the birds by providing grain and grit at feeding stations during the winter season. Digging through the snow, particularly when the snow is crusted, to expose areas of green grass also helps.

In Memory

Members of the Blomidon Naturalists Society have been saddened by the recent deaths of two of our Honourary Life Members: Dr. Kenneth A. Harrison (HLM 1983) and Dr. Albert E. Roland (HLM 1985).

Dr. Kenneth Archibald Harrison

Dr. Kenneth Archibald Harrison, 90, died November 5, 1991, in Kentville. Born in Maugerville, Sunbury County, N.B., he was a son of the late Charles Ashley and Clarissa S. (Roach) Harrison. After his early education in Maugerville, he received his Academic Diploma in 1922 from the Nova Scotia Agricultural College; B.Sc. (Agriculture) in 1924 from the Ontario Agricultural College, Guelph; and M.Sc. (Plant Pathology) in 1925 from McGill University, Montreal. He began a doctoral program at the University of Toronto in 1929 but the Depression forced him to abandon his studies.

In 1926 he began his professional career as Assistant Plant Pathologist at the Kentville Experimental Farm. He worked until 1940 with the late Dr. J.F. Hockey studying various apple diseases and developing a method to control willow blight in the historic willows at Grand Pre Park.

His reserve military career began in 1927. He served as Captain in the

Kings Canadian Hussars from 1936-1938 and then transferred to 87/88 Field Battery. He went on active service in July 1940 and went overseas in September 1941 with the 88th Light Anti-aircraft Battery. He was promoted to Major in October 1942 and served with several Light Anti-aircraft Regiments in England before returning to Canada in April 1944 where he continued on active service as training officer and liaison officer until November 1945. In 1947, he became second in command of the West Nova Scotia Regiment and became its commanding officer in 1950. He served as Lieutenant Colonel until September 1954.

After wartime service, he returned to Kentville as Plant Pathologist and worked at developing methods to control diseases in vegetable and small fruit crops until his retirement in 1966. In 1969, when the Nova Scotia Department of Agriculture and Marketing expanded and took over the work Ken had done previously for Agriculture Canada, he became the Extension Plant Pathologist for one year.

In 1965, he was awarded an honourary D.Sc. by Acadia University for his work in mycology and plant pathology.

Ken had a lifelong interest in the study of mushrooms and published numerous technical papers on the mushroom flora of Nova Scotia. In addition, he encouraged interested amateurs and, from 1929 until 1987, regularly led field trips for students and the general public. His mushroom collections, about 13,000 specimens, reside at Acadia University, the University of Michigan (Ann Arbor), and the Biosystematics Research Centre (Agriculture Canada, Ottawa).

Upon his "retirement" in 1966, Ken became a research associate with the University of Michigan (Ann Arbor) and he and his wife spent several summers and falls collecting mushrooms in various parts of the United States. He continued as a research associate at the University of Michigan and spent his winters studying, writing and publishing at Ann Arbor until 1984. From 1972 until 1987, he worked as a researcher, teacher, and advisor at Acadia University from spring through fall and returned to Michigan for the winter months.

The Kenneth A. Harrison Laboratory of Mycology was dedicated in his honour by the Department of Biology, Acadia University, in 1979.

During his distinguished career, Ken was a member of many professional organizations including the Mycological Society of America (Charter Member) and was a elected a Fellow of the American Association for the Advancement of Science.

The Dr. Kenneth A. Harrison Memorial Mycological Fund has been established in his honour at Acadia University.

BNS members who knew Ken only through our Society, remember him in the context of autumn walks through the Kentville Ravine, finding, identifying, collecting and, sometimes, consuming mushrooms. His extensive and detailed knowledge of mycology, as well as the history and

natural history of this area, was evident as was the willingness and pleasure it gave him sharing this knowledge with others. Although his knowledge and appreciation of the Ravine was evident, few of us knew the depth of his attachment to this area.

As a university student working for the summer at the Kentville Experimental Farm and living in a cabin situated on what is now the picnic grounds, Ken's interest was aroused by the many mushrooms he saw on his walks through the Ravine. In his spare time he set about the task of identifying these mushrooms. Thus began what was to become perhaps the major passion in his many-faceted life.

Until his "retirement" in 1966, his interests in mycology, while being subordinated to his other careers, were nonetheless a prominent part of his life. Members of the Harrison family relate that family activities seemed to be centred around mycological forays. Instead of spending warm summer Sunday afternoons at the warm beaches on the Minas Basin or South Shore, the family would often find itself hiking along the cold Fundy shores where the probabilities of discovering interesting mushrooms were greater. It was only after his "retirement" that Ken was able to throw himself full time into the pursuit of his major passion.

Ken's love for mycology did not wane with advancing age. His daughter Jennie (Sheito) tells of how, in recent years, each September 4th her father would arrive at her home in Starr's Point and proceed to roll up the turf on large sections of her lawns in pursuit of a rare underground mushroom he had found there on that date in a previous year. Ken was himself an avid gardener but he had his priorities and the aesthetics of lawns placed a distant second to finding rare mushrooms! During the past couple of years, when advancing age had robbed him of his physical strength, his mind remained as alert as ever and he continued to enjoy reading, particularly the current mycological journals.

Although Ken's mycological studies took him across North America, his favourite "special place" was the Kentville Ravine. It was here that his interest in mycology was sparked. His home and/or workplace were near the Ravine during most of his adult life. He conducted mycological surveys in the Ravine for more than sixty years. Ken was at least partly responsible for the nature of the Ravine as we know it today. At a time when the management of government-owned quasi-recreational land meant the removal of all understory plants and dead and decaying trees, Ken persuaded management to adopt a more ecologically sound approach. When erosion threatened some banks of the Ravine, it was Ken who planted the cricket-bat willows for erosion control. These remain today as testimony to his concern. It would seem most appropriate that when we wander, in thought or in deed, through the Kentville Ravine that we remember Ken Harrison.

Dr. Albert Edward Roland

Dr. Albert Edward Roland, 80, died September 17, 1991, at home in Truro. Born in Aylesford, Kings County, he was a son of the late George and Mabel (Robinson) Roland.

He graduated from Acadia University in 1931 where he received his Bachelor of Arts degree. He studied at the University of Toronto majoring in plant pathology, receiving his Master of Arts degree in 1936. He attended the University of Wisconsin where he received his Ph.D. in 1944 and was appointed to the Wisconsin Chapter of Sigma Xi.

In 1934 he joined the Nova Scotia Department of Agriculture and remained there until his retirement. He also served as Provincial Botanist. He was a professor and headed the Department of Biology at the Nova Scotia Agricultural College, remaining there until 1972 when he retired and was named Professor Emeritus in Biology.

He published *Flora of Nova Scotia*, the first provincial flora in Canada, and a number of books and papers on the same subject. He was a member of the Nova Scotia Institute of Science, the Agricultural Institute of Canada, the Nova Scotia Institute of Agrologists and the Canadian Botanical Association. He was elected president of the Nova Scotia Institute of Agrologists for the term 1958-59 and was cited by Acadia University as one of the 30 outstanding graduates in the period 1910-1960. He was made a fellow of the Agricultural Institute of Canada in 1971. He received an honourary Doctorate of Science in 1972 from Acadia University, a centennial medal in 1967 and was granted a degree of Doctor of Laws from Dalhousie University in 1980.

After retiring, he continued his writing on environmental matters, travelled, taught a course at the Nova Scotia Agricultural College and gave lectures. He was preparing a new edition of *Flora of Nova Scotia* at the time of his death.

1991 Robie Tufts Young Naturalists Award

Each year since 1984 the Blomidon Naturalists Society seeks out and gives recognition to promising young naturalists. This year the Award Committee selected the 1st Port Williams Scout Troop for their investigation, establishment, monitoring and maintenance of tree swallow nesting boxes adjacent to the Port Williams sewage pond. The Scouts involved in this project were: Tim Ansems, James Churchill, Tim Cox, Peter Davis, Matt Gowland, Douglas Jackson, Arne Jensen, Robin Jensen, Albert Miner, and Leonard Rand.

A report on this project by the troop leaders and some of the participating Scouts is presented below.

The "official" presentation was

made at the Society's November meeting. George Forsyth introduced the Scouts and their leaders (Alex Crouse, Mark Crouse, Wayne Hines, and Brad Sweet) and made a "symbolic" presentation to troop members Tim Cox and Leonard Rand. The "symbolic" presentation consisted of the only nest box in the project that was not occupied by tree swallows -- the one that had been constructed by one of the troop leaders. The box sported a plywood roof that, after becoming wet, had delaminated resulting in an interesting geometrical configuration that provided little protection from the elements. An editorial comment on the suitability of this box as a nest site by some anonymous, but presumably large, bird was displayed prominently on the roof of the box. Both the Scouts and their leaders accepted this symbolic presentation in the spirit that was intended.

Funds have been provided by the BNS* to be used by the troop to purchase natural history publications, prepared by the international Scout movement, which will be added to the troop's resource library. The Scouts will also receive a certificate commemorating their award.

James Churchill thanked the Society on behalf of the troop.

* The funds for this award were kindly donated to the BNS by Lillian Tufts, wife of the late Robie Tufts.

Tree Swallow Project - 1991

BY BRAD SWEET
1st Port Williams
Scout Troop

As summer holidays approached, it was decided to finish our Scouting year as we had started, working on an achievement badge. As a troop we decided to work towards the conservation badge of which the two basic objectives are "learn about the need to conserve our natural resources" and "carry out projects to help our environment". After some discussions among the troop members and some consultation with outside sources (thanks, George Forsyth), it was decided to develop a tree swallow project at the Port Williams sewage pond, just a short hike from our Scout hall.

Since we weren't sure of the legalities involved, we decided to make a formal presentation to the Port Williams Village Commission at their monthly meeting. Two of the members of the 1st Port Williams Scout Troop offered to do the necessary research and prepare a presentation on the objectives of our chosen project.

Tim Cox and Leonard Rand gave an excellent report to the Commission that resulted in permission being granted to carry out the project.

The following is a report given to the Scout leaders by one of the project teams. It begins with our first trip to the sewage pond.

Tree Swallow Project Report

BY JAMES CHURCHILL
and
ARNE JENSEN

April 11, 1991

Tonight we put our tree swallow boxes up at the Port Williams sewage pond. Arne and I built it down in the basement. It took about an hour to complete. There were six other boxes put up tonight. We put ours on the south west section of the fence surrounding the pond. There are a lot of bugs so the swallows should have lots to eat.

May 16, 1991

Tonight we went down to check our boxes and we discovered a nest in our box. There are no eggs in it yet. Matthew's and Robin's boxes also had nests in them. Robin's probably had eggs in the nest because when we opened the door to his box the tree swallow sat there not moving. We also identified eight birds for the requirement of a badge. Some of the birds we saw were: tree swallow, crow, herring gulls, barn swallow.

May 30, 1991

Tonight we came down to check our boxes after running 1600 m for our fitness badge. Most people were exhausted. Tonight we saw a bird sitting on our nest. Probably sitting on eggs. There was a male guarding the nest. We could tell it was a male because of the iridescent colour on the head. Everyone else's box had a nest except for Brad's. We think it is because of the odour of the stain or the colour. The female was really nervous when we opened the box and she did not move.

June 6, 1991

Sherman Boates and Pam Matthews came tonight from Acadia to band the tree swallows. They banded only a few. They opened up our box to weigh the baby birds. We had five babies and one egg that did not hatch. We took a look at the baby birds and because there were no feathers on them you could see right into their stomachs. They were mostly stomach. They still looked cute. A couple of other boxes had babies as well. These were weighed also. A few people had only recently put up their boxes and there were no nests in them.

October 3, 1991

We went back tonight to the sewage pond to clean out our boxes. In our box we found the nest along with the dud (unhatched egg). The nest was made of grasses and lined with chicken feathers. They smelled really bad. Some of the nests we found were very fragile unlike ours which held together well. We found a spider's web up by the light which was huge. The spider in it was feasting on anything that hit the web (that was a lot). This was the last night for our project for 1991. We learned a lot and have kept the nest as a souvenir along with the egg.

I was very pleased with the participation of the troop in this unique and informative project. I know that if the boys learned as much or enjoyed this project half as much as the leaders, which I believe they did given the comments and reports I received, then it succeeded in satisfying both of the badge's objectives. We look forward to continuing our tree swallow project in the spring of '92 and hope to make it a more informative project for our group and others with similar interests to the 1st Port Williams Scout Troop.

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.

January 23
Carolyn Davidson
Acadia University Student
"An Invitation to Indonesia"
(Describes her participation in "Crossroads International")

January 30
Peter J. Austin-Smith
N.S. Dept. of Natural Resources (retired)
"Long-term Monitoring Program of Eiders - Eastern Shore Islands"

February 6
Randy Milton
St. Mary's River Project
"Songbird / Small Mammal Habitat - Relationships and Forest Management

February 13
Dr. Robert F. Smith
Agriculture Canada
"Integrated Pest Management in Orchards"

February 27
Dr. Sherman Boates
N.S. Dept. of Natural Resources
"Mate Selection in *Corophium volutator*"

March 5
Lewis Hinks
Cumberland County River Enhancement Project
"?"

March 12
Dr. T. Rand
St. Mary's University
"Infestation of Hatchery-raised Brook Trout Eggs by *Saprolegnia diclina*"

March 19
Dr. Margaret McCulley
Carleton University
"How do Roots Really Work?"

FIELD TRIP REPORTS

Nights in the Enchanted Forest
A Visit to Bon Portage Island
June 29 - July 1, 1991

BY GEORGE ALLISTON
West Brooklyn, N.S.

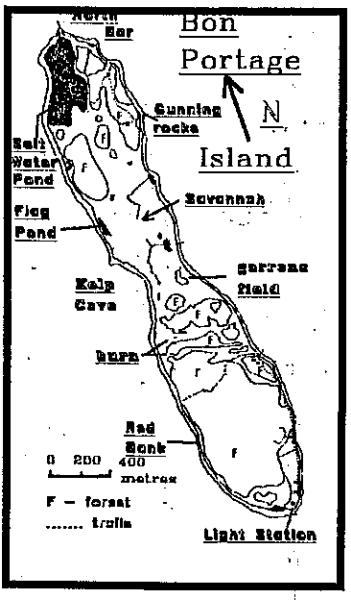
Editor's Note: We attempted to include this field trip report in the last issue of the *Newsletter*, however, while we were learning to use our desktop publishing program, gremlins crept in and spirited off half of the report. Bon Portage is a very special place that we believe many members would like to know about and possibly visit, so we are trying again to present this summary of our experiences during our brief visit to the island. We hope the gremlins are more cooperative this time.

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. Only one of the eight had previously explored the 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 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 dormitories 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 rising not more than 20 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-leafed 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 shores of the east side of the island, we were impressed by the large masses of herb Robert growing in the open along the shore. 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 heart of a naturalist.

Vertebrate populations on the island consist almost entirely of birds. Mammals are represented only by the masked 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 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 black-backed gulls nest along the shores, 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 shore adjacent to the colony 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. Raptors are represented by a single pair of ospreys (we observed only one bird) and a single pair of great horned owls which we saw and heard. Of the songbird populations on the island, the most notable we observed were the very high densities of nesting blackpoll warblers and numbers of breeding fox sparrows. Undoubtedly our most interesting songbird sighting during the trip was an Ipswich sparrow (now, sadly for listers, considered to be only a subspecies of the Savannah sparrow).

While we were on the island a little egret (a stray from Europe) was present. Although we made a couple of half-hearted attempts to see the bird, we were unsuccessful. We did, however, see and/or meet people from New York, Texas and California who came to the island just to see this bird and, after it had been identified and checked on their lists, they left the island oblivious to all else except this single freak!

After our first day of exploring we were content to sack out by about 11:00 p.m. During the night, from the comfort of our bunks, we heard the nearby hoots of the great horned owl, the occasional muffled calling of petrels and a few bumps as a bird collided with something but we were only dimly aware of what was going on outside. Only Bernard, who had an important 3:00 a.m. outside appointment, got a first-hand idea of what was happening.

The second day of our visit was another beautiful day and we broke up in groups of two or three and continued our explorations focussing on our own special interests. Shortly after dark that evening we all hit the sack in the hope of getting a bit of

sleep before our 1:00 a.m. meeting with Peter Smith. Most of us had only limited success. By 1:00 a.m. we were up, dressed and ready to go. Since Peter had not arrived, we decided to go outside and check things out a bit ourselves. The forest that by day had been so peaceful had been dramatically changed. From above us, around us and from under the ground, strange, rather harsh, calling sounds could be heard. Birds were flying close by us and crashing into the vegetation and fluttering along the ground. Bernard was able to pick up a petrel as it fluttered along the ground by his feet. As we stood by the edge of a small clearing trying to watch the circling petrels against the sky, a great horned owl, looking for an easy meal in the circling petrels, landed in the tree beside us.

Eventually Peter Smith, who had better luck getting to sleep than we had, arrived and, with flashlights in hand, we began our trek through the forest. Peter explained that the incubation of the one-egg petrel clutch is shared by both adults and, to minimize their exposure to predation by gulls, the birds change shift at night. One of the partners may spend as long as several days incubating before there is a change. The darker the night, the more likely the birds are to switch. As the petrels fly into the forest, they begin calling to their mates and their incubating mates answer back -- presumably assisting the returning bird to locate its burrow in the dark. When the returning bird makes its way into the burrow, the two "duet" with one, then the other making a deep purring sound. This dueting can continue for as much as three quarters of an hour before the switch is made and the previously incubating bird leaves for the sea. Occasionally, in all the hubbub, a bird gets in the wrong burrow. The sounds issuing forth from this kind of meeting are quite loud and distinctive but don't last for long as the intruder is unceremoniously expelled.

We continued our walk with Peter answering our questions about the island as we listened and looked about us, awestruck by this surrealistic scene we were witnessing. Finally, at about 4:00 a.m. we straggled back to the dorms, thanked Peter for his wonderful guided tour and went to bed.

Some of us were up the next morning at seven o'clock although we could not claim to be bright-eyed. We spent a leisurely morning exploring (another beautiful day) but after the previous night's experience practically anything would have been anti-climactic.

As we sat on the wharf in the early afternoon waiting to be picked up by the fishing boat, all agreed that we had had a truly fascinating weekend in a very special place. We felt rather sorry for the mindset of the other visitors to the island that weekend who had gone to such trouble, spent large amounts of money only to see a freak and to miss the whole essence of this wonderful place.

Acadia University encourages the use of their facilities on Bon Portage, when available, by environmentally

responsible people. Fees for use of the dorm are $10 per night per person and you must bring your own food and drinking water. Separate arrangements must be made for transport to and from the island. Arrangements to use the facilities must be made in advance. Contact Peter C. Smith on Bon Portage at 637-7699 or, if he is unavailable, the Acadia University Biology Department at 542-2201.

We expect that a BNS trip to the island will become an annual event.

P.S. Those wishing to learn more about Bon Portage Island will be interested in two books that were written about the island by Evelyn Richardson who lived on the island for many years. *We Keep a Light*, which describes her family's life on this isolated island, won the Governor General's Award for Creative Non-fiction (1946). This book is still in print. *Living Island* (1965) is of particular interest since it deals primarily with the natural history of the island. Unfortunately this book is no longer in print but should be available through your local library.

Shorebirds at Grand Pre

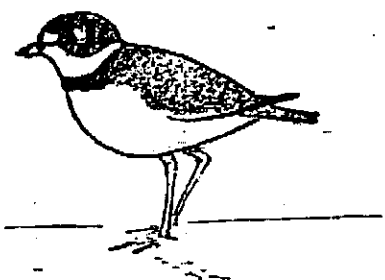
September 21, 1991

BY JIM WOLFORD
Wolfville, N.S.

This joint trip with the Nova Scotia Bird Society took place on a windy, chilly day, with sun, cloud and occasional showers. Our caravan of eight vehicles included a van loaded with tourists from Germany.

At high tide we drove across the Grand Pre dykelands. We hadn't gone far when we stopped to observe a soaring bald eagle; a few people also saw a **turkey vulture.**

We didn't find any shorebird roosts in the fields, but there was an abundance of crows and ravens and three kinds of gulls. A highlight for everyone following me was trying to avoid the muffler that fell off my



Semipalmated Sandpiper

car!

At the Shorebird Reserve sign at Evangeline Beach there were about 75 molting male common eiders and six white-winged scoters. Some also saw a red-throated loon and two black scoters.

Farther east along the beach, we found four black-bellied plovers, five semipalmated plovers, and a group of eight sleeping "peeps" (four least and four semipalmated sandpipers). As I approached the latter, I very nearly stepped on three roosting least sandpipers on the upper beach. We saw several flying flocks of

peeps, totaling at least 200, with occasional sanderlings among them.

As we watched the rain sweeping across the Minas Basin toward us, a **rough-legged hawk** glided over us from the north. One of the German birders found two very distant soaring raptors that may have been peregrine falcons.

A very unusual sighting was made by two Acadia University students. Flying low over the Minas Basin, off Kingsport and Starr's Point, were eight **shearwaters**. These were quite far from us but were light-bellied and almost surely had to be greater shearwaters. They were flying toward the mouth of the Cornwallis River. A few of us drove to Kingsport in hopes of a closer look but we couldn't find them.

Finally, in the rain, we visited Harris' Pond in Canning. In addition to the numerous American black ducks were two mallards, three American wigeons, four blue-winged teal, and a common snipe.

Landfill and Sewage Treatment

September 28, 1991

BY GEORGE E. FORSYTH
Port Williams, N.S.

Although the trip title probably did little to attract more than gulls, three members of the BNS executive and the "friend of a member's spouse" did join Ken Redden, Director of Environmental Services for Kings County, on a tour of the landfill site in Meadowview and the sewage treatment facility in New Minas.

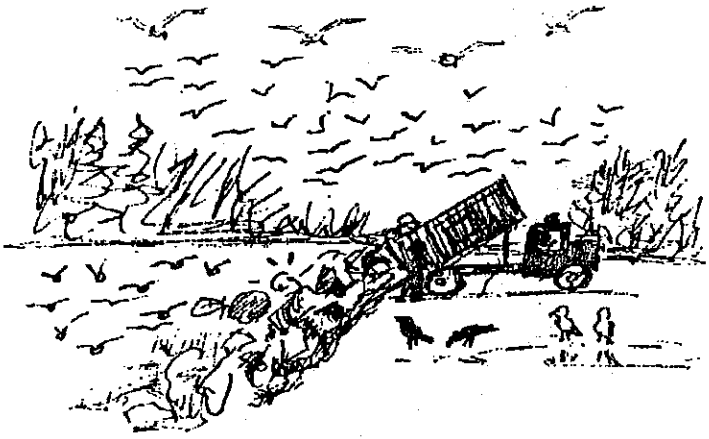
This field trip (other trip leaders please don't be offended) was probably the most informative field trip I have been on. Ken did a superb job explaining what his department does and how it is done. In recent years the location and potential environmental effects of landfill and sewage treatment plants are very newsworthy items; they are locations most don't wish to visit but send all their trash to, something people don't want in their community but wish to have access to. The low turnout of members reinforced this in my own mind.

We started at Meadowview and were taken all the way to the pit where garbage was being deposited and buried. Even on a Saturday morning the pit was a busy spot. Thousands of gulls and many tons of trash, most from busy homeowners in the midst of fall cleanup, were present.

Ken was able to show us that the Meadowview facility is more than a "dump". This facility is managed, it is not perfect but he feels they do the best possible job with the available budget and the physical site. He showed us the asbestos site, a registered deposit for this hazardous material. We also saw the area, and were informed of the processes, being used to land farm hydrocarbon contaminated soils.

The group discussed the choice of a new site for the municipal landfill. A proposal to place a new landfill site at one of three sites on the South Mountain has met with

sufficient criticism of the criteria and process used to select these sites that the selection process has had to be reconsidered. New proposals will be forthcoming in the near future and it is important that we as responsible, informed citizens be able to base our judgments of these proposals on a knowledge of how a landfill really works.



We then went to New Minas to view the four sewage treatment lagoons and accompanying laboratory. These lagoons treat, by natural processes, the sewage produced by Greenwich, New Minas, Kentville, and Coldbrook. The lagoons are truly fertile ecosystems that abound in life forms from the tiniest bacterium to ducks, muskrats and hawks.

The processing of this sewage involves both engineering and biology. It is truly amazing that, in a matter of months, natural life forms can clean this raw sewage so that it can be released into the Cornwallis River.

I really feel that this informative and eye-opening field trip should be repeated and that members of our Society should seize this opportunity to learn how we in Kings County deal with our ever increasing demands for waste disposal.

As naturalists we send money to protect the rainforest, or adopt a whale, or participate in other worthwhile "out of town" projects, but too often we ignore what does take place at home. We benefit from this municipal waste disposal system but often don't know where it is or how it operates. By taking it for granted the incentive for improvement and innovation is lost. We can continue to have a system that sets provincial standards or we can allow uninformed decisions to be made that could move this system backward. As Ken Redden stated, "the system is not perfect" but considering budget and land constraints, it is the best presently available. With decisions to be made on both landfill and sewage treatment issues in the near future, we must be informed so that these decisions are made in everyone's best interests.

Saturn and Other Celestial Wonders
October 2, 1991

BY LARRY BOGAN
Cambridge Station, N.S.

As was common this autumn, on the scheduled evening for this field trip (October 1), the sky was cloudy and the trip had to be rescheduled for October 2. At twilight on October 2 five of us met at the Stile Park in Wolfville as the sky was clearing of clouds. We were all surprised at the sudden uncovering of the heavens.

During the observation session the skies slowly became clearer and we were able to see more and more. Saturn was bright in the southwest while the bright three stars Deneb, Altair, and Vega hung overhead forming what is called the Summer triangle.

Sherman Williams and Roy Bishop had brought telescopes that allowed us to get good views of Saturn and several deep sky objects such as the globular cluster, M-13 and the Andromeda Galaxy, M-31. The air was not very clear so the number of easily visible celestial objects was limited. After about an hour of observing we finished discussions and went our separate ways.

My Grandfather's Walk
October 6, 1991

BY GEORGE E. FORSYTH
Port Williams, N.S.

1991 was a fitting year to lead "My Grandfather's Walk"; one of my grandfathers, Frederick Albert Forsyth was born September 17, 1891, in the "House on the Hill", the old farm house of Peter Bishop on "Johnny Cake Hill", now opposite the Kentville Golf Club. Our walk ended where his life began.

The beginning of the walk, at the wharf in Wolfville, was where Fred sailed from, to England, the Caribbean and other ports, as a teenaged sailor. This is also where he played as a youngster, growing up on Front Street, learning about the vessels he would later sail. From here we could see his closest port of call, Boot Island, where he spent childhood summers overseeing the community pasture and undoubtedly learning to hunt and fish, two pastimes that he pursued late into his life.

As we walked west on the Dominion Atlantic Railway tracks we followed in his footsteps. As a retired employee of the railroad, he did much of his walking "on the tracks". The roads were too busy and he was likely to be offered a ride; "on the tracks" he was just as likely to be offered a ride (the engineers all knew him), but it was much less busy.

During our walk we were able to see many species of flora and fauna as we passed through various habi-

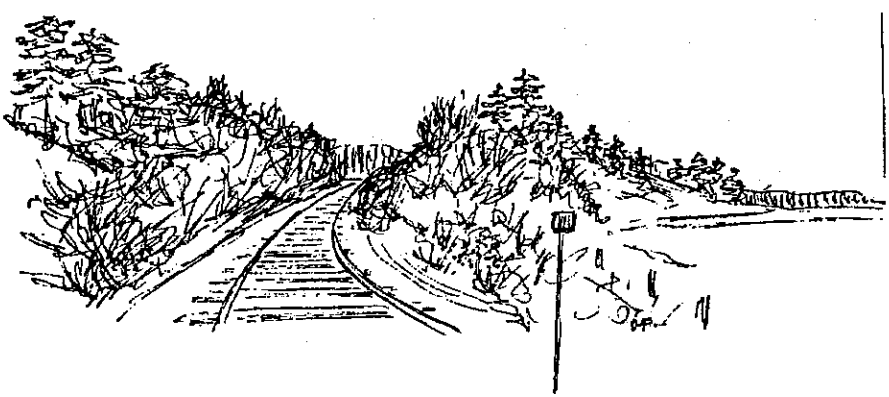
tats. Growing adjacent to the tracks in the gravelly fill for the rail bed are plant species that are typical of dry, sandy areas. The brooks and ponds along the way support wetland species and the "Neary Pines" are home to ancient woodland species.

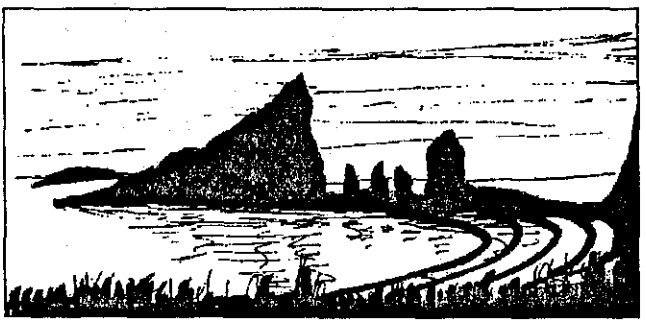
As we were leaving Wolfville, but still close to the dykelands, Bernard Forsythe was prompted by the passing of three Canada geese to tell a story about my grandfather when he had to purchase a goose hunting license for the first time. He went to the Post Office where they were obtained, he filled in his name, paid the five dollars and was ready to go when he was asked his age. His comments, as always, were honest and to the point; he couldn't see that the geese would care how old he was (he was already seventy-three) and why did the Post Office need to know this?

As we approached Sunnyside, now part of New Minas, we explored an area that is much less developed than Wolfville and Greenwich. The railway goes through a heavily wooded area where, to the north, the banks of the Cornwallis River are very steep. The hike ended at the ACA Coop, Hostess Foods, industrial area.

In these days of modern technology it is interesting to think back on a different time. Our walk did just this. We walked through woods containing trees that were growing before Europeans settled here, passed hills that were the sites of Micmac encampments, saw swales settled by the Acadians, traced the boundaries of New England Planter land grants, and walked through my grandfather's life following his footsteps on the D.A.R.

Our walk began where his life had come to rest, in Wolfville; we ended where his life began, in Sunnyside. The D.A.R.'s life is about to end and, as I brought life to my "Grandfather's Walk", so may we restore the life of the D.A.R. as a permanent walk for Frederick Albert Forsyth and all those who share his love of walking and the out-of-doors.





Hike to Cape Split
October 12, 1991

BY SHERMAN WILLIAMS
Avonport, N.S.

We started at the Robie Tufts Nature Centre with a group of six hikers, added another dozen at the beginning of the trail in Scots Bay, and several others joined our group during the trip. Although the day began with dark cloud and drizzle, by the time we reached Cape Split we were enjoying sunshine, blue skies and pleasant temperatures.

The flowers, bird-song and greenery of our spring and summer hikes had been replaced by the colour, silence and patterns of autumn. Notable features along the trail were changing colours of leaves on deciduous trees and the variety of fall fungi. Leaves had changed to shades of red, yellow and gold, and were beginning to fall. Of the fungi we encountered along the way, we examined the cortinas of the *Cortinarians*, the clubs of the *Clavarians*, and the veils of the *Armillarians*. We even saw a few drops of "milk" ooze from the lamellae of *Lactaria*. A few brave hikers let their tongues tingle to the "hot pepper" sensation of nibbled bits of *Russula* and had their fingers feel the slime of *Hygrophorii*.

Arriving at the Split we were greeted by the wind, the sound of surging tide and the view. Shortly each had found a place sheltered from the wind to sit, eat lunch and enjoy the unique atmosphere of Cape Split. On the water surface below we watched a flock of eider ducks seeking shelter in the lee of the rock pinnacles. The occasional raptor and raven was observed riding the air currents above the cliffs. At one point, another great bird came swooping from across the Bay toward the Split and whistled by us at cliff height with a great roar. It was the "Great Aurora" from Greenwood.

Following lunch, and after having been joined by a few more hikers who had come to the Split on their own, we followed the lower trail back along the cliffs to Little Split Cove. We took time to enjoy the rugged, windswept beauty this part of the trail features. Just before leaving the shoreline and hiking upward to join the main trail, we contemplated the collapsed lava tubes of long silent volcanic eruptions that created the circular features we now recognize as Little Split Cove. Here we rested briefly and readied ourselves for the trek back to the Scots Bay parking lot. As with all adventures of mind and body we must come back to the

reality of our usual routines, refreshed, however, by having been away.

I would like to thank those hikers in our group who carried back some rather large pieces of litter left on Cape Split by "campers".

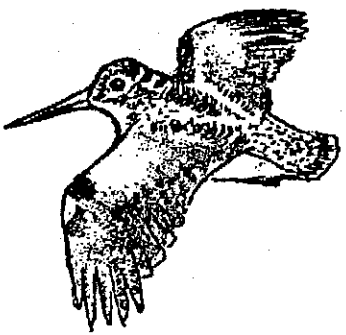
Little River Falls
October 20, 1991

BY BERNARD FORSYTHE
Wolfville, N.S.

Although the weatherman had forecasted sunny breaks, the drizzle we were getting at the beginning of the outing failed to dampen the spirits of the twenty people who joined me for this field trip. We made a couple of stops along the Sunken Lake Road on our way to the start of our hike. The first was to look at nodding ladies'-tresses blooming in a damp roadside ditch. This is our latest-flowering orchid species and I couldn't pass up a chance to show off at least one orchid. At our second stop we looked at a field covered with the white and pink flowers of fleabane and asters that made an eyecatching cover of blossoms on a late fall day. Jim Wolford pointed out a roadside bank covered with pinkearth lichen.

Many pauses were made as we slowly walked along the wood road to the falls. Most of the summer plants were limp and discolored, having been touched by frost, but still recognizable. Of course, many of our woodland plants are evergreen and these really begin to stand out in late fall. A few noted included teaberry, partridgeberry, pipsissewa, mayflower, and Christmas fern. The mosses, lichens, and fungi also tend to be noticed more now that they have less competition and were discussed at length. There were also still many mushrooms in the more sheltered areas.

Considering the dampness, there was quite a lot of bird activity in several areas along our route of travel. A large flock of white-winged crossbills was seen feeding among the cones of white spruces. Some were heavily streaked, recently fledged young begging to be fed. We watched as an adult placed spruce seeds into the crossed bill of one young. A barred owl as well as a couple of woodcock were flushed. Gray jays were heard and seen along with chickadees, nuthatches, kinglets, and two cooperative brown creepers. After being offered a drink (of fruit juice, that is), the leader was persuaded to try various owl and raven calls with which he received lots of help from the younger members of our group.



Woodcock

At the falls its beauty was enjoyed along with the lush green vegetation on the steep river banks. We picked our way over the slippery rocks following the Little River to its mouth where it joins the Gaspereau River. Here we looked for and found witch hazel in full bloom with its narrow, yellow petals. I am always amazed by this shrub that flowers at this time of year when its leaves are falling. One witch hazel still had fruit from last year that had not yet been cast off.

The walk back to our cars was made at a faster pace; however, there were still interesting things to look at. A young green frog was seen in a water puddle. Jim pointed out that it would need a much larger body of water to overwinter successfully. Could this be nature's way of permitting only the wisest young frogs to survive through their first winter? It began to rain again just before we reached the cars but we were treated with another highlight as a large flock of juncos flushed around us. Thus ended an enjoyable Sunday afternoon.

Birds in Your Hand II An Evening for Children

November 20, 1991

Cyril Coldwell again added specimens to the Acadia Biology Museum display and opened its doors for an evening of exploration by children. Unlike a similar open house last April that attracted an overwhelming 200 people (see the *Newsletter*, June 1991), this event attracted about 35 children with about 15 parents, grandparents, and guardians in tow. The children ranged in age from two-year-olds whose prime interest was in patting the specimens through early teenagers interested in the biology of the species on display as well as the methods used in preserving and mounting the specimens. All in all, it was a much more controlled and relaxed experience for all when compared with last April's inundation.

CHRISTMAS BIRD COUNTS

Brier Island Christmas Bird Count

December 17, 1991

BY RICHARD STERN
Kentville, N.S.

This year the traditional Brier Island count took place as usual on Tuesday, December 17, with Eric Mills of St. Margaret's Bay as the compiler. Ten people took part, with Eric, Ian McLaren and Jim Taylor from the Metro area, Jean and Bill Morse from Mader's Cove, and the Tufts, the Sterns and Jim Wolford from the Valley. The day was c.c.c.c.cold! particularly in the early morning, with a minus 10 C. temperature and NNW winds blowing at

Hawk Owl

50 km/hour across Pond Cove and Gull Rock. As might be expected, under these conditions birding was rather slow.

As the morning progressed the group divided into four parties and went on their separate ways. Most notable of these forays was Jim Wolford's intrepid walk along the coast from Western Light to Northern Light -- a trek that took him from 11:00 a.m. to 4:30 p.m. to complete in less than ideal conditions!

The results of the count were slightly disappointing with only 47 species being observed and no great rarities being seen. As well, the numbers of individuals of species such as Red-necked grebes, Great Cormorants, Alcids, etc., were less than "normal".

Apparently a Northern Hawk-owl, a really "good" bird for a Christmas Count, had been present close to the Brier Island Lodge dining on chickens in an enclosure for the previous few days, but it could not be found on Count day despite intensive searching. Likewise a Turkey Vulture and a Northern Mockingbird could only be included for the Count Period, not for the day itself.

Some of the more interesting sightings included 145+ Purple Sandpipers at Gull Rock, four Red-tailed Hawks, two Rough-legged Hawks, 11 Brant in Pond Cove, 57 Gannets off Northern Light, three Glaucous and seven Iceland Gulls, five American Robins, a Ruby-crowned Kinglet, and two Northern Shrikes.

Several counters had to leave to catch the ferry before the tally-up, but for those who stayed there was pleasant relaxation and some very

West Hants Christmas Bird Count

December 29, 1991

compiled by
KAREN AND TED CASSELMAN
Cheverie, N.S.

The sixth annual West Hants Christmas Bird Count involved the most participants and produced by far the highest species count in our rather brief history. Thirty-eight individuals from Kings, Hants, Lunenburg, and Halifax Counties participated in the 1991 count (24 in 1990). Weather conditions were almost perfect; the day was clear and windless

with temperatures beginning the day a few degrees below freezing and rising throughout the day to well above freezing. Conditions for driving as well as walking in the woods were excellent and we were able to do considerably more of the latter than in previous years. Although it did rain on count day, this did not happen until evening when our counting activities were complete.

Our total species count for the day was 71, up a whopping 27 percent over the previous high of 56 tallied last year! Highlights included hermit thrush, northern shoveler, chipping sparrow, hooded merganser, and record numbers of owls (three saw-whet, five great horned, ten barred). Notable too was the very high count of red-breasted nuthatches (228) and a respectable count of 14 pileated woodpeckers, the latter having become a "tradition" in our counts. Three more species were seen during count week; seven gray partridge, a snowy owl, and a northern oriole.

Pileated Woodpecker

Great Cormorant	1
Great Blue Heron	5
Canada Goose	60
American Black Duck	397
Mallard	2
Northern Shoveler	1
Common Eider	1
Common Merganser	70
Red-breasted Merganser	1
Hooded Merganser	1
Bald Eagle - adult	5
Bald Eagle - immature	4
Bald Eagle - Total	9
Northern Harrier	3
Sharp-shinned Hawk	2
Red-tailed Hawk	14
Rough-legged Hawk	4
Merlin	1
Gray Partridge	CW-7
Ring-necked Pheasant	67
Spruce Grouse	1
Ruffed Grouse	20
Purple Sandpiper	17
Ring-billed Gull	9
Herring Gull	1057
Iceland Gull	2
Great Bl.-backed Gull	602
Rock Dove	440
Mourning Dove	185
Great Horned Owl	5
Snowy Owl	CW-1
Barred Owl	10
Northern Saw-whet Owl	3
Downy Woodpecker	25
Hairy Woodpecker	21
Bl.-backed Woodpecker	4
Common Flicker	7
Pileated Woodpecker	14
Horned Lark	108
Gray Jay	12
Blue Jay	354

American Crow	749
Common Raven	201
Bl.-capped Chickadee	758
Boreal Chickadee	37
Red-breasted Nuthatch	228
Wh.-breasted Nuthatch	8
Brown Creeper	9
Golden-crowned Kinglet	332
American Robin	9
Hermit Thrush	1
Northern Mockingbird	1
Cedar Waxwing	11
Northern Shrike	1
European Starling	3055
Pine Warbler	1
American Tree Sparrow	106
Chipping Sparrow	1
Savannah Sparrow	1
Song Sparrow	28
Swamp Sparrow	1
White-throated Sparrow	9
Dark-eyed Junco	532
Lapland Longspur	1
Snow Bunting	729
Brown-headed Cowbird	9
Northern Oriole	CW-1
Pine Grosbeak	6
Purple Finch	422
Red Crossbill	45
White-winged Crossbill	261
Common Redpoll	243
Pine Siskin	979
American Goldfinch	727
Evening Grosbeak	1132
House Sparrow	750

NUMBER OF SPECIES	71
(+ 3 SPECIES - CW)	
NUMBER OF INDIVIDUALS	14918
(+ 9 INDIVIDUALS - CW)	

CW - Count Week: the 3 days before and the 3 days after the Count Day

Wolfville Christmas Bird Count

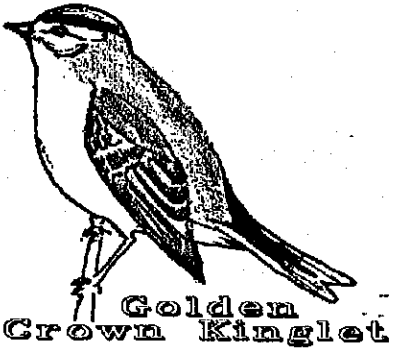
December 21, 1991

BY JIM WOLFORD
Wolfville, N.S.

compiled by
RICHARD STERN
Kentville, N.S.
and
GORDON TUFTS
Wolfville, N.S.

Five days of cold weather (mean temperature = -8.6C) and snow flurries (total snowfall = 20 cm) preceded count day; hence the ground was snow covered and ponds and slow moving waterways were frozen over. We began count day with cold temperatures (about -15C), a light wind and good visibility. By 11:00 a.m. conditions had deteriorated; the temperature had increased as had the wind and a wet, blowing snow, at first intermittent and later continuous, severely limited visibility. Many would have preferred the +17C temperatures and drizzle encountered during the 1990 Christmas count to the weather experienced on the afternoon of count day 1991!

Participants in this year's bird count included 53 field observers in 21 to 36 field parties plus 61 observers at 38 feeders. Total party hours were 178.75 (88 on foot, 90.75 by car) and total party miles were 679 (101.25 on foot and 577.75 by car). Overall field effort (party-hours) was



more than 20 percent higher than in 1990. The number of party-miles covered on foot was up 45 percent over 1990 whereas the number of miles covered by car remained essentially the same.

A total of 49,260 birds (46,769 in 1990) of 73 species (62 in 1990) were observed on count day and an additional seven species (three in 1990) were observed during count week. Species that were particularly abundant this year were bald eagles, ring-billed gulls, mourning doves, northern flickers, red-breasted nuthatches, golden-crowned kinglets, Savannah sparrows, song sparrows, white-throated sparrows, dark-eyed juncos, pine siskins, and American goldfinches. It seems rather incredible that almost as many bald eagles (333) were seen as were black-capped chickadees (448)!

The numbers of American crows were very small compared to counts of a few years ago; are large numbers of crows still in our area?

Highlights of the count were the six eastern bluebirds seen at Woodside (later a total of eight was seen), an immature black-crowned night heron at Sheffield Mills, an unidentified skua off Medford Beach, a common black-headed gull in New Minas, a brown thrasher at White Rock, a common yellowthroat at Canard Pond, a clay-colored sparrow and several chipping sparrows at Greenwich, a vesper sparrow at Canning, a sharp-tailed sparrow along the dykes east of Wolfville, and three house finches in Wolfville.

Two other species believed to have been seen, but not confirmed for the count, were a wheatear at Grand Pre and an ovenbird in West Brooklyn.

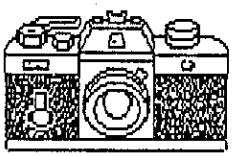
The post-count chowder dinner was well attended and most enjoyable. Thanks are extended to the Thextons, Judy Tufts et al for their organization of, and contributions to, this event. Thanks too to Sherman Boates and Merritt Gibson for organizing the count effort and to Gordon Tufts and Richard Stern for the compilation of these data. All of this requires a great deal of time and effort and I think a lot of us now have a much better appreciation for the efforts of Peter Smith who organized the count for many years.

Common Loon	4
Black-crowned Night Heron	1
Great Blue Heron	CW-1
Canada Goose	186
American Black Duck	2056
Mallard	34
Common Eider	12
White-winged Scoter	30
Common Goldeneye	2
Bufflehead	1
Common Merganser	45
Bald Eagle - adult	187
Bald Eagle - immature	141

Bald Eagle - unknown	5
Bald Eagle - Total	333
Northern Harrier	7
Sharp-shinned Hawk	11
Northern Goshawk	CW-1
Red-tailed Hawk	154
American Kestrel	1
Merlin	4
Rough-legged Hawk	10
Ring-necked Pheasant	284
Ruffed Grouse	3
Common Snipe	1
Skua sp.	1
Com. Bl.-headed Gull	1
Ring-billed Gull	957
Herring Gull	6267
Iceland Gull	10
Great Bl.-backed Gull	2649
Rock Dove	1193
Mourning Dove	959
Great Horned Owl	1
Barred Owl	CW-1
Short-eared Owl	8
Northern Saw-whet Owl	CW-1
Belted Kingfisher	CW-1
Downy Woodpecker	60
Hairy Woodpecker	19
Common Flicker	11
Pileated Woodpecker	3
Horned Lark	152
Blue Jay	1037
American Crow	5959
Common Raven	451
Bl.-capped Chickadee	448
Boreal Chickadee	4
Red-breasted Nuthatch	49
Wh.-breasted Nuthatch	18
Brown Creeper	4
Golden-crowned Kinglet	126
Eastern Bluebird	6
American Robin	105
Northern Mockingbird	2
Brown Thrasher	1
Cedar Waxwing	33
Northern Shrike	1
European Starling	17363
Yellow-rumped Warbler	4
Common Yellowthroat	1
American Tree Sparrow	114
Chipping Sparrow	3
Savannah Sparrow	95
Clay-colored Sparrow	1
Song Sparrow	396
Vesper Sparrow	1
White-throated Sparrow	66
Sharp-tailed Sparrow	1
Dark-eyed Junco	1130
Lapland Longspur	CW-3
Snow Bunting	100
Brown-headed Cowbird	28
Northern Oriole	CW-1
Purple Finch	76
House Finch	3
Red Crossbill	14
White-winged Crossbill	57
Common Redpoll	181
Pine Siskin	441
American Goldfinch	2696
Evening Grosbeak	1962
House Sparrow	813

NUMBER OF SPECIES 73
(+ 7 in CW)
NUMBER OF INDIVIDUALS 49260
(+ 9 in CW)

CW - Count Week: the 3 days before and the 3 days after the Count Day



ARTICLES

2000 Bird Nests

BY BERNARD FORSYTHE
Wolfville, N.S.

The 1991 nesting season is history. The nest cards have finally been completed and sent off to the Maritimes Nest Records Scheme run by the Canadian Wildlife Service in Sackville, N.B. Each year my success in finding nests varies depending on time available, special interests, habitat changes, weather, etc. This year the extreme fire hazard kept me out of the woods for most of the period that many of our songbirds were nesting; however there were other places to go nest hunting.

Experimenting with nestboxes over the years has produced excellent results. Visiting a nestbox that one has erected and finding it occupied by a family of ducks, owls, or songbirds will brighten up any day. Often I am surprised to find a mother deer mouse, red or flying squirrel, or the destructive (dare I say) raccoon in my nestboxes. It's bad enough that raccoons eat the young birds in the nestbox but why do they have to tear the nestbox apart? Barred owls feed on the mice and squirrel families they find in a nestbox but at least they don't destroy the box while doing it.

Many of my barred owls have been using the same nestboxes for years and I can now recognize their different personalities. The Dug Woods female insists on striking me on the head (protected by a helmet) each time I climb the nest tree, even before she lays her first egg. The Hells Gate female is the exact opposite - gentle as a mother house cat as she proudly shows off her family to me, a real joy. She was banded as an adult and is now at least eight years old.

A May 26 canoe trip to Methals Lake turned out to be the highlight of the year. As I approached my nest boxes a male wood duck (rare for this area) flushed near a stump that two years ago housed a family of black-backed woodpeckers. To my great surprise the woodpeckers were using the same cavity again this year and I could hear several young inside begging for food. A short distance away a female common merganser was scolding near one of the nestboxes. From an earlier visit I knew it contained a mixed clutch of common and hooded merganser eggs. Peering into the box I could see brown and white fluff balls scurrying around. Responding to a call from the mother merganser, one, two, and then all the young ducks jumped to the water, regrouped, and made a bee line as a ball of many headed and legged fluff towards their mother. She quickly led them away in single file with one youngster on her back.

Within sight of this nest was another of my nestboxes. Looking

towards it I could see a female hooded merganser trying to enter the nestbox but it was obvious something inside was trying just as hard to keep her out. Soon I was peeking into the box at a female wood duck incubating a clutch of eggs. Three duck species were using or attempting to use my nestboxes in this small area.

Next I waded into Methals Bog to check out yet another nestbox. Talk about a string of luck for at this box was a beautiful male bluebird singing and chasing away a pair of tree swallows who also had designs on the box. While pondering this birdwatcher's dream, I could hear a Lincoln's sparrow singing in the bog and watch a pair of bald eagles tending their nest at the far end of the lake. A day for the record books!

Now that news of my interest in bird nests has got around I often get phone calls from others telling about their finds. This year I was shown a mockingbird nest in New Minas and, best of all, a family of great crested flycatchers using a nestbox in the backyard of a house in White Rock. It pays to check out these reports. Sooner or later someone will find house finches nesting in Kings County.

Just down the road from my house is an untended apple orchard growing up with tall grass, weeds, various shrubs and young trees. In 1991 the orchard was stripped of its leaves by a caterpillar invasion. Later new leaves budded out. This habitat attracted many species of birds including a blackpoll and other species of warblers, a male scarlet tanager, alder flycatchers, sparrows, and tree swallows using the nestboxes monitored by Acadia students.

When the woods were closed to travel this orchard looked even more inviting. During several visits I located five yellow warbler nests (one with a cowbird egg), three alder flycatcher, two American robin, one pheasant, one blue jay, one goldfinch, and three song sparrow nests. This represented only a few of the bird families taking advantage of the rich source of food and shelter provided by an apple orchard going wild.

With my 1991 nest card contribution to the nest record scheme I have passed a milestone. Since I began sending in cards in 1975, I have found and documented over 2000 bird nests. Is it possible to reach 3000? Only time will tell.

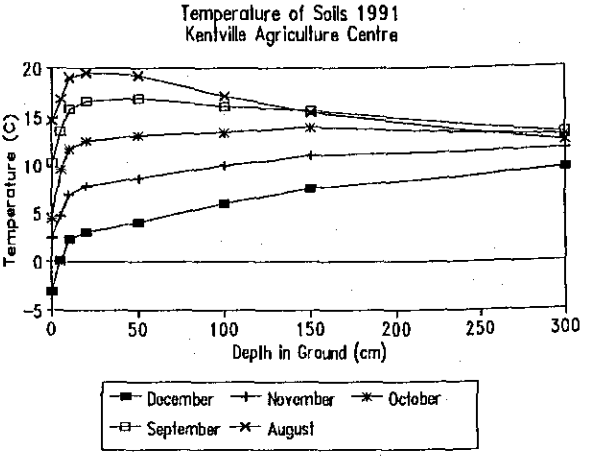
Autumn Weather in the Valley

BY LARRY BOGAN
Cambridge Station, N.S.

Amateur astronomers and solar heating enthusiasts have been disappointed by the cloudiness of this autumn. October through December had only two-thirds of the "normal" bright sunshine hours. Rainfall was above average and when that for August, September, October and November are added it totals 606 mm. Thus, in one-third of the year, we received almost three-quarters of the rainfall we would expect in an entire"normal" year. Decem-

ber reversed the trend when only three-quarters of the "normal" precipitation fell; however, more of it fell as snow than expected.

Compensating somewhat for the cloudy, wet weather in October and November, we were blessed with warmer than average temperatures. Heating degree days in those two months were down to 84 percent of the expected value because the average temperature was 1.6 C above the 30-year average. But December again reversed the trend and was colder than "normal".



Through the autumn, air temperatures drop and so do ground temperatures. In recent years Ed Reed, at the Kentville Agricultural Centre, has recorded daily soil temperatures at various depths up to three metres below the surface. In the autumn soil temperatures lag far behind air temperatures. I have plotted some of the available soil temperatures in the figure below.

The highest ground temperatures occur in the top 1.5 m in mid-August and drop slowly after that. The soil temperature at three metres actually does not reach the highest temperature until September. The variation in soil temperature during the year at three metres is small compared to the range of air temperatures. In August and September the shallow soil temperatures are still warmer than the deep soil temperatures. In October the soils at all depths below 20 cm have similar temperatures. After October, soil temperatures in the top 1.5 m are lower than the deep soil tempera-

Weather Statistics
October - December 1991
Kentville Agricultural Centre
(30-year averages in parentheses)

	Avg. Temp. (C)	Precip-tation (mm)	Sun-shine hours	Heating degree days	Snow-fall (cm)
Oct	10.7	105	114	226	
	(9.1)	(86)	(163)	(278)	
Nov	5.5	172	50	380	
	(4.0)	(105)	(83)	(442)	
Dec	-3.1	98	52	65	272
	(-2.4)	(130)	(74)	(631)	(57)
Tot	4.4	375	216	1258	
	(3.6)	(321)	(321)	(1351)	
F91 vs. 30-yr avg.	+0.8 (C)	117 %	67 %	93 %	

tures. During the winter, heat flows up from the ground because the air temperature is below the ground temperature. A deep blanket of snow will insulate the ground from the cold air and shallow soil temperatures under the snow will be higher whereas shallow soil temperatures on uncovered ground will be colder.

Protection Plan for PEI Sites *

Ninety-four sites have been identified in PEI as significant environmental areas which will be protected under the province's Natural Areas Protection Act. The sites, which include both private and Crown properties, are the best examples of various habitats on the Island such as bogs, sand dunes, natural ponds, riparian zones, salt marshes, estuaries, woodlands, and offshore islands. Some were also chosen for their educational value - as typical examples which were close to schools and easily accessible.

"It is important to identify the most sensitive and unique natural areas in our province and ensure that they are managed and protected for future generations," said Environment Minister Gilbert Clements. The government will work with private landowners and non-government groups such as the Island Nature Trust to provide long-term protection for the selected areas.

The Island Nature Trust, a CNF affiliate, worked with the government committee to draft the plan and is very happy to be an ongoing partner. "This plan is PEI's answer to the Endangered Spaces Campaign," said Diane Griffin, the Trust's executive director. "Only 10 percent of PEI is in Crown ownership and very few natural areas are left. The government is showing good leadership, and now there is the necessary backing to see the plan carried out." J.K.

* Reprinted with permission from *Nature Alert*, Vol. 2, No. 1, p. 5.

Wetland Stewardship in Nova Scotia *

BY PETER MacDONALD
Federation of Nova Scotia Naturalists

Wetlands, the most productive ecosystems in North America, are utilized by hundreds of species of plants and animals. In addition to their value as wildlife habitat, wetlands perform significant natural functions such as recharging groundwater, reducing flooding from rains and melting snow, recharging water-tables and providing settling basins for sediments and chemical pollutants. Wetlands also provide many forms of consumptive and non-consumptive recreation. In Nova Scotia we have over 33,000 individual wetlands, many of which are categorized as extremely important to wildlife.

Unfortunately, wetlands in

North America are presently being destroyed or degraded at an alarming rate. It is estimated that over 50 percent of the original freshwater wetlands in the United States, and over 70 percent of the productive wetlands in some important areas of Canada, have been lost.

In response to concerns over wetland destruction and declining waterfowl populations, the North American Waterfowl Management Plan (NAWMP) was signed in 1986. Under this historic agreement, Canada and the United States are committed to a long-term program of joint projects aimed at assuring the survival and increase of waterfowl populations through the preservation of wetland habitats. While directed primarily toward waterfowl, the plan will benefit a wide range of wetlands flora and fauna. A series of Joint Ventures, partnerships of public and private organizations working toward the common goal of wetland preservation, have been established for some of the most critical areas and species in North America. The Eastern Habitat Joint Venture (EHJV) is the eastern Canadian operational arm of the NAWMP, and includes the provinces from Ontario east to Newfoundland. The purpose of the EHJV is to secure the waterfowl resources of Eastern Canada by maintaining and enhancing the abundance and quality of wetlands.

Wildlife habitat has traditionally been protected through the creation of parks or management areas on public land, or through regulating private land use. Private stewardship is an alternative to such approaches. It is a relatively cost effective strategy which protects wildlife habitat while leaving the land in private hands. Through agreements and education, the landowners themselves are directly involved in habitat conservation. Agreements with landowners may take the form of simple verbal agreements, management contracts, long-term leases or permanent conservation easements and covenants.

In Nova Scotia, almost 75 percent of the total land base is privately owned. With such a large proportion of land under private ownership, the Nova Scotia EHJV is implementing private stewardship as one of its main strategies for wetland protection. The use of stewardship as a means of habitat retention has become extremely popular throughout North America, and many such programs are currently in existence.

Nova Scotia's wetland stewardship program began in January of 1991. The program is initially focusing on corporate lands to secure large areas of wetlands, and will eventually shift to encompass smaller private lands in 1992. In addition to wetlands (fresh and salt), important offshore islands may also be targeted for protection.

* Reprinted with permission of the author from "FNSN News", Vol. 1, No. 2, Summer 1991, p. 1.

FNSN News will be publishing a series of articles about Nova Scotia wetlands. *FNSN News* is published quarterly by the Federation of Nova Scotia Naturalists. For information

on obtaining a subscription, see the "Blomidon Naturalists Society Membership Fees" form at the end of this *Newsletter.*

First Move *

Bowater Mersey Co. in Nova Scotia signed an agreement with the provincial Department of Natural Resources which will see up to 42,000 of Bowater's 320,000 hectares of land committed to wetlands conservation management. This is the first time that a move has been made in the province toward including private land in wetlands' conservation management.

* Reprinted with permission from *Nature Alert*, Vol. 2, No. 1, p. 5.

The Milky Way, Tides and Jupiter

BY LARRY BOGAN
Cambridge Station, N.S.

I know it gets awfully cold at night in January and February but I still think more people should get out and enjoy the winter sky. Put on as much insulation as possible and chose a still, dark, clear night.

Not many people realize that the Milky Way is visible in the winter sky. It is not as bright as in summer but it does add beauty to the winter sky. In late January the constellation Perseus (the saviour of Andromeda) is at the zenith after the end of evening twilight. In this constellation, you can see the northern end of the summer Milky Way. From here it spreads southward into the pentagon-shaped constellation Auriga. South of there it squeezes between Gemini and the very bright, familiar constellation of Orion. It passes east of Orion through the center of a constellation called Monoceros (the unicorn). This constellation has no bright stars in it and you will more likely be attracted to the two bright stars Procyon (in Canus minor) and Sirius (in Canus Major) on either side. The Milky Way disappears below the horizon in Puppis, a constellation of which we can see only the very northern parts. Puppis is the stern part of an old constellation called Argo Navis (ship of Argonauts). The Milky Way would appear brighter if you could follow it further south but you must be closer to the equator to see it. Vela is the next constellation but it is entirely below the horizon in Nova Scotia (it is the sail of Argo Navis).

If you go to the Southern Hemisphere or even nearer the equator, be sure to get out at night and enjoy the spectacular view of the Milky Way!!! In Vela and the next constellation, Carina, are some fabulous deep sky objects observable with binoculars.

Some astronomical events coming up in the next few months include high tides, a rising Jupiter, and another solar eclipse (again one that we can't see!).

Saturn has moved closer to conjunction with the sun during the autumn and is no longer visible in

the evening sky. Jupiter will be rising into the night sky during the winter. It will be at opposition with the sun on February 29 (yes, 1992 is a leap year). In January and February, Jupiter will rise in the east after sunset but in March it will be rising before sunset. Jupiter will be in the constellation of Leo (the lion).

On January 19 we should expect some of the highest tides of the year. Five different effects contribute to causing these high tides:

1) The Moon will be closest to the Earth on that day (at perigee) which increases the tidal effects (gravitational pull) of the Moon on the Earth's oceans.

2) The perigee in January will be the closest of the year.

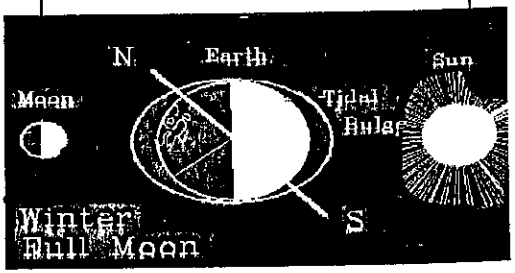
3) It will be a Full Moon which means that the Moon, Earth and the Sun line up such that the tidal effects of the Sun and Moon are additive.

4) The Earth will be near the closest point in its orbit to the Sun in January and hence there will be a slightly increased tidal effects due to the Sun.

5) The northern axis of the Earth will be tipped away from the Sun which will cause the tidal bulge to pass over our latitude near midnight. **

On January 4 there was an **annular** eclipse of the Sun over the Northern Pacific. Residents of the west coast of North America saw it begin at sunset. Unfortunately, we did not see any of it. It was not a total eclipse of the Sun because of two astronomical events. On January 3 the Earth was closest to the Sun and on January 6 the Moon was farthest from the Earth for the month. As a result the Moon appeared a little smaller and the Sun appeared a little larger than normal. This positioning of the Earth relative to Sun and Moon makes the apparent size of the Sun larger than the Moon and, hence, the Moon cannot cover the whole disk of the sun. An annular ring of the sun peeks around the Moon at mid-eclipse hence it doesn't become dark as with a total eclipse of the Sun.

**The Earth's rotation axis is not perpendicular to directions toward the Moon and the Sun. In the winter the northern hemisphere is tipped away from the sun. Since the tidal bulge is in line with the Sun or Moon, northern locations on the night side of the Earth will be under the deeper part of the bulge -see diagram.



Trivial Tidbits of Local Natural History

Unavailable for this issue.

Highlights for Fall 1991 will be included in the next issue.

BLOMIDON NATURALISTS SOCIETY

1991 - 1992 Membership Fees

Each member receives four issues yearly of the *BNS 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 *FNSN News*, 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

Number	Membership Classification	Price	Total
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Sources for Local Natural History Information
(compiled by Blomidon Naturalists Society)

Information	*Source*	*Office*	*Home*
Rocks & Fossils	Geol. Dept., Acadia Univ.	542-2201	
Fish	N.S. Dept. of 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
	Nancy Nickerson	679-5333	542-9332
Flora - Lichens	Karen Casselman		633-2837
Flora - Seaweeds	Darryl Grund	542-2201	542-9214
Flora - Mosses & Ferns	John Pickwell		681-8281
Birds - General	Bernard Forsythe		542-2427
	Richard Stern	678-4742	678-1975
	Gordon & Judy Tufts		542-7800
	Jim Wolford	542-2201	542-7650
	Jean Timpa		542-5678
Birds - Hawks & Owls	Bernard Forsythe		542-2427
	Cyril Coldwell	542-2201	542-2854
Birds - Falcons & Eagles	Peter Austin-Smith		542-2109
Mammals	Tom Herman	542-2201	678-0383
Amphibians & Reptiles	Sherman Bleakney	542-2201	542-3604
	Jim Wolford	542-2201	542-7650
Seashore & Marine Life	Sherman Bleakney	542-2201	542-3604
	Jim Wolford	542-2201	542-7650
	Graham Daborn	542-2201	542-5373
	Michael Brylinsky	542-2201	582-7954
Indian Prehistory	Ellis Gertridge		542-2816
& Archaeological Sites	James Legge		542-3530
Astronomy	Roy Bishop	542-2201	542-3992
	Larry Bogan	542-2201	678-0446
	Sherman Williams	542-3598	542-5104