

# Blomidon Naturalists Society



SPRING 2012 NEWSLETTER

Volume 39 · Number 1





*Whimbrel at East Point*

RICK WHITMAN

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❖ THE BLOMIDON NATURALISTS SOCIETY ❖

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

**BNS Executive**

*Past president*

Rick Whitman 542-2917

*President*

John Owen 678-0004

*Vice-presidents*

Murray Colbo 365-2932

Patrick Kelly 472-2322

*Treasurer*

Ed Sulis 678-4609

*Secretary*

Helen Archibald 582-1561

**Directors**

George Alliston 542-3651

John Belbin 684-0862

Jean Gibson Collins 678-4725

Denyse Kyle 365-2504

Jean Timpa 542-5678

Barry Yoell 542-9240

The Blomidon Naturalists Society is a member of the Sable Island Preservation Trust and the Federation of Nova Scotia Naturalists (Nature Nova Scotia) and is an affiliate member of the Canadian Nature Federation (Nature Canada). The Blomidon Naturalists Society is a registered charity. Receipts (for income-tax purposes) will be issued for all donations. (Registration number: 118811686RR0001)

THE BLOMIDON NATURALISTS SOCIETY

P.O. BOX 2350

WOLFVILLE, NS B4P 2N5

**BNS Newsletter**

The Blomidon Naturalists Society Newsletter is published quarterly (March, June, October, & December) by The Blomidon Naturalists Society.

Contributions to the BNS newsletter are always welcome. Articles may be reprinted with permission of the author or the editor. Credit the Blomidon Naturalists Society Newsletter. Unless otherwise stated, opinions are those of authors, not necessarily the Blomidon Naturalists Society. For subscription information, see the membership fees form at the back of this newsletter. If you change your address, please notify us at the address in the facing column.

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Typeset in Rod McDonald's Laurentian & Slate Sans, with ornaments designed by Jack McMaster and Andrew Steeves. Designed, printed and bound under the direction of Gary Dunfield and Andrew Steeves at Gaspereau Press, Kentville, Nova Scotia.

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BLOMIDON NATURALISTS SOCIETY  
members are encouraged to share unusual or  
pleasurable nature stories through the pages  
of the *BNS Newsletter*. If you have a particular  
area of interest, relevant articles and stories  
are always welcome. Send them to Jean Timpa:

1 – 25 GASPEREAU AVENUE  
WOLFVILLE, NS B4P 2C5  
*jtimpa@ns.sympatico.ca*

Digital photographs should be submitted to  
*doug@fundymud.com*

**Submission deadline for Spring:  
May 31, 2012**

## *Out and About*

Jean Timpa

SEVERAL weeks ago the federal economic plan was tabled in the House of Commons, and since then environmentalists have been in despair and frustration. The Canadian Charities Act has a clause that prevents us from disagreeing as a society with the directions government wishes to take, or we will lose our charity status and our income will be taxed. This is not a new law, and its removal has been sought for a number of years to no avail. John Bennett of the Sierra Club of Canada is trying once again to eliminate this clause on the basis of freedom of speech, which our 1967 Constitution upholds.

As a result, the tenor of *Out and About* will undoubtedly take on a very tepid ring, but I cannot jeopardize our finances. Kudos to all of you for your continuing support of BNS activities and assistance in so many ways. Many volunteers keep BNS ticking along, and all paid up members are automatically on the membership committee, so please help us find new faces, with new talents; young people with their energy, passion, and inquisitiveness; and older people with their knowledge and – often the best teacher – experience. Please do bring potential new members to a meeting or a field trip at least once a year! In the past we have had some wonderful camaraderie with Acadia students who know the current state of affairs in the sciences. We don't seem to have as many students as we used to have, so if you know any, please encourage them to bring their friends and come along to our various events. We don't want to dissolve as the Annapolis and South Shore Naturalist clubs had to do not so long ago. Warm, active bodies are very essential to our vitality and continuance and to the health of our spaceship, planet Earth.

Our Green Dragon camps will continue this coming summer, as

far as we know, but on a much scaled-down version. The cost for the buses has become prohibitive, so we need to formulate new walking programs in localized areas instead of taking day campers to Blomidon, Blue Beach, Smileys, and the Harriet Irving Gardens. Harold Forsyth has some money lined up, possibly, for summer 2012, but regular sources have dried up over the years for one reason or another. If you wish to give the camp a donation, a receipt will be issued by Treasurer Ed Sulis (see the first page for contact information or see him at an event). We guarantee that all your money will go directly to educating young naturalists, a great way to make your charitable givings work 100 percent! At some point we may do some combined events with the Young Naturalists Club of Nova Scotia.

Here are a few current, interesting statistics on BNS members for you: Our greatest enrollment of members a few years ago was around 185 people. In 2011 we had 156 members, of whom only 44 have not renewed with us as of January 1. We certainly do not want to miss a single one of you. We also have 15 honorary members. So, if you are still on the missing list after this newsletter goes out with a reminder for a reasonable length of time, someone on the executive may give you a call, hoping to find out how we can encourage you to come back to the flock. Ed declares that we are in stable position financially, but never in our history have we needed people power so much as we do now. Please give us your best shot!

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CALL FOR PHOTOS

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## *2013 BNS Natural History Calendar*

**P**HOTO submissions are invited for possible use in the 16th edition of our society's Natural History Calendar. Submissions should be in electronic form: JPEG format, with file size between 300 KB and 2 MB.

Photos should be of natural history interest, preferably taken in Nova Scotia. Usually we receive more “summer” photos than scenes from the other seasons. Please submit no more than ten (10) of what you consider to be your most suitable photos.

Suitability involves technical quality (sharp focus, not under- or over-exposed), composition (object of interest nicely positioned, no distracting background), content (a photo that calendar users will enjoy looking at for a month), and originality (not too similar to photos appearing in recent BNS calendars).

Send submissions to Roy Bishop (542-3992) by e-mail (RLB@eastlink.ca) or by post: RR 1, Avonport, NS B0P 1B0

DEADLINE FOR SUBMISSIONS: Labour Day, September 3, 2012

*Sherman Williams, Pat Kelly, Roy Bishop*

CALENDAR COMMITTEE

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CLUB NOTES

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## *2011 Annual General Meeting*

Monday 21 November 2011

1. Meeting called to order by Rick Whitman at 7:30 p.m. All members and guests welcomed.
2. Financial Report by Ed Sulis: net worth \$66,236.00; membership 165.
3. Report of the Nomination Committee for 2011 officers of the Society by John Belbin. Committee consisted of John Belbin & Jean Gibson Collins.
4. Proposed slate of officers:  
*President:* John Owen (new)  
*Past president:* Rick Whitman

*Vice presidents:* 1. Murray Colbo, 2. Patrick Kelly (program chair)

*Secretary:* Helen Archibald

*Newsletter:* Jean Timpa

*Treasurer:* Ed Sulis

*Members-at-large:* George Alliston (new), John Belbin, Jean Gibson Collins, Denyse Kyle (new), Barry Yoell

5. Call for nominations from the floor. No nominations.
6. John Belbin declared slate elected. Rick agreed to run the rest of the meeting with John Owen to take over for the next meeting.
7. Rick Whitman presented Honorary Life Memberships to John Harwood and Bob Bancroft.
8. Motion for adjournment by Jim Wolford at 7:59, seconded by John Owen.

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CLUB NOTES

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## *Board of Directors Reports*

By John Owen, BNS president

**Y**OUR board had a regular meeting on December 8, 2011.

The feasibility of having a regular item in local papers (e.g., *The Advertiser*) on a regular basis was discussed, with follow-up for the March board meeting.

BNS has made input to the NS government 12 Percent by 2015 program. A notice has been put in the Newsletter to encourage members to submit supporting documents. The BNS submission document will be on the BNS website. There was discussion on whether BNS should take political or activist positions on issues. Restarting the Issues Committee will be discussed at the March meeting.

There will be a program for follow-up with former BNS members

to determine if they wish to renew their membership and to inquire why they didn't renew.

Bird Studies Canada would like BNS to partner with them on stewardship of Grand Pré Beach. Sue Abbott of BSC is invited to the March board meeting for discussion.

BNS received an invitation from Young Naturalists Club NS to have a closer working relationship when YNC starts a Valley chapter. YNC is a member of Nature Nova Scotia. Charlane Bishop is invited to the March meeting to discuss further.

The Fundy Film Society has asked BNS to recommend movies to be included in their film schedule for showings at the Al Whittle Theatre. Jean will put this in her editorial in the newsletter.

Ed Sulis reported that we are in a good financial position, membership seems to be on the rise, and the recent craft fair made a record amount. The Green Dragon program committee will meet in January to review operating costs.

Patrick Kelly reported that winter and spring programs are finalized. All BNS monthly meetings will be in BAC 241 for the coming year.

Jean Timpa reported that the winter Newsletter is almost done. An e-version of the Newsletter was proposed, with further analysis to follow.

**Y**OUR board had a regular meeting on March 8, 2012.

A presentation on the Valley Young Naturalists Club was given to the board. The informal association between Nature Nova Scotia and Young Naturalists is working out well. YNC would like someone from BNS to liaise with. A more formal connection between the two groups would be good and could help make BNS activities more popular with young people. The board agreed that there should be an expanded committee to cover both Green Dragon and YNC. Murray Colbo, Charlane Bishop, and Harold Forsyth will form the committee.

Rick Whitman will take the lead on stewardship issues for BNS. He and Sue Abbott of Bird Studies Canada will discuss BNS's entering

a stewardship agreement regarding the shorebirds on Evangeline / Grand Pré Beach.

The board approved posting of the BNS Newsletter on the club website, with a 12-month lag.

The board decided to restart an Issues Committee (see article in this Newsletter).

Denyse Kyle and George Alliston are involved with the issue of invasive species; on March 22 there will be a round-table discussion at the Irving Centre on the topic.

Ed Sulis reported that 51 members from 2011 have not renewed, 127 have paid for 2012, and there are 15 life members.

Ed explained the new newsletter deadlines and that the new format takes longer to produce than the previous one. The directors meeting will now be held in the third or fourth week of February, May, August, and November, and the deadline for submissions to the editor will be one week following the meeting.

Patrick Kelly confirmed BAC 241 for upcoming monthly meetings; locations for April and December could change depending on exam schedules.

Patrick will e-mail the membership asking for suggestions for field trips.

The spring issue of the Newsletter is progressing, and the board decided that there would not be an e-version produced at this time.

Janet Whitman will represent us on the Eco-Kings Action Team (see article in this Newsletter).

The Science Fair will be on March 2–3, 2012, at the NSCC campus in Middleton. BNS gives two awards every year, and our representative John Belbin will be assisted by Jean Gibson Collins this year.

The next BNS board meeting is scheduled for May 17, 2012.

## *BNS Newsletters Back Issues Available Online*

By Larry Bogan

THIS is the beginning of the 39th year for the BNS Newsletter, which was first published in the autumn of 1974, when the society began. A searchable index of all BNS Newsletter articles is on the BNS website (see the Newsletter page, or use [www.nature1st.net/search/index.php](http://www.nature1st.net/search/index.php)). This began as a project in 2001 when Craig Daniels, a summer student, went through all the Newsletters (to Vol. 28) to create the index. Since then, the index has been put into an electronic database and kept up to date with every new issue.

BNS Newsletters have an abundance of nature information, history, and interesting articles and should be available to more people. Until now, in order to read an old article you had to have access to a set of paper copies. The BNS board agreed that we should make back issues available to everyone, and so I scanned the issues from 1974 through 1995 (Vol. 22) and put them on the BNS website ([www.blomidonnaturalists.ca/node/4](http://www.blomidonnaturalists.ca/node/4)).

The remaining volumes will be put online. After 1995, production of the Newsletter became fully computerized, and we hope that the electronic version will be available for the website. The current online volumes are just images of the Newsletter pages and are not searchable. The electronic versions will be searchable.

## *Issues Committee Reactivated*

**A**T the March BNS board meeting it was decided to reactivate the Issues Committee. A conservation committee was formed in the early 1990s but has not been active recently.

The new committee will, under the direction of the board, investigate and inform the Society on issues (such as government policies and major proposed developments) that could affect the natural history and conservation values espoused by BNS. Potential issues brought forward by the membership must be approved by the board before being delegated to the Issues Committee.

George Alliston (542-3651, [alliston@xcountry.tv](mailto:alliston@xcountry.tv)) has agreed to act as coordinator to get the committee up and running. We expect that the committee will be small; however, input from all members with knowledge of issues being investigated is welcomed and encouraged.

The first issue that has been put forward is the proposed development of wind farms in our area. This is a many-faceted issue, and the Issues Committee will focus its attention strictly on matters that have the potential to affect wildlife. We will keep you posted.

## Upcoming Events

### Meetings

*Unless otherwise noted, all meetings are held at 7:30 p.m., usually on the third Monday of each month, in Room BAC241 of the Beveridge Arts Centre of Acadia University on the corner of Main Street and Highland Avenue, Wolfville. Parking is available off Highland Avenue, on Acadia Street, and at the parking area around the Robie Tufts Nature Centre. Everyone is welcome.*

**Monday, April 16, 2012** – *The Maritimes Butterfly Atlas: 2 Years In*, by John Klymko. Launched in 2010, the Maritimes Butterfly Atlas is a five-year citizen-science project documenting the distribution of every butterfly species in the region. Significant discoveries have been made during the first two years of the atlas. Highlights include the addition of a species to the provincial lists of both New Brunswick and Nova Scotia and a dramatic increase in what is known about two Canadian endemic species. In this presentation you'll find out what has been learned from the nearly 5,000 records submitted to date.

John Klymko has been the zoologist at the Atlantic Canada Conservation Data Centre since 2009. During his tenure he has led studies on a variety of insect groups of conservation interest, including pollinators and dragonflies.

**Monday, May 21, 2012** – *Lady Beetles and Their Use as Biological Pest Control Agents*, by Susan Bjornson. Biological pest control involves the use of natural enemies (predators, pathogens, and parasitoids) for controlling agricultural pests. Although biological control was first practised in 4th-century China, the earliest, most spectacular success was recorded in California. This case involved the use of

an Australian lady beetle for control of a scale insect on California citrus. Other lady beetle species have since been used for pest control on various horticultural crops, and their efficacy has led to the ongoing practice of using lady beetles for pest control on agricultural crops and in home gardens. This presentation will focus on the history of biological pest control, the practice of using of lady beetles for controlling crop pests, and the ecological implications associated with using lady beetles and other natural enemies for pest control.

Dr Susan Bjornson is an invertebrate pathologist in the department of biology, Saint Mary's University. She earned a diploma of horticulture (Olds College), followed by a BSc (Honours) in environmental biology (University of Guelph) and a PhD in entomology (University of Alberta). Her early research focused on biological pest control in horticultural crops. Her current research program involves the study of invertebrate pathogens that cause chronic disease in beneficial insects that are used for biological pest control.

**Monday, June 18, 2012** – *Atlantic Coastal Plain Flora*, by Alain Belliveau. The Atlantic Coastal Plain Flora (ACPF) is a group of 90 species of wetland plants that inhabit our lake and river shores, bogs, fens, and estuaries. Some of the world's largest and least disturbed ACPF populations are located here in Nova Scotia.

Alain Belliveau is a masters student at Dalhousie University's School of Resource and Environmental Management. Alain's research focus has been the examination of a number of lakes in southwestern Nova Scotia for red- and yellow-listed ACPF species to determine, among other things, their distribution and population health.

#### FIELD TRIPS AND OTHER NATURE EVENTS

**Saturday, April 21, 2012** – Herbert River Canoe Trip. Patrick Kelly (472-2322, [patrick.kelly@dal.ca](mailto:patrick.kelly@dal.ca)) will be leading this trip. The Herbert River is fairly easy, with lots of water at this time of the year, and

it covers a great variety of terrain. There may be spots where it is running a bit faster or where there are new obstructions from the trees, etc., that have come down over the winter, so we may have to wade in a few places or stop to scout out a bend. The trip will be four to five hours long. Bring life jackets, canoe or kayak, and paddles. If you have access to a life jacket but not a canoe, there will likely be extra room in one of the canoes. Check with the leader to be sure. Meet at the Newport rink parking lot at 9 a.m. Take Exit 5 from Highway 101 and follow Highway 14 east for about 10 km to the village of Brooklyn. At the cenotaph, keep left and follow Highway 14 north for just under 1 km. At the intersection (Petro-Canada station), Highway 14 turns right. Continue straight on Highway 215 (Note the YIELD sign; you do NOT have the right of way). The rink is on the right as soon as you exit the intersection. We will be leaving some cars there as we will actually be putting into the river farther upstream. Rain date: Sunday, April 22.

**Saturday, April 28, 2012 – Wolfville Area Birds.** Richard Stern (stern-richard@gmail.com) and Jim Wolford (jimwolford@eastlink.ca) will lead this trip. This is a joint trip with the Nova Scotia Bird Society. We will be pond hopping for ducks and early migrants. There will possibly be a visit to Wolfville Ridge first for Barred Owls. Meet at the town wharf off the east end of Front Street in Wolfville at 10 a.m. Dress warmly and bring a lunch. No rain date.

**Saturday, May 5, 2012 – Native Plant Sale.** The Friends of the Acadian Forest Society (FAFS) will be hosting a sale of native plants at the Harriet Irving Botanical Gardens at Acadia University from 9 a.m. to 12 noon. Buy native plants grown by volunteers from seed collected in the gardens and from local nurseries. There will be a variety of trees, shrubs, and perennials for sale, as well as information tables and displays. Proceeds will be used by FAFS for forest conservation and education. Don't miss this great annual event in the Walled Garden and Conservatory at the Gardens.

**Saturday, May 12, 2012 – Nova Scotia Spring Migration Count.** To participate, contact the Annapolis Valley coordinator nearest your area:

- *Hants West:* Patrick Kelly (Falmouth): 472-2322, patrick.kelly@dal.ca
- *Kings County:* Larry Bogan: 678-0446, larry@bogan.ca
- *Kings County (Kingston area):* Sheila Hulford: 765-4023
- *Annapolis County:* Contact Chris Pepper (829-3478, cpepper@ymail.com). Anyone interested in helping coordinate Annapolis County, or parts thereof, as a regional representative would be most welcomed by Chris.

**Sunday, May 13, 2012 – Cape Split Hike 1.** Jim Wolford (jimwolford@eastlink.ca, 542-9204) and Patrick Kelly (patrick.kelly@dal.ca, 472-2322) will lead this walk with interpretive stops along the way. Spring wildflowers and birds should be abundant. This walk requires good footwear. You should bring water with you and a lunch, as we usually don't get to the end of the trail until lunch time. Meet at the Wolfville waterfront at 8:15 a.m. or at the start of the trail in Scots Bay at 9 a.m.

**Saturday, May 19, 2012 – Blomidon Provincial Park.** Jim Wolford (542-9204, jimwolford@eastlink.ca) will lead a walk from the campground about 2 kilometres to a seasonal pond that has the very rare and beautiful fairy shrimp. Other pond life, spring plants/flowers, and birds will also be seen. A lookoff toward Five Islands Park, across the Minas Basin, will be visited. BNS members can meet and carpool from the Wolfville Waterfront at 9:15 a.m. or meet Jim at the Blomidon Park registration building at 10 a.m.

**Saturday, May 19, 2012 – Cape Split Hike 2.** This will be a joint trip with the Halifax Field Naturalists. Patrick Kelly (472-2322, patrick.kelly@dal.ca) and Sherman Williams (542-5104, shermwms@eastlink.ca) will lead the trip. Meet at the Wolfville waterfront at 8:15 a.m. or at the start of the trail in Scots Bay at 9 a.m.

**Monday, May 21, 2012** – *Historic Hants County*. This is a Nova Scotia Bird Society field trip. Suzanne Borkowski (445-2922, [suzanneborkowski@yahoo.ca](mailto:suzanneborkowski@yahoo.ca)) will lead this trip, which will start at 8 a.m. in the parking lot of Mount Uniacke Estate Park. (Those wishing to carpool should meet at the Wolfville waterfront and leave by 7 a.m. to ensure they arrive on time.) The main gate will be locked, but the 2nd gate (coming from Halifax) will be open. The trip will start by exploring some of the grounds at Mt. Uniacke then continue along back-country roads through Hants County. Bring a lunch to be enjoyed at Smileys Park. No rain date.

**Friday, May 25–Sunday, May 27, 2012** – *Nature Nova Scotia Conference and Annual General Meeting*. Nature Nova Scotia will host its annual conference and AGM at the Tatamagouche Centre in Tatamagouche, Colchester County. This event is always affordable and fun.

Book early for great rates at the centre. Registration is only \$20. For program details and registration information, see the NNS website ([naturens.ca](http://naturens.ca)).

This year there will be a concurrent youth program (geared to 8–12 year olds, but any age welcome). The theme is “Becoming a Naturalist.” Explore the basic skills of a naturalist; identifying species, observing, and recording wildlife and nature will be key activities. Learn how to use the tools of the trade – field guides, keys, binoculars, and more. A variety of workshops will cover natural history, birding, identifying trees, and observing signs of wildlife. And there will be some great family field trips.

Ten youth (age 8–12) sponsorships are available to cover meals and accommodations. We are grateful for TD Friends of The Environment Fund for sponsoring the youth program. For information, contact Robin Musselman at [yncns@yahoo.ca](mailto:yncns@yahoo.ca).

**Saturday, June 9, 2012** – *Gaspereau Lake Area Canoe Trip*. Larry Bogan (678-0446, [larry@bogan.ca](mailto:larry@bogan.ca)) and Patrick Kelly ([patrick.kelly@dal.ca](mailto:patrick.kelly@dal.ca), 472-2322) will lead a canoe trip in the Gaspereau Lake area. We will meet at 8:30 a.m. in South Alton at the intersection

of Highway 12 and English Mountain Road. Bring a hearty lunch, water, drinks, etc., and, of course, life jackets, canoe, and paddles. If you do not have a canoe there will likely be extra room in one. Check with a leader to be sure. The trip will cover a stillwater in either the southwest part of Gaspereau Lake or the North River, depending on wind conditions.

**Saturday, June 16, 2012** – *Herbert River Trail*. Patrick Kelly (472-2322, patrick.kelly@dal.ca) will be leading this easy walk for the Nova Scotia Bird Society. Following the rail bed of the former train from Windsor to Truro via Kennetcook, the trail runs along the Herbert River for a good part of its length. It is a great walk for spotting floodplain vegetation as well as birds. Meet at the Newport Rink parking lot at 9 a.m. Take Exit 5 from Highway 101 and follow Highway 14 east for about 10 km to the village of Brooklyn. At the cenotaph, keep left and follow Highway 14 north for just under 1 km. At the intersection (Petro-Canada station) Highway 14 turns right. Continue straight on Highway 215 (Note the YIELD sign; you do NOT have the right of way). The rink is on the right as soon as you exit the intersection. Bring insect repellent. We should be done by lunch time. Rain date: Sunday, June 19.

**Saturday, June 23, 2012** – *Butterfly Field Trip*. Jim Edsell will lead this 4-hour trip in support of the Maritimes Butterfly Atlas. Given that butterflies tend to be active only in good weather, register with Jim by e-mail (jim.edsell@bellaliant.net) so that if the event must be cancelled he can contact you. Meet at the Wolfville Waterfront at 10 a.m.

For more information on the atlas project, visit the atlas web site at [www.accdc.com/butterflyatlas.html](http://www.accdc.com/butterflyatlas.html).

**Saturday, June 23, 2012** – *New Birders Trip: Windsor, Hants County*. Leader: Patrick Kelly (494-3294 (w), 472-2322 (h), patrick.kelly@dal.ca). Pre-registration is required. This trip is geared for those who have always had an interest in bird watching but are not sure how it

is actually done. Bring binoculars and field guides, if you have them. Meet at 9 a.m. at the parking lot for the Windsor Tourist Bureau, which is just north of Exit 6 (Water Street) on Highway 101. We should be 1–2 hours and will visit a few different types of habitat in the town of Windsor. No storm date.

**Saturday, June 30, 2012** – *Showy Lady's Slippers: Smileys Park*. Bernard Forsythe (542-2427) will lead a trip to see these magnificent flowers. They are usually at their best around this time of year. Meet at the Wolfville waterfront at 6 p.m. or at the picnic area at Smileys Provincial Park at 6:45 p.m.

**Wednesday, August 11, 2012** – *Moon Over the Water*. The view from The Lookoff on the North Mountain is likely familiar to many society members. But how many have watched the Sun set and the Full Moon rise from that vantage point? Tonight, the Moon will rise around 8 p.m., about 40 minutes before the Sun sets and about 4 hours from being full. The tide will be coming in, although you will have to stay until after 1:30 a.m. to see the moonlight with the tide in all the way. Arrive for around 7:45 and enjoy the evening. We will likely hear lots of nature sounds as it darkens, and the brighter constellations will come into view. Weather permitting, of course.

**Friday, August 17–Sunday, August 19, 2012** – *NOVA EAST 2012*. Atlantic Canada's longest-running star party will be held at Smileys Provincial Park near Brooklyn in Hants County. Some of the presentations and workshops and the Saturday evening observing session are open to the public. This year's guest speaker is David Levy. NOVA EAST is hosted jointly by the Halifax Centre of the Royal Astronomical Society of Canada and the Minas Astronomy Group. More information can be found at <http://halifax.rasc.ca/ne>.

## *Eco-Kings Action Team*

by Janet Whitman

AT our monthly BNS meeting in November, David Mangle made a request to the membership for a volunteer to serve on the Eco-Kings Action Team. David, who represents the town of Wolfville on this committee, told us that the team is seeking to broaden its base by inviting participation by more organizations, including the Blomidon Naturalists. The purpose of the Eco-Kings Action Team is to serve as an advocacy group for positive environmental change in Kings County and to work on locally relevant sustainability and environmental issues. Recent programs include an anti-idling campaign, awareness of the Air Quality Index, and various conservation efforts. This sounded interesting to me, so when I was approached to volunteer I agreed to be the BNS representative.

The first meeting I attended was in Kentville on January 18. The main item of business was discussion of the application to the Federation of Canadian Municipalities Green Municipal Fund to finance a couple of local initiatives. The first is a feasibility study to look at a rapid-transit corridor, with about three collection areas in the Valley, that would provide a high-quality commuter link with HRM. The second initiative is funding to hire a full-time regional sustainability coordinator. Following discussion of these proposals, Derek Gillis from Clean Nova Scotia gave us a short presentation on Clean Across Nova Scotia, an event to take place June 8 and 9 as part of the first-ever World Cleanup Day. The Blomidon Naturalists may be interested in participating in this venture. More information is available on the Eco-Kings website ([www.ecokings.ca](http://www.ecokings.ca)), including a short video about a similar event in Estonia involving a very successful nationwide cleanup of that country.

## *Harrison Lewis Centre: Spring Workshops*

**May 11–13:** *Spring Mushroom Foray / Grow your own:* Investigating the amazing lives of mushrooms and their essential role in the life of the forest. Richard McBride, David Boyle.

**May 25–27:** *Portable Band Saw Mill Workshop.* Hands-on instruction in all aspects of mill operation. Lew Dingwall, instructor.

**June 1–3:** *Women-only Chainsaw Course.* Patrick Allan, instructor.

**June 8–10:** *Introduction to Plants and Ethnobotany.* Ethnobotanist Keith Williams and botanist Pierre Taschereau will introduce participants to the fascinating kingdom of plants.

**June 15–17:** *Writing From Nature.* “To pay attention, this is our endless and proper work,” wrote American poet Mary Oliver. Harry Thurston, leader.

Each course \$250 all inclusive – five meals, snacks, shared cabin for one or two nights. For information about workshops and other programs go to [www.HarrisonLewisCentre.org](http://www.HarrisonLewisCentre.org), visit us on Facebook, or phone 683-2763. To register, send cheque or money order, along with name, address, phone number, and email address, to The Harrison Lewis Centre, RR 1, Port Joli, NS B0T 1S0.

## *Valley Birding*

By Patrick Kelly

**M**ARCH 4, 2012 – This was a joint Blomidon Naturalists–Nova Scotia Bird Society field trip. Only four people showed up: Paul Evans and Harriet Davies from Lawrencetown (the one on the Eastern Shore), Andy Dean from Kentville (who it was nice to meet in person after reading his many postings to NatureNS), and Erika Holland, a very enthusiastic biology student at Acadia who plans to go into ornithology. Late winter (or very early spring) usually does not result in a lot of birds, and this trip was no exception, despite the nice weather with only 20.5 species being seen over a five-hour period.

The Grand Pré area seemed to be devoid of birds. When we stopped along the western dyke at the last-reported location of a Short-eared Owl (not seen) we did get a great view of a mink that was scampering around on the ice in one of the drainage areas. The Port Williams sewage lagoon accounted for the “half” species – the fairly well-preserved remains of a Great Blue Heron that we found on the embankment midway between the fence around the ponds and the power lines. It may have come to grief on either one, or perhaps it tried to stay too late this winter and that was where it finally died of starvation. We also saw a Common Goldeneye, but the scaup, often reported there, were absent. The other hot spot of the day was the river behind Canning. At least two dozen Common Mergansers seemed to keep popping out of nowhere, and upstream, but still easily seen, was a male Hooded Merganser. From there we checked several locations where there were large numbers of gulls, but most were hidden behind higher ground.

To that point we had seen a number of birds showing evidence of breeding activity. Several corvids were seen carrying sticks, and we had a good view of two Bald Eagles next to what was likely the nest they were going to use. The last official stop was the home of Richard Stern, who had said that we could stop to check out the feeders in the back. While there we saw a Bald Eagle flying toward us that appeared to have a severely shredded and longer-than-usual tail. As it flew over us, it became clear that the eagle was actually carrying a large amount of hay or some other material that was trailing behind it. On Church Street, we had one last encounter with nesting birds. At the location of an active nest from last summer we found two Red-tailed Hawks and a nest that was in excellent repair. That they were a mating pair was likely the reason that one of them didn't mind when the other left its branch and "bounced" off the back of the one that remained before it flew off.



RICK WHITMAN

*Great Black-backed Gulls*

## *Along the Fundy Shore*

By Wayne Neily, Tremont, Kings Co., Nova Scotia

**M**ARCH 24–25, 2012 – The two joint NSBS-BNS outings this weekend went well, with good weather and excellent views of birds. The attempt to convert one very long day (8–9 hours or more) with long caravans of cars into two shorter ones (6–7 hours each) with more manageable numbers proved quite successful, although we still did not have time to visit all sites that we had hoped to and could stop only briefly at others. The number of vehicles and observers per trip did go down, perhaps more than we would have liked, but made an enjoyable experience without logistical problems for both participants and leaders. Keeping in mind Harrison Lewis's dictum that the ideal number for a birding outing is two persons, perhaps we should not be too concerned about that.

The combined number of species was a little higher than for the single trips of the past two springs (55 species versus 51–52), and this year all observers were able to get good looks at nearly every species. Thirty-two species were common to both trips, including a Turkey Vulture over the mountain at Morden Saturday (March 24) and one over the Belleisle Marsh on Sunday (March 25) and Northern Cardinals singing at several locations. Nine additional species were seen on the Kings West–Margaretsville trip Saturday and 14 more on the Annapolis County trip on Sunday, for totals of 41 and 46, respectively.

Waterfowl were highlights both days, with 17 species observed in total; only one, a pair of Hooded Mergansers at the Andrews Brook marsh in west Margaretsville, was seen Saturday but not Sunday. The wind and sea were almost calm Sunday, making observation much easier, and all the regular sea ducks could be seen along the shore in

courtship, most with 4–5 males displaying to one female, including about 12 Harlequins at Port George. The best spots for freshwater ducks were the Belleisle and Annapolis Royal marshes, with most of the dabblers already paired, and mainly the males of the divers back by now. Highlights were 60+ Ring-neckeds (mainly at Belleisle) and about 100 Buffleheads (most at Annapolis). Gadwalls, American Wigeons, Green-winged Teal, and Northern Shovelers were notable among the dabblers.

Other highlights: Saturday – five Purple Sandpipers at Margaretsville, a Black Guillemot at Morden, two Brown Creepers (brought in for great looks by Richard Stern) at Stronach Park, Kingston, a very early Chipping Sparrow at Victoria Vale, an American Kestrel at Spa Springs, and a Merlin at North Kingston; Sunday – our first Northern Harrier (a male at Bridgetown), a Ring-billed Gull at Port George, and a Red-throated Loon at Hampton, as well as nine species of ducks not identified Saturday.

One other item of note: the large number of early migrants. Robins, male and female, were on almost every lawn, and hundreds of Song Sparrows singing provided amazing contrasts to the one or two of each on the equivalent date and trip in 2007.

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FIELD TRIP REPORT

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## *Snowshoeing*

By Soren Bondrup-Nielsen

**F**EBRUARY 4, 2012 – This winter has been quite odd. We had the first heavy snow in late November, but it didn't last long and we had a green Christmas. January continued largely snow free, and I was beginning to worry that there would not be any snow for the snowshoe field trip. However, luck would have it that it snowed, and



*One snowshoer, six pretenders*

the snow stayed for the field trip, which was a success (if I may say so myself).

The last few years I have taken people on the trail along the south side of the Gaspereau River, leaving from the ball field just as the River Road starts to climb up toward Lumsden Dam, but I thought that this year we needed a change of scenery. On the day before the field trip, I drove up Gaspereau Mountain and turned along Forest Hill Road and parked at the end of the road. There was not enough snow for me to put my snowshoes on, but as I followed the path into the Wolfville Watershed Nature Reserve it was obvious that there were lots of tracks.

Saturday morning was clear and cold. When I arrived at the rendezvous site by the Wolfville waterfront there were several cars, and

by 10 a.m. we were 15 people ready to head out. We met up again at the parking lot at the end of Forest Hill Road. Four folks insisted on putting their snowshoes on, but the rest of us didn't; there were only about 10 centimetres of snow, so it was easier to get around without.

Last year we saw no tracks at all, despite all the snow on the ground, but out on the road we saw a Meadow Vole scurry under one of the parked cars. This year was very different. We had hardly started down the trail before there were tracks of Snowshoe Hares. It is no wonder they have the name they do: their hind feet leave impressions in the snow like snowshoes. An interesting phenomenon, which confuses beginning snow-track-naturalists, is the direction of travel. Animals when running or hopping land with their front feet first and then place their hind feet ahead of their front feet. Hence, the direction of travel is the direction in which the hind feet are pointing.

It was a gorgeous day, and we wandered through the reserve for two and a half hours. First we went toward the reservoir, and then we headed down to the old hemlock stand. The tracks were dense throughout the area. I always think of my dog, Freia, when I am out during the winter looking for tracks in the snow. I can see the trails of animals that she can follow using her nose when there is no snow. Following trails and interpreting what a particular animal was up to is fascinating. Other than the Snowshoe Hares, we saw tracks of Red Squirrels, Least Shrew, Short-tailed Shrews, Meadow Voles, probably Red-backed Voles, Short-tailed Weasel, mink, deer, Coyote (or big dogs in some cases), and more that I have now forgotten.

You never know what weather we will have in early February. I like to say that it is predictably unpredictable. This year we only had a little snow, but there were lots of tracks, unlike last year when there was lots of snow but no tracks. Hopefully next year will be predictably unpredictable with lots of tracks again.

## *Serviceberries or Shadbushes* *in Nova Scotia*

By Martin L.H. Thomas

THE serviceberries or shadbushes of Nova Scotia are a small group of shrubs and small trees in the genus *Amelanchier*. They are placed in the rose family but are not at all like wild roses. Most grow to 1–3 m high, but some (the Mountain Serviceberry, *Amelanchier bartramiana*, for example) reach the size of trees. There are about 20 species of serviceberry in total; 7 occur in Nova Scotia. Some, such as the Shadbush (*A. arborea*) – also known as the Bilberry, Wild Pear, or Juneberry – are common and well known. Others such as the Nantucket Shadbush, or Nantucket Juneberry (*A. nantucketensis*), are extremely rare.

The various species are quite difficult to tell apart, and to make matters more confusing one common name may be given to several different species. The various serviceberries tend to hybridize when growing quite close to each other, producing specimens with intermediate characteristics. Most shadbushes are spring flowerers having beautiful creamy white or light-pink petals, and in all examples the flowers drop their petals quite quickly, usually about a week after the buds open. The flowers are followed by smallish purple or bluish-pink berries somewhat resembling and about the size of blueberries. These berries are sweet and tasty and are a favourite food of many wild birds. Getting a good quantity of berries before the birds do is quite a challenge; however, if you succeed they are delicious as a raw snack, made into a pie, or stewed. They make good jam, having lots of natural pectin that acts as a gelling agent.

A related species native to the prairies, the Saskatoon Berry (*A.*

*alnifolia*), also called a Shadbush or Juneberry, bears fruit more profusely than our native examples. It can be grown here with a little tender loving care. In the prairies, it is grown commercially and is the second most important fruit crop, only exceeded by strawberries. The fruit of all the serviceberries are very nutritious, having a very high content of antioxidants, which are said to help prevent cancer and heart problems.

Although the common names used for these plants are all mixed up, they do give some useful information about their characteristics. The shadbush name comes from their tendency to bloom at about the same time as American Shad move upstream to spawn in the spring. In the past, large numbers of shad migrated into many coastal rivers and large streams and were caught for food at that time. One supposes the fact that the prairie species is also called Shadbush results from the movement of settlers from along the east coast to the prairies. The Juneberry name also results from the spring flowering event. Bilberry comes from the resemblance of the fruit to blueberries; in England blueberries were usually called Bilberries. The name Wild Pear is a bit less easily explained, but apples, pears, and their allies are also in the same family (Rosaceae) as the serviceberries. The name serviceberry comes from the similarity of the fruit to the related European *Sorbus*, or Mountain Ash. If you look up this shrub on the Web, you will find a host of other common names such as Shadblow, Sugar Plum, Wild Plum, and Chuckley Pear (in Newfoundland). This only goes to show how unreliable common names can be in trying to correctly identify any animal or plant.

The very short flowering season and the variability found among shadbushes in Nova Scotia makes them a real challenge to identify. Because of this, most people just identify them generally as serviceberries. They also can be mistaken for Pin Cherries (*Prunus pensylvanica*), which bloom at about the same time and with which they are closely related. The mixed-up common names also add to the confusion, and because of this we use scientific names, where necessary, below.

Botanists have been able to identify several characteristics that



ABOVE:  
Nantucket  
Serviceberry  
(*A. nantucketensis*),  
Peggy's Cove Barrens.  
Petals 5–6 mm long

RIGHT:  
Downy Serviceberry  
(*A. arborea*), Port  
Williams





ABOVE:  
Smooth Serviceberry  
(*A. laevis*), Kingston Sand  
Barrens



LEFT:  
Shadbush (*A. canadensis*),  
Acadia Botanical Garden

PHOTOS BY MARTIN THOMAS

help the layperson to separate the species. All species except one have flowers in racemes. A raceme is a group of flowers arising on side shoots from a single central stalk. The exception is the Mountain Serviceberry (*A. bartramiana*), which has clusters of two to four flowers. Mountain Serviceberries are common from Kings and Cumberland Counties to the northern tip of Cape Breton. Of the ones with flowers in racemes, only two, *A. arborea* and *A. laevis*, can reach tree size. You can tell these apart easily only at flowering time: in *A. arborea* the leaves are still unfolded at flowering, whereas in *A. laevis* the reddish leaves are at least half-grown when the flowers appear. The others are all shrubs and differ in the serration of the leaf edges. All except *A. spicata* have teeth almost to the base of the leaves, whereas *A. spicata* leaves are toothed only on the outer half. Of the remaining three species only *A. canadensis* has leaves of a leathery texture; the other two have thin leaves. Both of these thin-leaved examples, the St. Lawrence Serviceberry (*A. fernaldii*) and the Nantucket Serviceberry (*A. nantucketensis*), are rare. The former has been found at only a few scattered locations, including Cape Blomidon; it is a very small shrub rarely exceeding 1 m high.

The Nantucket Serviceberry is perhaps the most interesting member of this group of plants. It is a member of the Atlantic Coastal Plain Flora (ACPF) and is common only in coastal areas such as sand plains in the northeast United States. In Canada it is restricted to Nova Scotia; it has been found in very small numbers in three scattered locations, including Peggys Cove. If you can find one during its brief flowering period, note that it differs from other serviceberries in having very short petals only 2.5–6 mm long. It also displays a very rare feature of flowering plants in that it can produce pollen from the tips of a few petals. This is called “andropetalý”; it results from a few stamens becoming petals. The only other common example that does this is the Garden Ranunculus (*Ranunculus asiaticus*).

## *Wildfires and Clearcuts*

By Donna Crossland

**F**OREST fires ignited by our forefathers are used to justify today's clearcuts. A retrospective glimpse of Nova Scotia during the early European settlement period can reveal important information otherwise lost from the modern understanding of the natural characteristics of our forests. From this early period, R. Lyons (1885) provides a valuable insight:

*It is a matter of record that the forests of Nova Scotia had not been visited by any great fires until 1784, just 100 years ago. [...] The aborigines, as well as the French settlers, were careful never to make fires in the woods in the dry season of summer. In 1783, however, a great number of refugees and discharged soldiers came into the country and many new settlements were formed. The following year no rain fell in June, the latter part of May and the first ten days of July. Fires were kindled in the clearings by the new settlers, and it is reported that within a fortnight two thirds of the province were burnt over. —EXCERPT FROM A REPORT TO GREAT BRITAIN PARLIAMENT BY ROBERT LYONS IN 1884.*

Titus Smith, an early botanist and surveyor, while conducting the first survey of the province's interior, referred to these same fires: "The great influx of inhabitants in 1783 produced, in the course of a few years, a complete change in the appearance of the forest" (Smith 1835).

While Lyons reported that two-thirds of Nova Scotia forests burned in 1784, the carnage didn't end there. The 1800s witnessed still more fire, as lands were subjected to more settlement and log-

ging. By the time the 1900s arrived our forests had been subjected to repeated fires. Bernhard Fernow, in his report on the forest condition in 1912, estimated that approximately one-quarter of the forest area of Nova Scotia was semi-barren, attributed mainly to repeated wildfires (Fernow 1912). Catastrophic wildfires destroyed vast tracts of majestic, centuries-old hemlocks, tall Red Spruce, grand Sugar Maple, and Yellow Birch in the virgin Acadian forest prior to its ever being subjected to the axe or saw. Most of these fires were not recorded, as there were few people and little means to document the facts during those early days. Some scant early records on wildfires have survived through the centuries, but nothing has ever been comprehensively compiled on this fascinating chapter of our natural history. (This would be a captivating and worthwhile task for a naturalist with an interest in historical ecology.)

Many 18th and 19th century forest observers commented on the increased frequency of fires following European settlement, the fires being nearly entirely generated from human activities rather than natural causes. "Forest fires, practically without exception, are the result of human agency" (Bruncken 1900). Titus Smith pointed to two basic human causes of fire: fires ignited by "design" or "negligence." There were some compelling reasons for purposefully setting fires. Land grants stated the terms and conditions under which the forests must be cleared by early settlers. Within five years, for every 50 acres of land considered arable, three were to be cleared for cultivation. Non-compliance resulted in lands reverting to the crown. Settlers, equipped with only an axe, found fire to be a necessary tool to clear land and meet the terms of their grants. Trees were an obstacle to cultivation. Every field was created through aid of fire, and countless land-clearance fires escaped to surrounding forests without intervention.

Early wildfires often raged through forests unheeded until they met with some natural fire barrier (a lake, bog, river, or coast). Interestingly, fires were observed to commonly stop at the edge of hardwood stands, the canopy of moist green leaves less flammable than resin-filled needles of conifer-dominated stands. Young, early-suc-

cessional forests that grew up following fire featured dense growths of Balsam Fir and other species whose fine branches, being closer to the ground, were more combustible than the smooth, tall trees of shaded, old-growth forests. Thus new forests were even more fire susceptible and often burned uncontrollably once ignited. Fires were particularly frequent near more settled areas along the coast and on lands near Halifax and other communities. Only after the 1940s did we gain the technical support to effectively control wildfires using better means of fire detection, aerial support, and mechanized tools. Smokey Bear (adapted from the US Forest Service in the 1940s) sensitized us to be more careful in the woods: “Only YOU can prevent forest fires.”

Drought periods resulted in more intense, deep-burning fires that destroyed the very soil and humus layers on which the forests grew. Repeated fires had similar impacts on soil humus and nutrients, stunting forest growth for centuries. Such is the situation we see today on the fire barrens, largely the result of our misuse through previous centuries. Lyons (1885) stated that during the 1840s many miles of wilderness east of Halifax was of

*open barrens. The burnt stumps, trunks, roots of spruce and white pine trees, many of large dimensions, were [...] scattered all over the barrens [...] although the surface has been burnt over many times within the last 45 years, still the forest goes on reproducing itself and being burnt down and will continue to do so until active means are resorted to for having the forest fires put out as soon as observed.*

Similarly, some of the barrens in southwest Nova Scotia were repeatedly burned to aid blueberry production.

This brief synopsis of the post-European-settlement fire regime can be summed up as a time of frequent, large-scale wildfires, the vast majority caused by human activity. But what do we know of the pre-European (or natural) fire regime? Fires, along with other disturbance agents, such as wind, insect infestations, and ice storms, peri-

odically occur in the Acadian forest. Such events serve an important function in forest renewal and contribute to the mosaic of diverse stand compositions and age classes inherent in the Acadian forest. Very often, disturbances open up small gaps as one tree or a small group die or are blown over. Other times, the entire stand is replaced (a “stand-replacement” event), perhaps the result of a hurricane or intense fire.

Just how often did stand-replacement fires shape the natural forest condition? Only two natural ignition sources existed: fire use by the Mi’kmaq and dry-lightning strikes. Very little is known about the relationship of Mi’kmaq people with wildfire. Titus Smith (1835) spoke of the “habits of the Indians, who carefully avoided setting the woods on fire.” Lightning-caused forest fires were relatively infrequent, with only about 3 percent of fires caused by lightning in Nova Scotia (NSDNR 2009). While lightning strikes are common, most of them are followed by heavy rainfall, thereby curtailing potential wildfires. Dry-lightning strikes are less common here; they are more frequent in drier climatic regions, such as the boreal forest, or at higher altitudes, such as in the Rocky Mountains, where a single electrical storm can cause several wildfires. Natural fire regimes vary widely across North America.

How is any of this historical information pertinent to today’s forest management practices? The cornerstone to ecologically based forest harvesting is to lessen its impacts by more closely approximating natural disturbance events. In other words, clear-cutting more closely mimics the natural occurrence of a stand-replacement wildfire event (although the effects are not identical), while partial harvests emulate small blow-downs or tree mortality caused by insects or diseases. Thus you can see why it is important to accurately define the natural disturbance dynamic that operates in our forests.

Here’s the kicker: Since clear-cutting is the preferred harvest method (being the cheapest), the forest industry finds it is in its best economic interest to declare that large portions of Nova Scotia are “naturally” subjected to frequent stand-replacement events. In the absence of reputable scientific or historical research, an astounding



ANDREW STEEVES

43 percent of the province is said to operate under a frequent natural disturbance regime that gives rise to even-aged forests (Neily et al. 2008). (There are documents that also overemphasize the natural role of fire in Nova Scotia.) According to the report *Mapping Nova Scotia's Natural Disturbance Regimes* (Neily et al. 2008), many of the areas repeatedly burned by European settlement fires are now deemed part of the frequent “natural disturbance” regime, thereby justifying the wholesale destruction of forests by clear-cutting. Historical references on wildfires have been cherry-picked to overstate the importance of fire, the human causes of these fires conveniently downplayed or omitted. Such statements guide “ecologically based forestry practices.” Large tracts of lands certified by FSC (Forest Stewardship Council) have been clear-cut under the guise of emulating the “natural” disturbance regime. FSC, in my opinion, has lost credibility as an ecologically reputable forest certification program. Nonetheless, the *Guide to FSC Certification* (MTRI 2011) provides some hope of restoring FSC integrity, stating that “as natural disturbances in the Acadian Forest are mostly small and frequent, harvesting based on natural disturbance should usually create only small gaps in the forest canopy, as might be created by the death of one or several trees. [...] Large natural disturbances were historically rare ...”

Nova Scotia's human-altered fire regime is not unique but similarly shared throughout the entire Acadian forest region, including PEI, New Brunswick, and Maine. I concluded from forest ecology research in eastern New Brunswick that vast forest tracts dominated by old-growth hemlock–Red Spruce were rapidly transformed to present-day forests of Jack Pine–aspen–Black Spruce; the agent of change was human-caused fire (Crossland 2006). There has been little interest exhibited in these research results to date. Short cutting rotations of 40–60 years continue to be justified based on modern-day forest stands that are adapted to repeated fire (conveniently ignoring human-caused ignition sources).

We must insist on using more peer-reviewed, science-based evidence (mixed with healthy portions of common sense and ecological deduction) to guide forest harvesting. Historical forest ecology provides clear evidence that Nova Scotia forests were dominated by late-successional, shade-loving species of hemlock, Sugar Maple, Red Spruce, Yellow Birch, and beech. Such species are highly sensitive to fire and could not survive the new disturbance regime created by our ancestors. Furthermore, forests were dominated by much larger trees and older-growth stands than presently (Mosseler et al. 2003). To achieve such conditions, long intervals between intense disturbance events were necessary.

Recent scientific research indicates that the key agent of forest disturbance was perhaps not fire at all, but high-wind events (Seymour et al. 2002; Ponomarenko 2007). Dr E. Ponomarenko (2007) analyzes historic events of wind, fire, and insect infestations from hundreds to thousands of years ago still discernible in the soil. She teaches us that nearly everything we need to know about the historic Acadian forest lies recorded within the soil. More scientific research by Ponomarenko and others, as well as an examination of archival documents (e.g., sawmill records), can provide quantifiable evidence of what was lost during this last brief chapter of our history.

Wise management of Nova Scotia forests for the future requires an accurate understanding of our past.

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## *Wolfville Christmas Bird Count 2011*

By Alison Bogan and Jim Wolford, coordinators

**D**ECEMBER 16, 2011 – Forty-six observers took to the field with daytime temperatures ranging from  $-4$  to  $0^{\circ}\text{C}$ . The winds were light and snow on the ground ranged from none to 5 cm. Only small ponds were frozen, while running water and lakes were open. In addition to the field observers, 82 people watched feeders during the day. Count numbers were smaller than other years, perhaps because the benign December weather didn't encourage the birds to concentrate in the usual hot spots.

In addition to the 66 species listed on count day, eight species were seen during the count week (three days before and three days after count day), for a total of 74 species seen for this Christmas count.

Unidentified species of scoter (6), gull (300), and sparrow (2) were reported; they contribute only to the numerical count, not the species count.

Species	Field Count	Feeder Count	Total
Red-throated Loon	1	–	1
Common Loon	3	–	3
Great Blue Heron	3	–	3
Canada Goose	168	12	180
Black Duck	2152	–	2152
Mallard	599	21	620
American Wigeon	2	–	2
Common Eider	1	–	1
Surf Scoter	3	–	3

Species	Field Count	Feeder Count	Total
White-winged Scoter	1	–	1
scoter sp.	8	–	8
Common Goldeneye	4	–	4
Common Merganser	7	2	9
Red-breasted Merganser	4	–	4
Hooded Merganser	18	–	18
Bald Eagle (adult)	99	24	123
(immature)	101	10	111
(unknown)	2	13	15
Northern Harrier	2	1	3
Sharp-shinned Hawk	1	–	1
Red-tailed Hawk	80	7	87
Merlin	2	–	2
Peregrine Falcon	1	–	1
Rough-legged Hawk	1	–	1
Ring-necked Pheasant	53	40	93
Ruffed Grouse	5	–	5
Ring-billed Gull	18	–	18
Herring Gull	4307	54	4361
Iceland Gull	1	–	1
Gr. Black-backed Gull	833	–	833
Lr. Black-backed Gull	2	–	2
gull sp.	300	–	300
Rock Pigeon	291	5	296
Mourning Dove	466	212	678
Great Horned Owl	1	–	1
Barred Owl	–	1	1
Downy Woodpecker	31	55	86
Hairy Woodpecker	26	28	54
Northern Flicker	25	19	44
Pileated Woodpecker	4	1	5
Red-bellied Woodpecker	2	3	5
Horned Lark	11	–	11
Blue Jay	569	279	848

Species	Field Count	Feeder Count	Total
American Crow	1303	127	1430
Common Raven	264	16	280
Black-capped Chickadee	684	292	976
Red-breasted Nuthatch	13	7	20
White-breasted Nuthatch	40	40	80
Brown Creeper	6	–	6
Golden-Crowned Kinglet	51	–	51
Ruby-crowned Kinglet	1	–	1
American Robin	37	47	84
Mockingbird	4	–	4
Cedar Waxwing	8	30	38
European Starling	5627	209	5836
American Tree Sparrow	53	–	53
Savannah Sparrow	18	1	19
Song Sparrow	92	8	100
Swamp Sparrow	1	–	1
White-throated Sparrow	32	26	58
sparrow sp.	2	–	2
Dark-eyed Junco	190	74	264
Lapland Longspur	1	–	1
Snow Bunting	51	–	51
Northern Cardinal	4	22	26
Baltimore Oriole	–	2	2
Pine Grosbeak	1	–	1
Purple Finch	22	8	30
American Goldfinch	974	542	1516
Evening Grosbeak	7	–	7
House Sparrow	71	12	83
<b>Total Birds</b>	<b>19,763</b>	<b>2,250</b>	<b>22,013</b>
<b>Total Species</b>	<b>66</b>		

Field observers put in 86 hours on foot, travelling 170 km; 54 hours by car, travelling 790 km. Feeder watchers recorded 105 hours observing. The following additional species were seen during count week: Wood Duck, Gadwall, Northern Pintail, Turkey Vulture, Snowy Owl, Belted Kingfisher, Red-winged Blackbird, Common Redpoll

## *The 2012 Transit of Venus*

By Roy Bishop

A RARE EVENT

THE year 2012 is a special astronomically – not because of silly reports that the world will end on December 21 but because, for the last time in the 21st century, on June 5 Venus will pass directly in front of the Sun.

From the third planet, only Mercury and Venus can be seen silhouetted against the Sun, an event called a “transit.” Mercury passes between Earth and Sun about once every four months, Venus about once every year and a half. However, because their orbits are tilted a few degrees relative to Earth’s orbit, Mercury and Venus usually pass north or south of the solar disk and no transit occurs. Transits are uncommon for Mercury, rare for Venus. During the 20th century there were 14 transits of Mercury, zero transits of Venus. Currently, transits of Venus occur in pairs, with 8.0 years separating the members of a pair, and the pairs separated alternately by 105.5 and 121.5 years, resulting in a 243.0-year period for the pattern.

### HISTORY AND SIGNIFICANCE

Johannes Kepler, extraordinary astronomer and author of the Rudolphine Tables of planetary positions, predicted the Venus transit of 1631. Unfortunately, he died in 1630. A few years later in England, 21-year-old Jeremiah Horrocks predicted the 1639 transit, and he and his friend William Crabtree were the first to see a transit of Venus – on December 4 that year. Beginning with the transit pair in that century, years having transits of Venus include 1631/1639D,

1761/1769J, 1874/1882D, 2004/2012J, 2117/2125D, where “D” denotes a pair occurring in December, “J” in June.

Kepler’s third law, later explained by Newton’s mechanics, links the relative sizes of the planetary orbits to their timed periods of revolution, but how can the absolute size of any one orbit be determined? The English astronomer Edmund Halley (1656–1742) emphasized that observations of a transit of Venus from locations widely separated in latitude could be used to determine the size of Earth’s orbit and hence, via Kepler’s third law, the scale of the Solar System. Halley developed the technique mathematically and outlined a practical way to carry out the enterprise. Just as he knew he would not live to see his predicted return of *his* comet, Halley again reached beyond his own mortality to urge astronomers to go to the ends of the Earth to observe the 18th-century Cytherean transits and thereby attain the first step in determining the scale of the universe.

Difficulties with weather, with establishing accurate positions for observing sites, and the Seven Years War between England and France limited efforts to carry out Halley’s plan in 1761, but with the Treaty of Paris in 1763 an unprecedented effort was launched to observe the 1769 transit. It was the first worldwide, international venture in the name of science. The most famous of the expeditions was that sponsored by England’s Royal Society and led by Lieutenant James Cook (later Captain Cook) of the Royal Navy, who observed the transit from Tahiti. His ship on that legendary voyage was the bark *Endeavour*, after which NASA named one of its space shuttles. The British Admiralty chose Cook because of his reputation as an outstanding seaman, captain, hydrographer, and astronomical observer while on the east coast of present-day Canada during the years 1758–1767. During that period Cook spent more time in Halifax, Nova Scotia, than in any other one location during his adult life.

The 1874/1882 transits were also widely observed, but by then advances in astronomical knowledge and technology had altered the best way to determine the scale of the Solar System. Observations of asteroids were providing results of higher accuracy. Yet the transit results were remarkably good. In 1890 Simon Newcomb, a

native of Nova Scotia and director of the Nautical Almanac Office of the U.S. Naval Observatory, re-examined the 1761 and 1769 transit observations. By using accurate longitudes for the observation sites, he arrived at a value for the astronomical unit that lies within 0.1 percent of today's value. Occasionally, one reads a superficial reference to the 18th-century transit observations stating that these efforts were generally unsuccessful. Newcomb's result indicates otherwise.

Today, precision timing of signals from interplanetary spacecraft and of radar reflections from Mercury, Venus, and Mars provide the best data, far surpassing those available from transit observations.

The last transit of Venus was on June 8, 2004. Sherman Williams, a charter member and a past-president of the Blomidon Naturalists Society, was the only one of nearly one million Nova Scotians to see the 2004 transit. Everyone else was under clouds that morning!

The 2012 transit is the last that anyone now alive will ever experience, for there will not be another until December 11, 2117 – 105.5 years from now.

#### AN INTELLECTUAL SPECTACLE

The most spectacular sight that the heavens offer is a total eclipse of the Sun, an event that is visible, on average, about once in 300 years at any one location on Earth, or more like once in 1000 years for a place like Nova Scotia where 2 in 3 days are cloudy. A total solar eclipse is a visceral, emotionally overpowering spectacle for anyone, encompassing the entire sky, the surrounding landscape, and the observer. By travelling to the path of totality, it is possible to see several total solar eclipses in a lifetime, yet the vast majority of people never see one.

In terms of spectacle, a transit of Venus is different. To an uninformed observer a transit of Venus is underwhelming, even boring, as over several hours a small black dot, like a geometrically perfect sunspot, creeps ever-so-slowly across the solar disk. Moreover, special equipment is needed to view a transit; otherwise, you would never notice it. An appreciation of the orbital dynamics involved,

knowledge of the history of the role of transits in establishing the scale of the solar system, and the rarity of the event all combine to make a transit of Venus an intellectual spectacle of the first rank.

#### TO SEE THE TRANSIT

From central Nova Scotia, including the Wolfville area, Venus will begin passing in front of the Sun at 7:04 p.m. ADT on Tuesday, June 5. It will be fully upon the solar disk by 7:21 p.m. and will begin to work its way westward across the brilliant disk, until Sun and planet vanish below the horizon at 8:59 p.m. Observers far to the west, in Alaska, Hawaii, and Japan will witness the entire transit.

**A WARNING:** Never look at the surface of the Sun, either directly with the unaided eyes or especially through binoculars or a telescope. Permanent partial blindness can result almost instantly in the case of telescopic viewing. Commercially made solar filters exist for direct viewing of the Sun, but these are specialized items that can be employed safely only by experienced solar observers. Do not attempt to fabricate your own solar filters out of readily available household items, for these may be transparent in the hazardous invisible infrared part of the solar spectrum.

The most convenient way to view the transit is by using binoculars to project the Sun's image onto a white cardboard viewing screen placed 30 or 40 cm behind the eyepiece of the binoculars. No filter is needed. Do NOT aim the binoculars at the Sun by looking through them! Mount the binoculars on a secure, adjustable stand such as a camera tripod, cover one side of the binoculars so there is only one image, and attach a second cardboard sheet to the binoculars (with a hole in it so light can enter the binoculars) to prevent the direct rays of the Sun from striking the viewing screen. Position a physical barrier to prevent anyone from trying to look into the eyepieces of the binoculars (children especially are apt to try to do that). While looking at the solar image on the viewing screen, focus the binoculars for a sharp image. Finally, don't wait until the day of the transit

to assemble this viewing arrangement. Practice several days before June 5 using the 7 p.m. evening Sun.

May your sky be clear on June 5.

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WEATHER

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## *Winter Weather 2011–12, Eastern Annapolis Valley*

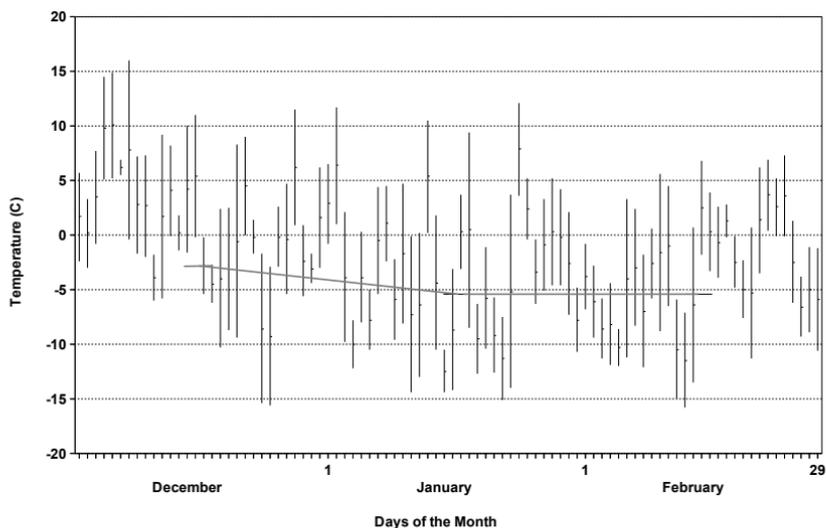
Larry Bogan, Cambridge Station

EVERYONE agrees that this was a mild winter. The temperatures were above average and the snowfall was small for a typical winter here.

	Temperature			Precipitation	Snow on Ground
	Max (°C)	Min (°C)	Mean (°C)	Total (mm)	Mean (cm)
<b>December</b>	5.5	-3.3	1.1	99	1
(30 yr. average)	(1.6)	(-6.5)	(-2.5)	(130)	(6)
<b>January</b>	1.3	-7.9	-3.3	40	1
(30 yr. average)	(-1.2)	(-9.8)	(-5.5)	(127)	(21)
<b>February</b>	0.5	-7.5	-3.5	60	7
(30 yr. average)	(-0.9)	(-9.5)	(-5.2)	(101)	(25)
<b>Season</b>	2.5	-6.2	-1.9	199	3
(30 yr. average)	(-0.2)	(-8.6)	(-4.4)	(358)	(18)

Source: Environment Canada data for Kentville, NS (<http://weather.gc.ca>) and Canadian Climate Normals and Averages 1971–2000 (Kentville).

Daily Temperature - Dec, Jan, Feb  
Kentville, 2011-2012



#### TEMPERATURE

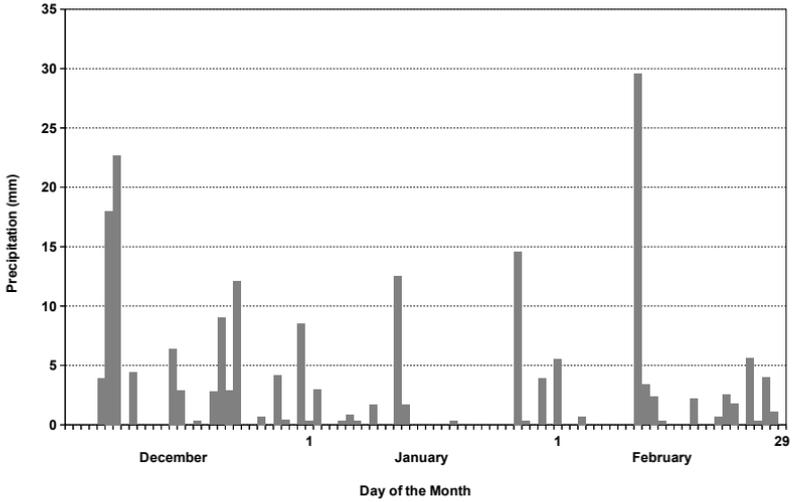
Each month of the winter had above-average temperatures. Mean temperatures exceeded the 30-year averages by  $3.6^{\circ}\text{C}$  in December,  $2.2^{\circ}\text{C}$  in January, and  $1.7^{\circ}\text{C}$  in February for a seasonal  $2.5^{\circ}\text{C}$  above the average. Note that December was the warmest month, and the relative warmth decreased throughout the winter. Only six days had a mean daily temperature below  $-10^{\circ}\text{C}$ ! I have put lines on the temperature chart showing the average temperatures for the winter, and you can readily see that most days have mean temperatures above the line.

#### PRECIPITATION

Daily snowfall information is no longer collected at the Horticultural Research Centre in Kentville, so we cannot compare this winter with the long-term averages. Depth of snow on the ground *is* measured; we had a mean depth throughout the winter of only 3 cm, compared

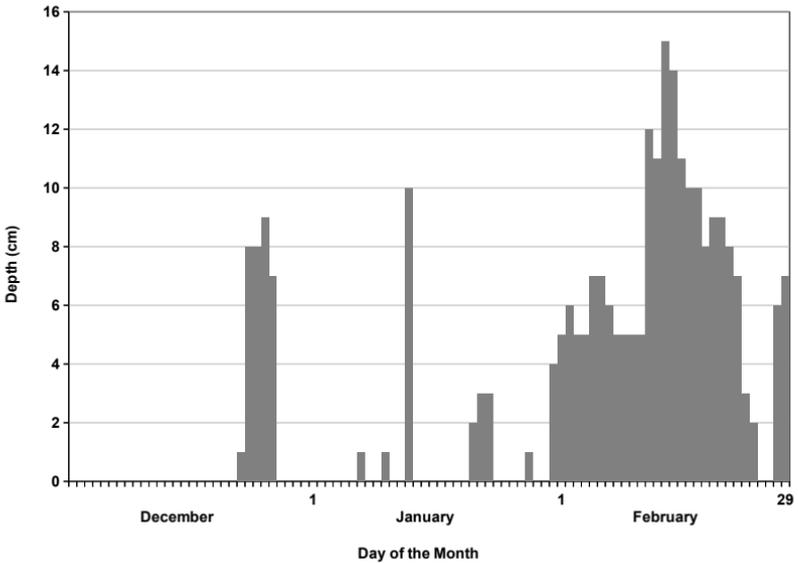
Daily Precipitation - Dec, Jan, Feb

Kentville - 2011-2012



Depth of Snow on the Ground - Dec, Jan, Feb

Kentville 2011-2012



to the 30-year average of 18 cm (see the accompanying chart of daily snow depths). We only briefly had more than 10 cm for a week in mid-February. Compare this year with the corresponding chart for the winter of 2010–11, when we had snow depth of over 50 cm throughout February 2011 (see page 47 of the BNS Newsletter Volume 38, No. 1).

Total precipitation was below the expected values each month and ended the season with some 160 mm (6 inches) less than the average 358 mm. With the warmer-than-normal temperatures, much of the precipitation we did get was rain rather than snow. Once the snow disappeared in late February, there was ice underneath from the rains and freezing rains.

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ASTRONOMY

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## *What's in the Sky?*

by Roy Bishop

### APRIL

**All month:** Venus brilliant in the western evening sky

**April 2, 3:** Venus passes the Pleiades (binoculars)

**April 6:** Full Moon, and to its left the star Spica and (further left) Saturn

**April 6, 7, 8, and 9:** Large perigean spring tides

**April 9 to 23:** Dark, moonless evening skies

**April 15:** Saturn at opposition (see your BNS Calendar)

**April 22:** Jupiter below the crescent Moon (binoculars, before 9:20 p.m.)

**April 24:** Waxing crescent Moon below Venus in the evening sky

**April 30:** The star Regulus is above the Moon, with Mars to the left of Regulus

#### MAY

Venus brilliant in WNW evening sky, but descending day-by-day toward the Sun. Saturn lies 5 degrees north of the star Spica (spykah) all month.

**May 5:** Largest Full Moon of 2012

**May 5, 6, 7:** Large perigean spring tides

**May 5, 6, 7, 8:** Venus lies within one degree of the star El Nath

**May 20:** Annular solar eclipse in the western USA, not visible from Nova Scotia

**May 22:** Waxing crescent Moon is to the lower left of Venus

#### JUNE

Saturn lies 5 degrees north of the star Spica all month

**June 4:** Full Moon

**June 4, 5, 6:** Large perigean spring tides

**June 5:** Venus passes in front of the Sun (see the article elsewhere in this newsletter)

**June 5 to 20:** Mercury is low in the WNW evening twilight (before 22:00)

**June 15:** Earliest sunrise of the year (05:30)

**June 20:** Summer solstice 20:09, longest daylight of the year

**June 25:** Latest sunset of the year (21:06)

#### JULY

Saturn lies 5 degrees north of the star Spica all month

**July 3:** Full Moon

**July 1 to 15:** Jupiter stands above Venus in the dawn sky (04:00–05:00)

**July 15:** Venus, Jupiter, Moon, Aldebaran, Hyades low in the dawn  
(03:30–04:15, binoculars)

**July 24:** Southwest sky at 22:00: Moon, Mars upper right of Moon,  
Spica and Saturn to the left

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POEM

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## *Mother Nature*

By Emily Dickinson

NATURE, the gentlest mother,  
Impatient of no child,  
The feeblest or the waywardest, –  
Her admonition mild

In forest and the hill  
By traveller is heard,  
Restraining rampant squirrel  
Or too impetuous bird.

How fair her conversation,  
A summer afternoon, –  
Her household, her assembly;  
And when the sun goes down

Her voice among the aisles  
Incites the timid prayer  
Of the minutest cricket,  
The most unworthy flower.

When all the children sleep  
She turns as long away  
As will suffice to light her lamps;  
Then, bending from the sky

With infinite affection  
And infiniter care,  
Her golden finger on her lip,  
Wills silence everywhere.

*Source: Project Gutenberg*

# BLOMIDON NATURALISTS SOCIETY

## 2012 Membership Fees & Order Form

Members receive four issues of the BNS newsletter annually. As a registered charity, BNS issues receipts for all donations. Members may also join Nature Nova Scotia through BNS and will receive FNSN News, the federation newsletter. (Neither BNS nor NNS membership is tax deductible.)

NAME

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ADDRESS

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POSTAL CODE

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E-MAIL

TEL

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*In signing this membership application, I/we hereby waive & release the Blomidon Naturalists Society, its executive committee and members, from all claims for injury and/or damage suffered at any function or field trip organized by the Blomidon Naturalists Society.*

SIGNATURE

DATE

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No.	Description	Price	Total
_____	Individual/ Family Membership	\$20.00	\$ _____
_____	Junior (under 16 years) Membership	\$1.00	\$ _____
_____	Nature Nova Scotia Membership	\$5.00	\$ _____
_____	2012 BNS Calendar	\$15.00	\$ _____
_____	Natural History of Kings County	\$14.00	\$ _____
_____	Within the View of Blomidon	\$20.00	\$ _____
_____	Checklist of Kings County Birds	\$5.00	\$ _____
_____	Blomidon Naturalist crest	\$5.00	\$ _____
_____	Blomidon Naturalist hat	\$15.00	\$ _____
_____	BNS Calendar Photos (Screensaver)	\$10.00	\$ _____
	Postage: (calendar \$2) (parcel \$6)		\$ _____
	Tax-deductible Donation		\$ _____
	(Registration number: 118811686RR0001)		

**TOTAL** \$ \_\_\_\_\_

Address cheques or money orders to Blomidon Naturalists Society for membership and other purchases to: **Ed Sulis, 107 Canaan Avenue, Kentville, NS B4N 2A7.** Due date is January 1 of current year.



# SOURCES OF LOCAL NATURAL HISTORY

Compiled by the Blomidon Naturalists Society

TOPIC	SOURCE	OFFICE OR HOME TELEPHONE	
<b>Amphibians &amp; Reptiles</b>	Sherman Bleakney	H: 542-3604	
	Jim Wolford	H: 542-9204	
<b>Astronomy</b>	Roy Bishop	H: 542-3992	
	Sherman Williams	H: 542-5104	
	Larry Bogan	H: 678-0446	
<b>Birds – General</b>	Bernard Forsythe	H: 542-2427	
	Richard Stern	O: 678-4742	H: 678-1975
	Gordon & Judy Tufts	H: 542-7800	
	Jim Wolford	H: 542-9204	
	Jean Timpa	H: 542-5678	
<b>Butterflies &amp; Moths</b>	Jean Timpa	H: 542-5678	
<b>Fish &amp; Wildlife</b>	NS Department of Natural Resources	O: 679-6091	
<b>Flora:</b>	Ruth Newell	O: 585-1355	H: 542-2095
<b>Fungi:</b>	Nancy Nickerson		H: 542-9332
<b>Hawks &amp; Owls</b>	Bernard Forsythe	H: 542-2427	
<b>Indian Prehistory &amp; Archeology</b>	James Legge	H: 542-3530	
<b>Mosses &amp; Ferns</b>	Ruth Newell	O: 585-1355	H: 542-2095
<b>Mammals</b>	Tom Herman	O: 585-1358	H: 678-0383
<b>Rocks &amp; Fossils</b>	Geology Dept., Acadia University	O: 585-2201	
<b>Seashore &amp; Marine Life</b>	Sherman Bleakney	H: 542-3604	
	Jim Wolford	H: 542-9204	
	Michael Brylinsky	O: 585-1509	H: 582-7954