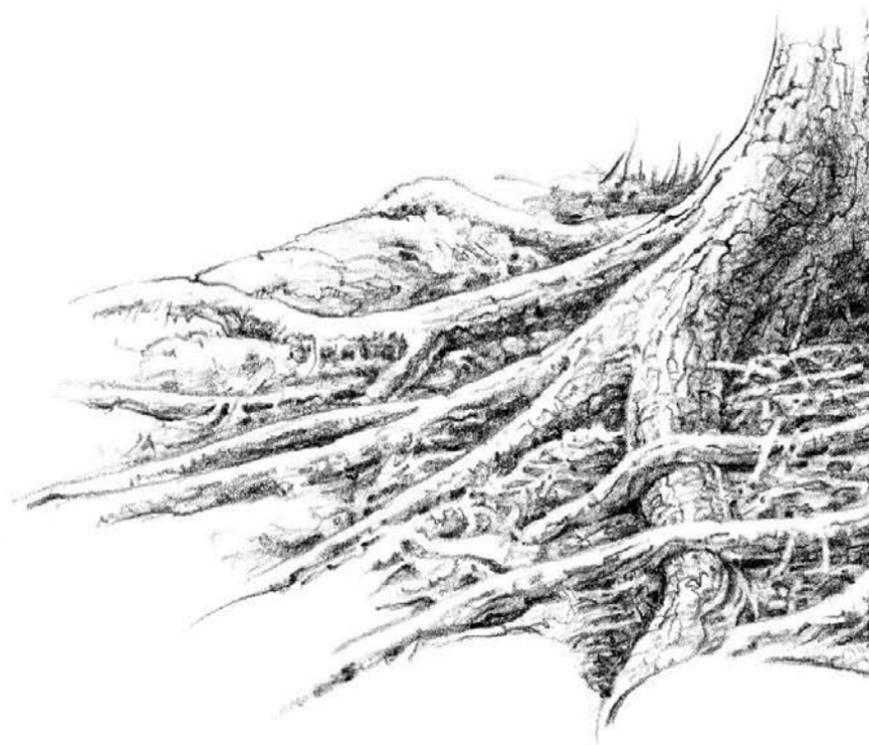
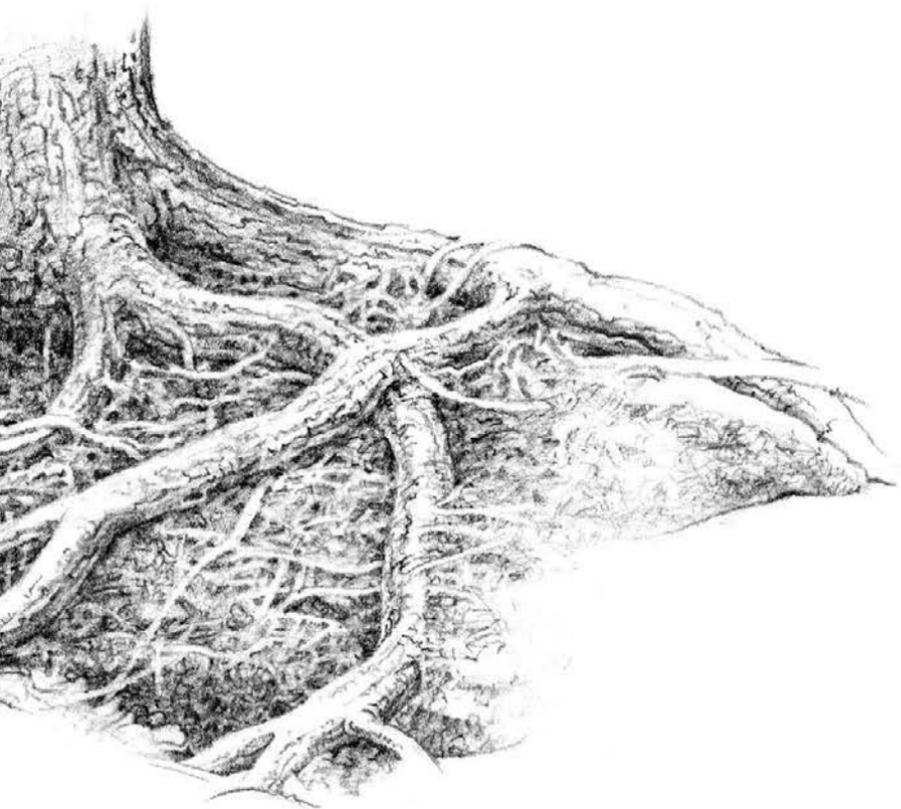


BLOMIDON  
NATURALISTS  
SOCIETY



SUMMER 2015 NEWSLETTER  
*Volume 42 · Number 2*





# ❖ THE BLOMIDON NATURALISTS SOCIETY ❖

*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

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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)

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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 Summer:  
August 20, 2015**

## OUT AND ABOUT

JEAN TIMPA, EDITOR

Actually, I am outside as I pen this on June 27 – much later than it should have been, but much more conducive to being outside than it was in March, when the snow was piled at its highest and the fuel truck had to come three times! The sky is a beautiful clean blue, cloudless so far. There are masses of green plants and tall trees of various types, with leaves ever so gently moving in the slightest of breezes. A large wild rose of some sort is blooming and sharing its fragrance within a few inches of me, and not long ago a fat, fuzzy bumblebee visited it briefly. The cherries are beginning to show signs of ripening, although many of them were knocked off their slim branch-holds by the drenching rains of tropical storm Bill. If one did not know better, one might conclude that all is well with the world. As a confirmed environmentalist and tree hugger, I mourn daily at the news of flooding, droughts, pollution violations, and increasing damage and deaths from tornadoes and lightning strikes as the temperature increases.

Despite the frustrating sadness of our earthly degradation, there are still some wonderfully caring happenings. A few days ago there was a short news item about the rescue of a Pacific Humpback Whale in Vancouver waters by a cetacean rescue group, just in the nick of time. The whale was thoroughly entangled with trap-line, from snout to tail, and was becoming weaker to the point of suffocation when the rescue crew was able to “convince” the whale to surface, stay alongside, and allow all the ropes to be cut and untangled, at which point it happily swam away, just having used up one of its nine lives. Initially, this rescue appeared to be an impossible task. I hope other BNS members saw this clip too. It would make a great program theme some evening: Human ability to communicate successfully with other animals, or maybe it is other animal species communicating with us. Perhaps someone from the Atlantic

cetacean rescue group could speak to us, during their off season, about their experiences,.

Kudos to everybody who has volunteered time and talents recently to keep BNS ticking along. We all have other lives to live, and sometimes artificial timelines (for publishing this newsletter, for example) do not work as well as theory would dictate. A special thanks to Andrew Steeves for updating the look of our Newsletter, starting in the spring 2015 issue, and explaining all its artistic and scientific intricacies, too. Thanks to Andrew and his partner, Gary Dunford, and their staff at Gaspereau Press for creating such a special little quarterly publication for us.

BNS is supporting a nature learning experience for children – in the schools this spring, followed by various recreational camps during July and August. BNS board member Marina Myra reports great success and interest (see report in this issue), so much so that sometimes parents are also keen to learn about plants and animal life that they were not shown as children. I'm sure they will have a great report for us for the fall or winter issues.

**Call for volunteers** We still need a new editor to replace me no later than the end of the fall or winter newsletters, and while I have several helpers, they cannot take it over altogether. I am willing to help you ease into the position if necessary, but I may have to move from Wolfville. I don't want to leave the newsletter suddenly if I can help it. It pays well in fun and camaraderie. Experience is really not necessary. Please call me at 902-542-5678.

— *Club Notes* —

## **2016 BNS NATURAL HISTORY CALENDAR: CALL FOR PHOTOS**

Photo submissions are invited for possible use in the 19th edition of our society's Natural History Calendar.

Submissions should be in electronic form: JPEG format, with file

size between 300 KB and 3 MB. Photos should be of natural history interest, preferably taken in Nova Scotia.

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 subject that is not too similar to photos appearing in recent BNS calendars.

Send submissions at any time to Roy Bishop: RLB@eastlink.ca, 902-542-3992

Deadline for submissions: Labour Day, September 7, 2015.

Calendar committee: Sherman Williams, Pat Kelly, Roy Bishop

---

— Club Notes —

## **BOARD OF DIRECTORS REPORT**

BY KENT WILLIAMS, BNS PRESIDENT

*Perhaps we should add the letter i to our planet's name, and call it "Eairth," in order to remind ourselves that the "air" is entirely a part of the earth, and the i, the I and self, is wholly immersed in that fluid element.*

DAVID ABRAM, *Becoming Animal*

How wonderful it is to collaborate with all of you in the Blomidon Naturalists Society, sharing the air of our planet here in the Valley. Since our last board of directors report there are two key updates to share with the membership: (1) we have approved and are sponsoring the "Wild Roots Kids Camps" through the Town of Kentville. This creative program is developed and facilitated by Marina Myra and enables the hiring and support of a summer student. This initiative fits well with our mission and need to educate kids on their connection to nature and continuing to enable that sense of wonder and creative spirit. If members have further curiosity on this wonderful program please contact Marina. (2) BNS has been working with Rob

Place, a local web developer, to create a new interface website for our membership. This site is a continuation of the great work done by Larry Bogan and our past site and is evolving to offer innovative member user interaction space to educate and inform. We are pleased with early drafts and will be working on this through the summer with an official launch date in September. So keep tuned into our website and look for the emerging changes!

It is also important to recognize great initiatives being led by BNS over the last several months. Hats off to James Churchill and all those who made the first Citizen Science Expo a success this past May. This initiative was a first time for this program in BNS and Wolfville and seems to be a growing trend across the country. The board has agreed to continue to support this initiative and looks to see this event grow in 2016, promoting the web of interconnected networks of citizen scientist and interested parties. Other notable events were the Kentville Ravine Garbage Collection Day (lots of trash was rounded up!) – so great thanks to those who participated – and several field trips, including Cape Split. Moreover, I want to thank our great monthly presenters, including our recent members who shared their stories of time in nature through June's Show & Tell Night, where we heard about diverse and amazing moths (Devin Johnstone), star events in the Cosmos (Sherman Williams), seasonal walks, skating, and kayaking in nature (David Dermott), emerging and innovative energy and research initiatives for a better world (Ed Sulis), and the edible mushrooms of our area (Ken Harrison). Thanks to our members for sharing!

During our monthly meetings, one of the highlights for me is hearing from you, the members, on your nature experiences. Hearing your lived experiences with the natural world that surrounds us – it is through these shared experiences we sense the deep respect and connection to our Eairth.

As we head into the summer months and a hiatus with our monthly meetings until September, I wish you all illuminating adventures of exploring and just *being* in nature. Please take note and record your amazing experiences, and come and share them

at our next meeting in September. We always welcome feedback from the members in how the board can best serve you, so feel free to pick up the phone or send us an e-mail any time.

Lastly, great appreciation and gratitude to our editorial chair, Jean Timpa and supporting members and others, including Doug Linzey, Ed and Mary Anne Sulis, Gaspereau Press, and contributors, for making this newsletter a possibility!

*We must learn to reawaken and keep ourselves awake, not by mechanical aid, but by an infinite expectation of the dawn. The world is but a canvas to our imagination.* HENRY DAVID THOREAU

— Club Notes —

## UPCOMING EVENTS

### Meetings

*Unless otherwise noted, all meetings are held at 7:30 p.m., usually on the third Monday of each month (except July and August), 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, SEPTEMBER 21, 2015 – *Raptor Identification*, with Richard Stern. Richard is a Come-from-Away, but settled in the Kentville area in 1981, originally from Liverpool, England, via London and Bristol, St. Anthony and Goose Bay, NL, and Halifax. He is a physician, an internal medicine specialist, but now semi-retired and no longer dealing with crises in the middle of the night. He has been a birder and photographer since before coming to Canada, and has been an active member of various organizations, including past president of the NS Bird Society and BNS. Over the years, Richard he has become less of a twitcher and more of a photographer and is always pleased

to have a photo or two included in the BNS calendar. He currently writes the section on raptors for the NSBS newsletter. He lives north of Kentville with his wife, dog, cat, ducks and hens, various children and grandchildren who come and go (an unashamed plug: one son owns a well-known and excellent crepe and pizza restaurant in Wolfville). Richard also has a cabin near Pond Cove on Brier Island, with a great bird list, including Mississippi Kite and Zone-tailed and Swainson's Hawks.

MONDAY, OCTOBER 19, 2015 – *Joint Meeting with Valley Gardeners.*  
Details TBA.

### **Field Trips and Other Nature Events**

*Visit the BNS website for field trip maps and directions.*

SATURDAY, JUNE 27, 2015 – *Butterfly Atlassing.* This trip will be in support of the Maritimes Butterfly Atlas, which has recently announced that it will continue into 2015. Given that butterflies tend to be active only in good weather, registration will be required by e-mail so that if the event has to be cancelled we can contact you. The trip will start at the Wolfville waterfront at 10 a.m. and will go until 2 p.m. For more information on the atlas project, visit the atlas web site at <http://www.accdc.com/butterflyatlas.html>. To register for the event, contact [jamesLchurchill@gmail.com](mailto:jamesLchurchill@gmail.com).

SATURDAY, JULY 11, 2015 – *Kingston Sand Barrens.* Leader: Ruth Newell (902-542-2095, [ruth.newell@acadiu.ca](mailto:ruth.newell@acadiu.ca)). Sand barrens are one of the most rapidly changing, disappearing, and endangered ecosystems in Nova Scotia.

As recently as the 1960s, mile after mile of the Evangeline Trail was surrounded by extensive open heathlands with scattered Red Pines. In pre-settlement times, the actual area of heathland is believed to have encompassed an area of approximately 200 km<sup>2</sup>. Today it appears that less than 3 percent of the original heathland remains.

(Catling et al. 2004. *CBA Bulletin* 37(1), [www.cba-abc.ca/bulletin/vol\\_37\\_1.pdf](http://www.cba-abc.ca/bulletin/vol_37_1.pdf))

The Kingston Sand Barrens are home to a number of the province's plant and animal species at risk, including Rockrose (*Helianthus canadense*, endangered in Nova Scotia), Wood Turtle (threatened in NS), and Vesper Sparrow (rare in NS). Ruth will take us on a tour of this incredible and sensitive ecosystem. Meet at the Wolfville waterfront at 9 a.m.

FRIDAY, JULY 10, 2015 – *Blomidon Park Moth Out*. All ages. Leader: Jeff Ogden. This is a joint event hosted by Blomidon Provincial Park and BNS. Make your way to the Blomidon Provincial Park multi-purpose building for what promises to be a spectacular night of strange creatures, marshmallows, and camping out (if you like). We will begin just after sunset, when Jeff will fascinate us with lore of “insects of the night” and specimens available for hands-on discovery. During the night, we will commune around the campfire and periodically treasure hunt by checking on various trapping and sheeting stations for moths and other nocturnal insects. Bring a flashlight and camera. This will be an excellent opportunity for all ages to explore Nova Scotia's secretive winged night life. Attendees are invited to stay the night in the park campground if they like ([www.novascotiaparks.ca/misc/make\\_a\\_reservation.asp](http://www.novascotiaparks.ca/misc/make_a_reservation.asp)). Meet at the park campground at 8 p.m.

TBA, JULY 18–26, 2015 – *National Moth Week Event: Mothing in the Valley*. National Moth Week (<http://nationalmothweek.org>) is a global citizen science effort – the last full week of July (18–26) – to learn about, observe, and document moths in backyards, parks, and neighbourhoods. This year, BNS will host its first incarnation of National Moth Week, led by Jim Edsall, one of Atlantic Canada's leading invertebrate experts. This event will involve a combination of techniques for drawing moths and other nocturnal insects in close for observation and photography. This event is family friendly

and will be a great opportunity to view, and be inspired by, some of Nova Scotia's rich biodiversity that we rarely get to see! Meet at 8 p.m. at the KCA School parking lot, in Kentville.

FRIDAY, JULY 24, 2015 – *Swift Night Out III*. Our third annual Chimney Swift celebration during Wolfville's Mud Creek Days. 6:45–9:15 pm. This year, all events will take place outside the Robie Tufts Nature Centre in downtown Wolfville. We will hold outdoor presentations and some interactive events for kids (which might include an endangered species obstacle course and face painting). At 8:10 we will begin the official count of our provincially endangered Chimney Swifts as they circle the skies and spectacularly plummet into the chimney for their nightly roost. In case of poor weather, we will reschedule to the next evening: Saturday, July 25. For final details closer to the event, see [www.blomidonnaturalists.ca/swiftNightOut](http://www.blomidonnaturalists.ca/swiftNightOut). This is a joint event between BNS and the Maritimes Swiftwatch program of Bird Studies Canada.

SATURDAY, AUGUST 1, 2015 – *Minas Basin Shorebirds*. Leader: Rick Whitman (902-542-2917, [rick.whitman@ns.sympatico.ca](mailto:rick.whitman@ns.sympatico.ca)). This field trip will focus on the shorebirds that visit the Minas Basin to fatten up on mud shrimp and other foods on their way south. We should see at least 4–6 species and some large flocks. We may also see Peregrine Falcons, in which case we might see fewer shorebirds. We will meet at Evangeline Beach parking lot and walk toward East Point, North Grand Pre. High tide this date is 14.6 m at 2:17 p.m. The birds should be very busily feeding during our walk and will be pushed closer each hour by the tide. Meet at Evangeline Beach, North Grand Pre at 9 a.m. Some of the walk will be in the very muddy silt areas. Drizzle and light showers will be tolerated. There is no rain date.

SATURDAY, AUGUST 8, 2015 – *Milkweed and Monarchs*, with Larry and Alison Bogan. Meet at the Bogan house (6539 Brooklyn Street, Brooklyn Corner) at 10 a.m., or meet at the Wolfville Waterfront at 9:30 a.m. to travel to Brooklyn Corner together. Participants will look at

the Common Milkweed in the Bogans' field and survey for eggs and caterpillars of the Monarch butterfly. Alison and Larry will explain the process of raising Monarchs from egg to adult and how they tag the adults for migration. Participants will also look for other butterflies that might be in the field. The field is a Monarch Waystation, and the Bogans will explain how an area can get such a designation. If anyone wishes to transplant Milkweed to their garden to make habitat for Monarchs, bring a plastic bag to carry some roots. Alison has a butterfly garden and will show and describe the flowers and plants there.

FRIDAY, AUGUST 14–SUNDAY, AUGUST 16, 2015 – NOVA EAST 2015. 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, as well as the Saturday evening observing session, are open to the public. 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>.

SATURDAY, AUGUST 22, 2015 – *Amethyst Cove Rockhounding and Photography*. Our last two attempts to explore Amethyst Cove with Fundy Rocks were thwarted by damage caused by Hurricane Arthur and poor spring conditions. We will give it another shot! Fundy Rocks members David and Chris Sheppard will accompany us on the trip, which includes a descent into Amethyst Cove and a trek along the shore to Amethyst cove proper. The descent to the cove is not for the faint of heart, and the trip will only proceed if conditions are good. Meet at the entrance to the Cape Split trail at 9 a.m. Fundy Rocks will check conditions in advance, and we will use social media (BNS website, e-mail, Fundy Rocks Facebook page, BNS Twitter) to advertise trip postponement or cancellation. A rain date is set for Sunday, August 23, but if conditions are still not good, the trip will be postponed until next year.

SATURDAY, SEPTEMBER 26 – *Brier Island Hawk Watch 1*. Leader: Richard Stern. Fall raptor migration on Brier Island can be outstanding; when conditions are favourable, it is not unusual to see kettles of hundreds of raptors circling the island. Richard has seen 18 species here, including some spectacular finds such as a Zone-tailed Hawk, a species normally found south of the southern United States. Richard will lead us on a tour of the island's best raptor-watching locations. Meet at the Irving Big Stop parking lot, Exit 12, at 6:30 a.m. to carpool/caravan, or meet on the Island at Pond Cove Parking lot around 10 a.m. The trip to Brier Island takes about 3.5 h and involves two ferry crossings (total \$10). Weather on the island can vary extensively, so be prepared for all conditions. Raptor activity is highly dependent on weather, so if conditions are not favourable, the trip will be cancelled. Pre-registration is required by e-mail: [info@blomidonnaturalists.ca](mailto:info@blomidonnaturalists.ca). For those interested in staying the night, accommodations include Brier Island Lodge and Brier Island Hostel.

SATURDAY, OCTOBER 3 – *Brier Island Hawk Watch 2*. Leader: TBA. Since hawk migration is highly dependent on conditions, we are planning this second trip independently of the first trip. We will tour the island's best raptor watching locations. Meet at the Irving Big Stop parking lot, Exit 12, at 6:30 a.m. to carpool/caravan, or meet on the Island at Pond Cove parking lot around 10 a.m. (See previous entry for details.) Since raptor activity depends on weather, if conditions are not favourable the trip will be cancelled. Pre-registration is required by email: [info@blomidonnaturalists.ca](mailto:info@blomidonnaturalists.ca).

SUNDAY, OCTOBER 18, 2015 – *Wallbrook Fall Colours, Late Wildflowers, and a Beautiful View*. George Forsyth (902-542-7116). A walk at Ralph Stirling's in Wallbrook. Have you ever seen the view of Melanson and the Minas Basin from the Wallbrook Tower? Many people have seen this tower when driving by, but few have been near it or even inside. Well, George will have the key. At this time of year we will also see some spectacular hardwood trees in fall colours and some late wildflowers. Meet at the Robie Tufts Nature Centre (Front Street,

Wolfville) at 1:00 p.m. to drive to Wallbrook, or meet at Ralph Stirling's at 1:15 pm. This will be an easy walk suitable for all, especially young people.

SPECIAL ANNOUNCEMENT AND OPPORTUNITY – *BNS Mapping Initiative*. Maps can be valuable navigational resources, but they can also tell powerful stories about the past, present, and future of our natural world. Did you know that BNS now has a licence for mapping software and a subscription to an online mapping portal (ArcGIS online)? We do! Are you interested in geography, maps, or collecting and mapping nature-related data? Then let the mapping begin.

One of the first expressions of the Mapping Initiative might be a mapathon: a fleet of us compiling geographic datasets; exploring the region with GPS units, cameras, and notebooks; and using our artistic nature to make posters, web maps, or web applications that we can host on the BNS website. Don't have GPS skills or experience in map making? Not a problem – it's easy and we can hold some workshops if need be. If you would be interested in being part of this initiative, or have ideas for a map BNS should create, contact James at [info@blomidonnaturalists.ca](mailto:info@blomidonnaturalists.ca).



JACK MCMASTER

## MAY PICK-ME-UP

BY KEN HARRISON

*Saturday, May 16, 2015* – About a dozen volunteers participated in the 2nd Annual Great Nova Scotia Pick-Me-Up event. Members of BNS and the Friends of the Kentville Ravine Society were joined by Kings County Councillor Pauline Raven. We were blessed by a beautiful, sunny morning that allowed the participants to work comfortably outdoors.

This event was originally scheduled for mid-April but was postponed by the lingering winter snow. The location chosen was the Kent property opposite the Big Stop at Exit 12 in New Minas. This 40+ acre property is bounded on the north side by one of the tributaries of Elderkin Brook, which flows down from the slopes of Canaan Mountain, under Hwy 101 near Exit 12, along the Kent property and down into the Research Station Ravine.

We concentrated on the open area near Exit 12 and along the New Minas Connector Road. There is a partly overgrown woods road that leads steeply down from the Kent property to where it joins the Research Station Trail near the falls. Several of our intrepid participants descended into the Ravine and were able to find and retrieve debris from along that trail and in the brook itself. They were able to locate a number of larger articles partly buried in the stream which will need to be removed with mechanical help at a later date. Our foragers collected about 20 bags of garbage, which was piled up and later removed by the staff of the Village of New Minas.

**Background** The Research Station Ravine (often called the Kentville Ravine) is familiar to most BNS members as a natural oasis with old-growth trees and a wide variety of both aquatic and terrestrial flora and fauna.

The Research Station Trail criss-crosses Elderkin Brook as it flows northward toward the Cornwallis River. The portion of the trail on

the floodplain (visible from Hwy 1 as it becomes Commercial Street in New Minas) is currently isolated from the rest of the trail by a beaver pond and the removal of a bridge crossing. That bridge crossing will hopefully be restored soon; a small footbridge would re-establish the connection of the Research Station Trail to the Kentville and New Minas trails along the former DAR rail line and the Miners Marsh in downtown Kentville and points west.

— *Field Trip* —

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## **BLOMIDON FAIRY SHRIMP**

BY JIM WOLFORD

*May 23, 2015* – Choosing dates for field trips is always a guessing game and done months in advance. In this year of very long winter and very late spring, today's weather had hints of the past winter, with very cold temperature, very strong winds from the west and north, and even some flakes of snow.

Today's small group (about 12) made for a perfect number for a field trip. Participants included Nick Hill & Marina Myra with their three youngsters armed with magnifiers, Bernard Forsythe, Donna Crossland with an Acadia University student, a Wolfville couple, and Pat Hawes & me.

In the edge of the woods we noticed a couple of closed-up Spring Beauties and open Red Trilliums, unfurling fronds of Ostrich, or fiddlehead Fern, plus abundant carpets of leaves of wild leek, and a real wild onion, which in Nova Scotia has a very sparse and disjunct distribution. Other ferns noted were Braun's Holly Fern, Christmas Fern, Marginal Fern, Woodfern, and Lady Fern. Also mostly on tree-trunks we spotted lots of examples of lung lichens, other lichens, *Neckera* and *Ulota* and other mosses, and a couple of kinds of liverworts.

Just inside the campground, we started northward on the Jodrey Trail. Bernard showed us his nestbox for Barred Owls. He climbed the tree and discovered only pieces of toilet paper in the box, from

the outdoor privies not far away (possibly the work of Red Squirrels). This box has not yet been used by owls, and this year only three of Bernard's boxes had owl eggs, no doubt because of the deep and long-lasting winter snow. That is where Bernard left us, and later there were very few bird calls to be heard, mainly from an Ovenbird. Also, Nick spotted and gave a good description of a Magnolia Warbler.

Other flowers seen on our walk included alder (*Alnus crispa*), American Fly-honeysuckle, Hobblebush (only the outer & sterile flowers open, central fertile flowers still closed).

The walk into the vernal pond (which means no inlet nor outlet streams; water is from precipitation runoff plus spring melts, and it may also be spring-fed) is less than 1.5 km. On arrival, we all could see that the pond was huge and flooding parts of the trail. This is not unusual for such runoff ponds, but later in the year they experience large drops in water level that depend on weather for the rest of the summer and autumn.

Pond life seen from random sweeps of a dip-net in edges of the pond:

- fairy shrimps (*Eubranchipus intricatus*): quite common and full-grown, both sexes, and females had small spherical-looking egg-sacs on bases of tails (a couple of people said the egg-sacs looked green to them)
- 2 kinds of water fleas (tiny crustaceans): present but not abundant
- unseen microscopic green algae (food for crustaceans and other animals)
- amphibian eggs: Donna spotted an irregular mass of very thin jelly that held developing tadpoles (young, not close to hatching age) probably of Yellow-spotted Salamander; and Nick saw one batch of frog eggs, probably of Wood Frog
- mosquito larvae (2 kinds): the most abundant kind of life seen in the pond water (probably related to the absence of aquatic predators); no pupae were seen
- phantom midge larvae (only a couple seen)

- “bloodworms”: 2 red-pigmented larvae of midges (non-biting flies)
- 3 kinds of caddisfly larvae: in cases made of pieces of vegetation (one caddis larva seemed to be consuming a mosquito larva)
- only one small, skinny, black planarian flatworm
- no snails, no damselfly or dragonfly nymphs, no water boatmen, no water beetles (possibly one whirligig beetle seen), no water striders, no tadpoles (but later netting might yield some of these critters)
- small black adult flies: common on the pond surface (some kind of non-biting gnat)

Some of us skirted the flooded trail to walk further to the lookoff, which allows a view of Five Islands Provincial Park across the Minas Basin to the northeast. Lowered tide made those islands visible, but visibility was quite poor.

My final memory is of taking off my rubber boots and then not being able to tie the laces on my shoes because the very frigid temperature plus snowflakes and wind made my hands and fingers very numb!

Finally, I have an acknowledgement plus a book recommendation. For anyone of any age who is interested in more information, check out the Golden Guide called *Pond Life* (Golden Press), available from bookstores. And thanks to the Acadia Centre for Estuarine Research for the dip-net, buckets, and white enamel pans.

*A short postscript from last year’s similar field trip.* We sampled the same pond on May 18, 2014 and saw only a single fairy shrimp, which appeared to be being eaten by a planarian flatworm. But later we learned that only three days later, on May 21, Mark Elderkin and John Brazner (Wildlife Division of the NS Department of Natural Resources, Kentville office) sampled the same vernal pond, apparently more thoroughly, and found and photographed several to many of the fairy shrimps, of both sexes, some of the females gravid with egg-sacs on their “tails.”

## CAPE SPLIT PROVINCIAL PARK

BY PATRICK KELLY AND JIM WOLFORD

May 30, 2015 – This is an annual Blomidon Naturalists Society / Halifax Field Naturalists trip to the tip of Cape Split. We had perhaps 15 participants, about half from HRM (including Ingrid & Burkhard Plache & Charlie Cron & Candice MacDonald). Leaders were Patrick Kelly & Jim Wolford. Weather was less than great, with fog and humidity and heavy mist in Wolfville, and then cool fog up on the North Mountain (but at least no rain). Pat's group ended up ahead of Jim's group, and we were looking mostly at plants and birds, but did notice some of the things in Jim's detailed notes.

[Jim] We started walking at 9:20 a.m. and got to the Split in the fog at 1:05 p.m., where Patrick's group had eaten and were just starting back. After 20 minutes for lunch and rest at the end, my walk back to the car ended at about 4:30 or so.

The high humidity was great in that it showed off the thousands of sheet webs from spiders of at least three kinds: the bowl-and-doily spider webs and dome-shaped sheets on trailside shrubs, and funnel-webs on the ground.

Plants with flower-buds: ground carpets of Wild Lily-of-the-Valley, Aralia (or Wild Sarsaparilla), Clintonia (or Blue-bead Lily), Roseroot, Red Elderberry.

Plants in bloom (overall really awesome, especially Red Trilliums, which were everywhere and more abundant than ever): Goldthread, Striped Maple, American Fly-honeysuckle, Red Trillium, toothwort (2 kinds, mostly *Dentaria diphylla*, but also some with cut leaves (possibly hybrids with *D. laciniata* genes); also, some of the cut leaves showed a white fungus growth – perhaps rust – on their undersides), Spring Beauty (in carpets as usual, and more of them were open on our walk out in the brighter light of afternoon), Dutchman's Breeches, several clumps of pale-red trilliums, but perhaps 10–15 white flowers with purplish centres of Red Trilliums, Rosy Twisted-

stalk, Blue Violet, Small-flowered Crowfoot (a buttercup), Hobble-bush (just one prostrate plant), sedge sp. (*Carex*), wood rush (*Luzula*), common dandelion, dewberry (*Rubus*), wild strawberry, alder (*Alnus viridis crispa*), baneberry (probably red-berried).

Herptiles: We looked under two logs in one spot and found a Red-backed Salamander under each one.

Birds: A drumming Ruffed Grouse was heard by Patrick's group, and they also had great views of a Black-and-White Warbler as well as two Black-throated Green Warblers, a Red-eyed Vireo, and a male American Redstart. For Jim's group, Black-throated Green Warbler, Black-capped Chickadee, male American Redstarts seen extremely well and closely and singing at arm's length to trail and us on our way out, Common Raven(s) at west end of trail in fog, same for nesting Great Black-backed and Herring Gulls, a Black-throated Blue Warbler, an unidentified Empidonax flycatcher, Blue-headed Vireo, several Blue Jays at west end of trail. Any nesting Double-crested Cormorants were hidden by fog.

Mammals: I (Jim) may have heard a single chipmunk and a Red Squirrel. There were lots of humans and their dogs along the popular trail.

Uncommon Common Art, by Christine Waugh, on trunks and branches in two widely spaced sites: We discovered signage for this on our way back toward Scots Bay — look for brochures & maps & on-line promos later throughout the Valley. When Patrick's group first encountered this, it was initially thought to be a weird fungus. It was white, about the size of a fist, and appeared to have a Dairy Queen soft cone-shape on the top. It looked to be growing from the cut end of a tree that had been removed as part of the damage from Hurricane Arthur. On closer examination (tapping) it was noted to be quite hard and barely attached to the wood. The reason, as we found, was that it had a hole in one side and was hanging from a nail! Along the next section of trail we found numerous similar examples, often in colour. The signage was not there on our way in, but was in place on the way back. (Another piece of sculpture in this series is located, at the time of this writing, in Miner's Marsh in Kentville.

Scots Bay Bald Eagle nest along Huntley Road behind Fire Hall/Community Centre: Someone on the field trip mentioned there were two eaglets; by the time I viewed the nest, the eaglets were inactive in late afternoon; one eaglet was on the nest rim just below the perched attending adult eagle, and I could see only the top of the back of the second eaglet (both are dark-downed and only a third or less grown).

— Into The Past with Robie —

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**WOODS, WATER AND SKY:  
WRITINGS BY ROBIE TUFTS**

BY RACHEL COOPER

Robie Wilfred Tufts (1884–1982), of Wolfville, was Chief Migratory Birds Protection Officer for the Maritime provinces from 1919 to 1947. He was also founding president of the Nova Scotia Bird Society and author of the highly regarded *Birds of Nova Scotia*, first published in 1961. He held honorary degrees from Acadia and Dalhousie universities, and his papers are housed in Acadia University’s archives, including the manuscript for his small 1934 book *Some Common Birds of Nova Scotia* (the image shows the cover of a first edition of the book owned by Gerald Cudmore, Delhaven).

From the early 1940s to the 1970s, Robie Tufts wrote a regular column, “Woods, Water and Sky,” for the *Chronicle Herald*. A scrapbook of those columns (undated) was put together by Lloyd Duncanson, who joined the staff of the Nova Scotia Museum of Science in 1950 and later became its curator, and by Eric Dodge of Middleton, a young amateur ornithologist who died in 1955 at the age of 25. The scrapbook is now in the care of Mark Elderkin, Species at Risk Biologist, Wildlife Division, at the Nova Scotia Department of Natural Resources. The scrapbook is destined for the Acadia archives, but BNS has been given the opportunity to look through it and publish a sampling of Robie’s columns.

This is the second in the sampling, a column from the 1940s, exact date unknown.

An Avonport area farmer discovers foxes in the raspberry canes and enlists help to root them out. But foxes, as we know, are resourceful ...



### **Woods, Water and Sky**

*By R.W. Tufts*

The prevalence of foxes throughout the Annapolis Valley in recent months has been commented upon a number of times in this column, and numerous are the complaints we have received from poultry-raisers, of damage done to their birds. It is well known that these nightly prowlers will often venture close of man's abode during their hunting expeditions, but when it comes to making a den in which to raise their young, we have come to think of them as selecting a spot in some remote section, where humans do not ordinarily intrude.

But such is not the case in the instance which has just come to our notice. Last week a prominent farmer living in the Avonport area chanced to see Mrs. Red Reynard loping across his open farmlands in plain view in broad daylight. Watching her from his outbuildings he was surprised to see her disappear among his raspberry canes.

A second later she reappeared followed by a family of husky little kittens, and a lively time ensued as the little ones frolicked about with their mother, but never venturing far from the den door. At this point our friends decided to investigate, and as was expected

there was a sudden scampering for the den when the man appeared in sight. He discovered no less than five entrances into the ground, all in a small area in a sandy knoll which was covered with the raspberry canes.

SEEKS CAPTURE Desirous of capturing the entire outfit alive he phoned us for any possible information we might have re the best way to proceed. On arriving at the scene, it was soon decided that all entrances should be stopped and the dens dug out. Three men armed with shovels were soon at work and progress was rapid. As the tunnels, which ran in all directions, were explored, they began giving up their dead, and this is what we found: three house cats, one small suckling pig, one rabbit, one house rat, one red squirrel, one small mole, three heads of fowls and corresponding legs thereof, and one hen's egg (unbroken). The pig had died a natural death, as had the three cats, and all had been thrown out behind the barn during the recent Winter and it goes without saying they all smelled to high heaven by now.

As tunnel after tunnel of the underground galleries were opened up, however, they all came to dead ends, revealing no foxes. Digging began about 11:00 a.m. and at 3:00 p.m. we were licked. Though we searched diligently for new leads we could find none. As we started back to the house, many and varied were the theories advanced by way of accounting for how she had outwitted us. True, some few hours had elapsed since the den was first discovered, and some believed that the mother had taken them off to a place of safety. This proved to be a wrong theory, however, for early next morning it was found that we had, in spite of all our probing with iron bars and digging with shovels, missed one of the tunnels, for there was the new, fresh, gaping hole and the fresh sand all about tracked up by the imprints of the little furred feet of the kittens and the larger ones of the mother as she had led her family away from these unfriendly surroundings where they had had such a close call.

## UHURU – WHITE LIONS RETURN HOME

BY JOHN BELBIN

After generations of being forcibly removed from the wild and placed in highly profitable breeding programs “for their own good,” the White Lion has been returned to wildlife refuges in South Africa. The long, sad story of our brutality to this animal may just be beginning to change, thanks to a huge effort on the part of some dedicated people in that country.

The White Lion is not an albino; it carries a naturally occurring recessive gene, called leucism, as part of its genetic heritage. The eyes tend to be blue in males and greenish in females. The pads are often pink. That means that a tiny fraction of all lions will naturally be born as a mostly white or light-coloured variant. When they breed they can pass on this characteristic. This probably dates from the time when lions had a huge range, being found throughout North Africa and much of Europe and Asia. As they were originally in both desert and snowy regions, this gene would have provided somewhat better camouflage in those days. However, the recently released white lions have proven that these animals are still extremely capable hunters, even without a local background coloration. Once again we prove not to know very much about the real lives of the animals about us.

Local people in Africa have passed on stories about legendary white lions for centuries, but these were dismissed as superstitions by the all-knowing Europeans. Not until 1928 did a European document this animal’s existence. Another was sighted in the Timbavati region of South Africa in 1940. A couple of white cubs were seen near Kruger National Park in 1959. Finally, researcher Chris McBride found a litter containing two white cubs and one tawny one in 1975. The story is told in his book *The White Lions of Timbavati*. These cubs were captured, kept in zoos, and bred as heavily as possible. Most of the white lions in captivity today originate from these animals. They are, of course, inbred, with all the problems that creates.

A very few others were also found and removed from the wild. Virtually all went to breeding farms of some kind. Lions are easy to breed; if you remove the cubs from the mother immediately they are born, she goes right back into oestrus and can breed again. That characteristic is due to the fact that when a new male takes over a pride, he kills all the cubs, and the females must be able to breed



JOHN BELBIN

*Sanbona white lion*

with him as soon as possible. The breeding farms take advantage of this, and the female lions are turned into baby factories until they are too old, when they are sent to the hunting farms as targets.

Well-meaning conservationists removed every white lion they could find from the wild. The logic was that they couldn't compete with normally coloured lions because of their lack of camouflage. They even stated that these animals would starve to death; some people still believe that. We now know that to be a false assumption, and recent observations have shown that if a white lion does not want to be seen, you can't find it even if you know it is there. They would certainly have been the target of every would-be hunter who wanted to kill something to brag about and hang in their living room. The net effect of this unlikely collusion was that by the end of the century the white lion was effectively extinct in the natural world.

As usual, the real reason was money – lots of it! White lions are

immensely profitable. They are the current “must-have” animal for every zoo that competes for the tourist dollar. You don’t have to go further than Toronto if you want to see a white lion. Even more money is generated by the scores of “canned hunting” operations that are allowed in South Africa. Over 1000 lions every year are shot down by people posing as hunters. These animals have all been hand-reared and bottle-fed by humans, with little or no contact with their own kind. They have no fear of people and no hunting skills or defensive awareness. When they reach adulthood, they are released into a fenced area, and the “hunter” guns them down from the back of a vehicle at no risk or effort and without even getting his boots dirty. You pay \$50–60,000 for the privilege and the photos of your heroics. In the case of a white lion, the tab can run from \$130,000 to \$250,000. Virtually every lion that starts off in a petting zoo or a “Walk with Lions” tourist trap will end up being shot in this way. So will many of the exotic pets of our great entertainers, and the older animals from breeding farms.

There are currently more than 300 white lions in captivity. There are fewer than a dozen in the wild.

The turnaround began in 1982 when well-known ecologist–conservationist and nature guide Andrew Schofield bought a run-down sheep and goat farm in the Klien Karoo region of South Africa. The Klein Karoo is one of the most diverse and important arid zones anywhere in the world. One third of all the world’s 10,000 species of succulent plants grow here. However, the farm had been severely overgrazed, and many of the endemic species were now locally extinct. Andrew set about turning this near desert into a self-sustaining nature reserve, re-introducing species that had always been locally important and reversing the actions of the areas short-sighted farmers. Black Eagle Farm was soon a success and a model for others to follow.

The Linton Group began buying up similar old farms to the south of his own and soon had an area of 26,000 hectares. In 1997 Andrew was asked to turn this entire region into a wildlife reserve and to become the manager. The reserve continued to grow and now cov-



ers some 55,000 hectares. It was renamed Sanbona (after the local San people) and is now one of the most important wildlife areas in southern Africa. The driving force behind all this is Dr. Gaston Savoi, a passionate conservationist and co-chairman of the Mantis Collection (a group of hotels and lodges in South Africa and London). Dr. Savoi came up with the concept of using Sanbona to re-introduce white lions to the wild.

This is a long-term, complex, and very expensive project. All known white lions were currently in captivity where they had been born and raised. Most were severely inbred. None had any experience of living in the demanding conditions they would be released into. All were comfortable with humans and would let anyone approach them.

None of this could be done in a single generation. The animals that were eventually released would have to be the offspring of once-captive lions, brought up in a totally natural setting. The human hand would have to be hidden from these animals and no contact made during their upbringing. Providing food for the parents, who would not initially know how to hunt, was a major problem, as it had to be done in ways that excluded all human contact. A large area of Sanbona was set aside for this purpose.

Finding un-related animals to breed was a major hurdle involving extensive research followed by blood tests. Eventually, Dr. Savi was able to buy an adult pair, Jabulani and Queen, and move them to Sanbona in 2003. The rumoured price was in excess of \$200,000 each. The first cubs were born in May 2004. They were released in November of that year and proved to be every bit the match for the normal tawny lions of the region.

Since that time there have been both successes and disaster with the program, but it continues with new personnel. When Andrew visited in October 2012, Sanbona had a pride of five lions: two female tawny lions, one adult white lion, and her two white cubs, a male and a female. All three of the white lions had been born and raised in the wild by wild lions, with no human interference at all. The next stage was to be the removal of the male white cub from the pride and his introduction to another group of lions. This is the basis for spreading those genes back across Africa.

Andrew Schofield has retired and become one of the most knowledgeable nature guides on the African Continent and throughout the Indian Ocean. I was fortunate to have him as both a lecturer and guide on my recent trip through the islands of the Indian Ocean. Much of the information here was derived from his lectures and his book *White Lion, Back to the Wild*, published by Quickfox Publishing, Cape Town, South Africa.

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— Youth —

## **LEARNING FROM NATURE IS NATURAL**

BY MARINA MYRA, MSc

Wild Roots Nature Education Centre was created to encourage the next generation to care about nature and the environment throughout their lives. Once people learn to love nature, it is harder for them to turn a blind eye when faced with decisions that affect the natural spaces and species.

I am delighted that the Blomidon Naturalists Society is sponsor-

ing Wild Roots with the Town of Kentville Recreation this summer – to provide four weeks of total nature immersion summer camps! BNS is also funding half the salary for a Bio/Enviro Acadia co-op student from May to August to help with Wild Roots After School programs and the Summer Camps. The nature awareness camp activities will all be outdoors, rain or shine, for eight hours, and will involve hiking, climbing, balance walking, and stillness of the mind and body. Through these activities, the participants will be aware of themselves and others around them, learning respect for their own abilities and the abilities of the other participants. Participants will work together in groups on weekly projects that will enhance their understanding of the local natural area. With guidance, participants will help choose the activities and special projects they feel are important.

Children who take part in this summer camp will learn about a variety of natural phenomena, plants, and animals. They will come away with an appreciation for the natural world and a sense of hope for the future of the environment and their role in it. An increasing body of evidence suggests that people who are immersed regularly in the natural world, especially at a young age, are more resilient, relaxed, and happy. Games are designed to allow kids to be comfortable in the woods so they can learn from nature. For example, the sleeping-fawn game teaches how to be silent, alert, and aware of your surroundings. Activities such as log walking and fox walking teach body awareness, balance, and how participants can trust themselves. Investigations and research will be conducted by participants to monitor abundance of aquatic invertebrates, seedling germination, and invasive species. Participants will also experience wilderness survival skills, such as recognizing edible plants, shelter building, basic first aid, and what to do if you get lost in the woods.

As human demands on natural resources increase, natural spaces are becoming rarer and less accessible. When natural spaces become scarce, young people do not get opportunities to explore them. The result will be adults who are disconnected from the environment

and not equipped to make informed decisions about the future of the environment.

**Advantages** There is an ever-growing body of published research about the many positive reasons why teaching outside in nature is good for students and teachers alike. The biologist E.O. Wilson speculates that biophilia, our need to affiliate with other species, is built into our genes. When we are young we have an innate curiosity about the natural world. Therefore, it is natural to teach our children about the world around them through nature. The following are just a few of the reasons why nature is good as a teaching place:

- Enhances academic performance
- Improves behaviour and cooperative skills
- Promotes good communication
- Helps students focus
- Makes students happier, less stressed, and physically healthier
- Reduces some ADHD and ADD symptoms
- Helps with recall and memory
- Enhances problem solving and creativity
- Gives students a nature ethic to protect the earth

Some subjects in the curriculum could benefit from nature study:

- Math – Patterns and probabilities are everywhere.
- Music – Instruments can be made with natural objects.
- Art – Possibilities for beautiful natural masterpieces are limitless.
- Science – From the sky to the earth and the creatures in between, there is so much to discover.
- Language Arts – Find the story lines of nature or keep a journal of discoveries.

**Barriers** There are some barriers – perceived or real – for teachers, students, and parents that may get in the way of successful nature education. They include weather, lack of adult supervision, lack of

time, fear and reluctance of parents, perception that outside time is only play time, and lack of materials.

**Surmounting Barriers** Success lies in being prepared, and here are some solutions:

1. Build an outdoor kit for the classroom (collect items over time):
  - Material can include rain ponchos (garbage bags), foam sit-upons, pencils, first aid kit, clipboards, magnifiers, laminated scavenger hunt cards, warm clothing (extra mits and hats, etc.)
  - Ask parents for donations in lieu of gifts
  - Ask for business donations
  - Share with other classes
2. Have classroom discussions around rules and boundaries:
  - Stay together
  - Stay inside boundaries
  - Work as a team
  - No picking, pulling, or pocketing
  - Listen for a signal
  - Dress for the weather and conditions
3. Build your team – other teacher and parent support is the key

**Links** These websites are full of useful information about nature awareness and education:

[www.earthed.ns.ca/sunship/about.php](http://www.earthed.ns.ca/sunship/about.php)

[www.coeo.org/](http://www.coeo.org/)

[campkawartha.ca/outdoor-education/?gclid=CI\\_wg63S-7wCFYMcOgod5zsAAQ](http://campkawartha.ca/outdoor-education/?gclid=CI_wg63S-7wCFYMcOgod5zsAAQ)

[www.back2nature.ca/](http://www.back2nature.ca/)

[earthwalknorthwest.com/](http://earthwalknorthwest.com/)

[www.ecoearthwalk.ca/aboutus.html](http://www.ecoearthwalk.ca/aboutus.html)

[www.forestschoolcanada.ca/](http://www.forestschoolcanada.ca/)

[handbookofnaturestudy.com/](http://handbookofnaturestudy.com/)

[www.rbnc.org/schoolunits/natpyra.htm](http://www.rbnc.org/schoolunits/natpyra.htm)  
<https://greenacorns.wordpress.com/childnature.ca/>  
[www.highparknaturecentre.com/nature-elders/](http://www.highparknaturecentre.com/nature-elders/)  
[www.naturekids.co.uk/](http://www.naturekids.co.uk/)  
[www.davidsuzuki.org/what-you-can-do/connecting-youth-with-nature/#teachers-tab](http://www.davidsuzuki.org/what-you-can-do/connecting-youth-with-nature/#teachers-tab)

NOTE: *Marina is a Nature Educator for Wild Roots Nature Education Centre (www.wildrootsnec.com). Sources include www.getbackoutside.ca teacher's guide resources; Coyote's Guide to Connecting with Nature (2010) by Jon Young, Ellen Haas, and Evan McGown; Last Child in the Woods (2005) by Richard Louv.*



## THE SOUTH CANOE WIND FARM

BY ROY BISHOP

During 2014 and the first half of 2015, the largest wind-powered electricity generator in Nova Scotia was built in Lunenburg County. Located between the communities of Vaughan and New Ross, 34 turbines are scattered over 28 square kilometres of forest, south of the Vaughan–New Ross highway in the vicinity of South Canoe Lake, Card Lake, and Lake Lewis. The South Canoe Wind Farm is part of the effort to meet the government’s directive to have 25 percent of Nova Scotia’s electric energy generated from renewable sources by 2015. By 2020, the goal is 40 percent.

Each turbine at South Canoe has a nominal power output of 3 MW (megawatts), giving the South Canoe Wind Farm an output of  $34 \times 3 = 102$  MW. With a capacity factor of about  $1/3$  (the wind does not always blow), the average output will be in the vicinity of 33 MW, about 2.5 percent of the province’s average use of electricity. Assuming an average electric power requirement of 1.5 kW per home, the South Canoe turbines will power about 22,000 homes.

Three companies have collaborated to construct South Canoe. Nova Scotia Power Inc. is a minority partner, at 49 percent, with 17 turbines. Oxford Frozen Foods has 13 turbines, and Minas Basin Pulp & Power has 4. The total investment in the South Canoe Wind Farm is about \$200 million – or a toonie per watt, based on the nominal power capacity of the wind farm.

Four parties own the land occupied by the wind farm: Minas Basin Pulp & Power owns more than half. It was Minas Basin that first considered a wind farm for the South Canoe area when the company began wind measurements there in 2004.

Acciona, an international company with headquarters in Spain, made the turbines. Over \$80 million of the \$200 million cost of South Canoe has gone into the Nova Scotia economy through using local companies for site clearing, road construction, preparing foun-



dations, fabricating the five-section steel towers supporting each turbine (by DSTN Trenton Ltd.), and the electrical work, including two substations and a 17 km transmission line.

The individual 3 MW wind turbines at South Canoe are large. With a 92 m tower and blades that sweep a 116 m-diameter circle, the turbines reach 149 m (490 feet) into the sky. The turbines operate over a range of wind speeds, from about 10 to 90 km/h. Although they typically rotate at a rather lazy-appearing one turn every 5 seconds, the tips of the blades are then moving at 260 km/h. Except for metal tips and metal near the hub, the blades are fibreglass. The turbine on top of a tower consists of three 18 t (tonne) blades, a 32 t hub, and a 108 t nacelle containing a gearbox and a generator. The entire 194 t unit swivels in azimuth to point into the wind. An elevator inside the tower provides access to the nacelle. To keep such tall structures from being blown over by the wind, each turbine's steel tower is bolted to a 1200 t, 19 m-diameter concrete base. All but 2 of the 34 bases rest on bedrock. Each base contains 15 km (about 70 t) of reinforcing steel (rebar).

The power generated at South Canoe travels on the new 138 kV transmission line 17 km to the hydroelectric stations on the Avon

River north of Vaughan, where it connects to the provincial grid. To minimize light pollution and its impact on wildlife (it being not a good idea to attract birds toward wind turbines), the wind farm will be dark at night except for red, flashing aircraft warning lights on 10 of the 34 turbines. A motion-sensor light is on the control building, and the lights on the substation will be turned on only when operators/technicians are present.

Thirty kilometres of roads have been constructed at South Canoe, a third of which made use of existing (but now upgraded) woods roads. To commemorate the human history of the development of electrical power in the Kentville/Windsor/Vaughan area, the various roads have been named after a few key individuals: George Bishop, John Bragg, William Chase, Roy Jodrey, Jack MacKeen, Charlie Wright, and the Long family of White Rock. Bishop, Bragg, and the Long family played central roles in making the South Canoe Wind Farm a reality. Chase, Jodrey, MacKeen, and Wright were instrumental in bringing electricity to much of central Nova Scotia in the years 1920 through to about 1950. During the “electrical” part of their careers, Chase, Jodrey, and Wright were residents of Wolfville.

Four concerns often are raised about wind farms:

- Noise, including low-frequency vibrations known as infrasound
- Shadow flicker, from the moving shadows of turbine blades
- Impact on property values near a wind farm
- Wind turbines as a visual blight on the landscape

The first three concerns are mitigated by setback distance, the space between a wind turbine and homes. At 1.2 km, the minimum setback distance at South Canoe is among the larger such distances for wind farms, and most of its 34 turbines are considerably farther from any residence.

My experience is that at 1.2 or more kilometres from a wind turbine, noise is negligible. Furthermore, a recent study by Health Canada has not found any evidence for negative health impacts from infrasound. Every day, low-frequency sound generated by the wind in trees, by road traffic, by household appliances, and by routine activities, is seldom noticed, or it is regarded as only a minor annoyance.

At 1.2+ km, shadow flicker is essentially eliminated because at that distance the angle subtended by a turbine blade is small compared to the angle subtended by the Sun during the minute or two on a clear day when the Sun, then near the horizon, happens to align with a turbine and a house.

As to impact on property values, whether it is negative, neutral, or positive is subjective, depending on the buyer. For optimum power generation, wind turbines are placed on the highest elevations, and depending on the topography, that can make them visible from a large distance. Like many things in this world, the beauty of a wind turbine, or lack thereof, is in the eye of the beholder. I admire a pristine, natural landscape, but I also appreciate a wind turbine as it extracts solar energy via the wind to power my lights, computer, heat pump, water heater, clothes washer . . . all without polluting Earth's atmosphere with carbon dioxide, sulfur dioxide, nitrogen oxides, mercury, etc.

In today's world the NIMBY (not in my back yard) attitude toward wind turbines needs rethinking. The electrical energy to which we are addicted has to come from somewhere, and it is myopic to fret about the above four concerns while remaining silent about the benefit of wind turbines: they reduce the use of fossil fuels and the associated dumping of greenhouse gases and other pollutants into Earth's atmosphere. This small planet is all we have, and its atmosphere, its oceans, and its land-based resources are being impacted by the large and growing crush of humanity. Although Canadians comprise only half of one percent of the world's population, we are per capita among the worst offenders. The South Canoe Wind Farm is a small step toward getting the world off fossil fuels.



WHAT WILL YOU WRITE FOR THE NEWSLETTER?

## A FEATHERED FRIEND – A BIG OAK TALE

BY ROBERT L. DANSON

*Here is another tale from Bob's memoirs titled Big Oak Tales – a series of his life's recollections. Bob will be 100 years old on September 8.*

For a number of years my wife, Hazel, and I did a lot of travelling with a camping trailer during our summer vacation time. Our excursions took us all across Canada from St John's, Newfoundland, to Vancouver, BC, and north to Slave Lake, Alberta, visiting friends and relatives along the way. It was a wonderful way to gain an appreciation of the vastness of Canada and the diversity of its landscapes, people, and wildlife.

Wearied of travelling, we began to look for a cabin site. We were fortunate to find a pleasant, secluded spot on the shore of Lake Peter in Lunenburg County and were able to persuade the owner to part with it. Part of the charm of the location was the presence of the various wild creatures that we began to discover: chipmunks, deer, beaver gathering food, ducks and loons on the lake, loud woodpeckers, and a variety of other birds in the trees.

Over the summer, we cleared a site for a building and that winter made plans for a simple cottage. Prefabricated and built by Halliday Craftsman in Truro, it was delivered in the spring of 1972.

By the end of June, the cottage walls were up, the roof was on, the windows were in place, and the electric wiring done. Hazel and I decided to abandon our little trailer and begin sleeping in the cottage. While getting ready to get into bed, we began to hear strange noises, which seemed to come from just outside the bedroom window. Listening and puzzling for a while, we couldn't decide what could be making the hissing, snarling noise we were hearing. I thought it might be a cat, perhaps a wildcat. It seemed to move farther away, but the noise continued and I decided to go out and see what was causing it. Slipping on my shoes and taking a flashlight,



*This is Bob on Sept 27, 2014, displaying a memorial cake for the photographers, part of the official opening ceremonies of the Margaret King School Memorial. Bob unveiled the monument at the ceremonies. He was a 14-year-old student among the first classes of 1929–30, when the Margaret King school first opened. It was an amazing rural school built in Pugwash Junction, financed by Cyrus Eaton, who grew up in that community.*

I went outside. The noise stopped, but after a moment began again, and I was able to find the source. It was a large Barred Owl, perched on top of the power pole and looking down at me! It stayed around for several weeks, snarling at us whenever we appeared.

Why was it making such a strange noise? Was it upset by our presence? Was it trying to protect its territory? Was it trying to make us leave? Perhaps the light shining from the cottage windows scared it. The owl stayed around, often perched overhead as we sat under the trees or on the verandah in the evening. To this day, we do not know why it made that snarling, hissing noise.

Often we heard the owl calling – *hooo-hooo-ahoooooaaah* – up in

the woods. After a time, it seemed to have become used to us and would come sailing in on silent wings to sit in a tree close by as we sat out in the evening. Its favorite perch came to be high up in the big old oak tree across from the cottage, from where it seemed to watch all that was going on below.

Does the Barred Owl have a sense of humour? What else was I to think when, strolling up the lane one day, I was startled by loud squawk coming from directly overhead. I looked up, and there was the Barred Owl, perched on a branch and looking down at me, bobbing its head up and down as if to say, "I got you that time!"

— Nature Counts —

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## **WOLFFVILLE CHRISTMAS BIRD COUNT 2014**

BY ALISON BOGAN, COORDINATOR

*Saturday, Dec 20, 2014* – BNS acts as the sponsor of the annual Wolfville Christmas Bird Count, which was held on this relatively mild day, though the wind was cold. Due to the warm December, moving water was still open and, depending on location, still water was open or only partly frozen. The final tally was 77 species, with 42,380 individual birds counted. The total was bolstered by the count of over 19,000 European Starlings, many in the agricultural area around Canard.

If you consider the circle roughly divided into three areas – northern (dykelands, agricultural, and shore), central (the towns, Cornwallis River, and sewage ponds), and southern (South Mountain), the following are the highlights from each broad area:

Northern: A Eurasian Wigeon as well as a Merlin, N. Pintail, Coopers Hawk, Lesser BB Gull, and American Wigeon.

Central: Two rarities – a Dusky Flycatcher and Wilsons Warbler – plus a Great Blue Heron, Green-winged Teal, Am. Coot, Pine Warbler, Common Yellowthroat, Chipping Sparrow, Rusty Blackbird, Red-bellied Woodpecker, N. Shrike, and Great Horned Owl.

Southern: Our only Common Redpoll and a Barred Owl.



JACK MCMASTER

Five birds were added during the count week period: Blue-headed Vireo, Kingfisher, Gadwall, Eastern Phoebe, and Wood Duck.

These results come from the efforts of many people: 58 field observers in 31 parties covering 24 areas, and 62 feeder watchers watching 49 yards. The field observers invested over 150 hours and travelled almost 1000 km, including over 165 km on foot. The feeder watchers spent almost 100 hours at their posts.

Once again, I'd like to thank Liz and Richard Stern for graciously hosting the tally potluck, Judy Tufts for organizing the food for the potluck, and Jim Wolford for compiling the feeder watcher observations. Finally, a big thank you to all the folks who participated in this annual citizen science adventure.

**Summary of observations for the 2014 Wolfville CBC** Great Blue Heron 1, Canada Goose 1190, Northern Shoveler 2, Green-winged Teal 1, Black Duck 2569, Mallard 1018, Eurasian Wigeon 1, American Wigeon 4, Northern Pintail 2, Lesser Scaup 3, White-winged Scoter 18, Common Goldeneye 13, Common Merganser 24, Hooded Merganser 4, Bald Eagle (adult 220, immature 143, unknown 44), Northern Harrier 16, Sharp-shinned Hawk 9, Coopers Hawk 1, Northern Goshawk 1, Red-tailed Hawk 108, Merlin 1, Peregrine Falcon 5, Rough-legged Hawk 3, Ring-necked Pheasant 157, Ruffed Grouse 1, American Coot 1, Ring-billed Gull 207, Herring Gull 2698, Iceland Gull 6, Glaucous Gull 1, Great Black Backed Gull 731, Lesser Black Backed Gull 1, Gull sp. immature 83, Rock Pigeon 440, Mourning Dove 1545, Great Horned Owl 2, Barred Owl 1, Downy Woodpecker 94, Hairy Woodpecker 60, Northern Flicker 66, Pileated Woodpecker 8, Red-bellied Woodpecker 2, Dusky Flycatcher 1, Horned Lark 40, Blue Jay 1156, American Crow 4247, Common Raven 312, Black-capped Chickadee 1714, Red-breasted Nuthatch 24, White-breasted Nuthatch 80, Brown Creeper 4, Golden-crowned Kinglet 46, American Robin 245, Northern Mockingbird 2, Bohemian Waxwing 39, Cedar Waxwing 28, Northern Shrike 1, European Starling 19,169, Pine Warbler 1, Common Yellowthroat 1, Wilson's Warbler 1, American Tree Sparrow 127, Chipping Sparrow 1, Savannah Sparrow 19, Song sparrow 305, White-throated Sparrow 115, Fox Sparrow 1, Dark-eyed Junco 958, Snow Bunting 48, Northern Cardinal 58, Common Grackle 11, Rusty Blackbird 1, Purple Finch 21, Common Redpoll 1, Pine Siskin 61, American Goldfinch 1891, Evening Grosbeak 39, House Sparrow 106, Sparrow sp. 1

Total Birds 42,380



JACK MCMASTER

**SPRING WEATHER 2015,  
EASTERN ANNAPOLIS VALLEY**

LARRY BOGAN, CAMBRIDGE STATION

	TEMPERATURE			PRECIPITATION*		
	Max (°C)	Min (°C)	Mean (°C)	Rain (mm)	Snowfall (cm)	Total (mm)
<b>March 2015</b> (30 yr. average)	0.5 (4.3)	-10.6 (-5.7)	-5.1 (-0.7)	11 (59)	110 (43)	89 (95)
<b>April 2015</b> (30 yr. average)	7.8 (10.6)	-2.0 (0.0)	2.9 (5.3)	67 (68)	17 (15)	82 (83)
<b>May 2015</b> (30 yr. average)	19.3 (17.4)	5.8 (5.0)	12.6 (11.2)	58 (83)	0 (1)	58 (85)
<b>Season</b> (30 yr. average)	9.2 (10.8)	-2.3 (-0.2)	3.5 (5.3)	137 (210)	127 (60)	230 (263)

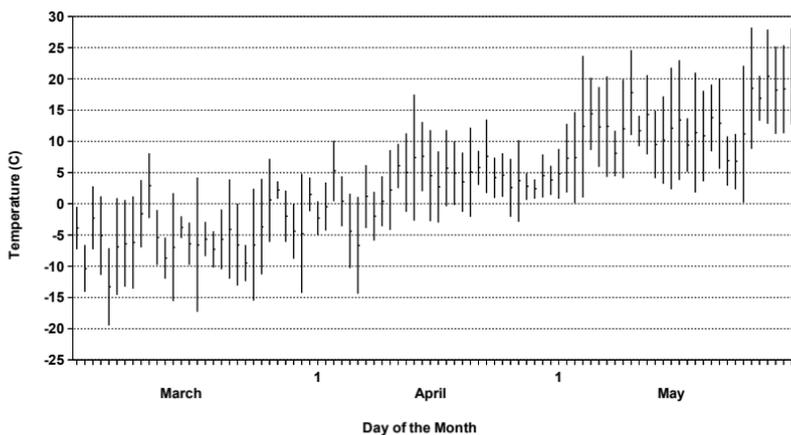
*Source: Environment Canada data for Greenwood, NS (<http://weatheroffice.gc.ca>). 30-yr. averages: 1980–2010.*

The winter of 2015 continued into spring with deep snow on the ground in March that only disappeared in mid-April. The colder temperatures of winter hung around. However, May recovered strongly, with warmer days, and we saw the flowers and leaves quickly burst forth, so that the Valley had almost all the trees leafed out by the end of May.

**Temperature** March started with 60 cm of snow on the ground, and more snowstorms added to that by a metre. The temperatures frequently dipped to  $-15^{\circ}\text{C}$  at night and averaged below  $-10^{\circ}\text{C}$ . March averaged  $-5.1^{\circ}\text{C}$ , well below the 30-year average of  $-0.7^{\circ}\text{C}$ . April was also colder than average, by  $2.4^{\circ}\text{C}$ . In mid-April, the highs

### Daily Temperatures - Greenwood, NS

March, April, May 2015

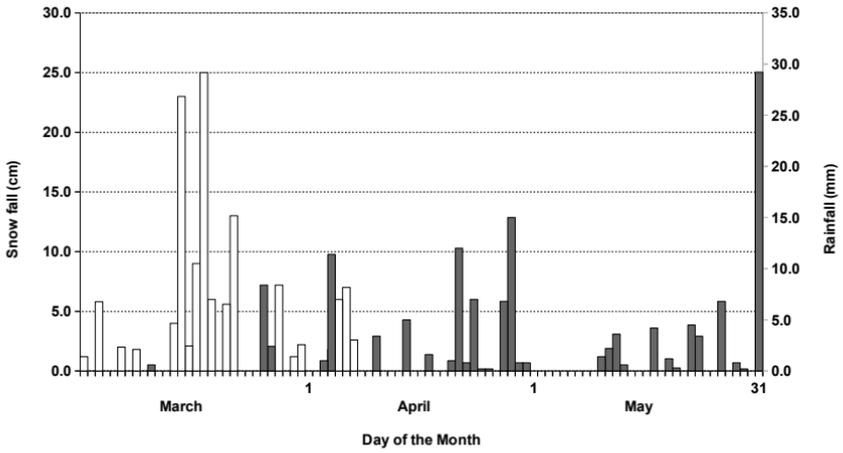


for the day were getting above 10°C, and the snow melted very quickly. The last snowfall of the season was on April 10, and we had only rain after that. Though the snow was mostly gone by April 19, the temperatures stayed low at the end of the month. May's temperatures were a sudden change, and there were no below-zero temperatures all month. All frost in the ground was gone by the time the snow melted in April, and May became very hot by the end of the month, with high temperatures near 30°C in the Valley. As a result, May averaged 1.4°C above the 30-year average. But the season as a whole was cold, 1.8°C below the average spring temperature.

**Precipitation** This report is using the weather data from Greenwood rather than Kentville, because that data includes snowfall separated from rainfall. The white bars on the precipitation chart show snowfall. You can see that there was a nine-day period in March when snow fell every day except one. During that period, 88 cm of snow fell and piled to over 1 metre in depth. Drifts were much deeper at that time because winds were high. Greenwood had maximum gusts of 60–70 km/h. Drifts higher than vehicles were a normal sight on the roadsides.

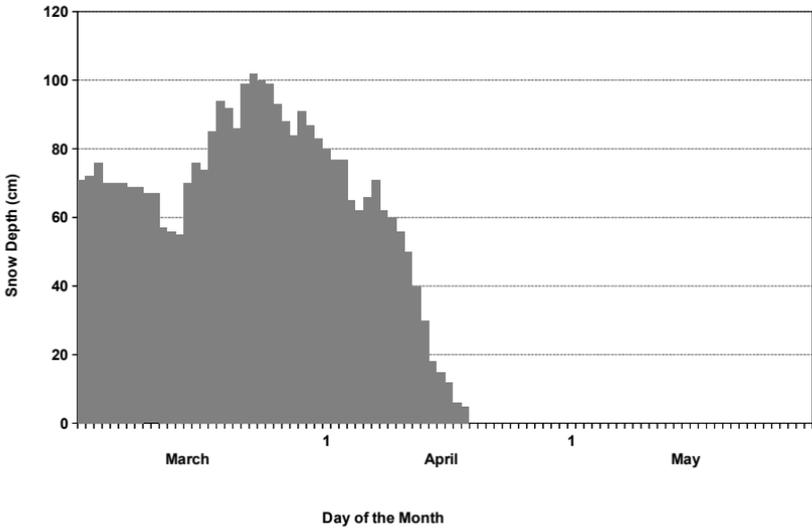
### Daily Precipitation - Greenwood, N.S.

March, April, May 2015



### Depth of Snow - Greenwood, N.S.

March April, May 2015



The snowfalls of March and April added up to 127 cm, much more than the 58 cm in an average year. Usually these spring months have more rain, but the cold temperatures produced snow instead. Total precipitation for March and April, though, was a bit below average.

There was so much runoff in April that the rivers were high, and it *seemed* wet. In reality, though, the season was relatively dry. May only got 58 mm of rain (average 85 mm), so the whole season received only 230 mm of the average 263 mm of spring precipitation.

(Note: Significant snows in 2015 started in late January, and the snow cover stayed until the sudden melt in the second week of April. We had over two months of the thick insulating blanket of snow. This allowed ground temperatures to warm from below, and when the snow disappeared there was no frost in the ground. As a result, the waters of the melt did not cause as much of a mud period as some winters and seeped into the ground. Certain soils, such as clay, retained the water, and farmers could not get onto those fields as quickly as on the sandy soils.)

— *Astronomy* —

## **WHAT'S IN THE SKY?**

BY ROY BISHOP

Highlights for July through October 2015

JULY 1: Full Moon

JULY 9: Venus brightest

JULY 15: New Moon

JULY 18: Crescent Moon close to Venus in western twilight (21:30 to 21:50)

JULY 30: Full Moon

During July, day-after-day watch Venus and Jupiter move farther apart in the western twilight (they were closest together on June 30).

Two full Moons this July! That occurs about every three years

because the average time between successive full Moons (29.53 days) is shorter than the average length of a month (30.44 days). More rarely, two full Moons occur in January, none occur in February, and two full Moons occur in March 2015. That next happens in 2018. The second full Moon in a month is sometimes called a “Blue Moon,” although there is nothing blue about it.

On the 18th, be sure to look for Venus and the Moon (see above). Use binoculars for a lovely view of the pair.

Saturn is well-placed in the southern, evening sky during July.

AUGUST 7: Dark Sky Weekend begins at Keji National Park

AUGUST 12: Perseid meteor shower

AUGUST 14: New Moon

AUGUST 15: Nova East Star Party at Smileys Provincial Park

AUGUST 29: Full Moon

AUGUST 31 and September 1: Very large tides

2015 is a good year for the annual Perseid meteor shower because moonlight does not interfere. The peak of the shower occurs after midnight on the night of August 12/13.

Venus, which has been very bright in the western sky during late winter and spring, vanishes from the evening sky in early August. It passes between Earth and Sun on the 15th as it moves into the morning sky.

Jupiter, so visible in the evening sky during late winter and spring, also vanishes from the evening sky early this month. Because of Earth’s faster motion, Jupiter passes behind the Sun on August 26.

SEPTEMBER 13: New Moon

SEPTEMBER 23: Autumnal Equinox (5:21)

SEPTEMBER 27: Largest full Moon of 2015, and a Total Lunar Eclipse!  
(See below)

SEPTEMBER 28, 29, 30: Very large tides (largest tide in 18 years on the 29th)

A total lunar eclipse visible from Nova Scotia at a convenient time (late evening) on a comfortably warm night in a clear sky happens only very seldom in a lifetime. Such an event occurs on Sunday evening, September 27, although whether the sky will be clear remains to be seen. In any case, mark your calendar! After September 27, the next total lunar eclipse is four years away, after midnight, on the cold night of January 21, 2019.

Eclipse Schedule for Sunday evening, September 27:

21:12 – Moon begins to enter Earth’s penumbra (undetectable)

22:07 – Moon begins to enter Earth’s umbra (obvious)

23:11 – Moon all within the umbra, total eclipse begins

23:48 – Mid-eclipse

00:23 – Totality ends, Moon begins to leave the umbra

01:27 – Moon clear of Earth’s umbra

02:23 – Moon clear of Earth’s penumbra

If you have time for only a brief look, the best time will be from about 23:00 to 23:15. Use binoculars to better appreciate the beauty of the event. If that turns you on, look again from about 00:15 to 00:30!

Venus shines brightly in the dawn twilight during September, causing UFO reports.

OCTOBER 12: New Moon

OCTOBER 25, 26: Venus and Jupiter close together in the dawn twilight!

OCTOBER 27: Full Moon

OCTOBER 27, 28, 29: Very large tides

Venus, Jupiter, and Mars (in descending order of brightness) perform an interesting waltz in the dawn twilight during October. On October 1, Mars and the bright star Regulus lie between Venus and Jupiter. On the 17th and 18th, Mars and Jupiter are close together. During the last ten days of October, Venus, Jupiter, and Mars present

a compact group, changing positions from one morning to the next. Venus and Jupiter are a spectacular pair on the mornings of the 25th and 26th, rising about 3:45 a.m. From October 15 to the end of the month, Mercury is well positioned far to the lower-left of the other three planets. On the 15th, Mercury rises about 6:00 a.m., on the 25th about 6:30 a.m.

— *Local History* —

## THE WELLINGTON DIKE

*This account of the Wellington Dike on the Canard River is from Will Bird's 1956 travel book Off-Trail in Nova Scotia:*

The great dike was built over one hundred and thirty years ago by early settlers from New England and protects about two thousand four hundred acres of rich marshland from Fundy's rampant tides. Many dikes have been built in the area with the utmost care but tremendous storms have driven violent tides that washed them out and caused losses running to millions of dollars. Yet the Wellington Dike has survived all those storms, its mile-long ridge bucking everything that has come along. Men laboured incessantly with ox carts and spades and axes and logs to construct the dike and legend has it that rum was their greatest inspiration yet they builded a sentinel that has stood guard faithfully over the decades and surely has earned the distinction given with the name of a great British general. It was built in layers of brushwood and mud, each layer being well staked, and the material hauled in by cattle or trundled by wheelbarrow. It took three years to complete the project but was the pride of the countryside when finished.

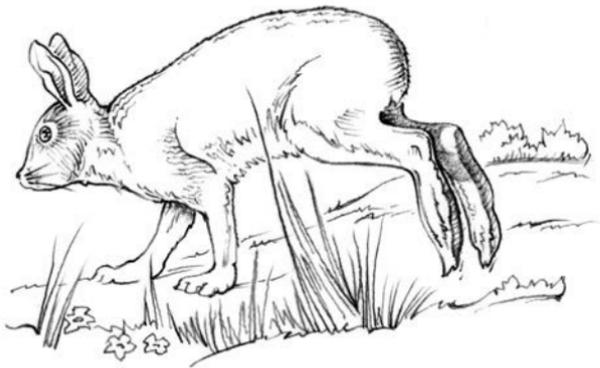
Some years ago it became apparent that the sluice was worn past usefulness and the Federal Government assisted the Provincial with the installation of a new sluice costing \$120,000. The highways was interested because the main way linking Lower Canard with Church Street goes over the dike. When the workmen dug down

to make room for the new sluice it was found that the birch and spruce boughs used in the construction so long ago were as sound as the day they were placed there, the spruce having the needles still attached.

*Charles G.D. Roberts, in this passage from The Forge in the Forest (1897) reminds us that the Planters were preceded by the Acadians, the first dyke builders:*

Where the five rivers flow down to meet the swinging of the Minas tides, and the great Cape of Blomidon bars out the storm and fog, lies half a country of rich meadow lands and long-arcaded orchards. It is a deep-bosomed land; a land of fat cattle; of well-filled barns; of ample cheeses and strong cider; and a well-conditioned folk inhabit it. But behind this countenance of gladness and peace broods the memory of a vanished people. These massive dykes, whereon twice daily the huge tide beats in vain, were built by hands not suffered to possess the fruits of their labour.

(NOTE: Any discrepancies in spelling or usage are the authors'.)



JACK MCMASTER

## BLOMIDON NATURALISTS SOCIETY 2015 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.  
(Neither BNS nor NNS membership is tax deductible.)

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

POSTAL CODE \_\_\_\_\_

E-MAIL \_\_\_\_\_

TEL \_\_\_\_\_

*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 \_\_\_\_\_

No.	Description	Price	Total
_____	Individual/ Family Membership	\$20.00	\$ _____
_____	Junior (under 16 years) Membership	\$1.00	\$ _____
_____	Nature Nova Scotia Membership	\$5.00	\$ _____
_____	2015 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*

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<b>Amphibians &amp; Reptiles</b>	Sherman Bleakney	H: 902-542-3604	
	Jim Wolford	H: 902-542-9204	
<b>Astronomy</b>	Roy Bishop	H: 902-542-3992	
	Sherman Williams	H: 902-542-5104	
	Larry Bogan	H: 902-678-0446	
<b>Birds – General</b>	Bernard Forsythe	H: 902-542-2427	
	Richard Stern	O: 902-678-4742	H: 902-678-1975
	Gordon & Judy Tufts	H: 902-542-7800	
	Jim Wolford	H: 902-542-9204	
	Jean Timpa	H: 902-542-5678	
<b>Butterflies &amp; Moths</b>	Jean Timpa	H: 902-542-5678	
<b>Fish &amp; Wildlife</b>	NS Department of Natural Resources	O: 902-679-6091	
<b>Flora</b>	Ruth Newell	O: 902-585-1355	H: 902-542-2095
<b>Fungi</b>	Nancy Nickerson	H: 902-542-9332	
<b>Hawks &amp; Owls</b>	Bernard Forsythe	H: 902-542-2427	
<b>Indian Prehistory &amp; Archeology</b>	James Legge	H: 902-542-3530	
<b>Mosses &amp; Ferns</b>	Ruth Newell	O: 902-585-1355	H: 902-542-2095
<b>Mammals</b>	Tom Herman	O: 902-585-1358	H: 902-678-0383
<b>Rocks &amp; Fossils</b>	Geology Dept., Acadia University	O: 902-585-2201	
<b>Seashore &amp; Marine Life</b>	Sherman Bleakney	H: 902-542-3604	
	Jim Wolford	H: 902-542-9204	
	Michael Brylinsky	O: 902-585-1509	H: 902-582-7954



