





BLOMIDON  
NATURALISTS  
SOCIETY



SPRING 2016 NEWSLETTER  
*Volume 43 · Number 1*



*Blomidon high tide*



SHELLEY PORTER

# 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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BLOMIDON NATURALISTS SOCIETY  
members are encouraged to share unusu-  
al 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 Shelley Porter at  
*blomidonrose17@gmail.com*

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

**Next submission deadline:**  
**May 30, 2016**

## OUT AND ABOUT

BY JEAN TIMPA, PAST EDITOR BNS NEWSLETTER

After two years of my pleading for retirement as temporary BNS Newsletter editor, Shelley Porter has come along to rescue me. And she will introduce herself in this issue as the planning/organizing editor and gatherer of programs, field trips, notices, stories of great natural history observations, historical documentation of field trips that did occur, some of the photos and drawings, poetry, and important odds and ends. [See the following article – “Listen” – for Shelley’s introduction to BNS.]

I started this in September 1974 because the survival of any organization is dependent on glue, perhaps otherwise known as regular communication with the locals and those who are away but still love us.

I will be nearby for a while yet to assist Shelley, if she needs help, because you do not know one another yet. She is from Canning originally and is an expert biologist so will contribute greatly, quickly. However, the glue that keeps us together (no gorillas, pleez!) is not the editor, or her committee, or Gaspereau Press staff and generosity, or the BNS board, but *all* the members and associated help who should write and send material before the deadline, even if it is only a few lines of interesting observation during the previous months. Otherwise, we will have to send you blank pages to write on, when we would rather be sharing. If you can talk, you can write, and editors will quietly fix up any typos, etc., as they are sworn to secrecy about bloopers, which I have made a good many times. You always seem to have a great variety of observations, which we share before our meetings begin, but they don’t seem to be written for those who cannot make the meetings. They would like to know, too, what is going on here in this part of the world and with BNS. I would never mind reading a story (even if I had already heard it) by

its keen observer or someone who had a question about *why* this or that was happening.

If Shelley receives too much material, the time-sensitive items will have to go in first, but the other bits and bobs can be saved for the next issue. Doug and I have had to make those decisions quite a few times, as I have had no idea how much he really needs to fill up the 56 pages or so for our one stamp, so definitely go too much rather than too little!

I leave with a little tinge of sadness, as the Newsletter has been so much a part of my life for 40+ years, but it is definitely time to be sensible, kick myself out, which is always the best way to exit. I'll be around, and now will have to take my own advice and write consistently. Please introduce yourself to Shelley and pass her little notes or send them in e-mails so she will know of your talents. Sail on, BNS. Bon voyage!

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— Editorial —

## LISTEN

BY SHELLEY PORTER

I went to a party last night and spent two hours listening to an old man. Listening was something I had to learn: I grew up the second of four girls, all strong-minded, articulate, opinionated, and well-read. Your statements had to be clever, complete, accurate, and delivered rapid-fire to be heard at all. So listening is a skill I learned later, and am still learning.

For the better part of the past decade, I worked for a Mi'kmaw organization in a Mi'kmaw community. Among the Mi'kmaq, Elders are rare and greatly respected. The legacy of residential school experiences and economic marginalization resulted in poor health outcomes for the Mi'kmaq, and they die younger than average Nova Scotians. Traditionally, Elders were the knowledge-holders for the community, and they still are. Their memories of times past, and information passed on from past generations, inform the current

generations in matters of spirituality, social values, food preparation . . . and natural history. The Mi'kmaq had no written language before contact with Europeans – all their history was oral history: stories told and retold around cooking fires and on long hunting trips through the forest. All the maps – the locations of clam flats, salmon rivers, moose yards, berry patches – were in people's heads. When an Elder died, all their knowledge might die with them. So, when an Elder spoke at a meeting, or brought a concern to our offices, we listened.

One of the first tasks I had handed to me when I first started that job was organizing a meeting of Elders, to share knowledge about the Bras d'Or Lakes. In speaking to activists and legislators in the region, it was clear that there would be a benefit to speaking not only to Mi'kmaq Elders but to Elders from all the communities around the watershed. Some farms had been in the same family for nearly 200 years, and knowledge of the natural world had been passed from generation to generation, just like in the Mi'kmaw communities. We brought all of these Elders together in a room, shared prayers and food, and told stories. The result was an ecological knowledge document like no other, with experiences, hunting techniques, recipes, and uses of natural materials exchanged, validated, and admired. The Elders talked, and we listened, like youngsters have listened for millennia: sitting at the table, or off to the side, saying nothing, absorbing everything. The Elders never shooed us away – the thing they want most is to pass their knowledge to those coming after them – “know this; do this; don't do that; do better.”

As I start climbing the learning curve of editorship of the Newsletter, I do so with great respect for my “elders”: the people who have worked on this periodical for many years. I volunteered for this position with impulsive eagerness and accepted it with awe and trepidation. The order of that probably should have been reversed, but it's too late now. I will try to be a good listener: to the membership, the Newsletter committee, and to the community. In a Mi'kmaw community, I have reached an age when, if I have sufficient expertise, I would be considered an Elder. But still, last

evening I sat listening and learning from someone who is my Elder. As naturalists, we should be listening to Elders all the time, and not just the ones of our own species. The Earth, the atmosphere, the ice sheets, the caribou, the rivers, the forests – they are our Elders, and they want more than anything to pass their knowledge to us: “know this; do this; don’t do that; do better.” Listen.

— *Club Notes & Notices* —

## **BOARD OF DIRECTORS REPORT**

BY KENT WILLIAMS, BNS PRESIDENT

As the Earth turns and moves into a new cycle and relationship with our Sun, we are seeing the renewal of life in the Annapolis Valley, along with welcome warmer weather. As part of this cycle, the BNS board recently met to continue to guide the society in a positive direction grounded in our mission of sharing knowledge of natural history and its interrelated relationships.

At our March meeting we welcomed several new board members: Kody Crowell, who is an Acadia science student; Ian Manning, Canning resident, who is leading our social network interfaces; Shelley Porter, our new Newsletter editor; and Jean Timpa, who has moved from Newsletter editor to sitting on the board. We thank these individuals for accepting positions on the board and look forward to their valuable contributions. Also, at this time we acknowledge and sincerely thank departing board members for their priceless contributions: Murray Colbo, Barry Yoell, and Jean Timpa in her Newsletter editor role, in which she tirelessly served BNS for many years. Thank you to these members – these contributions enable BNS to continue to thrive.

A large part of the conversation at the March board meeting was about our host role and planning for the upcoming Nature Nova Scotia conference taking place at Acadia in May. Keep an eye out for the great talks and field trips planned for this dynamic conference. Another item that we have been conversing on is a more formal pro-

cess for recognizing longstanding members for their contributions to BNS (i.e., Lifetime Achievement Award). We have not recognized a BNS member since 2011 and we believe it is important to continue to do this but to have a process that is objective as it can be. We are potentially looking to have a review with set criteria for recognizing members for awards every fall, with the possibility of recognizing one or more members in January of each year.

We look forward to furthering our mandate with strong and valued programming events throughout 2016. Moreover, with booked speakers and field trips, we need a new program coordinator: if anyone is interested please feel free to contact me or any board member to explore this. Also, our board meetings are always open to all members, should you wish to listen in or participate in the open dialogue – just contact a board member for our next meeting date.

I look forward to seeing members at the upcoming events. Feel free to connect with me any time with questions or concerns about the organization.

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— Club Notes & Notices —

## **MEET THE BOARD: KODY CROWELL**

*Kody is one of our new board members this year. He tells us a little about himself:*

I'm a third-year Acadia student majoring in mathematics and statistics with a second major in physics. My primary area of research involves predicting the movement of marine life in the Bay of Fundy, using computer simulations and tidal models. With this information, we hope to predict how porpoises and other sea critters will interact with the proposed tidal turbines to be installed.

But on top of my research and my courses, I'm also a resident assistant, a teaching assistant, and an editor for the student newspaper, the *Athenaeum*. With this position, I hoped to be able to educate the general Acadia populace on the efforts of tidal energy – its triumphs, its failings, and its potential as a renewable energy source

for Nova Scotia. I joined BNS with the same goal. I want to open up more discussions on conservation and environmentalism within the student body. One of the proposed ways of doing this involves creating a student branch of BNS, operated out of the Acadia Students' Union but answerable to the main BNS board. There will be potential to gain funding from both organizations. Failing that, other possibilities of including student participation in BNS involve more campus-based activities and talks, and helping out the executive in any other way I can.

If you have any questions about me, my research, or what I hope to offer BNS, feel free to get in touch with me. I'm always around Wolfville, and I look forward to contributing to the board.

— Club Notes & Notices —

## UPCOMING EVENTS

### Meetings

*Unless otherwise noted, all meetings are held at 7:30 p.m., usually on the third Monday of each month (note exception for December), 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. For more information on any events contact us at [info@blomidonnaturalists.ca](mailto:info@blomidonnaturalists.ca).*

✿ MONDAY, APRIL 18, 2016 – *Maritimes Butterfly Atlas Wrap Up*. John Klymko, zoologist for the Atlantic Canada Conservation Data Centre, and director of the Maritimes Butterfly Atlas will give a wrap-up of the spectacular findings of the first comprehensive and systematic survey of butterflies in our region.

✿ MONDAY, MAY 16, 2016 – *The Fascinating World of Lichens*: a look into what these extraordinary organisms are and some tips on how to identify them, with Frances Anderson.

Frances is a co-author of the field guide *Common Lichens of Northeastern North America*, published in February by the New York Botanical Garden Press, and has been studying lichens for over 10 years. This talk will be followed up by a lichen field trip in May.

✈ MONDAY, JUNE 20, 2016 – *Monarch Butterflies*, with Phil Schappert.

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

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

✈ BNS MAPPING INITIATIVE – Maps can be valuable navigational resources, but they 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.

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're interested in being part of this initiative, or have ideas for a map BNS should create, contact us at [BNS@valleynature.ca](mailto:BNS@valleynature.ca).

✈ SATURDAY, APRIL 16, 2016 – *Great Nova Scotia Pick-Me-Up*. Last year, BNS, the Eco-Kings Action Team, members of the County of Kings, the Town of Kentville, Village of New Minas, and the Friends of the Kentville Ravine Society joined forces to clean up along the trails and tributaries of Elderkin Brook (which flows into the Kentville Ravine). This year, BNS is joining forces again with local garbage enthusiasts – or at least those interested, and able – to do a bit of “beautifying” of our local landscapes. We will meet at the commuter parking lot on Prospect Road by the traffic lights directly opposite the Irving Big Stop (just off Highway 101, Exit 12) at 9 a.m. Parking is also available on the former Sawler property that now belongs to Kent Building Supplies. We will spread out from there to tackle the general area. For more information, contact Ken Harrison ([nosirah@bellaliant.net](mailto:nosirah@bellaliant.net)).

✦ TBA, MAY OR JUNE 2016 – *Amethyst Cove Rockhounding and Photography*. Fundy Rocks members David and Chris Sheppard will accompany us on this 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 the slope and the ropes are ice-free. Fundy Rocks will check conditions prior to the trip, and we will use social media (BNS website, email, Fundy Rocks Facebook page, BNS Twitter) to announce the trip and to advertise whether it will proceed.

✦ SATURDAY, MAY 14, 2016 – *Nova Scotia Spring Bird Migration Count*. To be involved, contact your local coordinator: HANTS WEST, Patrick Kelly (902-472-2322, patrick.kelly@dal.ca); KINGS COUNTY, Larry Bogan (902-678-0446, larry@bogan.ca); KINGS COUNTY (KINGSTON AREA), Sheila Hulford (902-765-4023); ANNAPOLIS COUNTY, contact Chris Pepper (902-483-6693, 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 22, 2016 – *New Birders' Walk*. Windsor. Leader: Patrick Kelly (902-494-3294 (w), 902-472-2322 (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, 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 for this trip.

✦ MAY 25, 29; JUNE 2, 6, 2016 – *Maritimes SwiftWatch Spring Migration Roost Counts*. Individuals are encouraged to count Chimney Swifts at roost sites during spring migration on the above dates (and earlier at major roost sites if swifts arrive earlier). These counts are part of a national monitoring effort to understand Chimney Swift population trends. Nova Scotians are asked to continue searching for, and reporting, active nests and roosts in both anthropogenic sites (e.g.,

chimneys) and natural areas. To share a Chimney Swift sighting, report a new roost or nest site, or help monitor an existing site, please contact Maritimes SwiftWatch ([marswifts@birdscanada.org](mailto:marswifts@birdscanada.org), 1-506-364-5196) or consider sharing your sightings and roost counts on their Facebook page ([www.facebook.com/Maritimes.Swifts](http://www.facebook.com/Maritimes.Swifts); omit specific address information if posting here), on NatureCounts ([http://www.birdscanada.org/birdmon/mar\\_swift/](http://www.birdscanada.org/birdmon/mar_swift/)), or via eBird. For more information, see [www.birdscanada.org/volunteer/acswifts/](http://www.birdscanada.org/volunteer/acswifts/).

☞ FRIDAY, MAY 27, TO SUNDAY, MAY 29, 2016 – *Nature Nova Scotia Annual General Meeting and Conference*. This year Nature Nova Scotia will be holding its annual meeting on the Acadia University campus. BNS members will be leading local field trips over the weekend, including our two traditional May trips (*Blomidon Provincial Park Fairy Shrimp Walk*, and *Cape Split Hike*) and a number of others. All naturalists of any age are welcome (you don't have to be a NNS member). Details will be available on the NNS web site ([naturens.ca](http://naturens.ca)).

☞ TBA, MID-JUNE 2016 – *Tree Swallow Banding Demonstration*. Miner's Marsh, Kentville. A number of local researchers are investigating factors involved in the decline of aerial insectivores – bird species that feed primarily off aerial insects. One component of this is to track individual birds (by applying small leg bands) and to weigh and measure them. As part of the Miner's Marsh Tree Swallow Project, we extend an open invitation to attend a demonstration of chick banding at the Miner's Marsh nestboxes in mid-June. This will be a fantastic opportunity to see birds up close and to get a glimpse into the world of aerial insectivore research. The date of the event will be determined based on breeding dates of birds that use the boxes. Please stay tuned! Access to Miner's Marsh is at the back of the Kentville Court House parking lot (87 Cornwallis St, Kentville). Contact us at [BNS@valleynature.ca](mailto:BNS@valleynature.ca).

☞ TBA, JULY 2016 – *National Moth Week Event: Mothing in the Valley*. National Moth Week (<http://nationalmothweek.org>) is a global citizen science effort to learn about, observe, and document moths

in backyards, parks, and neighbourhoods. National Moth Week is being held, worldwide, during the last full week of July (18–26). This year BNS will host its second incarnation of this event, led again by one of Atlantic Canada’s leading invertebrate experts, Jim Edsall. This event will involve a combination of techniques for drawing moths and other nocturnal insects in close for observation and photography (e.g., baiting and sheeting). This event is family friendly and will be a great opportunity to view, and be inspired by, some of the province’s rich biodiversity that we rarely get to see. As incentive to join us, last year, Jim discovered in the Kentville Ravine a species not yet reported for Nova Scotia: *Neoligia exhausta*. Time, date, and location of this year’s event will be announced soon.



R. WHITMAN

*Spruce Grouse*

## **CAPE BLOMIDON: A FRESH PERSPECTIVE**

BY PATRICK KELLY

[EDITOR'S NOTE: In the last issue (Winter 2015), two field trips led by Fundy Rocks were reported by David and Chris Sheppard. The following report covers the same trips from a different point of view.]

It is rare that weather postpones BNS field trips by months, but that was the case in 2015. Due to the late spring and poor weather in the fall, two trips to explore new-to-BNS parts of Cape Blomidon got postponed, in one case several times. We finally made it in October. Both trips had a secondary goal of looking for minerals. The leaders on both trips were the father-and-son team of David and Chris Sheppard, from Fundy Rocks. Besides being an avid rockhound, Chris is also an accomplished photographer and has made Capes Split and Blomidon a major focus of his work. You can see some of his pictures on the Fundy Rocks blog (<http://fundyrocks.blogspot.ca/>), including photos of some of the beautiful rocks found there.

### **Cape Split Seafloor**

OCTOBER 24, 2015 – The focus of this trip was agate, a semi-precious silica mineral noted for its bright colours and layered appearance. We started the trip at Little Split Cove. This beach on the south side of the tip of Cape Split is easily accessible, although there are some ropes that can be used, if needed, to help hikers reach the beach. The entire beach is the hunting ground for agate. Given the tides, there are always new pieces being eroded and brought to the top layers. Once you know what to look for, you can readily see how common it is, although really nice pieces are few and far between. We had lots of time to look, as our final goal was the sea-side area of Cape Split, and the first choke point is at the west end of the beach. Eventually the tide ebbed enough for us to have flat ground at the base of the cliff, and we were off. To be safe, once you can make it



CHRIS SHEPPARD

*Cape Split explorer*

past that point you want to be back there in four hours (or less) to make sure that the rising tide does not trap you.

From the beach it is about a kilometre to the tip, but the walking is not easy in places, as there are areas where you need to walk over broken rock. A stout piece of driftwood comes in handy for keeping one's balance. This was my first time, and it is a completely new way to see Cape Split, compared to looking down from the top. The "split" that has the nesting gulls in the spring looks a lot taller, thinner, and more fragile when seen from the beach. Having been to Cape Split numerous times, I always wondered if it was possible to get down to the shore from the tip. Those of you who have been there may be familiar with the large "crack" about halfway down the grassy tip that angles downward toward the shoreline and often has shoeprints in it. I now know where it comes out. There is a small grassy area, and from there you have to jump the other half of the way to get to the water! When you see people at the edge waving down to you, it really makes you realize how high Cape Split is, as normally when you are at the top looking down there is nothing really to give you a good scale to gauge its height.



CHRIS SHEPPARD

*Approaching storm, Cape Blomidon*

At the actual tip, there is an area called the Wind Tunnel (named for the tunnel that was there and has since collapsed and been eroded away), which you could go through to see the north side of Cape Split. It is now a fairly wide gap, although we were cautioned to move through quickly due to the possibility of falling rocks. From there, we returned to the south side and hiked to the three pinnacles of rock, where we noted two more vertical seams in the large adjacent rock, which will no doubt provide pinnacles in the future to replace the ones that are there now. We kept going, and the footing became more treacherous, not only because the basalt was more broken (often leaving triangular areas with sloped bottoms) but, as we were now in the intertidal zone, the rocks were carpeted with seaweed in some places, periwinkles in others. At least the barnacles provided good footing. Despite the slower pace, most of us made it out as far as possible, including an octogenarian, who may well be the oldest person to see the view from there. The water was pouring over the nearby rocks and looked more like part of a river than the ocean. After some great photo opportunities, we slowly worked our way back to the beach and made it with time to spare.

## Amethyst Cove

NOVEMBER 7, 2015 – You can likely guess the mineral for *this* trip! Amethyst is quartz, but rather than being composed entirely of silicon and oxygen, slight impurities in the crystal give it its lovely purple colour. I had been aware of Amethyst Cove for decades but did not know exactly where it was, or how to get to it, other than that it was more or less north of the parking lot at the start of the Cape Split trail. We had a larger group this time, about 30 people, half from BNS and half as part of another group that was doing a tour with Fundy Rocks. We arrived at the parking lot to discover a search and rescue team that was cleaning up. A father and son had spent the night in the woods above the tide line near Amethyst Cove and had just been rescued. Fortunately, there were no injuries.

To get to Amethyst Cove you start by crossing the field by the parking lot. Unlike the previous trip, there were lots of ropes here, and they were definitely not optional in some places!

The descent had to be done in single file, with a real bottleneck between two large rocks. Eventually, we all made it to the beach, where we discovered that it was *not* Amethyst Cove – the place we wanted to be was further east, almost three kilometres further east! Looking in that direction, there is a distant headland, and Amethyst Cove is just past it. Everyone set off, and while a lot of it was flat, in some places the only way to proceed was over large boulders that had fallen onto the beach. About half the people who started out made it all the way. One of the more interesting observations I made at Amethyst Cove was that there were still flowers in bloom along the rock face, despite its being early November. Given how little sunlight shines there over the summer, one can see that the growing season must start quite late.

The amethyst there is usually in geodes, which sometimes break open when they fall from the cliff onto the rocks. An unopened geode looks just like any other rock, so finding one can take a lot of time. Again, the erosion causes new material to show up on the beach with each high tide. Most people found a few pieces of

amethyst, the best specimen being a crystal that was about 2.5 cm long, dark purple but getting lighter toward the top, with a spiral of dark purple inside. We were told that a crystal like that would not survive intact through only a few high tides, so it was a good thing someone had spotted it.

As always, the climb back up to the trail took longer than coming down. On the plus side, it was easier to see where the hand and foot grips were going (coming down, there is one steep place where we had a spotter telling us where to put our feet).

I hope these trips are run again, and if so, I hope many of you will take the opportunity to see this area from an entirely new perspective.

— *Natural History* —

## RELATIONSHIPS IN THE WEB OF LIFE

BY KENT A. WILLIAMS

The deeper I go into this human expedition on Earth, the more I feel that understanding the universal story is essential to giving meaning to our existence and creating a needed paradigm shift in how we live on our planet. The traditional Cartesian binary perspective of *nature versus humanity* has created separation from our environment in how we live our lives: exploiting, accumulating, and profiting from what we view as “cheap nature.” We have objectified the environment (nature) instead of seeing it as an interconnected system of relationships – relationships that include us. For 400 years, western society has viewed nature as something to be mapped, rationalized, quantified, and, above all, controlled – and to be transformed into capital. Through understanding the universal story – the narrative of how our planet was created from the Big Bang theory – there is an opportunity to see the nebula of interconnected and synergistic processes over the approximately four-billion-year history of Earth. Instead of the idea of nature versus humanity, we can shift to a fuller meaning of humanity *in* nature, nature *in* humanity, appreciating

that nature is a web of life through which humanity develops. Viewing that it is an intertwined relationship, humanity can neither save nor destroy nature but only transform with it through the interconnected systems and relationships that make up the web of life.

Through this meaning of relationship perspective, we can view capitalism as only a project or process of our social system, and that it is every part nature. I feel this thinking is another part of the puzzle in shifting our thinking away from the environment/nature as an object that sits outside of humanity and our capitalistic world. In understanding in terms of relationships within relationships, it gives meaning to how everything intertwines and affects each relationship and system on the planet. I feel the social-ecological systems perspective (humanity in nature) gives the potential to move away from the cause-and-effect sequence of blaming capitalism and colonization for our challenges (climate change, massive deforestation, pollution, food security, and resource exhaustion) to seeing things as natural relationships that transform through relationships . . . and the power in envisioning new ways of seeing the world and relating with it toward possible and desirable futures.

These desirable futures are there, waiting to emerge through our relationships and cascading through the transformations and bifurcations of human activity in the web of life.

— *Natural History* —

## **ALERT: SALAMANDERS UNDER ATTACK**

BY TED LEIGHTON

As you probably know, a newly discovered disease is causing rapid and severe population declines among salamanders in Europe. The agent causing the disease is a fungus of the chytrid group, very similar to, but different from, the chytrid fungus that has caused extinction of many species of frogs and toads worldwide. Among continents, North America has the greatest diversity and richness of salamanders and thus is at the greatest risk for loss of biodiversity and ecological stability from this new disease, should it arrive.

Information sheets, in both English and French, are intended to alert both the public and scientific communities to this disease, the risks it poses, and the best approaches to reducing risks. They are available at this site: [www.salamanderfungus.org/resources/fact-sheets/](http://www.salamanderfungus.org/resources/fact-sheets/). Please use them to inform yourself and to disseminate this information through your various networks. Close observation by as many people as possible is the only way to achieve early detection and response should this fungus arrive here.

— *Natural History* —

## **A MORNING'S PADDLE ON THE ABISKAQ SABOO**

BY NICK HILL & ALAIN BELLIVEAU

Merritt Gibson organized a canoe trip down the Cornwallis River in 1991. On that trip, we found our paddles slimed with mats of filamentous green algae and cautioned children to not drink the water. There have been various conservation groups formed over the years with different focuses: from reducing the agricultural impacts on the river water, to the Atlantic Salmon and, more recently, concern for a remnant old growth, the Kentville Ravine. But despite their best efforts, the health of the river has steadily declined; last year, Shannon Stirling's report ranked it the most polluted river in Nova Scotia. Wikipedia describes the Cornwallis as one of the top ten most polluted rivers in Canada. It also gives a suggested name for the river in Mi'kmaq: *Abiskaq Saboo*.

Feeling again the Maritime spring doldrums, we harnessed the canoe to the rooftop last weekend and put in at the intersection between Lovett Road and the river. We had trouble finding a launch, as there was electric fencing across the span of the river at the bridge. It was not live, and we hoisted the old canvas canoe into the muddy river. We hailed a fly fisherman who was walking along the fenced banks of the river looking for a spot to cast. The banks were beautiful in a Constable Hay Wain sort of idyll, the grass was already green, and it seemed spring was around the corner. Grackles were back, but it was a cooling day.

As we paddled, we noted the grazed floodplain was a spinney of the exotic Multiflora Rose, and we also saw that grazed grass alone was not up to the job of holding the bank in place. The riverbank sods of Kentucky Bluegrass were sheared off, sending more sediment into the river. But soon we saw our first stop: a swamp was beckoning Alain, who has a sixth sense for the endangered Black Ash. Needless to say, he found a single Black Ash tree in a beautiful swamp nestled between the impact of cattle and a large sand extraction pit. The Black Ash has recently been listed as endangered, and this swamp was a mixture of White Ash, Red Maple, Yellow Birch, and Eastern Hemlock. Full of vernal pools and an abundance of lichens and mosses, the swamp acts as a water filter and a biodiversity hotspot in a reduced landscape.

We paddled on and came to a smaller floodplain swamp that was remarkable for its stand of American Elm. Most of the good-sized trees in the Valley have disappeared because of Dutch elm disease, so the sight of a healthy elm swamp was heartening. Nearby, along a higher spot along the meandering river, we found a small stand of Sugar Maple and Black Cherry, an unusual sight along this part of the Cornwallis. Atop the stable banks and around vernal pools in the occasionally washed floodplain, we found the provincially rare False Mermaidweed (*Floerkea proserpinacoides*), known from only about a dozen sites in the Maritime provinces. This floodplain footpath has been long worn by fishers with great regard for the river. They now catch mostly Brown Trout, a fish that, despite its persistence, has been hammered by pollution in Pennsylvania. Thus it was shocking for us to find on this very river bank a pile of excrement from someone mistaking a beautiful place for a toilet.

We paddled on.

After wrestling our way upriver some more, we found a long seepage marsh in fairly good state. It had Black Cherry and Blue Vervain (*Verbena hastata*), a blue-flowered rarity that specializes in floodplain marsh habitat and provides a good nectar source for pollinators in mid to late summer. And on we paddled, but we left before the weather turned, scooting downriver with the current, our minds

filled with the potential of this great river, but with the sadness of its neglect and abuse. We had a list of rare plants that underline the river's potential importance for wildlife and biodiversity. We had found an endangered, culturally significant tree (known as Wisqoq to the Mi'kmaq) in a unique swamp type that mixed ash with maple and hemlock. We had discovered a surviving stand of American Elm in good condition and with False Mermaidweed, and we had solid, or soiled, evidence that these things were underappreciated.

Sewage in rivers conjures up a Dickensian London to go along with a Hay Wain in a river so grazed that its sods fall into it. But there are now salmon in that same Thames River. We of European ancestry have done much along the Cornwallis River in scarcely 200 years. It is a proud heritage. Railways took apples in barrels, then boxes, to the Cornwallis at Port Williams, whence ships took them to Europe, where our apples were the prize of the Crystal Palace. This was a time of many mixed farms and of people fly-fishing the river and small creeks. Before that, the river served as a key transportation route for the Mi'kmaq and the Acadians – and likely as a prime source for fiddleheads, which now grow scarcely and soiled by the river's brown waters. With more people and more intensive methods, we overlooked the river and treated it like a ditch. In the memory of the retiring generation are days spent playing in the Cornwallis waters that were then clean. Indeed, the Cornwallis still flows, and after our experiencing just a short canoeing excursion, the prospects of a clean, ecologically vibrant river are still evident. Heraclitus claimed, "No man ever steps in the same river twice." But we can reclaim the Cornwallis and return it to its Abisqaq Saboo state.



## ROSES AND VIOLETS AND DANDELION JELLY: A JOURNEY INTO WILD EDIBLES

BY TANIS MACPHAIL

I've been getting to know herbs for a while now. Every year I do my best to learn a new plant, use, or method. This year, my learning curve is transitioning from the concept of "special medicine" to everyday wonder foods.

Herbs and *wild edibles* are much the same thing, when you get down to the root of it all. When asked what I do as a herbalist, the easiest answer I can give is this: "I practice the use of plants as medicine."

In our allopathically minded society, we're comfortably entrenched, regarding "medicine" as something that comes from a bottle, or a specially prepared mixture. That's true, so far as it goes; however medicine can be much easier and more accessible than that.

Herbs, and "herbal medicine" rarely work the same way an aspirin does. The medicinal and nutritive value of herbs is cumulative. That is, it takes time for the active constituents to accrue or act in the body in a noticeable way. So the trick, as a herbalist, is to find ways of incorporating herbs into a daily routine that is reasonable and enjoyable. Something that is simple and delightful.

Thus, my journey into wild edibles.

Did you know that you can eat violet blossoms (*Viola odorata*) and rose petals (*Rosa* spp.)? How about that unassuming little plant, plantain (*Plantago major*)?

A few summers ago I started adding to my salads. Of course, the mix of organic baby greens was an enjoyable start, but it went to a whole different level when I added handfuls of fresh basil, sage, plantain, dandelion greens, oregano, thyme, mint, lemon balm, chives, and beet greens to it. Rose petals added a little romance and a lot of enjoyment to the mix. On top of that, the fresh blackberries

and ground cherries were the bit of sweet to offset the savoury. Good grief, did we eat a lot of salad that summer!

It was also that summer that I was introduced to the sublime delight of Coconut Rose Semifreddo. This gently flavoured, frozen plate of heaven was crafted by the talented Aube, author of the inspiring Kitchen Vignettes blog (<http://kitchenvignettes.blogspot.ca/>). She has the full recipe, along with many others that have inspired me to incorporate wild foods into my kitchen, listed there. Rose petals are a beautiful source of vitamin C and are good medicine for the soul.

Recently, she and a number of herbal/wildcrafting friends of mine have started buzzing about dandelion jelly. I'm fascinated to try this simple preserve. A basic jelly, with the addition of bright-yellow dandelion petals promises to be a jar full of sunshine come the middle of winter. That is, if it makes it that long! Dandelions are edible from root to blossom and are high in vitamins A and C, and even have calcium and phosphorus too. Dandelions have mildly stimulating, cleansing properties, which help support the elimination of toxins from the body. I dare say they also help eliminate toxins from the mind, with their bright burst of cheerful yellow.

Something I've always wanted to do is add sweet violets to my salads and confections. I have, alas, never lived where there's been enough proliferation of this quiet little plant to justify sacrificing the blossoms to my dinner plate. Violets are also purveyors of vitamins C and A, and additionally contain properties that aid the body in cleaning the blood and toning almost all the separate systems that make us function well.

Years ago, when my family would visit my maternal grandparents on their farm in Cape Breton, one of the first things I'd do after the long car trip was bound up to the stand of soft pink mallows (*Althea officinalis*). I'd pick armloads that were as big as me for my grandfather. I'm sure, in retrospect, he was slightly dubious about the gift. I had no idea then that the root of this beautiful, soul-soothing plant was edible, nor of the properties associated with it. Mallow Root is a demulcent herb, one that aids healing by softening and coating the

area it's applied to. As a wild edible, it can be used as a vegetable, a thickening agent in pottages and stews, and as a vegan base instead of eggs for thickening and binding. Euell Gibbons, in his amusing and informative *Stalking the Healthful Herb*, devotes an entire chapter to his experiments with this herb. The flowers and young tips of the plants are ideal additions to a wild salad, adding their gentle healing properties along with their beautiful colour.

All of these plants can be made into teas. Some are ideal tossed into spring soups and stews. Pickles, jams, jellies, wines, and cordials are all possibilities, nuanced with the individual healing properties of the herbs added to them. Can you imagine making a rose and violet wine? What a delightful thing to pull out on a long January night!

Be mindful in your own wildcrafting adventures to harvest only from places you have permission to forage in. Too, check to make sure that pesticides and herbicides are not in use. Harvest gently from whichever stand of herbs you're foraging in. Don't be afraid to let your feet wander and your hands miss a blossom or ten. Take only what you need for that meal and no more. Learn how the plant grows and regenerates, and harvest from it in such a way that you promote the health and growth of the plant. Be mindful of what you do, and give thanks for the blessing of the bounty being added to your basket.

Last, but certainly not least, do make sure that the plant you think is edible is truly who you think it to be. Invest in a good wild edible handbook, and better yet, connect with a local herbalist, gardener, wise person, or wild edible aficionado who can show you the ropes and introduce you to your new food friends. Many wild things are harmless and helpful. Just as many are not. It pays to know the difference between the two before ill effects are felt.

Bright Blessings and Happy Wild Eating!

## MARGAREE RIVER

BY CADEL JONES, CANNING

*I wrote about Margaree. It's where my grandparents live. My family goes to visit them yearly. Margaree is such a beautiful place.*

My family and I visit Cape Breton at least once a year. We go and visit our grandparents in Margaree Valley. They have a home and a cabin on the Margaree River. The Margaree River is known worldwide for its amazing salmon fishing. It runs close to the Cabot Trail, which is also world known for its beautiful scenery. The Margaree River and the Cabot Trail both make Margaree a popular place to visit for tourists.

When my family and I go to visit Margaree Valley, one of our favorite things to do is swim in the river. It is a clean, clear, and deep river. The river waters can be frigid cold but they warm up significantly in the warm summer heat. We love swimming in the strong rapids of the river, having bonfires on the beach, and jumping off the Portree Bridge.

Sometimes we will visit Margaree in the winter when there is a lot of snow. We will even drive up into the Cape Breton Highlands where the snow has been over ten feet deep. We have a lot of fun cross-country skiing in the snow at the North Highland Ski Trails. In Margaree, less than a kilometre from my grandparent's home, there is a fish hatchery that was built in 1902. It is the oldest fish hatchery in Nova Scotia. At the Margaree fish hatchery they farm Atlantic Salmon and Speckled River Trout. Every year they release over fifty thousand salmon into the ocean where they will fully mature. Some are released and kept in the river to grow for another year, since they are not ready to go out into the ocean yet. At the hatchery they also farm over one hundred thousand trout every year.

The salmon that you would typically fish out of the Margaree River are Atlantic Salmon that have returned from the ocean to lay

eggs. These eggs will soon mature into young salmon, which are named fry or parr. These young fish will stay in the fresh water of their river homes for another year or two. Then they will grow into smolt, and at this time in their life cycle they will travel out to sea. In the ocean they will fully mature into adult salmon. The adult salmon will stay in the ocean for a year or more before they return to their river homes. Once back in the river, the salmon will lay eggs and restart the life cycle.

The Margaree River attracts tourists who come and fly-fish Atlantic Salmon from the river. Salmon fishing is probably the most common style of fishing in the Margaree River, but people will also fish trout. Fishers love coming to Margaree and renting a cabin on the river so that they can fish all day long then come back to their warm cabin and rest for the next big day of salmon fishing. Some renters will bring their off-road vehicles like dirt bikes or snowmobiles. Cape Breton is known for its snowmobiling. The deep snow and the grand snowmobile highways make Margaree a great place for snowmobiling and all of your other favorite outdoor sports.

Travelling to Cape Breton every year has become a family tradition and has created so many memories. We really enjoy riding our bikes, visiting our grandparents, going to beaches, or going on walks. My mom grew up in Cape Breton and so did a lot of my ancestors. I am sixth generation Canadian, and my Cape Breton family came from Scotland in 1843. That makes Cape Breton really special to my family.

*[Cadel (age 14), was awarded honourable mention in the Senior writing category of the 2015 youth nature writing and art competition for this piece. Congratulations, Cadel.]*



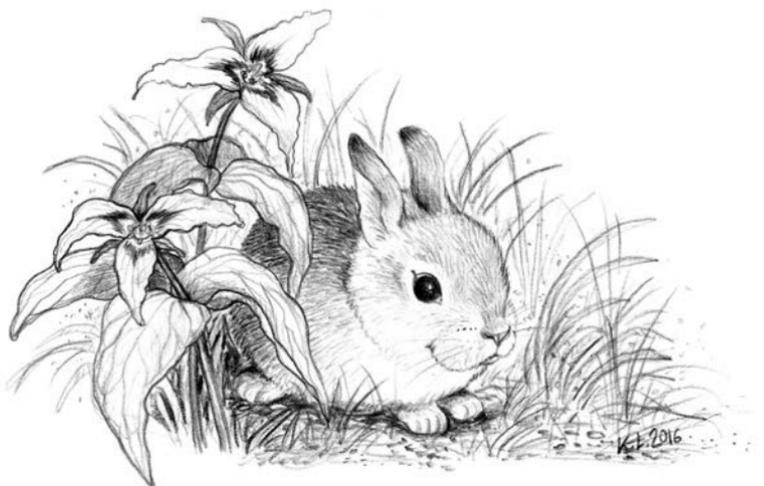
## A TALE OF TWO CHILDREN'S BOOKS

BY JEAN TIMPA

I have two very precious grandchildren: Naomi, who will be eight in September, and Dillon, who had his third birthday a few weeks ago in early February. They live in Lower Sackville, so we see one another on occasion, but of course not often enough for this Nanny. To stretch the money a bit and encourage storytelling, reading, artistry, and writing – as was traditional in my own younger life – I favour buying books for them, which can be shared for a two-in-one bargain in more ways than one.

In a local store in 2014, I was shown a wonderful book days before Christmas as a possible gift for Naomi, so I concurred with the opinion of the clerk that my granddaughter might very well like it. As it has turned out, *Albie's First Word, a Tale Inspired by Albert Einstein's Childhood* has become one of her favourite books and is now waiting for Dillon to grow into it. Written by Jacqueline Tourville and illustrated by Wynne Evans, this short historical novel-style biography is for all ages, as notes for adults have been included on Einstein's rather remarkable life, and photocopies, by permission, of several pages from his "Zurich Notebook" grace the front and back pieces of the hardcover book, which Naomi/Dillon and I now both own. I also notice that it comes in an e-book version. A more perfect product one could not find for a young child, or an adult for that matter, as it encompasses a number of ideals and social problems as well as the scientific challenges that revolved around Einstein's life – or so I thought: another children's book on the same subject could not be as perfect.

Then, early this year, a different clerk in the same store who knew of my enthusiasm for *Albie's First Word* called to say that a new book about Einstein had come in. Yes, it was for children, and she would save it for me. I was soon holding the 2016 paperback version of *On a Beam of Light, a Story of Albert Einstein*, by Jennifer Berne and illus-



KRISTINA LEHTONEN

trated by Vladimir Radunsky, originally published in hardcover in 2013. Again, the author has put in notes for further background for all of us, even giving us titles of books she read and her favourite online address. It is just as superior as *Albie's First Word* but tends to emphasize a bit more the scientific aspect of Einstein's life and how he figured out a number of things we now take for granted.

Both books encourage children to stop to wonder, think, and imagine, as we need new Einsteins to ask why, what, where, when, how . . . and many more questions. Some of his teachers told him he was being too disruptive to his classmates by asking too many questions, and that he should be more like his classmates – but that is another whole story for me to write in another issue. So please buy and place both these books in the hands of as many children as you are able: your own children, your neighbours' children, your local libraries if they don't already have them, and your local school libraries. It may be one of the greatest investments you ever make. Naomi and Dillon will soon have *On a Beam of Light*, so it will be interesting to hear if Naomi has a preference between the two books, or if she finds them complementary. I soon need to find my copy of Rachel Carson's *A Sense of Wonder* to go along with these classics for them, too.

Do you or children you know have other favourite books, relating to our BNS interests, about which we should know? Or favourite websites? Please do write a review and send it to Shelley. We need to keep our new BNS editor feeling welcome, useful, and busy!

— *Nature Counts* —

## **35TH CYRIL K. COLDWELL EAGLES/RAPTORS COUNT OF EASTERN KINGS COUNTY**

BY JIM WOLFORD

SUNDAY, FEBRUARY 7, 2016 – Dumb luck was a good provider this morning regarding weather. Snow flurries and even a blizzard changed abruptly and the sky cleared and bright sun appeared, to provide excellent visibility. We had 18 field parties totalling 34 people, who spread out for just one hour to designated areas within our count area (Kentville to Avonport and Black River Lake to Scots Bay). We identified and counted all birds of prey seen and also kept track of other sightings of all critters of general interest.

### **Bald Eagles**

Last year's count at the same time of year found 555 to 575 (the hedging here was from 20 eagles that might have got double-counted). Both totals are near-record highs, but this year's total of 380 is close to our long-term recent average. Adults made up 60.5 percent of the total (39.5% immature).

The eagles were located as follows:

- 51 in the Avonport area
- 41 west from Canning, including the main feeding site (where eagles showed little hunger)
- 40 south & east of Grand Pré National Historic Site
- 38 east & north of Port Williams (between the Cornwallis & Canard Rivers)

- 36 north and west of Grand Pré National Historic Site
- 36 at White Rock, Gordon Young's chicken farm, just south of Gaspereau River (Bernard Forsythe called Gordon the night before the count and arranged for an offering of chicken carrion, which the eagles quickly found this morning)
- 24 in the Cornwallis River valley (Kentville to Wolfville)
- 24 north and east of Grand Pré National Historic Site
- 23 in the Gaspereau River valley (White Rock to Avonport)

### **Other Birds of Prey**

- 50 Red-tailed Hawks
- 1 Rough-legged Hawk
- 2 Northern Harriers
- 1 Sharp-shinned Hawk
- 1 or 2 unidentified hawks
- 1 Barred Owl (as usual, seen at dusk by Bernard Forsythe at his feeding tray behind his house on Wolfville Ridge)

One other report is just hypothetical and unlikely: Peter Austin-Smith talked with someone who was walking on Wolfville dykes/dykelands and claimed to have seen a Snowy Owl (no details or photo).

### **Other Wildlife of Interest**

- 250 Canada Geese
- 150 Mallards & Black Ducks in the Cornwallis River
- 40 Mallards & 20 Black Ducks in the Gaspereau River
- 1 Common Merganser at Lumsden reservoir
- 40 ravens noted by one observer, and 75+ crows (a murder) noted by 2 groups
- a few flocks of Snow Buntings (2 observer groups) & Horned Larks

[Last year Jamie Gibson found numbers of coyotes at northeast

Grand Pré, but Jamie was absent this year and nobody reported coyotes.]

## Observers

George Alliston, Peter Austin-Smith Jr., Charlane Bishop-Boates, Sherman Boates, Soren Bondrup-Nielsen, John Brazner, James Churchill, Lana Churchill, Peggy Crawford, George Forsyth, Harold Forsyth, Bernard Forsythe, Glenys Gibson, Gerry Hardy, Pat Hawes, Tom Herman, Angus MacLean, Debbie Mander, Mark Mander, Sheila McCurdy, Terry Murphy, Mike O'Brien, Ian Paterson, Meg Raven, Stan Riggs, Pia Skaarer-Nielsen, Liz Stern, Richard Stern, Rick Whitman, Hannah Williams, Kent Williams, Olivia Williams, Sherman Williams, Jim Wolford.

Thanks again to all participants, and unless I hear comments from some of you to the contrary, we are done for another year!



BRIAN MCKIBBIN

## SUMMARY OF CYRIL K. COLDWELL EAGLE COUNTS, 1979–2016

COMPILED BY JIM WOLFORD

YEAR	DATE TIME	TOTAL EAGLES	NUMBER (ADULTS / IMMATURE / UNKNOWN)	RATIO (ADULTS / IMMATURE)	NUMBER OF OBSERVERS
1979	Mar. 4	22 (18?)	8 / 10–14?		10
1980	Feb. 24	31 (34?)	11? / 23?		10
1981	<i>No count</i>				
1982	Feb. 28	36	13 / 23		?
1983	Feb. 27, 10–11 AM	56 (58?)	27 / 29		11+
1984	Feb. 26	27 (40–65 in Jan.?)	12 / 15		?
1985	Feb. 24 10–11 AM	36	16 / 20		15
1986	Feb. 23	42	20? / 22?		?
1987	<i>No count</i>				
1988	Feb. 28	56	33 / 23		10
1989	Mar. 11	69	25 / 44		7 or 8
1990	Feb. 3 10–11 AM	123	60 / 63		16 in 10 parties
1991	Feb. 3 11 AM–Noon	148	76 / 72		12 in 8 parties
1992	<i>No count</i>				
1993	Jan. 31 11 AM–Noon	442	179 / 237 / 26	43% / 57%	15 in 11 parties

1994	Jan. 30	408 (Inflated?)	183 / 216 / 9	46% / 54%	30 in 12 parties
1995	Jan. 22 10–11 AM	405 (Inflated?)	173 / 213 / 19	45% / 55%	33 in 14 parties
1996	Jan. 21 10–11 AM	300 (Deflated?)	126 / 166 / 8	43% / 57%	34 in 12–15 parties
1997	Jan. 26 10–11 AM	525	269 / 247 / 9	52% / 48%	34 in 16 parties
1998	Feb. 1 10–11 AM	395	237 / 130 / 28	65% / 35%	32 in 17 parties
1999	Feb. 7 10–11 AM	483	255 / 220 / 8	54% / 46%	37 in 16 parties
2000	Feb. 13 10–11 AM	580	325 / 246 / 9	57% / 43%	29 in 15 parties
2001	Feb. 10 10–11 AM	387	224 / 157 / 6	59% / 41%	35 in 16 parties
2002	Feb. 9 10–11 AM	333	221 / 109 / 3	67% / 33%	31 in 16 parties
2002	Feb. 16 10–11 AM	312	188 / 120 / 4	61% / 39%	29 in 15 parties
2003	Feb. 9 10–11 AM	425	215 / 200 / 10	52% / 48%	36+1 in 16 parties
2004	<i>No good count</i>				
2005	Feb. 12 10–11 AM	217	115 / 95 / 7	55% / 45%	35 in 17 parties
2006	Feb. 11 10–11 AM	287+*	178 / 106 / 3	63% / 37%	23 in 15–16 parties
2007	Feb. 4 10–11 AM	427	222 / 203 / 2	52% / 48%	32 in 16–18 parties
2008	Feb. 3 10–11 AM	291	163 / 120 / 8	58% / 42%	30–31 in 16–17 parties

2009	Feb. 1 10–11 AM	294	184 / 106 / 4	63% / 37%	37 in 16 parties
2010	Jan 31 10–11 AM	427	245 / 176 / 6	58% / 42%	28 in 17 parties
2011A	Feb. 6 10–11 AM	176 (partial)	103 / 67 / 6	61% / 39%	30 in 14 parties
2011B	Feb. 13 10–11 AM	179	109 / 67 / 3	62% / 38%	28 in 16 parties
2012	Feb. 5	477	269 / 189 / 19	59% / 41%	32 in 17 parties
2013	Feb. 16	293	170 / 122 / 1	58% / 42%	27 in 16 parties
2014	Feb. 2	388	231 / 153 / 4	60% / 40%	35 in 16 parties
2015	Feb. 8	555**	356 / 216 / 3	62% / 38%	30 in 16 parties
2016	Feb. 7	380		60% / 40%	34 in 18 parties

\* One area done the next day – add 10 eagles? \*\* Reduced by 20 from total counted (575) because of possible overlapping observations at Hortonville and Avonport.

— Nature Counts —

## WOLFVILLE CHRISTMAS BIRD COUNT 2015

BY ALISON BOGAN

SATURDAY, DECEMBER 19 – We recorded 73 species in all. I am aware of three count week species: Red-breasted Merganser, Red-throated Loon, and Cedar Waxwing.

Many thanks to those of you who braved the nasty wind to contribute to the count. You collectively contributed 131 hours and travelled almost 900 km, 140 of them on foot. Pat yourself on the back.

SPECIES	FIELD	FEEDERS	TOTAL
Red-necked Grebe	1		1
Great Blue Heron	1		1
Canada Goose	1,592		1,592
Northern Shoveler	1		1
Green-winged Teal	97		97
Black Duck	1,362	50	1,412
Mallard	1,435		1,435
American Wigeon	8		8
Northern Pintail	11		11
Greater Scaup	3		3
Long-tailed Duck	2		2
Surf Scoter	30		30
White-winged Scoter	38		38
Common Goldeneye	5		5
Common Merganser	16		16
Hooded Merganser	32		32
Osprey	1		1
Bald Eagle (adult)	145	20	165
Bald Eagle (immature)	79	16	95
Bald Eagle (unknown)	36		36
Northern Harrier	5		5
Sharp-Shinned Hawk	3		3
Northern Goshawk	3		3
Red-tailed Hawk	48	7	55
Merlin	1		1
Peregrine Falcon	2		2
Rough-legged Hawk	1		1
Ring-necked Pheasant	108	36	144
Ruffed Grouse	7		7
Sanderling	3		3
Ring-billed Gull	539		539
Herring Gull	6,536	7	6,543
Iceland Gull	42		42
Glaucous Gull	1		1
Great Black-backed Gull	359		359
Lesser Black-backed Gull	4		4
Gull sp. (immature)	625		625
Black Guillemot	1		1
Rock Pigeon	404		404

SPECIES	FIELD	FEEDERS	TOTAL
Mourning Dove	322	87	409
Barred Owl	0	3	3
Short-eared Owl	1		1
Downy Woodpecker	17	32	49
Hairy Woodpecker	10	13	23
Northern Flicker	17	11	28
Pileated Woodpecker	2		2
Horned Lark	35		35
Blue Jay	226	92	318
American Crow	1,936	128	2,064
Common Raven	297	13	310
Black-capped Chickadee	627	210	837
Boreal Chickadee	1		1
Red-breasted Nuthatch	14	1	15
White-breasted Nuthatch	28	17	45
Brown Creeper	5		5
Golden-crowned Kinglet	45		45
American Robin	121	1	122
European Starling	6,969	142	7,111
Pine Warbler	1		1
Wilson's Warbler	1		1
Orange-crowned Warbler	1		1
Yellow-breasted Chat	1		1
American Tree Sparrow	15		15
Chipping Sparrow	10		10
Savannah Sparrow	1		1
Song Sparrow	94	8	102
Swamp Sparrow	1		1
White-throated Sparrow	38	3	41
Dark-eyed Junco	59	40	99
Snow Bunting	262		262
Northern Cardinal	19	20	39
Red-winged Blackbird	1		1
Purple Finch	23	20	43
Pine Siskin	4	8	12
American Goldfinch	823	269	1092
House Sparrow	86		86
Falcon sp.	1		1
<b>Total Birds</b>	<b>25,701</b>	<b>1,254</b>	<b>26,955</b>

## WEST HANTS CHRISTMAS BIRD COUNT

BY PATRICK KELLY, COORDINATOR

MONDAY, DECEMBER 28 – The 2015 count was originally scheduled for Sunday, December 27, but was delayed for a day by a snowstorm. Monday was considerably better (there was some wind), and we even had some sunny breaks. Despite that, the total number of birds seen, 4,387, was the second-lowest ever reported for this count. The only count lower was the first one, in 1987, which had just over 4,000. Part of the reason was the record-low numbers of both American Crows and European Starlings. We average 3,200 starlings, and this year we had only 741. We had more Canada Geese (746), and I thought for a while that even American Goldfinch would beat out the starlings, but in the end we only had 601 of them. I walked 1.5 km down a woods road off the Walton Woods Road. Despite pishing, the only bird I found was a Red-breasted Nuthatch, and it was well upwind of me and likely oblivious to my presence. Everyone found the same thing – very few birds.

The total number of species seen, 45, was well below the count average of 55. On closer investigation, I discovered that for the last 13 years the number of species has been at or below the average, despite a relatively constant amount of effort.

Even with the low numbers, we added a new species to the count (for the third year in a row). The Ruff, which had been reported at the Windsor sewage lagoon since just before Christmas, survived the Sunday storm and was seen by Richard Stern on the day of the count. It arrived in the early morning, but with all the snow it did not stay long. A group of birders who were there at the same time saw it and got a photograph of it as it flew away. We had another snowstorm on Tuesday, and the Ruff has not been reported since.

Here is a list of all species seen.

Canada Goose 746, American Wigeon 14, American Black Duck 413, Mallard 93, Green-winged Teal 7, Ring-necked Pheasant 17,

Ruffed Grouse 2, Bald Eagle 24, Sharp-shinned Hawk 2, Red-tailed Hawk 10, Rough-legged Hawk 1, Merlin 1, Ruff 1, Ring-billed Gull 17, Herring Gull 206, Iceland Gull 1, Great Black-backed Gull 19, Rock Pigeon 188, Mourning Dove 149, Downy Woodpecker 12, Hairy Woodpecker 12, Northern Flicker 2, Pileated Woodpecker 2, Blue Jay 122, American Crow 373 (record-low count), Common Raven 66, Black-capped Chickadee 249, Red-breasted Nuthatch 7, White-breasted Nuthatch 7, American Robin 9, Northern Mockingbird 2, European Starling 741 (record low count), American Tree Sparrow 42, Chipping Sparrow 1, Savannah Sparrow 1, Song Sparrow 9, White-throated Sparrow 19, Dark-eyed Junco 113, Northern Cardinal 11, Pine Grosbeak 2, Purple Finch 40, Common Redpoll 5, Pine Siskin 8, American Goldfinch 601, House Sparrow 20.

Party-hours totalled 50:35, 4:15 by car and 9:20 on foot. The total distance covered was 546.8 km, 525.6 km by car and 21.2 km by foot.

There were two count-week birds: a Great Blue Heron and a Northern Harrier were both seen near the Windsor sewage lagoons by George Forsyth.

As usual, I would like to thank all of those who helped in the field or as feeder watchers this year: George Alliston, Margaret Alliston, John Belbin, Tina Browne, Louis Coutinho, Gail Davis, Ryan Harvey, Andrew Harvie, Susan Harvie, Patrick Kelly, Peggy Kochanoff, John Robertson, David Simpson, Elizabeth Stern, Richard Stern, Walter Urban, Sherman Williams, Jim Wolford. I also want to thank the Belbins for hosting the potluck. There was lots to eat and drink and some great conversations.



## WINTER WEATHER 2015/16, EASTERN ANNAPOLIS VALLEY

LARRY BOGAN, CAMBRIDGE STATION

	TEMPERATURE			PRECIPITATION	
	Max (°C)	Min (°C)	Mean (°C)	Total (mm)	Snowfall (cm)
DECEMBER 2015 (30 yr. average)	5.6 (1.5)	-1.4 (-6.1)	2.1 (-2.3)	155 (122)	55 (63)
JANUARY 2016 (30 yr. average)	0.2 (-1.3)	-7.6 (-9.8)	-3.8 (-5.6)	96 (116)	104 (77)
FEBRUARY 2016 (30 yr. average)	3.5 (-0.5)	-6.3 (-9.2)	-1.5 (-4.9)	117 (101)	47 (53)
SEASON (30 yr. average)	3.1 (-0.1)	-5.1 (-8.3)	-1.1 (-4.3)	368 (339)	206 (193)

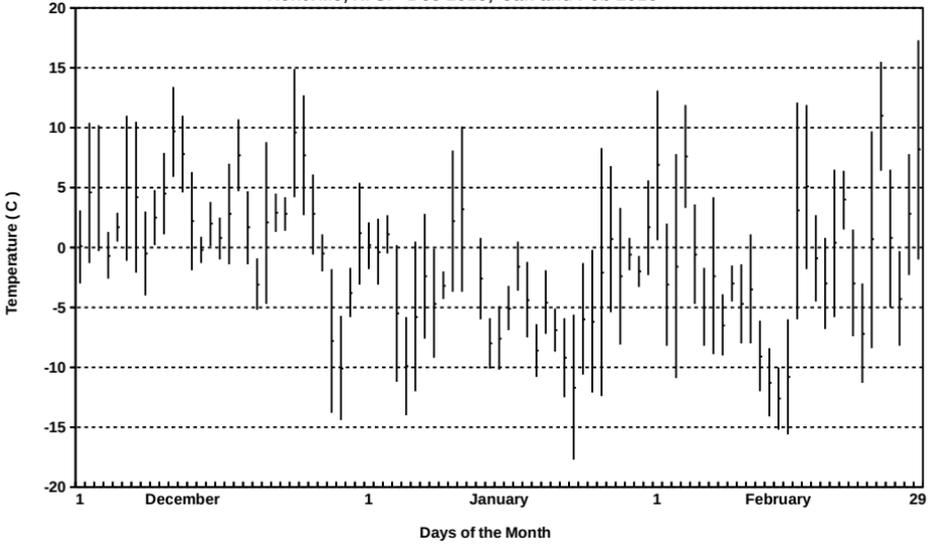
Source: Environment Canada data for Kentville, NS (<http://weatheroffice.gc.ca>). 30-yr. averages: 1981–2010. Snowfall recorded at Greenwood.

After the long, snow-covered winter of 2014/15, this winter was by contrast much warmer and more open. We had a strong flow of warm air up the Atlantic coast from the Gulf of Mexico, which gave us hardly any winter at all.

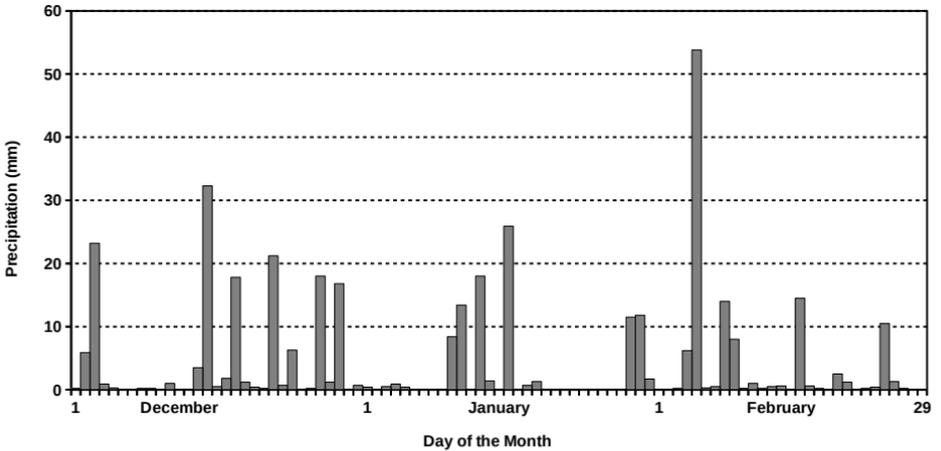
### Temperature

The average temperature for the winter was 3.2°C above the 30-year average. All three months of winter were above the average, by 4.4°C, with December being the most extreme. The chart of temperatures shows an abnormal winter temperature pattern. In December

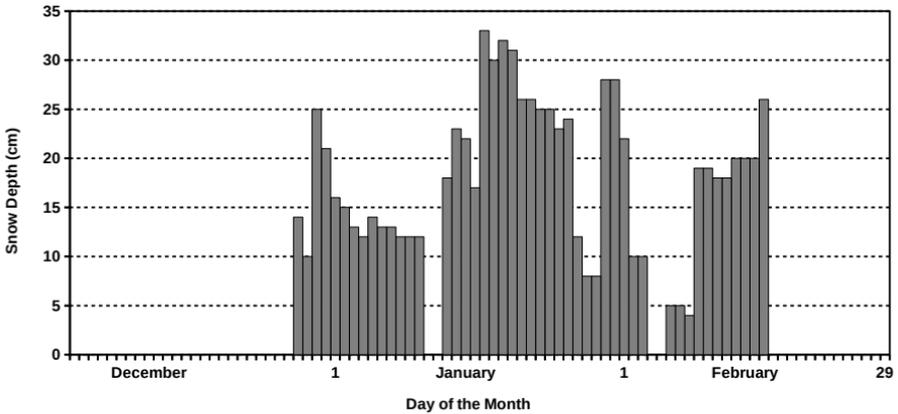
**Daily Max, Min, Mean Temperature ( C )**  
**Kentville, N. S. - Dec 2015, Jan and Feb 2016**



**Daily Precipitation (mm)**  
**Kentville, NS - Dec 2015, Jan and Feb 2016**



**Depth of Snow on the Ground (cm)**  
**Kentville, NS - Dec 2015, Jan and Feb 2016**



there were nearly uniform above-freezing temperatures until the very end of the month, when the first large snowfall occurred. The temperatures decreased a bit after that until the end of the month, when there was a mild spell that extended into February. The temperatures dipped again in mid-February, but then the last half of the month was warm, and the snow disappeared. On leap day, Kentville and Greenwood had 17°C to break the old record of 9°C for that day.

### Precipitation

Although it seems that we did not have much snow for the winter, it was the short period with snow on the ground that gave that impression. As you can see in the records for Greenwood, snowfall and precipitation were normal for the season. We did not get the first snowfall until the end of December, and the ground was bare by the middle of February. During that short period there were two thaws (one in January and one in early February) when all the snow melted. Depth of snow got up to 30 cm and averaged only about 10 cm during the season. During the whole winter there was an even distribution of moisture.

## WHAT'S IN THE SKY?

BY ROY BISHOP

Highlights for May through August 2016

MAY 6: New Moon

MAY 6–9: Large tides

MAY 9: Transit of Mercury (see below)

MAY 21: Full Moon

MAY 22: Mars at opposition (see below)

MAY 30: Mars closest to Earth (4.2 light-minutes distant)

JUNE 3: Saturn at opposition (see below)

JUNE 5: New Moon

JUNE 5 & 6: Large tides

JUNE 20: Full Moon. Summer Solstice at 19:34 ADT. Longest day, shortest night of 2016

JULY 4: New Moon, and Earth at aphelion

JULY 19: Full Moon.

AUGUST 2: New Moon

AUGUST 11 & 12: Perseid Meteor Shower

AUGUST 18: Full Moon

AUGUST 27: Venus & Jupiter conjunction (see below)

AUGUST 26, 27: Nova East Star Party (Smileys Park)

### **A Spring and Summer of Planets, in Order from the Central Star**

MERCURY – You might recall that a few years ago Venus passed in front of the Sun, in 2004 and again in 2012. Such events are rare, with more than a century separating 8-year pairs of Venus transits across the solar disk. Transits of Mercury (the only other planet which

can pass between Earth and Sun) are uncommon, but not rare. For example, there were 14 transits of Mercury in the 20th century, but none of Venus. On May 9 this year, Mercury will again pass in silhouette across the Sun. The transit begins at 08:13 and ends at 15:41 ADT. Safety Warning: To see the transit, you need a telescope that has a proper solar filter. Mercury's tiny, black disk is too small to see without magnification, and a telescopic view of the Sun without using a specially designed solar filter will permanently damage a person's vision.

Because of the tilt of Earth in its orbit and the closeness of Mercury to the Sun, Mercury is best seen from the latitude of Nova Scotia with the unaided eye or binoculars in the evening twilight in February and March, or in the morning twilight in September and October. Of course Mercury has to be in these parts of the sky in those months, which is not always the case. In 2016, Mercury was in the morning sky during February and March (unfavourable for observers in Nova Scotia), but will be easy to see in the morning sky during late September and the first half of October. More difficult sightings of Mercury may be made on July 16 and August 27 (see Venus below).

**VENUS** – Venus is the brightest of the planets in Earth's sky, far outshining even Mars and Jupiter, even when those planets are at opposition. Yet Venus is not visible during May and June. Venus spends those weeks on the far side of the Sun, lost in the solar glare, as it leaves the morning sky and reappears in the evening sky. Venus is in superior conjunction with the Sun on June 6, and reappears very low in the WNW evening twilight early in July.

Mercury is one Moon diameter above Venus in the evening twilight of July 16. You will need a very-low western horizon. Use binoculars and, between 21:15 and 21:30 ADT, look very low just to the left of where the Sun has set. In that one binocular field of view you will have the entire inner solar system: the twilight glow of the Sun, Mercury, and Venus, and Earth in the bottom of the field of view!

On August 27 (the date for public star viewing at the Nova East

Star Party in Smileys Provincial Park), Venus and Jupiter are very close together (only 5 arc minutes apart), but very low, due west in the evening twilight sky. Again, you will need a low horizon. Use binoculars and look between 20:15 and 20:45 ADT. During the first 10 minutes of that half-hour interval, you might also spot Mercury one binocular field of view at 7 o'clock from Jupiter and Venus.

**EARTH** – The third planet has completed more than four thousand million orbits around the central star. Friction from tides raised primarily by its large satellite has dramatically slowed its rotation, increasing its rotation period from near 3 hours to almost 24 hours, and continues to lengthen the day. Earth's immediate problem concerns its biosphere, namely the impact that its most numerous large mammal is having upon the forests, atmosphere, and oceans.

Maximum hours of daylight in Earth's Northern Hemisphere occurs on June 20, at which point the hours of daylight begin to decrease as the winter of 2016/17 approaches. At 19:34 ADT on June 20, Earth's tilted equatorial plane lies at its furthest point south of the central star, marking the summer solstice in its Northern Hemisphere and the winter solstice in its Southern Hemisphere. Less than 12 hours before the solstice, Earth's Moon is full, making this year's shortest night in Earth's Northern Hemisphere especially bright.

**MARS** – In late May, Mars, the planet of myth, fiction, and robotic exploration, is at its brightest, nearest to Earth, and visible throughout the night. It rises in the east near sunset. Mars is pale orange in colour, and unlike a star, it does not twinkle.

Mars is unique in that it is the only other planet showing a visible surface. Mercury is too small, too far away, and too close to the Sun to reveal its surface to Earth-based telescopes. Venus, Jupiter, Saturn, Uranus, and Neptune are veiled in clouds.

Earth, in its faster orbit, laps Mars on average every 2.13 years, at which time the Earth-Mars separation is a minimum, providing for a few weeks the best telescopic views of the red planet. Mars is then opposite the Sun ("at opposition") and thus highest in our sky

in the middle of the night. The Martian orbit is somewhat eccentric (elliptical rather than circular), so at successive oppositions the Earth-Mars distance varies, and the date of minimum separation can be several days different from the date of opposition. This year, Mars is at opposition on May 22 and closest to Earth on May 30.

The 2016 opposition is better than those of 2010, 2012, and 2014 in that Mars is closer to Earth. But for observers at the northern latitude of Nova Scotia, the 2016 opposition may be not much better than those earlier ones because Earth's tilt places Mars lower in the sky, where atmospheric turbulence makes it more difficult to obtain a steady, sharp telescopic view.

Two bright objects to the left (east) of Mars from May through mid-August are Saturn and, below Saturn, the star Antares. During May and June, Mars moves further to the right of Saturn and Antares, highlighting the westward shift of Mars as it undergoes retrograde motion during May and June. That apparent backward motion is our fault, a consequence of our faster orbital motion as Earth laps Mars in its eastward orbit.

Mars has seasons like Earth because its rotation axis is tilted from 90 degrees to its orbital plane by 25 degrees, almost the same as Earth's 23-degree tilt. Another remarkable similarity is Mars' rotation period, only 40 minutes longer than Earth's. A visitor to Mars would have no trouble adapting to the Martian day-night cycle. However, the Martian year is 1.88 times longer than Earth's year, so an inhabitant of Mars would qualify for the old age pension on their  $65/1.88 = 35$ th birthday.

During May and June, a good-quality small telescope having an aperture of 100 mm or greater will reveal the Martian disk, with its surface markings and small north polar cap, which is tilted toward Earth during those months. In late May, Mars will be only half as distant as the Sun, and 19 arc-seconds in angular diameter. In a telescope with a magnification of  $90\times$  or  $100\times$ , Mars will appear as large as does the full Moon to the unaided eye.

Having been at its closest point to Earth near the end of May, Mars is just as well placed throughout June as it was in May, with

the added benefit that the best time for viewing Mars is not so late in the night.

Mars remains in the evening sky for the rest of the year. It forms attractive patterns with Saturn and the star Antares during the last half of August (see Saturn below).

**JUPITER** – Jupiter, the brightest star-like object in the evening sky, slightly outshines Mars. Unlike pale-orange Mars, Jupiter is white in colour. Binoculars will reveal its disk and one or more of its four Galilean satellites.

Although well past its March 8 opposition, Jupiter remains well placed in the evening sky during May and June. By July it is lower in the western evening sky, dropping ever lower as the weeks go by. It vanishes into the evening twilight in early September. On August 27, Jupiter and Venus are exceptionally close to one another (see Venus above).

**SATURN** – With Mars and Saturn in the same part of the night sky this spring and summer, it is no surprise that their 2016 oppositions are less than two weeks apart, Mars on May 22, Saturn on June 3. On June 3, Saturn is 75 light-minutes from Earth, with the north side of its rings tipped 26 degrees toward Earth. It remains rather low in the southern part of the night sky through June, July, and August. The best time to see Saturn is when it is due south and thus highest in the sky. That occurs about 3 a.m. ADT at the beginning of May, 1 a.m. at the beginning of June, and 11 p.m. (23:00) at the beginning of July. During August, Saturn is in the southwestern sky by the time it is dark.

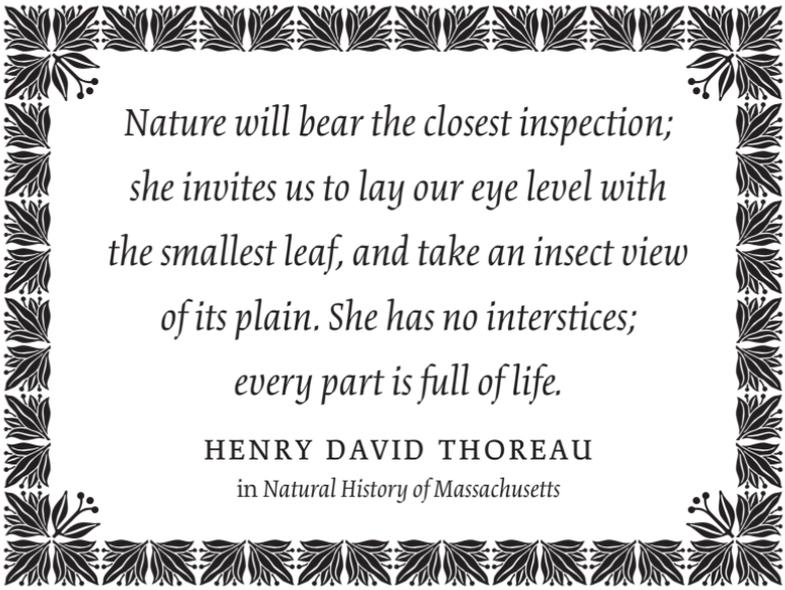
During the last half of August, Mars passes eastward between Saturn and the bright star Antares, and all three fit within the field of view of typical 7× or 8× binoculars. On the evenings of August 23 and 24, the three form a nearly straight line. Antares, a red giant star, is known as the “rival of Mars” because its pale-orange colour is similar to that of Mars.

Good-quality binoculars will reveal Saturn’s non-star-like shape

(like a tiny egg), but a small telescope is needed to reveal its spectacular rings.

URANUS – Despite being much larger than Earth, Uranus is 19 times further from the Sun, where sunlight is barely 0.3% as bright as at Earth. Consequently, the 7th planet is barely visible to the unaided eye. Binoculars must be used, but even then Uranus resembles a star, so one must use a finder star chart to identify it. In 2016, Uranus is in the morning sky from May through August, so is not available this spring and summer for good views in the evening sky. It is at opposition on October 15 and is not well positioned high in the mid-evening sky until November.

NEPTUNE – Neptune is even more distant and dimmer than Uranus. Like Uranus, Neptune is not conveniently placed in the evening sky during the summer of 2016. It is at opposition on September 2 and is not well positioned in the mid-evening sky until October.



*Nature will bear the closest inspection;  
she invites us to lay our eye level with  
the smallest leaf, and take an insect view  
of its plain. She has no interstices;  
every part is full of life.*

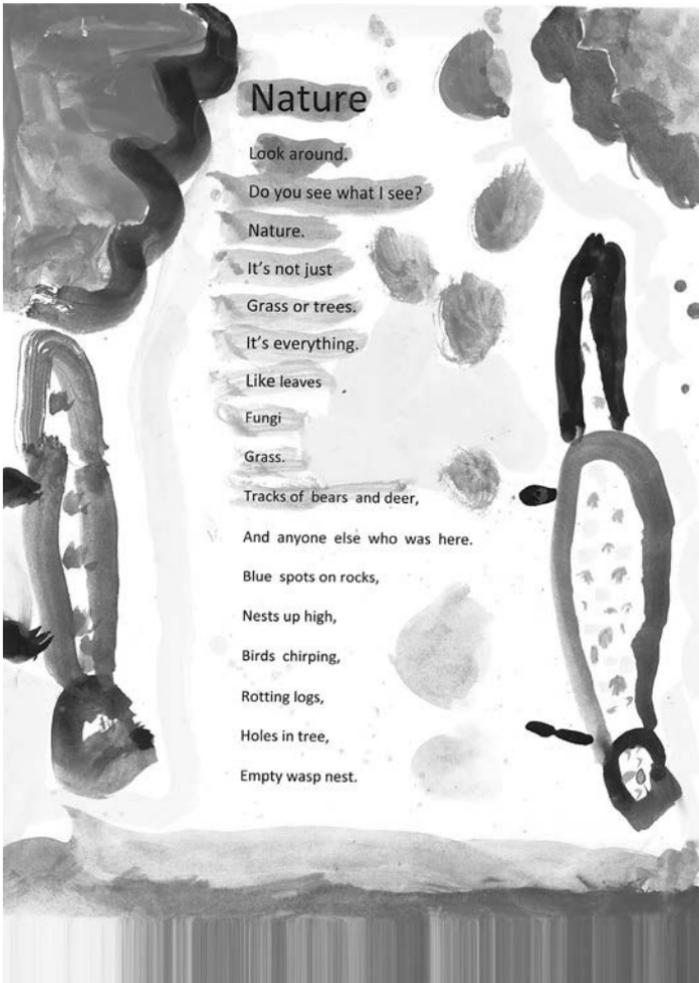
HENRY DAVID THOREAU

in *Natural History of Massachusetts*

## NATURE

BY JONATHAN LYON, WINDSOR FORKS, NS

*Jonathan (age 9) took honourable mention in the Junior writing category of the 2015 Nova Scotia Nature Art and Writing Competition. Congratulations, Jonathan.*



## BLOMIDON NATURALISTS SOCIETY 2016 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.)

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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 \_\_\_\_\_

No.	Description	Price	Total
_____	Individual/ Family Membership	\$30.00	\$ _____
_____	Junior (under 16 years) Membership	\$1.00	\$ _____
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_____	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>	TBA		
<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	