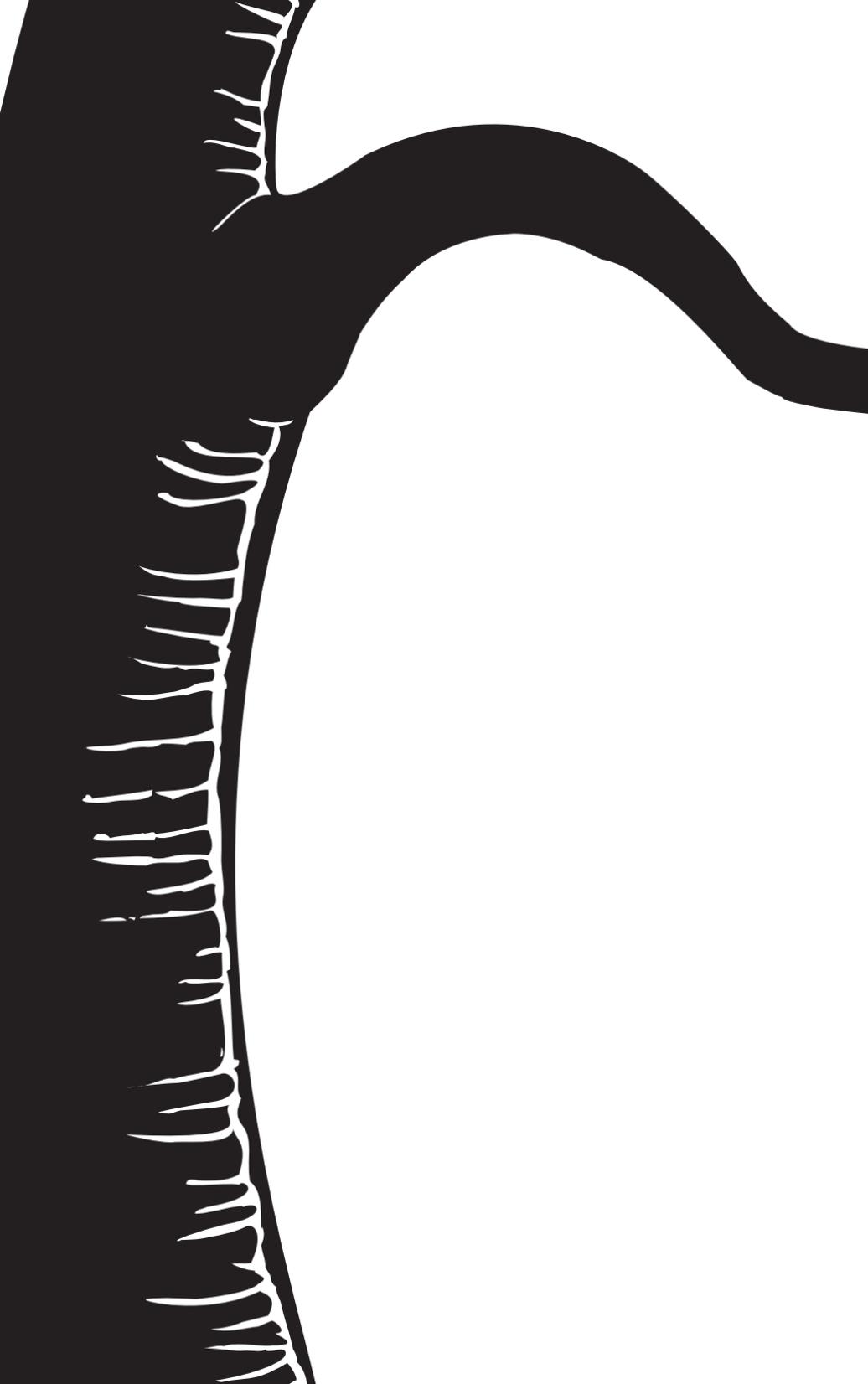


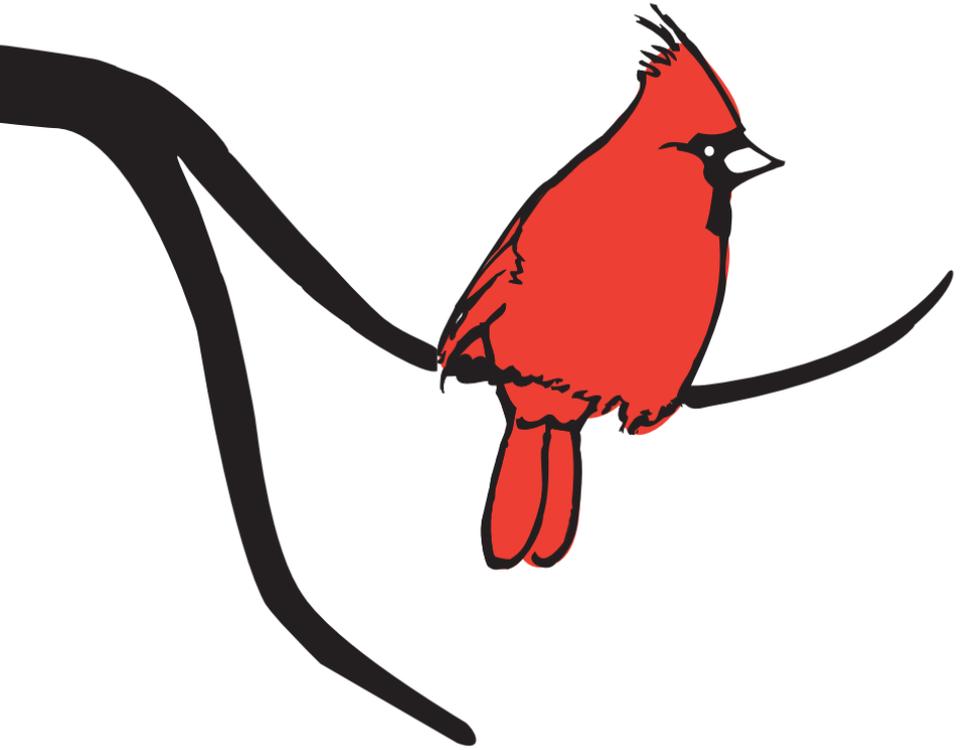
Blomidon Naturalists Society



SPRING 2013 NEWSLETTER

Volume 40 · Number 1





❖ 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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President

John Owen 678-0004

Vice-president

Murray Colbo 365-2932

Jean Gibson Collins 678-4725

Treasurer

Ed Sulis 678-4609

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Helen Archibald 582-1561

Directors

George Alliston 542-3651

James Churchill 681-2374

Denyse Kyle 365-2504

Jean Timpa 542-5678

Barry Yoell 542-9240

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

THE BLOMIDON NATURALISTS SOCIETY

P.O. BOX 2350

WOLFVILLE, NS B4P 2N5

BNS Newsletter

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

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

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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:

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jtimpa@ns.sympatico.ca

Digital photographs should be submitted to
doug@fundymud.com

**Submission deadline for Summer:
May 30, 2013**

Out & About

by Jean Timpa, editor

THIS past January 2013 was much too cold and windy for many of us to be out, and February tended to be too stormy and icy, especially underfoot. Now that the squishy muds of spring have arrived with Daylight Savings Time and cardinals are whistling once more, our thoughts turn certainly to being out and about once again. Will we find the serenity that a renewing spring should bring? Or will all sorts of environmental degradation/construction/destruction meet us, not only in the media but also in our own neighbourhoods?

Several situations will be raising their ugly heads nearby, so please be prepared to stand up for our local ecosystems, which have no voices unless we summon up our courage to speak up for them. Energy policies are obtuse and are often called green when they are not. Too many of them are full of Irish green blarney. Burning mercury-filled coal is absolutely no good for Nova Scotia, but burning biomass or anything else, including your morning toast, is not green either. We must insist on using better ways – the true ones that should be subsidized, not the false greens all too often promoted.

Our atmosphere, our waterways, our soils must not be used as garbage dumps! Planet Earth is an enclosed system that can only take so much abuse. All of us must become Mother Earth doctors, so that future generations can to be here in peace and comfort. There is much to be done if our descendants are to have the opportunity to go bird, whale, and sky watching, smell the roses and lilies, raise caterpillars to butterflies and moths, and admire the ancient reptiles, symbolic of times very long gone.

If you received a small envelope in your winter Newsletter addressed to our treasurer, Ed Sulis, this is just a gentle reminder that you have not paid your 2013 dues yet. We are now down to 148 members or thereabouts, and dropping every year. If this trend continues the dynamics of BNS will be, like any living creature, less and less able to function. Hopefully, we will not vanish like the South Shore Naturalists and the Annapolis Naturalists, who were once very active groups and then slowly but surely had to disband altogether. Our goal this year must be to bring in new enthusiasm in the form of members, and children too. Two hundred members would be a definite number needed, and beyond that, the more the merrier!

THANKS, THANKS, MORE THANKS, AND PATIENCE!

This has been a tough winter in more ways than one, and our Newsletter is running later than we like, but some of the staff – all volunteer – have had more than their share of illness and grief, so we are playing catch up right now as rapidly as we can. Special thanks to all of you who have gone out in rotten Maritime winter weather to greet guest speakers who would rather have stayed home, too. Storms wiped out one of the eagle counts, and the ever-popular snowshoe tracking field trip with Soren Bondrup-Nielsen was completely obliterated by the blizzard of the winter – well, at least so far. March 13, as I scribe this, is hardly winter over, so at 12°C, rain and wind, we must not be lulled into complacency just yet. All your encouragement, suggestions, and participation make for a tidy package of inspiration and worthiness for our efforts to keep BNS moving right along. Your biggest help will be to find at least one more member soon. Ed will be glad to supply receipts and recent newsletters to the newbies. Yes, I will keep on nagging about this urgent need for many new members, as I am, after all, known as the “Nag” editor, and I mustn’t let my reputation slip! Maybe we need a contest?

Blomidon Naturalists Society

2012 Annual General Meeting

MONDAY DECEMBER 10, 2012

1. Meeting called to order by John Owen at 7:33 pm. All members and guests welcomed.
2. Financial Report by Ed Sulis: Net worth \$79,534; Income \$31,440; Expenses \$29,096; Membership 148 (down from previous years).
3. Report of the nomination committee for 2013 officers of the society by Jean Gibson Collins. Committee consisted of Jean Gibson Collins.
4. Proposed slate of officers:
 - President:* John Owen
 - Past President:* Rick Whitman
 - Vice-presidents:* 1. Murray Colbo, 2. Jean Gibson Collins
 - Secretary:* Helen Archibald
 - Treasurer:* Ed Sulis
 - Members-at-large:* George Alliston, James Churchill, Jean Timpa, Denyse Kyle, Barry Yoell
5. Call for nominations from the floor. No nominations.
6. Jean Gibson Collins moved that the slate be accepted, Jim Wolford seconded. Carried. Jean Gibson Collins declared slate elected.
7. Motion for adjournment by George Forsyth at 7:48 pm, seconded by Jim Wolford. Carried.

Board of Directors Report

By John Owen, BNS president

YOUR board had a regular meeting on February 21, 2013.

BNS bursary – Nancy Handrigan, executive director, philanthropy, Office of Advancement for Acadia University, reviewed the setting up the agreement between Acadia and BNS. The BNS bursary will be \$2,000 each year for one student and will be awarded to a student entering 3rd year in any of the natural sciences, has financial need, and is involved in the community. BNS will be given the opportunity to meet the recipient and take part in the presentation. The award will continue as long as BNS is able to provide funding. Nancy, on behalf of Acadia, thanked BNS for the program. The university gives out about \$3 million in scholarships, bursaries, and scholar-bursaries per year. John Owen, on behalf of BNS, thanked Nancy and Acadia for the opportunity to give back to the community.

Expansion of Green Dragon program update – Regretfully, the program expansion will be delayed until 2014. The two students that ran the program in 2012 are unable to start until July. The plan was to use their experience and the preliminary work with the school administration to have an easier commencement of the expansion. They do plan to come back for our Green Dragon program during the summer, which is good news. We will continue to work on starting the expanded program in 2014.

BNS Stewardship Committee – All committee members have been active in somewhat different ways and have agreed to work together again, beginning this spring with their initial meeting in early April.

Combined meeting with Valley Gardeners – The Valley Gardeners and BNS will be holding a combined meeting during the third Monday of October 2013. The meeting will be held in BAC 241, which provides a better venue for the meeting.

Membership fees – Memberships Fees will remain unchanged again this year as the financial situation does not warrant an increase.

AGM – The society held its annual general meeting on December 10, 2012. The proposed slate of directors and officers was accepted as presented. The full slate is on the inside front cover of this Newsletter. The treasurer's financial report was received and appears elsewhere in this Newsletter.

The next BNS board meeting is scheduled Thursday, May 16, 2013.

CLUB NOTES

Blomidon Naturalists Society Creates New Bursary at Acadia

THE Blomidon Naturalists Society of Wolfville has provided a generous gift to Acadia University to support students majoring in the natural sciences.

The Blomidon Naturalists Society Bursary of \$2,000 will be awarded annually, starting in 2013, to a full-time student entering the third year of an undergraduate degree program with a major in one of the natural sciences (biology, physics, chemistry, environmental and earth science). Other award criteria include financial need and involvement in the university and/or the greater community. Candidates will be chosen by Acadia University, and the most deserving



On hand to celebrate the BNS commitment to Acadia and the local community at the signing of the gift agreement are (left to right) Dr. Peter Williams, Dean of Science; Nancy Handrigan, Executive Director, Philanthropy; Ed Sulis, BNS Treasurer; and Dr. Rod Morrison, Vice-president, Advancement.

candidate will be chosen during a joint meeting with university and BNS representatives.

The Blomidon Naturalists Society is a member of Nature Nova Scotia and other like-minded organizations. Its primary objective is to encourage and develop in its members, young people, and the public at large an understanding and appreciation of nature.

The society has had a long association with Acadia from the beginnings of BNS to the present day. The university has provided founding members, speakers, activity leaders, expertise, and membership. BNS also acknowledges that Acadia has contributed meeting space since the society's inauguration.

Over the years, BNS has profited from book sales and a natural history calendar created by its members. An endowment fund was established and invested in Canadian equity, the dividends from which can now comfortably support a \$2,000 annual bursary.

Valuable input was garnered from a chance meeting and discus-

sion with two Acadia students who were instrumental in the “community” concept being written into the agreement. Community commitment is a driving force with the society, evidenced by its newsletters being produced at Gaspereau Press, publishing books and a calendar with area content, organizing and running the Green Dragon young naturalists program, and hiring two university students each summer for the Green Dragon program.

The Annual Gift Agreement with Acadia was signed on February 28, 2013. Ed Sulis represented BNS.

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 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, March 18, 2013 – *The Big Eclipse Gamble*, by Mary Lou Whitehorne. The path of a total solar eclipse is narrow and sweeps rapidly across Earth’s surface. Almost three-quarters of Earth is covered with ocean and opportunity is therefore limited, so it is a rare privilege to stand in the shadow of the Moon. On a scale of one to ten, most amateur astronomers will rate the majestic spectacle of a total solar eclipse at one thousand! The 2012 November eclipse made its only landfall across the tropical northeast of Australia, near the Great Barrier Reef. The appeal was impossible to resist, in spite of less than stellar weather prospects at the beginning of the local monsoon

season. This is an account of the eclipse chase and all of its collateral adventures.

Mary Lou Whitehorne joined the Royal Astronomical Society of Canada in 1986 and is a life member of the Society. She served many years on the Halifax Centre executive, including three terms as president. Nationally, she has served six years on the national executive, the last two as president. She has written for, contributed to, edited, authored, or been involved in the production of all of the Society's publications. She is the recipient of the Chant Medal, Simon Newcomb Award, the Messier and Finest NGC Certificates, and the Las Cumbres Amateur Outreach Award. Minor planet 144907 Whitehorne carries her name in recognition of her contribution to educational outreach in Canada. Mary Lou has been involved in science education for 25 years. As well as working with schools, she has done space science education with the Canadian Space Agency and Canada's astronauts. She wrote *Skyways Astronomy Handbook for Teachers and Explorons l'astronomie – Guide pédeagogique*. She has recently worked on innovative educational products with Simulation Curriculum Corporation and is lead author of *Starry Night Middle School*, *Starry Night High School*, and *Starry Night Elementary*. Her most recent role has been astronomy consultant to the National Film Board for its upcoming Space School project.

Monday, April 15, 2013 – *Images & Minerals: Adventures on the Fundy Shores*, by David and Chris Sheppard. Through scenic photography, Fundy Rocks explores the Bay of Fundy and Minas Channel shores to uncover beautiful minerals and to document the beauty of the majestic North Mountain that ends with Cape Blomidon and Cape Split. We follow the footprints of Samuel de Champlain, who first found amethyst here in the early 1600s, and the tales of the Mi'kmaq, whose legends tell us that the gems sought here were once the treasure trove of the mighty giant Glooscap.

Chris Sheppard is the driving force behind Fundy Rocks, created in 2011 to promote hiking, rock collecting, and outdoor photography. A classically trained actor, he graduated from Acadia University

and from Circle in the Square in New York City. He has been a professional pastry designer and chef, and he now counsels and instructs adults with intellectual disabilities at Flower Cart in New Minas. Four years ago, after returning to his home town of Wolfville, Chris began hiking, then rockhounding, and now is emerging as a photographic artist, combining all three hobbies.

David E. Sheppard is a retired literature teacher who taught at Horton High School for 36 years after graduating from Acadia University. After retiring, he spent 18 months in the UK, where he hiked and travelled, writing a blog about his adventures. He has always been an avid photographer. Now limited to easily accessible sites, David is the chronicler, photo editor, archivist, and organizer for Fundy Rocks, which already has a catalogue of several thousand photographs of mineral specimens and photos from the nearly 300 Bay of Fundy hikes Chris has taken on his exploration of these shores.

Monday, May 20, 2013 – *A Whole World at Your Feet: Common Arctic Plants*, by Carolyn Mallory. This talk is an introduction to the most common Arctic plants found in Nunavut, their adaptations for survival in the north, and the known traditional knowledge from Inuit elders.

Carolyn Mallory is a writer whose 2011 book *Common Insects of Nunavut* is a follow-up to her popular *Common Plants of Nunavut*, co-written with Susan Aiken, which has been revised and updated in a second edition. She is also hard at work on a picture book for children and a novel. Carolyn travels across the Arctic on a cruise ship in the summer, where she lectures and guides people on tundra walks. Carolyn and her husband, Mark, have recently moved from Iqaluit to Canada's East Coast after living in the Arctic for the last 12 years.

Monday, June 17, 2013 – *Is It Hot Enough for You? Facts and Lore about Weather in Canada*, by Dr. Rob Raeside.

Dr. Raeside is the head of the Department of Earth and Environmental Science at Acadia University. He has a BSc, University of Aberdeen (1976); MSc, Queens University (1978); and PhD, Uni-

versity of Calgary (1982). One of the courses he teaches at Acadia – Atmosphere, Weather, and Climate – investigates the composition, structure, and dynamics of the atmosphere; weather, climate, and biogeographic patterns; microclimatology; paleoclimates, paleogeography, and extinctions; human effect on air quality; and climate change.

FIELD TRIPS AND OTHER NATURE EVENTS

Saturday April 13, 2013 – *Herbert River Canoe Trip*. Leader: Patrick Kelly (472-2322, patrick.kelly@dal.ca). The Herbert River is fairly easy with lots of water at this time of year, and it covers a great variety of terrain. There may be spots where it is running a bit faster, or where there are new obstructions from the trees, etc. that have come down over the winter, so we may have to wade in a few places, or stop to scout out a bend. The trip will be four to five hours long, depending on our pace. Bring life jackets, canoe or kayak, and paddles. If you have access to a life jacket but not a canoe, there will likely be extra room in one of the canoes. Check with the leader to be sure. Meet at the Newport rink parking lot at 9 a.m. Take Exit 5 from Highway 101 and follow Highway 14 east for about 10 km to the village of Brooklyn. At the cenotaph, keep left and follow Highway 14 north for just under 1 km. At the intersection (Petro-Canada station), Highway 14 turns right. Continue straight on Highway 215 (Note the YIELD sign. you do NOT have the right of way!) The rink is on the right as soon as you exit the intersection. We will be leaving some cars there as we will actually be putting into the river farther upstream. Rain date: Sunday, April 14.

Saturday, April 27, 2013 – *Birding in Kings County Forests*. Leader: Rick Whitman (542-2917, rick.whitman@ns.sympatico.ca). This joint trip with the Nova Scotia Bird Society will focus on forest species in two locations south of Wolfville. The Greenfield location is a wonderful, mature coniferous forest. The Forest Hill location is a NS Nature Trust property that is also very attractive. We'll take our

time and make a day of it, but the Greenfield section may be enough for some. Meet at the Wolfville wharf parking lot off the east end of Front Street at 9 a.m. Dress warmly, wear waterproof boots, and bring a lunch. Drizzle and light showers will be tolerated. No rain date.

Saturday, May 4, 2012 – The “Friends” *Native Plant Sale*. The Friends of the Acadian Forest will be hosting a sale of native plants at the Harriet Irving Botanical Gardens at Acadia University from 9:00 a.m. to noon. Buy native plants grown by volunteers from seed collected in the gardens and from local nurseries. There will be a variety of trees, shrubs, and perennials available, as well as information tables and displays. Proceeds will be used by the Friends of the Acadian Forest Society to work toward forest conservation and education. Don't miss this great annual event in the Walled Garden and Conservatory at the Botanical Gardens.

Saturday, May 11, 2013 – *Nova Scotia Spring Migration Count*. Annapolis Valley coordinators:

- *Hants West*: Patrick Kelly (Falmouth) 472-2322 (patrick.kelly@dal.ca)
- *Kings County*: Larry Bogan 678-0446 (larry@bogan.ca)
- *Kings County (Kingston area)*: Sheila Hulford 765-4023
- *Annapolis County*: Contact Chris Pepper (483-6693 cpepper@ymail.com). Anyone interested in helping coordinate Annapolis County, or parts thereof, would be most welcomed by Chris.

Sunday, May 12, 2013 – *Cape Split Hike 1*. Make a trip to Cape Split with leaders Jim Wolford (542-9204, jimwolford@eastlink.ca) and Patrick Kelly (472-2322, patrick.kelly@dal.ca). There will be interpretive stops along the way. Spring wildflowers and birds should be abundant. This walk requires good footwear, and people are reminded to stay away from the edge of the cliff. You should bring water with you and a lunch, as we usually do not get to the end of the trail until

lunch time. Meet at the Wolfville waterfront at 8:15 a.m. or at the start of the trail in Scots Bay at 9 a.m.

Saturday, May 18, 2013 – *Cape Split Hike 2*. This will be a joint trip with the Halifax Field Naturalists. Patrick Kelly (472-2322, patrick.kelly@dal.ca) and/or Sherman Williams (shermwms@eastlink.ca) will lead the trip. Meet at the Wolfville waterfront at 8:15 a.m. or at the start of the trail in Scots Bay at 9 a.m.

Monday, May 20 2013 – *Historic Hants County*. Leader: Suzanne Borkowski (488-0345, suzanneborkowski@yahoo.ca). Meet at 8 a.m. in the parking lot of Mount Uniacke House. Take Exit 3 off Highway 101 and drive approximately 8 km along Route 1 toward Windsor. Uniacke House is on your left. The main gate will be locked, but the second gate (coming from Halifax) will be open. We'll start by exploring some of the grounds at Mt. Uniacke, then continue along back-country roads through Hants County. Bring a lunch to be enjoyed at Smileys Park. Trip may last until 4 p.m. (option to leave early). No storm date.

Friday, May 24 to Sunday, May 26, 2013 – *Nature Nova Scotia Conference and Annual General Meeting*. Join Bob Bancroft and your fellow naturalists for this year's annual weekend celebrating the natural history of Nova Scotia at Milford House, near Kejimikujik National Park. The theme is *The Forests of Southwest Nova Scotia*. The Young Naturalists Clubs of Nova Scotia will be participating. And the price is right. See the Nature Nova Scotia website (naturens.ca) for details.

Saturday, June 1, 2012 – *Blomidon Provincial Park*. Jim Wolford (542-9204, jimwolford@eastlink.ca) will lead a walk from the campground about 2 km to a seasonal pond that has the very rare and beautiful fairy shrimp. We will also see other pond life, spring plants and flowers, and birds. And we will visit a lookoff toward Five Islands Park, across the Minas Basin. Meet and carpool from the Wolfville

Waterfront at 9:15 a.m. or meet Jim at the Blomidon Park registration building at 10 a.m. The trip will finished by 1 p.m.

Saturday, June 15, 2012 – *Herbert River Trail*. Patrick Kelly (472-2322, patrick.kelly@dal.ca) will be leading this walk for the Nova Scotia Bird Society. This easy walk follows the bed of the former rail line that ran from Windsor to Truro via Kennetcook. It runs along the Herbert River for a good part of its length. It is a great walk for spotting floodplain vegetation in addition to birds. Meet at the Newport Rink parking lot at 9 a.m. Take Exit 5 from Highway 101 and follow Highway 14 east for about 10 km to the village of Brooklyn. At the cenotaph, keep left and follow Highway 14 north for just under 1 km. At the intersection (Petro-Canada station) Highway 14 turns right. Continue straight on Highway 215 (Note the YIELD sign. you do NOT have the right of way!) The rink is on the right as soon as you exit the intersection. Bring insect repellent. We should be done by lunch. No rain date.

Sunday, June 16, 2013 – *New Birders Trip; Windsor, Hants County*. Leader: Patrick Kelly (494-3294 (w) 472-2322 (h), patrick.kelly@dal.ca). **Pre-registration is required.** This trip is geared for those who have always had an interest in bird watching but were not sure how it was 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.

Saturday, July 27, 2013 – *Grand Pre Shorebirds*, Leaders: Rick Whitman and Bernard Forsythe. Details to be announced. Rain date Sunday, July 28.

Friday, September 6 to Sunday, September 8, 2013 – *NOVA EAST 2013*. 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>.

NATURAL HISTORY

A 'Squall' of Grackles

by John Belbin

IT was the first weekend of September, the end of a long, hot summer. I'd spent about five weeks creating a large new raised flower bed, a project that in most normal suburban properties can be completed in two days. However, this one was on a steep slope that ended in a deep ditch, and the land was as hard as a rock. The softest parts needed a pickaxe, and every swing brought the jar of another large rock that would have to be dug out. Even worse, it was covered in the stumps of Norway Maple trees, strategically placed so that I had to dig them out by hand before anything else could be accomplished. I had spent five days on one root before I could even begin to build the low side wall needed there. The bed was now almost complete, and I couldn't believe it was over.

Just before sundown I went out to admire my handiwork and to reflect that no one would ever appreciate what I had gone through to create this minor miracle. It was one of those calm, clear, warm evenings that we had had so many of that summer. I heard a sudden wind noise behind me that was quite startling and felt it at the same time. I ducked my head and started to run, thinking that a sudden

squall had arrived like sometimes happens when you are out in a small boat. Only a couple of steps later I realized that idea was silly; it was a calm, cloudless evening. Turning around, I was amazed at the sight of an immense flock of grackles, wing tip to wing tip and streaming by only some 15 feet over my head. They came from the west, just cleared the small local trees, dropped down over my garden, and zoomed off down the hill toward the town of Hantsport. The combined wings were creating both the noise and the air movement of a local gust. They were obviously headed for some major roosting spot. The flock seemed to go on forever, and I saw several of my neighbours come out onto their decks to watch – it was quite a sight. At a rough estimate there must have been a thousand birds in that tightly packed and low-flying group, by far the largest flock of grackles that I have seen.

Large numbers continued to fly the same route for the next week, but never again was I close enough to experience the “squall” effect. Each day, the flight took place just before dusk, and they always headed downhill toward Hantsport. No one has reported a roost, so I have no idea where they spent the night. Maybe people are so used to crows roosting in large numbers that they don’t even realize that another group of black birds is doing the same thing.

What should we call such a large and loud group of grackles? Those other blackbirds all have names for their fall mass gatherings; we have a Murder of Crows and a Murmuration of Starlings, even an Unkindness of Ravens if you want to go back into ancient history. The grackle is ignored and apparently invisible. Maybe it’s because most of the names originate from Britain and grackles are a purely North American species, therefore not worthy of attention. (My personal favourite is a Siege of Herons – anyone who has owned a fish pond knows where that comes from!)

I modestly propose that from now on a very large group of grackles should be known as a Squall! It fits them to a T, and why should we let the Brits name everything?

A Winter Bird List

by Bernard Forsythe

DECEMBER 1, 2012 TO FEBRUARY 28, 2013 – Some people like to take a break from winter by heading south for a few days. Winter storms are not a problem for me. The next day will find me out either on foot or driving in pursuit of new bird species for a winter bird list. Often I will be joined by others for both birding and enjoying winter scenery. In no time, March creeps up on me, and I will be busy with owl nestboxes.

The trick is to start early for species that will be available only in early winter. Common birds will be found while chasing after harder-to-locate species. The list began before dawn December 1 with my backyard Barred Owl, followed by a drive to French Basin in Annapolis Royal. In no time, Northern Cardinal, Brown Creeper, Yellow-breasted Chat, and a surprising Eastern Towhee were added. The return trip along the Fundy shore produced Red-throated Loon, Horned plus Red-necked Grebes, and several sea duck species. The list was up to 40 at day's end.

On Day 2, Northern Mockingbird, Red-winged Blackbird, and Lesser Black-backed Gull were found near home. Good finds on a December 7 Halifax trip included Gadwall, Pine and Orange-crowned Warblers, plus Eurasian Wigeon at Windsor. By December 24, the list reached 76 from outings producing Chipping Sparrows in Greenwood, Red-bellied Woodpecker plus Marsh Wren at Miner's Marsh in Kentville, and Rose-breasted Grosbeak in Wolfville. We were back on the road December 26, where a now-hard-to-find Boreal Chickadee popped out at Second Peninsula, Sanderlings at Kingsburg Beach, and Dunlin at Crescent Beach.



RICK WHITMAN

Downy Woodpecker and suet feeder

Rough-legged Hawk and Peregrine Falcon were the first new birds on January 1. On January 4, I joined Richard Stern and Rick Whitman at Hartlen Point to view a Ross's Goose, along with a CBC TV crew. This trip also added Snow Goose, Barrows Goldeneye, and Yellow-rumped Warbler. That evening we watched ourselves on tv observing Nova Scotia's first Ross's Goose. The list grew, with Short-eared Owl on January 5, Broad-winged Hawk January 9 with Rick at Blandford, January 11 a Redhead (duck, that is) in Digby, January 13 Dovekie and Harlequin Duck at Peggys Cove, and Number 100 was a Glaucous Gull in Prospect.

New additions slow down once 100 is reached. On January 27 I added Richard's yard Cooper's Hawk along with the Falmouth Dyke Yellow-headed Blackbird. On January 29 four new species on Brier Island, three at Crescent beach February 6; and two species on Cape Sable Island February 11 brought the total up to 113. Finally on February 13 a pair of Grey Jays turned up on the road to Sheffield Lake. Richard found me a pair of Great Horned Owls, and Rick and I called

out a Saw-whet Owl in Greenfield. The grand total of 118 species was reached February 27, watching a Northern Goshawk repairing her nest.

March may still be winter, but my owls are already visiting the nestboxes. Some birds were missed, such as Black-backed Woodpecker and the Carolina Wren in Lunenburg, but we did enjoy seeing a lot of our beautiful province in winter. The list is only a game that results in winter being too short for birders.

NATURAL HISTORY

Local Duckweeds

by Martin L.H. Thomas

MANY people think of duckweeds as unpleasant plants that cover the surface of natural ponds, slow-moving streams, and man-made ponds in water gardens. Duckweed often grows as a dense layer that makes viewing the fauna and flora in the water beneath impossible. However, if we look at this group of highly adapted plants in more detail, we find they are important as food for wildlife, including fish and many birds, especially ducks. These plants have a very high nutritional value and in some, protein can make up to 35 percent of the dry weight. These plants are also rich in essential vitamins. Duckweed mats also provide an essential habitat for a host of aquatic invertebrates.

In some parts of the world, including Asia, India, and Africa, various duckweed species are used as food for cattle and pigs. Duckweeds incorporate nutrients (including nitrogen, phosphorus, potassium, calcium, and magnesium) into their biomass as they grow. These plants can then be harvested and used as fodder, spread on land as fertilizer, or dried and ground to be incorporated into animal feeds.

Most surprising, perhaps, is that the members of one duckweed sub-family (Lemnoideae) are often used as an ingredient for human food. These small plants have been used as a vegetable by the Burmese, Laotians, and the people of northern Thailand for many generations. Some duckweeds can be used raw in salads or sandwiches, or cooked in soups, or as a component of vegetable spread; and they are said to taste rather like spinach. They can also be incorporated in baked goods such as muffins. For food use, these tiny plants are cultured under special conditions. Plants from the wild frequently have attached anaerobic bacteria, some of which could be harmful. This is especially true where the plants grow as a dense covering of the water surface, cutting down light penetration. Under these conditions the underlying water can be anoxic, creating conditions suitable to anaerobic bacteria.

Duckweeds grow very fast, producing new individuals by budding. Flowers are rarely present, and spread by seed is unimportant. Duckweeds produce biomass faster than any other flowering plant. The faster-growing species can produce protein at the rate of 10 tonnes/hectare/year; in comparison, soybeans grown on land produce protein at rates of up to 1 t/ha/yr. Species that are especially rich in starch have potential as a raw material for the production of alcohol for use as vehicle fuel.

Another important application for this family of plants is in wastewater treatment. Water treated with duckweed can be discharged into water systems with less chance of causing eutrophication. However, these plants have a further use in wastewater treatment in that they take up heavy metal pollutants, including radionuclides in sewage or industrial effluents. The duckweed biomass can be skimmed off the water, dried, and burned and the ash disposed of under controlled, safe conditions.

Four species of duckweed have been recorded from Nova Scotia: the Lesser Duckweed (*Lemna minor*), the Star Duckweed (*Lemna trisulca*), the Giant Duckweed (*Spirodella polyrhiza*), and Water Meal (*Wolffia* sp.).

By far the commonest is the Common, Small, or Lesser Duck-

weed, *Lemna minor*. This water plant is native throughout most of Africa, Asia, Europe, and North America. Originally absent from Australasia and South America, it has now been introduced there. It is absent from arctic areas. It often covers the surface of small ponds and is also found as small populations in the stiller parts of flowing water. It is often extremely abundant in polluted water. Lesser Duckweed consists of small, oval floating green bodies, often called leaves or fronds – each of which is really a combined leaf and stem, called a *thallus* – and we will continue to refer to them as leaves). New individuals bud off the parent leaf from pouches at the leaf base. Each leaf produces a single root, which hangs down in the water. The leaves vary greatly in size from less than a millimetre to about 5 mm long; the width is about three-quarters of the length. Lesser Duckweed is intolerant of freezing and overwinters as special small individuals called *turions*, which sink to the bottom. These turions are a darker green than the leaves and remain green all winter. When waters warm in spring, the turions form internal gas pockets, rise to the surface, and develop into leaves, which rapidly bud off more new leaves. Lesser Duckweed is present throughout Nova Scotia.

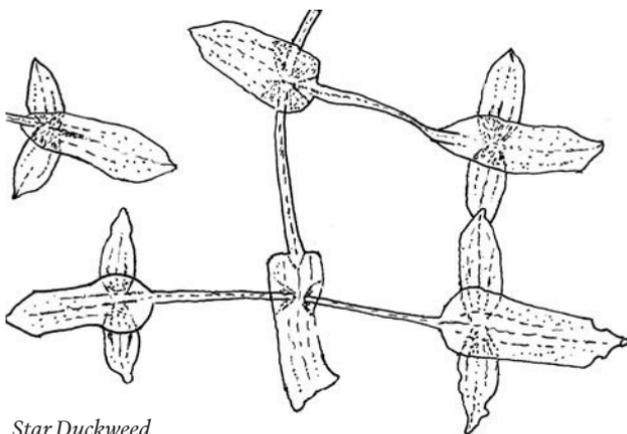
The Star Duckweed, *Lemna trisulca*, is much less common than the Lesser Duckweed and has only been found from Kings and Cumberland counties to Cape Breton. Where this species is found it is often abundant. It can be distinguished from the Lesser Duckweed by the elongated shape of the leaves and because it usually lacks roots; rarely, there is just a single root. Sometimes the tip of the leaf is toothed. In addition, Star Duckweed is found submerged just beneath the surface rather than floating on the surface.

New leaves are budded off from the parent pouches on the leaf sides. At first they merely look like leaves, but they steadily grow away from the parent on a fairly slender stalk, or *stipe*, which often gets quite long and may cross other stalks to produce tangled masses of the plant where the species is abundant. The broad part of the leaf varies in length from 6 to 18 mm, but with the stalk the whole leaf may reach 30 mm. The habitat varies from the shallow water of ponds to lakes and slow-moving streams and rivers. No overwinter-



MARTIN L. H. THOMAS

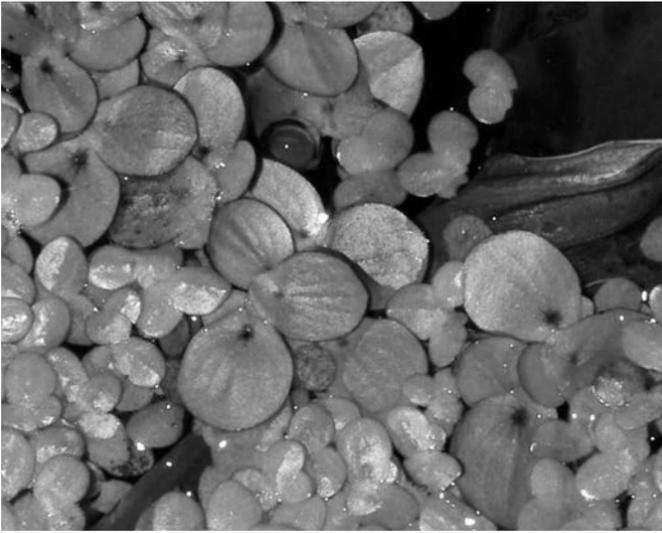
Lesser Duckweed, upper pond Blomidon Inn



Star Duckweed

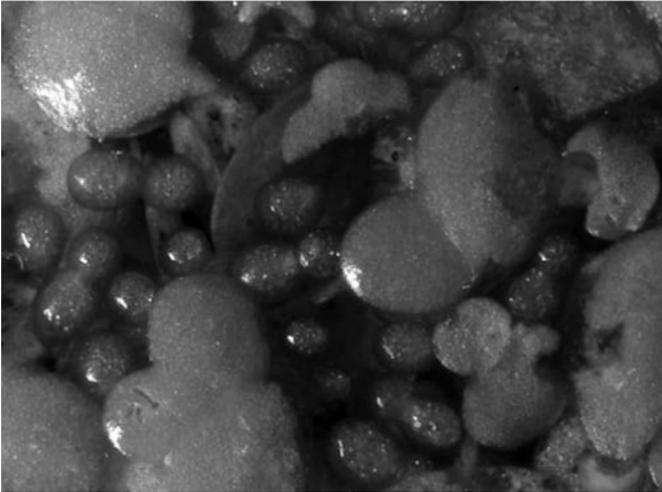
ing turions have been observed for this duckweed, and it is assumed that it overwinters just beneath the ice.

The common name of a third duckweed (*Spirodella polyrhiza*) is often simply Duckweed, but it is also known as Giant or Greater Duckweed. Being a small plant, though, it is large only in comparison with Lesser Duckweed. It does look somewhat like a larger Lesser Duckweed in that the leaves float on the surface. The leaves are usually up to 6 mm long, somewhat more rounded than Lesser Duck-



MARTIN L.H. THOMAS

Greater Duckweed with Lesser Duckweed, Canard River



MARTIN L.H. THOMAS

*Water Meal with possible flowers and Small Duckweed, middle pond
Blomidon Inn*

weed, and have 5–7 nerves or veins radiating from the base. There is often a small reddish-brown spot near the bottom of the leaf. The leaves are a darkish green above and have a red underside. In con-

trast with the two species formerly described, Greater Duckweed has a clump of 4–8 roots that hang down into the water. It has basically the same range and habitat in Nova Scotia as Star Duckweed and is also found in the USA, Mexico, tropical America, and Eurasia. Greater Duckweed overwinters in a similar manner to Lesser Duckweed.

The last of the Nova Scotia duckweeds, Water Meal (*Wolffia* sp.), said to be the smallest flowering plant in the world, is very different from the other three and very rare, having so far been recorded from one pond in Nova Scotia. The tiny plant body, less than a millimetre long, is rather like an inflated balloon. It floats just below the surface of the water in summer and descends to the bottom in winter. It has no roots at all and buds off new individuals as in the other duckweeds. In nature it appears as very small green specks in the water; it is most easily identified by getting some individuals on a finger and rubbing with the thumb. They feel like firm particles, and this suggests common name, Water Meal. Various species of this genus occur worldwide, and it is the most widely used duckweed for human and animal food.

THE WILD

Wilderness Access: Too Much Can Be Tough on Wildlife

by Bob Bancroft

IT was a spring day to savour: bright, warm, and free of blackflies and mosquitoes. The sun's first rays saw me underway. After a short drive I left the car parked where trees closed in over an old trail. My map and compass took me southeast, and I eventually reached my destination, a 140-acre forested hill untouched by humans. This

knob, on an otherwise flat landscape, had escaped the saws and felling axes of the 1800s and the chainsaws of the next century for one particular reason. It's flanked by swamps, which makes it extremely difficult to extract timber. After hours of wandering through this island of verdant stands of pine, maples, birches, and oaks, I stopped to eat lunch on an ancient fallen hemlock. Checking the map, my eye was caught by a small lake several kilometres to the west. A few hours later my fly rod was assembled on its shore. A number of Red-spotted Newts were foraging in the shallows, easy to see in the clear water. Fishing took second place to drinking in the beauty of this quiet place.

A low, rasping whine rose from the west. It stopped, but started again five minutes later. Then again. Each occurrence grew incrementally louder. Finally a six-wheeled motorized bathtub plugged with two overweight men burst through the woods on the opposite shore. Brandishing a chainsaw, one fellow disembarked to fell another tree. The tub then plunged over the bank into the lake. As the outboard began to sputter, one fellow tossed an empty bottle into the lake. Finally noting me on the shore, he exclaimed, "How the —— did he get here?"

It was time to pack up. I grew up enjoying relatively pristine wilderness. Access was by foot and water, and required the gradual development of survival skills.

Chainsaws and snowmobiles were major technical innovations of the 1950s that boosted access to wilderness. Now global demand for wood products keeps rising with a human population that tops seven billion. Decades of "forest management" catering to corporate interests have left their mark in Nova Scotia. Too much forest flattening, too fast, and for too long is causing many wildlife populations to plummet. The cumulative impacts of many activities on wilderness have made for horrendous change in our lifetimes. Taxpayer-subsidized forestry roads in the '70s brought new access to woodlands. The road access brought new hunting, angling, and trapping opportunities. More pressures were exerted on wildlife populations. Forest



JACK MCMASTER

habitats and waterways became drastically altered. Roads went in; the wood, fish, and wildlife came out.

My friend John had a fly-in camp on a remote lake in eastern Nova Scotia back in the '70s. There were petroglyphs on one shoreline rock, documenting a history of human visitation. I flew a crew in to survey the lake and its tributaries to determine habitat and fish populations before forestry roads approached. Speckled Trout populations were the stuff of dreams. Several years later, construction of a new road rumbled by a mile off to the west. After that John heard a noise one day while in his camp. A fellow appeared on the western shore with a chainsaw, then a canoe. That fall John collected 14 cases of empty beer bottles off one point on the lake. The fishing continued until there was nothing to catch.

Forty years ago, North Americans represented about 6 percent of the world's human population, and used about 60 percent of the entire world's annual output of resources to sustain a lifestyle we consider normal. We recycle now, but similar consumption continues.

During the '80s, four-wheel-drive technology became more refined. A generation that grew up in station wagons began to buy gas-guzzling sport utility vehicles and pickup trucks. The average showroom vehicle today burns more gasoline than 30 years ago.

The best-selling motorized vehicles for off-road wilderness adventure are personal watercraft (jet skis) and all-terrain vehicles (ATV's). Cranking around lakes like mad hornets on a waterborne mission to nowhere, the two-cycle motor exhaust from two hours of jet skiing is equal to the total smog-forming emissions from a 1998 passenger car operated for about 208,000 kilometres. These watercraft interrupt loon nesting and any pretence other folks might have about quiet relaxation at the lake.

As a fisheries biologist, I have seen the difference that all-terrain vehicle (ATV) access has brought to remote lakes. Typically there was an old forestry road in disrepair within several kilometres of the lake. From that point (in the '80 s) a walking trail had been cleared by the energetic few who would carry a canoe or simply wanted to hike. After an arduous trek, the balance of the day was spent alone with a refreshing wind and the quiet splendour of water, sky, shoreline, and occasional wildlife visitors. The Speckled Trout had been only lightly fished, so many of them were willing to bite almost any tackle. Returning to one such remote highland lake in the '90s to scientifically assess the trout population, I found the path had become a well-beaten ATV track. This is typical. Not surprisingly, the trout population had plummeted.

Global-Positioning-System-equipped ATV owners continue to push into the last remote areas, hacking through woods with little knowledge or concern for private or public ownership. I shudder to think where this process, and the future for wildlife and habitat, is headed. The ecological problems associated with ATV abuse of bogs, waterways, sand dunes, and shorelines with endangered species are well known. Snowmobiles and ATVs can and do interrupt the solitude of sensitive wintering areas for wildlife. I remember when clubs volunteered to find, note, and report moose evidence in their travels. They missed the point that in many cases an invasion of motorized off-road vehicles is enough to prompt a moose to move elsewhere. If he or she has the option.

In the wrong hands, ATVs can be a year-round wildlife menace. Wilderness access is a goal of many drivers who seem to consider pas-

sage a right. The organized ATV folks are doing their best to educate others, but their efforts have not turned the tide. My travels by foot and canoe in the 1990s to see the first 31 proposed wilderness areas convinced me that driving by ignorant or unconcerned ATV owners is damaging many of the last vestiges of Nova Scotia wildlife habitat.

Fish and wildlife populations will shrink further if motorized ground access continues on new lands that the government is proposing to set aside. If their proposal is publicly approved, it will provide some measure of protection to 12 percent or more of Nova Scotia's total land base.

Conservation should trump personal aspirations for motorized access on remaining wilderness lands. ATV and snowmobile access could hobble conservation and protection measures for Nova Scotia's remaining wildlife populations. Let's keep some wilderness for nature, by getting there on foot or by water.

Bob Bancroft has been called a past president of the Nova Scotia Federation of Anglers and Hunters, a forest ecologist, a wildlife biologist, and worse. He is currently president of Nature Nova Scotia.

NATURE COUNTS

West Hants 2012 Christmas Bird Count

by Patrick Kelly, coordinator

SATURDAY, JANUARY 5, 2013 – The 2012 count was originally scheduled for Sunday, December 30, 2012. As you may recall, the winter storm predicted for that day actually transpired, so the date was moved to January 5, the last day allowed. The weather that day also had some snow but at least it wasn't a blizzard! The temperature was pretty consistent, at around -3°C all day. There was also a

lot of snow on the ground, although even on woods roads it was not so bad that you could not walk.

The total number of species seen, 50, is below the average for this count (57); however, the average of the years 2008–12 is only 48, so one cannot complain too loudly. Similarly, although the total number of birds counted this year was 9,474, with a count average 11,981, the 2008–12 average is only 10,000. Total party-hours and distance covered are pretty consistent across those five years.

As always, there were a few surprises. A **Great Blue Heron** was spotted at the back of the Maplewood Cemetery in Windsor. Also in Windsor, Angela Joudrey had a **Red-bellied Woodpecker** at her feeder. The **Pine Warbler** at my house was spotted twice, in the morning by Ryan Harvey, who was covering that area, and by me when I returned in the late afternoon. Two **American Pipits** were seen in Mt. Denson, only the second time they have been reported for this count. The biggest surprise was a new bird for the count: a **Broad-winged Hawk** was spotted by Blake Maybank and company in the area that covers Smileys Park.

One thing most observers noticed was the high number (at 444, the highest since 2001) of **Dark-eyed Juncos**. We also set at new high for **Mallards** at 136, **American Robin** at 261, and **Common Grackle** at 7. On the other side of the coin, we set a new low for **Greater black-Backed Gull** (only 14, the previous low being 46 in 2010) and **House Sparrow** (22, down from the 26 the previous year). **American Crow** also had small numbers: the 569 seen was only 6 more than the record low from the year 2000.

Here is a list of all species seen (**boldface** indicates species for which only a single bird was found):

Canada Goose 665, American Black Duck 1128, Mallard 136, Ring-necked Pheasant 92, **Ruffed Grouse 1**, **Great Blue Heron 1**, Bald Eagle 29, Northern Harrier 2, **Northern Goshawk 1**, **Broad-winged Hawk 1**, Red-tailed Hawk 18, Ring-billed Gull 39, Herring Gull 207, Great Black-backed Gull 14, Rock Pigeon 312, Mourning Dove 407, **Barred Owl 1**, **Red-bellied Woodpecker 1**, Downy Woodpecker 21, Hairy Woodpecker 25, Northern Flicker 17, **Pileat-**

ed Woodpecker 1, Blue Jay 380, American Crow 569, Common Raven 61, Black-capped Chickadee 368, Red-breasted Nuthatch 1, White-breasted Nuthatch 15, Brown Creeper 2, Golden-crowned Kinglet 6, American Robin 261, European Starling 2060, American Pipit 2, Bohemian Waxwing 213, Pine Warbler 1, American Tree Sparrow 80, Savannah Sparrow 1, Song Sparrow 45, White-throated Sparrow 36, Dark-eyed Junco 444, Snow Bunting 315, Northern Cardinal 6, Red-winged Blackbird 2, Common Grackle 7, Red Crossbill 3, Common Redpoll 510, Pine Siskin 37, American Goldfinch 705, Evening Grosbeak 203, House Sparrow 22.



Party-hours totalled 66:25, 45:00 by car and 21:25 on foot. The total distance covered was 686.5 km, 645.7 km by car and 40.8 km by foot.

There was only one count-week bird this year: Wilson's Snipe.

As usual, I would like to thank all those who helped in the field or as feeder watchers this year: John Belbin, Louis Coutinho, Alan Covert, Gail Davis, Tony Duke, Laura Fieldsend, Nic Fieldsend, Ryan Harvey, Andrew Harvie, Susan Harvie, Angela Joudrey, Patrick Kelly, Peggy Kochanoff, Blake Maybank, Bob McDonald, Wendy McDonald, Sheila Robarts, Neil Robarts, John Robertson, Barry Sabeau, Elizabeth Stern, Richard Stern, Jim Wolford, Avard Woolaver, Frank Woolaver.

As always, I would also like to thank Beth and Frank Woolaver for hosting the after-count potluck at their home. It's always nice to come out of the field and be able to look forward to a warm place to sit, good food, and great company.

*32nd Annual Cyril K. Coldwell
Count of Eagles & Other Raptors
of Eastern Kings County*

by Jim Wolford

SATURDAY, FEBRUARY 16, 2013 – It was a very nice day, mostly sunny, with temperatures from +2 to +5°C. Winds were moderate from the east. (Note: We had been “weathered out” on earlier attempts on February 3 and 10).

The tide was well out. The low tide may have enticed some eagles onto the tidal flats, many of which were perhaps not seen at all by our surveyors in cars. Many of the dykeland roads, but not all, were driveable. Some groups of counters found that many of the eagles and Red-tailed Hawks were soaring at various heights and drifting from area to area, but other groups found a lot of perching raptors.

RESULTS

293 Bald Eagles: 170 adults (58%), 122 immatures (42%), 1 of unknown age

56 Red-tailed Hawks

1 Merlin

1 Barred Owl (in Bernard Forsythe’s backyard on Wolfville Ridge)

No other raptors were reported.

Other natural history reported: 1 large healthy-looking Coyote northwest of Grand Pre Park; 2 freshly road-killed skunks (northwest of Port Williams, near Canard Pond); 10 deer west of White Rock; about

500 + 300 Black Ducks (with a few Mallards); 1 Northern Flicker; 30 Blue Jays together in a flock at White Rock; a few Horned Larks; a few robins; 2 singing Purple Finches. And Bernard Forsythe had a singing male Northern Cardinal in his Wolfville Ridge yard.

Of the almost 300 Bald Eagles counted, Margaret and George Alliston found 100 of them east and north of Grand Pre Park, and most of those were perched and not flying. Harold Forsyth had 58 at Sheffield Mills but only 23 at the main feeding site. There were 36 west and north of Port Williams, and 28 more east and south of Grand Pre Park.

Regarding the eagles, mid-February is getting a bit late in their overwintering season, especially for the adults. We think they depart from our general area and gradually move toward their nesting territories during February. Thus we prefer to do our once-a-year survey in late January or early February.

For some perspective, last year we tallied 477 Bald Eagles, and the highest count ever was 580 in 2000, followed by annual numbers usually fluctuating between 400 and 300.

Our annual survey consists of 16 designated areas for a total of 27 observers, and we limit the counting to just one hour, from 10 to 11 a.m., in hopes of minimizing double counting of individual birds. Six of the 16 groups went to the old Coldwell kitchen at Gaspereau for reporting and coffee, etc. (Thanks, Zelda!) while the remaining groups reported by e-mail. Our observers consist of a hodge-podge of provincial government biologists, Blomidon naturalists, and Acadia University biologists and students.

Observers by area (sorry, no digital map): A – Linda Lusby; B – George Forsyth; C – Tom Herman & Gerry Hardy; Di – Margaret & George Alliston; Dii – Peggy Crawford & Mike O’Brien; E – Pia & Soren Bondrup-Nielsen; Fi – Liz & Richard Stern; Fii – Pat Hawes & Jim Wolford; Gi – Glenys Gibson & Ian Paterson; Gii – Lana & James Churchill; Hi – Stella & Angus MacLean; Hii – Harold Forsyth; I – Sherman Williams & Terry Murphy; J – Ruth & Reg Newell; K – Bernard Forsythe; L – Sherman Boates.

Thanks to all who participated this year!

The Eastern Grey Squirrel

– Is It Really Here?

by Jo Bishop

OVER the last 12 years, reports have circulated at random intervals about “black squirrel” sightings – usually a single sighting of one individual. These reports have come in from Wolfville, Canning, and Berwick. All sightings were in populated areas.

My first acquaintance with this creature was on a very personal basis in Ontario. My “boil-in-the-bag” ration pack (corned beef hash – my fave!) was left unattended for less than 10 seconds. The last glimpse of both the squirrel and my dinner was high in a mature Red Oak. My trench partner said he enjoyed a shower of tinfoil, paper, and appreciative comments all afternoon! Opinions of squirrels were not high on my agenda for the next week or so. However, they were preferred to the Mississauga Rattler that tried to share our trench one hot wet night in a thunderstorm. All things are relative.

The Eastern Grey Squirrel (*Sciurus carolinensis*) shares many characteristics with three other squirrel family members well-documented here in the Valley and at Keji Park. These are the American Red Squirrel (*Tamiasciurus hudsonicus*), the Eastern Chipmunk (*Tamias striatus*), and the Northern Flying Squirrel (*Glaucomys sabrinus*).

Another member, the Southern Flying Squirrel (*Glaucomys volans*) is present but much rarer. It and its northern cousin are mainly nocturnal. The Southern Flying Squirrel has been documented in the Keji area since 1971. A large introduction in the 1930s to Keji failed. The present-day ones may have been accidentally introduced as stowaways in campers, house trailers, and other recreational vehicles.

Squirrels are mammals, belonging to the order Rodentia. They exhibit many characteristics of rodents, including large, strong (and long) incisor teeth, which continue to grow throughout the animal's life. They usually have two litters of young per season, with three to four pups per litter. Squirrels are born blind, toothless, and hairless.

Squirrels belong to a large family called Sciuridae. The term "squirrel" comes from a Greek word meaning "shadow-tailed."

All our provincial squirrels share common characteristics: they have excellent vision, and the eyes are large in proportion to head size; the hind legs are generally longer than the front legs and more powerful, giving them great ability to be strong jumpers; their toes are well developed, with long, curved nails for climbing and foraging; they are primarily cavity nesters but will build nests of twigs and leaves in the crotch of a tree or among strong branches if no cavity is available; they are diurnal (mainly seen during daylight hours); they are found in many habitats – woods and parks, in urban and rural areas; and they cannot digest cellulose – they feed on nuts, seeds, fruit, fungi, green vegetation, insects, wild bird eggs – and the females have been known to eat young birds while lactating in order to fill their extra protein needs.

The Eastern Grey Squirrel has several characteristics of its own: its tail is long in relation to its body length, averaging 19–25 cm (7.5–10 in.); it has nearly twice the body mass of the American Red Squirrel, about 520 g (18 oz.); the ears are longer in relation to head size than those of the American Red Squirrel; and it has several forms of coat colour.

Eastern Grey Squirrel coat forms:

- Grey form – a soft grey on top; lighter grey underneath; tail is a light grey with a white or pale-cream fringe (sunlight seen through the tail illustrates the name "shadow-tailed" perfectly).
- Black (or melanistic) form – ebony black all over; tail is black.
- Red/Grey form – reddish on top with some grey underfur; head is reddish; underbody is a light colour; tail is fairly dark. This form is easily mistaken for the American Red Squirrel; look for body size, ear length, and tail length to discern the difference.

- White (or albino) form – whole body and tail are white; a true albino would have pink rather than dark eye pigment.

My personal sightings this past spring and summer were as follows:

May	1 x Black form	Highway 1 west of Kingston
June	1 x Black form	North Kentville
July 25	1 x Black form mature adult	North Kentville
Sept. 15	1 x Grey form young adult	Middleton
Sept. 30	1 x Black form adult	Middleton
Oct. 2	1 x Grey form young adult	Middleton (possibly same animal seen Sept. 15)
Oct. 3	1 x Grey form young adult	North Kentville
Oct. 9	1 x Grey form mature adult	Malvern Square
Nov. 3	possible tree nest, not in the crotch of a large maple but 30 feet up among strong branches – leaf and twig construction very visible	Middleton
Nov. 5	1 x Black form mature adult 1 x Red/Grey form mature adult 2 x Grey forms young adults, one older than the other	all seen as a family group Malvern Square
Nov. 16	1 x Black form adult	Holmes Hill Road, Hantsport

So, it would seem that no matter how the Eastern Grey Squirrel got here – escaped pets or under their own power – it is here and very likely breeding here.

Now is a good time to look for this animal. The leaves are off the trees, making cavity entrances and external nest sites easier to spot. This squirrel likes natural hardwood corridors of Red Maple, Sugar Maple, Red Oak, and American Beech, both in the wild and in more urban areas.

The downside of the Grey Squirrel is its size – physical and dietary. It will soon displace the smaller Red Squirrel. It's a fast breeder. It destroys birds' nests and eats the eggs. It is known to carry the mange

mite and rabies. But then so do all the other members of the native squirrel population.

Part of my aim was to mention the characteristics with a view to the reader documenting sightings and reporting to the Blomidon Naturalists Society and other nature groups. If you have signed up, you can also report sightings to nature@blomidonnaturalists.ca.

There is also an online form for reporting to The NS Department of Natural Resources. For an overview and report form, see the Significant Wildlife Habitat and Species Database web page: <https://www.gov.ns.ca/natr/wildlife/significant-report.asp>. Both flora and fauna observations can be reported on this form.

As always, have your binoculars, camera, and GPS device handy; keep notes, and be prepared to make a report.

ONLINE REFERENCES

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Canadian Biodiversity website <http://canadianbiodiversity.mcgill.ca/English/species/mammals/>

SEEN ON VACATION

Birding in Burlington

by Bernard Forsythe

IN mid-July 2012 we visited family in Burlington, Ontario, once again giving me the opportunity to enjoy bird species not often encountered at home. Surprisingly, Red-winged Blackbirds are one of the most common backyard birds in the city. On several evenings a family of Common Screech Owls appeared in our daughter's yard.

They must know of my interest in owls. Northern Cardinals and House Finches are also abundant. At the Lake Ontario shore, Caspian Terns were always present. A 1 km-long string of Double-crested Cormorants passing low over the water was made up of over 1,000 birds. Mute Swans, along with one tagged Trumpeter Swan, were also spotted.

Hiking trails along city brooks produced many interesting birds. Some that excited this Nova Scotia birder included many House Wrens, Carolina Wren, Warbling Vireo, Great Crested Flycatcher, Baltimore Oriole, Turkey Vulture, adult and young Black-crowned Night-Herons, and a Northern Mockingbird. Singing Field Sparrows were added at Bronte Creek Park, along with a loud three-part song described as “drink your tea” in field guides. The striking black, rufous, and white Eastern Towhee sang for a long time five metres up on an exposed perch. The occasional towhee we see in Nova Scotia is usually skulking in bushes. An Eastern Meadowlark and a female Eastern Bluebird at a nestbox were also great finds. At another park we watched a Blue-gray Gnatcatcher over the dead branch of an elm tree. It often flew out to snap up small insects, demonstrating how it got its name. In Sherwood Forest an immature Cooper’s Hawk sat unconcerned on an eye-level branch. Nearby three recently fledged Cooper’s hawks in a dead tree watched people walking dogs pass below.

Along Village Wood park an adult male Cooper’s Hawk chased a smaller bird while its young were heard begging food nearby. From tall pines in this park came junco-like songs. Feeding along the pine branches were Pine Warblers. Birders in Nova Scotia should check out any junco-like trills heard in mature pine woods. They may be breeding Pine Warblers.

One of our day trips found us in Delaware, near London. A farm woodlot was full of birds. Examples included Indigo Bunting, a family of Red-bellied Woodpeckers, a singing Wood Thrush, Scarlet Tanager, and a freshly road-killed Black-billed Cuckoo. By far the best find was an agitated male Brewster’s Warbler with a green worm in its beak, a first for me. Brewster’s is a hybrid between Blue-winged and

Golden-winged Warbler parents. On another trip we headed to Lake Erie, where at Turkey Point Park many Purple Martins with fledged young foraged along the beach. At Long Point, Marsh Wrens, Willow Flycatcher, and Sandhill Crane were added to the list.

A couple of highlights occurred in Bronte. Red-necked Grebes were nesting on car tires anchored along the marina boardwalks. At one nest an adult tended to one half-grown young while its mate continued to incubate four addled eggs. From time to time the adults changed duties. During one change a rotten egg broke and was tossed from the nest, but the three remaining eggs continued to be incubated. In April 2012 a Fish Crow was found on Jones Street in Bronte. Hoping for a lifer (new to me) I made several trips to the area, only to find a family of American Crows. The calls of young American Crows are similar to Fish Crow calls. One report online stated that 6 p.m. was the best time to find the Fish Crow. The next day at six we found a small crow high in a tree on Jones Street. Its bill looked small and legs short but I needed it to talk to me. After what seemed forever, it gave a series of uh uh calls, the first higher pitched than the second. To my ear they were quite different from the food-begging calls of nearby young American Crows. I had my lifer. Now I need a Fish Crow in Nova Scotia.



BRIAN MCKIBBIN

Whitecaps, White Tail, Black Prey

by Roy Bishop

MY bedroom window faces north, overlooking Minas Basin. Early on February 22, a strong, cold north wind blew unimpeded from the Parrsboro shore, across 30 kilometres of open sea until deflected upward by the dark cliffs of Horton Bluff, then up across the fields toward my home. Whitecaps covered the Basin as the waves approached the cliffs on the rising tide. Different every day, it is a scene I have treasured ever since I chose to live above Horton Bluff 44 years ago.

As I rose to begin that day I noticed a large bird hovering in the wind, directly above the cliff below my home. Red-tailed Hawks hover in conditions like that and have a remarkable ability to remain spookily locked in one position for many seconds at a time. Unlike a Red-tail, this bird did not “kite” as Red-tails do. It kept moving, up a bit, down a bit, to one side or the other and back again, as the turbulent wind buffeted it about. Bald Eagles frequently soar along Horton Bluff when there is a north wind, but eagles glide parallel to the cliff as they patrol the shoreline below. This bird was not doing that. What was it?

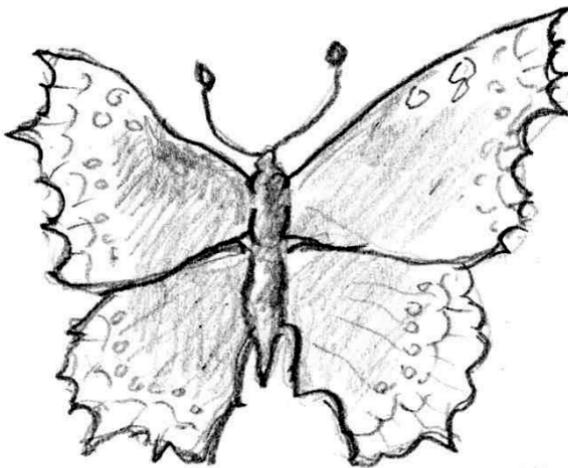
The bird now had my full attention, and I realized that it was too large to be a Red-tail. Binoculars revealed a mature Bald Eagle facing directly away from me, its talons extended downward, its white tail twisting this way and that as it steadied itself in the wind, its immense wings contracting and extending as it fought to neither rise too high nor fall too low in the turbulent gale. Occasionally blown sideways, as it turned to regain position its white head came into view.

The binocular view was entrancing. The eagle was superimposed against a backdrop of whitecaps on the heaving sea. Its feathers ruf-

fled in the turbulence as it struggled to maintain position. A few times the eagle dropped behind bare treetops at the cliff edge yet remained in sight and then rose again. What was it up to?

For a full five minutes I watched in wonder, when suddenly the eagle half folded its wings and dropped out of sight below the cliff. With binoculars fixed on where it had vanished, I waited. Ten seconds later, extended wings riding the upward gale, the eagle rose from behind the cliff and trees, a large black mass in its talons. Having gained altitude, it turned and soared rapidly westward along the cliff, until I lost it from sight.

Crows frequent the intertidal zone along that shoreline, and the eagle's prey resembled a crow, in size and colour. I did not notice it struggling, but then the eagle's talons would make short work of that. The eagle had been observing its prey for at least five minutes, and who knows for how long before I first spotted it. My guess is that the crow was alive while the eagle was assessing it from high above. Possibly it was injured, or starving, or just plain old, perhaps stranded on an ice cake below the cliff as the breaking waves approached on the rising tide. To be carried into the sky by an eagle is probably not the worst way to depart this life.



MOURNING CLOAK

MARY PRATT

Winter Weather 2012–13, Eastern Annapolis Valley

Larry Bogan, Cambridge Station

As we have come to expect, the winter was milder than the average over the last 30 years. Almost every one of these weather reports made over the last 10 years show the same trend. This year the month of December was the mildest, being more than 2°C warmer than average, while January was normal and cold. February was 1°C above the long-term average because of the mild weather after the beginning of the month. The season as a whole averaged 1°C warmer than normal.

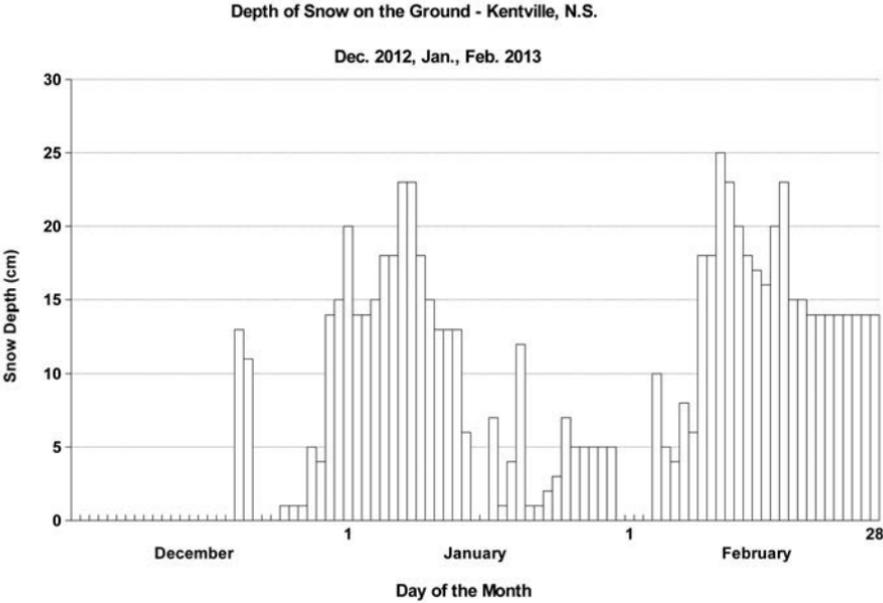
	Temperature			Precipitation	Average Snow on Ground
	Max (°C)	Min (°C)	Mean (°C)	(mm)	(cm)
December 2012	4.1	-4.3	-0.2	139.0	2
(30 yr. average)	(1.6)	(-6.5)	(-2.5)	(130.0)	(8)
January 2013	-0.8	-10.1	-5.5	35.0	9
(30 yr. average)	(-1.2)	(-9.8)	(-5.5)	(127.0)	(21)
February 2013	-0.2	-8.2	-4.2	91.0	13
(30 yr. average)	(-0.9)	(-9.5)	(-5.2)	(101.0)	(25)
Season	1.0	-7.5	-3.4	265.0	8
(30 yr. average)	(-0.1)	(-8.6)	(-4.4)	(358.0)	(18)

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

On the graph of temperatures throughout the winter, notice that the highest (16°C on January 31) and lowest (-23°C on February 8) temperatures of the season occurred only nine days apart.

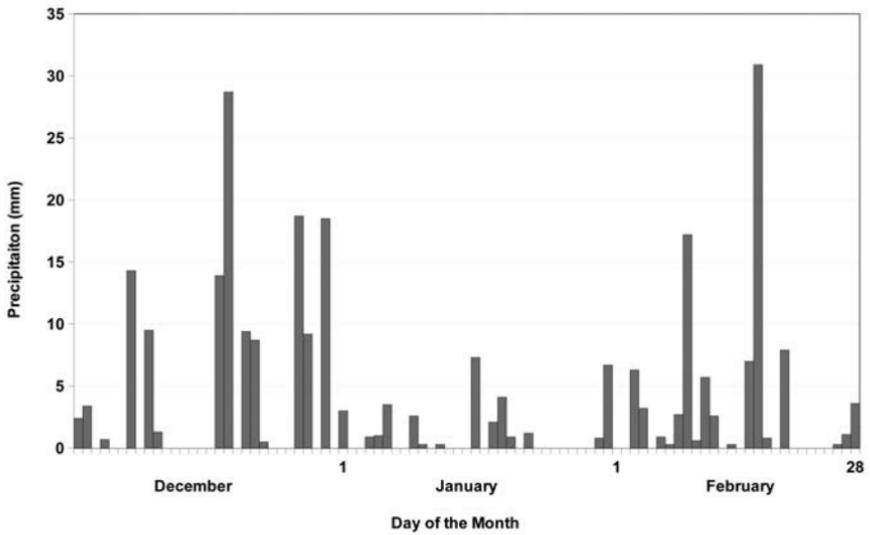
We had adequate snow this winter, with snow on the ground most days of the season. But the total precipitation was down by nearly 100 mm (4 inches). This was mostly due to the dry and cold January, which had only 27 percent of expected precipitation. December was normal, and February had only slightly less than expected precipitation.

Precipitation was distributed over the whole of the winter but with the higher accumulations in December and February. The graph of precipitation shows the liquid dropped on us and the graph of depth of snow indicates how much was frozen and staying on the ground.



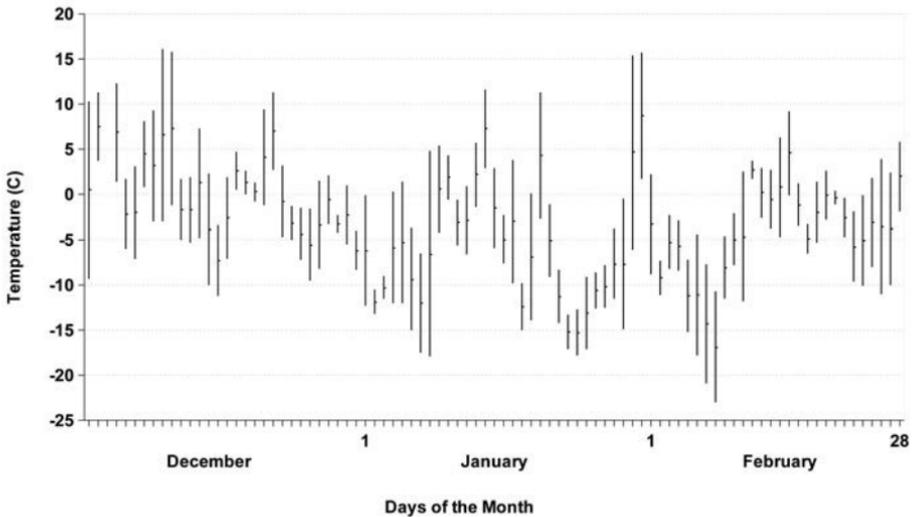
Daily Precipitation - Kentville, N.S.

Dec. 2012, Jan, Feb. 2013



Daily Temperatures - Kentville, N.S.

Dec 2012, Jan, Feb 2013



What's in the Sky?

by Roy Bishop

HIGHLIGHTS FOR APRIL THROUGH JULY 2013

April 25: Full Moon

April 27/28: Largest tides of the month

April 28: Saturn at opposition (see below)

May 24/25: Full Moon

May 23–30: Venus, Jupiter, and Mercury lie within a binocular field of view very low in the wnw evening twilight. Look between 9:30 and 9:45 p.m. (see below)

May 26/27: Largest tides of the month

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

June 21: Solstice 02:04 ADT

June 22/23: Full Moon, the largest in 2013

June 24, 25, 26: Largest tides of the month

June 25: Latest sunset of the year (21:08)

July 5: Earth furthest from Sun (aphelion)

July 15: (approximately) Sandpipers begin arriving in Minas Basin

July 22: Full Moon

July 23, 24, 25: Largest tides of the month

THE UNFORTUNATE TIMING OF COMET PANSTARRS

Comet PanSTARRS appeared in our evening skies in mid-March and likely will no longer be visible to the unaided eye by the time you read this. The comet should have been highlighted in the previous BNS Newsletter, but I did not have sufficient information to do that. Indeed, as I write this paragraph in early March, no one yet knows if Comet PanSTARRS will be an obvious naked-eye object when it appears in the western evening sky about March 10. If the comet was a spectacular naked-eye sight in mid-March, I hope there was sufficient publicity to alert everyone to it. Incidentally, the March comet is named after the telescope and observing program used to discover it: the Panoramic Survey Telescope and Rapid Response System. Located on the summit of Haleakala in Maui, the telescope is designed to look for near-Earth objects, asteroids that could pose a threat to Earth.

To avoid another missed comet in this column, I now give a heads-up for another potentially bright comet: Comet ISON is approaching the inner Solar System and may put on a memorable show for us in December. The path of a comet is predictable to high precision, but in terms of brightness and spectacle, comets are unpredictable.

SATURN'S SPRING SPECTACLE

Saturn is at opposition, closest to Earth, on April 28, 73 light-minutes from Earth, with the north side of its rings tipped 18 degrees toward Earth. It remains well placed in the late evening sky through May and June.

Although much of Saturn's light (reflected sunlight) is from its rings, the unaided eye cannot make out the rings. The angular diameter of the rings at opposition is 43 seconds of arc, about one-third of the smallest angle human vision can resolve. Thus to the unaided eye, Saturn looks like a star. Even binoculars will not reveal the rings. A telescope is necessary. With good optics, a magnification of about 20x will just reveal the rings. At a magnification in excess of 100x on

a good telescope having an aperture of 100 mm or greater, the view is exquisite.

Although Galileo, the first great telescopic astronomer, examined Saturn in 1610, his telescopes were inadequate to clearly show the rings. It was the Dutch scientist Christiaan Huygens who, in 1659, first realized that a ring surrounds Saturn. It was the British physicist James Clerk Maxwell who, in 1857, proved theoretically that Saturn's rings must be composed of countless, small satellites (icy rocks) independently orbiting around Saturn. We are fortunate to be now living at another historic moment for Saturn. The robotic American/European spacecraft Cassini, since arriving at Saturn in 2004, is revealing the entire Saturnian system in unprecedented detail. See: <http://saturn.jpl.nasa.gov/mission/introduction/>

MAY'S PLANETARY CONJUNCTION

The best planetary conjunction of the year occurs very low in the *wNW* evening twilight in late May (see the summary above). At that time, Venus, Mercury, and Jupiter are on the far side of the Sun and almost aligned, as seen from Earth. The three planets are most tightly grouped on May 26. Because Mercury and Venus move faster than Earth, day by day the two inner planets are moving further out from behind the Sun into the darker evening sky, while distant Jupiter, with its slower orbital motion, is closing on the Sun and becoming lost in the evening twilight.

The three planets can be identified by their relative brightness: Venus is brightest, followed by Jupiter and then Mercury. On the venerable but strange astronomical brightness scale, Venus is near apparent visual magnitude -4 , Jupiter -2 , and Mercury -1 . If you are outdoors with binoculars on a clear evening in late May, have a low *wNW* horizon, and count the one you are standing upon, you will be able to see half of the eight planets of the Solar System that evening. However, timing is important. Before 9:25 the sky will be too bright; after 9:50 the three planets will be too low or will have set. The heavens do influence our plans!

THE METONIC CYCLE

On May 10 there is an eclipse of the Sun, visible from Australia and the central Pacific but, unfortunately, not from Canada. A few days later the Moon is at its far point in its elliptical orbit. As a consequence, on eclipse day the Moon's angular size is smaller than that of the Sun. Thus the Moon appears too small to completely cover the Sun, so the eclipse is *annular*, not total. An observer on the eclipse centreline at mid-eclipse will see the exposed edge of the Sun as a bright ring, or annulus. If you are middle-aged or older, you might recall that an annular solar eclipse crossed Nova Scotia on the same date, May 10, 19 years ago, in 1994. That 19-year interval is known as a Metonic cycle.

A solar eclipse occurs at new Moon, so it is not surprising that the sequence of lunar phases in the annual calendar also repeats on a Metonic cycle. For example, the Moon was full on June 23 in 1994, will be full on June 23, 2013, and will be full on June 23 in 2032. The cycle is merely a consequence of a numerical coincidence: 235 lunar phase cycles happen to equal almost exactly 19 calendar years. That 19-year cycle was known in ancient Babylon (before television, computer games, and the Internet, people paid attention to the night sky). Meton, a Greek astronomer, independently discovered the cycle around 430 BC, and his name has been given to it.

WISDOM

“I had better explain that motor roads, cottages, and launches do not necessarily destroy hunting and fishing, but they destroy the wilderness, which to certain tastes is quite as important.... Wilderness can not be re-created when the need for it is determined by hindsight. The need for it must be determined by foresight, and the necessary areas segregated and preserved.”

— ALDO LEOPOLD (*THE LAST STAND OF THE WILDERNESS*)



JACK MCMASTER

SOURCES OF LOCAL NATURAL HISTORY

Compiled by the Blomidon Naturalists Society

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

BLOMIDON NATURALISTS SOCIETY

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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	\$20.00	\$ _____
_____	Junior (under 16 years) Membership	\$1.00	\$ _____
_____	Nature Nova Scotia Membership	\$5.00	\$ _____
_____	2013 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.





Spring on White Rock Pond, Gaspereau River – ANDREW STEEVES