

The Orchid

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Bulletin of the Peterborough Field Naturalists

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An engaged community that is inspired to learn about, appreciate and conserve nature in all its forms



House Finches Nesting in a Christmas Wreath. Photo: Don McLeod

Look closely and you'll see the female in the nest! The nesting story was published in the May and June 2021 Orchids

Inside: December Nature Almanac
How to Live with a River
Is There a Tree of Life?
Book Review: Not the End of the World
Ontario Nature Regional Meeting Report

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Welcome new PFN members!

- Julia Kuzeljevich
- Brian Catto
- Alex & Thomas Conolly & family
- Gabriel & Lou Godicheau



Some noteworthy recent sightings. Clockwise from above: An Eastern Grey Squirrel (!) swimming across Little Lake on Oct. 9 (Don McLeod). A first-year male Summer Tanager eating buckthorn and Virginia creeper berries at Stornoway Place on Nov. 22 (Dave Milsom). A Western Cattle Egret near Cedar Valley Rd and Hwy 28 on Oct. 30 (Marilyn Hubley). A Fox Sparrow near Millbrook on Nov. 3 (Marilyn Hubley).

PFN Coming Events	
<p>Dates and times to be announced</p>	<p>Nature Appreciation Walks</p> <p>Last winter’s Nature Appreciation Walks were a hit, so we are setting them up again this year. <i>We still have lots of room and we would love for you to join us!</i> If you are new to the PFN, you may be curious to know how they are different from our regular outings. Basically, we are looking to collect a list of people that are interested in getting together on more short-notice. These walks pop up based on the weather and leaders’ availability. Many times, they are great reasons to get out and enjoy nature with others without a topic or agenda. Getting out in the fresh air, exercising, and socializing are great for our physical and mental health.</p> <p>If you are interested in joining these nature walks, send us an e-mail. If there are topics you are very interested in, mention that in your response. If you might be interested in leading an outing, please identify that in your e-mail response as well. We will keep a list and - when the weather presents an opportunity - will send out an invitation. The time and day of the week will change as will the location and degree of difficulty. If you can’t attend, just ignore the e-mail. If you want to attend, just respond to the instructions in the e-mail. To register for being on this list, please send an e-mail to Steve at stevepaul70@gmail.com</p> 
<p>Thursday, Dec. 12</p> <p>Doors open 7 p.m. Meeting at 7:30 p.m.</p> <p>Hybrid meeting</p> <p>Camp Kawartha 2505 Pioneer Road</p>	<p>Monthly Meeting: Holiday Season Members’ Slide Show Night</p> <p>A long-time annual tradition in the PFN is the members slide show night. We will be treated to several short presentations by Lucie Blouin (Kenya & Tanzania Safari), Mark Williamson (The South Downs Way National Park), and Cathy Douglas (Birds of Colombia).</p> <p>Try to attend in person as we also hope to be treated to some festive baking as well. Please don’t feel shy about bringing a goodie or two. Sharing some holiday baking is also part of the December PFN tradition. Friendly reminder... the Environment Centre is a nut-free facility.</p> 
<p>Sunday, Dec. 15</p> <p>All day</p>	<p>2024 Peterborough Christmas Bird Count</p> <p>Please see article on page 9 for more details.</p> 
<p>Saturday, Jan. 4</p> <p>2 to 3:30pm</p> <p>Ecology Park 1899 Ashburnham Road (Beavermead parking lot)</p>	<p>UPCOMING JUNIOR NATURALIST EVENT</p> <p>Kids’ Christmas Bird Count</p> <p>The Christmas Bird Count (CBC) is North America’s longest-running citizen science project and now includes more than 2,000 locations and tens of thousands of volunteers just like you! It started way back in 1900.</p> <p>This is an important opportunity for our Juniors to help with scientific research and learn more about the birds who winter in Peterborough. It’s also lots of fun!</p> 

PFN Coming Events	
	<p>For more information, check out https://www.birdscanada.org/bird-science/christmas-bird-count-for-kids .</p> <p>To register, contact Shelley at juniors@peterboroughnature.org Children must be accompanied by an adult.</p>
<p>Saturday, Jan. 4 Back-up date: Jan. 5</p>	<p>Petroglyphs Christmas Bird Count</p> <p>If interested in taking part, please contact Colin Jones at cdjonesmclark@gmail.com</p>
<p>Thursday, Jan. 9 5 to 8 p.m. The Canadian Canoe Museum 2077 Ashburnham Drive, Peterborough Peterborough Transit: 7 Lansdowne (Eastbound), Marsdale at Ashburnham stop</p>	<p>Monthly Meeting: An Evening at The Canadian Canoe Museum</p> <p>The Peterborough Field Naturalists will celebrate 85 years in 2025 and to start the year off, The Canadian Canoe Museum (https://canoemuseum.ca/visit/) has been booked for the January PFN Members' Meeting!</p> <p>You are invited to come early (beginning at 5 p.m.) to tour the museum's Exhibit Hall and join PFN members for social time and displays. Upon arrival, please sign in at the Event Hall on the second floor and enjoy appetizers, sweets and beverages catered by the Silver Bean Cafe (alcoholic beverages can be purchased downstairs at the café). At 6:45 we will begin the PFN meeting with remarks from the President and guests followed by a presentation from MJ Proulx, the Exhibits Project Coordinator. MJ will outline the museum's approach to collaborative relationships with indigenous communities and commitment to the environment in caring for the museum's new campus. Admission for this event, including the Exhibit Hall, is at "no charge" for PFN members who pre-register. Mark your calendars to save the date and register for this meeting, through CanadaHelps, from December 1 to 25: www.canadahelps.org/en/charities/peterborough-fieldnaturalists/events/pfn-evening-at-the-canadian-canoe-museum/</p> 
<p>June 16 to 19 Presqu'ile Provincial Park</p>	<p>PFN's Third Annual Camping Trip</p> <p>This is just a quick heads up to tell you that camping reservations can be made for this trip starting on January 19. Stay tuned for the big announcement in January's <i>Orchid</i>.</p>
<p>Note: Most recordings of past PFN Zoom meetings can be viewed on PFN's YouTube channel at https://www.youtube.com/channel/UCAgbbqgr4ujZ16qba23LTQQ under the playlist menu.</p>	
<p>How can you get more involved with the PFN? Consider leading some outings!</p> <p>As you can see from this month's <i>Orchid</i>, we do not have many outings in store for you this month. We are so grateful for all our outing leaders who share their expertise but we need your help. If you have any ideas for an outing, but feel you would like some support to get started, please e-mail Linda Sunderland (linda.sunderland@gmail.com) or Steve Paul (stevepaul70@gmail.com) and we can connect you with experienced outing leaders to make sure you are comfortable with this new role.</p>	

Other Events of Interest

<p>Saturday, Dec. 7 10 a.m. to 4 p.m. Ken Reid C.A.</p>	<p>Christmas at Ken Reid</p> <p>Details about this fun-filled, free, family event in Lindsay can be found at: www.kawarthaconservation.com/learn-and-get-involved/festivals/</p>
<p>Tuesday, Dec. 10 7:30 p.m. at the Publican House 294 Charlotte St.</p>	<p>Conservation Café</p> <p>Trent University's Conservation Café presentation series shares research about topics connected to conservation with the public. The Conservation Café typically takes place on the 2nd Tuesday of each month upstairs at The Publican House at 7:30 p.m. Admission is free, and all are welcome! Follow @TrentConserve on Twitter to stay up to date on all Conservation Café events.</p>
<p>Saturday, Dec. 21 6:30 to 8 p.m. Gamiing Nature Centre, Kawartha Lakes Capacity: 24</p>	<p>Celebrate the Winter Solstice Night Hike</p> <p>Welcome the winter solstice with a night hike followed by a hot drink and an opportunity to warm yourself by a fire. Enjoy and embrace darkness and the longest night of the year. We will create smaller groups to explore the trails for those who are interested in walking. There is also the option to simply sit by the fire and enjoy the beauty of the night. Dress for the weather – boots and winter jackets!</p> <p>To register, go to: https://kawarthalandtrust.org/events/</p>



Messages from the PFN Board

New Board Members Announced!

The Board of the Peterborough Field Naturalists appointed Rachel Baehr and Lou Smyrlis as directors at its November 20, 2024 meeting.

Rachel Baehr is a graduate of Sir Sandford Fleming College's Conservation Biology program and has environmental education experience, including recent work with GreenUP. Rachel has been a PFN member for four years during which time she has led outings such as Fabulous Fungi and Sounds of Spring. Rachel is enthusiastic about further contributing to the PFN community by bringing her vision and fresh ideas (e.g., ways to reach the 20 to 30-year-old demographic) to the Board, utilizing previous organizational and outdoor education experience, and cultivating new skills to add to her professional toolkit.

Lou Smyrlis contributes to the PFN through a regular nature column in *The Orchid* and by leading botany outings. He is eager to become more involved with the PFN, contributing to its mission to instill in its members and the broader Peterborough community the fundamental importance and value of the natural environment. In his professional life, Lou has worked with Canadian business media companies as a management team member, leading research projects, managing websites, social media and monthly publications. He achieves results through the tried-and-true approach of "rolling up his sleeves and working to make it happen". Lou believes that working in collaboration with others always results in a better outcome and has offered to be a member of PFN's 85th Anniversary working group.

We extend a warm welcome and look forward to working with Rachel and Lou as part of the PFN leadership team.

~ Sue Paradisis, President



We want to hear from you! Share your thoughts on member meetings

The PFN board and member meeting organizers want to hear from you! What do you love about the monthly Member Meetings? What do you wish would change?

The Member Meetings survey is live now for all members at https://www.surveymonkey.com/r/PFN_MemberSurvey. It will be live until December 8.

The results will be compiled and digested over the winter. We will then be incorporating feedback to the meetings starting in the spring! Questions? Reach out to Tamara at tamaraebrown@gmail.com.



Membership Renewals

Just a friendly reminder that it's time to renew your PFN membership for 2025. Please go to our website <https://peterboroughnature.org/membership/> and click the "Join Online" button. Once your application form has been submitted, you can either pay your membership fees through Canada Helps by clicking on the "donate" button on our website or by going to your bank account to e-transfer your payment to payments@peterboroughnature.org. In the comment section of the transaction please indicate "Membership Payment." Should you have any questions regarding the renewal process, please contact our membership team at membership@peterboroughnature.org.

The Spirit of Giving

Happy December! We hope you have enjoyed a year full of outings, hikes, birdwatching, and enjoying the spectacular sights that nature has to offer. Thank you for making the Peterborough Field Naturalists a part of your 2024. The end of the year also marks a great time to renew your membership with the PFN! Did you know that we operate solely on the revenue we receive from memberships and donations? Thanks to our members, we are able to create and facilitate things like *The Orchid*, the Junior Field Naturalists, maintaining our bird feeders at Ecology Park, as well as monthly member's meetings and administrative costs.

Traditionally, December welcomes a time of generosity and a spirit of giving. If making donations is something you plan to do this holiday season, please consider supporting the PFN. You can even add a gift donation at the same time as renewing your yearly membership with us.

Due to the postal strike, we welcome online donations and renewals, as well as the option of bringing your envelope along to the December member's meeting. A heartfelt thank you to everyone who joined us, renewed their membership, and/or considered giving a donation this year!

85th Anniversary Slogan

We are looking to create a special slogan for our 85th anniversary next year and we would like to enlist your help. Come up with some catchy slogan ideas and send them to the 85th anniversary committee care of Lou Smyrlis (lousmyrlis@icloud.com). The slogan should be short, punchy, and capture what the PFN is about and how we want the community at large to think of us. To get you started, here are a couple of AI-generated examples:

"85 Years of Exploring Nature's Wonders Together"

"Celebrating 85 Years of Adventure and Conservation"

2025 AGM Online Auction Fundraiser

It's never too early to start planning! As you switch over from warm season to cold season interests, keep in mind the PFN's annual online auction. Held in conjunction with our Annual General Meeting in the spring of each year, the auction is PFN's sole fundraising event, with proceeds of the auction supporting the general operations of the PFN, including administration costs, production of PFN's newsletter, *The Orchid*,

events and special projects. Items must be new or previously owned in good condition, suitable to rehome. Contact Fiona (fcmckay@peterboroughnature.org) to discuss any possible donations.

Three PFN Research Grants Awarded in 2024

Submitted by Legacy Grant Committee

The PFN is pleased to announce that three research grants have been awarded to three students at Trent University to assist in their 4th year biology thesis project. The recipients and a summary of their projects follows:

Britt Petersen: This project will study the effects of native gardens on nocturnal pollinators and their predators through the identification of bat species at native gardens and control sites.

Jackson Paul: This project will attempt to investigate the limitations of using environmental DNA from aquatic samples as a method to monitor wildlife health.

Lucy van Haaften: The goal of her project is to examine the cause and pattern of ultraviolet-induced fluorescence in Northern and Southern Flying Squirrels.

Each application was reviewed by the Legacy Fund Grant Committee consisting of Martin Parker, Chris Risley, Pamela Martin and Sue Paradisis who made a recommendation to the Board. The Board approved a grant of \$250 to each project. Funds for these grants come from the annual payment received by the PFN from the PFN Legacy Fund, an endowment fund managed for the PFN by the Community Foundation of Greater Peterborough.

The three students have been invited to the April members' meeting of the PFN to give a presentation on their research.

Orchid submissions are encouraged!

The submission deadline for the next issue is Thursday, December 19.

Submissions can be articles, photos, anecdotes, nature book reviews, poems, outing reports, nature news, recommendations, interesting things you've learned or observed about nature etc.

Please send submissions to Kathryn Sheridan at orchid@peterboroughnature.org or mail submissions via post to: PFN, PO Box 1532, Peterborough ON K9J 7H7



Kawartha Field Naturalist Honoured

Submitted by Martin Parker

Dale Leadbeater, member of the Kawartha Field Naturalists and friend of the Peterborough Field Naturalists, was awarded the John Goldie Award by the Field Botanists of Ontario (FBO) at their 2024 Annual Meeting. From childhood, Dale developed a life-long interest in botany and the natural world. She worked as an ecologist in the private sector and was involved with many natural history organizations in central Ontario. Her recent work in coordinating the Kawartha Lakes botany project resulted in the publication of City of Kawartha Lakes Flora in 2022. FBO presents the John Goldie Award annually to an individual in recognition of their contribution to field botany in Ontario. The PFN extends congratulations to Dale in receiving this provincial award.

Copies of the City of Kawartha Lakes Flora are still available for purchase. They are available from PFN member Martin Parker (mparker19@cogeco.ca) who is selling them on behalf of the Kawartha Field Naturalists. The cost is \$40 each.

Outing Report for Nov. 3: The Miniature World of Lichens

Submitted by Lou Smyrlis

On a sunny Sunday at the start of November, more than 20 PFN members turned out for The Miniature World of Lichens outing at Kawartha Highlands Signature Park.

Lichens are everywhere – they can be found on all six continents, including Antarctica. There are more than 20,000 species, including 1,100 identified in Ontario so far. Yet lichens tend to go unnoticed by most people. Led by PFN president Sue Paradisis and Lou Smyrlis, the outing was focused on exploring the secrets of this pioneer organism, the first one hardy enough to inhabit the punishing landscape left behind by the retreating Laurentide Ice Sheet.

Before outing participants were sent, magnifying glasses in hand, to explore the rock outcrops in the centre of the park and the rugged banks of the Mississagua River, they learned how to identify the tell-tale signs of the three main lichen categories: Leafy-looking foliose lichens, tiny bush-like fruticose lichens, and crustose lichens which look like they've been spray painted on a surface. They also learned the different substrates that lichens attach to: rock, bark, and soil. They learned that lichens are not plants or as Carl Linnaeus, the founder of taxonomy, referred to them "the poor trash of vegetation." They're often confused with fungi, but they're not that either.

Lichens are complex organisms living together in a symbiotic relationship. Together they form a unique structure unlike the individuals on their own and with capabilities that go beyond what's possible for those individuals on their own. A lichen includes a fungal partner, which makes up 80-95% of the lichen mass, and provides protection against the elements and a moist environment. The majority of the fungi that form into lichens belong to the species ascomycetes (cup fungi). They produce little cup-shaped structures which contain spores and this ability is maintained in the lichen partnership. Using their magnifying glasses, the outing participants were able to see many of these cup-like structures on lichens.



Examples of foliose lichens. Left: Cumberland rock shield. Right: Common greenshield. Photos by Jason Hollinger

lichen while enjoying its protection from the elements. Cyanobacteria can also fix nitrogen. Within the past decade, thanks to the work of a professor at the University of Alberta, we've also discovered that some lichens include a yeast in the symbiotic relationship.

There were several lichen species to be observed. Gray reindeer lichen, a fruticose lichen with a coral-like, highly branched structure, grew on the sunny rock outcroppings. They grew in large, dense mats that retain



PFN members learning about lichens at Kawartha Highlands Signature Park. Photo: Kim Muzatko



Examples of fruticose lichen. Left: Reindeer lichen (photo: Paul Morris). Right: Boreal oakmoss (photo: Dina Nesterkova)

form into lichens belong to the species ascomycetes (cup fungi). They produce little cup-shaped structures which contain spores and this ability is maintained in the lichen partnership. Using their magnifying glasses, the outing participants were able to see many of these cup-like structures on lichens.

The second partner in the symbiotic relationship of lichens is algae and/or cyanobacteria. Both have the ability to use light to photosynthesize, producing food for the

water and prevent seeds from germinating. This keeps the canopy open, providing reindeer lichen with the sunlight they need.



More fruticose lichens. Left: Trumpet lichen (photo: Michel Langeveld). Right: Mealy pixie cup lichen (photo: Aaron Gunnar).

Another commonly found lichen was Cumberland rock shield, a foliose lichen with green lobes tightly attached to the rock and forming large patches. Common greenshield, another foliose lichen, grew on the bark of many trees and looked like a small lettuce leaf glued to a tree. There was also boreal oakmoss, a fruticose lichen, growing on branches of both deciduous and coniferous trees. Some oakmoss lichens contain usnic acid that can cause a rash (woodcutter’s eczema) if it comes in contact with the skin.



Examples of crustose lichens. Left: Tile lichen (photo: Lucas Beaver). Right: Crater lichen (photo: Tab Tannery).

There were mealy and trumpet cup lichens found growing on shallow soil and bark. These fruticose species have pale to gray green goblet-shaped cups on top of stalks. The cups contain spores, and when rainwater splashes into them the spores are forcefully ejected.

Probably everyone’s favorite is British soldiers, a fruticose lichen with greenish-gray stalks up to two inches high and a bright red cap. They were hard to find this year until Sue’s special sleuthing skills turned up several growing on the branches of a desiccated juniper bush.



Another fruticose lichen: British soldiers. Photo: Andrée Reno Sanborn

The hardest to conclusively identify were several of the crustose species. We believe we identified cinder lichen, crater lichen, tile lichen (which can photosynthesize even at temperatures near freezing), brown eyed rim lichen, mapledust lichen, whitewash lichen, and common goldspeck (with the emphasis on “speck” – bright yellow but with just a speck growing here and there).

Near the end of the day, growing along a cliff face overlooking a shady back channel of the Mississaugua River we found a colony of rock tripe. This is a foliose lichen with large reddish-brown lobes connected to the rock face by a central holdfast.

73rd Peterborough Christmas Bird Count – A Christmas Tradition

Sunday, December 15

The Peterborough Christmas Bird Count (CBC), now in its 73rd year, is the longest running wildlife survey in Peterborough County. Organization of this year’s Peterborough count has commenced, and members and friends of the PFN are invited to participate. If you are unable to participate in one of the field parties you can still assist by registering your feeder and counting the birds that visit during the day. Some participants will contribute by walking their neighbourhood. Others walk unopened road allowances. There are many ways to participate and learn more about our winter birds.



The Peterborough CBC participants cover an area contained within a circle with a diameter of 24 kilometers, centered on the intersection of Chemong Road and Sunset Boulevard. There are ten areas within the count circle, each of which will be covered by a specific group of participants. The count area will be subdivided by the area leader in order to enhance coverage. A map showing the count circle and areas is available on the PFN website (peterboroughnature.org/resources). The areas and confirmed Area Leaders are as follows:

Chemong/Bridgenorth.....Don McLeod
 Miller Creek/Selwyn.....Drew Monkman and Brian Wales
 Lakefield/Otonabee EastDave Milsom
 Douro Wedge.....Bill Crins & Mike Oldham
 Burnham.....Warren Dunlop & Janet Kelly
 Stewart Hall/LandfillJoan DiFruscia & Pam Martin
 AirportMatthew Tobey
 Cavan Swamp.....Chris Risley & Erica Nol
 Jackson Park.....Scott Gibson & Jerry Ball
 Downtown.....Martin Parker

This year there will be a count supper at the end of the day in a local restaurant. Participants can share count experiences during supper and then participate in the initial count tally. Details will be provided to all count participants. Plan now to register and participate in this Peterborough birding tradition and citizen science project. To register contact Martin Parker (count compiler) as soon as possible by phone 705-745-4750 or by e-mail mparker19@cogeco.ca. The area leaders can be contacted directly as well.

This is the 124th year Christmas Bird Counts are being held across North America. Join this Christmas birding tradition.

Backgrounder:

Each year, Birds Canada and the National Audubon Society help coordinate and support the efforts of more than 2500 counts throughout the Western Hemisphere. Christmas Bird Counts are run across Canada and the United States, as well as in Latin America, the Caribbean, and some Pacific Islands. Data collected during the Peterborough count includes details on the number of birds of each species seen or heard within a local 24-km diameter circle. Surveying this circle year after year contributes valuable long-term information on how winter birds are faring, both in your locale and across the country.

The Christmas Bird Count took root over a century ago when 27 birders in 25 localities from Toronto, Ontario to Pacific Grove, California, led by ornithologist Frank Chapman, proposed a conservation-oriented alternative to the traditional 'side hunt,' a Christmas Day competition to hunt the most birds and small mammals. This alternative initiative to identify, count, and record all the birds found on Christmas Day 1900 has turned into one of North America's longest-running wildlife monitoring programs.

For more information about the Christmas Bird Count, or to find the location of additional counts, visit Birds Canada's website at birdscanada.org/cbc.

Ontario Nature Lake Ontario North Fall Regional Meeting Report

Submitted by Steve Paul (with excerpts and summaries from ON meeting notes)



The 2024 Ontario Nature fall regional meeting was held via Zoom on October 10.

There were 13 people in attendance, including three from Ontario Nature. Nine clubs were represented at this meeting, including the PFN. Tony Morris, Conservation Policy and Campaigns Director at Ontario Nature, talked about two key campaigns they are working on this fall at Ontario Nature, including working

with other groups on the Federal Nature Strategy and Nature Accountability Bill and the Alliance for a Liveable Ontario's 5 Ways Home Campaign.

Federal 2030 Nature Strategy

The strategy was released in June 2024, and lays out a path to achieve the goals and targets of the Kunming-Montreal Global Biodiversity Framework. It identifies implementation plans for each of the 23 targets of the framework, as well as provincial and territorial contributions.

Some strategy gaps include: lacking timelines (other than 2030) and progress indicators; it represents industrial logging as benign and carbon-neutral; there is insufficient funding to achieve targets; it lacks cohesive and comprehensive pan-national cooperation.

Nature Accountability Bill

It is intended to strengthen the 2030 Nature Strategy and give it some bite. To do so, it requires a Cabinet Minister to establish a strategy and action plan, national reports on progress, and the establishment of an advisory committee. Some weaknesses of the bill include the fact there is no accountability mechanism for failing to meet targets, nor does it enshrine the targets into law. There are also no details on the timeline or total number of members needed for the advisory committee. As for what is to come in the future, Nature Canada is leading a national response to the strategy and bill, with Ontario Nature participating in a pan-national working group. It is expected that detailed submissions will be given to provincial and federal officials in the coming months. Ecojustice, Canada's largest environmental law charity, will be providing suggested amendments to strengthen the bill.

Alliance for a Liveable Ontario - 5 Ways Home Campaign

There are five key ways they want to make homes more affordable in Ontario:

1. Build in the right places
2. Build a wide variety of housing types
3. Build smarter and faster
4. Invest heavily in non-market, affordable housing
5. Make housing affordable and part of liveable communities

The campaign has several goals. They want to provide hope for Ontarians that there are doable solutions to the housing crisis. They want to get their messaging out to as many people as possible, making it easy to understand and share. And lastly, they want to provide an alternative to the destructive actions being pushed by the Provincial Government, such as destroying farmland and natural areas, making the housing crisis worse, dramatically reducing public oversight of development, and assuming the private sector will solve these dilemmas.

Group Activity Updates

Durham Region Field Naturalists

They have secured a permanent meeting location. Their monthly outings have been local, sometimes with a focus or theme in mind but other times it has simply been to get out and explore. They have finally installed 10 bird boxes at Lynde Shores Conservation Area - some near the trail and others further away. They have a new board member-in-training who will hopefully take on a role in conservation. One of their biggest challenges has been securing speakers.

Friends of the Rouge Watershed

They are a nature advocacy organization that is focused on increasing the biodiversity of the Rouge watershed and lands adjacent to it (e.g., Ontario Greenbelt and Pickering Airport Lands), by engaging the public in ecological restoration events in the Rouge watershed.

Friends of Second Marsh

They are in year five of the "Let's De-Phrag the Marsh!" project. Monitoring and spading in McLaughlin Bay Wildlife Reserve was completed in July. Treatment was completed in September and cutting of treated phragmites was to occur in October/November. They are also involved in the 3-year Ontario Power Generation Regional Biodiversity Grant Program to help partially fund their Plant Stewardship Program. The funding will be used to help manage dominant introduced plant species (invasive plant species) and plant/reseed with preferred (native) trees/shrubs/seeds within the McLaughlin Bay Wildlife Reserve. Certain management zones have been designated for management and restoration. They hired staff from May to August to help with their Plant Stewardship Program in which they managed eight dominant introduced plant species and introduced five preferred (native) plant species.

High Park Nature Centre

Their biggest update is that they now have a savannah landscape learning space called "Our Space." They received funding for trails and planting to start the second space. This allows them to animate their programs from summer camps and nature clubs and to engage the wider community in planting initiatives. The community will get to see the space as it grows and develops. They have also had stewardship events thanks to TD Friends of the Environment Fund, including bird counts and wildlife bioblitzes. They also have a water quality monitoring program with testing provided by Water Rangers. Their hope is that over time they will see if there are any trends.

North Durham Nature

They had a series of speakers in-person every month, alternating between two venues: one in Scugog and one in Uxbridge. A really interesting speaker in June was Michael Pavan, a farmer who spoke about sustainable agriculture and biodiversity. Two other speakers included Dale Leadbeater, who recently wrote a book on the flora of Kawartha Lakes, and Debra Metsger, who wrote the ROM tree guide and came with discounted books. The group regularly leads hikes on wildflowers, birds, etc. as well as butterfly counts. There has been a bluebird nesting box program at a gravel pit through an arrangement with Lafarge, but they have had issues with a bear destroying the boxes, so they are looking for a new location. They are advocating against a big development proposal on Lake Scugog, north of Port Perry, partly within a Provincially Significant Wetland (PSW), but they are not sure if the developer is using political tactics to get something else or they actually intend to build in the PSW.

Peterborough Field Naturalists

Three main areas of focus:

1. PFN has been involved in the City Nature Challenge for the last two years, which they have coordinated with the City of Peterborough. The challenge encourages people to get out during a world-wide four-day bio-blitz each April and capture any nature sightings into iNaturalist. iNaturalist is very easy to use, and allows you to explore nature while also recording important data that contributes to biodiversity science. The project is expanding in 2025 from the original city boundaries (58.6 km²), to now include ALL of Peterborough County (4,000 km²). PFN has added community partners like Peterborough County,

Kawartha Land Trust, Otonabee Conservation and Trent University to be involved in planning for next year's event, which takes place from April 25 to 28.

2. As the PFN approaches their 85th anniversary, this past summer they finalized their first strategic plan. They received a grant from the Government of Canada's Community Services Recovery Fund to do this. PFN has updated their vision statement to: "An engaged community that is inspired to learn about, appreciate, and conserve nature in all its forms." The pieces tying into the strategic plan are community and collaboration and learning. The plan focuses on four key values: environmental stewardship, engaged membership, inclusivity and knowledge sharing. Several sub-committees have been created to engage members to get them more involved in shaping the future.

3. One of PFN's strategic initiatives focuses on collaboration and partnership, and finding ways for multiple organizations to work together, like the City Nature Challenge mentioned above. They were recently invited to participate in a new initiative called Regional Conservation and Climate Partnership, hosted by Kawartha Land Trust, which aims to "enhance the health and well-being of local ecosystems and all beings who rely on them." The model came out of B.C. and they are very excited to see where it goes. They believe it will be useful to pool resources and avoid duplication.

Pickering Naturalists

They have meetings every month, all on Zoom. They had some really excellent speakers. One was Jean Iron speaking about prairies, including unusual prairie birds, prairie dogs and other interesting mammals. Their October talk was on Piping Plovers from Birds Canada. They are working on an interesting project using trail cams detecting night movement.

Thickson's Woods Land Trust

With the help of a grant, they hired summer students this past summer. The students did research, planted native plants, worked on invasive species removal, and also worked with James Kamstra on updating the plant list. The group is working on a petition regarding a new development proposal adjacent to the woods on a berm that was of historical conservation significance. They are particularly opposed to the proposed driveways which will enter onto the road right by the woods and the waterfront trail.

Toronto Entomologists Association

They meet every month on Zoom, but would like to move back to the University of Toronto where they can run hybrid meetings. They have had some interesting meetings, like their annual student symposium where graduate and senior students talk about their research on insects.

Their group had a face-to-face meeting at the zoo for the annual bug rearing day, which included spiders, but they also had some very enthusiastic people that were mainly rearing moths. The TEA compiles the lists of insect counts from all over Ontario. There were 30 butterfly counts this year across Ontario. Promoting counts to members would be a great way to attract volunteers.

Toronto Field Naturalists

Their group has spent the summer focusing on the stewardship aspect of their programming. They have been working with the City of Toronto on a project involving goat grazing for invasive species removal at Brickworks. They did monitoring before and after the grazing, and will continue to do the monitoring. This is the 8th year of Cottonwood Flats monitoring and the 3rd year of active stewardship there. They also started a joint stewardship project with the city at the Humber Arboretum, which is a community monitoring and stewardship program, inviting people with less experience to learn by volunteering. This includes monitoring invasive species and native plants. There is an ad-hoc trails task force as well as a

stewardship plan in place for the Jim Bailey nature reserve. They planted butternuts this year, and will be tackling phragmites and a list of other things over the next few years.

Toronto Ornithological Club

They run ten lectures or webinars as well as a variety of outings throughout the year. This includes coordinating and running citizen/community science initiatives such as the Christmas Bird Count, the Breeding Bird Atlas, local eBird review, Hawk Watch, and Whimbrel Watch. They also attend local bird festivals, and run a small grant program for local bird conservation education or advocacy.

Is There a Tree of Life?

Submitted by Lou Smyrlis

In February 1536, during the depth of Canadian winter with snow piled more than a metre deep, European explorer Jacques Cartier and his crew lay close to death. On their second expedition exploring the St. Lawrence River, they had to winter in their fort close to the Iroquoian capital of Stadacona (near present day Quebec City). Their three ships were trapped in river ice almost two metres thick. The condition of the men was so dire that Cartier wrote, "Out of the 110 that we were, not 10 are well enough to help the others, a pitiful thing to see."

Cartier described an unknown sickness that began to spread among his men which came on so strong that "some did lose all their strength and could not stand on their feet, then did their legs swell, their sinews shrink as any coal.

Others also had their skins spotted with spots of blood or a purple color; then did it ascent up their ankles, knees, thighs, shoulders, arms and necks. Their mouths became stinking, their gums so rotten that all the flesh did fall off, even to the roots of the teeth, which did also fall out."

But Cartier and his men didn't die. Instead, something miraculous happened. It involved a hardy conifer whose conical shape and pleasant spicy scent is familiar to anyone hiking by limestone-dominated wetlands in Peterborough County.

Domagaya, the son of an Iroquois chief, visited Cartier and his men and showed them a brew which could heal them. The brew was made from the inner bark and leaves of a tree the Iroquois called Annedda. The Frenchmen used up the bark of an entire tree in a week on the cure and it saved them. So awed was Cartier by how quickly the cure worked that he proclaimed it a godsend, and the Annedda tree became known as *Arborvitae*, Latin for the Tree of Life.

Today we know the mystery disease which almost took Cartier and his men to their graves during that winter 488 years ago was scurvy, which is brought on from a lack of vitamin C. And the Tree of Life, although not known with absolute certainty, is widely believed to have been eastern white cedar. Teas prepared with its leafy twigs and bark are high in the vitamin C required to treat scurvy.

In fact, white cedars save many lives every Canadian winter. White tailed deer stay alive during harsh winters by eating its flattened, scale-like foliage. Porcupines eat its inner bark for the sugars that will keep their bodies warm during the coldest January and February nights. Squirrels use its thick, reddish-grey fibrous bark to form the structure of their winter nests. Its reddish-brown seed cones, which stay on the tree through the winter, provide food for various small birds and mammals.



White cedar's vitamin C-rich bark and leaves are a literal winter lifesaver for man and animal alike (photo by Lou Smyrlis)

Cartier took seeds of the Arborvitae back to France and white cedar is believed to be the first native North American tree to be introduced into Europe. By 1536, it was growing in Paris in the royal garden of Fontainebleau.

How to Live with a River

Submitted by Cheryl Lyon

Hundreds of millions of years ago, Nature began forming the land we call the Kawarthas. Ten thousand years later, the massive fingers of retreating glaciers gouged out lowlands, raised rolling drumlins, deposited the gravelly eskers, strung beads of lakes along strings of rivers, and birthed a river. That river, now called Otonabee, found its present course that drops more than 600 feet over its length from Lake Katchewanooka (“lake of rapids”) to its southern emptying into Rice Lake.

The river flowed so energetically that the first inhabitants of the land, the Anishinaabe, called it “odoonabii-ziibi” from the Anishinaabemowin words ode meaning “heart” and odemgat that comes from “boiling water.” Hence, “the river that beats like a heart.”

Odoonabii-ziibi was life. The river nourished unique local ecosystems wisely used by the Anishinaabe, the first people here. They followed each season’s bounty of game and plant life with their encampments and gatherings. Islands were especially valued as places of ceremony and connection. Shallows and shorelines offered shellfish and frogs. An abundance of fish, moose, deer, rabbits, muskrats, fox, and others shared the water with the humans. Wild rice (manoomin) seeded the lakes and became a staple food.

The Anishinaabe also respected the powers of the water in the river. They erected their dwellings the appropriate distance from shorelines to forestall the flooding and sometimes fevers and other illness and dangers that come from water’s shallows. From the depths of local Chemong Lake, canoeing fishers might encounter the powerful, mythical serpent Mishipeshu, whom parents used to instill respect in children for water’s power and the consequences of taking it for granted.

The first British Empire settlers arrived with their memories too. Some remembered expulsion, poverty and forced migrations, deaths by fever in ships’ holds. Others were driven away from their homeland by the lack of advancement for youngest sons, the miseries of early industrialization and religious persecution. The money-minded saw only the riches to be gotten from this “empty” and “new” land. Anishinaabe land was stolen and given to the first Irish immigrants. A city called Peterborough built up on it, and the river was anglicized to “Otonabee” on their maps.

Because they did not know how to listen to the wisdom of the river, the land and its first peoples, they located their homes close to the river banks for the ease of proximity to water and to build lumber mills. They broke old forests’ intimate relationship with the river when they clear-cut trees. They subdued its wild heart with locks and dams, sometimes diverting its natural flow away from its ancient companionship with the land. Industrial wastes from sawdust and meat packing effluences polluted its clear purity. The river was colonized. And the long reach and clash of memories began to play out along the banks of odoonabii-ziibi.

A city took shape. Commerce drowned the voice of the free-running river, dammed its wild power with a giant lift lock and the lesser shackles of the locks of the Trent–Severn Waterway. Private ownership restricted the pleasures of its shores to cottagers, private boat launches, some public parks, and small untended “green” spots at the end of a few city streets. The beating heart of a wild river was silenced.



Odoonabii-ziibi is a modest river. The unfortunate scientific classification of “misfit” is applied to it, meaning a river flowing through a valley eroded by much more ancient volumes of water greater than represented by the current river. So the Otonabee River lies within a broad serpentine lowland that flooded with water in the last Ice Age.

The weather extremes of the climate crisis are a wake-up siren for our renewed attention to the water in Peterborough City and County. The unprecedented flood of 2004 was only a tap on the shoulder. Must we wait for another flood or the city’s drinking water to dwindle or the turbines of the hydro stations to stop turning before we pay attention, prepare and adapt?

Can we free the Otonabee to be what it once was? Can we remove the locks and dams that stifle its heart? Can we return its stolen places? Will Nogogiwanoong (Peterborough), the city “at the end of the rapids,” ever see a boiling, sparkling, wild river again? Likely not. The course of history is harder to reverse than the course of a river. The fossil-fuelled economy is even harder to turn around to an Earth-centred one.

Anishinaabe peoples knew that we do not ‘own’ a river just as we do not own the sun or the wind. Land and water are life, and humans are stewards of them. With this understanding, we can become reacquainted with odoonabii-ziibi. Sit quietly with the river (or any a local lake or stream.) Walk its banks and linger in wild spots that are still green and untouched. Be thankful for the gift of water each time we use it. Make amends for wasting it or avoid polluting it. Bring the voice of the river into all personal behaviours and community decisions about local land (aki) and water (nibi) - most urgently now as we try to adapt to and lessen the climate consequences of our past neglect of local rivers and lakes.

Now is the time to hear once more the beating heart of the Otonabee and restore the river to our understanding of where and who we are now, and what we must do at this perilous time of climate crisis, right here, in the Kawarthas, in Anishinaabemowin “the place of shining waters and happy lands”.

Book Review: Not the End of the World by Hannah Ritchie

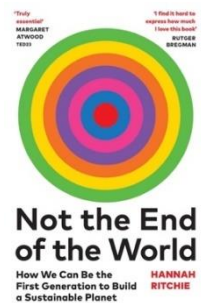
Submitted by Marilyn Freeman

Am I depressed when I think about the state of the world? Yes, and that is exactly the reason I had to read Dr. Hannah Ritchie’s book. Ritchie is a climate data expert and a senior researcher in the Program on Global Development at Oxford. She is also a deputy editor and lead researcher at the online publication, *Our World in Data*.

According to Ritchie, we could be the first generation that leaves the world in a better state than when we found it. That sounds attractive because all of us are overwhelmed with dire “click-bait” information and what we shouldn’t be doing. Ritchie pulls out the big things that are really making a difference and why we should focus on them.

This book is based on the seven biggest environmental crises that must be solved in order to achieve sustainability. The view starts literally high up with air pollution which moves to climate change, deforestation, food, the life of other species on land and then dives under water to examine ocean plastics and fish. Of course, all these problems overlap. The food we eat influences climate change. Burning fossil fuels damages our health. This interconnectedness gives us a clue how to address several problems at once.

Ritchie spends some time rejigging our perception of where the world is at today compared to before. From the human side, there have been major gains. From the environmental side, it’s a different story. She goes into detail through the different chapters – all of which are fascinating. They cover air pollution, climate change, deforestation, food, biodiversity loss, ocean plastics and overfishing. There are surprises.



One of the things I appreciated about this book was the section entitled “Stress Less About” at the end of each chapter. When people are asked what are the most effective things they can do to reduce their carbon footprint, they mention stuff that has the smallest impact: recycling, LED bulbs, hang washing outside. They constantly miss the big stuff: eat less meat, aim towards using a hybrid or EV vehicle, insulate the home, do less air travel.

Let’s take a look at biodiversity loss. The metrics used to measure biodiversity are tricky and made worse by click-bait headlines like this from the Washington Post in 2018: “Two generations of humans have killed off more than half the world’s wildlife.” In fact, some populations are doing okay while others are faring poorly. The World Wildlife Fund’s Living Planet Index presents a mixed picture with half the animal populations increasing and half decreasing. Humans are notoriously bad at understanding interdependencies between species. For many species, humans don’t have a clue as to their functionality in the system. We pay attention to rhinos and polar bears but not worms and bacteria – species we actually depend on. Today the mammal kingdom is dominated by humans and the animals we raise to eat (e.g., cows and pigs). The animals we eat weigh almost ten times as much as all wild mammals combined! But humans make up 0.01% of Earth’s biomass. Trees, despite deforestation and wildfire, make up 82% of biomass. In second place is bacteria at 13%. The animal kingdom is only 0.4%.

The rate of change is what we need to pay attention to and the rate of change now is high. Birds and amphibians have been declining at 100 to 1000 times faster than scientists have expected. In terms of rate, we’re outpacing the five big mass extinctions. It’s a bleak picture but it’s one that’s based on an assumption that this rate will continue. That assumption is wrong, says Ritchie. The previous mass extinctions were driven by geological, asteroidal or climate changes. This time it’s being driven by us. Therefore, we are also the handbrake.

While climate change, plastics, deforestation etc. have a negative effect, it’s still how we humans feed ourselves that has the biggest effect. Overhunting and agriculture have been responsible for 75% of all plant, amphibian, reptile, bird and mammal extinctions since 1500.

Overall, sustainability is the goal. The solution is simple: stop burning stuff. The developed world built their economies and wealth on burning fossil fuels. Lower income countries can leapfrog over this path and are doing so. For example, African countries have skipped landlines and jumped to cell phones. What is needed is systemic change because we will not fix our environmental problems through individual behaviour alone. Ritchie has suggestions: get involved in political action, vote with your wallet because every time you buy a plant-based burger, an EV, a solar panel, you’re telling the market to serve you. The more we buy this stuff, the faster the price falls. Support organizations working for the environment and climate change either with your volunteer time or money. Check out charity evaluations to see what’s most effective. Stick with others pulling in the same direction. When we fight among ourselves, the big money lobbyists for fossil fuels, cattle etc. get a free ride.

The author writes, “If you are living today, you are in a truly unique position to achieve something that was unthinkable for our ancestors: to deliver a sustainable future.” We’re the generation that has options.

What’s missing from this book? Tipping points, the thresholds beyond which occurs abrupt and irreversible change, are missing. Geopolitics are missing. Big money is missing.

Ritchie’s book is useful as far as it goes. It cheered me up and, goodness knows, we need some optimism, especially from those who say, “Look at the numbers. We can turn this around.”



Nature Almanac for December - The Sun Stands Still

By Drew Monkman

*"So the shortest day came, and the year died,
And everywhere down the centuries of the snow-white world
Came people singing, dancing,
To drive the dark away,
They lighted candles in the winter trees;
They hung their homes with evergreen;
They burned beseeching fires all night long
To keep the year alive..."*

- Susan Cooper, *The Shortest Day*



Great Black-backed Gull amongst Herring Gulls. Photo: Marilyn Hubley

With the fall's first snow now upon us, much of the natural world seems to slip into a gentle slumber. This is certainly not the case for humankind, however, caught up as we are in the frenzy of the holiday season. Not surprisingly, we often forget that a mystic celestial event takes place this month. Just when the sun seems to be on the brink of vanishing completely, it suddenly stops its southward march and essentially "stands still," hence the word solstice. It will then proceed to move northward once again, to climb higher and higher into the sky and to provide longer and longer days for the next six months. So it was with great joy and relief that ancient cultures on every continent celebrated this life-affirming event, an event that may even have been a precursor to faith. The Christmas tree, too, proclaims life's vigour in the face of winter. It fills our homes with the resinous fragrance of the northern forest and is the centrepiece of our holiday decorations.

The natural world provides many other Yuletide adornments, as well: festive winterberry holly fruits, radiant cardinals at our feeders, fluffy chickadee baubles, hoar-frosted windows, and shimmering icicles. Nature also supplies its own array of sounds for the festive season - the cracking and rumbling of ice forming on the lakes, the shrill scolding of red squirrels, the croaking of ravens patrolling Shield country and the roar of the north wind as it ushers in winter. Although December sees the year come full circle, it is neither an end nor a beginning. Like every other month, it is simply part of an indivisible whole.

- 1) Almost all migratory birds that breed in the Kawarthas are now on their wintering grounds. Most hummingbirds choose the Yucatan Peninsula, Baltimore orioles fly all the way to Costa Rica and large numbers of robins spend the winter in South Carolina. Some robins also overwinter in the Kawarthas each year.
- 2) Throughout the late fall and winter, gray squirrels are often seen high up in maple trees feeding on the keys.
- 3) You may still see farmers harvesting hard corn this month. Even though the plants are dry, withered and often frozen, they still have excellent food value.
- 4) A December moon rises about 30 degrees north of due east and sets 30 degrees north of due west.
- 5) Ducks lingering until freeze-up usually include common goldeneyes, common mergansers, hooded mergansers, mallards, and American black ducks. A small number of common loons, too, often remain quite late.
- 6) In early December, the easily-identifiable constellation Cassiopeia looms like a big letter "M" in the north sky in the evening. The Inuit imagined the shape as a pattern of stairs sculpted in the snow.
- 7) Balsam fir makes the perfect Christmas tree - a symmetrical shape, long-lasting needles, and a wonderful fragrance. Buying a real tree is a better environmental choice than purchasing an artificial tree.
- 8) Great black-backed, lesser black-backed, glaucous, and Iceland gulls often turn up on Little Lake where they can sometimes be seen sitting on the T-wharf.

- 9) Most years, a small number of snowy owls arrive in the Kawarthas this month. The concessions east and west of Lindsay are often the best place to see them.
- 10) Loons sometimes become trapped in the ice when an expanse of open water freezes overnight. Iced-in birds can fall prey to bald eagles.
- 11) On local lakes such as Jack, Katchewanooka, Buckhorn, and Stoney, eagles are sometimes seen sitting on the ice near open water or perched in nearby trees.
- 12) In past decades, all of the Kawartha Lakes were usually frozen by December 12. However, freeze-up is often much later now as a result of climate change.
- 13) The Geminid meteor shower usually peaks around the 12th to 14th of the month. It is thought to be intensifying every year. Recent showers have seen 120 to 160 meteors per hour under optimal conditions.
- 14) Skunks may emerge from their winter slumber to search for food during mild spells.
- 15) The red squirrel's coat is now a brilliant russet. It is also much thicker than the summer coat.
- 16) White spruce and eastern hemlock release their seeds during late fall and winter. It is not uncommon to find the snow beneath these species powdered with seeds.
- 17) Between mid-December and early January, Christmas Bird Counts take place across North and Central America. There are two local counts: the Peterborough Christmas Bird Count and the Petroglyphs Christmas Bird Count.
- 18) "Nip twigs" on the ground below conifers are a sure sign of red squirrel activity. Squirrels nip off the tips of conifer branches, allowing the twig to fall to the ground. They then scurry down the tree, remove the cones and buds, and leave the rest of the twig there. The buds are usually consumed immediately.
- 19) By 8 p.m., the Andromeda galaxy is nearly directly overhead. At 2.2 million light years away, it is the farthest celestial object detectable with the naked eye.
- 20) December is the peak calling month for both the eastern screech-owl and the great horned owl.
- 21) December 21 or 22 (depending on the year) marks the winter solstice, the shortest day of the year and the first official day of winter. The sun rises at its southernmost point on the eastern horizon, and sets at its southernmost point in the west. Sunrise is not until about 7:45 a.m., while sunset is upon us by about 4:35 p.m.! This means that it traces its lowest and shortest trajectory of the year through the southern sky. With nights as long as June days, it's no wonder that the ancients prayed that the sun would not disappear altogether.
- 22) Moose shed their antlers between now and February.
- 23) The last of our local "giant" Canada geese usually depart in late December. Most go no further south than Pennsylvania.
- 24) When viewed from a distance, the upper branches of white birch create a beautiful purple haze in the forest canopy.
- 25) The chance of having a white Christmas in the Kawarthas is over 80%.
- 26) In the southeast night sky, look for the Winter Six: Orion, Taurus, Auriga, Canis Major and Canis Minor. The winter constellations shine brightly and are easy to pick out.
- 27) A huge bank of clouds along the horizon is a common winter sight when you look south from Peterborough on a clear day. These clouds form over Lake Ontario as a result of water vapour rising from the relatively warm lake and condensing in the colder air above.
- 28) Cooper's hawks are quite common in the city during the winter months. They are probably attracted by the large number of prey species such as starlings and mourning doves to be found in built up areas. These hawks fly with a characteristic flap-flap-glide style and can be easily identified at considerable distances. Most years, a small number of merlins can also be seen.

- 29) Watch for overwintering birds such as robins feeding on clusters of mountain-ash berries, wild grape, sumac, and European buckthorn.
- 30) If you live outside of the city near a forest or woodlot, you may have flying squirrels providing nightly entertainment at your bird feeder. They are quite tame.
- 31) Even though the days grow longer after the winter solstice, the increase in daylight is in the afternoon, not in the morning.

Steve's Swan Sightings

Submitted by Steve Paul

Some of you may recall my story of Trumpeter Swan Y43 that I attempted to rescue in December 2022 off of the causeway near Port Perry. Four days later on Boxing Day he was rescued by Toronto Wildlife Centre, and had quite a bit of fishing line removed from his wings, some of which left deep cuts that required stitches. After about three weeks in recovery, he was successfully released. This story is available in the January/February 2023 Orchid.

As much as I would love to say the majority of rescues of Trumpeter Swans have happy endings, unfortunately that is not the case. This is meant to be educational and not triggering, so if you are sensitive, you may want to skip reading the rest. The following story is a tragic example of how humans interfere with the balance of nature.

Late in the afternoon of Sunday, November 10, I received a message from Trumpeter Swan Conservation Ontario (TSCO) that there was an adult Trumpeter Swan with yellow wing tags sitting in a weird spot just off the south side of the Port Perry causeway. Shortly after, I spoke with both Toronto Wildlife Centre and Carrie Tovey, the person who reported the swan. She was not able to see the wing tags. With it being almost dark, TSCO put out a request for any locals who may be able to look at the swan and attempt rescue. Amazingly, Sherrill Nesbitt and her husband went out in the dark, but were unsuccessful in even trying a rescue, as the Trumpeter wanted nothing to do with them, slipping into the water and out into the wetland. Still no ID from the wing tags. Positive thoughts were shared as we hoped the swan was just resting.

Early the next morning I received an urgent text from Carrie, asking me to call her. The tagged adult Trumpeter was back in the same spot, and there was another untagged adult swan and five cygnets nearby. Carrie took a series of photos, and the swan was identified as L77. Records show it was a cob (male), tagged in 2012 and estimated to have been born around 2009. I was able to confirm through Kim Stevenson at TSCO that L77 and his partner nested in the area and had six cygnets this year.

This is where the story takes a turn. Both Sherrill and Carrie identified something else partially visible in the water, but it wasn't until after Carrie went through her photos from Monday morning that we were able to confirm there was a dead Trumpeter in the water. With gray on its wings, it was presumed to be the sixth cygnet from the L77 family. Perhaps L77 was just watching over or mourning the passing of the cygnet? After getting additional messages of people seeing a dead swan off the causeway, we decided to find a way to recover the dead cygnet from the marsh. I was not able to do it as I had a couple of appointments I could not move on short notice.

Another message went out to the TSCO Facebook group. This time, another amazing local, Tricia McCourt, offered to help. She called around and got permission to access the wetland, and even got help from the manager of the marsh property who launched their boat and went out with Tricia to recover the cygnet. Sometime later, I got a phone call from Tricia: they recovered the cygnet, but also captured L77 as well. He



L77 and cygnets on the south side of the Port Perry causeway. Photo: Carrie Tovey

had been back in the same spot and didn't look well. So they decided to scoop him up too. Next thing you know, they were off to Shades of Hope to get L77 some help. L77 was well behaved and sat on Tricia's lap on the way to Pefferlaw.

When I got up Tuesday morning, I saw I had a message from Kyna Intini, one of the go-to experts on Trumpeter Swans and the primary rehabber of TSCO. I was informed that L77 had been suffering from high lead, had ingested multiple pieces of unidentifiable fishing tackle, and two pieces of metal that had pierced his gizzard. He was very emaciated and barely able to stand, so they made the decision to euthanize him.

The phrase "it takes a village to raise a child" truly applies, because there are so many caring people out there who love swans and want to make a difference. On top of all the amazing TSCO Board members and volunteers who do everything possible to protect Trumpeters, every single person that loves and appreciates swans, that are willing to call when something is wrong, that are willing to rescue or transport swans to Shades, your help is very much appreciated.

This is a very difficult and sad story, especially with two swans dead in one spot, and it proves there is much, much more we need to do to educate people around the effects of lead, fishing tackle and fishing line on wildlife. However, out of this tragedy - I have now connected with some amazing people who want to make Port Perry and Lake Scugog safer. More to come on this. I will share the results of the necropsy on the cygnet once it is available.

L77, rest in peace. We will carry forward and make the world a better place in your honour.

From the Archives - The Formation of the PFN, Originally the Peterborough Nature Club

Submitted by Martin Parker

From a PFN publication entitled "20th Anniversary of the Peterborough Field Naturalists - 1940 to 1980" written by John E. Fitzgerald

"On Saturday, May 18, 1940 the fifth annual field outing of the Peterborough and visiting naturalists was taken. Fifth Annual? Then why was this our 40th in Anniversary in 1980? There is an answer for all things and so we go right back to the beginnings.

The opening sentence is the first recorded word the Peterborough Nature Club, the Peterborough Naturalists Club and today's club, the Peterborough Field Naturalists. For five years the men and women who formed the PNC held field outings with members of the Federation of Ontario Naturalists (now Ontario Nature). They were not an organized club nor associated with the FON in any official way.

Mrs. Harry Graham (her husband was our first President) recounted some of the early history. It seems that Dr. MacKenzie of the Grove School was invited to organize an outing with the FON in this area in 1937. An outing was held. The following year, along with help from F.J.A. Morris, a second outing was held and people from the University of Toronto, Western Ontario and Queen's attended.

Two more outings followed, leading up to the 1940 outing from which our club became organized. Messrs. Frank Morris, H.H. Graham, and John Hooper led this outing.

Following the 1940 outing and lunch, a meeting was held and from it our club was organized. Thirty-two adults and four juniors became club members, with the membership fee set at \$1.00.

Mr. Graham was elected President. He served two years and then Dr. A. J. Madill served a similar term to be followed by V.R. Henry in 1944 and then by Miss Margaret Eastwood. (This had to be the start of women's lib.) Alex Shearer then followed Miss Eastwood as President in 1946."

They Snatch and Go, and Make My Heart Glow

You'll never feel more grand as when you extend your hand
Holding black oil seeds or shelled nuts for a chickadee.
These cheerful, little winged puffballs need no command
To take your offering, it appears, with obvious gaiety.

He'll steal away quickly to his secret cache sites,
All the while avoiding thieves and killers, too,
And return for more such clandestine flights.
Your reward comes when he casts an accepting look at you.

There is much memory formation occurring in his tiny brain.
He must remember where to retrieve his scattered food.
Could human beings muster such ability to mentally retain
Equivalent data for location with our brains so crude?

By early fall a chickadee replaces outdated brain cells
With new ones to store his memory of new food stocks.
'Bird brain' may someday refer to someone whose skill tells
Of excellent cerebral refinement about which no one balks.

Murray Arthur Palmer, 2020

Bring on the Beaver!

Submitted by Marilyn Freeman

We are all aware of the danger of wildfire to wildlife (and ourselves) but fire is only the first phase of threat to the species that live there. The second threat is the incredible amount of ash and charred debris that runs off into waterways. It can be so bad in some areas that fish populations disappear completely. However, some areas do remain clear of soot and ash and full of fish.

What's the difference? Bring on the beaver! Wildlife biologists have discovered that water runs clear in areas around beaver dams. It appears that the runoff from wildfire settles in beaver ponds. Studies of waterways downstream of beaver dams show that wildfire-created sediment is only a third of what is upstream. The ponds created by beavers serve as a sanctuary that help forest systems recover from fire disturbance.

In the face of climate change and environmental disturbances caused by it, understanding long-term ecosystem dynamics better enables wildlife managers to plan for sustainability and resilience. The work that beavers do contributes to that resilience. In fact, in some areas, beaver dam "analogues" are being installed. These are walls of vegetation placed across streams before springtime rainfalls in areas burned by wildfire the previous summer.

All hail the mighty beaver! May they teach us what we need to know!



The Orchid Diary



A summary of noteworthy observations by PFN members and others in Peterborough County. Information compiled from eBird's rare bird sightings, Drew Monkman's Sightings website and individual submissions. Please submit your interesting observations to orchiddiary@peterboroughnature.org

Oct. 23	Dave Milsom, Brian Wales and Leo Weiskittel observed an adult Golden Eagle soaring overhead and an American Goshawk gliding towards Rice Lake, from Scriven Heights. A very late Eastern Phoebe continued to be seen at Corrigan Hill by Tim Haan.
Oct. 25	Caleb Catto noticed a Snow Goose amid a large flock of Canada Geese on Buckhorn Lake. A couple of female Black Scoters were seen by Chris Risley at Hammer Family Nature Preserve, Pigeon Lake. Scoters continued to be seen at the site over the following weeks. Randy Smith saw a Carolina Wren in Lakefield feeding at birdfeeders. Possibly continuing bird from last week. A late Savannah Sparrow was spotted at the Lakefield Sewage Lagoons by Don Sutherland.
Oct. 26	Golden Eagles were on the move today. Participants of the OFO trip to Nephton Ridge led by Dave Milsom saw an adult and 2 immatures; Dan Newman spotted two at the Lakefield Sewage lagoons; another was seen by Don Sutherland and Jake Nafziger at Scriven Heights, where they also saw 3 Red-shouldered Hawks .
Oct. 27	While checking out the Black Scoters at the Hammer Family Nature Preserve, Don Sutherland noticed a Red-necked Grebe and a Yellow-bellied Sapsucker . Martyn Obbard noted a Red-shouldered Hawk overlooking his birdfeeders in his Lakehurst yard.
Oct. 28	Leo Weiskittel, Dave Milsom and Brian Wales saw 4 more Red-necked Grebes at Sandy Point, Pigeon Lake. Angela Mattos saw 2 Red-shouldered Hawks circling over her Douro yard.
Oct. 29	Don Sutherland saw 3 adult and 4 hatch-year Tundra Swans at Sandy Point Bay, Pigeon Lake.
Oct. 30	A Western Cattle Egret was spotted by Jane Kroes, Laurie Healey and Marilyn Hubley in a farm field with cattle on Cedar Valley Rd. This very rare bird was seen by many birders over the next weeks.
Oct. 31	A late Northern Parula was seen by Don Sutherland at the Lakefield Sewage Lagoons.
Nov. 1	Mike Burrell saw a Golden Eagle over his Douro yard and Don Sutherland saw one at Elim Lodge Rd.
Nov. 2	A male Gadwall was seen by Don Sutherland at Lakefield Sewage Lagoons and a couple of American Wigeon were spotted by Jake Nafziger at the Hammer Family Nature Preserve. Kale Worman saw an American Woodcock fluttering across the road at Cty Rd 36 north of Pigeon Lake.

	<p>A Red-shouldered Hawk was seen by Jake Nafziger at Scriven Heights and another was seen by Iain Rayner from his Lakefield yard.</p> <p>Sarah Bonnet heard a Northern Saw-whet Owl at the James McLean Oliver Ecological Centre. Tony Barrett also saw one being mobbed by Dark-eyed Juncos in his South Monaghan yard, and Kale Worman heard another north of Pigeon Lake.</p> <p>A Ruby-crowned Kinglet was seen at Pengelly Landing by Matt Tobey.</p> <p>Dave Milsom saw an Eastern Meadowlark fly over the field at Scriven Heights, and as many as 3 were seen in that location over the day. Another individual was heard by Laurie Healey, Jane Kroes and Marilyn Hubley near Millbrook.</p>
Nov. 3	JulieAnn Prentice and Jake Nafziger participated in the Northern Saw-whet Owl banding program at the James McLean Oliver Ecological Centre and banded one hatch-year male.
Nov. 4	Another immature Golden Eagle was seen from Spillsbury Dr. by Dave Milsom, Brian Wales and Leo Weiskittel.
Nov. 5	Jeff Stewart was alerted by a distress call and saw a large dark ball up in the branches of a tall tree near Millbrook. It turned out to be a Fisher capturing an Eastern Grey Squirrel , which was quickly dispatched. The Fisher scrambled down the tree with the squirrel limp in its mouth.
Nov. 6	<p>Another American Woodcock was flushed by Caleb Catto in Young's Cove gravel pit in Ennismore.</p> <p>Don Sutherland and Dave Milsom spotted a Red-throated Loon at the Hammer Family Nature Preserve.</p>
Nov. 7	<p>A Red-necked Grebe was seen by Don Sutherland at the Hammer Family Nature Preserve.</p> <p>Julia Marshall encountered a Swainson's Thrush on the Lady Eaton Drumlin Nature Area at Trent.</p> <p>A late Field Sparrow was spotted with a flock of American Tree Sparrows and Dark-eyed Juncos by Jake Nafziger on a trail near Television Rd.</p> <p>Tony Barrett saw a red Fox Sparrow at his feeders on Whitfield Rd, South Monaghan and Sue Paradisis has been hosting 1 to 3 Fox Sparrows in her East City yard since October 15. These birds continued over the month.</p> <p>Another Eastern Meadowlark was observed flying over the field at Scriven Heights by Don Sutherland.</p>
Nov. 9	<p>Angela Mattos discovered a Long-eared Owl in her Douro backyard.</p> <p>A Common Grackle was encountered by Wendy Hogan at the north end of Mississauga Lake.</p>
Nov. 10	Two Greater Yellowlegs were seen by Dan Newman in the Millbrook mill pond, and may have been there for several weeks. Dan also heard and saw a Cackling Goose among Canada Geese at this location.
Nov. 11	Jake Nafziger heard and then saw a Dunlin land on the wharf at Crescent St, Little Lake.

	<p>Fox Sparrows were seen by Leo Weiskittel in his Weller St yard and by Laurie Healey at the feeders in her Keene Rd yard. These birds continued over the next week.</p>
Nov. 12	<p>Dave Milsom and Leo Weiskittel encountered 10 Tundra Swans at the Hammer Family Nature Preserve. They also picked out a single female Redhead in a raft of Lesser Scaup on the Fothergill Causeway, Pigeon Lake. A large raft (150) of Redheads were spotted in a very large flock of diving ducks at Pengelly Landing, Rice Lake, by Laura Maskell and Trevor MacLaurin. They also saw a Horned Grebe at this spot.</p> <p>Noelle Deane spotted an immature Golden Eagle being harassed by a Crow at May's Creek Marsh.</p> <p>Another couple of Fox Sparrows were seen by Scott Gibson under his feeders in Peterborough. These birds continued through the month.</p> <p>Laurie Healey was surprised to see a late migrant Yellow-rumped Warbler in her Keene Rd. yard.</p>
Nov. 14	<p>Jake Nafziger observed 2 Cackling Geese and a Greater White-fronted Goose near Roger's Cove, Little Lake. The Greater White-fronted Goose may well be the same goose last seen in this area in mid-October.</p>
Nov. 15	<p>Robert DiFruscia spotted a Virginia Opossum in the middle of the night under the birdfeeder in their Heritage Line yard.</p>
Nov. 16	<p>Mike Burrell and Colin Jones noted a late Double-crested Cormorant at the Hammer Family Nature Preserve. Another was seen by Jonah Bergquist-Best at Auburn Reach.</p> <p>Marilyn Freeman noted a late Northern Harrier fly over a field up Hilliard St near Woodland.</p>
Nov. 17	<p>Scott McKinlay and Dan Newman encountered a Red-necked Grebe at Pengelly Landing, Rice Lake, while checking out the continuing Horned Grebe and large lingering rafts of Redheads. While there, Dan also saw a late Yellow-bellied Sapsucker.</p> <p>Angela Mattos saw a Snowy Owl in her Douro backyard then, later in the evening, heard a Northern Saw-whet Owl calling.</p>
Nov. 18	<p>Randy Smith observed what is now believed to be Graylag x Canada Goose hybrid, among the continuing White-fronted Goose and many Canada Geese on Little Lake. Don Sutherland informed us that domesticated geese are in fact domesticated Graylags, so it is likely this bird is a hybrid between a Canada Goose and a domesticated goose.</p> <p>Another Double-crested Cormorant was seen by Martin Parker between Locks 23 and 24 on Otonabee River.</p> <p>Luke Berg had an immature American Goshawk fly across County Rd 1, Selwyn in front of his car.</p>
Nov. 19	<p>Dave Milsom discerned a single male American Wigeon among a flock of Common Goldeneyes at Pengelly Landing, Rice Lake.</p> <p>Another Dunlin was spotted by Don Sutherland at the Hammer Family Nature Preserve.</p> <p>A late Field Sparrow was seen with a flock of American Tree Sparrows along the Lang Hastings Trail near Villiers Line by Luke Berg.</p>

Nov. 20 Don Sutherland picked out a female **Barrow's Goldeneye** and a young female **Ruddy Duck** amongst the other divers at Pengelly Landing.

Snowy Owls were seen by Leo Weiskittel in the northwest part of Peterborough (1) and by Kale Worman in downtown Peterborough (1). Hopefully we will be seeing more of these owls over the winter!

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Animal Sign Photos



Animal sign photos by Don McLeod. Clockwise from above: Eastern Cottontail – debarking; Black Bear – bear tree with claw marks; White-tailed Deer – antler rub; Red Squirrel – recently cached walnut lodged in base of branches; Porcupine – nip twigs.





JUNIOR NATURALIST NEWS

peterboroughnature.org email: juniors@peterboroughnature.org

December 2024



Mark Your Calendar!

It's almost time for the KIDS CHRISTMAS BIRD COUNT!

DATE: Saturday, January 4th, 2025
TIME: 2 to 3:30 pm
LOCATION: Ecology Park, 1899 Ashburnham Drive (Beavermead Parking Lot)
REGISTRATION: Contact Shelley at juniors@peterboroughnature.org.
 This event is **FREE for members** and is suitable for ages 5 to 12 (plus interested siblings). Children must be accompanied by an adult.

What is a Christmas Bird Count?

The Christmas Bird Count (CBC) is North America's longest-running Citizen Science project and now includes more than 2000 locations and tens of thousands of volunteers just like you! It started way back in 1900.

The results from each CBC event in Canada are compiled and submitted to **Birds Canada** and are used by conservation biologists, environmental planners, and naturalists to track population trends and distribution of birds. This is an important opportunity to help with scientific research and learn more about the birds who winter in Peterborough. It's also lots of fun! For more information, check out <https://www.birdscanada.org/bird-science/christmas-bird-count-for-kids>. Bring your binoculars & dress warmly. There will be some extra kids' binoculars for anyone who doesn't have their own.

Project FeederWatch

If you want to continue counting birds beyond the annual Christmas Bird Count, check out Project FeederWatch. All you need is a space to watch birds through the winter months. You can even share information about mammals that visit your feeders. All your observations become part of a larger set of data from all across North America. Scientists use the data to better understand what's happening in the world of birds.

For more information and to sign up, check out feederwatch.org

We'll wrap up our time together with hot chocolate and hot apple cider! We hope to see you there!



Membership Application Form

Memberships may be obtained by mailing this completed form to:

Peterborough Field Naturalists
PO Box 1532
Peterborough Ontario K9J 7H7



PETERBOROUGH FIELD NATURALISTS

Contact Information:

Name(s):	Phone(s):
Address:	Email(s):

I would like to receive The Orchid by (pick one): Mail Delivery Email Both

Membership type and fee schedule:

Notice: Membership fees provide only a small part of the funds required to operate the Peterborough Field Naturalists. Donations from members like you help us offer a diverse range of programming for everyone. Please consider including a donation with your membership so that we can continue to serve you and the Peterborough community. **Please make cheques payable to Peterborough Field Naturalists.** For E-Transfer go to <https://peterboroughnature.org/membership/join-online/>

I have included a donation with my membership fees:

Yes or No

If yes, amount: \$ _____

1. Single Adult \$30 2. Single Student or Youth \$15 3. Family \$40*

* Please give the names and ages of children wishing to enroll in the Junior Field Naturalists:

Name	Age	Name	Age

◀◀◀ New Member Information ▶▶▶

Main interests:	How do you hope to participate?
<input type="checkbox"/> Natural Environment <input type="checkbox"/> Reptiles and Amphibians <input type="checkbox"/> Botany <input type="checkbox"/> Birds <input type="checkbox"/> Aquatic Life <input type="checkbox"/> Geology <input type="checkbox"/> Insects <input type="checkbox"/> Astronomy <input type="checkbox"/> Mammals Other: _____	<input type="checkbox"/> Outings <input type="checkbox"/> Citizen Science <input type="checkbox"/> Meetings <input type="checkbox"/> Junior Naturalists

Volunteers are always needed. Are you interested in any of these activities?

- Join the PFN Board Sit on research or conservation committees Lead an outing
 Assist with meetings Work on field projects Help with the Orchid publication
 Help the junior naturalists Give a presentation

Liability Waiver (New and Returning Members):

In consideration of the Peterborough Field Naturalists (PFN) accepting this application, I hereby for myself, my heirs, executors, administrators and assigns forever release and discharge the PFN, their officers, directors, servants and agents from any liability whatsoever arising from my participation in PFN activities, whether by reason of negligence of the PFN or its representatives, or otherwise. I affirm that I am in good health, capable of performing the exercise required for field trips or other activities in which I participate and accept as my personal risk the hazards of such participation. As a member of the PFN and/or as a parent / guardian of a member under 18 years of age, I have read and understood the above, and accept its term on behalf of all my underage children.

Signature: _____

Date: _____