The Orchid

December 2019 Volume 65, No. 9 peterboroughnature.org

Bulletin of the Peterborough Field Naturalists

Published nine times yearly. Publication Mail Agreement #4005104

Know

Appreciate

• Conserve Nature in All Its Forms



A Northern Cardinal Puffing Out His Feathers To Keep Warm. Photo by Cathy Douglas

Inside: A Student's Account of the Ontario Nature Youth Summit for Biodiversity

Outing Reports for Presqu'ile Birding Trip and Kawartha Heights Park BioBlitz

Determining Wild Pig Numbers in Ontario

Information on Upcoming Christmas Bird Counts

In this Issue:

PFN Coming Events	3
PFN Junior Field Naturalists	5
President's Message	6
Christmas Gift Ideas	6
Outing Report for Nov. 3: Birding at Presqu'ile	7
Outing Report: SUN BioBlitz	8
Public's Help Needed for Wild Pig Numbers	9
The Fairy Bird or the Humming-bird Moth1	1
Report on Youth Summit for Biodiversity1	2
Giving Tuesday is on December 31	3
Forster's Tern - New Species for County1	3
Turtle Observations from the Jack Lake Area1	4
Tell Us What It's Like to Be a Citizen Scientist1	5
Peterborough Region Christmas Bird Counts1	5
From the Archives: The 1963 CBC1	6
The Orchid Diary1	8
PFN Membership Application2	4

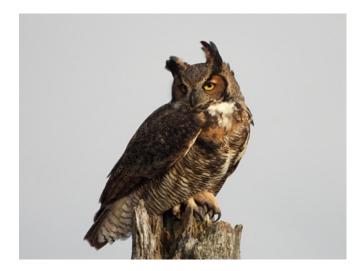
Welcome new PFN members!

- Don Middleton & Kari McDougald
- Stephanie Rutherford



Clockwise from above: Wild Turkey and Red Fox (Ken McKeen), Great Horned Owl (Don McLeod), and a leucistic Common Grackle in the Lily Lake area (Claire McGrath)







PFN Coming Events

As 2019 draws to a close, I want to take this opportunity to thank all the outing leaders for sharing their knowledge, enthusiasm and time. It has been a great year for participation. Planning is underway for 2020. Members' comments for improvement and suggestions for the future are welcome. ~Sue Paradisis

Wildlife Tracking Outings

PFN member, Don McLeod, will once again lead one or more outings during the months of November to March focusing on tracks and other wildlife sign. These outings will be scheduled when weather conditions permit. The place and time will be announced by e-mail shortly before each outing. Anyone interested in attending should send an e-mail to Don McLeod at donaldmcleod.com@gmail.com so he can add you to an e-mail distribution list. If you signed up for last year's outings, you will automatically receive an e-mail to confirm.



Accessibility: Moderate to somewhat challenging. These outings will all involve walking in snowy conditions.

Sunday, December 1 7:00 a.m

Meet at Tim Horton's in the Canadian Tire/Sobey's Plaza on Lansdowne St. W.

World's Greatest Concentration of Gulls

This day trip will be a birding outing to the Niagara River, a designated Important Birding Area due to the variety and number of gulls which utilize the river in the late fall. More species can be observed in a day than anywhere else in the world. There will be thousands of gulls consisting of ten or more species. Besides the gulls, there will be other water birds, and southern specialties such as Tufted Titmouse. The leaders for this outing will be Martin Parker and Matthew Tobey.

Participants will carpool from this meeting location and proceed directly to the secondary gathering location at the Adam Beck Generating Station Lookout at Queenston at 10 a.m. The group will spend time here identifying gulls. If you are planning to meet the group at Queenston please advise Martin (705-745-4750) in advance.



From ilpavone2004 on DeviantArt

Bring a packed lunch, binoculars, and telescope if you have one. A camera may be handy as well. Wear clothes suitable for the weather forecast for the Niagara River area for the day of this excursion.

This outing will end in the Niagara Region in the late afternoon. For those wishing to spend the weekend at Niagara, the secondary meeting location at Queenston gives you the opportunity.

Accessibility: Easy

PFN Co	oming	Events
na: Mamb	orc' Clid	a Shaw N

Wednesday, Dec.11

7:30 p.m.

Camp Kawartha Environment Centre 2505 Pioneer Road Monthly Meeting: Members' Slide Show Night

The members' slide show, held at our December monthly meeting, is a highly anticipated annual PFN tradition. Show fellow PFN members your photos of a recent trip. Display those exciting nature moments or wildlife encounters that you have recently experienced. This is your night to "show and tell"!

We ask that you limit your presentation to less than 15 minutes so several members have an opportunity to share their photos and narrative. Contact Jim Young at jbyoung559@gmail.com or phone 705-760-9397 to add your name to the list.

Sharing some Christmas baking is also part of the December PFN tradition, so please don't feel shy about bringing a goodie or two. Friendly reminder... the Environment Centre is a nut-free facility.

Sunday, Dec.15

68th Annual Peterborough Christmas Bird Count

All day

Please see article on page 15 for more information.

Saturday, Jan.4

34th Annual Petroglyphs Christmas Bird Count

All day

Please see article on page 16 for more information.

Friday, Jan. 31

Join us for PFN's 79th Annual General Meeting

Doors open at 5 p.m.

20013 open aco pina

Peterborough Curling Club

2195 Lansdowne St.

Keep up-to-date on PFN business, elect the next executive, enter the raffle for prizes, enjoy a delicious meal and stay for an entertaining presentation! The guest speaker, Noel Alfonso, will entertain us with tales of his adventures in fish research at the Canadian Museum of Nature. Check out the AGM poster on page 23 for further details.

Wednesday, Feb.12 7:30 p.m.

Camp Kawartha Environment Centre 2505 Pioneer Road



Monthly Meeting: Wild Pigs in Ontario

Speaker: Erin Koen, Research Scientist for the Landscape Team at the Wildlife Research and Monitoring Section of the MNRF.

Wild Pigs are in Ontario. They can be destructive to wild habitat and crops. This introduced species is difficult to control through traditional management tools such as recreational hunting. We will learn where wild pigs have been located so far in Canada and Ontario and how we can help their monitoring by communicating sightings.

PFN Junior Field Naturalists (ages 5-12)

Junior naturalist families are reminded to check the website for event listings and email pfnjuniors@gmail.com if you're not on the members' distribution list for event announcements. Bookings can be made online at https://peterboroughnature.org/junior-naturalists/

Activities are geared for ages 5 to 12, but kids of all ages are welcome (parents stay and participate). Our events are led by PFN members and individuals from other organizations in our community who volunteer to share their knowledge and skills with us. We also organize environmental stewardship activities for kids to get involved and inspired.

Not a PFN member yet? Child memberships are \$10 per year. Contact pfnjuniors@gmail.com for details.

Saturday, Dec.14

1 to 3 p.m.

Camp Kawartha
Environment Centre
2505 Pioneer Road



Christmas Bird Count for Kids

Learn how to look for birds! Snacks, prizes, and special entertainment. If you have friends with young children, the PFN always welcomes new members so please spread the word!

Please register at the PFN website (just so we have an idea of numbers) at https://peterboroughnature.org/event/pfn-juniors-christmas-bird-count/

Sunday, Jan.5

1 to 4 p.m. Art Gallery of Peterborough

250 Crescent St.

Let's Make Nature Art

The Peterborough Junior Naturalists are teaming up with the Art Gallery of Peterborough for a nature art event.

The Art Gallery of Peterborough (AGP) has "Family Sundays", where families can come for free to visit the gallery and make some art. For this Family Sunday, we'll be decorating wood pendants with pressed flowers and leaves. Make some nature-themed jewelry or ornaments to take home. All wood and plants are from Peterborough. Jay Fitzsimmons of the PFN Juniors will be there along with AGP volunteers.



Pressed flower art by Kathie McCurdy

No registration required. The event is free, as are all of the AGP's Family Sundays. You can enjoy them the first Sunday of every month. Drop in any time between 1:00 and 4:00.

Membership Renewals Due

PFN memberships expire on December 31. If you paid after September 1, you have a 2020 membership and are okay. Otherwise you can renew at the December 11 meeting or by mail or at the Annual General Meeting on January 31. Orchid deliveries will continue until March.

President's Message

Hello Club Members,



I trust you all had an enjoyable fall! Especially with all of the excellent speakers we hosted and outings that we had.

On October 21, people across the province went to the polls and cast their ballot. It was clear from the beginning of this last election that environmental issues were top of mind for Canadians. All but one party had adopted a climate and environmental plan as a major part of their policy platform by the end of the campaign. It is becoming increasingly clear that the environment is the issue of our time.

Naturalist societies have long been at the forefront of environmental issues, both locally and globally, and the PFN is proud to continue that legacy. Volunteers with our club participate in a wide variety of projects across the Kawarthas to ensure that a strong voice for nature is always at the table. The PFN is considered one of the main stakeholders in our community when it comes to projects such as the official plan update or watershed planning. We work hard to make sure that our voice is included wherever necessary. With environmental issues taking a front and centre space in the public discourse, it is as important as ever to ensure that our voice is heard. Your participation in our club helps make this possible!

Dylan Radcliffe, President

First Call for Bucket Draw and Silent Auction Donations

A tradition at our PFN Annual General Meeting (AGM) held in January is a bucket draw and silent auction of items generously donated by our members. Attendees at the AGM are given one free ticket for the bucket draw, and additional tickets can be purchased to improve your chances of winning. Tickets are then placed in the "bucket" beside the item(s) that are of interest to you, and the winning tickets are announced after the dinner. Each year, there are also some special items available through a silent auction. In the past, a print, sketch or painting donated by artist Kelly Dodge has been a highlight of the silent auction. Proceeds of the bucket draw and silent auction are used for some of our special projects. If you have any items to donate for the bucket draw or silent auction, please contact Rene Gareau by e-mail at: rene.gareau@sympatico.ca or by phone at 705-741-4560. You may also bring any donation items with you to the next PFN monthly meeting.

Christmas Gift Ideas

PFN Club Logo

Mark's Work Wearhouse has the PFN Club logo ready and waiting to be embroidered on any piece of clothing of your choice: perhaps a t-shirt, hoodie or hat.



Next time you are out shopping be sure to check out the new location for Mark's Work Wearhouse at 1230 Lansdown St. West, Peterborough.

- Choose a piece of clothing
- Take it to the desk at the back of the store.
- Tell the clerk that you would like to have the Peterborough Field Naturalists' logo embroidered on it.

- You will receive 10% off the cost of the clothing (probably some exceptions here)
- The cost to embroider is \$5.75. You or that special someone will become one of the elite "Peterborough Field Naturalists logo-wearing club members". It doesn't get much better than that!

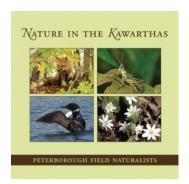
Nature in the Kawarthas

If you are looking for a Christmas gift which is unique to this part of the province, consider giving a copy of the Peterborough Field Naturalists' book Nature in the Kawarthas, published in 2011. It contains articles by members of the PFN and others on the natural history of the Kawarthas region.

The following merchants in Peterborough stock the book for sale:

- Avant-Garden Shop, 165 Sherbrook Street
- Hunter Street Books, 143 Hunter Street West
- o Green-Up Store, 378 Aylmer Street

Copies are also available at the regular meetings of the PFN.



Outing Report for Nov. 3: Birding at Presqu'ile Provincial Park

Submitted by Don McLeod

Jerry Ball led 16 members of the Peterborough Field Naturalists (PFN) on a birding trip through rural areas between Peterborough and Brighton. The ultimate destination was Presqu'ile Provincial Park and there were some additional stops around Brighton and Cobourg. The bird highlight along the first leg of our trip was Rusty Blackbird.

Upon our arrival at the beach in Presqu'ile, we greeted fellow birders who were participating in a similar outing for the Ontario Field Ornithologists (OFO). There was plenty of room



Sanderling (left) and Dunlin (right). Photo: Don McLeod

for all of us to set up spotting scopes and a good number of birds to observe. Aside from the usual Gulls and Geese, we observed Bonaparte's Gulls, Sanderlings and Dunlins. Winds and waves certainly added to the excitement, but it was a tad chilly!



Lifeless American Eel on beach, dragged back from shoreline. Photo: D.McLeod

One of the highlights of the entire trip was an American Eel. While sad to find this rare fish dead, it offered a first time observation for almost everyone in attendance. This particular Eel had washed up on shore and then was dragged across the sandy beach, likely by a Herring Gull. The American Eel has declined from historic highs to remnant populations and the status is endangered. There is a provincial program in place with a long term plan to aid in recovery of this species. For more information on the American Eel recovery strategy, check out the following link: https://www.ontario.ca/page/american-eel-recovery-strategy

The east side of the Park had large flocks of Redheads with lesser numbers of Scaup, Long-tailed Ducks and White-winged Scoters. Mute Swans were still present near the cattails but we were pleased to also find some Tundra Swans. Other birds of interest included Great Black-backed Gull, Bufflehead, American Coot and American Wigeon. The bird list for the day included 40 species in the Park.

Outing Report: Sustainable Urban Neighbourhoods BioBlitz at Kawartha Heights Park Submitted by Brittany Harding, GreenUP Education and Outreach Coordinator

PFN Juniors and Kawartha Heights residents enjoyed a beautiful fall day for a BioBlitz held at Kawartha Heights Park on October 5. The team from GreenUP was pleased to join forces with biologists, ecologists, and outdoor educators from Otonabee Conservation, Kawartha Land Trust, Camp Kawartha, Ancient Forest Exploration and Research, the Ontario Invasive Species Awareness Program, Fleming College, and Trent University. Together, we all spent the day building relationships with residents, community organizations, and with the flora and fauna of Peterborough's urban greenspace.



PFN Juniors and other BioBlitz participants.

A BioBlitz is known for its value as a data-collection opportunity, and this event also built public engagement

and nature appreciation. While identifying 161 different species within the park, participants and volunteers practiced ecological observation and identification skills, learned about biodiversity and the importance of urban parks as wildlife refuges, corridors, and in the maintenance of water quality.

Kawartha Heights Park is an 11-hectare urban greenspace within the Byersville Creek sub-watershed in west Peterborough. The creek runs through the south end of the park and enters into a large stormwaterpond, then flows through the south end of town until it outlets into the Otonabee River.

Kawartha Heights Park is in the traditional territory of the Mississauga Anishinaabe. During colonization, the park was developed for agriculture. Kawartha Heights Park is now an important community greenspace within a modern subdivision. Many local residents have meaningful memories and attachments to the space. Kawartha Heights Park provides ecological benefits and infrastructure services to the City of Peterborough.

The 161 unique species identified in the park included 128 species of terrestrial plants, 17 bird species, 7



Paul Finigan checking out some Crane Fly larvae.

aquatic invertebrates, and 3 each of mammals, fungi, butterflies, dragonflies, and bees and wasps. Within these, we identified 6 invasive species that were quite prolific within the park, including Common Buckthorn, European Swallow-Wort (dog-strangling vine), Garlic Mustard, Periwinkle, Phragmites, and Purple Loosestrife. Whether they were planted intentionally by European settlers during colonization, or introduced accidentally, these invasive species have all spread throughout Southern Ontario are now a significant threat to biodiversity and ecosystem health.

During breaks from guided hikes, residents of all ages helped to plant 23 new trees surrounding the playground in the north end of the park. The newly planted trees include Green Mountain Sugar Maple, Common Hackberry, Serviceberry, Pagoda Dogwood, Boulevard Linden, Dolgo Crabapple, and Kentucky Coffee Tree (threatened in Ontario). We chose these species based on urban canopy needs within the neighbourhood, in accordance with the City of Peterborough's Recommended Species List, and all these trees were planted with City approval.

More on GreenUP's Sustainable Urban Neighbourhoods Program

GreenUP has facilitated the Sustainable Urban Neighbourhoods (SUN)
Program in the Kawartha Heights and East City-Curtis Creek neighbourhoods
since 2017. The SUN Program represents a collaborative and comprehensive effort towards sustainability in the city of Peterborough.

SUN Program goals include the maintenance and creation of urban wildlife habitat and refuge, supporting biodiversity and ecological health; preservation of aquatic ecosystems and water quality; local food production; resource and energy conservation; and active transportation and recreation.



Through events like the Kawartha Heights Park BioBlitz, SUN supports residents, the municipality, and other community partners to identify priorities for sustainable action on both public and private property. SUN recognizes the importance of collaboration in the face of broad-scale environmental degradation and climate change, and the widely shared benefits of even small initiatives.

To demonstrate and inspire action, SUN has installed more than 1700m2 (equivalent to 4 NBA basketball courts) of pollinator gardens, rain gardens, food gardens, and tree-plantings. The

BioBlitz celebrated the launch of the SUN Action Plans, which identify actions to improve sustainability and resiliency to climate change in each neighbourhood. SUN Action Plans are available online at www.greenup.on.ca/sun.

The SUN program is facilitated by GreenUP, in partnership with the City of Peterborough and many other community partners, and is modelled after the Toronto and Region Conservation Authority's Sustainable Neighbourhood Action Program (SNAP). Funding for SUN Peterborough projects is generously provided by the Ontario Trillium Foundation.

MNRF Enlists Public's Help in Determining Wild Pig Numbers

Submitted by the Media Desk, Communications Services Branch of MNRF

Canada's natural environment is being impacted by invasive species that range from fungi to fish, but few have as much destructive potential as wild pigs.

Invasive species like wild pigs can cause damage to habitats and native species, and can be nearly impossible to get rid of once they become established.

That's why Ontario's Ministry of Natural Resources and Forestry is asking for your help to quantify one of North America's most destructive invasive species.

Understanding the threat of invasive wild pigs

Eurasian wild boars were brought to Canada as exotic livestock for meat and other purposes, beginning in the 1980s. Some escaped into the wild, causing damage to crops and natural habitat across the country, mainly in the prairie provinces.



Group of Wild Pigs. Feral pigs that escape from farms adapt well to life in the wild, and they pose a big threat to Ontario's natural environment. Photo: Dr. Ryan Brook, University of Saskatchewan.



Big wild pig. Wild pigs eat pretty much anything and can live in virtually any habitat. Once established in a territory, they can be very difficult to get rid of. Photo: Ryan Brook

But Eurasian wild boars are not alone in the equation. Escaped, or "feral" domestic pigs from farms adapt well to life in the wild and can have the same impact as their wild cousins. They are the same species (Sus scrofa) and they can easily breed with Eurasian wild boar — which is why as an invasive species they are collectively known as wild pigs.

With a high birth rate, few natural predators, and the ability to travel long distances and adapt to pretty much any habitat, a handful of escaped animals has the potential to multiply exponentially.

Wild pigs eat almost anything, can happily live in virtually any climate, and their nocturnal lifestyle and elusive behaviour can make them very difficult to spot.

Often their presence is only indicated by the damage they leave behind.

In their search for food, they tear up crops and pastures, causing tremendous damage to farming areas. They also cause serious harm to sensitive ecosystems by rooting in soil for plants, reptiles, and amphibians.

"We thank those who have already reported sightings — from the French River down to Lake Erie and east to the Ottawa Valley," said Dr. Erin Koen, research scientist with the Ministry of Natural Resources and Forestry. "We are asking anyone who spots a wild pig to let us know. Once wild pigs become established in a territory, they are almost impossible to eliminate."

How to report a wild pig sighting

There is still time to manage the problem in this province, and that's why MNRF is looking to Ontarians for help by asking them to report sightings of any pig they see outside of a fence.

Sightings will help the ministry gather information about the locations, number, and behaviour of wild pigs in the province, and will help to determine an appropriate response.

Members of the public can report sightings to MNRF by reporting directly to the iNaturalist Ontario Wild Pig Reporting webpage (www.inaturalist.org/projects/ontario-wild-pig-reporting) or by email to wildpigs@ontario.ca.

For more information about reporting wild pigs in Ontario, please visit https://www.ontario.ca/page/reporting-wild-pigs-ontario.

BIRDS OF THICKSON'S WOODS - Available November 1. \$25 incl.tax. pp extra.

We were very pleased that the first edition of *The Birds of Thickson's Woods* sold out, but the demand for copies continues, so Margaret, Sue and I [Phil Holder] decided to publish a Second Edition.

This second edition is updated and revised with over 100 new photographs. It is "field friendly" and contains an enhanced warbler section which includes larger photographs of each of the 38 recorded warbler species, showing some differing male and female plumages, and documenting all 323 species of birds that have been seen so far in the

BIRDS
OF THICKSONS WOODS
WHEN GRAND
PRACTICE THICKSONS WOODS
WHEN WOODS
THAT WATER THICKSONS
THE HOLDER AND MANGARET BAN

THE HOLDER

reserve. It is illustrated with exceptional full colour photographs of each species, including status and the specific dates of the rarities seen and original observers and also includes a field checklist and trail map. Available from www.mattholderfund.com/shop

The Fairy Bird or the Humming-bird Moth

From Woodland Tales by Ernest Thompson Seton, 1921

When I was a schoolboy, a number of my companions brought the news that the strangest bird in the world had come that day to our garden and hovered over the flowers. It was no bigger than a bumble-bee. "No! It was not a humming-bird," they said, "it was smaller by far, much more beautiful, and it came and went so fast that no one could see it go."

Every guess that I made seemed not to fit the wonderful bird, or help to give it a name that would lead us to its history in the books. The summer went by, several schoolmates saw the Wonderbird, and added stories of its marvellous smallness and mysterious habits. Its body, they said, was of green velvet with a satin-white throat; it had a long beak – at least an inch long - a fan-tail of many feathers, two long plumes from its head, "the littlest feet you ever have seen," and large lustrous eyes that seemed filled with human intelligence. "It jest looked right at you, and seemed like a fairy looking at you."

The wonder grew. I made a sketch embodying all the points that my companions noted about the Fairy Bird. The first drawing shows what it looked like, and also gives the exact size they said it was.

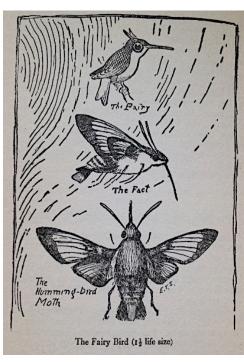


Illustration: Ernest Thompson Seton

It seemed a cruel wrong that let so many of them see the thing that was of chief interest to me, yet left me out. It clearly promised a real fairy, an elfin bird, a wonderful messenger from the land I hungered to believe in.

But at last my turn came. One afternoon two of the boys ran toward me, shouting: "Here it is, the little Fairy Bird, right in the garden over the honeysuckle. C'mon, quick!"

I rushed to the place, more excited than I can tell. Yes, there it was, hovering over the open flowers – tiny, wonderful, humming as it swung on misty wings. I made a quick sweep of my insect net and, marvellous to relate, scooped up the Fairy Bird. I was trembling with excitement now, not without a sense of wickedness that I should dare to net a fairy – practically an angel. But I had done it, and I gloated over my captive, in the meshes. Yes, the velvet body and snowy throat were there, the fan-tail, the plumes and the big dark eyes, but the creature was not a bird; it was an insect! Dimly now I remembered, and in a few hours, learned, as I had feared, that I had not captured a young angel or even a fairy – it was nothing but a



Humming-bird Moth, a beautiful insect – common in some regions, scarce in some, such as mine – but perfectly well known to men of science and never afterward forgotten by any of that eager schoolboy group.

Editor's note: Like the children in this story, I, too, got swept up with my first sighting a few years ago of a Hummingbird Moth and – I have to admit – I pondered the possibility of a fairy, if only for a brief moment. Now, I consider myself blessed any time I encounter one of these creatures, perhaps because I felt that I had experienced a magical moment in which the impossible was possible, miracles happened, and heaven was on earth.

Left: Hummingbird Clearwing Moth (Hemaris thysbe) photo by Danny Bales

2019 Ontario Nature Youth Summit for Biodiversity

Dear Peterborough Field Naturalists,

Thank you so much for your sponsorship which allowed me to attend the 2019 Ontario Youth Summit! First, I thought I would share some things about me in order to learn about the girl your group sponsored. Then I will explain what it is I did during my time in Orillia, at the summit. My name is Emma Booth. I'm 18 years old and am currently attending Adam Scott C.V.I. My hopes are to either go into pre-med or environmental science next year for university. I know slightly different directions, but there are just so many cool things out there I want to learn about! A few of my hobbies include art, gardening, cooking and travelling. Some of these things I get to do more often than others.





I first learned about the Youth Summit from a teacher of mine. The idea of being sent out by myself to an unknown town, in a conservation park, with 121 other kids sounded right up my alley, so obviously I said, "Sign me up!" I believe it's that sense of adventure from my love of travelling kicking in here. My teacher thought it would be a good idea for me to reach out and meet like-minded youth. This way I could expand my horizons and make connections with other driven youth so I can make changes in the world. My teacher has some very high hopes for me, so I'm trying my best to live up to them now that I am back.

There were so many highlights from the youth summit that I could probably write a moderately sized novel about the experience, if I had the time and patience. I'll start my story with the first day, where we did icebreakers to get to know the other youth attending the Summit. That day, we also acquainted ourselves with the area and the workshops we would be doing during our stay in Orillia. The park was beautiful, full of trees and we were right beside the water. It was such a large camp that even with our fully packed days I didn't get to see the entirety of the area, but I had an amazing time trying.

My workshops for the days that followed were Bringing on Biodiversity, Medicinal Plants of Ontario, Freshwater Life, Breaking up with Single Use Plastics and the Vertablitz Showdown. Bringing on Biodiversity was probably my favourite. This workshop wanted to help bring awareness to the decline of native species and biodiversity in urban areas, and the steps we can take to help stop this decline. A campaign was proposed by the council to make the areas we live into "biodiverse communities". In order to get this title, a group in the community would need to complete and implement a specific set of criteria laid out by the Ontario Nature Youth Council. I was so taken by this campaign that I've started working with the Adam Scott C.V.I. ecos team in order to make Adam Scott a biodiverse community. Hopefully once we have the school under our belts, we can work at giving this title to all of Peterborough.

I made so many new friendships and memories while at this summit. In between all the workshops we also managed to have a bit of fun now and again as well. For some activities we were separated into four teams. I was part of the purple team. Which also happened to be the best team, in my personal opinion, although I might be slightly biased. In these four teams we got to complete activities and competitions.

This experience gave me so many new friendships and memories that I will cherish. Thank you so much for sending me to the Ontario Nature Youth Summit. I will remember all the things I was taught and continue to foster the friendships I've made. On behalf of myself, and all the other youth who attended this summit, thank you for allowing us to be a part of such an amazing opportunity for learning and growth.

Sending my best regards,

Emma Booth

Giving Tuesday is on December 3

A new Christmas tradition is to remember your favourite charity through a donation on Giving Tuesday. Consider giving a gift to the PFN on this year's Giving Tuesday. The Peterborough Field Naturalists is a registered charity with Canadian Revenue Agency. The donation can be either to the Peterborough Field Naturalists or the PFN Legacy Fund.

The PFN Legacy Fund is an endowment fund managed by the Community Foundation of Greater Peterborough and, in accordance with CRA regulations, provides an annual income to the PFN. This income is used for special initiatives such as the recently announced grant programme, citizen-science projects and youth initiatives. If the donation is to the PFN Legacy Fund, please indicate at time of donation. Donations can be made online through Canada Helps at peterboroughnature.org/donate/ or by cheque at the November and December meetings of the PFN or by mail to Peterborough Field Naturalists, P.O. Box 1532, Peterborough, K9J 7H7.



Baby Blanding's, Map and Painted Turtles basking in the morning "sun" at the Ontario Turtle Conservation Centre on November 21. Photos: Kathryn Sheridan

Forster's Tern -- New Species for Peterborough County Submitted by Iain Rayner

On November 1, I spent the morning doing a lake watch on Lake Ontario, hoping the strong west winds (gusting up to 60 km/h) were blowing birds in shore. After mixed results, I decided to return home to Peterborough via a familiar route that often involves a quick scan of the west end of Rice Lake. I was pleased to see the usual late fall complement of Bonaparte's Gulls feeding along the near shoreline. I scanned through the flock, trying to get an accurate count when I was struck by a very white bird with a dark mask behind the eye. It was immediately apparent it was a Forster's Tern in winter plumage. An adult I think?



Forster's Tern at Pengelly Landing, Rice Lake on Nov. 1. Photo: Iain Rayner

I quickly got the word out to the birding community -- or at least all three of the people whose phone numbers I have and then spent the next half hour watching it range up and down the near shoreline plunge-diving for food. It was very accommodating. Awesome!

According to the eBird database, this is the first confirmed observation for this species for Peterborough County. It is not noted in the PFN Publication 'Our Heritage of Birds' Peterborough County in the Kawarthas by Doug Sadler, 1983.

2019 Turtle Observations from the Jack Lake Area

Excerpts from a report submitted by Steve Kerr of the Jack Lake Association

Efforts to record turtle observations in the Jack Lake area occurred as early as 1987. It was not until 2014, however, that more intensive efforts were coordinated to collect information on turtles in the Jack Lake area of Peterborough County (Table 1).

Table 1: Turtle observations from the Jack Lake area (Square 17QK35), 1987-2018. Data was derived from the Ontario Herpetofaunal Survey and was supplemented by observations from volunteers of the Jack Lake Association (from Kerr 2016, 2017, 2018).



Midland Painted Turtle pile-up. Photo: Steve Paul

Year	# of Parti- cipants	Blanding's Turtle	Eastern Musk Turtle	Midland Painted Turtle	Northern Map Turtle	Snapping Turtle	Spotted Turtle	Uniden- tified
1987	-	-	-	-	-	1	-	-
1988	-	-	-	1	-	1	-	-
1994	-	-	-	-	-	1	-	-
1999	-	-	-	1	-	-	-	-
2007	-	1	-	1	1	2	1	-
2008	-	1	-	1	ı	2	ı	-
2009	-	1	-	8	ı	2	ı	-
2010	-	4	-	8	ı	ı	ı	-
2011	-	3	-	3	ı	ı	ı	-
2012	-	2	-	2	ı	5	ı	-
2013	-	1	-	7	ı	5	ı	-
2014	5	2	-	32	ı	12	ı	-
2015	6	3	-	58	ı	20	ı	-
2016	17	5	-	14	ı	16	ı	-
2017	31	6	-	60	2	21	ı	-
2018	33	7	-	43	6	34	-	1
Total		36	0	239	8	122	0	1

The spring of 2019 may generally be considered as late, cold and wet. The 2019 ice-out date was April 28. Although there were sightings of turtles as early as late April to early May, reports of increased turtle movements and activity were not documented until mid to late June (Table 2). Over the course of the 2019 season, sightings of 88 turtles were reported. The only observation of a turtle hatchling occurred on September 15 when a young snapping turtle was observed in the Redmond Bay area.

A total of 30 individuals participated in the 2019 program and reported observations of 88 turtles. The highlights of the 2019 program included the documentation of two new turtle species. A Spotted Turtle

(Clemmy sguttata), rated as endangered in Canada, was photographed on May 26 near the north end of the lake. On August 4, the shell of an Eastern Musk (stinkpot) Turtle (Stenotherus odoratus) was found. It is believed that these are the first records of these two turtles in the Jack Lake area.

Species	May	June	July	August	Sept-Oct.	Total
Blanding's Turtle	6	4	0	1	0	11
Eastern Musk Turtle	0	0	0	1	0	1
Midland Painted Turtle	5	12	5	29	0	51
Northern Map Turtle	0	2	2	0	0	4
Snapping Turtle	9	4	1	1	2	17
Spotted Turtle	1	0	0	0	0	1
Unknown	3	0	0	0	0	3
Total	24	22	8	32	2	88

Table 2: Temporal distribution of 2019 turtle sightings in the Jack Lake area

Tell Us What It's Like to Be a Citizen Scientist!

Submitted by Lisa Nisbet, Environmental Psychology Researcher at Trent University

We're researchers interested in citizen science activities and would like to hear from you. Please visit bit.ly/TrentCitSci to learn more and help us by completing a brief survey. Participants who complete this survey will be entered in a draw for a \$100 gift card (Amazon, MEC, or REI; CAD or USD depending on the region). There will be a draw every six months. Participants can win only once.

Peterborough Region Christmas Bird Counts

Participate in the longest running annual wildlife survey.

This is the 120th year that Christmas Bird Counts are being held across North America. Join this Christmas birding tradition. This is an excellent opportunity to learn about our winter birds and participate in the largest citizen-science project. If you are unable to participate in one of the field parties you can still assist by registering your feeder and counting the birds which visit during the day.

68th Annual Peterborough Christmas Bird Count - A Christmas Tradition

Sunday, December 14 - all day

The Peterborough Christmas Bird Count (CBC), now in its 68th year, is the longest running wildlife survey in Peterborough County. 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. This total count area is divided into ten smaller areas and a team of participants is assigned to each area.

Organization of this count is well underway and there remains opening for additional participants. Plan now to register and participate in this Peterborough birding tradition and long-term citizen science project.

To register contact Martin Parker (count compiler) as soon as possible by phone at 705-745-4750 or by e-mail at mparker19@cogeco.ca

34th Annual Petroglyphs Christmas Bird Count

Saturday, January 4

This is the second Christmas Bird Count conducted in the Peterborough Region by members and friends of the PFN. This count samples the bird life in an area which stretches from the north shore of Stoney Lake northward to the Aspley-Jack Lake area.

The compiler for this count is Colin Jones. New participants are welcome. Participants will be split into a number of field parties, each covering a different part of the overall count circle. At the end of the day, all the parties will gather to compile the final results. To participate in this count contact Colin Jones in advance at colin.jones@ontario.ca or by phone at 705-750-7998.

Other Counts in Ontario and Canada

Bird Studies Canada coordinates the Christmas Bird Counts for all of Canada. If you are going to another part of the province or country during the Christmas period there may be another count for you to join.

For information on locations and dates of other Canadian CBC's visit the following web-site

https://www.birdscanada.org/volunteer/cbc/index.jsp?targetpg=mapviewer&lang=EN

From the Archives: The 1963 Christmas Bird Census

From The Orchid, January 1964, Volume 1, Number 1; (compiler J. L. McKeever)

For the first time, we participated in the continent-wide census run by the Audubon Society. Our results will be published along with those from all over North America – nearly 700 groups – and will be available for use by students, researchers and plain birdwatchers.

Forty species were recorded this time, on December 28, in fine but very cold weather. This beats the previous record (last year) by two. Total individuals was also well up at 4,705, of which no less than 1,201 were Snow Buntings. Highlights were the Three-toed Woodpeckers and the many winter finches. Twenty six observers took part, in six parties. The full count was - Sparrow Hawk 5, Goshawk 5, Red-tailed Hawk 7, Red-shouldered Hawk 1, Rough-legged Hawk 5, Lesser Scaup 1; Bufflehead 1, Hooded Merganser 1, Common Merganser 1, Ruffed Grouse 9, Rock Dove (common pigeon) 132, Barred Owl 1, Pileated Woodpecker 2, Yellow-bellied Sapsucker 1, Hairy Woodpecker 34, Downy Woodpecker 51, Black-backed Three-toed Woodpecker 3, Northern Three-toed Woodpecker 9, Horned Lark 3, Blue Jay 64, Crow 15, Black-capped Chickadee 408, White-breasted Nuthatch 17, Red-breasted Nuthatch 1, Brown Creeper 3, Northern Shrike 7, Starling 338, House Sparrow 524, Grackle 1, Cardinal 2, Evening Grosbeak 368, Pine Grosbeak 111, Redpoll 287, Pine Siskin 54, Goldfinch 533, White-winged Crossbill 8, Slate-coloured Junco 78, Tree Sparrow 37, Song Sparrow 8, and Snow Bunting 1201.

New for the record were Northern Three-toed Woodpecker, Red-shouldered Hawk, Bufflehead, Yellow-bellied Sapsucker and Horned Lark.

Editorial Note: As noted, this was the first count under the National Audubon Society protocol. According to this article, the initial Christmas Bird Counts in Peterborough commenced in 1952, although there are some earlier records.

Next month look for the results of this year's count.

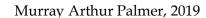
For the Love of Wolves

"Hey, Mur, you awake? Did you hear that howl??", asked Ray. The night we spent camping on Stoplog Lake was for me One of the most thrilling renditions of a wild symphony, Which stirred our hearts as do the sounds of loons in their way.

We lay transfixed in our sleeping bags in the darkness of the tent.
We felt no fear, no desire to put a log on the fire.
We were entranced, our trip enhanced like none prior.
Comfortable in Nature's domain, we couldn't be more content.

Several years later I was included in a pack at Ursa - Of Ron and Sharon Lawrence and two timber wolf infants, Who clambered for their bottles and, later, dominance As Tundra challenged his sister, Taiga, and vice versa.

These wolves must have thought me a long lost member ...
On every arrival I was mobbed with tongues and feet.
I've never experienced a demonstration of affection to beat
That of wolves, a feeling of belonging I'll always remember.









The Orchid Diary

A summary of noteworthy observations by PFN members and others in the Peterborough region.

Please submit your interesting observations to Martin Parker

at mparker19@cogeco.ca or phone 705-745-4750

Weather: 7	The weather started out with seasonal conditions. Stormy weather moved in with wet
	on Halloween. On November 1, snow and below seasonal temperatures arrived.
Oct. 20	Ben Taylor located a male Ring-necked Pheasant on Wilson Line, Cavan. Seen by others until October 28.
	Dave Milsom had a Canvasback on the Lakefield Lagoon.
Oct. 23	Jerry Ball had a Cooper's Hawk at Lakefield.
Oct. 25	Scott McKinlay had an Eastern Phoebe on Cavan Woods River, Cavan.
	Dan Chronowic had two Orange-crowned Warblers in Ecology Park, Peterborough.
Oct. 27	Another Eastern Phoebe in Bears Creek Woods by David Britton.
	A Magnolia Warbler was found by Iain Rayner at the Lakefield Lagoons.
	On the PFN outing led by Jerry Ball, the participants observed 7 Eastern Bluebirds near
	Ennismore and a Red-bellied Woodpecker at Birch Point, Pigeon Lake.
Oct. 28	Dave Milsom had 3 Lesser Yellowlegs at the Hastings Lagoon wetlands
Oct. 29	A late departing Osprey was spotted by Cathy Douglas along Walker Lane, Cavan-area.
	Late departing Eastern Phoebe by Jeff Stewart on Carveth Drive, Millbrook & Dan Chronowic in Beavermead Park.
	Iain Rayner & Matthew Gaving had a late departing Warbling Vireo in Millennium Park.
	Robert Pratton reported a late emergence of 8 hatchling Blanding's Turtles in the Anstruther
	Lake area.
	JB Jaboor reported that the bird feeders maintained by PFN at Ecology Park are now stocked
	with seed ready for the winter birds and view. Thanks to JB Jaboor & Kathryn Sheridan for
	stocking the feeders with food.
Oct. 20	Matthew Tobey, Brian Wales & Dave Milsom observed 2 River Otters in a marsh in Nephton Ridge.
Nov. 1	Luke Berg had a Ross's Goose within a flock of Canada Geese flying over at Hall's Landing, Rice Lake. He also had a Cackling Goose in the area of the Riverview Park.
	Jeff Stewart had an American Woodcock at Carveth Drive, Millbrook.
	Luke Berg had an Eastern Phoebe and Chipping Sparrow in his yard in the City.
Nov. 1	Iain Rayner located a Forster's Tern feeding over the waters of Rice Lake of Pengelly
	Landing, Rice Lake. This is the first accepted record for Peterborough. It's the 303 rd species
	for the County.
	Dave Milsom at this location also spotted 2 American Wigeon and 2 Horned Grebe.
Nov. 2	Jerry Ball had a flock of blackbirds along the Ouse River Road (east of Hastings) which
	numbered at least 1,000 individuals - primarily Red-winged Blackbirds with some Common
	Grackles and Rusty Blackbirds.
	Bill McCord had a Cooper's Hawk in the Roper Drive area.
	Ruby-crowned Kinglet
	e several sightings of this species in early November.
Nov 1 Po	engelly Landing by Iain Rayner; Nov 2 Weller Street in the city by Donald Sutherland

	Sutherland.
Nov. 3	Donald Sutherland had two American Widgeon off Kerry Line, Pigeon Lake. Jeff Steward had a Red-shouldered Hawk at Millbrook.
Nov. 4	Dave Milsom spotted 8 Dunlin at the west end of Kerry Line, Pigeon Lake.
Nov. 5	Mike V.A. Burrell & Colin Jones had a Blue-winged Teal on the Lakefield Lagoons.
	Matthew Gavin had a late Chipping Sparrow in his yard in the City.
	Daniel Williams also had a Chipping Sparrow in the Maria Blvd to Water St. area.
Nov. 6	Ben Taylor had a Cackling Goose at the Millbrook Conservation Area.
	Henrique Pacheco & Hannah Dodington had a Gadwall off Cooney Lake Road, Douro
	Dummer.
Nov. 8	Dan Williams had a late departing Warbling Vireo & 2 Cackling Geese at Millennium Park.
	Dave Milsom, Matthew Tobey & Brian Wales had a Common Grackle in the area of the boa
	ramp at Hiawatha First Nation.
	At Pengelly Landing, they observed a significant hawk migration which included 1 Northern
	Harrier, 1 Sharp-shinned Hawk, 1 Northern Goshawk, 2 Bald Eagles, 4 Red-shouldered
	Hawks, 33 Red-tailed Hawks, and 2 Rough-legged Hawks.
Nov. 9	Bill Snowden reported a Red-bellied Woodpecker in his yard the south end of Buckhorn Lake
	A small flock of Red-winged Blackbirds was still present in his yard.
Nov. 11	Paul Elliott observed a Red Fox in his neighbourhood in the north end of the city.
	Donald Sutherland spotted 2 Snow Geese with a flock of Canada Geese feeding in a field nea
	Bailieboro.
	Iain Rayner found 3 Redhead (ducks) in a flock of Scaup on Rice Lake off Pengelly Landing
	Seen the next day by others.
	Iain Rayner had a Yellow-rumped Warbler at Pengelly Landing, also seen the next day.
	Iain Rayner located a Red-necked Grebe on Little Lake.
	Ken Fulsang had a Common Grackle at his feeders in the city.
Nov. 12	Jerry Ball noted that on this date there was a major movement of Sandhill Cranes & American
	Pipits through this region. He observed over 80 cranes pass over the Cranberry Marsh Hawl
	Watch.
	A Golden Eagle was observed at Pengelly Landing, Rice Lake by Dave Milsom, Matthew
	Toby & Ken Fulsang.
Nov. 13	Sue Paradisis reported a Cooper's Hawk is again visiting her yard.
	Steve Paul had Common Grackle at his feeders near Keene.
Nov. 14	Brenda Higgins reported seeing a large black cat crossing the Mississauga Dam Road. I
Member's	appeared to be 8 feet in length. In the same area, a dead deer was located up in a tree. Since
Meeting	the cat was black, it is likely a released or escaped individual.
Reports	Several members reported observing Coyotes: on the Parkway Trail by Brenda Higgins, and
	along Emily Park Road south of Hwy 7 by Ron Sanders.
	Marilyn Hubley had a flock of Snow Buntings along the road near Mt. Pleasant.
	Drew Monkman reported that a resident on Maple Cres. has four species of woodpecker
	coming to his feeders: Pileated, Hairy, Downy & Red-bellied.
	Ken McKeen reported a White-crowned Sparrow is still visiting his feeders.
	Mary-Beth Aspinall has a bat in her house and asked for assistance which was provided by another person at the meeting. The bat is to go to a rehab facility.

There were numerous reports of Fox Sparrows on eBird for the Nov. 12 to 17 period at locations ranging from Scollard Drive (Dave Milsom). Maple Cres. (Drew Monkman). Carveth Cres., Millbrook (Jeff Stewart)

Maria St, Pe	terborough (Dan Williams). Marilyn Freeman reported at the member's meeting that one was
present at he	er feeder
Nov. 15	Iain Rayner had a Canvasback off Pengelly Landing. He also heard a Greater Yellowlegs as
	it flew over. Two Double-crested Cormorants were also present.
	Matthew Tobey & Dave Milsom observed a River Otter on the ice off Kerry Line, Pigeon Lake,
	and another 2 individuals off the Fothergill Causeway.
Nov. 16	Martin Parker observed a Porcupine feeding in a tree off the end of the Airport.
Nov. 17	Sue Paradisis watch a Cooper's Hawk in her yard. She saw it flying into a tree and was able
	to watch for about 20 minutes as it sat there. It had a bright yellow eye so was an immature
	and by size seemed to be male. Two chickadees mobbed the hawk. After twenty minutes,
	the hawk moved closer to the trunk on the branch and stayed plucking feathers off a prey.
	Soon feathers were all over her lawn

Lakefield Sewage Lagoons Access During Dredging Project

Selwyn Township is requesting that ALL birders STAY OUT of the lagoons until the road work is complete. This includes weekends. Normal access will resume on Saturday, November 30.

The dredging work is complete; however, Public Works is working on fixing the roads around the lagoons after the abuse the roads took with large tankers going in and out during all the wet weather we had in October and November.





SAVE THE DATE!!! 2020 JOINT CONFERENCE & AGM Ontario Chapter / Canadian Section TWS

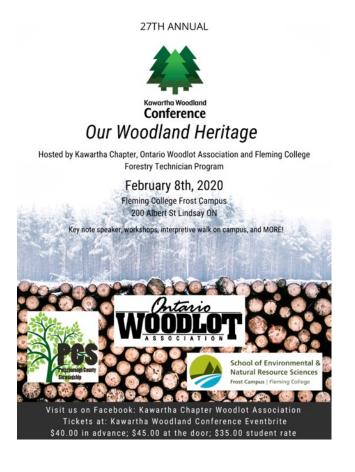
March 27-29, 2020 Peterborough, Ontario, Canada Wildlife Professionals and Students Welcome!

Location:

Holiday Inn Hotel Peterborough Waterfront 150 George St N, Peterborough K9J 3G5

REGISTRATION
ANNOUNCEMENTS
COMING SOON

The Canadian Section of The Wildlife Society



	PFN Board	of Directors		Other Volunteers		
President & Co- webmaster	Dylan Radcliffe	dylan.radcliffe@gmail.com	991- 0422	Membership Secretary	Jim Young 760-9397	
Vice-President	Vacant			Orchid Editor	Kathryn Sheridan orchid@peterboroughnature.org	
Past President	Ted Vale	tedandmarion@sympatico.ca	741- 3641	Orchid Mailing	Mary Thomas	
Secretary	Martin Parker	mparker19@cogeco.ca	745- 4750	Jr. Naturalists	Lara Griffin, Stephanie Collins, Erica Barclay and Jay Fitzsimmons pfnjuniors@gmail.com	
Treasurer	Dave Heuft	dave.heuft@gmail.com	743- 6164	Ecology Park Feeders	JB Jaboor, Kathryn Sheridan	
Community Partners Liaison	Lynn Smith	smithfam@nexicom.net	944- 5599	Orchid Diary, Citizen Science Projects	Martin Parker	
Meeting Coordinator	Phil Shaw	pshaw78@hotmail.com	874- 1688	Environmental Protection Committee	Jim Cashmore, Jim Young, Martin Parker, Ted Vale, Sue Paradisis	
Meeting Coordinator	Marie Duchesneau	duchesneau13@hotmail.com	874- 5739	Harper Park Stewardship Committee	Dylan Radcliffe, Lynn Smith, Rene Gareau, Marilyn Hubley, Ted Vale	
AGM Coordinator	Reem Ali	reemest@hotmail.com	868- 0060	Webmaster	Chris Gooderham webmaster@ peterboroughnature.org	
Digital Comms Co- coordinator	Marilyn Hubley	maykeema@hotmail.com	760- 9378	Peterborough CBC	Martin Parker	
Outside Shows Booth Coordinator	Rene Gareau	rene.gareau@sympatico.ca	741- 4560	Petroglyphs CBC	Colin Jones	
Outings Coordinator	Sue Paradisis	sueparadisis@hotmail.com	559- 2061	Peterborough Butterfly Count	Jerry Ball	
Ontario Nature Representative	Lesley Hale	lesleyhale@hotmail.com	917- 0373			

Orchid submissions are encouraged!

The submission deadline for the next issue is Friday, December 20. Send submissions to Kathryn Sheridan via email: orchid@peterboroughnature.org or post mail to: PFN, PO Box 1532, Peterborough ON K9J 7H7









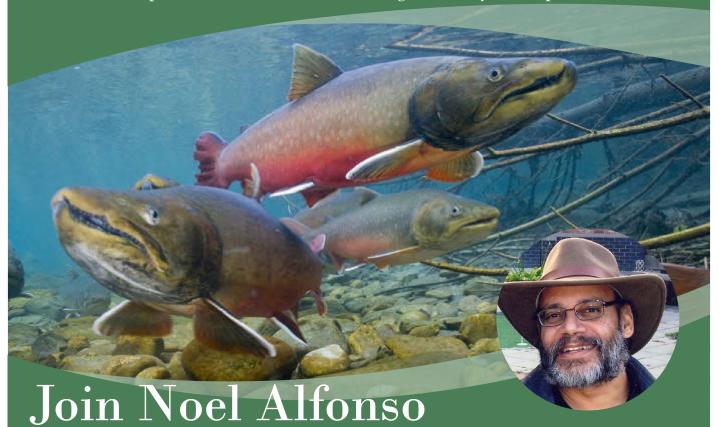


INVITE YOU TO OUR 79TH ANNUAL GENERAL MEETING

January 31 5 PM at The Stone House Hall Peterborough Curling Club 2195 Lansdowne St, Peterborough

Please RSVP by Friday, January 4 by contacting Jim Young at jbyoung 559@gmail.com or calling 705-760-9397. Tickets are \$45/person

Doors Open at 5, Dinner at 6, Meeting at 7, Keynote Speaker at 8



This presentation will be given by keynote speaker, Noel Alfonso, Senior Research Assistant (zoology) at the Canadian Museum of Nature. He will be sharing with us his lifelong fascination with fishes and he will regale us with adventurous tales from his work at the museum.

Membership Application Form

Memberships may be obtained by mailing this completed form to:

Peterborough Field Naturalists PO Box 1532 Peterborough Ontario K9J 7H7



Contact Information:	
Name(s):	Phone(s):
Address:	Email(s):
I would like to receive The Orchid by (Pick One):	☐ Mail Delivery ☐ E-Mail ☐ Both
Membership type and fee schedule:	
Notice: Membership fees provide only a small part of the full operate the Peterborough Field Naturalists. Donations from help us offer a diverse range of programming for everyone, including a donation with your membership so that we can you and the Peterborough community. Please make chequeterborough Field Naturalists.	Please consider continue to serve I have included a donation with my membership fees: If Yes amount:
1. Single Adult \$25 □ 2. Single Student \$15 □	3. Single Child (5 – 12) \$10 □ 4. Family \$30* □
*Please give the names and ages of children	vishing to enroll in the Junior Field Naturalists:
Name: Age:	Name: Age:
4< New Member	er Information >>>
Main interests:	r Information >>> How do you hope to participate:
Main interests: □ Natural Environment □ Reptiles and Amphibians	How do you hope to participate: □ Botany □ Outings
Main interests: □ Natural Environment □ Reptiles and Amphibians □ Birds □ Aquatic Life	How do you hope to participate: □ Botany □ Outings □ Geology □ Citizen Science
Main interests: □ Natural Environment □ Reptiles and Amphibians □ Birds □ Aquatic Life □ Insects □ Astronomy	How do you hope to participate: Description: Description
Main interests: □ Natural Environment □ Reptiles and Amphibians □ Birds □ Aquatic Life □ Insects □ Astronomy Other:	How do you hope to participate: Botany
Main interests: □ Natural Environment □ Reptiles and Amphibians □ Birds □ Aquatic Life □ Insects □ Astronomy Other: Volunteers are always needed. Do you have interest □ Ioin the PEN board □ Sit on r	How do you hope to participate: Botany
Main interests: Natural Environment Reptiles and Amphibians Aquatic Life Insects Astronomy Other: Volunteers are always needed. Do you have interest Join the PFN board Sit on reconser	How do you hope to participate: Botany
Main interests: Natural Environment Reptiles and Amphibians Aquatic Life Insects Astronomy Other: Volunteers are always needed. Do you have interest Join the PFN board Sit on r conser	How do you hope to participate: Botany
Main interests: Natural Environment Reptiles and Amphibians Aquatic Life Insects Astronomy Other: Volunteers are always needed. Do you have interest Join the PFN board Sit on r conser	How do you hope to participate: Botany
Main interests: Natural Environment	How do you hope to participate: Botany