

The  **Orchid**

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*Bulletin of the Peterborough Field Naturalists*

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Know • Appreciate • Conserve Nature in All Its Forms



Sharp-lobed Hepatica at KLT's Ingleton-Wells Property on April 13. Photo: Jude Pelley.

**Inside:** May Nature Almanac  
4<sup>th</sup> Year Trent Student Articles  
Spring Ephemerals: Trout Lilies  
Recipients of 2023 PFN Awards  
Ontario Nature Annual Gathering

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Clockwise from top: Blue-spotted salamander at Lakefield sewage lagoons on Apr.24 (Dave Milsom), Barnacle Goose and Canada Geese off Elmhirst Rd on Apr.20 (Marilyn Hubley), and colourful lichen and moss at Ingelton-Wells property (Jude Pelley)

*Welcome new PFN members!*



- Charles Johnson
- Chip Arnaldo & Crystal Van Lare
- Tina & Dave Grant
- Yamei Jiang and family
- Robert Bartram & Marta Martinovic and family
- Neil McCoag
- Lorraine Topping and family
- Nolan Geninger
- Keegan Beaney
- Amanda Merchant




<b>PFN Coming Events</b>	
<p>Saturday, May 4 1 to 4 p.m. 15 participants</p>	<p><b>The Fascinating World of a Vernal Pool</b></p>  <p>In the spring forest when vernal pools melt and fill with rain, life returns to these ephemeral wetlands. As soon as water appears, fairy shrimp hatch and are soon joined by hundreds of other organisms. These are the breeding grounds of wood frogs, spotted and blue-spotted salamanders and numerous other creatures. The salamanders migrate to the pools on the first warm, rainy night above 8 °C and generally stay in the pond a few weeks to mate.. We will be checking a pool for the eggs of wood frogs, spotted and blue-spotted salamanders and for some of the many organisms that live and breed in these unique woodland ponds.</p> <p>Mark Williamson, of Trent University will be bringing nets and trays for us to have a closer look at some of the invertebrates that are part of this fascinating ecosystem. We will also be listening for calling frogs and identifying some early spring wildflowers. Dress according to the weather and consider wearing rubber boots. To register for just one date and for more information on location, contact Sue at sueparadis@hotmai.com or call 705-559-2061. Accessibility: Moderate with walking around woodland ponds.</p>
<p>Thursday, May 9 Doors open 7 p.m. Meeting at 7:30 p.m. Hybrid meeting Camp Kawartha 2505 Pioneer Road</p>	<p><b>Monthly Meeting: Brook Trout in the Lake Simcoe Watershed</b></p>  <p>The phenomenon of how natural resource subsidies support stream productivity is well-known in the Pacific Northwest where salmon return from the ocean to spawn. In doing so they import nutrients and energy that supercharge the ecosystem. Does this also happen in the Great Lakes? This presentation will discuss a study on this very question, and will also evaluate factors that drive brook trout distribution in the Lake Simcoe watershed.</p> <p>Nicolas Jones is a research scientist with the Aquatic Research and Monitoring Section of the Ontario Ministry of Natural Resources and Forestry and is an Adjunct Professor at Trent University and the University of Toronto. Nick has expertise in the ecology and management of flowing waters. He has studied many species, including brook trout, sturgeon, reddsides dace, and lake trout.</p>
<p>Saturday, May 11 8 to 12 p.m. 15 participants</p>	<p><b>World Migratory Bird Day - Otonabee Gravel Pits</b></p> <p>In honour of World Migratory Bird Day, Steve Paul will lead a spring tour of the Otonabee Gravel Pits. This site is a former gravel pit that is managed by Otonabee Conservation and it is one of the top birding hotspots in the Peterborough area. The scenery is beautiful. There are great views of the ponds and the 3 km loop takes you through a large meadow and a forest as well. We will be watching for shorebirds and early migrant activity, but you never know what else we may see. As this year's theme (refer to page 22) is celebrating both birds and insects, we will try to capture some sightings in iNaturalist. Bring your camera and binoculars and dress for the weather. There is poison ivy along the trails and with</p>

<b>PFN Coming Events</b>	
	<p>higher water levels some spots may be wet, so rubber boots are a good idea. Ticks are always a possibility as well.</p> <p>To register, contact Steve after May 6 at <a href="mailto:stevepaul70@gmail.com">stevepaul70@gmail.com</a>. Details on the meeting place will be sent a couple of days before the outing. Accessibility: easy to moderate</p>
<p>Sunday, May 12 8 a.m. to noon 15 participants</p>	<p><b>Spring Nature Walk in the Cavan Area</b></p> <p>Come out and enjoy a hike in the Cavan area. We'll search for birds, admire the flora, identify species with iNaturalist, get some exercise and chat amongst friends. It's a wonderful way to spend a Sunday morning. Please dress for the weather, wear sturdy walking shoes and bring binoculars. Mosquito/blackfly/tick season may be upon us, so bring your favourite bug juice. Accessibility: Easy to moderate.</p> <p>To register, contact Lynn Smith after May 6 at <a href="mailto:smithfam@nexicom.net">smithfam@nexicom.net</a>. Further details will be sent to registered participants.</p>
<p>Saturday, May 18 1 to 4 p.m. 15 participants</p>	<p><b>Wildflowers of Warsaw</b></p> <p>Spring wildflowers are abundant along the road and on the alvar at Warsaw Caves Conservation Area. Those found along the shady roadside are quite different from those found on the sunny alvar. These vastly different growing conditions allow us to see a greater variety of plants and appreciate how they have adapted. At this time of year, we should also be treated to a wide variety of birdsong. Lou Smyrlis and Sue Paradisis will lead this afternoon outing. Be sure to bring binoculars and a camera if you have one.</p> <p>To register after May 6, contact Lou at <a href="mailto:lousmyrlis@icloud.com">lousmyrlis@icloud.com</a>. Carpooling from Peterborough will be arranged. Further details will be sent to those who register. Accessibility: Easy</p>
<p>May 18, May 22, May 26, May 30, June 3 8:15 to 9:00 p.m.</p>	<p><b>Chimney Swift Roost Watches</b></p> <p>PFN members are invited to see Chimney Swifts gather, circle and then dive into their roost as part of Birds Canada's annual monitoring of their numbers. The outing takes place on the top level of the King Street parkade on any of five nights. Meet on the top floor (parking is free in the evening) at 8:15 p.m.</p> <p>Contact Chris Risley (<a href="mailto:risleych@gmail.com">risleych@gmail.com</a>) for more information. Registration is not necessary. Accessibility: Easy</p> <p><i>Chris wrote an article for the Peterborough Examiner on the roost watches. You can read it here: <a href="https://rb.gy/btpu3g">https://rb.gy/btpu3g</a></i></p>
<p>Sunday, May 19 8 a.m. to 12 p.m. 15 participants</p>	<p><b>Lang-Hastings Rail Trail - Part 2</b></p> <p>The Lang-Hastings Trail offers many chances to see nature up close and enjoy great views of the countryside south of Peterborough. Steve Paul will lead this second spring walk on the section between Cameron Line and County Rd. 38.</p>



<b>PFN Coming Events</b>	
	<p>There will be opportunities to see and hear some returning spring birds including various migrating warblers and sparrows, flycatchers, Brown Thrashers, Rose-breasted Grosbeaks, Veery, and hopefully Green Herons. Last year on this walk 46 species were recorded. Be sure to bring your binoculars and dress for the weather of the day. Bug spray should be considered as we will be walking through wetland areas.</p> <p>To register, contact Steve after May 6 at <a href="mailto:stevepaul70@gmail.com">stevepaul70@gmail.com</a>. Details on the meeting place will be sent a couple of days before the outing. Accessibility: Easy. 4 km on a flat rail trail.</p>
<p>Thursday, May 23 &amp; Thursday, May 30 6:30 to 8 a.m. 8 participants</p>	<p><b>Bike and Bird</b></p> <p>We'll meet on Hunter St in East City for 6:30 am, and head for a leisurely bike ride up Rotary Trail, stopping to listen and look for birds at 2 to 3 different locations each week: likely Meadowvale Park, Trent Moraine Trail just south of Nassau Mills Rd, and along the trail in busy bird spots. We'll finish back on Hunter St. for 8 a.m., where anyone interested can join for hot beverages and/or breakfast at the Railyard Cafe.</p>  <p>Bring your own bike, helmet, bell and lock. Email Tamara Brown with questions, to register, or if you would be into future bike &amp; birds but you're not an early bird! <a href="mailto:tamaraebrown@gmail.com">tamaraebrown@gmail.com</a></p> <p>Accessibility: Biking will be a casual speed, on paved trails shared with pedestrians (not on roads).</p>
<p>Saturday, May 25 1:00 to 2:30 p.m. Camp Kawartha Environment Centre, 2505 Pioneer Road</p>	<p><b>Upcoming Event for The Junior Naturalists</b></p> <p><b>WHOOOOO DID THAT OWL EAT?</b></p> <p>In this workshop, the Junior Naturalists will learn about owls and their role in an ecosystem. We will dissect owl pellets to figure out who that owl ate!</p>  <p>To register, contact Shelley King at <a href="mailto:juniors@peterboroughnature.org">juniors@peterboroughnature.org</a>. Children must be at least 8 years old and accompanied by an adult.</p>
<p>Sunday, May 26 9 to 12 p.m. 15 participants Hazel Bird Nature Reserve</p>	<p><b>Hazel Bird Nature Reserve</b></p> <p>The Nature Conservancy of Canada's Hazel Bird Nature Reserve is a national nature viewing and public recreation destination. The reserve conserves tallgrass prairie, sand barren, oak savanna, and oak woodland communities while providing significant habitat for grassland birds.</p> <p>Join Gerry Bird and Linda Sunderland as we take a 3 km walk to look for returning birds and wildflowers with target species being Prairie Buttercup, Eastern Hog-nosed Snake, Eastern Meadowlark, Northern Mockingbird, Eastern Towhee, Eastern Bluebird, and a variety of grassland sparrow species including Clay-coloured, Grasshopper, Field and Vesper.</p>

<b>PFN Coming Events</b>	
	To register, contact Linda after May 6 at <a href="mailto:linda.sunderland@gmail.com">linda.sunderland@gmail.com</a> . Further details will be sent to those who register. Accessibility: Moderate with steep sections and uneven terrain. Wear sturdy shoes, long pants and bring bug spray and your binoculars.
June 24 to 27 Silent Lake P.P.	<b>PFN's Second Annual Camping Trip</b> <b>Please be advised that this year's camping trip is now full.</b>
	
Note: Most recordings of past PFN Zoom meetings can be viewed on PFN's YouTube channel at <a href="https://www.youtube.com/channel/UCAgbbqgr4ujZ16qba23LTQQ">https://www.youtube.com/channel/UCAgbbqgr4ujZ16qba23LTQQ</a> under the playlist menu.	

<b>Other Events of Interest</b>	
Saturday, May 11 10 a.m. to noon Tecasy Ranch, Buckhorn 24 participants	<b>Kawartha Land Trust Passport to Nature: Spring Beauty and Blooms - Ephemerals Galore!</b> Join us as members of Peterborough Field Naturalists (PFN) lead us through the beautiful forests of Tecasy Ranch, a KLT Partner in Conservation. PFN's hike leaders will share their love and extensive knowledge of local flora while you enjoy the signs of spring. Register at: <a href="http://kawarthalandtrust.org/connect-with-nature/passport-to-nature/">kawarthalandtrust.org/connect-with-nature/passport-to-nature/</a> 
Saturday, May 18 10 a.m. - 4 p.m. Ecology Park	<b>Annual Spring Opening Event of GreenUP Ecology Park Native Plant &amp; Tree Nursery</b> The nursery carries more than 200 species of native trees, shrubs, and perennial plants! There will be lots of expert gardeners around to help you out. As always, there will be herb and veggie seedlings available in the opening days of the season. Parking is in the south end of the Beavermead Park parking lot. 
Sunday, May 26 9 to 11 a.m. Location: TBA	<b>Kawartha Land Trust Passport to Nature: Birding for Everyone</b> From warblers to woodpeckers and everything in between (at least in Ontario!), join us for a birding extravaganza where our team of facilitators will help you to learn about – and hopefully view – the many birds that call the Kawarthas home – at least for part of the year. Register at: <a href="http://kawarthalandtrust.org/connect-with-nature/passport-to-nature/">kawarthalandtrust.org/connect-with-nature/passport-to-nature/</a> 
May 31 to June 2 Evergreen Resort, Saugeen Bruce Peninsula	<b>Ontario Nature Annual Gathering</b> Join Ontario Nature at Evergreen Resort on the Saugeen Bruce Peninsula for a weekend filled with expert-led workshops, lectures, field trips, and opportunities to connect with old friends and meet new ones. For more information, visit: <a href="http://ontarionature.org/events/annual-gathering">ontarionature.org/events/annual-gathering</a> . Register by May 6 to reserve your spot. (See page 19 for article about last year's gathering.) 

## President's Address at 2023 AGM

### Submitted by Sue Paradisis

It was a different world in 1940 when the Peterborough Field Naturalists was founded. The motto "to know, appreciate, and conserve nature in all its forms" is, however, as relevant now as it was 83 years ago if not more so. A lot has been accomplished over the years. And through the strength of its membership, a lot continues to happen.

To recap our year, PFN was busy from day one in 2023 when a New Year's Day hike was held at Petroglyphs Provincial Park. Also, in January, after donating to the resurfacing of the Jackson Creek trail, we participated in the celebration of its re-opening. Next, The PFN Juniors held their first event since Covid, a Christmas Bird Count.

In February, we were able to finally resume in-person meetings, and in March, we had the pleasure of hearing the Trent student grant recipients present their research. In April, we held the first annual Peterborough City Nature Challenge in Jackson Park.

In May, we celebrated World Migratory Bird Day at the library with Bird Friendly Peterborough and launched the bird-watching kits in memory of Terry Hunter, which are now on loan at the library.

For the first time in many years, we had a camping trip this time to Algonquin Provincial Park. We also offered a canoe and kayak outing.

In the fall, the Board started work on developing our first Strategic Plan. We were gratified by the number of members who helped by participating in reflection and visioning sessions, focus groups, interviews and online surveys. We were also gratified by the overwhelming support of our membership for what we do and what the PFN stands for.

We have a strong focus on knowledge sharing. The more one learns about the natural world, the more one will want to protect it. Our core programming of meetings, outings, Juniors and the Orchid all increase the knowledge of members. From our strategic plan surveys and interviews, it was clear how much these programs are valued by members. From the focus groups, the first two words used by members to describe the PFN were educational and informed.

In the next couple of months, the work of implementing the Strategic Plan will begin and we will be able to share it with you. Next year, when we celebrate our 85<sup>th</sup> anniversary, it will be with a clear vision of how to involve our membership with renewed purpose while staying true to the original values that are as relevant today as they were in 1940.

One thing that has not changed in 83 years is the commitment of many of the PFN members to the organization and its purpose. We are a volunteer-run group and would not exist without their work. I wish to salute all of those who contributed in 2023 and, in particular, the Board of Directors who have worked so hard this past year.

Finally, by attending meetings and outings, I had the pleasure to meet and welcome many of our new members and become reacquainted with long-time friends. I have frequently heard how much people enjoy spending time with other like-minded people in the PFN.

I am optimistic for our future and look forward to our 85<sup>th</sup>.



Sue Paradisis giving the President's report at AGM.  
Photo: Steve Paul

## **2023 PFN Awards**

### **Submitted by Sue Paradisis**

#### **Certificates of Appreciation**

At the Annual General Meeting of the PFN, we recognized some of our valued volunteers with the presentation of Certificates of Appreciation.

#### **Reem Ali**

Reem served on the PFN Board from 2019 to 2023 and was instrumental in establishing our Policy Committee. She led us through the creation of several key policies, including the Code of Conduct, the Harassment Policy, the Complaints Procedure, and the Financial Policy.

She was our first Zoom Coordinator, getting us established with this program for board meetings and facilitating our members' meetings during the pandemic. She was also vital in introducing a hybrid format for meetings, enabling us to be more inclusive.

She was always a willing participant in club and board activities and as the PFN representative, Reem was very involved in getting Peterborough recognized as a Bird-Friendly City. When you see the dots on the Peterborough Library windows, you will know that this comes from Reem's efforts.

#### **Marilyn Freeman**

Marilyn Freeman is an individual that many will recognize while she is out enjoying a favourite pastime such as birding or cycling around Peterborough.

Marilyn, a member of the Peterborough Field Naturalists since 2015, has contributed to the ongoing success of the club through the enthusiasm that she shares with the membership. If you have been fortunate enough to have been present at an activity that Marilyn has participated in, you would have experienced her humour, kindness, and knowledge firsthand.

Many members will recognize her name from the monthly book reviews that she has faithfully submitted to the Orchid since 2018.

It is due to these positive contributions that the Board is happy to present Marilyn with this Certificate of Appreciation.

#### **Erica Nol**

The PFN is pleased to present this Certificate of Appreciation to Dr. Erica Nol, for her outstanding and life-long contributions to the field of ornithology. Dr. Nol has worked in the Department of Biology at Trent University for over 35 years. She has dedicated much of her life to the mentorship of students in the study of shoreline and forest birds, investigating issues such as forestry practices, urbanization, forest fragmentation and climate change.

Dr. Nol is also recognized for her work at the national level, having served with the American Ornithological Society Council, the Society of Canadian Ornithologists, and the Waterbird Society, to name a few. In recognition of lifetime achievement in ornithological research, she was presented with a Research Award from the American Ornithological Society in 2020.

The PFN acknowledges the ongoing work that Dr. Nol also does for our local area and club, such as participation in the annual Christmas Bird Counts, and particularly this year's Junior's Count, held in January, as the PFN restarted its children's program post-Covid. The PFN is proud to have you as a member and your contributions are greatly appreciated.



### **Lola Leach Award**

The Lola Leach award was created in 1985 to recognize her for the years of service she gave to the Peterborough Field Naturalists. This award is presented to a long-standing member who has made a significant contribution to advancing the values of the PFN. In the 38 years since its conception, it has been awarded just 27 times. When looking over the plaque, our history is on display as there is a story behind each of those names and all of them made the PFN better. This year's recipient is Chris Risley.

Chris has been a member for over 25 years. He sat on the Board and was President from 1997-1999. An avid birder, he has led countless outings through the years and continues to do so. As a member of the Chimney Swift Monitoring Team, he invites us to join him on several evenings in late spring to watch the swifts entering downtown chimneys while sharing his knowledge of these unique little birds. He has organized one of the Christmas Bird Count teams for years and has often helped with the Juniors Christmas Bird Count.

He also continues to sit on a committee to go over applications for the annual PFN awards to Trent students for their 4<sup>th</sup> year thesis work.

Chris also shares his time and knowledge by organizing the Peterborough County point counts for the Ontario Breeding Bird Atlas. He conducted a northern atlas trip last summer at the mouth of the Moosonee.

Since the Northern Saw Whet Owl banding project started over 25 years ago, he has organized the permitting through the MNRF, written the report for the Ministry, submitting a version of it to the Orchid as well and helps with the actual banding one night a week.

He was a very active participant in Pathways to Stewardship, leading numerous groups of students. He also took kids out birding at Prince of Wales school on numerous occasions even when they were not officially a part of that program.

As you can see, Chris certainly meets the criteria to receive PFN's highest honour.



Chris Risley accepting Lola Leach Award from PFN President, Sue Paradisis. Photo: Steve Paul

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### **Outing Report for March 23: Spring Field and Woodland Exploration at Kidd Farm**

**Submitted by Linda Sunderland**

On Saturday, March 23, PFN member Bruce Kidd led 15 people through the hills and vistas of his farm property in Douro-Dummer Township. Participants walked through agricultural land, wetland and forested areas and meadows. The agricultural land and natural features of Bruce's property are preserved through a Conservation Easement Agreement with Kawartha Land Trust and this outing gave us all a wonderful opportunity to experience early spring in a beautiful environment.



Highlights of the outing included finding emerging Hepatica and seeing some returning birds like Turkey Vultures, Eastern Meadowlark and Red-winged Blackbirds, and of course eating freshly made cookies. Thank you to the Kidds for hosting this outing on a beautiful early spring day.

## Outing Report for April 13: The Fascinating World of a Vernal Pool

Submitted by Jude Pelley

Being a new member with the Peterborough Field Naturalists, I was excited for my first field trip to Kawartha Land Trust's Ingleton-Wells property in search of salamanders and more on Saturday, April 13. Truth be told, this is my third year in search of a Blue-spotted Salamander, the most common of all the salamanders. My fingers and toes were crossed in hopes that today was going to be the day!

I met Sue Paradisis and the group at 1 p.m. for our little adventure to a vernal pool. Sue was right: with the warm overnight rain on Thursday, April 11, the salamanders would have been on the move. Unfortunately, Saturday was not only cold but it was windy - something salamanders are not fond of. Also on our adventure, we had Richard Raper, the property steward with the Kawartha Land trust, and Mark Williamson, a member who brought his hip waders and was kind enough to bring the magic from the bottom of the vernal pool to us!



PFN group at the vernal pool.  
Photo: Sandy Garvey



Red-backed salamanders.  
Photo: Jude Pelley

The main purpose of the adventure might have been to see salamanders but it was very easy to get distracted en route. Deer tracks, the distant sound of a drumming Ruffed Grouse and the magic that was emerging from the forest floor... spring ephemerals! Lots of Trout Lily leaves, a few Hepaticas in bloom as well as Blue Cohosh and Bloodroot. Cutleaf Toothwort on the brink of blooming, a few sedges in bloom, mosses too. With the wet ground, the lichen was brilliant in colour. I even managed to find a couple of Scarlet Cup Fungi. No wonder it can take me 2 hours to travel 5 feet sometimes during a forest walk... so many wonderful things nature has to show you.

When we got to the vernal pool, we began the slow and careful process of looking for the salamanders. Three Red-backed Salamanders were found along with a Green Frog. As I said, it was thanks to Mark Williamson that we got to see what was in the vernal pool, and thanks to Sue Paradisis and her

amazing bug containers with built-in magnifiers that we were able to see these tiny creatures. One of the most beautiful and magical in my opinion is the Fairy Shrimp. These creatures lay diapausing eggs that - after a rest period - may hatch with flooding of the pool in late fall or the following spring. Not all eggs from a season will hatch at the same time, and some may rest in the bottom of the pool for years.

Once again, the Blue-spotted Salamander eluded me.... sigh. Did it matter when it was all said and done? Absolutely not, that is the fun of exploring a forest in the spring. You never know what you are going to find. The other joy is joining a club and going on an adventure with like-minded people... with lots of eyes looking, you are sure to find something! Thanks again, Sue, and the other members who welcomed me to the group!



A fairy shrimp in the viewing jar.  
Photo: Eugene Jankowski.

## Outing Report for April 20: Lang-Hastings Rail Trail - Part 1

Submitted by Steve Paul

On Saturday, April 20, twelve of us endured a “Canadian” spring walk along the Lang-Hastings Trail between Heritage Line and Nelson Road. The weather started out okay but by the halfway mark, things got a little chilly, and we even had a few snowflakes come down. Highlights of the walk included visiting the Keene Station gazebo honouring the local history of the railway and the 10th anniversary of the Lang-Hastings Trail. We also met up with Carol Berridge, Director for the Peterborough-Hastings Trans-Canada Trail Association, which oversees the Lang-Hastings Trail, and learned about her love and appreciation for the trail. Oh, of course, I can’t forget about the two local alpacas that always seem to get cuter every time we see them.



Photo: Steve Paul

Thank you to Pam Martin for taking the official bird list. We had a total of 33 species on this outing, including: Canada Goose, Mallard, Ruffed Grouse, Rock Pigeon, Mourning Dove, Killdeer, Turkey Vulture, Osprey, Red-tailed Hawk, Yellow-bellied Sapsucker, Downy Woodpecker, Northern Flicker, Eastern Phoebe, Blue Jay, American Crow, Common Raven, Black-Capped Chickadee, Tree Swallow, Ruby-crowned Kinglet, European Starling, American Robin, American Goldfinch, Fox Sparrow, White-throated Sparrow, Song Sparrow, Swamp Sparrow, Dark-Eyed Junco, Eastern Meadowlark, Red-winged Blackbird, Rusty Blackbird, Common Grackle, Northern Cardinal.

## Outing Report for April 20: Sounds of Spring

Submitted by Richard Mann

Leaders Sue Paradisis and Rachel Baehr led a group of 20 members from the Peterborough Field Naturalists on the “Sounds of Spring” outing along Hooton Drive on April 20. The outing took place on a chilly and cloudy evening after a stint of warm spring weather. Wood frog egg clutches could be seen in several clusters in flooded ditches adjacent to the road, as well as the previous year’s American bullfrog hatchlings (which are still currently tadpoles). As the evening progressed, spring peepers could be heard vocalising in the near-distance by the road. The cold temperatures kept the other species quiet. The group was also able to hear the song of the American Woodcock near the end of the outing, which was observed flying near the group several times. Finally, the group heard the calls of a snipe, but was unable to see the bird itself. The outing lasted a total of two hours from 7 to 9 p.m. The upcoming warmer weather is sure to bring the hatching of the eggs observed very soon.



Wood frog eggs. Photo: Sue Paradisis



Photo: Sue Paradisis

## Outing Report: A Spring Evening in Nature

Submitted by Anda Rungis

A special nature outing took place on the evening of March 26 and PFN members Samm Medeiros and Sue Paradisis, were both excited to report how amazing it was to witness the courtship "sky dance" and "peent" of the American woodcock at Trent University and hear a screech owl call near Keene. Surrounded by the fresh scent of spring, a chorus of three species of frogs, and a rising full moon, outing participants experienced all the wonderful "feels" that the return of spring has to offer.



Photo: Lauren MacLachlan

This outing, was organized for Samm, as one of the lucky winners in the PFN strategic plan engagement draw (held in December, 2023). When I contacted Samm to offer her the choice of a PFN membership or outing, she immediately said "I'm going to join the PFN, but I'd really like to go on an outing to see either owls or moths."

Thank you to Chris Risley for leading this outing and sharing his skill and knowledge in support of the PFN. Much like the process to prepare a strategic plan, it takes solid background knowledge, consideration of options and good communication to organize a nature outing. Chris cautioned that "there are no guarantees to see owls," but thorough preparation and planning always go a long way to delivering great experiences.

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## PFN Juniors - Spring Puppetry on April 7

Submitted by Jennifer Lennie

The Juniors got creative this month with a spring puppetry workshop led by our very own Shelley King. We welcomed the new season by talking about our favourite Ontario animals. Everyone made their own sock puppet, designed as an animal of their choice, with grown-ups lending a hand, and a few making their own creations too. Some Juniors chose Ontario species like the Northern Cardinal and Map Turtle, while others decided on more imaginative creatures like dragons. We were also treated to a vibrant puppetry presentation about how each colour brings its own beauty and value to the world, just like all the diverse people and species that share our planet.



Junior participants with their puppet creations. Photo: Jennifer Lennie

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## PFN Undergraduate Research Grants

Submitted by Martin Parker

The submissions to this issue of *The Orchid* by Alexander Robertson, Beck Bugeya, and Jade Gorman are summaries of the results of their individual 4<sup>th</sup> year thesis projects at Trent University. The PFN provides an annual grant through a competitive process to selected 4<sup>th</sup> year students to assist in their research. The funding for these grants comes from the annual income of the PFN Legacy Fund, an endowment fund managed by the Community Foundation of Peterborough for the PFN. Contributions, bequests and memorial donations to the PFN Legacy Fund are a means for supporting the PFN and its special initiatives such as the PFN Undergraduate Research Grants. Information on how to contribute to the PFN Legacy Fund is available through the Community Foundation of Greater Peterborough or by contacting the PFN Treasurer.

## Northern Dog-Day Cicada Emergence Isn't Random

By Alexander Robertson, supervised by Kaitlyn Fleming & David Beresford

If you haven't seen them, you've definitely heard them.

Northern dog-day cicadas (*Neotibicen canicularis*) emerge annually in the Peterborough area during the summer, with their discarded exuviae, a shed skin, being easily found on the trunks of trees or on the ground nearby.

If you've ever searched for cicadas, you may have wondered which trees you can find them on. This was the question I asked the internet and, to my surprise, I couldn't find a clear answer. So, under the supervision of Doctors Kaitlyn Fleming and David Beresford, I took it upon myself to try and discover the answer.

The most effective method for collecting data for this project was to walk around Peterborough County and collect exuviae, while concurrently recording which trees they occurred on.

We attempted fitting cicada-count-per-tree data to a zero-inflated Poisson distribution, which would indicate random distribution. Through using variance/mean ratio tests, further validated using a t-test, as well as chi-squared tests with simulated p-values, we found that the distribution of cicada emergence among trees was following a pattern of overdispersion, or clumping.

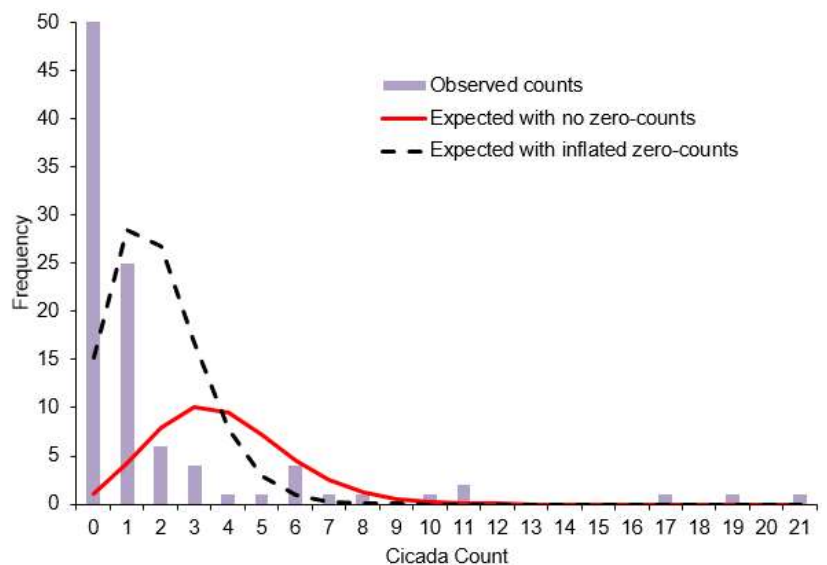
While we were not able to pin down a specific tree that cicadas prefer, we can say that when it comes to selecting trees, there is some form of selection occurring. Whether it's the mothers choosing a site to lay eggs at or the nymphs choosing a specific root to feed on, one thing is for sure: these musical critters may be more particular than you might expect from a bug that spends most of its life underground.



A cicada resting next to its exuvia.



Left: a female cicada sitting in the grass; Right: cicada count-per-tree distribution with inflated zero-counts, with lines representing expected frequency if emergence followed a Poisson distribution.



## Crayfish Concerns: Potential Impacts of Exotic Crayfish on Pelee Island's Endangered Salamanders

By Beck Bugeya (Thomas Hossie (Primary Supervisor, he/him), David Beresford (Second Reader, he/him))

Canada's endangered small-mouthed salamander population lives exclusively on Pelee Island. This island used to be primarily wetlands and forest, but was drained in the 1880s to the detriment of the resident amphibians. Today, the small-mouthed salamander is threatened by habitat loss and invasive species that could further harm the few locations they occur in.

White River crayfish are an American species first discovered on Pelee Island in 2015 in the same wetlands as small-mouthed salamanders. Despite the potential danger of this exotic species, little work has been done to investigate their effects on Pelee Island's ecosystems. Like other crayfish species, White River crayfish may eat salamander tadpoles and eggs, which would reduce the already-declining population sizes. Also, amphibians in the presence of predators accelerate their metamorphosis or the hide to avoid getting eaten, both which would reduce their body size and, in turn, their survival probability.



White River crayfish

To investigate if White River crayfish are affecting small-mouthed salamander population densities or body sizes, we searched ponds across Pelee Island for the number and size of salamanders. We then surveyed for White River crayfish using traps, dip nets, and through catching them incidentally while searching for salamanders. Then, we compared salamander populations in ponds with and without White River crayfish. Additionally, we created a map of White River crayfish habitat suitability to detect potential locations where they and salamanders are likely to interact. The Peterborough Field Naturalists' generous grant is going towards getting DNA barcoding on our crayfish samples to positively identify their species and potentially the location where they're originally from.



Small-mouthed salamander larva

Surprisingly, we found more salamanders in ponds with White River crayfish than without. This could be because they have similar habitat needs, so a good pond for one would be good for the other. White River crayfish also could be increasing habitat suitability for the salamanders! Pelee Island's salamanders are known to use the burrows of native crayfish to escape the summer heat and winter freezes, so White River crayfish burrows could also be a good hideaway. Additionally, we did not find evidence that White River crayfish affected salamander size. This may be because the salamanders try to escape all predators similarly, so a new predator wouldn't change how they behave. We also found that

their most suitable locations did regularly overlap with confirmed small-mouthed salamander locations.

White River crayfish don't appear to be affecting small-mouthed salamander population densities or body sizes, but this doesn't mean that they absolutely are not or never will. Additionally, even if they don't affect salamanders, Pelee Island is home to so many other kinds of amazing wildlife that could be impacted by this exotic species.

You can help track these and other exotic crayfish! The Ontario Federation of Anglers and Hunters just released a guide to the native and exotic crayfish in Ontario, so reach out to them for a free copy. Then, if you see something, say something! Researchers (like me!) use data from citizen scientists (like you!) in projects (like this!), so upload the photos you take to iNaturalist and EddMaps.

Sometimes in science, you get lucky and find yourself completely wrong. While we remain concerned about the other ways in which White River crayfish might be impacting Pelee Island's native wildlife, we're relieved that they don't appear to be affecting the small-mouthed salamanders in these ways. After all, we

all want wildlife to be doing well! More than that, we need to be objective about our science to truly understand how exotic species are affecting our native ecosystems.

## Stormwater Secrets: Benthic Hotspots

By Jade Gorman, supervised by Dr. Kaitlyn Fleming & Dr. Mary-Claire Buell

Did you know that your local stormwater management pond (SWP) may be keeping secrets from you? These stormwater secrets include their potential to be benthic hotspots in urban and suburban areas! While stormwater ponds are constructed for the purpose of flood mitigation and the bonus benefit of improved water quality, they also have the potential to boast great habitat for benthic macroinvertebrates. Although SWPs are not designed to provide aquatic habitat, this benefit can be seen in many SWPs, including those I studied in Peterborough. Every SWP is unique, so determining the factors that contribute to diverse benthic communities is important to improving SWPs as benthic habitats.



The Foxmeadow stormwater pond in East City

Following the Ontario Benthos Biomonitoring Network (a.k.a. OBBN) protocols, I characterized and sampled benthos in seven SWPs in Peterborough to determine what factors contributed to diverse benthic communities in stormwater ponds. I also sampled two natural ponds (NP) to use as a comparison.



Pollution-sensitive benthos: caddisfly (above) and dragonflies (below).

Benthos were identified in the lab to the OBBN 27-group level to determine the species composition in each pond. Many influencing variables were also determined including land use of each catchment, distance to the nearest waterbody from each pond, distance between ponds, etc. I was able to determine which ponds were most similar to others, and which were the most dissimilar.

While both SWPs and NPs provide habitat for benthos, I found that most of the SWPs I sampled actually had higher abundances and diversities of benthos compared to the NPs that I sampled. True flies dominated the NPs, indicative of higher organic pollution levels, resulting in poor levels of biodiversity.

I also found that land use does not have an effect on species diversity.

However, a higher composition of pollution-sensitive benthos was observed in ponds within catchments that had higher proportions of forested and water-covered areas. With the assumption that benthos are attracted to these ponds through oviposition (otherwise known as egg laying), connections can be made between natural areas near SWPs and the abundance of pollution-sensitive benthos.

Understanding the characteristics of SWPs that bring forth complex benthic communities is important for many reasons. SWPs can be managed and maintained in a way to protect benthic communities, and new SWPs can be constructed with the additional purpose of hosting benthic communities. These SWPs bring forth an overall more complex community structure in ecosystems with the addition of benthos, and can contribute to urban and suburban biodiversity. These hotspots of biodiversity should be prioritized and protected, especially in more urbanized areas where biodiversity and complex communities are harder to come by.

## Nature Almanac for May – The Promise of Spring Fulfilled

By Drew Monkman

“The world’s favorite season is the spring. All things seem possible in May.” – Edwin Way Teale

May usually begins with tree branches bare to the sky. But, as the trees leaf out, the spectrum of pastel greens, whites, browns and reds offers a colour spectacle that almost equals that of fall - at least to those who take the time to appreciate its subtleties and nuances. When warm weather finally arrives, change occurs at a dizzying pace. Woodlots come alive with rafts of trilliums, fields glow with dandelion gold and roadsides and trails beckon us to savour the lovely fragrance of blooming lilacs.

Southerly winds this month will push avian migrants north to take advantage of the billions of insects feasting on the smorgasbord of new leaves. The arrival of the birds of May is no less than a reaffirmation of life.

- 1) Watch for skeins of high-flying northern Canada geese passing as they make their way to nesting grounds on James Bay. Most are seen east of Peterborough.
- 2) This is the time to see the “spring ephemeral” butterflies such as the Olympia marble, the chryxus arctic and the elfins. Try Sandy Lake Road off County Road 46.



Serviceberry blossoms.  
Photo: Drew Monkman

- 3) The white blossoms of serviceberries, also known as Juneberries, are a common sight along country roadsides.
- 4) Large, pregnant queen bumblebees forage at flowers and fly low over the ground, searching out an underground chamber in which to start a new colony.
- 5) Hummingbirds return from the Yucatan and make a beeline to our feeders. Their natural food at this time includes tree sap oozing from sapsucker drillings.
- 6) High in the northeast, Ursa Major appears “upside down,” with Polaris and Ursa Minor below it.
- 7) Blackflies are usually at their worst about now. One square metre of a fast-running stream can produce over 30,000 in a season!
- 8) The long, fluid trills of the American toad are a characteristic sound of early May. The high-pitched song can be heard both day and night and often lasts up to 30 seconds without a break!
- 9) Along trails and roadsides, watch for the light brown stems of horsetails (*Equisetum*) rising from the ground in colonies. Spore cones are visible on the tips.
- 10) Sugar maples appear light yellow from the thousands of yellow flowers in bloom. Within a week or so, they will fall to leave a yellow floral confetti on the ground.
- 11) The first dragonflies change from forbidding aquatic nymphs to gracious adult flying machines. The first species seen is usually the common green darner, our only migratory species.
- 12) The damp morning air is rich with the fragrance of balsam poplar resin, a characteristic smell of spring in the Kawarthas.
- 13) With many species nesting, baby birds are inevitably found and believed to have been abandoned. Rarely is this the case. The cardinal rule is to leave them alone.



Olympia marble butterfly. Photo:  
Basil Conlin



14) The buck white-tailed deer's antler growth accelerates dramatically as a result of the increased daylight. Males keep a low profile at this time of year and allow does a wide berth.

15) Songbird migration is at its peak. The greatest numbers of migrating warblers, vireos, thrushes, orioles and flycatchers pass through between May 10 and 25.



Yellow-rumped Warbler. Photo: Drew Monkman

16) Pin cherries bloom in mid-May at about the same time as lilacs.

Mosquitoes become quite noticeable, too, since the males feed heavily on the nectar of cherry blossoms.

17) Gray treefrogs, green frogs and bullfrogs join the amphibian chorus. Treefrogs sound remarkably like birds and will even call during the day. Listen for them in suburban areas, too.

18) The last frost in the Kawarthas usually occurs about May 18. Frost will generally not occur again until September, giving our area an average of 135 frost-free days.

19) Woodlots display a profusion of wildflowers including yellow trout lily, large-flowered bellwort, spring beauty and, of course, white trillium.

20) Migrating rose-breasted grosbeaks and indigo buntings sometimes show up at sunflower feeders, so keep your feeders stocked up at least until month's end.

21) Tent caterpillar infestations sometimes reach epic proportions in late May. The eastern tent caterpillar builds a tent into which it retreats at night. Forest tent caterpillars do not make a tent. These are both native species and very rarely ever kill the tree that they feed upon.

22) May is the time to see moose. Try northern Peterborough County, especially along County Road 507 near Pencil Lake. Algonquin Park is still the surest bet, however.

23) Birders start looking and listening for the last of the warbler species to arrive, namely the blackpoll, mourning, and Canada. The blackpoll is only passing through, however.

24) Common nighthawks return to the Kawarthas. This species, which used to be common in downtown Peterborough, is suffering a major decline. It is still found at Petroglyphs and Kawartha Highlands Provincial Parks.

25) White ash, American basswood, and both red and white oak finally come into full leaf.

26) Members of the sunfish family such as the small-mouth bass and the pumpkinseed begin to spawn.

27) Trembling aspens release their seeds, filling the air with white "parachutes". The seeds of elms, Norway and silver maples spin to the ground as well.

28) Frothy, white masses of spittle become a common sight on the stems of field plants. They are excreted by spittle-bug nymphs, possibly as protection from predators.

29) With many grasses now in bloom, grass pollen is a major irritant for allergy sufferers. Most pollen is released in the morning between 8 a.m. and noon when the anthers dry and burst open.

30) White-tailed deer fawns are usually born in late May or early June.

31) Canadian tiger swallowtail and black swallowtail butterflies appear by month's end. They are sometimes seen "puddling" for minerals along trails and dirt roads.



Gray treefrog. Photo: Martin Parker

*Editor's note: Drew Monkman is a local "retired teacher, naturalist and writer with a love for all aspects of the natural world, especially as they relate to seasonal change." Drew's almanacs, newspaper columns, sightings and climate change articles can be found at [www.drewmonkman.com](http://www.drewmonkman.com).*

## Trout Lilies: Beautiful Children of Spring

Submitted by Jason & Lou Smyrlis

One of the most attractive of the spring ephemerals is the trout lily. Its pair of brownish-mottled leaves, said to resemble the markings on trout fish, break through the leaf litter in early to mid-April.

The stiff, waxy, lance-shaped leaves emerge from the bottom of the plant to provide a sheath for a stalk that, a couple of weeks after the leaves first appear, will bear a single nodding flower, bright yellow on the inside and bronzy on the outside. The petals and sepals of the flower bend backwards exposing six brown stamens.



Trout lilies take years to mature but over decades they can grow into huge colonies covering large patches in our woods. Photo: Lou Smyrlis

Trout lilies take a long time to develop. The bulbs are sterile up to about their seventh year and then produce only one leaf and no flowers. Only mature plants grow two leaves and the single flower. But over decades, trout lilies can grow into huge colonies covering large patches in well-drained soil under deciduous trees as well as along streams and ravine slopes. The colony expands primarily by underground runners called stolons, which create offshoots from the mother plant. Only a very small percentage of the plants in a trout lily colony will flower and seed in any given year.

When they do produce seed, trout lilies have evolved a way to aid in its dispersal. The seed capsules, which appear in late spring, are about 13 to 19 mm in length. Fleshy, lipid-rich, protuberances on the outside of the seeds, called elaiosomes, attract ants, which carry the seeds to their colony and feed the elaiosome to their larvae. The seed is then usually discarded in underground middens or ejected from the ant nest, providing trout lilies with a way to disperse their seeds further afield in conditions favorable for germination.

Like all ephemerals, trout lilies not only provide early sustenance for insects, they also play a crucial role in preserving nutrients in our forests. The potential for soil nutrient losses is high in the early spring because trees, although large consumers of nutrients, don't start to absorb them until they leaf out. Spring's profusion of rain would carry away nutrients, such as potassium and nitrogen, from forest ecosystems were it not for ephemerals. They absorb these nutrients to fuel their annual sprint against time to bloom and produce seeds before the canopy trees grow their leaves and shade the forest floor. When ephemerals die back and decompose into the forest litter, those nutrients are released back into the soil, just as the roots of trees and other plants are starting into their growth cycle and are in urgent need of them.

By June trout lilies will have run their annual race against time, completing their entire growing season in a few short weeks, their speckled leaves spent and decomposing back into the forest floor. During this time of rapid growth, trout lilies will have increased their dry weight by nearly 450%, according to one study, growing much faster than forest plants that stay green the entire summer.

Such is the fleeting life of the "beautiful children of spring," as poet Emily Dickinson referred to trout lilies, which inspired her poetry and highlighted her collection of pressed dry flowers two centuries ago. Quite possibly some of those trout lily colonies are still growing today.

## Don't Shave Those Legs

Submitted by Marilyn Freeman

Spiders have hairy legs. This might, in fact, be their superpower.

Hunting spiders use the sense of touch to get their dinners. The superpower hairs, called "trichobothria", are attached to 3 or 4 nerve cells. They are of different sizes and exist on different locations on the legs.

When an insect flies by, it sets the air in motion. In a split second the spider knows exactly where the prey is and where it needs to strike.

Some hunting spiders have hairs on their palps called "scopulae". These bristles enable the spider to better grasp and hold struggling prey. The "scopulae" help the spider to be more efficient in that less energy is expended in neutralizing their dinner.

Other spiders use webs to catch their food. The web silk is coated in glue but how does the spider know how to walk across the web without getting itself stuck? Again, it has to do with hairy legs. These hairs are called "setae" and they all point downward. This arrangement allows the spider to push indirectly down on the sticky silk forcing it to adhere to the structural strands. The "setae" are branched and stop the strands from sliding up to the base of the hair where they might get stuck to the spider's leg. The tips of the "setae" are so narrow and sharply pointed, they easily disengage. The spider's "setae" are randomly distributed and the sticky glue droplets slide off the ends, one drop at a time. In this way, the forces never become so strong that the spider gets stuck but the overall adhesive forces become pretty strong.

These fun facts were gleaned from [asknature@biomimicry.org](mailto:asknature@biomimicry.org). A super cool site!

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## Ontario Nature Annual Gathering 2023



Submitted by Kathryn Sheridan

I have enjoyed all Ontario Nature Annual Gatherings that I have attended. They are always informative, inspirational and social, but last year's Annual Gathering was especially inspirational. The 92<sup>nd</sup> annual AGM was entitled "Bringing Back the Wild." It was held in Sudbury, a mining town that is infamous the world-over for looking so much like a moonscape in the early 1970s that astronauts trained there for the Apollo 16 and 17 moon landings. To train their eyes for what they expected to encounter on the moon, astronauts were able to study meteor impact structures and shatter cones in the bedrock near Sudbury quite easily since so much of the bedrock was exposed. The so-called "moonscape" was caused by sulphur dioxide that was emitted by mining activity which acidified the soil, killing most vegetation, greatly hindering new plant growth, and resulting in erosion of exposed soil. Metal particles released from smelting activity provided a further insult to injury: the metals accumulated in the soil, became mobilized with acidity and were uptaken by plants, resulting in phytotoxicity at high levels and the hinderance of seed germination.

The Annual Gathering kicked off on Friday evening with a meet and greet, dinner and tour at Dynamic Earth. Dynamic Earth is a hands-on science centre focussed on earth sciences and mining. After dinner, we were taken on a tour of a demonstration mine seven stories below the centre where we learned about how underground mining is done and how it has changed over the years.

On Saturday morning, we attended a presentation by keynote speaker, Dr. David Pearson. Dr. Pearson's presentation was entitled "Learning and Collaborating Alongside Northern and Remote Ontario First Nations Facing and Preparing for the Impacts of Climate Change." Dr. Pearson spoke about how resilience and hope for communities will come from being prepared.

Workshops took place late Saturday morning and early afternoon. Of seven interesting offerings, we had to choose one for the morning and one for the afternoon. Most workshops were on the theme of revival of nature, specifically related to Sudbury. I found the workshop entitled "Sudbury Lake and Watershed Recovery" led by Dr. John Gunn particularly interesting.

In the late afternoon, the Ontario Nature AGM took place, followed by a wine and cheese reception and dinner.

On Saturday evening, we were welcomed by the mayor of Sudbury, Paul Lefebvre, who was very excited we were there and was very proud of the success of greening efforts. He shared with us an amazing fact: at the time of the meeting, the mayor, the MP *and* the MPP – representing all three levels of government – were all on the same page regarding concern and care for nature, and striking a healthy, sustainable balance between industry and the environment. Imagine! What an exciting time to be a naturalist in Sudbury.

Following the mayor's address, there was a keynote presentation by Dr. Peter Beckett, a restoration ecologist and associate professor at Laurentian University. He is one of the pioneers of the efforts to regreen Sudbury which began around fifty years ago. He told the fascinating story of the greening. The situation in the 1970s was such that more than 82,000 hectares (820 km<sup>2</sup>) of land in the Sudbury area was left barren or semi-barren. The turnaround began with increasing environmental regulation at the provincial level, resulting in Inco (now Vale) building the superstack, which greatly reduced ground-level sulphur dioxide. Subsequent smelting and emission capture technology improvements have reduced sulphur dioxide levels even more – to the extent that the superstack has been decommissioned. Once the level of emissions was greatly reduced, greening efforts could commence. Dr. Beckett explained that the application of crushed limestone at a rate of approximately 20 tonnes per hectare reduced soil acidity and the uptake of deleterious metals from the soil, allowing plant growth. Following the neutralization of the soil, a seed mixture of grasses and legumes and a special fertilizer mix was applied. This resulted in a healthy sward into which tree seedlings could be planted. This method has proven to be very successful; however, the restoration is ongoing. Dr. Beckett says, "We still have a long way to go. By our calculations, about 28,000 hectares (280 km<sup>2</sup>) of formerly barren or semi-barren land have never been limed or had trees planted on them." Visitors to the area aren't likely to come across many of these barren areas since the greening efforts focussed on areas where people live or travel to or travel along (e.g., highway corridors).



Laurentian Conservation Area before and after restoration. Photos supplied by Dr. Gerard Courtin

On Sunday, we were given a choice of five field trips to go on. I chose the Lake Laurentian Conservation Area hike which was led by Dr. Gerard Courtin (Professor Emeritus, Laurentian University) and Will Kershaw (Planner, Ministry of Natural Resources Parks). We walked through a number of different plant communities, and Dr. Courtin explained how geology, soil and access to water and sunlight controlled what type of plant community exists where. We saw some of the thriving forest mats that had been transplanted from forested areas that had been cut down during the widening of Highway 69. Even though people had carried out plantings, over the years, nature added to the greenery of the rehabilitated landscape, as it would. Dr. Courtin often comes across native plants in the conservation area that are new and unexpected arrivals. On this hike, he was delighted to spot a small mountain maple growing that he hadn't noticed before.

After the field trips, we were bussed back to Collège Boréal, where most of us were staying, and then we said our good-byes. On the way home, I'm sure I was not alone in feeling incredibly uplifted by all the greening success stories we had been told and by the strong sense of community from spending a pleasant weekend amongst fellow nature supporters.

This year, Ontario Nature is holding its Annual Gathering on the Saugeen Bruce Peninsula from May 31 to June 2. It promises to be another wonderful, edifying weekend for the keen naturalist. If interested, sign up by May 6 by visiting Ontario Nature's website: <https://ontarionature.org/events/annual-gathering/>

## Kawartha Land Trust Purchases Largest Nature Preserve in Its History

From article in Peterborough Examiner, Feb. 14, 2024

A 566-hectare nature preserve, located along the shores of Pigeon Lake in the Municipality of Trent Lakes, has been purchased by Kawartha Land Trust (KLT). It's the largest conservation property purchase in the organization's 22-year history.

On Monday in Lakehurst, Andrea Khanjin, provincial minister of the environment, conservation and parks, announced a \$2.9 million investment from the province's Greenlands Conservation Partnership to partially provide financial support for the purchase of the Hammer Family Nature Preserve. The area comprises forests, wetlands, fields, and natural shoreline on the east side of Pigeon Lake and is seven times bigger than Emily Provincial Park.

The preservation of the property will protect its ecology, provide clean air and clean water and future opportunities for public access and nature connection, while mitigating the effects of climate change, states a KLT news release. "The protection of this natural gem of the Kawarthas is an important investment in nature, in the Kawarthas, and Ontario at large," said John Kintare, KLT executive director.

The \$38-million Greenlands Conservation Partnership program helps safeguard ecologically important natural areas while protecting wetlands, grasslands, and forests. Funding for the project was also received from the federal Environment and Climate Change Canada's Nature Smart Climate Solutions Fund and private donors.

The property features over 200 acres of wetlands in total, and 183 acres which include sections of the Bear Creek provincially significant wetland and Fulton's Bay-Oak Orchard wetland.

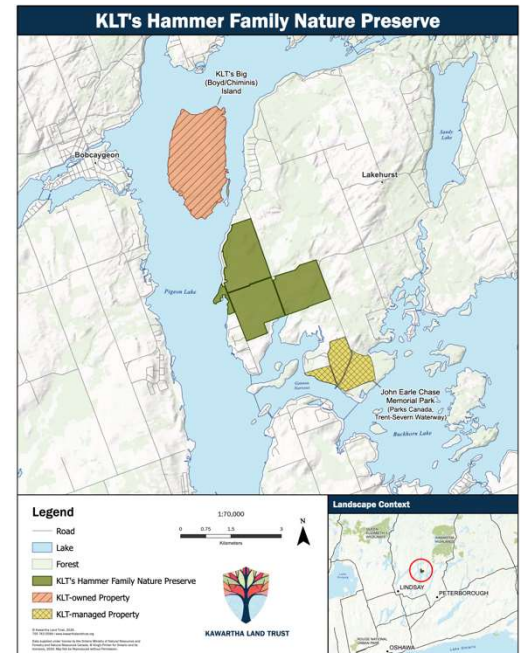
It will protect approximately 700 acres of deep upland forest, which is uncommon for the region, and provides vital habitat for species which are sensitive to disturbance and require large tracts of woodlands, like the at-risk Wood Thrush, states the news release.

Some of the species at risk that can be found on the property include: blanding's turtle, monarch Butterfly, golden-winged warbler, evening grosbeak, barn swallow, eastern meadowlark, butter-nut tree and black ash tree.

Founded in 2001, KLT is a land conservation charity which protects 34 properties including more than 6,700 acres of ecologically diverse lands, some of which include hiking trails, introducing thousands of people to the Kawartha's nature.

The KLT is currently developing a comprehensive community consultation plan to survey local stakeholders, Williams Treaties First Nations, and community partners regarding future stewardship plans, partnerships, and public access to the Hammer Family property, all while maintaining and strengthening its ecological values. The organization is also working on a public fundraising campaign for the ongoing stewardship of the property.

"The support and financial investments from the province of Ontario, government of Canada, and private donors, has resulted in the creation of a regional and provincial community asset," said Kintare, in the release.



## World Migratory Bird Day 2024: Protect Insects, Protect Birds

from <https://www.migratorybirdday.org/conservation-theme>

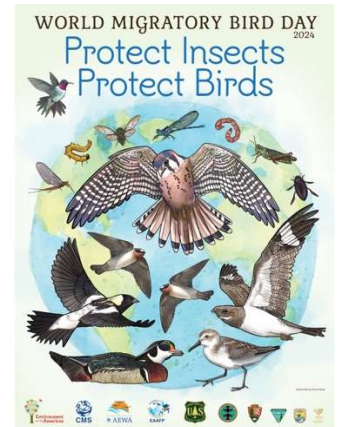
Insects are essential sources of energy for many migratory bird species, not only during the breeding seasons but also during their extensive journeys and greatly affect the timing, duration, and overall success of bird migrations. Along their migration routes, birds actively seek out insects in fields, forests, wetlands, and various habitats during stopovers. The timing of bird migration often coincides with peak insect abundance at stopover locations, supplying nourishment for birds to replenish their energy reserves before continuing their journeys.

The loss and disturbance of insect populations at breeding sites and along avian migration routes threaten bird survival and well-being. Natural spaces like forests and grasslands that have been transformed or endangered by intensive agriculture and urban development and its effects such as light pollution can result in a decline in insect populations. Pesticides and herbicides designed to protect crops harm insects that birds rely on for food. A scarcity of energy- and protein-rich insects can hinder bird migration and breeding, leading to weakened immune systems, reduced reproductive success, and increased mortality rates for both adult birds and their offspring.

Birds play crucial roles in pollination and pest control, and a lack of insects disrupts these ecosystem functions. Overpopulation of certain insects, without natural predators from birds, can also cause outbreaks that damage plant health and agriculture.

The World Migratory Bird Day campaign in 2024 will stress the need for proactive conservation measures. This includes reducing the use of pesticides and fertilizers, and where possible, switching to organic farming. Other measures include maintaining and connecting areas of natural vegetation which provide food and shelter for birds and other species, in agricultural landscapes.

*Editor's note: World Migratory Bird Day takes place this year on May 11.*



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## 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](mailto:orchiddiary@peterboroughnature.org)

Mar 17	A lone <b>Western Chorus Frog</b> was heard on Indian River Line near Hwy 7 by Marilyn Hubley, Laurie Healey and Sue Paradisis.
Mar 22	Marilyn Hubley spotted a <b>Yellow-bellied Sapsucker</b> on Bartlett Road, Cavan. A <b>Fox Sparrow</b> was seen by Mike Burrell and Erica Barkley under the feeders of their Douro backyard.
Mar 25	An <b>Osprey</b> was seen between Locks 24 and 25 on the Otonabee River by Don Sutherland. <b>Ospreys</b> at different locations are seen daily after this point, many returning to traditional nesting platforms. Don also continued to see <b>Tree Swallows</b> at the Lakefield Sewage Lagoon, where there are many nest boxes set up. Chris Risley and a group of Trent students heard <b>Wood frogs, Spring Peepers and Western Chorus Frogs</b> at Allandale Rd and Nelson Rd, Otonabee. They also heard an <b>Eastern Screech Owl</b> on River Rd, Lang. Two optimistic <b>Painted Turtles</b> were seen amidst the ice at the Lakefield Sewage Lagoons by Tamara Brown.
Mar 26	Cathy Douglas spotted a <b>Common Loon</b> at Birdsall's Wharf, Rice Lake. They begin to show up regularly after this, including one seen by many on Little Lake. Small groups of <b>Double-crested Cormorants</b> were seen by Jake Nafziger at both Hall's Landing and Pengelly Landing, Rice Lake. <b>Eastern Phoebes</b> were reported by Cathy Dueck on Cty Rd 44, Havelock and by Kale Worman on the South Drumlin Nature Area. They are spotted in many locations in the following days.
Mar 27	A <b>Greater Yellowlegs</b> was seen by Chris Risley wading in a pond on Fourth Line S, Douro-Dummer. Mike Burrell heard a first <b>American Bittern</b> flying over his Douro yard. An early, roving <b>Leopard Frog</b> was found, sadly flattened, on Allandale Rd, Lang.
Mar 28	Zach Peck and Serina T confirmed the ongoing presence of the <b>Carolina Wren</b> in Keene, who has been singing in the woods by Mill St all winter!
Mar 30	Marilyn Hubley noted a <b>Virginia Rail</b> at the Airport Ponds. Laurie Healey saw a <b>Chipping Sparrow</b> in her Keene Rd yard. A leucistic <b>American Robin</b> was spotted by Marilyn Freeman in her Peterborough yard.
Mar 31	Warren Dunlop spotted a male <b>Blue-winged Teal</b> at the Bensfort Rd Ponds and flooded fields.

	<p>An immature <b>Rough-legged Hawk</b> was seen flying over the Johnston Drive Ponds by Noelle Dean.</p> <p>Cathy Dueck heard the characteristic drumming of a <b>Yellow-bellied Sapsucker</b> on Cty Rd 44, Havelock.</p> <p>A <b>Chipping Sparrow</b> was seen by Patrick Tuck on the Lang-Hastings Trail, Dillon Rd.</p>
Apr 1	<p>Marilyn Freeman heard a loud chorus of <b>Wood Frogs</b> from a vernal pool on McAuley Rd, Ennismore.</p> <p>A <b>Savannah Sparrow</b> was heard calling by Laurie Healey and Marilyn Hubley at Thompson Bay.</p>
Apr 2	<p>A <b>Lesser Yellowlegs</b> was seen by Laurie Healey along Bensfort Rd.</p>
Apr 5	<p>Laurie Healey spotted a <b>Lesser Black-backed Gull</b> in a field along Base Line with a flock of Herring and Ring-billed Gulls.</p>
Apr 6	<p>Steve Paul heard a <b>Sora</b> calling from the marsh along the Lang-Hastings Trail by Technology Dr. This bird was later heard by several others.</p> <p>A <b>Hermit Thrush</b> was heard by Patrick Kramer at the Otonabee Gravel Pits.</p> <p>Bruce Kidd detected a <b>Ruby-crowned Kinglet</b> on Cty Rd 8, Douro.</p> <p>Leo Weiskittel saw an <b>Eastern Towhee</b> at Bailieboro Second Line Rd.</p>
Apr 7	<p>A <b>Green Heron</b> was seen by Marilyn Freeman at Meadowvale Park.</p> <p>Jake Nafziger saw the first <b>Barn Swallow</b> at the Johnston Rd Ponds.</p> <p>Sarah Jamieson saw another <b>Chipping Sparrow</b> on Oriole Dr, Peterborough.</p> <p>The first <b>Vesper Sparrows</b> and <b>Field Sparrows</b> were detected by Don Sutherland in the flooded fields of Bailieboro Second Line Rd.</p> <p>Tim Haan heard a <b>Brown Thrasher</b> singing along Centre Line, Norwood.</p>
Apr 8	<p>Mike Burrell spotted an adult <b>Lesser Black-backed Gull</b> by itself on Chemong Lake.</p> <p>A <b>Red-headed Woodpecker</b> was seen on Elim Lodge Rd, Trent Lakes by Kevin Kemmish and Natalia Hrynko.</p>
Apr 9	<p>A <b>Mourning Cloak</b> butterfly was seen by Marilyn Freeman in her Peterborough backyard.</p> <p>Marilyn also noted <b>Bloodroot</b> blooming on Division Rd east of Hwy 28.</p> <p>An <b>American Bittern</b> was observed on bank of creek at Cavan Woods by Scott McKinlay and another was heard at Miller Creek Wildlife Area by Scott Gibson.</p> <p>Steve Paul heard the first 2 <b>Swamp Sparrows</b> in the marsh on the Lang-Hastings Trail near Technology Dr.</p> <p><b>Lapland Longspurs</b> (3 total) were seen a scriven Heights by Jake Nafziger.</p>
Apr 10	<p>Cathy Douglas spotted a <b>Lesser Yellowlegs</b> on Douro 8<sup>th</sup> Ln, Norwood, which was later seen by many others.</p> <p>Cathy also heard, then saw, a <b>Marsh Wren</b> at the Providence Ln railway wetland.</p>



Apr 11	<p>A <b>Virginia Rail</b> was heard by Don Sutherland at Centre Rd 'Dillon Marsh', at Douro 3<sup>rd</sup> Ln; other <b>Virginia Rails</b> were heard by Steve Paul and Laurie Healey in the marsh along the Lang-Hastings trail near Technology Dr, and by Don Sutherland at the Providence Line railway wetland where Don also saw an <b>American Bittern</b> and heard 2 <b>Marsh Wrens</b>.</p> <p>Mark Williamson and Esther Paszt report having seen a <b>Carolina Wren</b> and a <b>Spring Usher Moth</b> in north end of Peterborough.</p>
Apr 12	<p>Dan Chronowic heard a <b>Sora</b> calling in the Fairbairn St. wetland, Peterborough.</p> <p>An <b>Iceland Gull</b> was spotted at Hall Landing, Rice Lake, by Jake Nafziger.</p>
Apr 15	<p>A <b>Broad-winged Hawk</b> was seen by Leo Weiskittel while checking out the <b>Virginia Rail</b> and <b>Marsh Wren</b> at the Providence Line Railway wetland. Another <b>Broad-winged Hawk</b> was seen by Laurie Healey at the Peterborough Landfill Wetland Project ponds.</p>
Apr 16	<p>Dave Milsom saw a <b>Red-headed Woodpecker</b> at Sandy Point, Pigeon Lake.</p> <p><b>Soras</b> were heard by Sue Paradisis at Cavan Swamp, Hooton Dr and by Luke Berg on the Lang-Hastings Trail near Technology Dr.</p> <p>Scott Gibson heard a <b>Common Gallinule</b> calling at the N. Esson Line Wetland.</p>
Apr 17	<p>Matt Tobey noticed a <b>Blue-headed Vireo</b> passing through his Fleming area yard.</p>
Apr 18	<p>A <b>Red-necked Grebe</b> was spotted by Leo Weiskittel on Little Lake from Mark St. boat launch, and later seen by many others.</p> <p>Talon Stryker and Samantha Welsh heard a <b>Least Bittern</b> along the Lang-Hastings Trail between Technology and Keene Rd.</p> <p>A <b>Great Egret</b> was seen on 3<sup>rd</sup> Line, South Monaghan by Shay McWilliams and Cathy Douglas.</p> <p>Sue Paradisis heard a <b>House Wren</b> at Beavermead campgrounds.</p>
Apr 19	<p>An amazing <b>Barnacle Goose</b> was noticed initially by Jake Nafziger foraging among a large flock of Canada Geese, in a field by Blezard Line. This rarity was later viewed by many birders as it stayed close by. See photo on page 2.</p> <p>Mike Burrell heard a very early <b>Whip-poor-will</b> in his Douro yard.</p> <p>Mike Coyne and Kim Bennett saw a <b>Bonaparte's Gull</b> from Auburn Reach Park, perched near the <b>Caspian Terns</b>.</p> <p>Don Sutherland had a single <b>American Pipit</b> flyover, calling, at the Lakefield Sewage Lagoons.</p>
Apr 20	<p>A <b>Black-crowned Night Heron</b> was seen flying over Johnson Dr Ponds by Laurie Healey.</p>
Apr 21	<p>A <b>Lesser Black-backed Gull</b> was seen by Andrew Brown and many other observers of the Barnacle Goose, who had relocated to Elmhirst Road, Keene.</p>

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Did you know that injured wild animals do not belong at a humane society or animal control but stand their best chances with a licenced wildlife rescue? Find out more about wildlife rescues and find one close to you at Ontario Wildlife Rescue. Visit: [www.ontariowildliferescue.ca](http://www.ontariowildliferescue.ca)

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## Looking For a Home: Can You Dig It?

When walking in the woods you'll hear its 'wicka' call.  
As it flushes from the ground its white rump you recall.  
You've never seen a woodpecker so garish, so unlike one of them.  
It's a bird of open, treed country, not a nuisance but a gem.

A flicker probes for ants and beetles hidden in the earth.  
It's slightly downcurved, long and thin beak isn't worth  
Using on a live tree a pileated's sharp chisel can chop,  
But its sticky tongue can dart out two inches, its prey to crop.

A year ago a northern flicker tried to usurp a fresh cavity.  
It'd dig its own in an old tree with heart rot if not for scarcity.  
Now it's checking out the pileated woodpecker's old hole.  
It, too, is a keystone species, making homes for other birds its role.

Flicker declines due to forest removal and fragmentation,  
And use of lawn pesticides are cause for lamentation.  
If possible, leave large, dead trees for nesting holes and food -  
How can one not help this irrepressible bird with attitude?

Murray Arthur Palmer, 2018



Two male Northern Flickers.  
Photo: Susan Weaver

## The Blob Without a Brain

Submitted by Marilyn Freeman

Some years ago, I peered out of the window into my backyard. There was something weird on the grass. It looked very much like dog vomit and I don't live with a dog. A little research told me that it was a slime mold called *Physarum polycephalum* a.k.a. "The Blob Without a Brain." But how can an organism without a brain solve puzzles that stump Harvard grad students, design the most efficient rail system for Japan and greatly improve the American interstate highway network?

It starts with oats - well, at least in a lab situation, oats are the food of choice. Outside of the lab, dead leaves suffice. Like humans, slime molds are motivated by food. They will quickly determine the most efficient route to get to where the food is. A slime mold is essentially a congregation of single cells that operate together to form a super cell, much in the way that ant societies work. But ants have brains and slime molds don't. What they can do when they converge is inform each other of what each already knows and they do this by chemical interactions.

Unbelievably, they also seem to have personalities! For those who have worked with slime mold and have learned their unique curiosities, tendencies and preferences - well, pet slime mold has become a thing! If you want to be wowed, check out this TED talk:

[www.ted.com/talks/heather\\_barnett\\_what\\_humans\\_can\\_learn\\_from\\_semi\\_intelligent\\_slime](http://www.ted.com/talks/heather_barnett_what_humans_can_learn_from_semi_intelligent_slime)

### Orchid submissions are encouraged!

The submission deadline for the next issue is Friday, May 24.

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](mailto:orchid@peterboroughnature.org)

or mail submissions via post to: PFN, PO Box 1532, Peterborough ON K9J 7H7





# Junior Naturalist News

[peterboroughnature.org](http://peterboroughnature.org)

email: [juniors@peterboroughnature.org](mailto:juniors@peterboroughnature.org)

May 2024

## WHOOOO DID THAT OWL EAT?



In this workshop, the Junior Naturalists will learn about owls and their role in an ecosystem. We'll dissect owl pellets to figure out who that owl ate!

Valerie VanSickle, Science Teacher and Mom of an eager Junior Naturalist, will be our workshop leader!

The event is FREE to members but children must be 8 years of age or older for this workshop.

**DATE:** Saturday, May 25th

**TIME:** 1pm to 2:30pm

**LOCATION:** Camp Kawartha Environment Centre, 2505 Pioneer Road, Peterborough

**REGISTRATION:**

Contact Shelley King at [juniors@peterboroughnature.org](mailto:juniors@peterboroughnature.org).

Children must at least 8 years old and accompanied by an adult.



## WHAT ARE OWL PELLETS?

"Owls swallow their prey whole or in large pieces, but they cannot digest fur, teeth, bones, or feathers. Like other birds, owls have two chambers in their stomachs. In the first chamber, the glandular stomach or proventriculus, all the digestible parts of an owl's meal are liquefied. Then the meal passes into the second chamber, the muscular stomach or gizzard, which grinds down hard structures and squeezes the digestible food into the intestines. The remaining, indigestible fur, bones, and teeth are compacted into a pellet which the owl spits out. Owls typically cast one pellet per day, often from the same roosting spot, so you may find large numbers of owl pellets on the ground in a single place."

Courtesy of Cornell Lab  
[allaboutbirds.org](http://allaboutbirds.org)



# 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:

<b>Name(s):</b>	<b>Phone(s):</b>
<b>Address:</b>	<b>Email(s):</b>

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 ▶▶▶

<b>Main interests:</b>	<b>How do you hope to participate?</b>
<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?

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Join the PFN Board          | <input type="checkbox"/> Sit on research or conservation committees | <input type="checkbox"/> Lead an outing                   |
| <input type="checkbox"/> Assist with meetings        | <input type="checkbox"/> Work on field projects                     | <input type="checkbox"/> Help with the Orchid publication |
| <input type="checkbox"/> Help the junior naturalists | <input type="checkbox"/> 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:** \_\_\_\_\_