

The Orchid



August/September 2021

Volume 67, No. 6

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 colourful male Least Bittern at Sawyer Creek at end of June. Photo by Cathy Douglas

Inside: Jerry Ball on Hawk Watching
Two Finches on a Christmas Wreath Part 3
Book Review: Owls of the Eastern Ice
Summary of Student Research on Electrofishing
Honey Bee Swarm
Nature Almanac for August and September

In this Issue:

PFN Coming Events	3
Volunteer Corner: Outing Leaders.....	5
Nature Almanac for August and September	5
Honey Bee Swarm	7
Results of 2021 Petroglyphs Butterfly Count.....	7
Book Review: Owls of the Eastern Ice	11
The Joys of Hawk Watching.....	12
Outing Report: Dranoel Rail Trail Loop.....	13
Two Finches on a Christmas Wreath Part 3.....	14
Notes of Interest from PFN Members.....	14
PFN Undergraduate Research Grant	15
The Orchid Diary	16
PFN Membership Application.....	20

Welcome new PFN members!

- Carson Hvenegaard
- Mary & Stan Garason
- Kate Hyde
- Joanne & Duff MacKinnon
- Mark Stewart
- Catriona Sinclair
- Dania Madera-Lerman
- Lorne R. Smith
- Larkspur Bethany Sky
- Leila Grace Maher
- Jeffry Evans
- Karen Dawn
- Sheila Potter



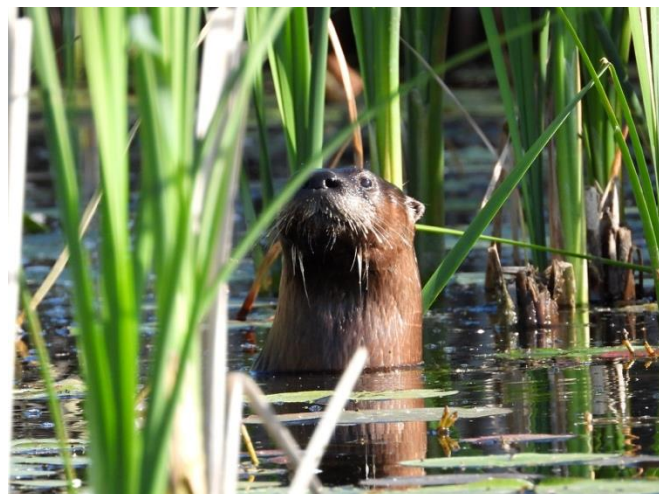
Garter snake eating a green frog in pond at Dave Milsom's house on August 8.



Goldenrod crab spider on a coneflower at Stoney Lake. Photo: Rene Gareau



Upland Sandpiper on Centre Line Smith on June 14.
Photo: Dave Milsom



River Otter on lower Chemong Lake on June 17.
Photo: Don McLeod

PFN Coming Events

Cooler fall weather has arrived and after cancelling so many outings this year due to COVID-19, we are pleased to be able to offer opportunities to get together safely outdoors. Numbers will be kept small, preregistration will be necessary, and carpooling will not be arranged. To give equal opportunities to those who receive the Orchid later by mail, registration will not begin until September 4. Please do not contact the leaders before that date.

<p>Thursday, Sept. 9 7:30 p.m. Virtual meeting on Zoom Invitations e-mailed to members</p>	<p>PFN Meeting: Mable's Meadow</p> <p>Katie Andrews started Mable's Meadow, a registered monarch waystation in Ontario, in an effort to support monarch butterfly conservation. She will speak about how she has raised monarch butterflies over the past four years and how to create and protect habitat that supports monarch butterflies.</p>
<p>Saturday, Sept. 11 9 a.m. to ~4 p.m. 20 participants</p>	<p>Early Fall Migrants at Presqu'île</p> <p>Saturday, September 11</p> <p>Presqu'île Provincial Park, located on the north shore of Lake Ontario, is one of the prime birding locations in the province and hosts lots of other natural wonders. This initial outing of the fall season will visit the park to look for migrating waterfowl, fall flowers and butterflies. The leaders are Martin and Kathy Parker. The outing will commence at 9 a.m. at the park. We will then proceed to the beach area and visit different sites there and at Owens Point. All participants are encouraged to bring masks and abide by social distancing guidelines.</p> <p>Bring a packed lunch, binoculars, and if you have them a telescope and camera. Bug spray for ticks is also recommended. There is an admission fee per car to enter the park. Members wishing to participate should register with Martin Parker at mparker19@cogeco.ca or (705) 745-4750 after September 4.</p> <p>Accessibility: easy to moderate</p>
<p>Saturday, Sept. 18 8 to 10:30 a.m. 10 participants</p>	<p>Peak Migration Birding</p> <p>Chris Risley is our leader for this Saturday morning birding walk. There is a lovely path along the canal at the foot of the South Drumlin Nature Area at Trent which is a popular spot for birders. At this time of year, there is the possibility of seeing a lot of species. All participants are encouraged to bring masks and abide by social distancing guidelines. Be sure to bring your binoculars and dress for the weather of the day. Register by email to risleych@gmail.com after September 4. Details on the meeting place will be sent when Chris confirms your spot.</p> <p>Accessibility: Easy</p>
<p>Sunday, Sept. 26 8:30 to 11:00 a.m.</p>	<p>Lang-Hastings Rail Trail</p> <p>Sue Paradisis will lead a walk along the Lang-Hastings Trail (LHT) from Technology Drive toward Keene Road and back. This section of the LHT travels</p>

PFN Coming Events	
10 participants	<p>through two beautiful marshland sections with a deciduous forest in the middle. This mixed habitat is great for finding a variety of plants and birds. Sue will share some tips on finding and identifying birds, and using eBird and apps.</p> <p>All participants are encouraged to bring masks and abide by social distancing guidelines. Be sure to bring your binoculars and dress for the weather of the day. Register by email to sueparadisis@hotmail.com after September 4. Details on the meeting place will be sent when Sue confirms your spot.</p> <p>Accessibility: Easy walking along a level rail trail. 2.6 km</p>
Sunday, Oct. 3 8:30 to 11:30 a.m. 10 participants	<p>Fall in the Cavan Hills</p> <p>Enjoy a 5-kilometre looped hike along a rail trail, ATV trails and along Dranoel Road. Participants will meet at the home of Lynn & Larry Smith on Tapley ¼ Line in Cavan township. We'll watch for later fall migrants and enjoy the onset of autumn colour. Be sure to bring binoculars and dress for the weather of the day. To register, contact Lynn at smithfam@nexicom.net after September 4.</p> <p>Accessibility: Some hills, therefore easy to moderate.</p>
Thursday, Oct. 14 7:30 p.m. Virtual meeting	<p>PFN Meeting: Reptile Rehabilitation and Biology</p> <p>Details on this talk by Jeff Hathaway will follow in the next Orchid and will also be posted on the PFN website.</p>
Sunday, Oct. 17 1 to 4 p.m. 20 participants	<p>Fall Nature on the Farm</p> <p>PFN member Bruce Kidd invites other members to join him and Martin Parker in an exploration of the field and woodlands of his farm property in Douro-Dummer Township. This outing will provide an opportunity to kick leaves, look at late-blooming flowers, find migrating birds and sample different types of 'wild apples' and discover the range in flavors. On last year's outing, highlights included a small flock of American Pipits and a tree that hummed (it contained a Honeybee hive). All participants are encouraged to bring masks and abide by social distancing guidelines. Be sure to bring your binoculars and dress for the weather of the day.</p> <p>Members wishing to participate should register with Martin Parker at mparker19@cogeco.ca or (705) 745-4750 after September 4. Details on reaching the Kidd farm will be provided to registered participants.</p> <p>Accessibility: Easy to moderate</p>

Orchid submissions are encouraged!

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

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



Volunteer Corner: Outing Leaders

Submitted by Sue Paradisis



One of the PFN's most popular benefits of membership is participating in the many outings, field trips and workshops. Due to COVID-19, some of our regular leaders are not comfortable participating and some of our long-standing leaders have decided to "retire" after many years of service. This is leaving us with a limited number of volunteers. If you or someone you know would be willing to get involved, please contact me. Expertise in an area of the natural world is nice but not mandatory. Perhaps, you have a property that you know well and would be willing to take some of us for a tour like Bruce Kidd on the October outing. In addition to spotting wildlife and learning something new, the camaraderie of fellow members that share your enthusiasm for nature is a big part of why outings are so well attended. Training will be provided and a seasoned leader can accompany you. I can be reached by phone at 705-559-2061 or email at sueparadisis@hotmail.com

Nature Almanac for August and September

By Drew Monkman

August

Listen for the high-pitched "lispings" calls of cedar waxwings and the "po-ta-to-chip" flight call of the American goldfinch. Waxwings often perch on the branches of dead trees and sally out to catch flying insects.

August is a good time to check milkweeds for the yellow-, black-, and white-striped caterpillars of the monarch butterfly. They are easy to rear in captivity and provide adults and children alike with a first-hand lesson in insect metamorphosis.

By mid-August, ragweed is in full bloom, and its pollen has hay fever sufferers cursing with every sneeze. The higher CO2 levels and longer growing season associated with climate change are greatly increasing pollen production. It is also causing Poison Ivy to thrive like never before.

Small dragonflies known as meadowhawks abound. Mature males are red, while females and immature males are yellowish.

Bird migration is in full swing by mid- to late August, with numerous warblers, vireos, flycatchers, and common nighthawks moving through. One of the best places to see nighthawks is Back Dam Park near Warsaw. Migration peaks around August 20 but continues into the first week of September. Go in the evening and watch the sky for loose flocks.

Watch for underwing (Catocala) moths, named for the bright colours of the underwings. The forewings, however, which often hide the underwings, look very similar to bark. These moths can be attracted by applying a sugary concoction to tree trunks. A cup of white sugar, two or more mashed bananas, one ounce of molasses, a bottle of beer, and a pinch of yeast to help with fermentation will usually do the trick. Look for the moths once it gets dark.

Goldenrods reach peak bloom at month's end and become the dominant flowers of roadsides and fields. These plants are veritable insect magnets, drawing in an amazing variety of species with their offerings of pollen and nectar.



Female Widow Skimmer dragonfly.
Photo: Joan Sutherland

Pegasus, the signature constellation of fall, becomes visible along the northeastern horizon in the late evening. It reminds us to enjoy summer now because it won't last!

September

Fall songbird migration is at its peak. Watch for warblers and vireos in trees and shrubs along forest edges and even in well-treed city backyards. Strangely enough, the key to their presence is often the sound of chickadees, which often join up with migrants during the day. A minute or two of pishing will quickly bring the chickadees out into the open with the warblers and vireos not far behind.

The fall equinox takes place on September 22, marking the beginning of autumn. At the equinox, both the moon and sun rise due east and set due west. Day and night are of almost equal duration.

The Harvest Moon, the full moon closest to the fall equinox, occurs September 20. For several evenings in a row, the moon rises at almost the same time and seems to linger on the horizon as it follows a shallow angle up into the sky.

Large mating swarms of ants are a common September phenomenon, especially on warm, humid afternoons. Some are females – the potential future queens – but the majority are males. Ants bear wings only during the mating season.

The spiraling flight of pairs of white or sulphur butterflies is a commonly seen behaviour. A male and female butterfly will circle around each other, all the while ascending high into the sky. Then, without warning, the male will give up the chase and drop to the ground, almost like a dead weight. It is believed that the female initiates these aerial climbs to rid herself of unwanted suitors.

Virginia Creeper turns a fiery red or deep burgundy. Poison Ivy offers up lovely oranges, while dogwoods and blackberry bushes provide beautiful burgundies.

Two species of white-flowered vines are very much in evidence this month, especially along woodland edges where they sprawl over fences, shrubs and trees. They are Wild Cucumber, which develop into roundish, cucumber-like seed pods covered in soft bristles, and Virgin's Bower, identified by its distinctive, fluffy seed heads of gray, silky plumes.

Brown and black Woolly Bear caterpillars are a common sight on roads, sidewalks and trails. People used to believe (falsely) that the longer the middle brown band was, the shorter and milder the coming winter would be.

Most years, White Ash, Pin Cherry, Staghorn Sumac, Virginia creeper vine, poison ivy, and chokecherry reach their colour peak in late September. Some ash trees turn a stunning purple-bronze that literally glows in the September sun.

By late September, asters reign supreme. Their purples, mauves, and whites light up fields and roadsides and bring the year's wildflower parade to a close. The most common species include New England, heath, panicked, and heart-leaved asters. They make a great addition to any pollinator garden.

Monarch butterfly numbers are at their highest. Monarchs congregate at peninsulas on the Great Lakes such as Presqu'île Provincial Park, a jumping off point for their migration across Lake Ontario.

Chinook and Coho salmon leave Lake Ontario to spawn in tributaries of the Ganaraska River. Huge salmon can be seen jumping up the fish ladder at Corbett's Dam on Cavan Street in Port Hope.



On June 13, Marie Duchesneau wrote: "My dock is still a favorite place for mostly water snakes but this morning it was this cute garter snake shaped like an old-fashioned braided rug having a rest."

Honey Bee Swarm

Submitted by Evan Thomas

I had an interesting visit to our backyard in the west end of Peterborough on June 1 by a very large swarm of honeybees. They landed on a tree and remained there for most of the day before again dispersing. I understand they may be a breakaway swarm from a hive in the vicinity. Fascinating to watch! The swarm arrived in a cloud in late morning, then all landed on the tree and stayed there until late afternoon before disappearing again. Was extremely interesting to see but a bit of a relief when they left!



Honey Bee swarm on a tree. Photo: Evan Thomas

Editor's Note from course notes from University of Alberta course entitled "BUGS 101: Insect-Human Interactions" © 2015; Module 7: Pollination and Beekeeping

Unlike most other bee species, a new colony of honey bees is formed by an abundance of individuals rather than a single queen. Honey bee colonies multiply through a complex phase of the colony's life cycle called swarming. A honey bee swarm is made up of a mass of bees outside the hive that contains a queen. The swarm searches for a new nest site. The advantage to colony propagation with a large number of individuals is that the reproductive member of the colony, the queen, gets assistance from the workers in foraging, the construction of the new nest, and the rearing of her brood.

Swarming occurs if the population of a hive gets too crowded. In the wild, swarming is a key part of the life cycle of honey bees that allows new colonies to get a head start during the critical period of hive establishment. Rather than starting a colony on her own, a queen honey bee has her offspring ready to help. Commercial operations however, manage and manipulate their hives to prevent swarming.

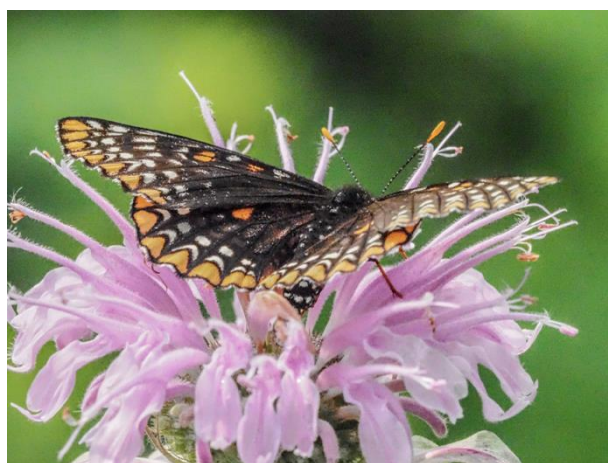
Results of 2021 Petroglyphs Butterfly Count

By Jerry Ball, Count Compiler and Martin Parker, Assistant

The 2021 count was held on a primarily sunny day on Saturday, July 17. Twenty-five participants in nine parties cover the areas within the count circle looking for butterflies. They located and identified a total of 57 species of adult butterflies consisting of 4,398 individuals and 55 Monarch caterpillars. The complete count results are shown on the following count summary. The variety of species is one less than the record high of 58 species observed on both the 2020 and 2003 counts. The number of individuals was above the average.

Highlights of the Petroglyphs Count:

- Acadian Hairstreak: 91 -- 2nd highest, high was 96 in 2003



Baltimore Checkerspot nectaring on wild bergamot on Lang-Hastings Trail on July 18. Photo: Ken Morrison

- Coral Hairstreak: 117 -- new high, previous was 78 in 2020
- Banded Hairstreak: 58 -- 2nd highest, high was 96 in 2004
- Striped Hairstreak: 42 -- new high, previous was 33 in 2004
- Northern Azure: 1 -- 2nd time on count
- Great Spangled Fritillary: 133 -- 2nd highest, 136 in 2014
- Atlantis Fritillary: 20 -- 2nd highest, high was 45 in 2005
- Silver-bordered Fritillary: 6 -- new high, previous was 6 in 2017
- Northern Crescent: 689 -- new high, previous was 579 in 2005
- Mourning Cloak: 70 -- new high, previous was 52 in 2020
- Common Wood Nymph: 135 -- new high, previous was 49 in 2012
- Monarch: 475 -- new high, previous was 472 in 2013
- Monarch caterpillars: 55 -- also a record number, previous was 33
- Wild Indigo Duskywing: 12 -- new species for the Petroglyphs count
- Long Dash Skipper: 37 -- new high, previous was 23 in 2003
- Mulberry Wing: 165 -- previous was 149 in 2014

The Petroglyphs Butterfly count is one of the annual counts in the NABA Butterfly Count Programme. The North American Butterfly Association (NABA) has run the Butterfly Count Program in the United States, Canada, and Mexico since 1993. Each of the approximately 450 counts consist of a compilation of all butterflies observed at sites within a 15-mile diameter count circle in a one-day period. The annually published reports provide a tremendous amount of information about the geographical distribution and relative population sizes of the species counted. Comparisons of the results across years can be used to monitor changes in butterfly populations and study the effects of weather and habitat change on North American butterflies.

The registration fees for the Petroglyph Count were paid by the annual grant from the PFN Legacy Fund, an endowment fund managed for the PFN by the Community Foundation of Greater Peterborough.

Special thanks go to the 25 volunteers who participated in this annual count.

Area participants were:

- Park - Robert and Joan DiFuscia
- ATV Trail east of Park -- Colin Jones
- Sandy Lake Rd North -- John Carley, Garth Riley, Nancy McPherson, Greg Stuart, and Kevin Seymour
- Sandy Lake Road south -- Rayfield Pye and Tom Mason
- Cty Rd 46 South -- Steve LaForest
- Cty Rd 46 North -- Martin Parker, Rene Gareau, King Baker and Jan Doherty
- McCoy Bay Road -- Kathy Parker, Ruth Davenport, Carly Davenport, and Jonathon Alsop
- Jack Lake -- Jerry Ball, Matthew Tobey, Ken Morrison and Luke Berg
- Forest Access Road -- Dennis Barry and Margaret Carney
- Hwy 28 Corridor -- Colin Jones

Results of Annual Petroglyphs Butterfly Count on July 17, 2021

Species	Park	ATV Trail E of Park	Sandy L. Rd South	Sandy L. Rd North	Cty Rd 46 South	Cty Rd 46 North	McCoy Lake	Jack Lake	Forest Access Rd	Hwy 28 Corridor	Total
Midsummer Tiger Swallowtail	1					2	5	5		1	14
Mustard White							12		3		15
Cabbage White			2	1	1	2	2	2			10
Clouded Sulphur	4	1	2		2	1		4	5		19
Orange Sulphur								1	3		4
Pink-edged Sulphur			1	1			1	2			5
Bog Copper			11	6							17
Acadian Hairstreak			9	4		1	1	71	3	2	91
Coral Hairstreak	22	11	36	42		1		3	1	1	117
Banded Hairstreak			31	11		1	1	13	1		58
Edwards' Hairstreak									1		1
Striped Hairstreak	1		30	6		5					42
Gray Hairstreak		1	1	4	1		1		2		10
Early Hiarstreak								1			1
Eastern Tailed Blue			1	2	2		3	5			13
Northern Azure				1							1
Summer Azure	5		19	12	1	8	2	2	12	2	63
Great Spangled Fritillary		2	1	5	2	10	31	53	29		133
Aphrodite Fritillary	12		5	2	4	17	6	11	4		61
Atlantis Fritillary	15				1	1	1	2	10		30
Silver-bordered Fritillary			4					3			7
Pearl Crescent			6	10				3	2		21
Northern Crescent	17	13	19	5	6	17	196	126	271	19	689
Questionmark									2		2
Eastern Comma	1			2			5	7	2		17
Green Comma								3			3
Gray Comma				2				2	1		5
Compton Tortoiseshell	1						4	4			9
Mourning Cloak	4		9	7	1	3	19	19	6	2	70
American Lady		1						1			2
Red Admiral								4		1	5
White Admiral			1	1				1			3
Viceroy		1									1
Northern Pearly-Eye		1	4	2	1			4	4		16
Eyed Brown	1		7	4	9	2		14	7	2	46

Species	Park	ATV Trail E of Park	Sandy L. Rd South	Sandy L. Rd North	Cty Rd 46 South	Cty Rd 46 North	McCoy Lake	Jack Lake	Forest Access Rd	Hwy 28 Corridor	Total
Appalachian Brown			1				2				3
Little Wood-Satyr	1										1
Common Ringlet								1			1
Common Wood-Nymph	3	1	59	6	38	8		1	10		126
Monarch	21	12	6	16	10	22	114	193	75	6	475
Silver-spotted Skipper	1									1	2
Dreamy Duskywing							3				3
Columbine Duskywing	45		17	2	1	1		5	5		76
Wild Indigo Duskywing		17								1	18
Delaware Skipper	1	2	9	17	3		2	74	2	4	114
Least Skipper			17	11		1	11	47		2	89
European Skipper			2	2	1	4	33	40	5	5	92
Peck's Skipper			3	5	1			21	1	2	33
Tawny-edged Skipper								4	1		5
Crossline Skipper			2			1		2	2		7
Long Dash			5				3	26	2	1	37
Northern Broken-Dash		2	1	3	1		2	78	1	1	89
Little Glassywing								11			11
Mulberry Wing	1	6	11	22			5	57	58	5	165
Broad-winged Skipper	6	3	115	134	60	2		3	28	5	356
Dion Skipper				3		1			1	3	8
Dun Skipper	34	3	232	72	50	35	120	383	84	39	1052
Unidentified											
Fritillary Sp.		2		3	1				3	1	10
Crescent Sp.					4						4
Brown Sp.				1							1
Hairstreaks Sp.									5		5
Comma Sp.		1			1			1			3
Total Individuals	197	80	679	427	202	146	585	1313	652	106	4387
Total Species	21	16	34	34	21	23	26	43	34	20	57
Caterpillars											
Monarch				5			50				55

Owls of the Eastern Ice: A Quest to Find and Save the World's Largest Owl by Jonathan C. Slaght

Review by Marilyn Freeman

Cast your mind over to Russia, then go east, very far east, all the way over to the Sea of Japan. Now you're in Primorye province and you are about to venture 1000 km north of Vladivostok. This is the territory of the endangered fish owl, the world's largest owl.

Fish owls hunt for prey - mostly salmon - under the water's surface. Because they don't use sound to find food, they have no facial disk common to most owls. To survive winters that regularly dip below -30 °C, they amass thick fat reserves and hunt where there are patches of unfrozen water. This is a bird with a two-metre wingspan! While typical owls fly silently, fish owls vibrate the air. Silent flight is not necessary if your prey is under water. "Backlit by the hazy gray of a winter sky, it seems almost too big and too comical to be a real bird, as if someone had hastily glued fistfuls of feathers to a yearling bear, then propped the dazed beast in the tree."

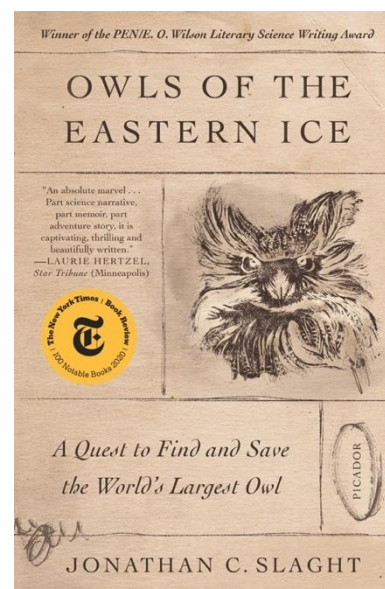
Fish owl pairs vocalize in duets. This is common in less than 4% of bird species globally, most of which are in the tropics. The male will initiate the duet by filling an air sac in his throat until it's swollen like a monstrous bullfrog. "After a moment he exhales a short and wheezy hoot - the sound of someone having the breath knocked out of him - and she answers immediately with one of her own, but deeper in tone. This is unusual among owl species, where females usually have the higher voice. The male then pushes out a longer, slightly higher hoot, which the female responds to. This four-note-call-and-response is over in three seconds, and they repeat the duet at regular intervals for anywhere from one minute to two hours. It is so synchronized that many people, hearing a fish owl pair vocalize, assume it is one bird." The hoots are twice as low as a great horned owl and similar to a great gray owl. The low frequency ensures that sound passes cleanly through dense forest.

Fish owls are so rare that until recently not much was known about their habits so not much had been done about protecting the habitat they need to flourish. *Owls of the Eastern Ice* documents the author's five-year study to gather the information necessary for developing conservation policies. Author Jon Slaght is an American who is fluent in Russian. This enabled him to work closely with his Russian counterparts because he would spend two months of every winter in very primitive conditions in very close proximity to his coworkers.

Slaght gives the reader a real feel for the fortitude necessary in doing field work, especially under the conditions of working outside during a Russian winter. It's also fascinating to learn what sort of technology goes into trapping, banding, GPSing and tracing these birds. At one point it became necessary to don a full-body neoprene wet suit, mask and snorkel and crawl 100 metres up shallow rivers counting and identifying fish - in April. Hardly a summer swim!

Beyond the vicissitudes of field life, Slaght gives intriguing glimpses into Russian culture, especially Russian male culture. There is a social bond to drink until the bottle - usually vodka, sometimes pure ethanol - is empty. Alcoholism is a huge problem in Russia. Like the Finns, the Russians appreciate their "banya", the Russian equivalent of a sauna. Many of the towns and villages in the Primorye area of the country are very much frontier places. No toilets, only outhouses. "We passed bearded men in home-sewn coats chopping wood and smoking filterless cigarettes, and women in felt boots and cinched shawls."

Back at home in Minnesota, it took Slaght a year to analyze all the GPS data points but the patterns were startlingly clear and made it possible to develop a conservation program to maintain and protect the



environment of the fish owl. As forty-three per cent of the fish owl territory was leased to logging companies, this necessitated direct engagement with the industry. Fortunately, the trees the fish owls need for nesting are rotting poplars and elms – worthless commercially.

In reading this book I learned a lot about things I didn't know that I wanted to know! It was thoroughly enjoyable and enlightening.

ISBN: 9780374228484

Ptbo Library: 598.97Sla

The Joys of Hawk Watching

Submitted by Jerry Ball and Martin Parker

Commencing the last week of August and lasting until late November, on days with winds from the north or northwest Jerry Ball is drawn to the hawk-watching platform on the edge of Cranberry Marsh in Whitby. The annual fall hawk migration is one of Jerry's personal highlights of the fall season. He can be found in his chair at the platform, scanning the sky for migrating hawks.

Jerry notes that the best days are when there is a north to northwest wind in the range of 10 to 20 km per hour.

The hawks are migrating southwards and soaring the air currents and updrafts into the wind. A north or northwest wind pushes them towards the shore of Lake Ontario. They prefer not to cross the open waters of the lake due to the lack of updrafts. Rather, they continue westward just inland from the shoreline. On a day with southern winds, their flight path is shifted well to the north. A sky with scattered clouds makes it much easier to locate the hawks against the sky as they pass over. Jerry is joined daily on the platform by other hawk watchers, many who have become close friends over the years.

Jerry notes that his personal highlights at the Cranberry Marsh Hawk Watch include a Black Vulture and a hunting immature Golden Eagle. The eagle captured a Canada Goose. It dropped into the flock of geese on the mudflats and it could be observed feasting on a goose. On another occasion, he watched a Northern Goshawk chase a Short-eared Owl and then a Peregrine took over mobbing the owl. A memorable show.

Non-hawk highlights include a flock of Cave Swallows (a southwest USA species) flying over the marsh. On the adjacent lake, Jerry observed a raft of 200 Common Loons, Red-throated Loons flying over, and a Glossy Ibis feeding in the marsh. In October 2020, there were up to 45 Great Egrets feeding daily in the shallows adjacent the viewing platform. In the woods along the border of the marsh he has found a Prairie Warbler, Barred Owls and Northern Saw-whet Owls. Besides birds, there are major flights of Monarchs moving westward as well.

In a typical fall, Jerry observes 10 species of hawks and 3 species of falcons. He is waiting for the day a Gyrfalcon joins the parade of raptors soaring southward.

Overall Results from 2020 Cranberry Marsh Hawk Watch

As provided by Rayfield Pye, Hawk Watcher Coordinator

Total Observers Hours -- 253

Total Number of Raptors – 13,059



A Sharp-Shinned Hawk chasing a Red-Tailed Hawk at Cranberry Marsh on October 4, 2019. Photo: Steve Paul

Turkey Vulture 5,827, Osprey 80, Bald Eagle 203, Northern Harrier 97, Sharp-shinned Hawk 891, Cooper's Hawk 83, Northern Goshawk 3, Red-shouldered Hawk 42, Broad-winged Hawk 3643, Red-tailed Hawk 1,736, Rough-legged Hawk 10, Golden Eagle 7, American Kestrel 292, Merlin 33, Peregrine Falcon 27, and unidentified 75.

Directions to Cranberry Marsh Hawk Watch from Peterborough

Travel south to Highway 401 and proceed west past Oshawa. Take the Brock Street exit at Whitby. After leaving the 401, turn left onto Consumers Road and then left at the next traffic lights onto Brock Street South. Cross over the 401 and then turn right at the traffic lights onto Victoria Street West.

After passing the Lynde Shores Conservation Area (parking lot after marsh), turn left onto Hall's Road. (If you reach Lakeshore Road you have gone too far.) The parking lot for the hawk watch is on the left at the south end of Hall's Road. Park and take the short path to the observation area.

If you go on a day with north or northwest winds, expect to find Jerry watching for hawks. Remember to bring a portable chair as hawk watching requires sitting and scanning the sky.

Outing Report: Dranoel Rail Trail Loop

Submitted by Lynn Smith

It was a gorgeous morning on Saturday, June 12 as seven PFN members started a 5 km trek along rural roads, unassumed roads, a rail trail and ATV tracks. At times, the mosquitoes came out to 'hike' with us but they were tolerable, mostly. The birds co-operated and after 2 hours 48 minutes, we had observed 45 species. The teamwork was impressive as we all contributed to hearing, seeing and identifying the birds.

A few notables:

- Prettiest song: Wood Thrush
- Slight Disappointment: The Canada Warbler sang but didn't show itself. Cameras were ready!
- Surprise: Mourning Warblers at three different locations along the route.
- Colourful: Scarlet Tanager, Indigo Bunting, Rose-breasted Grosbeak, Baltimore Oriole, Eastern Towhee
- Loudest: Ovenbird
- Constant: Red-eyed Vireo
- Flying Overhead: 2 Broad-winged Hawks
- Buzzing Through: Ruby-throated Hummingbird
- Serenading in the Background: Eastern Wood Pewee, Great Crested Flycatcher in harmony with Yellow-bellied Sapsucker & Black-capped Chickadee, interspersed with the Red-breasted Nuthatch, Cedar Waxwing, Pine Warbler and solos by the Northern Waterthrush, Field Sparrow, Black-throated Green Warbler and White-throated Sparrow. Yes, there were more participants in the 'choir' but these were some notables.

Along the trail we stopped at the abandoned Dranoel Rail Station. In the early 1900s, the Georgian Bay & Seaboard Railway ran from Port McNicoll to Dranoel, transporting grain and later transporting passengers. However, the track is now pulled up and a portion of it is the Victoria Rail Trail which goes to Lindsay.

At the end of the walk, we all appreciated the opportunity to be out in nature and we especially appreciated the companionship of a group (albeit COVID-style).



Photo: Cathy Douglas

A Pair of Finches in a Christmas Wreath – Part 3

Submitted by Don McLeod and Colleen Lynch

The following is a final update on the story about a pair of House Finches that set up 'home' in a Christmas wreath (*The Orchid*, May 2021 & June/July 2021). There were five Finch eggs and two Cowbird eggs. Over time only four Finch eggs hatched. One Cowbird egg hatched but perished soon after. The two unhatched eggs were found in the nest after all the nestlings had fledged.

The final few days of development were busy for the adults who made regular visits with food for the nestlings. Growth in these final few days was dramatic with visible differences on a daily basis. Near the end, the nestlings' wings were stretched every day and frequent fluttering in the nest was observed.



Four House Finch nestlings waiting their turn to fledge. Photo: Don McLeod



First fledgling House Finch perched in a Birch tree just minutes after leaving the nest. Photo: Don McLeod

The male adult House Finch made frequent visits to the nest on May 26 and often sang from the nearby Birch tree. He was also observed perched in the nest and seemingly pointing the way out. There was great excitement at 9 a.m. on May 26 when we observed one nestling follow the male adult, leave the nest and fly to the Birch tree.

Our first fledgling perched on a branch and looked a bit bewildered. The remaining nestlings left the nest at intervals throughout the day. By late evening, there were none left! They appeared to be in the area for a few days, but were absent during the remainder of the spring and summer. That marked the end of an educational and fun bird observation project. And yes, they were definitely added to the Ontario Breeding Bird Atlas!

Notes of Interest from PFN Members

Maxwell Matchim and his friends have been working on an educational children's web series entitled "Friends of Mine". For the second season, they shot one of the episodes at the Ontario Turtle Conservation Centre, exploring turtles and the conservation threats they face in a child-friendly way. The video can be watched on YouTube at www.youtube.com/watch?v=w8brH1MiwqI

Marilyn Freeman found this online presentation to be really informative and full of new information on migratory patterns. In the words of National Audubon Society: "Birds migrate north in spring and south in fall, right? That's true in a very superficial way, but when we look more closely, the facts are more complicated and a lot more interesting. Migratory birds in North America travel in every conceivable direction, and some migration is in progress on every day of the year. Watch bird expert Kenn Kaufman, who will explore some of the surprising routes traveled by migrating birds." www.facebook.com/NationalAudubonSociety/videos/1403826079968853/

Marilyn Hubley, PFN's digital communications coordinator, would like club members to know that PFN now has a YouTube channel. You can watch members' meetings that you missed by visiting this web page: www.youtube.com/channel/UCAgbbqgr4ujZ16qba23LTQQ. To quickly find the meeting videos, click on the search icon (magnifying glass) and type "meeting".

Ken Lyon's latest project is called "Introductory Resources for Exploring the Geology of Ontario." It's an annotated list of publications and internet resources that cover a variety of topics that range in level from "don't know anything about geology" to "starting to feel comfortable with basic concepts". If members want a free pdf copy, they can send an email to kenlyongeo@gmail.com.

PFN Undergraduate Research Grant

Summary of Research: Shocking Reproduction

Submitted by Bradley Howell, Fourth-Year Trent University Student

Electrofishing is widely used for population and community assessment in freshwater systems. However, as a technique to collect wild fish eggs and milt it is not nearly as common and is actively discouraged in many jurisdictions. There is currently a limited understanding of the effect of electrofishing inside the bodies of live fish, with little scientific evidence indicating whether the electricity itself or acute stress imposed on pregnant females could impact reproductive quality and viability. While it is currently considered to be a relatively safe method of collection, there are potential risks with its use arising from improper voltage and user inconsistency.

The brook trout is a widely distributed native sportfish in Ontario, however its range is becoming increasingly threatened by climate change and other stressors. Luckily, recent conservation efforts have been on the rise and hatchery-reared wild brook trout offspring are being used to re-populate and support existing populations. Yet, the collection of wild eggs and milt for use in conservation efforts requires an effective capture method that doesn't cause unintended mortality in offspring.

With the help of the Peterborough Field Naturalist's research grant, I tested to see whether electrofishing had a negative effect on offspring survival and whether it affects male and female reproductive cells differently. To better test this question, I also included two strains of Ontario brook trout to determine if domestication had any effect on gamete survival. I accomplished this by exposing both strains of brook trout to standard electrofishing practice and monitored the development of different treatment families through fertilization, eyed-egg, alevin, and fry stages over 109 days.

Electrofishing was shown to not have an overall effect on average proportion survival in the brook trout examined in this study. AIC modelling demonstrated that strain was not an accurate predictor of average proportion survivorship, suggesting that wild-origin genetics do not offer any significant advantage over domesticated genetics when being exposed to electrofishing methods. While treatment was demonstrated to be the best predictor of average proportion survivorship, a lack of statistical significance suggests that there is not a sex-based interaction associated with offspring survival post-electrofishing. Based on this study's findings, current fisheries practices regarding the use of electrofishing methods are understood to be a safe and non-limiting method. Future studies would benefit from more long-term monitoring and should consider examining fish response to different strengths of electrofishing treatment.



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

The COVID-19 pandemic eliminated most outings & all in-person meetings and reduced the sharing of information on our natural heritage. Special mention goes to Jerry Ball for all of his butterfly reports.	
The drought conditions of April and May continued through June but July was a rainy month.	
May 18	FOY (first-of-year) Red Admiral (1) & Clouded Sulphur (2) on Lang-Hastings (LH) Trail between David Fife and Settlers by Jerry Ball.
May 20	Eight Redheads were still present on the Lakefield Lagoon by Mike Burrell and others. Continued at this location until May 30. Dave Milsom found a White-rumped Sandpiper on a pond along Brown Line, S.W. of city. A Pectoral Sandpiper was present in the flooded field on the 2 nd line at Balieboro by Martin Parker. Cathy Douglas had a Wilson's Phalarope on the pond on Brown Line . Seen by many observers until May 23.
May 21	Mike Burrell had a Rusty Blackbird in his yard on Douro 8 th Line. Sue Paradisis had a Solitary Sandpiper on the Brown Line pond.
May 23	Jerry Ball had FOY West Virginia White (butterfly) on Ties Mountain Road, Trent Lakes
May 24	Matthew Gavin had a Lincoln's Sparrow in the area of Rotary Park. Bill Crins had a late Red-breasted Merganser off Beavermead Park. Sheila Collett & Ben Taylor had a Great Egret off Engleburn Avenue in the city. Jerry Ball had FOY Dreamy Duskywing & Eastern Pine Elfin on Jack Lake Road, Apsley
May 25	On LH Trail between David Fife and Baseline, Jerry Ball had FOY Silvery Blue , Northern Crescent & Eastern Tailed Blue (butterflies).
May 26	Kyle O'Grady observed an American White Pelican flying down the Trent River west of Hastings.
May 27	Lynn Cotton found 6 Black-bellied Plovers at the western end of the Chemong causeway. Seen by other observers
May 28	Donald Sutherland had a Red-throated Loon off Birdsall Wharf. Seen by others. Marilyn Hubley & Sue Paradisis had a Rusty Blackbird along Birdsall Line.
May 29	Iain Rayner had a Black-bellied Plover at the Lakefield Lagoon. John Bick had a Philadelphia Vireo on Ties Mountain Road, Trent Lakes. Scott McKinlay had a Solitary Sandpiper in Cavan. Jerry Ball reported FOY Monarch on Charlie Allan Road, Trent Lakes.
May 30	Bill Snowden reported a Cliff Swallow colony on the Ennismore Foodland building. Matthew Gavin had a late Bufflehead on the river off Rotary Park -- present until July 12. Along Sandy Lake Road, Jerry Ball had FOY Arctic Skipper , Little Wood Satyr , Common Ringlet , Columbine Duskywing , Northern Cloudywing & Indian Skipper .
May 31	Luke Berg observed a flock of 100 Brant flying north in the area of the landfill George Tuck had a Carolina Wren in the area of Lock 19 - and again on June 9. Donald Sutherland had a singing Lincoln's Sparrow in a bog off Jack Lake Road - present throughout the breeding season.
June 1	In the west end of the city, Evan Thomas observed a large swarm of Honey Bees . They landed in a tree and remained for most of the day until they dispersed.

June 2	Matthew Gavin and others had an Orchard Oriole along Redmond Road - seen by others until June 13.
June 3	Iain Rayner at his Night Flight Call (NFC) station near Lakefield recorded a flyover by a Grey-cheeked Thrush just after midnight. He had two more the next evening, and a single bird on June 5. Scott Gibson had a Short-eared Owl near dusk along Camp Road, Douro-Dummer.
June 4	Jerry Ball had FOY Pearl Crescent, Viceroy & Hobomok Skipper along Sandy Lake Road.
June 5	Travis Cameron had a Cerulean Warbler on Deer Bay Reach Road -- seen by others throughout the month. Cathy Douglas & Anda Rungis had an American Wigeon in the Lakefield Marsh. Iain Rayner reported a night-migrating Wilson's Warbler at his NFC station, Lakefield. FOY White Admiral along Sandy Lake Road by Jerry Ball.
June 6	Pam Martin reported a Philadelphia Vireo on the LH Trail west of Heritage Line. Rick Stankiewicz photographed a Common Snapping Turtle laying eggs with a Raccoon behind it plundering the nest as new eggs were being added.
June 7	Donald Sutherland had a singing Lincoln's Sparrow in a fen off the Sandy Lake Road -- seen by others in following days.
June 8	Kathryn Sheridan had a Bufflehead sleeping on a log on the Otonabee River. Dave Milsom found a Semipalmated Sandpiper in pond at Cleantech Commons, Trent U. Seen by many others until June 10.
June 10	Iain Rayner recorded a Nelson's Sparrow at his NRC Station, Lakefield FOY Least Skipper, Long Dash, & Silver-spotted Skipper along LH Trail, Cameron to Blezard by Jerry Ball
June 11	The LLD Moth (<i>Lymantria dispar dispar</i> ; formerly known as Gypsy Moth) infestations in various parts of the region continued this year with heavy infestations along County Road 46 north of Havelock, the eastern end of Stony Lake, and the Buckhorn area. On this date, Jerry Ball noted the caterpillars have stripped the leaves of trees in the area north of Havelock. The Oaks have been especially hard-hit along with birches, poplars and White Pines. He noted some butterflies will be impacted due to the lack of oak leaves for their caterpillars to feed on. By mid-July most of the trees which had been stripped regrew smaller leaves. Donald Sutherland had a Carolina Wren in the Ennismore area.
June 12	Luke Berg saw a Ring-necked Pheasant on Deer Bay Reach Road. Along Jack Lake Road, Jerry Ball had FOY Harris's Checkerspot, Tawny-edged Skipper, European Skipper & American Lady (all butterflies).
June 13	Jerry Ball had FOY Atlantis Fritillary along Salmon Lake Road.
June 14	Karl Smith had a Ring-necked Pheasant in area of 15 Line at North School Road, Selwyn. Don McLeod & Colleen Lynch have been monitoring a pair of nesting Eastern Screech Owls in the Ennismore area. The pair has two young.
June 15	Dave Milsom had a Semipalmated Plover at the Lakefield Lagoon. Seen by others 'til Jun.17.
June 16	Along Sandy Lake Road, Jerry Ball had FOY Silver-spotted Fritillary, Silvery Checkerspot, & Two-spotted Skipper .
June 17	Kathy Baker reported Eastern Bluebirds were nesting in the Woodview Golf Course. Don McLeod reported the Common Loon nest at the western end of Chemong Lake had two eggs. There was also an American Coot and a River Otter present.
June 19	Dave Milsom located a Carolina Wren along Settlers Line. Jerry Ball had FOY Great Spangled Fritillary along Sandy Lake Road.
June 20	Donald Sutherland had a singing Cerulean Warbler at two locations in the Lower Buckhorn Area. Both were singing from the top of leafless oak trees.

June 23	Pam Martin had a Blue-gray Gnatcatcher in the area of the Lang Pioneer Village -- seen in following days by multiple observers.
June 27	Late Lesser Scaup on the Lakefield Lagoon by Iain Rayner and two by Daniel Williams. On Sandy Lake Road, Jerry Ball had FOY Striped Hairstreak, Banded Hairstreak, Gray Comma, Pink-edged Sulphur, Eyed Brown, Mulberry Wing & Appalachian Brown (butterflies).
June 24	Jerry Ball had FOY Coral Hairstreak along Sandy Lake Road.
July 1	For Canada Day, Jerry Ball butterflyed Sandy Lake Road and had FOY Crossline Skipper, Broad-winged Skipper, Edwards Hairstreak, Northern Pearly-eye, Dun Skipper, Mid-Summer Swallowtail, Aphrodite Fritillary, Delaware Skipper, Summer Azure, Northern Broken-Dash, Acadian Hairstreak and Peck's Skipper .
<p style="text-align: center;">Banded Hairstreak</p> <p>Early July is a time for this small butterfly. On July 1, Jerry Ball walked sections of the 11 km Sandy Lake Road and counted a total of 865 Banded Hairstreaks. He repeated his coverage on July 4 and recorded a total of 2,165 Banded Hairstreaks. He noted he did not cover all sections of the roadway. Some of the flower heads of Common Milkweed contained up to a dozen feeding Banded Hairstreaks. Two weeks later on the Petroglyphs Butterfly Count on July 17 the two parties covering Sandy Lake Road could only locate 42 Banded Hairstreaks. Their annual flight period was ending. The females had laid eggs and we have to wait until next year for a new flight of this butterfly.</p>	
July 2	Jerry Ball had FOY Common Wood Nymph on the LH Trail from Cameron to Blezard.
July 4	Donald Sutherland had a Black-backed Woodpecker in the Apsley area. Jerry Ball observed FOY Bog Copper along Sandy Lake Road.
July 5	Dave Milsom had a Sedge Wren in the Hogan Lake Marsh, Apsley area.
July 6	Donald Sutherland observed fledged young Golden-crowned Kinglets along McCoy Bay Road, Apsley area. He noted they do breed in the shield area of the county.
July 9	Ian Sturdee observed young Golden-crowned Kinglets in the Cordova Lake area.
July 10	Jerry Ball had FOY Orange Sulphur & Hickory Hairstreak along 11 th Line Road, Dummer.
July 12	Jerry Ball had FOY Little Glassywing along LH Trail from Cameron Rd to Cty Road 38.
July 13	Ted Stewart had a Common Goldeneye on the Lakefield Lagoon. Still present on July 16.
July 14	Hunter Brainbridge-Parker spotted a Black Bear sitting at the edge of a field just off the Young's Point Road at Lakefield.
July 17	Petroglyphs Butterfly Count - please consult separate article on the count.
July 18	Jerry Ball had FOY Baltimore Checkerspot, Meadow Fritillary & Question-mark along the LH Trail from Baseline to David Fife.
July 25	Luke Berg & Matthew Tobey had a Blue-gray Gnatcatcher at the Otonabee Gravel Pits Conservation Area.
July 20	Jerry Ball had FOY Gray Hairstreak along Cty Road 46.
July 28	Sandra Neill reported a Canada Jay along the trails in Petroglyphs Provincial Park. Jerry Ball had his FOY Black Swallowtail along the LH Trail from Villiers to Blezard.
General	Throughout the reporting period, Red-headed Woodpeckers were being reported regularly on the eBird alerts. It appears numbers of this species are increasing. This may be a result of the Emerald Ash Borer infestation which has resulted in more flying beetles which is this species of woodpecker's preferred food. Similarly, there were numerous reports weekly of Clay-coloured Sparrows . This probably reflects the increased coverage by birders participating in the Ontario Breeding Bird Atlas.



Aphrodite fritillaries nectaring on false sunflowers near County Rd 46/Sandy Lake on Petroglyphs butterfly count day. Photo: Rene Gareau



PFN Board member, Sue Paradisis, took this photo (left) of a fawn that visited her backyard for two days in early August. Sue wrote, "I had the privilege of watching it wander around the yard pruning the apple tree, eating apples, grasses and violets. When it started on hydrangea flowers, it was time for it to leave. 😞 After dark when it was safer, my grandson and I herded it toward the gate and off it ran." It headed off in the direction of the Meade Creek wetland, away from the city. The Kawartha Wildlife Centre said that the fawn was too old to still be with its mother, and Sue observed, "It was strong and very capable of finding food on her own." Good luck to you, little fawn!

PFN Board of Directors				Other Volunteers	
President	Rene Gareau	rene.gareau@sympatico.ca	705-741-4560	Membership Secretary	Jim Young 760-9397
Vice-President and Outings Coordinator	Sue Paradisis	sueparadisis@hotmail.com	705-559-2061	Orchid Editor	Kathryn Sheridan orchid@peterboroughnature.org
Treasurer	Ted Vale	treasurer@peterboroughnature.org	705-741-3641	Orchid Mailing	Mary Thomas
Secretary	Martin Parker	mparker19@cogeco.ca	705-745-4750	Jr. Naturalists	Lara Griffin, Stephanie Collins, Erica Barclay and Jay Fitzsimmons pfjuniors@gmail.com
Digital Comms Co-coordinator	Marilyn Hubley	media@peterboroughnature.org	705-760-9378	Ecology Park Feeders	JB Jaboor, Kathryn Sheridan
Meeting Coordinator	Steve Paul	stevepaul70@gmail.com	705-930-8370	Orchid Diary, Citizen Science Projects	Martin Parker
Assistant Meeting Coordinator	Phil Shaw	pshaw78@hotmail.com	705-874-1688	PFN Advocacy Committee	Martin Parker, Ted Vale, Sue Paradisis, Anda Rungis
AGM and Zoom Coordinator	Reem Ali	reemest@hotmail.com	705-868-0060	Harper Park Stewardship Committee	Lynn Smith, Rene Gareau, Marilyn Hubley, Ted Vale, Sue Paradisis, Anda Rungis
Assistant Membership Secretary	Cathy Douglas	cddouglas77@gmail.com	905-751-5292	Webmaster	Chris Gooderham webmaster@peterboroughnature.org
Ontario Nature Representative	Fiona McKay	fcmckay@peterboroughnature.org		Peterborough CBC	Martin Parker
Liaison with Juniors	Anda Rungis	rungisa@gmail.com	613-298-9062	Petroglyphs CBC	Colin Jones
Board Intern	Maela Kaminski	maelakaminski@trentu.ca	639-571-4638	Peterborough Butterfly Count	Jerry Ball
Peterborough Field Naturalists, P.O. Box 1532, Peterborough, Ontario, K9J 7H7					

Membership Application Form

Memberships may be
obtained by mailing this
completed form to:

Peterborough Field Naturalists
PO Box 1532
Peterborough Ontario K9J 7H7



PETERBOROUGH FIELD NATURALISTS

Contact Information:

Name(s):

Phone(s):

Address:

Email(s):

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

Membership type and fee schedule:

Notice: Membership fees provide only a small part of the funds required to operate the Peterborough Field Naturalists. Donations from members like you help us offer a diverse range of programming for everyone. Please consider including a donation with your membership so that we can continue to serve you and the Peterborough community. **Please make cheques payable to Peterborough Field Naturalists.**

I have included a donation with my membership fees:

☐ Yes or ☐ No

If yes, amount: \$ _____

1. Single Adult \$30 ☐

2. Single Student or Youth \$15 ☐

3. Family \$40* ☐

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

Name	Age

Name	Age

◀◀◀ New Member Information ▶▶▶

Main interests:

☐ Natural Environment

☐ Reptiles and Amphibians

☐ Botany

☐ Birds

☐ Aquatic Life

☐ Geology

☐ Insects

☐ Astronomy

☐ Mammals

Other: _____

How do you hope to participate?

☐ Outings

☐ Citizen Science

☐ Meetings

☐ Junior Naturalists

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

☐ Join the PFN Board

☐ Sit on research or conservation committees

☐ Lead an outing

☐ Assist with meetings

☐ Work on field projects

☐ Help with the Orchid publication

☐ Help the junior naturalists

☐ Give a presentation

Liability Waiver (New and Returning Members):

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

Signature: _____

Date: _____