

Parthenice Tiger Moth

(Grammia parthenice)

Photo by Lane Henderson



In this Issue:

Coming Events p 4

Trip Reports p 9

Monitoring Reports p16

Nature Notes p 19

Member Photos p 23

A Message from your Editor

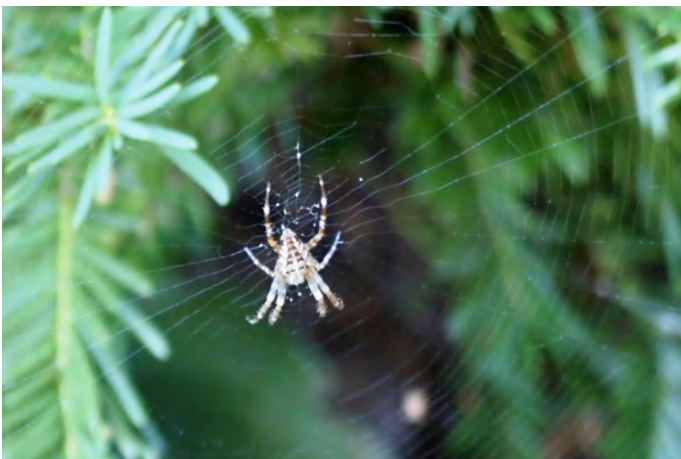
I was going to call this editorial the year of the Wren, however, I'm now thinking it really should be called the year of the Spiders.

Well, I hope you all had a fabulous summer. Its tough to remember, now, that we started off this summer with a cold wet spring, which then morphed into beautiful hot dry weather. However, the late start delayed many natural happenings by approximately two weeks. The plant world decided sprouting was a bit too dicey, which caused some concerns during our spring ephemeral walks. The Bluebirds decided they were going to wait awhile before settling down to their nest building chores. The Swallows decided to forego building nests for the most part, but the busy little Wrens were quite happy to pull up the slack by stuffing the nesting boxes with twigs.

Because of this delay we are not able to provide a final tally of fledglings for the Blue bird report. However, despite a rough start, the boxes that Lane & I monitor produced 23 Bluebirds, 20 Wrens and 7 Swallows.

The same, is true for our Swiftwatch team, Phyllis has provided an up to date report, yet we still have Swifts in the area, who seem reluctant to start their journey South.

So, about the spiders, has anyone else noticed how abundant they are this year. Just take in a walk in your back yard and you get their threads across your neck and arms. I understand that some folks actually like them but as I suffer with arachnophobia, I just wish there weren't quite so many. And, so big! The one by the garden shed has wrapped up a hot dog sized meal to save for a snack.



Garden Spider



House Wren by Andy Witchger

Well, our exec. has once again, been busily working behind the scenes, inviting a great line up of guest speakers to our meetings. This year we will kick off the season with a joint meeting with local clubs. It's Carden's turn to host this meeting and they have invited Matt Lieberknecht, to talk about his passion of Falconry. Our own, at home, club meetings will start in October. The first guest will be Steve Burrows, who is the author of several birding murder mysteries. That should prove to be an awesome night. So, make sure you mark that on your calendar. November's guest will be Jeremy Benseette who completed "A big Year" in Ontario, in 2017. For those that are not familiar with this terminology, it's when an individual decides to count as many bird species, they can find or hear, in a certain location, during a certain period of time. For more information on these meetings, or other dates, please pick up a copy of the programme schedule which should be ready for distribution by the time this newsletter goes to print. All the information on meetings and trips will also be posted on our website.

The field trips will commence again for this season on Saturday September 8 with a trip to the North Simcoe Rail Trail. Brian & Lynne Gibbon will be your guides on this outing. Please put some time aside and join this group, on one of many outings. They are always fun & informative. All our leaders have a wealth of experience in the natural world and they are only too happy to share this knowledge with folks.

I hope you enjoy this issue of the Blue Heron. If you would like to contribute an article or share your photos, don't hesitate to contact me.

clareholden5@gmail.com

Your Board of Directors

2018/19 Club Executive, Directors, Committee Chairs & Representatives

Position	2018/19	Home	Mobile	email
President	Dorothy McKeown	705-735-0767	705-817-9572	dorothy.mckeown@gmail.com
Vice-President	David Walsh	705-424-0356		davidwalsh@sympatico.ca
Past President	Alex Mills	705-739-1094		
Secretary	Jim Coey	705-252-0277	705-543-1866	jamescoey37@gmail.com
Treasurer	TBA			
<u>Directors</u>				
Conservation	Al McNair	705-737-3388	705-331-5743	alcappella@rogers.com
Education and Displays	Gwen Petreman	705-722-5377		gwenpetreman@gmail.com
Field Trip Coordinator	Jim Coey	705-252-0277	705-543-1866	jamescoey37@gmail.com
Meetings Program	Alex Mills	705-739-1094		
Membership	Judy Watson	705-984-4866		jw1686@hotmail.ca
Newsletter Editor	Clare Holden	705-722-6447		clareholden5@gmail.com
Ontario Nature	Chris Evans		705-722-1136	chrisgevans55@gmail.com
<u>Committee & Project Chairs</u>				
Publicity	Paul Forde	705-725-0750		58Forde@gmail.com
Social	Christine Beggs	705-721-6842		christinecarterbeggs@gmail.com
Welcoming	Claude Cox	705-737-2272		c.cox@sympatico.ca
Project SwiftWatch	Phyllis Tremblay	705-737-2580		petremblay@rogers.com
Bluebird Trails	Dorothy McKeown	705-735-0767	705-817-9572	dorothy.mckeown@gmail.com
Christmas Bird Count	Chris Evans		705-722-1136	chrisgevans55@gmail.com
<u>Club Reps & Liaisons</u>				
LSRCA & Barrie Creeks Project	Gwen Petreman	705-722-5377		gwenpetreman@gmail.com
MTM Conservation	David Eales	705-721-8174		eales@sympatico.ca
North Simcoe Rail Trail	Lisa Levez Bordeleau		705-309-1528	theearthshiring@gmail.com
Helen Emery Award/ Georgian College	Lynne Gibbon	705-721-4599		lgibbon@sympatico.ca

Aims of the Club

- To acquire and disseminate knowledge of natural history
 - To protect and preserve wildlife
 - To stimulate public interest in nature and its preservation
- For membership details see back page*

Coming Events - Meetings *Sept 2018–Jan 2019*

MEETINGS are held at the NORTH WEST BARRIE UNITED CHURCH (NWBUC) 464 Ferndale Drive North on scheduled, Friday nights unless otherwise stated. **Please bring your own coffee mug to help reduce garbage.**

NON MEMBERS are welcome to participate in our activities.

Becoming a member will support club activities and Ontario Nature through our Federation club status.

Please note that if you have questions regarding any outing or event, check the website. www.naturebarrie.com or Nature Barrie Facebook Group Events and Discussion sections.

Sept. 12 Wednesday 2018 This year's Annual Joint Meeting

Location: The Carden Recreation Centre,
258 Lake Dalrymple Rd

Time: 7:00pm

Speaker: Matt Lieberknecht
who will speak on the topic of Falconry.

This is our annual joint meeting with our neighbouring clubs.

Each Club will present a brief activity summary of their year, followed by current events in Carden. Matt Lieberknecht will then give his presentation.



Oct. 12 Friday 2018 Birder Murder Mysteries

Location: North West Barrie United Church (NWBUC)
464 Ferndale Drive North, Barrie

Time: Doors open at 7:00pm. Presentation at 7:30pm.

Speaker: Steve Burrows

Oshawa resident **Steve Burrows** is both an excellent writer (e.g. winner of the Nature Writer of the Year Award from BBC Wildlife) and a very competent birder. Combining the two, he's created a very successful mystery series known as the Birder Murders. He created Chief Inspector Jejeune, a Canadian birder policeman working in rural England, where he uses an unconventional approach to capture the bad guy. But there's always an ornithological element!

Nov. 16 Friday 2018 The Ontario Big Year

Location: North West Barrie United Church (NWBUC)
464 Ferndale Drive North, Barrie

Time: Doors open at 7:00pm. Presentation at 7:30pm.

Speaker: Jeremy Bensette

Jeremy Bensette woke up on January 1, 2017 with a giant task ahead: to see as many bird species in Ontario in a calendar year, preferably more than anyone else had ever seen. So began what became a modern day odyssey. Jeremy made the most of the instantaneous communications we are becoming used to in order to pursue birds as he amassed his list. From Lake Erie to the great North, and from the east and west edges as well. Jeremy found more than 340 species.

Coming Events - Meetings *Sept 2018–Jan 2019*

Dec. 15 Saturday 2018 Christmas Bird Count & Potluck Dinner

Participants must register no later than Dec. 8th. with Chris Evans via email

Location: Group Leaders will establish the meeting point & time for their group.

POT LUCK SUPPER

Location: North West Barrie United Church (NWBUC)
464 Ferndale Drive North

Time: Doors open 6pm. Meal will commence at 6:30pm.

For more information about the dinner please contact the Social Director, Christine Beggs 705-721-6842

Participants, (both beginners & experts), will be distributed among 9 groups, each with a leader. This is one of the most exciting and fun events of the year!! Teams of birders will survey a section within a 7.5 mile radius of Barrie and record individual numbers and species of birds.

A potluck supper will be held afterwards and the team results will be presented.

Please bring your own cutlery & dishes as well as a contribution to the supper.

Jan. 18 Friday 2019 Ontario Turtles – Past, Present & Future

Location: North West Barrie United Church (NWBUC)
464 Ferndale Drive North, Barrie

Time: Doors open at 7:00pm. Presentation at 7:30pm.

Speaker: Peter Mills

Turtles are among Ontario's most charismatic and recognizable animals, and are also in trouble. In fact, all eight of Ontario's native turtles have been recommended for species-at-risk status. What are these species? How did these organisms, successful for millions of years, find themselves in their current predicament? What is being done to halt and reverse these declines? Join Peter Mills to discover the answers to these questions, and explore what is in the forecast for Ontario's turtles in the years ahead.

Coming Events & Field Trips *Sept 2018 - Dec 2018*

FIELD TRIPS The Meeting point for all FIELD TRIPS will be Little Lake Parking lot (LLPL) at the far (east) end of Little Lake Road. Take Duckworth St. Northbound to just past Hwy. 400. Make a right hand turn onto J.C. Massie Way after the lights. (if coming along Cundles then make a left turn). This becomes Little Lake Road. (*see web site for map*).

NO pets please on these outings. Dress for the weather, bring sunscreen & bug repellent. Pack a lunch & water. On many trips, it is advisable to carpool to the rally point. This makes it easier for site parking & for the leaders to keep track of the participants. **It would be most appropriate to offer your driver recompense for the fuel expenses.**

FOR ALL OUTINGS PLEASE CHECK THE WEBSITE FOR CANCELLATIONS OR CHANGES!

NON MEMBERS are welcome to participate in our activities.

Please note that if you have questions regarding any outing or event, please call the trip leader or check the website. www.naturebarrie.com You may wish to phone the trip leader for details regarding length, terrain, lunch etc. Please note that on some of our outings biting insects could be a problem. In particular we need to be concerned about ticks and **Lyme disease**. Please check out the following site for tips on prevention.

<http://www.cdc.gov/features/lymedisease/>

Coming Events & Field Trips (cont.) Sept 2018 - Dec 2018

OFO YOUNG BIRDERS: OFO Young Birders field trips and workshops are for birders age 9 -19. The only prerequisites are enthusiasm and curiosity about birds. Nature Barrie supports this initiative and Brian Gibbon will host Young Birders on some off his outings. That having been said young birders and naturalists are welcome to join in all Nature Barrie activities. Parents or guardians are expected to attend with their younger boys and girls.

NOTICE TO FIELD TRIP LEADERS It is expected that you will file a report of your field trip with the Editor of the Blue Heron, Clare Holden and with the Field trip co-coordinator, Jim Coey. This creates a historical record of bird and plant populations in Simcoe County and documents increases or decreases in species. It would be appreciated if the leaders please announce the next Nature Barrie event at the conclusion of their trip.

Sept.8 Saturday 2018 North Simcoe Rail Trail

Location: Departs from LLPL

Time: 8:30 am.

Leader: Brian & Lynne Gibbon 705-721-4599

Let's see what mid autumn has to offer in flora and fauna along a favourite section of the rail trail near Mayer's Marsh. Sparrows and other hardy migrants will still be in the area including, possibly, Rusty Black-birds.

Easy walk, water & light snack, ends by 1:00 pm

Sept.15 Saturday 2017 Exploring Springwater Provincial Park

Location: Departs from LLPL

Time: 8:30am.

or alternatively at the park entrance at 8.45.am.

Leaders: Brian & Lynne Gibbon 705-721-4599

This trip has been chosen to support OFO's Young Birders initiative. We will explore some of the nature trails in the Park that winds through the woodland, where birds, fall flowers, and ferns can be found. Long pants are recommended as there is some poison ivy.

Moderate walk, ends by 1:00pm.

Water & light snack.

A small entrance fee of \$3.00 will be charged.

Sept.22 Saturday 2018 Scanlon Creek Conservation Area

Location: Departs from **SOUTH BARRIE GO STATION** Parking lot. Right side of lot on entering. We will meet there and arrange carpooling. *If it's pouring rain at the GO station, we may cancel.*

Drive is about 20 minutes to Scanlon Creek south on Yonge Street. If you wish to attend, it will be important to send Paul your cell number beforehand.

Parking at Scanlon Creek is \$6 per car.

Time: 6:30 am.

Leader: Paul Forde 705-725-0750

Wear good reliable hiking footwear and possibly a hiking pole for the hills.

This small but beautiful conservation area on the shore line of ancient Lake Algonquin is a nature lover's paradise. It is home to many species of birds and other fauna. Fall is an especially beautiful time of year in this oasis of woodland and wetland with colours starting to change and the fall migration is in full swing. It boasts a small pond and riparian habitat.

This walk is on well maintained park trails but some are on very steep hills. Down and up! People must be able to navigate this terrain. It is a few kilometers around the path. *Note: There are no washrooms along the trail and at a minimum this walk will take two full hours there and back. There are outhouses at the parking lot entrance.*

Sept.29 Saturday 2018 *Fall Ferns*

Location: Departs from LLPL

Time: 8:30am.

Leader: Alex Mills 705-739-1094

Ferns are ancient plants one of the first to adapt to life on land. They are fascinating and prolific and found in many different habitats. Ontario has many different species, from Bracken to Walking Rue. Join Alex Mills as he leads a walk through prime fern habitat near Singhamton. As a bonus the foliage on the escarpment will just be beginning to turn into its majestic fall colours. This promises to be a great outing.

Moderate walking along the Bruce Trail. Long Pants, bring snacks and water

Oct 13 Saturday 2018 *Birding Simcoe Shores*

Location: Departs from Dock Road

Meet at the City of Barrie Dock Road Municipal Parking lot at 204 Dock Road, south-east corner of Dock Road and Plunkett Ct.

Time: 9:00am.

Leader: Jim Coey 705-543-1866

We will be looking for migrants in the parks and waterfowl on the lake. Lake Simcoe has had some surprising birds over the years. Who knows what will turn up? This is a joint walk with the Ontario Field Ornithologists

Easy walking, bring snacks and water.

Oct. 20 Saturday 2018 *A fall Hike in the Copeland Forest Tract*

Location: Departs from LLPL

Time: 9:00am.

Note second meeting place at:
3rd Line off Ingram Road at 9:30 a.m.
(the first parking lot east of highway 93, near 400)

Leader: Dave Lord 705-835-6642

The walk will take approximately 3 hours. Members of the Midland-Penetanguishene Field Naturalists will be joining us. The fall colours should still be interesting, and we could see some migrant sparrows, and other birds.

Mushrooms and fungi could also be present.

Moderate difficulty walking conditions. Please bring water and snacks.

Participants are advised that this is hunting season, in the forest, and that bright clothing should be worn.

No dogs please.

Nov. 17 Saturday 2018 *Lake Simcoe Migrants*

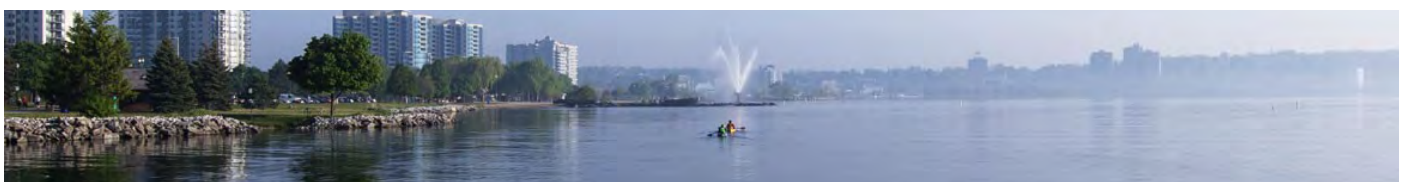
Location: Meet at the City of Barrie Dock Road Municipal Parking lot at 204 Dock Road, south-east corner of Dock Road and Plunkett Ct. (If you end up on the dock you have gone too far.)

Time: 9:00am.

Leader: Chris Evans 707-722-1136

This trip will explore the late November lakeshore along Kempenfelt Bay looking for lingering waterfowl, gulls and late migrants. We will visit The Dock Road Jetty, Tyndale Park, Minet's Point, South Shore Community Centre, Centennial Park and Barrie Marina.

Car pooling, easy walking. This can be a very cold outing so dress warmly from head to toe. Ends by 2:00 pm



Dec.8 Saturday 2018 Barrie Lakeshore

Location: Meet at the City of Barrie Dock Road Municipal Parking lot at 204 Dock Road, south-east corner of Dock Road and Plunkett Ct.

Time: 9:00am.

Leader: Jim Coey 705-543-1866

We will be looking for lingering migrants in the parks and waterfowl on the lake. Lake Simcoe has had some surprising birds over the years. Who knows what will turn up?

car pool and easy walking and usually cold.

Dec.15 Saturday 2018 Christmas Bird Count & Pot Luck Supper

Time: 8:00am. approx.

Please refer to your team leader for instructions.

Your team leaders will determine meeting places and start times and team composition.

(Please see Meetings schedule for further information)

Participants must register no later than Dec. 8th, with Chris Evans who will distribute people (Both beginners and experts) among 9 groups, each with a leader.

Co-ordinator: Chris Evans 705-721-1136

Every year NB club members and other birders join together to count the birds in a clearly defined area in and around Barrie. The area is divided into sections and each section is looked after by a leader who assigns the counters to teams and each team is given a specific area within the section. Then the fun begins.

Starting around 8:00 a.m., the count generally lasts until about 2 to 3 p.m. with a break for lunch. Afterwards counters meet to discuss results and compare notes at the pot luck supper.

Jan. 5 Saturday 2019 Christmas Bird Count for Kids (CBC4kids)

Location: Tiffin Centre for Conservation,
8195 8th. Line, Utopia

Time: 9:00 am. - 12:00 pm.

Co-ordinator: Chris Evans 705-721-1136

Come out and help us count the birds making their winter home at Tiffin! Learn about local birds and collect real scientific data at this family-friendly event.

Everyone is welcome.

Details will be found, nearer the time, at <http://www.nvca.on.ca/events-education>

Ontario Nature – Fall regional meeting

Please mark your calendars for the Ontario Nature's Huronia Fall Regional Meeting which will take place on

Saturday, November 3 at 9:30 a.m.

The hosts are Paul Harpley and the South Lake Simcoe Field Naturalists.

The location for the meeting is in the "Chapel" at the De La Salle Park, Jackson's Point, Georgina Township right on Lake Simcoe. (1940 Metro Rd. N.)

The theme for this meeting will be Lake Simcoe.



Trip Reports

May 2 2018 The Gables – Phyllis Tremblay

The mid-April snowstorm and the lingering freezing temperatures made it difficult to determine if the trails would be safe for walkers by May 2nd. Continued construction of the water and sewer lines through the park and major ongoing work to stabilize the shoreline caused me to cancel this springtime outing.

By May 2, the snow was gone, the temperature was 21°C, and the profusion of the early garden escapes was evident. With a few deviations from the usual route, the pathways were deemed safe for the 5 participants. The twittering of yellow-rumped warblers as they flitted about the woodland added to the evening's pleasure.

Plants Observed: Black Raspberry, Blue Cohosh, Canadian Yew, Celadine plants, Coltsfoot, Common Mallow, Early Meadow-rue, Garlic Mustard, Lesser Periwinkle, Long-Stalked Sedge, Motherwort, Sharp-lobed Hepatica, Staghorn Sumac, Trout Lily, Two-leafed Toothwort, Virginia Waterleaf, Wild Leek, Wild Red Raspberry & Wood Anemone.

Garden Escapes: European Wayfaring Tree, Forsythia,

Glory of the Snow, Snow Drop, Snow Flake, Spring Squill, Striped Squill and Yellow Anemone.

Bird List: 2 Canada Goose, 3 Bufflehead, 2 Common Merganser, 3 Red-breasted Merganser, 1 Osprey, 4 Ring-billed Gull, 1 Caspian Tern, 1 Belted Kingfisher, 1 Northern Flicker, 1 Eastern Phoebe, 3 American Crow, 6 Black-capped Chickadee, 1 Red-breasted Nuthatch, 1 American Robin, 3 Pine Warbler, 13 Yellow-rumped Warbler, 1 Chipping Sparrow, 2 Northern Cardinal and 4 American Goldfinch.



May 05 2018 Copeland Forest - Dave Lord

On Saturday May 5, we were blessed with having a great day, and 23 participants for our annual walk through the Copeland Forest. We concentrated on the area around the Ducks Unlimited (DU) Pond, which is of great interest owing to its abundance and diversity of wildlife. This is an area of special concern as the DU Pond is to be decommissioned and a special study will be carried out to what vital species might be affected here.

Approximately 40 species of birds, many spring ephemeral (wildflowers), turtles, and amphibians were seen.

Thanks to all, who participated, and special kudos to Clare Holden and Chris Evans for their detailed reports. Also, thanks to them, and others who helped many with the observations!

Duration: 3 hours, 30 minutes

Distance: 5. kilometers

Amphibians:

Northern Leopard Frog x11, Spring Peeper x7

Birds: (39 identified species)

American Goldfinch x6, American Robin x4, American Wigeon x4, Belted Kingfisher x1, Black-and-white Warbler x1, Black-capped Chickadee x5, Blackburnian Warbler x2, Blue Jay x21, Blue-headed Vireo x4, Brown-headed Cowbird x1, Bufflehead x2, Canada Goose x6, Chipping Sparrow x1, Common Grackle x6, Common Yellowthroat x1, Eastern Phoebe x1, Great Blue Heron x1, Gull sp.x1, Hairy Woodpecker x1, Hawk sp. x1, Hooded Merganser x4, Mallard x2, Mourning Dove x6, Northern Flicker x1, Northern Cardinal x1, Palm Warbler x5, Pied-billed Grebe x1, Pine Warbler x1, Red-winged Blackbird x24,

Trip Reports

May 05 2018 Copeland Forest (cont.) - Dave Lord

Ruby-crowned Kinglet x1, Sandhill Crane x4,
Song Sparrow x4, Swamp Sparrow x2,
Tree Swallow, Trumpeter Swan x2, Turkey Vulture
x1, Virginia Rail x1, Wild Turkey x1, Woodpecker
sp.x2, Yellow-bellied Sapsucker x1, Yellow-rumped
Warbler x6, Yellow-throated Vireo x2

Butterflies: Mourning Cloak x2

Dragonflies: Common Green Darner x3

Mammals: Chipmunk x1

Plants: Carolina Spring Beauty, Clubmoss, Coltsfoot,
Marsh Marigold, Yellow Trout-lily

Reptiles: Midland Painted Turtle x13, Snapping
Turtle x1



Group photo by Chris Evans

May 12 Spring migration at Tiny Marsh – Don Scanlan



photos courtesy of Paul Forde

8 hours starting May 12, 2018 @ 7:30 AM and ending
May 12, 2018 @ 3:30 PM

Amphibians: Green Frog x1, Spring Peeper x2

Birds: Canada Goose x32, Mute Swan x1, Trumpeter
Swan x1, Wood Duck x4, Mallard x3, Northern Shoveler
x2, Hooded Merganser x2, Ruffed Grouse x1, Pied-billed
Grebe x4, Mourning Dove x1, Ruby-throated Humming-
bird x1, Virginia Rail x3, Sora x1, Sandhill Crane x7

Killdeer x1, Solitary Sandpiper x3, Greater Yellowlegs x1
Ring-billed Gull x30, Caspian Tern x1, Double-crested
Cormorant x2, Great Blue Heron x9, Turkey Vulture x4
Osprey x2, Broad-winged Hawk x1, Snowy Owl x1
Belted Kingfisher x1, Yellow-bellied Sapsucker x1
Downy Woodpecker x4, Hairy Woodpecker x1
Northern Flicker x1, American Kestrel x1, Least Fly-
catcher x5, Eastern Phoebe x1, Great Crested Flycatcher
x3, Eastern Kingbird x5, Yellow-throated Vireo x1,
Warbling Vireo x6, Blue Jay x26, American Crow x2
Tree Swallow x6, Barn Swallow x3, Black-capped Chick-
adee x7, Red-breasted Nuthatch x2, White-breasted
Nuthatch x1, Brown Creeper x3, House Wren x1,
Marsh Wren x2, Blue-gray Gnatcatcher x2, Eastern
Bluebird x1, American Robin x3, Gray Catbird x4,
Brown Thrasher x1, European Starling x3, Purple Finch
x2, American Goldfinch x2, Ovenbird x1, Blue-winged
Warbler x1, Black-and-white Warbler x2, Nashville
Warbler x4, Common Yellowthroat x5, American Red-
start x6, Cape May Warbler x1, Northern Parula x2
Magnolia Warbler x1, Blackburnian Warbler x1,
Yellow Warbler x7, Black-throated Blue Warbler x1,
Palm Warbler x1, Pine Warbler x2, Yellow-rumped
Warbler x3, Black-throated Green Warbler x3, Chipping
Sparrow x1, Savannah Sparrow x1, Song Sparrow x3
Swamp Sparrow x9, White-crowned Sparrow x1
Rose-breasted Grosbeak x1, Red-winged Blackbird x55,

May 12 Spring migration at Tiny Marsh (cont.) – Don Scanlan

Eastern Meadowlark x1, Common Grackle x7, Brown-headed Cowbird x1, Baltimore Oriole x1.

Butterflies: Mourning Cloak x1, Northern Spring Azure x1

Dragonfly: Common Green Darner x1

Reptiles: Eastern Garter Snake x1 , Midland Painted Turtle x9



May 16 Little Lake Area - Phyllis Tremblay

It was a chilly, but sunny morning at 4°C for the 16 participants, eventually warming up to 24°C during the 5-hour hike to visit the south and north sides of Little Lake Park. Despite the cool late spring, white trilliums were at their peak, blanketing the south facing slope on the north side of Little Lake.

64 bird species were identified. Bird migration was still underway, and we were able to see 14 warbler species, most with good views. The Bay-breasted Warbler was the highlight. Six woodpecker species were identified, and they likely nest in this park.

As the field trip was getting underway, a Red Fox strolled through the parking lot, (LLPL). Other mammals seen were 5 Eastern Chipmunks and 1 Red Squirrel.

One American Lady, and 2 Spring Azure Butterflies were noted. Dragonflies: Green Darner and a species from the Emerald group.

Plants Identified:- Blackberry, Blue Cohosh, Bitter Dock, Coltsfoot, Common Burdock, Common Cattail, Common Dandelion, Common Mullein, Creeping Charlie, Ferns:- Northern Maidenhair, Ostrich & Sensitive; Horsetail Family:- Dwarf Scouring Rush, Field Horsetail & Scouring Rush; Jack-in the pulpit, Garlic Mustard, Herb Robert, Kidney-leafed Buttercup, Large-flowered Bellwort, Lesser Celandine, Marsh Marigold, Mayapple in bud, Moneywort, Motherwort, Poison Ivy, Red Trillium, Red-berried Elderberry, Red-osier Dogwood, Sedges:- Long-stalked and Plantain-leaved; Sharp-lobed Hepatica, Solomon's-Seals:- False, Giant, Hairy & Starry False; Spotted Touch-me-not (seedlings), Squawroot, Stag-horn Sumac, Trout Lily, Two-leaved Toothwort, Violets:- Canada, Dog, Downy Yellow & Woolly Blue; Virginia Waterleaf, White Trillium, Wild Columbine, Wild Ginger, Wild Leek, Wild Lily-of-the-Valley, Wild Sarsaparilla, Wild Red Raspberry, and Wood Betony.



Bird List: Canada Goose, Mallard, Greater/Lesser Scaup, Bufflehead, Common Merganser, Common Loon, Double-crested Cormorant, Great-blue Heron,

May 16 Little Lake Area (cont.) - Phyllis Tremblay

Spotted Sandpiper, Turkey Vulture, Osprey, Broad-winged Hawk, Red-tailed Hawk, Killdeer, Spotted Sandpiper, gull species, Caspian Tern, Ruby-throated Hummingbird, Red-bellied Woodpecker, Yellow-bellied Sapsucker, Downy Woodpecker, Hairy Woodpecker, Northern Flicker, Pileated Woodpecker, Eastern Wood Pewee, Least Flycatcher, Great-crested Flycatcher, Eastern Flycatcher, Warbling Vireo, Red-eyed Vireo, Blue Jay, American Crow, Tree Swallow, Black-capped Chickadee, Red-breasted Nuthatch, White-breasted Nuthatch, Veery, Wood Thrush, American Robin, Gray Catbird, Ovenbird, Northern Waterthrush, Nashville Warbler, Common Yellowthroat, American Redstart, Northern Parula, Bay-breasted Warbler, Blackburnian Warbler, Yellow Warbler, Chestnut-sided Warbler, Palm Warbler, Black-throated Blue Warbler, Yellow-rumped Warbler, Black-throated Green Warbler, Chipping Sparrow,

White-throated Sparrow, Song Sparrow, Swamp Sparrow, Northern Cardinal, Rose-breasted Grosbeak, Indigo Bunting, Baltimore Oriole, Red-winged Blackbird, Common Grackle, and American Goldfinch.



The Rescued Baby Turtle by Bill Hester

May 26 Birding Barrie – Alex Mills



About a dozen members and guests came out to search for late spring birds within city limits.

We began at Little Lake, with a stroll down the lane to the shore. The place was in full song, and we had good looks at quite a few birds, most notably a Baltimore Oriole nest being built, and a freshly built Warbling Vireo nest from which the male was singing heartily. Yellow Warblers and American Redstarts were plentiful.

We had two target spots other than Little Lake. One was the Ardagh Bluffs and the other was Bear Creek Eco Park. Since it was already past 8:30 and Ardagh Bluffs birding depends largely on song, we headed there first. We had great excitement almost right away, as a Kentucky Warbler, which is extremely rare this far

north, was singing from low levels in dense shrubbery and brush in the creek bottom that the trail follows. We never got a good look at the bird, but we did get the word out, and a couple of Barrie area birders did manage to see it later in the day. (It was not there on May 27th). Likely, this was what ornithologists call an "overshoot," so perhaps that night he headed back south where he belongs. We enjoyed other bird music as we walked through this great forest reserve:

Wood Thrush, Yellow-throated Vireo, Brown Creeper, Eastern Wood Pewee, and Black-throated Green Warbler among others.

The day was getting hot, but we persevered and headed to Bear Creek. More orioles were in evidence there, and some of us had a good look at a Wilson's Warbler, a late migrant. We also saw Rough-winged Swallows here and several other summer residents, including Grey Catbird, Swamp Sparrow, and Common Yellowthroat. We quit just about noon.



Kentucky Warbler

Geothlypis Formosa

Photo credit to Brian E. Small

May 26 Wooing Whip-poor-wills – Alex Mills

Alex Mills has been pursuing Whip-poor-wills in one way or another since the 1980s, and he continues to be interested in what they do. His current project requires capturing them and outfitting them with a tiny device that is a gps logger. The data obtained is used to reconstruct migration routes and to answer questions about habitat choice and landscape use.

We headed out to Anne Street at evening twilight to try to catch one. Although we heard several Whip-poor-wills (and briefly saw one), it was not a successful night. Our sound system did not produce the volume necessary to bring in birds from afar. However, that's the nature of nature, and also the nature of research! While we pursued our quarry, we did enjoy the evening flight displays of an American Woodcock, and we also heard a Field Sparrow singing in the moonlight. Perhaps we'll try again in 2019, since Alex has been putting new tags on birds this spring.



Photo credit to US Army Corps of Engineers

May 26 LSRA Tree Planting - Gwen Petremen



Saturday, May 26 turned out to be a perfect day for tree planting, with lovely sun for the grunt work and rain in the forecast for nighttime.

Last year, with the help of dozens of volunteers, we planted about 300 potted native saplings, 200 live Willow, and Red Osier Dogwood cuttings at Willoughby Park.

This year we continued to transform the former baseball field (it became too wet for sports activities) into a thriving woodland.

In partnership with LSRA and the City and with the help of 30 eager Boy Scouts we added more native saplings such as Cedars, Willows, and Red Osier Dogwood.

Everyone was pleased to know that they all had a small part in providing food, shelter, protection, and nesting materials for birds, as well as, helping to mitigate the devastating effects of climate change.

It is interesting to note, that in research done at University of Guelph, that it was discovered that Willow trees will clean contaminated soil.

So right now the University has planted hundreds of Willows at their test site of contaminated soil to determine the effectiveness of earlier findings.



Photos provided by Gwen Petremen

June 3 Oro Rail Trail Flora & Fauna – Brian Gibbon

Five people joined me for the walk we stopped first at the Heronry on the 5th/6th Side Road where we found the nests are pretty much abandoned. There was a female Gadwall swimming about. Over all it was not the greatest birding day. The weather was sunny but cool.

BIRDS: 21 species

Indigo Bunting, Common Yellow Throat Warbler, Black-capped Chickadees, Great Blue Heron, Mourning Doves, American Robin, Common Grackle, Red-winged Blackbird, Yellow Warbler, Eastern King Bird, Blue Jay, American Crow, Hairy Woodpecker, Gadwall Duck, Great-crested Flycatcher, American Goldfinch, Ruby-throated Hummingbird, Common Raven, Gray Catbird, House Wren, and Field Sparrow.

PLANTS: Poison Ivy, Honey Suckle, Common Mullein, Milk Weed, Wild Columbine, Garlic Mustard, Wild Strawberry, Dog Strangling Vine, Buttercups, Goat's Beard, and Dandelion.



Yellow Warbler by Jim Charlebois

June 06 Eastern Bluebird Nest Box Trail



This year's Bluebird Trail outing was well attended by club members and other interested folks from the community. It turned out to be a beautiful sunny evening with pleasant temperatures.

The walk started at the Seadon area mailboxes with a talk from Dorothy regarding the care & maintenance of the birds & boxes. A lot of questions were asked and answered as folks were captivated by these hardy little

birds.

From the parking lot it was decided that we walk the fence line alongside the Barrie Hill property, where there were Raspberry canes and Asparagus plants. The first box we opened contained 4 Bluebird chicks which were already getting their blue tinged feathers. The next two boxes contained Swallow eggs & Chicks respectively. Then another box of Bluebird chicks that were recently hatched.

Everyone got a really good sampling of both species of birds, in various stages of development and were also able to see the different methods of nest building that are employed.

Since, we had spent a considerable amount of time at the boxes and it was getting late, it was decided not to proceed to another area. We also did not wish to disturb any more nestlings than was necessary.

All birds, young & old were given a tasty treat of mealworms as a thank you for being so patient with us.

June 9 Birding on the Carden Alvar – Brian Gibbon

Saturday June 9th was sunny with light intermittent wind, temperature at 7:30 am – 13C and at 4:00 pm – 18C. Ten people joined me for the trip.

BIRDS: 63 species.

Yellow Warbler, Alder Flycatcher, Eastern Meadowlark, Common Yellowthroat Warbler, Warbling Vireo, Veery, Baltimore Oriole, Swamp Sparrow, Red-winged Blackbird, Great-crested Flycatcher, Eastern Wood Peewee, Red-eyed Vireo, Willow Flycatcher, House Wren, Brown Thrasher, Savannah Sparrow, Song Sparrow, Barn Swallow, Tree Swallow, Eastern Kingbird, Mourning Dove, Green Heron, Mallard Duck, American Robin, Canada Geese, America Kestrel, Northern Flicker, Common Grackle, Eastern Bluebird, House Wren, Vespra Sparrow, Field Sparrow, Gray Catbird, European Starling, Blue Jay, Common Raven, Turkey Vulture, American Redstart, Wilson's Snipe, Merlin, Chestnut-sided Warbler, Eastern Kingbird, Lesser Flycatcher, Ring-billed Gull, Belted Kingfisher, Red-tailed Hawk, Rose-breasted Grosbeak, Oven Bird, Sedge Wren, Grasshopper Sparrow, Killdeer, Chipping Sparrow, Chimney Swift, Cedar Waxwing, Northern Water Thrush, Nashville Warbler, Eastern Towhee, American Crow, Downey Woodpecker, Rock Dove, Osprey, and American Goldfinch, Turkey.

A highlight was a mother turkey on her nest down in some long grass and reeds just beyond the road boundary fence.

Phyllis Tremblay kindly provided a list of a few of the plants we saw and she identified along the way. Thank you Phyllis it is always great having a botanist with us on the outings.

PLANTS:

Fragrant Sumac, Shrubby Cinquefoil, Balsam Ragwort, Field Chickweed, Harebell, Indian Paintbrush, Hairy Beard-Tongue, Prairie Smoke, Tall Cinquefoil, Long-leaved Bluet, Upright or Low Bindweed, Cow Vetch, Canada Anemone, Blue-eyed Grass, Tall Meadow-rue, Common Buttercup, Birds-foot Trefoil, Poison Ivy.



Prairie Smoke aka. 3 Flowered Avens

June 23 Tiny Marsh Bioblitz Results

This years bioblitz was held on June 23 from 6am to 4pm. There were approximately 100 folks in attendance.

The weather consisted of light rain showers in morning, overcast in afternoon, 15 – 20 degrees C.

The locations surveyed were:

Concession 3 (Birds), Concession 2, East Canal, Carolina dyke (Birds), Trotter dyke, Carolina dyke (Waterfowl/birds), Visitor Centre to boardwalk, to Mole Mountain (Birds, Plants, Insects, Butterflies, Dragonflies), North west corner of Tiny Marsh (Plants), Trotter dyke (fish, insects), south west side of Tiny Marsh in fields (Insects, Butterflies), north east side of Tiny Marsh (Insects, Butterflies)

A total of 311 species were recorded:

134 Plants, 80 Birds, 12 Odonata, 11 Butterflies & Moths, 5 Reptiles and Amphibians, 8 Mammals, 7 Fish and Crustaceans, 54 Insects

The Afternoon Indigenous Outings were led by Gary Pritchard, a member of Curve Lake First Nation. Gary spoke about the use of Wetlands, on the Trotter dyke.

While Jake Charles, from the First Nation of Georgina Island spoke about first Nations Gardens in the: pollinator garden behind maintenance shed and boardwalk.

These walks were designed for teaching the many uses of plants that Indigenous people would have used, and continue to use, for food, shelter and healing

Monitoring Reports

2018 Swiftwatch by Phyllis Tremblay



This is the 10th year that the SwiftWatch Team, coordinated by Phyllis Tremblay and Inga Brinckmann with guidance from Bird Studies Canada has been monitoring the Chimney Swift population in the Barrie area. This involved the participation of dedicated volunteers both from Nature Barrie and the community.

Chimney swifts were observed in Barrie on May 2 and that evening at sunset, 18 chimney swifts entered the Barrie Central Collegiate, (BCC) chimney which became a “stand alone” chimney after most of the school was demolished. HIP Developments Inc. agreed to save this chimney for roosting and nesting chimney swifts. This chimney was the most significant roost during the spring monitoring blitz and early summer. By May 4, two signs describing chimney swift habitat were produced and installed by the City of Barrie on the chain-link fence on Bradford and Dunlop Streets.

A data logger which measures heat and light intensities was installed on May 8th in the Unity Christian High School chimney by Chris Evans and Ruth Noland-Flores. Our observations indicated that chimney swifts likely nested there this season.

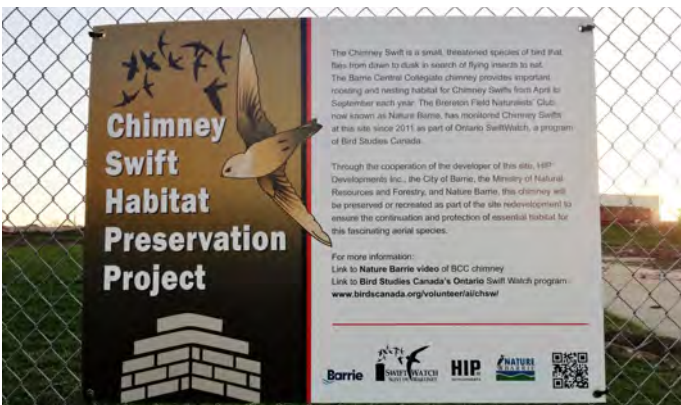
The National Population Roost Monitoring Blitz counts were performed on May 13, 17, 23, 27 and June 4 at all 5 Barrie communal roosts, as reported in the table below.

The SwiftWatch Team made 114 visits to 39 chimneys, both to previous known active and potential sites to monitor the presence or absence of chimney swifts at each location. Two new sites were identified in Barrie giving us a total of 24 active chimneys plus the 3 sites in 3 other communities – Elmvale, Guthrie, & Minesing. Monitoring population levels at Barrie’s known roosts is a mystery during the local fall migration. They have a tendency to “roost hop”, and by August the swifts relocated from BCC “stand alone” chimney to The Main Barrie Roost and The Jail. By August 30, a few swifts were still present at these 2 downtown roosts.

SwiftWatch Promotion

Updates of chimney swift news and information were announced at club meetings and in March a video prepared by Clare Holden was presented to help recruit volunteers. Volunteers are so important to monitor occupied chimneys both during the national blitz and the entire season and their participation is critical for the success of this program.

All data has been submitted to Bird Studies Canada and Inga has prepared a spread sheet for Nature Barrie.



Results of 2018 National Population Roost Monitoring Blitz Counts

Chimney Location	13-May	17-May	23-May	27-May	31-May	04-Jun
Main Roost	4	3	2	7	6	2
Roost B	2	0	3	2	2	0
Barrie Central Collegiate	33	58	90	106	81	48
Unity Christian High School	0	2	2	1	2	0
The Jail	1	2	2	3	2	0

The Copeland Forest Ducks Unlimited pond - Dave Lord

The Ducks Unlimited Pond is located in the northwest quadrant of Copeland Forest and the closest access point is Parking Lot P1. Much of the area around the pond is only accessible by water, but it is an enjoyable short walk west from the parking lot. This pond is scheduled for decommissioning in the next year or so.

Copeland Forest Friends Association is doing a study of species that may be at risk in and around this pond. At the present time they have two volunteers from the Couchiching Conservancy doing an amphibian survey, using protocols established by the Marsh Monitoring Program.

Chris Evans from our Nature Barrie club will take a canoe into the pond and he will be looking for species which might fall into the at risk category. His focus will be on everything including birds, reptiles, insects etc. Chris is an excellent naturalist and has great experience in many areas.

Dave Lord, the Copeland Naturalist rep. on the Board of Directors made a trip or two in June, and his main focus was birds which he identifies by song. Dave will also monitor the wet area on the Third line (runs directly south from P1), as the lowering of the DU pond impacts this zone.

It should be emphasized that they are not doing a bio blitz; the focus is on at risk species.

Volunteers are always welcome. Please contact Dave Lord at 705-835-6642, or by email davelo@sympatico.ca.

This is a continuing program, and we intend to involve as many interested people as possible



Degrees of Protection

Have you ever wondered about the meaning of initials attached to designated area?

87% of Ontario is **crown land**, primarily administered by the provincial government

Provincial parks and Conservation reserves

Areas in which resource management is largely outlawed (logging in Algonquin Park being a notable exception). They safeguard less than 10% of Crown land. In the rest, representing more than three-quarters of Ontario, the provincial government allows logging, tourism, energy projects, staking of mining claims and other forms of development. Crown land is occasionally sold to private buyers

Provincially designated Areas of Natural and Scientific Interest (ANSIs)

Highlight unique biotic communities and rare geological features and are often on private land.

Provincial Wildlife Areas (PWAs)

Reflect important habitat

Neither of the previous 2 designations provides legal protection from development and ecological impacts

Important Bird and Biodiversity Areas (IBAs)

They are designated on the basis of internationally agreed criteria but carry no legal protection. However, they focus attention on these lands and waters to help them get the protection they need.

National Wildlife Areas (NWAs)

Is a federal designation that permits hunting but outlaws some industrial development. The rules are not as strict as for a national park

Natural Marine Conservation Areas (NMCAs)

Afford similar protection for marine habitats and in them activities such as off-shore drilling are banned. Fishing and shipping in designated areas are allowed.

Information provided from an article in

Ontario Nature Magazine by Conor Mihell

Birds and Native Trees – Gwen Petremen

Now more than ever we need to plant as many trees as possible.

For the first time in our history on Earth, every citizen of every country faces a global crisis; namely, ever increasing global warming which is triggering dramatic changes in our climate.

Trees play a vitally important role in mitigating the devastating effect of climate change such as famine-producing droughts, out of control forest fires, deadly flooding, rising sea levels, melting polar caps, release of methane and life threatening bacteria from the melting of perma frost, desertification of fertile lands and the acidification of our oceans.

As well, trees reduce our energy costs and vastly reduce our soaring health care costs.

By planting a forest of native trees we will all reap the benefits of cleaner air, as the billions of hairs on the leaves of trees trap dust, dirt, and nasty pollutants such as lead, mercury, and sulphates.

Trees provide a safe habitat for numerous forms of animals and birds.

brates, while non-native species of trees were virtually devoid of the aforementioned arthropods.

As well, non-native trees hardly have any insect bite marks suggesting that that they are inedible.

Home owners like the idea of pest - free trees.

Any urban areas, that are forested by mostly non-native trees, are detrimental to birds that rely on invertebrates found in native trees.

Davies observed, while developing his thesis, that birds that landed on a non-natives such as a Norway Maple flew off immediately, as there was no food to eat.

However, birds that landed on a native species such as a Silver Maple, would stay and forage on the invertebrates.

So we can all contribute to the preservation of our feathered friends, by planting as many native trees as possible on our private property and in public spaces.

Seeing that we are a key community partner with Lake Simcoe Region Conservation Authority, I hope that as many members of Nature Barrie as possible, will make a concerted effort to participate in the native tree planting event on

**October 20 from 10-12
at Barrie disc golf course.**

Refreshments and shovels will be provided but bring your own gloves.

Submitted by Gwen Petremen
Education and Tree Planting Coordinator
Nature Barrie



Warbler photo provided by Jim Charlebois

Whenever, we participate in tree planting with LSRCA we always plant native trees.

Many of our members are passionate about birds and our club is actively engaged in number of birding initiatives to protect and preserve bird species. It might be of interest to learn about the vitally important role native trees play in feeding our bird populations.

Eric Davies, a PhD candidate from the University of Toronto, discovered that native trees support a myriad of pollinators, moths, beetles and other inverte-



Cardinals on Bittersweet photo by Phyllis Tremblay

Nature Notes

The Boreal Owl

Boreal owl *Aegolius funereus*

Population Status: Least Concern,

Body Length: 8-11 in (22–27 cm)

Wingspan: 20-24 in (50–62 cm),

Weight: 3-7 oz (85-198 g)

Simcoe County, more specifically, South Elmvale, was happy to play host to one of these small owls this past spring. Deep in the forest, about 1.5 km. from a county rd. It was spotted by forest surveyors, who realised that they had come across something a little unusual, while performing an inventory of the area. It appeared to have been there for a while, due to the amount of white markings on the tree trunk.



photo by Lane Henderson

Boreal Owls are circumpolar. They make their home in the northern reaches of North America, including Alaska and Canada and the northern regions of Eurasia. They are not normally migratory, though some populations will move south in colder months. Similar to the Snowy Owl, they will also occasionally irrupt.

They prefer deciduous forest habitats, which are carpeted with tall trees such as pine, birch and spruce. They enjoy roosting in dense coniferous trees that offer protection from inclement weather and make them harder for predators to see and capture.

The Boreal Owl certainly ranks among the world's cutest owls. Less than a foot tall, it is a rather smallish owl with large yellow eyes, a chocolatey brown body with white mottling, dark feathers which line its facial disk, and white spots on its head. The female Boreal Owl is

much larger than the male. The species shows the most extreme reversed sexual dimorphism of any American owl. Like other owls, the ends of the Boreal Owl's flight feathers are very soft and feathery, giving it the ability to fly in absolute silence, because the air doesn't make noise as it passes through the soft feathers. This helps them to be very stealthy hunters.

The oldest recorded Boreal Owl was a male, and at least 8 years old when it was recaptured and rereleased during banding operations in Idaho.

The Boreal Owl finds its prey by sound. It can locate mice even through vegetation and under snow. The ear openings on the skull are asymmetrical, with one opening high up on the skull and the other much lower. The different positions of the holes help the owl find exactly where a sound comes from, helping gauge height as well as distance. They tend to hunt from a stationary position, watching for prey from a strategic perch. They will pounce on their prey, grabbing and killing it with their feet. Though their food of choice is voles, they will also eat just about anything that is catchable and the right size. The Boreal Owl is strictly nocturnal. However, the 24-hour light period during the summer at the northern extent of their range, this small owl has no choice but to go about its hunting during the day.

Boreal Owls usually are considered monogamous, with one male mating with one female. They will occupy old woodpecker holes or other natural tree cavities, laying their eggs on the natural substrate within these holes. After the male locates a suitable nesting cavity, he needs to find a female. To gain her attention, he will leave food inside the potential nesting cavity. If the female likes the nesting spot and the food, she will stick around and will lay between 3-6 eggs. The female is responsible for incubating the eggs, for about a month. During this time, the male will bring her food. When the chicks hatch, they are very fluffy and don't open their eyes for the first time until they are over a week old. After only about 5 weeks, the young will fledge. After another month or two, the young will become independent of their parents.

It was hoped that this owl might be tempted to nest in our area. However, it left the forest for places further north, after a few days of rest.

The Helen Emery Award - Lynne Gibbon

The Helen Emery Award for \$1000 was given to Marcus Remonde in 2018. He is a third year student in the Environmental Studies programme at Georgian College.

The Brereton has given this award since 2012. Helen Emery was a past-president of the Brereton, held a number of other offices on the executive over the years. She was an expert birder and was well versed in plant identification. She passed away in 2011 and bequeathed \$10,000 to the club in her will.

A committee was then formed, chaired by Lynne, to determine what to do with the funds. It was felt that since she was a teacher, she might prefer that the money support a student in an environmentally related programme. After a few months of research and contacting various universities and colleges in the area, it was decided to present the funds to a student in the final year of the Environmental Technology Program at Georgian College. The Georgian Foundation met the amount with an additional \$10,000. The interest from this fund of \$20,000 is now used to present an award to a student that demonstrates an interest in the protection of our natural heritage and supports our aims to acquire and share knowledge of natural history, to protect wildlife and to stimulate public interest in nature and its preservation.

Students must apply for the award by the end of March and the suitable candidate, who meets the award criteria, is decided on by a vote of the executive. The award provides awareness of the club and its goals and hopefully brings new naturalists to our membership.

Nature Barrie (Brereton Field Naturalists') is represented on a donor wall at Georgian, located on the main floor of C building. This gives the Club further publicity. The award is presented each year at Georgian's Awards Ceremony.

The following photo & letter were provided by Lynne. The photo is of Lynne with Marcus at the Georgian College awards ceremony.

Marcus has kindly given us permission to publish his thank you letter and wishes to let us know that he has signed a contract with the Regional Municipality of York for an 8 month Co-op position as a Water Operator.



Dear Ms. Lynne Gibbon,

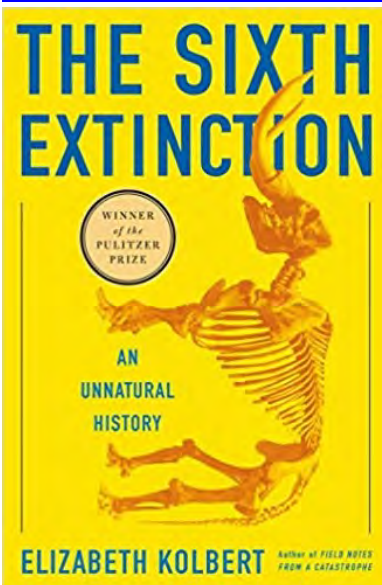
I cannot express how much this award nomination means to me and my education. I am deeply honored and appreciative. The past two semesters at Georgian College have been challenging, with my last occurring this summer.

There are few passions that outweigh the one I have for Mother Earth and our natural environment. Being outdoors and enjoying the synchronicities surrounding us is a major part of my life and I hope this is a passion in which you share. I believe conservation and preservation are crucial practices in our day and age and I hope my generation can strive to set new precedents in this regard.

These awards are incredibly helpful to students everywhere and I know I speak for both the college and my fellow cohorts when I express my sincere and deepest thanks. It is the generosity of people such as yourself who help this country and its future generations to succeed. You inspire hope, courage and kindness for those in need and I intend to pass on these traits in all of my future endeavors.

Yours Sincerely,
Marcus Remonde

Book Review - The Sixth Extinction by Elizabeth Kolbert



The Sixth Extinction An Unnatural History

By Elizabeth Kolbert
*author of Field Notes
and From a Catastrophe*

Published by Henry
Holt and Company, LLC

2014

ISBN 978-0-8050-9299-
8 (hardcover)

The subject matter in this book is well researched and documented. The back of the book contains notes on each chapter, as well as a comprehensive bibliography

The book begins with a fascinating description of the golden frog, originally found in Central Panama near the Costa Rican border. In some areas, they were so plentiful as to be almost impossible not to step on. However, in the 1980's the population began to decline rapidly. Not only were the golden frogs disappearing, but so were many other species of frogs.

Over time, it was discovered that a type of Chytrid fungus, never before identified even at the genus level, was responsible for the death of these amphibians. The Chytrid fungus, *Batrachochytrium dendrobatidis* has since spread to Columbia, New Zealand, Tasmania, parts of Australia, the Caribbean, Italy, Spain, Switzerland, France, many parts of the US and Canada. In fact, it is found on every continent except Antarctica. Where did this fungus come from? How is it spreading so rapidly? The answer to this issue and other extinctions is discussed throughout the book.

The once huge population of golden frogs is now considered extinct, save for a few saved and carefully raised examples at the highly isolated and protected El Valle Amphibian Conservation Center (EVACC). Many other species have faced or are facing the same fate. Only a few species of frogs seem to be immune.

The golden frog is an example a species that has become extinct recently. The little brown bat of North America has also been decimated by 90 percent in recent years. The book proceeds to explain how difficult it was for scientists in the eighteenth and nineteenth cen-

turies to accept the concept of extinction. But at least they grappled with the concept. The idea of extinction did not even occur to those who had studied nature prior that time, despite the evidence of large mysterious bones and fossilized remains around them. Aristotle wrote a ten volume History of Animals without ever considering the possibility of animal extinction. Pliny wrote Natural History which described real and fabulous animals that existed in his time, but no descriptions of extinct ones. But Cuvier, of France, published in 1812, "*Recherches sur les ossements fossiles de quadrupèdes*" four volumes large, explaining his research on fossils. This was followed by a paper in which he explained his ideas on how the earth was periodically wracked by cataclysm. His secular essay cited references from the Vedas, the Bible and the Shujing. Being from France, his work was written in French.

The Anglican clergy at Oxford, ignored the references and when the work was translated into English, construed it as proof of Noah's flood.

Gradually the idea of extinction became more acceptable – the evidence was becoming overwhelming. But the prevailing thinking was that animals only became extinct one at a time – cataclysms just did not occur.

In 1980 Walter Alvarez and his father Luis Alvarez published Extraterrestrial Cause for the Cretaceous-Tertiary Extinction. This is the famous paper that claimed that at least one previous extinction had been caused by an asteroid that had crashed into earth. The paper was not well received and the Alvarez's had to endure a good share of mocking for eleven years. Paleontologists, in particular, disdained his paper. In 1991, however, cores taken from a crater in Mexico contained a layer of glass – which could only be formed from rock heating and cooling very quickly – at the Cretaceous-tertiary boundary. The multiple effects of the impact were so widespread that every creature larger than a cat appears to have been decimated worldwide. The evidence was so rock solid (no pun intended) that the Alvarez's claim came to be approved.

The book continues to explore additional extinctions, including coral worldwide. The news is dismal. It also discusses the importance of diversity. For example, islands of any kind – whether they are islands of land

Book Review - The Sixth Extinction

surrounded by water, or islands of trees surrounded by fields have lower levels of diversity, When land islands are created, even if the space between the islands is only a short distance, diversity within those islands will decrease and extinction of various animals from insects to mammals can occur.

Aside from the previous five massive extinctions that have occurred since the earth was formed, what has caused multiple extinctions in the last 50,000 years?

And why is it increasing so phenomenally rapidly? How soon will the next complete mass extinction be – or is it occurring now? The answer is convoluted and a little complex, but there is one species on earth that is most responsible. Can you guess what name of that species might be?

Reviewed and Submitted by NoraShipley

Answer: suæides owøH

Curious Critters - The House Centipede (*Scutigera coleoptrata*)

House Centipedes are found in almost any part of the house, but most commonly they are encountered in basements, bathrooms, and lavatories, which tend to be humid. The greatest likelihood of encountering them is in spring and fall when they come out because the weather changes.

In 1902, C. L. Marlatt, an entomologist with the United States Department of Agriculture, wrote a brief description of the house centipede:

It may often be seen darting across floors with very great speed, occasionally stopping suddenly and remaining absolutely motionless, presently to resume its rapid movements, often darting directly at inmates of the house, particularly women, evidently with a desire to conceal itself beneath their dresses, and thus creating much consternation.

House Centipedes feed on spiders, bed bugs, termites, cockroaches, silverfish, ants, and other household arthropods. They administer venom through forcipules. These are not part of their mandibles, so strictly speaking they sting rather than bite. They are mostly nocturnal hunters. Despite their developed eyes, they seem to rely mostly on their antennae when hunting. Their antennae are sensitive to both smells and tactile information. They use both their mandibles and their legs for holding prey. This way they can deal with several small insects at the same time. To capture prey, they either jump onto it or use their legs in a technique described as "lassoing".

They can live anywhere from three to seven years and can start breeding in their third year. To begin mating,

the male and female circle around each other. They initiate contact with their antennae. The male deposits his sperm on the ground and the female then uses it to fertilize her eggs. An average of 63 eggs can be laid. As with many other arthropods, the larvae look like miniature versions of the adult, albeit with fewer legs. Young centipedes have four pairs of legs when they are hatched. They gain a new pair with the first molting, and two pairs with each of their five subsequent moltings. Adults with 15 pairs of legs retain that number through three more molting stages

An adult is 25 to 35 mm (0.98 to 1.38 in) in length, with up to 15 pairs of long legs, attached to the rigid body. Together with the antennae they give the centipede an appearance of being 75 to 100 mm (3 to 4 in) in length. They can reach surprising speeds of up to 0.4 meters per second, running across floors, up walls and along ceilings. Its body is yellowish-grey and has three dark dorsal stripes running down its length. When the centipede is at rest, it is not easy to tell its front from its back.



Photo credit to Lane Henderson

Members Photo Gallery



Virginia Rail by Chris Evans



Bluebird chicks by Nora Shipley



Young Cardinal with nice hair by Elaine & Claude Cox



Hummingbird & Eastern Bumblebee meet for a drink by Claude & Elaine Cox

Nature Barrie Club Membership

Annual Fees:

Family—\$30 Individual— \$25

Student—\$10 Corresponding—\$15

Memberships run from January 1st to December 31st.

Members get into meetings at no charge, are eligible for discounts at local nature stores and have access to the content of the website. To join Nature Barrie please come to one of meetings or complete **the downloadable application form from our website and send with your payment.**



www.naturebarrie.com

Visit us on our Facebook page! Nature Barrie (public group)

