Halton/North Peel Naturalist Club

The Esquesing

Sept-Oct 2017 Newsletter
Volume 52, Number 1

Talks and Walks

Indoor: Meetings begin at 7:30 p.m. on the second Tuesday of the month, September to June at St. Alban the Martyr Anglican Church, 537 Main Street, Glen Williams, unless stated otherwise.

Tuesday September 12, 2017, 7:30 p.m.
Nicola Ross: Hiking in Mexico's Sierra Norte Mountains
Author and club member Nicola Ross is an inveterate hiker. She's also a keen observer of flora, fauna and local culture and is eager to tell us about her hiking adventure in Mexico's Oaxaca state last year. Nicola is the author of two hiking books: Caledon Hikes, Loops and Lattes and Halton Hikes, Loops and Lattes.

Tuesday October 10, 2017, 7:30 p.m.
Yves Scholten: Belize
Club member Yves Scholten is a planning ecology specialist with Conservation Halton. In this presentation, his nature observations from a recent trip to Belize will be highlighted. Yves is an excellent all-round naturalist with a special affinity for herpetiles.

Tuesday November 14, 2017, 7:30 p.m.
TBA

Tuesday December 14, 2017, 6:30 p.m.
Christmas Pot Luck
Come for gustatory pleasure of Ray Blower's legendary bean salad and for general conviviality. There will be an opportunity to show slides after we eat, but due to time constraints, please limit your presentation to 5-10 minutes.

Outdoor Events

Sunday September 10, 2017
Big Bird Day (this is not a club event)
This is a fundraising event for Wildlife Preservation Canada and their Loggerhead Shrike Recovery Project. Teams of up to four people pay $50 to participate and then count as many species of birds as possible anywhere in Ontario during a 12 hour period, 8am to 8pm. Contact Don Scallen dscallen@cogeco.ca if you'd like to participate.

Sunday September 17, 2017 – 1:30 p.m.
Fungi Hike
Autumn is an excellent time to observe the diversity of fungi in our midst. This year should be especially good after the wet summer we've had. We'll travel to club member Nikki Pineau's Dufferin County property which has proven in the past to be fungi rich. Contact Don Scallen dscallen@cogeco.ca for directions.

Saturday September 30, 2017 – 7:00 a.m. Please note early start
Spiders at Scotsdale Farm
Meet in the Scotsdale parking lot accessible from Trafalgar Road.
The orb-web weaving spiders reach their largest size in the fall and create exquisite webs that are best appreciated after a cool dewy night. If the weather cooperates we should be able to find and admire many webs and their occupants. Cameras are recommended for this outing.

Saturday October 7, 2017 – 9:30 a.m.
Waterfowl at Scotch Block Reservoir
Meet at Scotch Block (or car pool at 9 a.m. in GT, contact leader for details) at 9:30 a.m. The reservoir is often host to a good variety of waterfowl in the fall. We will spend an hour or so here, then move on to other productive localities for the rest of the morning and early afternoon. Please RSVP Fiona (Fiona.reid7243@gmail.com) for more details.

Saturday October 14, 2017 – 2 p.m.
Big Tree Measuring at the Calcium Pits
Bruce Side Trail along Twiss Road about 2.5km south of Steeles Avenue southwest of Campbellville. Limited parking is available along the roadside.
Bill McIlveen will lead this hike to seek out and measure large trees.

Sunday October 15, 2017 – 1 p.m.
Nest box cleaning at Scotsdale
Meet in the Scotsdale parking lot accessible from Trafalgar Road.
Our annual inspection and cleaning of the nest boxes we've installed at Scotsdale.

Sunday October 22, 2017 – 1:30pm
Nest box cleaning at Forks of the Credit Provincial Park
Meet in the Forks of the Credit parking lot west off of McClaren Road Caledon, between Forks of the Credit Road and Charleston Sideroad. Parking fee required.
In the spring our club installed ten nest boxes at Forks of the Credit Provincial Park. They were a great success with at least 9 of them occupied by nesting birds. Now it's time to clean and inspect them so they are ready for next year.

Other outings: There may be other walks and activities happening in the fall. One will likely be woody vegetation removal at Forks of the Credit Provincial Park. Watch your inbox for email blasts and visit our website http://hnpnc.com/site/ for updates.

President's Message

I had the occasion this summer to fly to the U.S. for the solar eclipse. A window seat was a must as I still possess a childlike fascination with the landscape viewed from above. I crossed my fingers for a blue-sky day and my luck held.

En route to Cincinnati we first travelled west. Georgetown appeared momentarily, and in quick succession the Niagara Escarpment and the Grand River. Then the airplane paralleled the Thames River before banking south. In the distance, Point Pelee came into view and the extreme southwestern isthmus of the province embraced by lakes Erie and St. Clair.

Southwestern Ontario viewed from above is a quilt-work of agricultural land and remnant woods, networked by roads and rail lines connecting cities, towns and villages. What is abundantly clear is that this is a landscape completely subjugated by us. Well almost. There are a few places where nature still holds sway – the Niagara Escarpment, the forests of Norfolk County, Rondeau Provincial Park and of course Point Pelee.

From 10,000 feet the great value of these places comes into sharp focus. They are bastions of nature in a sea of human development. They provide habitat for myriad life forms and they offer joy to those of us who appreciate and are fascinated by that life.

I considered that these remaining natural spaces exist because of people who championed their protection many years ago. The architects of the Niagara Escarpment Plan for example. There are undoubtedly many unsung heroes who fought for the preservation of natural land in the most unnatural landscape of southwestern Ontario and I salute them. Imagine a southernwestern Ontario without Point Pelee! Or without a strategy to conserve the Niagara Escarpment.

Another thought occurred. I pondered the wonders that must have existed in southern Ontario before European colonization. The life that existed in the vast forests that prevailed at that time – the birds, the reptiles, the amphibians, the wildflowers, the trees. The life that flourished in savannas and prairies managed by the burning regimen of First Nations people. The wealth of life we've lost is simply staggering.

So let's cherish our remaining natural areas and let's advocate for more. And let's do our part to help by landscaping for wildlife on our own properties.

A sad note: Irene McIlveen, a great friend of nature, and of the Halton/North Peel Naturalist Club, passed away during the summer, succumbing finally to a lengthy illness. Our condolences go out to her husband Bill.

Irene was a club member for several decades. She was a connoisseur of the natural world, fascinated by everything, but perhaps especially by small life forms – insects and other arthropods. She expressed her love of nature through her exquisite art. Our club owes Irene a fitting remembrance and so the next newsletter will be dedicated to her. It will feature samples of Irene's art and reflections on her life as a naturalist. If you have any personal stories or dedications to contribute please contact me.

Don Scallen

Cicadas vs. Katydids

By late summer, the songs of breeding birds have mostly died away leaving just the year-round resident species to make any significant calls. Amphibian calls too have mostly passed for the year. But nature is not quiet yet, as other creatures take their turn using sounds to attract mates. Mostly, the callers are insects. Of course, we can hear the buzz of bees and wasps which create sounds simply by flapping their wings as they move from place to place, typically during daylight hours. Mosquitoes do the same in both the dark and the light and are usually more annoying to us humans.

The present article deals mainly with two groups of insects that use sounds to communicate their biological urges to mate as so propagate their species. The two groups might get confused in the minds of the average person so hopefully the following will help to clarify the differences between cicadas and katydids. As well, there are three further groups that are related to the katydids that also make audible calls for mates. These are the grasshoppers, the tree crickets, and the true crickets. The latter two are more conspicuous during the hours of darkness when the general background sounds of all things and visual information available in the daylight does not overwhelm our senses.

The Cicadas

Cicadas are true bugs in the Order Hemiptera and insect family Cicadidae. All cicada species look very similar and species are difficult to distinguish. They typically have large bodies. The adults have black to dark brown bodies ornamented with green and yellow venation depending on the species. The eyes can be red, orange, or brown which makes them appear slightly ferocious. The dried wings are clear with dark veins (Fig. 1). The veins on freshly-emerged adults are a beautiful pale green (Fig. 2).

Fig 1. Adult Dog-day Cicada, Rattray Marsh, Aug. 24, 2015

Fig. 2. Emerging Dog-day Cicada, Acton, Aug. 25, 2015

For many people that have any familiarity with cicadas, they are well aware of the Periodical Cicada that is often referred to as 'locusts'. None of these species occur in Canada save for a possible occasional stray from the adjacent United States. They are included here only to clarify their unusual life style in comparison to our local species.

The Periodical Cicada has an unusual life cycle. It is one of the longest-living insect species taking seventeen or thirteen years of living underground feeding on tree roots before emerging to breed. It is proposed that the length of these particular life cycles represent prime numbers so that parasites have difficulty coordinating their own life cycles with those of the cicadas. In this way, the cicadas have a good means to avoid massive attacks by predators and pathogens. The other feature of this strategy is that the cicadas all emerge at the same time. The massive numbers that emerge during the years of maturity is so large that existing predators cannot consume enough of their prey to decimate the cicada population. This allows large numbers to escape attack and so the new generation gets established. Despite this apparent advantage of the cicadas over potential predators, the entomopathogenic fungus *Massospora cicadina,* which infects adult cicadas, manages to survive in the soil as dormant spores between host generations [Speare, 1921]

As noted, Periodical Cicadas have developed 17-year and 13-year forms. As well, these have similar cycle length in three types. The three types and cycle length have been assigned to seven separate though similar species

	'decim group	**'cassini** group	**'decula** group
17-year Cycle	*Magicicada septendecim*	*Magicicada cassini*	*Magicicada septendecula*
13-year Cycle	*Magicicada neotredecim* *Magicicada tredecim*	*Magicicada tredecassini*	*Magicicada tredecula*

By contrast, our local species are described as 'annual'. In fact, the species live from two to five years. The 'annual' name is applied instead to describe the fact that the cicadas emerge in similar numbers every year. Like their Periodical cousins, they feed on tree roots in their nymph state. When they emerge, they climb convenient surfaces, frequently tree trunks. They undergo metamorphosis and transform into their adult form leaving a shed skin or exuviae attached to the surface when they emerge. The exuviae are usually the most tangible evidence of the cicadas for most people.

There are six species of cicada in Ontario in two genera. The Ontario species list includes *Okanagana canadensis* (Canadian Cicada), *Okanagana noveboracensis. Okanagana rimosa* (Say's Cicada), *Neotibicen linnei* (Linne's Cicada), and *Neotibicen lyricen* (Lyric Cicada). The most common species is *Neotibicen canicularis* (or *Tibicen canicularis*) (Dog-day Cicada). This is the most common species that we hear making a buzzy call from trees in our area.

The Katydids

Sometimes cicadas are called katydids and katydids are referred to as cicadas. This would be incorrect in both instances. Unlike cicadas which are true bugs, katydids belong to an entirely different insect order. Katydids belong to the Order Orthoptera which is aligned with the grasshoppers [Vickery *et al*., 1985]. In Ontario, there are 24 species that partly share the common name 'katydid'. These are fairly diverse species within three different families – namely the Conocephalidae, Phaneropteridae, and Tettigoniidae (Fig. 3).

Fig. 3. Adult Katydid species, Rattray Marsh, Oct. 20, 2009.

Despite their very different taxonomic status, the egg-laying practice is shared, at least to some extent. Cicadas use their ovipositors to cut slits in the bark of tree twigs while some of the Katydids perform a similar procedure on plant stems. As adults, cicadas do not feed at all whereas adult katydids feed on plant foliage.

Although cicadas and katydids can cause some damage to vegetation, this is seldom great enough to be considered serious. The insects themselves are quite attractive and their 'song' adds greatly to the pleasant ambience of summer days and nights, even if we are not aware of their presence as individuals.

References

Speare, A.T. 1921. *Massospora cicadina* Peck: A Fungous Parasite of the Periodical Cicada. Mycologia **13**: 72–82.

Vickery, V.R, D.K.McE. Kevan, and **C.D. Dondale.** 1985. The Grasshoppers, Crickets, And Related Insects Of Canada And Adjacent Regions: Ulonata: Dermaptera, Cheleutoptera, Notoptera, Dictuoptera, Grylloptera, And Orthoptera (The Insects and Arachnids of Canada #14) Publication 1777. Research Branch, Agriculture Canada, Ottawa. 918 pp.

W.D. McIlveen

Monarch Musings

The summer of 2017 will be remembered for the rain and for an uptick in the monarch butterfly population. This was unexpected. Cold weather at monarch roosting sites in Mexico this past winter apparently killed many. This mortality combined with a wet spring had some monarch experts forecasting another gloomy outlook for monarchs in 2017.

But the beautiful, iconic insects seem to be enjoying a good summer, at least in contrast to the last several. Chip Taylor of Monarch Watch expects that the overwintering colony in Mexico will grow from 2.91 hectares last year to 4 hectares or more this year.

The reasons for this good news appear unclear at this time. I'd be skeptical of attributing this surge to the promotion of milkweed planting in recent years, and the removal of milkweed from the noxious weed lists. Last year monarch populations were at a low ebb. Planting milkweed, while all to the good, can't be credited for a big increase in monarchs from one year to the next. A gradual increase yes, a dramatic increase over one year, no.

Equally disingenuous is a belief that, on the basis of one year, we can assure ourselves that monarch populations have recovered. Margaret Wente in the Globe and Mail on July 25, 2017 wrote this about the monarch surge: "We'd begun to wonder if they'd ever come back. And now here they are, alive and well, and the future is looking surprisingly bright." While I fervently hope that the monarchs' future is bright, a year does not a trend make. It is far too early to declare a long-term recovery in the population.

On a July 21st visit to Forks of the Credit Provincial Park monarchs were seldom out of view. Egg-laying females were a common sight – easy to distinguish from the males by their behaviour. Gravid females show little interest in nectar plants. Instead they touch down repeatedly on leaves of all sorts of herbaceous plants, "tasting" them with their feet. Females appear to use their olfactory sense to locate milkweed, not vision. So they smell the milkweed but appear uncertain as to its exact location. Hence the necessary foot touching. Non-milkweed leaves are immediately rejected.

When milkweed is confirmed the monarch females may lay eggs almost immediately. Or not. I speculate that they can sense whether another female has already laid eggs on a particular plant and such plants may then become less attractive for egg-laying. Monarch butterflies like to spread their eggs around – adherents of the "don't place all your eggs in one basket" philosophy.

Touching a milkweed leaf could perhaps impart other information – the presence of arthropod predators for example, or telltale signs of parasitic wasps or flies. But this is speculation.

When satisfied, the female monarch curls her abdomen and usually lays an egg on the underside of a leaf. The tops of milkweed plants where the tender new shoots are emerging are favourite egg laying locations. Club members Kim and Ramona Dobson discovered a few years ago that a recently hayed field at Scotsdale farm was drawing monarch females. They were searching out the new growth of milkweed that had been slashed to the ground by the haying operation. This has implications for anyone who grows common milkweed for monarchs. Cutting it to the ground in July may bring in more monarchs in August.

Monarch females laid eggs on this butterfly milkweed throughout the summer, more often than not on unopened flower buds. The caterpillars favour these buds for food – presumably they offer more nutrition than the leaves. Monarch butterflies also laid eggs on common milkweed, marsh milkweed, Sullivant's milkweed and tropical bloodflower in my backyard.

Monarchs in the garden

My yard was visited by more monarch butterflies this year than any in memory. This in part to the surge in their population, but also because the milkweed I grow and to a nectar plant called *Liatris ligulistylis* (left).

In my front yard, I have two large clumps of butterfly milkweed, *Asclepias tuberosa* (below). This species is restrained in habit compared to its rampant cousin, the common milkweed, and a gorgeous orange colour when in bloom. It's tailor made for sunny urban gardens.

So the various milkweeds I grow attracted monarchs but I suspect my yard wouldn't have been as popular a monarch destination without *Liatris ligulistylis* a prairie wildflower I grew for the first time this year. This variety of blazing star is a monarch magnet. The day the first blossom of this liatris opened on July 16, a monarch butterfly nectared on it. Scarcely a day went by from mid-July to mid-August without at least one monarch butterfly on my liatris – some days three or four visited at one time.

Liatris ligulistylis is a prairie native extending north into Manitoba, Saskatchewan and Alberta that thrives in sun. If its first season in my garden is anything to go by, it is more effective in attracting monarchs than the well-known butterfly bush (*Buddleia davidii*). And though I wouldn't be without buddleia, an advantage of the liatris is that it blooms about a month earlier, when monarch females are still actively laying eggs. Monarch females refuel at the liatris in my yard and then visit the nearby milkweed to lay eggs.

Laurel Sphinx caterpillar parasitized by wasp larvae

All well and good, right? Well not so fast. I estimate that 40 or more eggs were laid in my yard in July and August. All but one or two of the caterpillars I didn't protect (more on this in a moment) were predated. Few caterpillars in the "wild" or in backyards survive. Spiders, stink bugs and yellow jackets stalk them. Tachinid flies and small parasitic wasps lay eggs on them that hatch and devour the caterpillars from the inside – a macabre death. Caterpillars are an important food source for songbird nestlings, though likely not monarch caterpillars. The reason monarch caterpillars are brightly coloured is almost certainly to warn birds that they are distasteful. But the aforementioned rogue's gallery of arthropod predators seem completely unfazed by the monarch caterpillars' toxicity.

I do realize that predation is completely natural and that statistically monarch caterpillars stand little chance of surviving to pupation. But from a personal point of view, if I'm attracting monarchs to my yard with milkweed and nectar plants I feel a measure of responsibility that some survive. And of course, I want to witness their growth, their transformation into jewel-like chrysalides, and the miracle of metamorphosis.

So I protect some of "my" caterpillars. A simple way to do this is to enclose the developing caterpillars in a five-gallon mesh paint straining bag from a paint and wallpaper store. I tie the bag on a milkweed plant that has eggs or caterpillars. I also use purpose built caterpillar "houses" available from Wings of Paradise in Cambridge and put an entire potted milkweed inside for the caterpillars to feed on.

As for the caterpillars left to their own devices in the garden, their chances will likely be enhanced if the milkweed they're feeding on is immediately adjacent to bushy non-milkweed plants. I speculate that two of my unprotected caterpillars that survived to a large size benefitted from being able to leave the milkweed plant periodically and shelter

in non-milkweed vegetation – perhaps when digesting their food or preparing to molt. They would later return to the milkweed to eat. Why do this? Almost certainly to deter predation. Flies, wasps and other predators can find caterpillars by smelling their frass (excrement). So it makes perfect sense for a caterpillar to leave its host plant and its frass behind, when not feeding. (Some caterpillars – not monarchs – shoot poop out of their anuses so it lands a considerable distance from where they're feeding. A notable talent!)

The avoidance of predators can also explain why monarchs and other caterpillars, wander when they are preparing to pupate. Monarch caterpillars for example seldom form their chrysalides on their host plant, unless forced to when kept in an enclosure. Again, they likely want to distance themselves from their excrement.

In a nutshell: If you want to attract monarch butterflies to your yard and you want to enhance their life chances…

- Plant as much milkweed as possible.
- Try to ensure that other non-milkweed plants touch your milkweed so the caterpillars can take refuge when not eating.
- If you have a mature patch of common milkweed consider cutting it close to the ground in late June or early July to encourage new growth that monarch females preferentially lay eggs on.

Monarch laying eggs on new milkweed shoot

- Plant *Liatris ligulistylis*, buddleia and other good nectar plants.
- Consider protecting a certain number of the caterpillars to ensure at least some reach adulthood.

Don Scallen

The artwork shown below and on pages 1 and 2 are by Irene McIlveen. More of her amazing nature art will be shown in our November issue, which will be dedicated to her memory.

Unexpected Encounters

Late May and early June of this year, I dedicated a fair amount of time to searching for morels. These odd-looking fungi are a delicacy, and those who know of good localities guard them closely. I had read that they could sometimes be found along railroad tracks, so on a damp morning on June 3, I checked a section of line south of Speyside. What I saw was this:

No morels, but spiny green orbs. In all I counted eight plants scattered along the slope. With a certain amount of pride, I was able to take Bill McIlveen to see a species of plant that he had not recorded previously in Halton.

On close examination, we found another alien plant, a type of Yucca, growing alongside the cacti. This indicated that these plants arrived through human intervention and do not represent a natural range extension. Nonetheless, it is interesting to figure out which species of *Opuntia* is here, as it seems to be doing well at this particular site and has likely existed there for several years (unlikely that eight plants of different sizes all arrived at the same time).

Our Opuntia in flower, July 1, 2017

There are few records of prickly pear in southern Ontario. One is the Eastern Prickly Pear. Almost all existing Ontario records refer to these as *Opuntia humifusa*; however, in a more recent taxonomic study [Majure et al, 2017], the Ontario specimens have been identified as *Opuntia cespitosa*. *Opuntia cespitosa* occurs on Pelee Island, one of the northernmost limits of its native range. It was first recorded at Point Pelee in 1884 by John Macoun and was still there in 2017. It has also been reported in Harwich Twp in Kent County (possibly transplanted from Pelee Island). The Fragile (or Brittle) Prickly Pear, *Opuntia fragilis*, is native to western Canada ranging naturally to Lake of the Woods, with a single record east of our region, in Kaladar, Ontario (north of Kingston). Another population at Nepean appears to have died out. Two other species of prickly pear occur in western Canada.

Our prickly pear does not match the Eastern Prickly Pear, as the spines on that species are sparse and widely spaced. It doesn't match the Fragile Prickly Pear which has very small vegetative growth. The two western forms are a much closer match, *O. polyacantha* and *O. x columbiana*. The latter species is considered to be a hybrid by some. The origin of this small colony of cactus remains a mystery. As noted above, there is no evidence of a past residence nearby. The position on the east side of the track seems like an unusual place for anyone to dispose of garden waste, let alone such an unusual species. The possibility that the plants originated from an association with rail traffic from Western Canada also seems highly unlikely.

Reference

Majure. L.C., W.S. Judd, P.S. Soltis, and **D.E. Soltis.** 2017. Taxonomic revision of the *Opuntia humifusa* complex (Opuntieae: Cactaceae) of the eastern United States. Phytotaxa 290. 65 pp.

Ovenbird nest, entrance in upper left

The second unusual and very exciting encounter occurred in early June when a fellow moth enthusiast was visiting me from Ohio. We were walking through my forest and stopped to look at a small gray moth poised on a leaf. Out of the corner of my eye, I saw something running off over some fallen logs. My friend Deb also glimpsed this scurrying creature. We didn't know if it was a bird or mammal, but I decided to look around for a nest, just in case we had disturbed a fledgling. Just a few feet from the trail I found an Ovenbird nest! I'd never seen one before, but the domed top is very characteristic and unique to this species in our area. It was the parent bird that had scurried away.

I had sat out in the forest for hours at a time trying to follow Ovenbirds carrying food for their young while working on the Ontario Breeding Bird Atlas, but had only been rewarded with numerous mosquito bites. And now here it was, right by the trail through my own woods. I took a picture into the nest and recorded five eggs. Although I returned a few times, I kept my distance so as not to disturb the bird or draw attention to the nest.

I believe the young fledged successfully, and when the nest was out of use I felt the inside cavity. It sat a little lower than the entrance, providing a secure, roughly spherical home for the family.

Fiona Reid

Halton/North Peel Naturalist Club, Box 115, Georgetown, Ontario L7G 4T1
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President: Don Scallen	(905) 876-6180
Past President: Fiona Reid	(905) 693-9719
Vice President: Ian Jarvie	(905) 877-1441
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Membership:	Lorysa Cornish
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Ontario Nature Representative:	Don Scallen
Webmaster:	John Beaudette
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Membership for one year: $30 Single; $40 Family
The Halton/North Peel Naturalist Club is an affiliated member of Ontario Nature.

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Halton/North Peel Naturalist Club Membership Form

_____ Renewal or _____ New Member(s) Date_____

Name(s): _____

Address: _____

Postal Code: _____ Telephone: _____

E-mail: _____

New membership fee for the period:

from September through to August	_____ Single ($30.00)	_____ Family ($40.00)
from December through to August	_____ Single ($22.50)	_____ Family ($30.00)
from March through to August	_____ Single ($15.00)	_____ Family ($20.00)
from June through to August	_____ Single ($ 7.50)	_____ Family ($10.00)

Would you like to make a donation to help send a youth to the **Ontario Nature Youth Summit for Biodiversity and Environmental Leadership**? If yes, amount of donation: _____

Do you have any suggestions for programs or field trips?

_____

_____

_____

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WAIVER OF LIABILITY

(must be signed by anyone planning to attend field trips or other outdoor activities)

In making this application, I affirm that I am in good health, capable of performing the exercise required to participate, and that I accept as my personal risk the hazards of such participation and will not hold the Halton/North Peel Naturalist Club or its representatives responsible.

In consideration of the Halton/North Peel Naturalist Club accepting my application, I hereby and forever release and discharge the Halton/North Peel Naturalist Club and its officers, directors, servants and agents from any liability whatsoever arising as a result of my participation in these trips and declare that this is binding upon me, my heirs, executors, administrators and assigned.

Signature(s): _____ Date: _____

_____ Date: _____

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Please fill out this form and bring it in to next indoor meeting or mail with payment to:

Halton/North Peel Naturalist Club,
P.O. Box 115,
Georgetown, Ontario,
L7G 4T1

Halton/North Peel Naturalist Club

Meetings are at St Alban's Church in Glen Williams starting at 7:30 p.m.