Halton/North Peel Naturalist Club

The Esquesing

March – April 2018 Newsletter
Volume 52, Number 4

President's Message

In mid-February David Williams and I saw a turkey vulture sailing over Bronte Creek Provincial Park. On February 18th, pictures of yellow-spotted and Jefferson salamanders in the Hamilton area were posted on Facebook. On February 26th I stepped out of my front door in the morning and was greeted by the gurgling call of a red-winged blackbird, a signature sound of spring, except that it was still winter. Robins are beginning to filter back into suburbia. All of this seems to presage a very early spring, but by the time you read this we may well be back in the deep freeze. March weather, as we know, is fickle.

Despite this, another glorious spring is on the cusp. Spring peepers and hepatica, song sparrows and bloodroot will soon enliven our outings. Your club will celebrate the season with evening walks to watch the breeding activities of salamanders at Silver Creek and the wonderful aerial displays of woodcocks at Forks of the Credit Provincial Park. Other field trips are likely to be offered. Please watch your inbox.

And speaking of outings, kudos to Ian Jarvie who led a convoy of club members into the wilds of Wellington County in search of snowy owls. The grand total of nine of these impressive northern visitors were found! Other great birds included an adult bald eagle and three rough-legged hawks. Earlier in the winter several of us enjoyed a morning of animal tracking at Terra Cotta Conservation Area. Fresh porcupine tracks were a highlight, with impressions of the tail quills clearly visible in the snow. Finally, a recent owl search at Claireville Conservation Area didn't yield any owls, but we did find proof of their presence: the fur and bones of mice packaged neatly into pellets.

Indoors this spring we'll learn about Ontario's badgers from biologist Josh Sayers in April, and Professor Laurence Packer of York University will speak to us about his native bee research in May. But this month we're depending on you. Anne Fraser will share some of her spectacular photography but we're hoping that other club members will enrich the evening by bringing in anything nature related: art, sketches, crafts, collections, poetry, etc. etc. Perhaps you've been practicing imitations of owl calls. We'd love to hear them! But seriously, we've had some fun with this in the past and I'm sure we'll have an enjoyable evening. Hope to see you there!

Don Scallen

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 March 13, 2018, 7:30pm
Members night
A show and tell for adults. You are invited to share anything you do that connects with the natural world. This could include art, crafts, photography (prints), collections, poetry, writing, etc. Anne Fraser will kick off this meeting with a slide show of some of her superb nature photography. Anne's credentials? Five first place finishes in the last four Halton Hills Photoart competitions and numerous second, third and honourable mention prizes! After Anne's presentation we'll have a chance to socialize with mugs of tea or hot chocolate and celebrate the nature pursuits of our fellow club members. Please let me know if you can help with the beverages or some choice edibles.

Tuesday April 10, 2018, 7:30pm
Ontario Badgers
Josh Sayers of Ontario Badgers will tell us about a mammal that most Ontarian's don't realize exists in the province. Ontario Badgers is involved in advocacy work, conservation and research to protect and better understand the ecology of badgers in the province. To learn more, visit their site http://www.ontariobadgers.org/index.html

Tuesday May 8, 2018, 7:30 pm
Native Bees
Professor Laurence Packer of York University is one of Canada's foremost experts on wild bees. He'll speak to us about the ecology and conservation of these important insects.

Tuesday June 12, 2018, 7:30 pm
Not an indoor meeting at all, but rather our traditional walk in a local natural area prior to our summer break. Details TBA later

Outdoor:

Sat. March 17, 2018

Tundra Swans at Long Point
Flocks of Tundra Swans stop at Long Point during their spring migration to their northern breeding grounds. Many other species of waterfowl, early-returning songbirds, Bald Eagle, and Short-eared Owl may also be seen on this long day trip. Be advised that lunch at the restaurant is usually after 1:00 and we usually do not head for home until around sunset. Bring snacks, water, a lunch or money for the restaurant, and layers of warm clothing, etc. Call Ray Blower, (519)853-0171 by Friday, March 16 for more details.

Saturday March 24 at 1:30
Bark and Buds
Tree identification at Terra Cotta Conservation Area. Almost every species of tree that grows naturally in northern Halton Region can be found at TCCA. We'll take a walk around and see how many species we can ID by their bark, buds and form. A nice opportunity to advance your knowledge of these important organisms. Of course, we'll welcome the pleasant distractions of birds and other wildlife! Difficulty level: easy but be prepared to walk for a couple of hours. Leader: Don Scallen

Sat. April 14, 2018
Beamer Conservation Area Hawkwatch, Grimsby
Stops on the way to Grimsby include Scotch Block reservoir and La Salle Park to see waterfowl and early songbirds. Beamer C.A., at the top of the escarpment in Grimsby, provides a large clearing and two cliff-edge platforms to search the sky for migrating hawks. Walking trails in the surrounding woods show early wildflowers and more songbirds. Bring a lunch, hat sunscreen, binoculars, etc. Call Ray Blower (519-853-0171) for starting location and time.

Sun. May 20, 2018
Spring Birding at Thickson Wood, Lynde Shores Conservation Area and Cranberry Marsh
If I had only one day in the spring to go birding, this is where I would go. These locations provide a wide variety of habitats including mature forest, meadows, swamps, marshes, old fields and Lake Ontario and its shoreline. The result is a diverse collection of bird species, especially during spring migration. Scheduling on the Sunday of the Victoria Day holiday weekend has resulted, so far, in trouble-free driving to and from these Whitby birding hot spots. Bring a lunch, water, hat, sunscreen, binoculars, etc. Call Ray Blower (519-853-0171) for starting location and times.

Dates TBA
Salamanders and Frogs
Watch your inbox for dates and times in late March or early April to view the annual appearance of spotted and Jefferson salamanders at local ponds. These outings are somewhat weather dependent, so the timing can't be set in stone yet. We will try to give you at least three or four days' notice.

Other outings
Should there be other walks and activities happening in the near future. Watch your inbox for email blasts and visit our website http://hnpnc.com/site/ for updates.

Spring

by Mary Oliver

All day the flicker has anticipated
the lust of the season, by shouting.
He scouts up tree after tree and
at a certain place begins to cry out.
My, in his black-freckled vest, bay body
with red trim and sudden chrome
underwings, he is dapper. Of course
somebody listening nearby hears him;
she answers with a sound like hysterical
laughter, and rushes out into the field
where he is poised on an old phone pole,
his head swinging, his wings opening and
shutting in a kind of butterfly stroke.
She can't resist; they touch; they flutter.
How lightly, altogether, they accept
the great task, of carrying life forward!
In the crown of an oak they choose
a small tree-cave which they enter with
sudden quietness and modesty.
And, for a while, the wind that can be a
knife or a hammer, subsides.
They listen to the thrushes. The sky is blue,
or the rain falls with its spills of pearl.
Around their wreath of darkness the
leaves of the world unfurl.

"Our club was saddened to hear of the passing of Marinus (Rein) Pater in December. A member of the Halton/North Peel Naturalist Club, Rein was noted for his fine nature photography that he shared widely through community television and other media outlets. Rein was a kind, gentle man and will be missed by all who knew him."

Finding Fickle Fall-Flowering Flora: Discovering Autumn Coralroot (*Corallorhiza odontorhiza*) in the Credit River Watershed

Jessica Consiglio

Autumn coralroot (*Corallorhiza odontorhiza*) is a small orchid species found growing in North and Central America. Worldwide, the orchid family (*Orchidaceae*) encompasses a very diverse group of plants, including anywhere from 22,000 - 35,000 species (Romero-González et al., 2003). There is amazing variation within these species, especially in terms of the adaptations that they have developed to survive in challenging environments. Some orchids, including those found in the coralroot genus *Corallorhiza* are myco-heterotrophic: using the unique strategy of working with a symbiotic fungus to break down organic materials for nutrients.

The name *Corallorhiza* is made of the Greek word for coral (korallion) and root (rhiza) which refers to the coral-like shape of the root system, a characteristic shared by all members in this group (Romero-González et al., 2003). In Ontario there are four species of coralroot: autumn coralroot (shown below), early coralroot (*C. trifida*), spotted coralroot (*C. maculata*), and striped coralroot (*C. striata*). Although autumn coralroot may look similar to other members of the genus, this species flowers from August to October while other coralroots flower during late spring or early summer.

Autumn coralroot is easily overlooked by botanists due to its late flowering time, as well as its small size and lack of developed leaves. Aboveground, the plant consists of a delicate reddish-purple flowering stalk measuring between 5 cm and 30 cm, topped with tiny drooping flowers. Additionally, the stems of autumn coralroot are enlarged or thickened at the base, which is an easy-to-observe feature that is not found in other coralroot species!

Although not particularly large or brightly coloured, the flowers of autumn coralroot are interesting for their own reasons. There are two known varieties of autumn coralroot: one

with showy flowers that needs insects for cross-pollination, and a second variety with closed flowers that doesn't need pollination because it is self-fertile (shown below). These two kinds of autumn coralroot are both found in Ontario and although the showy variety is less common, they are both considered rare and difficult to find.

The habitat for autumn coralroot includes old pine plantations in sandy soils, as well as mixed hardwood forests and coniferous forests. Although this orchid can be found in a variety of habitats, it is found very sparsely throughout eastern North America. Autumn coralroot's national rank in Canada is N2 (Imperiled) and its subnational, or provincial rank, in Ontario is S2S3 (Imperiled to Vulnerable) (NHIC.) These rankings mean that the species is found in very few locations, making it more vulnerable to extirpation from threats such as habitat loss. Autumn coralroot's southwestern distribution in Ontario generally follows the Lake Erie shoreline in the Niagara Region and Norfolk County, and it is less often found along the shorelines of Lake Huron and Georgian Bay. In eastern Ontario, autumn coralroot's distribution is very patchy and less predictable, but generally seems to follow the distribution of sandy and sandy loam soils.

This record is especially exciting as it is not only a new species for the Credit River watershed, but also for the Region of Peel! Autumn coralroot had not previously been reported in Jocelyn Webber's *The Vascular Plant Flora of Peel County, Ontario* (1984), or more recently in Jeff Kaiser's *Vascular Plant Flora of the Region of Peel and the Credit River Watershed* (2001). This new record is also interesting since it has been suggested that autumn coralroot's range may be spreading north in Michigan, and there is a possibility that a similar shift is happening in Ontario (Voss and Reznicek, 2012).

This species discovery was just one of several highlights from Credit Valley Conservation's (CVC's) Natural Heritage Inventory (NHI) program in 2017! The NHI program is an on-going inventory program which conducts extensive flora and fauna inventories within the natural areas of the Credit River watershed. This data is used by many departments within CVC to ensure science-based approaches to watershed planning, protection and restoration. A summary of all collected information for many parts of the Credit River

watershed, as well as additional information about the NHI program, is available to the public at the Region of Peel's website:
https://www.peelregion.ca/planning/pdc/data/monitoring/watersheds/maps.htm

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White, D.J., R.V. Maher, P.M. Catling, and R.E. Whiting. 1982. Corallorhiza odontorhiza (Willd.) Nutt. (Orchidaceae). One page in "Atlas of the Rare Vascular Plants of Ontario". National Museum of Natural Sciences, Ottawa. Looseleaf.

Strange Science.

No this isn't a reboot of the infamous News of the World tabloid. Elvis isn't alive and running for president and cavers haven't found a bat child two miles underground. The three stories below do have a News of the World flavor but they're true. (No really, they are – well except for the rather florid headlines perhaps.) A shout out to the club members who brought them to our attention. They are quite extraordinary!

From Darryl Gwynne: ***Fire from the sky. Raptors set fire to the Australian outback***.
https://www.sciencealert.com/birds-intentionally-set-prey-ablaze-rewriting-history-fire-use-firehawk-raptors

From Jamie Marchant: ***Attack of the mutant crustaceans. Clonal crayfish conquer Europe. Is Canada next?***
http://www.sciencemag.org/news/2018/02/aquarium-accident-may-have-given-crayfish-dna-take-over-world

From Laura Weihs: ***Immaculate conception. A watersnake at Mountsberg practices safe sex (actually no sex at all) AND STILL GIVES BIRTH!***
http://thegrindstone.ca/a-miracle-at-mountsberg/

Exploring 16 Mile Creek

David Williams

About 4 km's west of Trafalgar Road, we parked at the east end of the massive double bridge that carries Dundas Street over the valley below. It was a picture-postcard January day with the sun blazing out of a brilliant blue sky.

Turning right from the modest church parking lot, we walked to the barrier that stops cars from descending to the valley floor during winter months when the roadway's not plowed, and we descended the hill. We successfully resisted the urge to slide down the hill on our bums as we passed the improvised ski-jump.

At the valley floor we entered a different world; we were grateful for the barrier that kept the cars out, realizing their presence would seriously detract from the natural snow-covered vista we encountered. This highlighted the ongoing tension between, on the one hand, wanting people to experience "nature", but on the other hand, wanting to protect "nature" from the damage that can result from such experience.

We turned onto the double track running alongside the creek. According to a French Sketch Map from about 1760, indigenous people knew the creek as Ne-sauga-y-onk, which may have referred to the creek dividing around an island where it met Lake Ontario. The same map showed the French name of Riviere de Gravois (pebbly or gravelly). But since Europeans started settling the area, it's been known as 16 mile creek, so named for the distance from its mouth at Lake Ontario to Burlington Bay.

Sixteen mile creek watershed is the largest in Halton Region, at 372 square kilometres; (more than double that of Bronte Creek to the west). Its east branch draws water from south of Georgetown and Acton, including the Scotch Block reservoir. Its west branch draws from Milton to east of Campbellville, including reservoirs at Hilton Falls and Kelso.

In 1821, 16 Mile Creek's west branch powered a grist mill built by the Martin family from Northumberland and sparked the growth of a vibrant community that we know today as Milton. But such growth comes at a price. For example, in May 1920 the Milton Champion newspaper reported that " Sixteen Mile Creek ... was full of trout not many years ago, many of them large, but it has been fished out. ....the barrenness of its waters is due to greed. Few anglers have paid any attention to the legal six-inch limit. The rest basketed the fingerlings."

Below Britannia Road, the two branches begin carving their way into the land. Where the east branch, deflected westward by the Trafalgar Moraine, merges with the west branch, a sizable valley has been incised. We were fortunate to explore part of this valley on our afternoon outing.

The creek flowed steadily beside us, about 10 metres wide with snow and ice bordering both banks. Large slabs of ice as big as sheets of drywall and some over 30 cm thick were jumbled up like the playthings some giant child abandoned along the shoreline. These

were evidence of both the recent cold weather and the power of the creek to be able to lift and then plunk them down where they lay. We wondered about the effect such pile-ups would have in burying the abodes of shore dwelling creatures like muskrat.

We passed through a flock of more than 2 dozen robins flitting on either side of the trail. They were particularly interested in the purple/black Buckthorn berries growing there. Common Buckthorn, also known as European buckthorn, is a disparaged invasive shrub or small tree that's native to the other side of the Atlantic. It was brought to Canada in the 1700's and used as a windbreak in farm fields. It certainly didn't stay down on the farm, and is now ubiquitous across much of North America. Its common name comes from its smaller branches terminating in a thorn or spine. Its Linnaean name, Rhamnus cathartica, gives a clue to its use in earlier times as a medicinal cathartic or purgative.

Although people don't consume it today, the robins clearly enjoy it. Although it's been here for three centuries and is thriving, it's still described as an "alien invader". This prompts discussion about when does a species qualify to be accepted as a new or naturalized native; if the robins were to participate in this discussion, it's a good wager they'd want to keep it around.

The robins also fluffed around in the sparse leaf litter on the ground. Watching them, we saw that the north-east slope of the valley was quite clear of snow cover, while across the river its south-west counterpart was snow-covered. We speculated about the different micro-climates that might coexist within the same river valley as a result of the differences in solar exposure between the two banks. And we wondered what the robins were finding on the ground that kept them so interested: maybe seeds, maybe bugs, maybe fallen fruit?

The snow cover on the ground showed that lots of other critters besides humans had wandered around the valley floor. Bending over to study the spoors, we tried to interpret species, direction of travel, pace, and behaviour. Hind feet are bigger than front feet for some animals, such as squirrels and rabbits. For others the front feet are bigger, such as fox and coyote. Some tracks showed direct register, where the hind foot steps directly into the track of the front foot, such as foxes. Some animals alternate between running on top of the snow and burrowing along underneath. A dragged tail is often a clue to identity. Some animals left a trail that was the shortest path between two points. Other trails looked random and erratic, and made no sense at all to us human observers.

The creek-side track disappeared as the side of the valley steepened into a shear wall that looked to be well over 50 metres high. As the trail ascended a convenient set of switch-backed stairs we were treated to an elevated view of the creek, and a good look at the exposed red rock of the valley wall. This is the same dark red Queenston shale that's found in the Cheltenham "badlands", and that has long been used for brick making in several Halton and Peel locations. Laid down about 460 million years ago, it's a crumbly mudstone rock that easily degrades on exposure, and has not done a good job of withstanding the creek's erosive forces.

Queenston Shale, looking south east on 16 Mile Creek below Dundas Street.

Farther south the trail again descended to the valley floor, where we explored a low-lying area encompassed by the creek's wide bend to the east. Here we found a magnificent Sycamore tree, Platanus occidentalis. Looking for mature sycamores is like looking for a friend with a white toque standing in a crowd of people wearing black toques: the whitened upper branches of the sycamore stand out against the adjoining trees. As the tree ages, its lower trunk and branches lose their characteristic "camouflage" pattern of smooth patchy bark. They're also known as buttonball trees, for their spherical fruit. Often found in riparian areas, they can achieve massive sizes, and live for centuries. A Halton ESA–NAI survey lists sycamore as rare in Halton region, so we were glad to visit with this solitary giant who looked like the old-man-of-the-woods, and who dominated the surrounding growth.

A bridge took us over the creek to a large low area on the west side. Nearby was the putative site of Proudfoot's Hollow, comprising a village with mills, shops, and other buildings that were established about 1827. The village disappeared by 1858, probably because of the removal of the stage coach route along Dundas and the increased focus on Oakville as a thriving centre. Although there's no village, there are several Proudfoot properties and a mill marked on the The Tremaine Map of 1858 that hangs on a wall in the Georgetown library. The map's about 5 feet high by 4 feet wide, and if you move the table from in front of it, get down on your hands and knees, and look closely, then you can see the notations near Dundas and 16 mile creek, along with the note "mill by the grove".

The Creek was important to the growing village of Oakville – likely so named because according to the Walker & Miles Illustrated Atlas of 1877, large quantities of white oak staves were made in Trafalgar and nearby townships and floated down the creek for shipment to Quebec. The same atlas notes that in 1876 Oakville was the biggest strawberry grower in Canada. Indeed, the map shows the length of the creek and its tributaries surrounded by many, many farms and orchards.

As the trail took us north along the top of the valley's west side, we had a good view of the creek and valley below. We continued to see and hear "backyard birds" such as chickadees, nuthatches, and woodpeckers, but couldn't see the pileated woodpecker we heard calling.

This system supports an abundance of natural life; surveys of portions of the creek have found many nationally and provincially rare species, including more than 40 species of plants and critters that are designated as rare in Halton Region.

But such life is fragile and vulnerable to a multitude of pressures, including inquisitive naturalists like us. We hope that the abundant diverse life of this particular system will be respected and cherished, and will persevere to be enjoyed for long to come.

Variations in *Impatiens* Flowers

W.D. McIlveen

A plant that never fails to impress when it is first encountered is the Jewelweed AKA Touch-me-not. Whether the observers are young or old, the first time that the seed pod suddenly explodes will certainly be remembered. And it is not just once that people like to touch the pod. They frequently have to squeeze another then another. The flowers too are very exotic in appearance and appear somewhat like an orchid though there is no close relationship at all to those species.

World-wide, the genus *Impatiens* includes up to a thousand species. This includes many hybrids. Some select species are grown horticulturally as ornamentals including such favourites as Impatiens (*Impatiens walleriana*), New Guinea Impatiens (*Impatiens hawkeri*) and Garden Balsam (*Impatiens balsamina*). In our area, we have three species that grow in the wild and these species form the subject of this article.

Our *Impatiens* include two species that are native while the other is an invasive alien. Individually, the species have slightly different habitat preferences but generally, the preferred habits include high soil moisture. There is enough overlap in tolerance within the site requirements that it is not uncommon to find all three growing within the same square meter of soil. All of the species are annuals whose seeds are spread directly only a short distance away by the exploding seed pod. The three species are described below and are illustrated with some of the colour variation that occurs with each.

The most-commonly encountered species is Spotted Jewel-weed (*Impatiens capensis*). It typically grows to a height of 1 to 1.5 meters. Most commonly, it can be found along the edges of marshes in full or partial shade. The flowers are basically a dark yellow with small reddish-brown spots. The spots can occur almost anywhere on the flower but are most prominent and dense on the lower spreading petals. Overall, the combination of coloured dots on the yellow background causes the flowers to appear orange. This leads to one of the common names which is Orange Jewel-weed or to Orange Touch-me-not. The degree of spotting can be highly variable with individual plants bearing flowers with hardly any dots at all and ranging to plants with a dense pattern in

Common form of *Impatiens capensis*, Acton 2017

Dark form of *Impatiens capensis*, Rattray Marsh, 2009

which the dots completely overlap as shown in the dark variant in the accompanying photo. Weatherby [1917] reported the occurrence of at least three colour variants of this species that included lemon-yellow, white or cream coloured, and pink forms.

The second native species is Pale Jewel-weed (*Impatiens pallida*). Although it is still considered to be a very common species, it is encountered with a slightly lower frequency than the preceding species. It is the most shade-tolerant of the three in our area, often occurring in wooded sites. Rocky sites along the Niagara Escarpment seem to be especially favorable but by no means is it restricted to such sites. It reaches about the same size as Spotted Jewel-weed. The common form has pale yellow flowers that also have their own spotting pattern. The spots are small and generally confined to the throat area of the flower and not at all prominent. The spots are easily overlooked. This species has at least one formally-described subspecies (Impatiens pallida *forma speciosa*). That subspecies as described by Jennings [1920] appears to match some of the plants discovered in the Etobicoke Creek valley upstream from Lakeshore Road north of Marie Curtis Park. Some of these flowers are shown in the attached photos.

Common form of *Impatiens pallida*, Streetsville, 2011

Pale form of *Impatiens pallida*, Etobicoke Creek, 2009

Common form of *Impatiens glandulifera*, Port Hope, 2003

Impatiens glandulifera (Purple Jewelweed) is the tallest of the three species commonly reaching two metres in height or more. This is native to the Himalayan part of India. In our area, it is a significant invasive species. It is spreading in many riparian areas in sun and shady areas. It was introduced to North America as a horticultural species because of its large and showy pink flowers. The flowers are typically a pink magenta colour and are

quite showy. Owing to their beauty, it is easy to understand why the species attracted attention by the horticultural industry. The flowers can also be much paler as illustrated in the accompanying photo.

Colour variants of *Impatiens glandulifera*, Bowmanville, 2011

Update:
I am recently informed by Dan Schuurman that he has discovered at least one stand of the previously unreported Small Balsam (*Impatiens parviflora*) in a Brampton area watershed. This species has been found in Quebec and Prince Edward Island but not in Ontario. We hope to evaluate the extent of the infestation in 2018.

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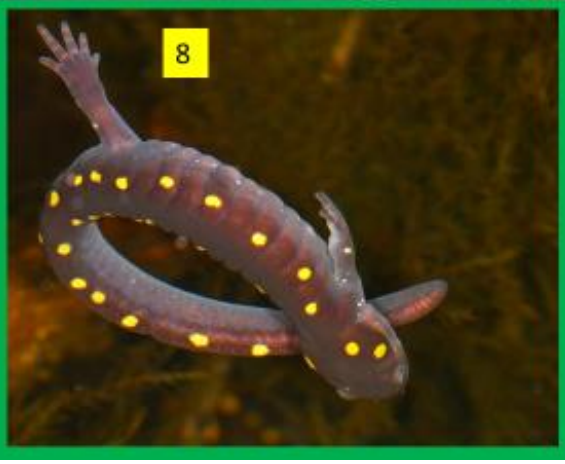
Weatherby, C. A. 1917. Color Forms of *Impatiens biflora*. Rhodora 19: 115- 118.

All photos were taken by the author.

Spring Quiz

(Answers on the last page.)



Comings and Goings: Nature in Flux

Don Scallen

It's something of a cliché, but the only constant in nature is change. This is born out over the course of centuries and millennia, but dramatic change can happen even within a lifetime. Especially in this era of the Anthropocene.

When I was a child in the '60s, mature elms bordered my street in Georgetown, no one knew what a house finch was, and coyotes still had an aura of exotica about them. I heard the haunting calls of whip-poor-wills near Limehouse and had a "great bird" moment when I stumbled across one during the day resting on a limb.

In the 1970's my teenage friends and I would sneak onto the Georgetown Golf Course (Now Eagle Ridge) to play a round for free. As my friends concentrated on their drives and putts I was distracted by red-headed woodpeckers which, for several years, nested and foraged in the savanna-like landscape of the golf course. In winter, during those days, evening grosbeaks would occasionally appear in Georgetown – delightful.

If some bird species have largely disappeared from southern Ontario during my lifetime, others have colonized or increased their presence. The aforementioned house finches spread like wildfire after their release in New York City in the 1940's with breeding first documented in Ontario in 1978. Wild turkeys, first released in the province in 1984 have had a similar meteoric rise in population. For the first half of my life, red-bellied woodpeckers were exciting birds that I looked for on my annual trips to Point Pelee and Rondeau. I still enjoy seeing them, but a special trip is no longer necessary. They have become, almost overnight, one of the most common woodpeckers here in Halton/Peel.

Tom turkey, spring.

Birds, of course, aren't the only colonizers from the south. During my lifetime opossums have established an enduring presence here and giant swallowtail butterflies, once largely confined to the Carolinian zone like red-bellied woodpeckers, can be expected every summer.

The movement of "new" species into southern Ontario has hardly been unidirectional however. If anything, more birds and mammals have moved south as part of a wave of recolonization – reoccupying territory that European settlement pushed them out of. Ravens now breed in this area and can be expected any time of year. Thus far I've found two raven nests in our naturalist club's bailiwick – one near Glen Williams, the other at the old Cheltenham

Raven pair and nest, Cheltenham brickyards

brickworks. And ravens are now even colonizing the nation's largest city. They've bred at Leslie Street Spit and at least one other site in Toronto in recent years.

Ravens are not the only bird species returning to southern Ontario. At the February meeting talk turned once again to bald eagle sightings. Club members are seeing these majestic birds with increasing frequency. Bald eagles now have a tenuous breeding hold in our part of the province, nesting at Cootes Paradise in Hamilton and along the Grand River. Merlins, once rare south of the Canadian Shield, are becoming increasingly common here.

Mammals have also been moving south. Fishers have reached Dufferin County and will almost certainly follow porcupines, a favoured prey, into our area – if they haven't already. Two otters were recently photographed along a creek in Burlington, so sightings of these engaging aquatic weasels along the Credit River and other area streams likely aren't far off.

All this flux invites us to speculate about causes. Some answers are clear. The loss of most of our majestic mature elms and the diminishing numbers of healthy ash, beech and butternut is easily explained – all have been victimized by introduced pathogens.

The reason for the comings and goings of other organisms is more complex. Take red-headed woodpeckers for example. It has been suggested that this species got an artificial population bump when the elm trees were dying en masse in the 1960's and '70's. This hypothesis proposes that the red-heads benefitted from the insects that were feasting on the dying trees. Then when the large elms were cut or simply fell over and decomposed, that food source dried up and the woodpeckers declined. This explanation is becoming less credible with so many of our other tree species dying, without a corresponding uptick in red-headed woodpecker populations.

Other possible causes for the decline of red-headed woodpeckers seem more likely. The habit of these woodpeckers to "hawk" insects in the open habitat along roads makes them vulnerable to road mortality. But perhaps the biggest reason for their decline is natural succession – forest reclaiming the savanna-like habitats they favour. According to a recent article in *Birdwatching* magazine biologists characterize red-headed woodpeckers as habitat specialists and in the upper Midwest at least, they need "oak savanna with clumps of live and dead oak trees, and regular disturbance by fire." A project at the 44,000-acre Necedah National Wildlife Refuge in Wisconsin to enhance savanna by selective cutting and low-intensity fire, brought back the red-heads in a big way. Shortly after this regime was instituted, 70 pairs of red-headed woodpeckers were counted.

The loss of the whip-poor-will from this area was also likely caused, at least in part, by natural succession. According to the *Atlas of the Breeding Birds of Ontario 2001—2005* whip-poor-wills "shun both wide-open spaces and deep forest". It could be that as the second growth woodland of southern Ontario matured, less of this habitat was available

for the whip-poor-wills. But if change in nature is a constant, so too is complexity. Whip-poor-wills are probably also declining because of diminishing insect populations. The populations of all sorts of birds that eat flying insects are shrinking. Not only whip-poor-wills but swifts, swallows, flycatchers and nighthawks.

Multiple causes are also likely responsible for the movement of birds and animals into our area. Climate change is the go-to explanation for the northern movement of organisms. And while I agree that a warming climate is probably a contributing factor there are almost certainly other causative factors. Climate change could hardly be invoked to explain the southward movement of birds and animals. Other causes must be involved, and if that's true for southbound creatures, it suggests it might be for northbound birds and animals as well.

The possibilities are various. Forest cover has increased as marginal farmland has been abandoned. Many existing woodlands have been permitted to mature. Hunting is now carefully regulated – strict hunting seasons are in place and most birds are fully protected. In the bad old days, rifle-wielding vigilantes viewed all raptors as vermin. Thousands of hawks were shot as they migrated in the fall. The banning of DDT was also good news for the raptors (and other bird species).

Beyond these reasons, behavioural adaptation may be partly responsible for the movement of some birds and mammals into areas dominated by humans. Ravens, often celebrated as avian Einsteins, appear to be figuring out how to live among us. Cooper's hawks, once quite shy and rare, due perhaps to the persecution of yesteryear, are beginning to nest in urban areas.

What does the near future hold? I'm surprised that tufted titmice aren't regulars at our feeders. They are common residents of similar latitudes in the eastern U.S. so maybe we'll eventually see more of them. Black vultures, expanding northward, may appear more often, perhaps even to breed. As for mammals, expect, as mentioned earlier, that fishers and otters will reoccupy this area. And cougars? Some people believe a few are already in southern Ontario. I remain skeptical. But the possibility of this wide-ranging cat occupying some of the wilder sections of the Niagara Escarpment exists. There's certainly an abundance of prey in the form of white-tailed deer. Black bears will likely continue to make forays into southern Ontario but will almost certainly continue to be met with fear and tranquilizer guns – or worse. It's unlikely we'll ever allow their recolonization.

While it's fun to speculate on the future comings and goings of animal species, the reality will likely surprise us. The only thing we know for certain is that the natural world will continue, as always, to be governed by change.

Bird Box Use at Forks-of-the-Credit Provincial Park, 2017

By W.D. McIlveen

The Forks-of-the-Credit Provincial Park covers 282 ha within the Town of Caledon, Region of Peel. A large portion of the eastern portion of the park is relatively open grassland that was created during former use of that area for agricultural purposes. The management plan for the Park [Ontario Ministry of Natural Resources, 1990] calls for a significant portion of the grassland to be retained as habitat that is important for a range of wildlife including endangered bird species.

In 2016, the Halton/North Peel Naturalist Club (HNP) entered into an informal arrangement with Ontario Parks to monitor various biota in the Park including birds and butterflies and to assist in the management of invasive species. As part of that arrangement, an initial set of bird nesting boxes was established in 2017. The report summarizes the results of the first year of operation.

Methods

On April 9, 2017, a set of 10 standard wooden bird boxes were installed at Forks-of-the-Credit Provincial Park. The boxes were of a design suitable for Eastern Bluebirds or Tree Swallows. The boxes were placed in open sites on metal T-bar fence posts and were supplied with baffles to reduce predation by snakes or certain mammals. One of these (Box FC-01) was dedicated to the memory of Valerie Dobson with a small plaque. The locations of the boxes are indicated on the attached map.

The boxes were examined for evidence of breeding birds on two occasions during 2017 by members of HNP. The first visit was made on June 26 during the peak of the breeding season. The second visit was made on October 22 to document the nest box contents and to clean the boxes.

Results

Examination of the boxes on each occasion indicated that all ten boxes were being used by birds (Table 2). Tree Swallows were the predominant users that occupied seven of the boxes. At the time of the first visit, two boxes were being used by House Wrens while the third appeared to be used by Bluebirds (Table 1). However, the occupation pattern determined during the second visit suggested that there might well have been second broods or changes in occupancy. Most of the contents observed in October confirmed the earlier observations. Three boxes showed multiple users over the summer (Table 1). House Wrens had built nests over the earlier Tree Swallow nest in Boxes 5 and 6. Box 5

was believed to have been used by Bluebirds during the earlier visit but the contents suggested that it had initially been used by Tree Swallows. In the case of Box 8, the original nest appeared to have been that of Bluebirds and then it was sequentially used by House Wrens and Tree Swallows. The multiple uses of the boxes caused the tallies of occupancy to exceed the number of boxes (Table 2).

Comments

The high rate (100%) and multiple use of the bird boxes suggests that there is a shortage of breeding sites for cavity-nesting species in the Forks-of-the-Credit Park, at least in the grassland sites where the boxes were placed. This is not unreasonable considering that by its very nature, grasslands are open and thus generally devoid of natural cavities because of the lack of large trees. On the other hand, the open sites are desirable locations for foraging by Tree Swallows and Bluebirds. HNP is contemplating adding more boxes to the trail next year.

Table 1 – Results of monitoring of bird boxes established at Forks-of-the Credit Park

Box No.	June 26, 2017	Oct 22, 2017
1	Tree Swallow	Tree Swallow
2	Tree Swallow	Tree Swallow
3	Tree Swallow	Tree Swallow
4	Tree Swallow	Tree Swallow
5	Eastern Bluebird	House Wren on Tree Swallow
6	Tree Swallow	House Wren on Tree Swallow
7	House Wren	House Wren
8	House Wren	Tree Swallow over House Wren over Bluebird
9	Tree Swallow	Tree Swallow
10	Tree Swallow	Tree Swallow

Table 2 – Summary of use of bird boxes Forks-of-the-Credit Park

Species	June 26, 2017	Oct 22, 2017*
Eastern Bluebird	1	1
Tree Swallow	7	9
House Wren	2	4
*Totals exceed the number of boxes due to multiple uses		

References Cited

Ontario Ministry of Natural Resources 2016. Forks-of-the-Credit Provincial Park Management Plan 1990. Queen's Printer for Ontario

Results of the 2017 Monitoring of Bird Boxes Established at Scotsdale Farm, Halton Hills

W.D. McIlveen

A project to erect and monitor a network of bird nest boxes at the Scotsdale Farm located at Silver Creek north of Georgetown was initiated by the Halton/North Peel Naturalist Club in April 2014. Initially, sixteen boxes were placed at Scotsdale and three more were set up at St. Albans Church in Glen Williams. In 2015, 27 boxes were added to the trail at Scotsdale. It was decided that 13 old boxes already at Scotsdale would also be monitored. No new boxes were erected in 2016 or 2017. The positions of the boxes are shown in Figure 1.

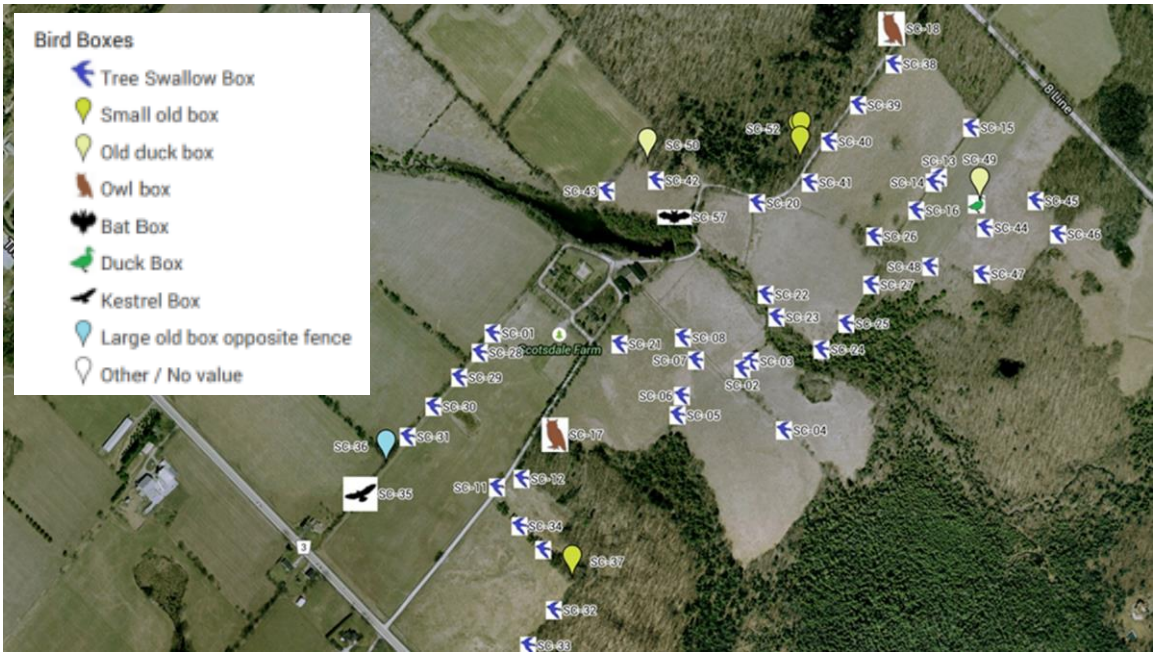


Figure 1. Map of Scotsdale Farm showing the locations of bird nest boxes established in 2014, 2015 and previously erected boxes.

The majority of boxes were of a standard design suitable for Tree Swallows or Bluebirds; however, two boxes were designed for owls and one was for kestrels. The old boxes had mostly been designed for Tree Swallows but at least one was intended for nesting ducks. Each box was assigned a unique identification number to assist with the anticipated subsequent monitoring. Monitoring in 2017 was continued in the peak of the breeding season with visits made on June 12 and 13. The boxes were cleaned in mid-October 2017 and the contents of each box was noted (Fig. 3). The present report considers the results for only those boxes at Scotsdale.

The results of the monitoring for 2017 are summarized in Table 1. Data for the boxes in the three previous years are also included for comparison.

Table 1. Contents of Bird Boxes at Scotsdale Farm 2014-2017							
Species	**2014**	**2015**		**2016**		**2017**	
	June	**June**	**October**	**June**	**October**	**June**	**October**
Black-capped Chickadee						1	1
Eastern Bluebird		1	2	2	0	4	4
House Wren	1	4	4	2	3	6	11
Tree Swallow	2	12	8	6	6	8	5
Mouse		1	2	5	7	0	4
Squirrel		2	1	1	0	0	0
Unknown		9	17	13	20	0	0
Empty	19	30	25	30	22	34	32
Total Boxes	22	59	59	59	58	53	54

During the June 2017 visit, the nesting birds had either eggs or young at different stages of development. In previous years, three species of bird and two species of mammal were found to use or have used the boxes. All of the species involved were species that commonly accept nest boxes. The bird species noted every year were Eastern Bluebird, House Wren and Tree Swallow. In 2017, one box was found being used by a Black-capped Chickadee for the first time. The mammals encountered during the October visit were Red Squirrel and a mouse species though the former was not confirmed in 2017. The vast majority of nesting attempts appeared to have been successful as there were no remaining eggs or dead young in the boxes when they were examined in October. The one exception was one House Wren nest where the eggs had not hatched. The nests that were still present at that time appeared to be quite normal for a nest that had been successfully occupied. Five boxes were not found in 2017 while one of these had fallen due to growth of the support tree.

Overall, the percent usage of the boxes was generally higher than in the previous years of monitoring (Fig. 2). The occupation by Tree Swallows was similar to previous years but the number of Bluebird and House Wrens had increased. Nearly 40% of the boxes had been occupied in 2017 despite the fact that a number of boxes had been obscured in different ways including growth of the supporting vegetation, growth of surrounding vegetation, or collapse of nearby trees and vines onto the boxes.

In addition to the typical nesting materials (twigs, grass, feathers) introduced by the nesting birds, some other material types were noted. Sometimes there was intact tree foliage that is not likely due to incidental entry caused by wind. Sometimes there was shredded material (bark or grass), moss, and fungi. Cocoons of undetermined moths, likely Gypsy Moth and Tent Caterpillars, and paper wasps were seen in several boxes. None of the old nest boxes had been used. The contents of the owl or kestrel boxes were not checked.

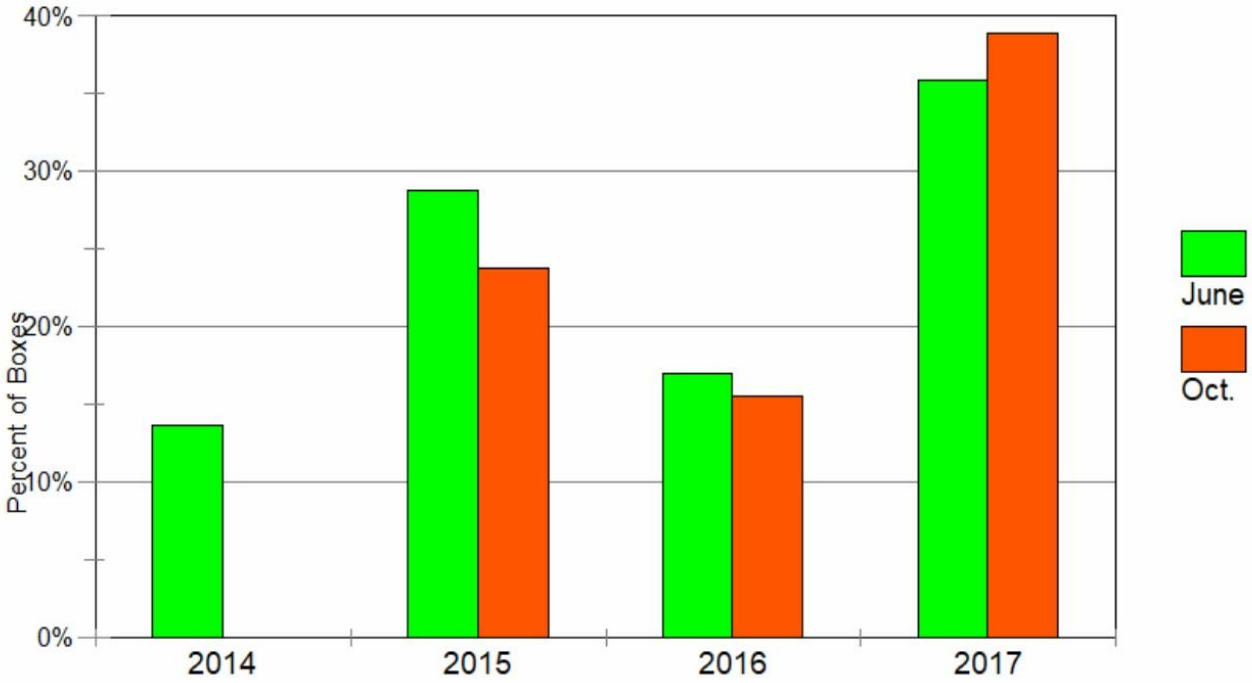


Figure 2. Summary of bird box use at Scotsdale Farm, 2014-2017.

In 2018, it will be very important to 'daylight' some of the boxes to make them more attractive to the birds. As a minimum, some boxes require pruning of the surrounding vegetation, tree branches, or vines. At least one box needs to be remounted.

Overall, it may be most efficient to move some boxes to new posts in more-exposed positions. Several were relocated to steel fence post supports in October. Some old boxes in poor condition are unlikely to ever be used and thus warrant removal. Any missing boxes could be replaced by new boxes, preferably located on new support poles.

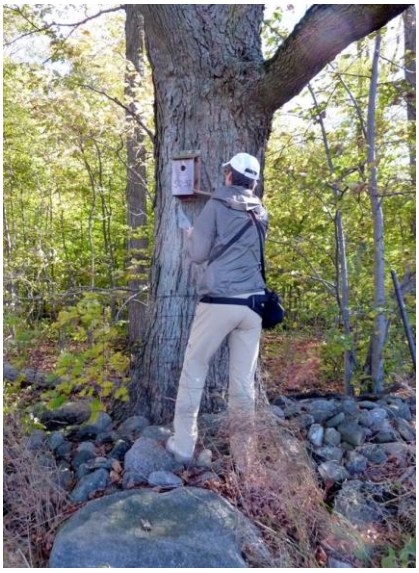


Figure 3. Checking bird boxes at Scotsdale Farm, October, 2017.

Don't forget to check the last page for your answers to the Spring Quiz on page 14!

Halton/North Peel Naturalist Club, Box 115, Georgetown, Ontario L7G 4T1
Charity Registration number 869778761RR0001

Executive

President: Don Scallen	(905) 876-6180
Past President: Fiona Reid	(905) 693-9719
Vice President: Ian Jarvie	(905) 877-1441
Secretary: Ann Fraser	
Treasurer: Janice Sukhiani	(647) 408-9515

Appointments

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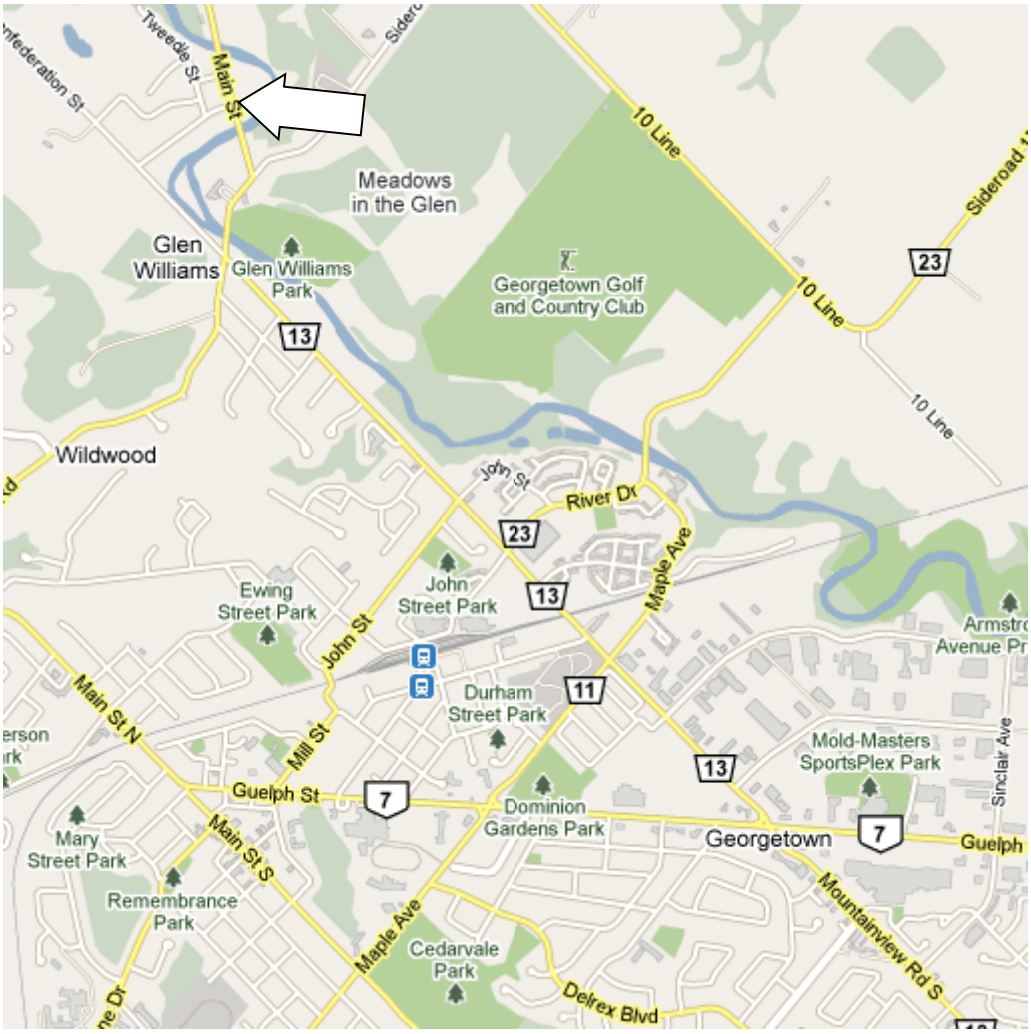
Newsletter:	Laura Weihs
Ontario Nature Representative:	Don Scallen
Webmaster:	John Beaudette
Crozier Property Steward	
Hardy Property Steward	Ray Blower

Membership for one year: $30 Single; $40 Family
The Halton/North Peel Naturalist Club is an affiliated member of Ontario Nature.

www.hnpnc.com

Halton/North Peel Naturalist Club

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



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?

_____

_____

_____

****

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: _____

****

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

Answers to Spring Quiz on page 14

1. Squirrel Corn
2. Fox Sparrow
3. Brown Snake
4. Compton's Tortoiseshell Butterfly
5. Mourning Cloak (butterfly)
6. Spring Peeper
7. Morels
8. Spotted Salamander
9. Fairy Shrimp
10. Yellow Lady's Slipper

An invitation to members:

If you'd like to submit a visual quiz for the newsletter just let Don Scallen or newsletter editor Laura Weihs know. Laura's e-mail is biker_chic@sympatico.ca

Our next newsletter will be published in early May. Summer things could be the theme, but other nature related themes would be fine as well.