The Esquesing

Halton/North Peel Naturalist Club
www.hnpnc.com

Volume 57, Number 5 May - June 2023

Meet Salamander “G”, the 7th piebald spotted salamander recorded by Don Scallen. First discovered this spring, “G” appears to be a female and needs a name. If you have a good “G” name suggestion, Don will put it in his Tilley hat and draw a winner prior to the May meeting. The prize? A bottle of Salamander Merlot/Shiraz if Don can find it. And in more piebald news, Calvin the Teenage salamander was observed again this year on April 16th. First photographed by Charlotte Cox in 2010 Calvin is now at least 15 years old, given two years to reach maturity!

Description & Photo Credit: Don Scallen

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President's Message

Spring is in full swing! The weather, mind you, has very much been up and down. Not necessarily a bad thing, as the cool, wet weather has its benefits: the watercourses and wetlands get well-recharged with a top-up from the spring rains, for example. This is a good thing, especially since the snow-pack in recent winters has tended to be light. For another thing, the amphibian breeding season gets drawn out a little this way, giving us a better chance to get out to witness it, and hopefully for their populations to benefit from it. Then again, bird migration may be slowed or halted temporarily with the poorer weather, and we get a protracted time to get out there and observe the migrants heading for their northern breeding grounds. Contrast this with a spring with long sunny, dry, warm spells: the birds will often race through on fair winds in a bid for the best nesting sites, and we get scant opportunity to see many of them in such years. Amphibian breeding may also be shortened and/or less successful if the ponds and wetlands have less water in warmer years like that.

That makes my preference easy, given my druthers: Give me a slow, cool, wet spring season any year, please! April showers bring May flowers... and salamanders, frogs, birds, insects, turtles ...

One thing that may also slow down with a cool, wet spring is the emergence of heat-loving reptiles like snakes. We plan to go looking for our lovely legless friends on our Saturday Adventure Walk this month. With some luck, we will be able to find a few as they come out of their hibernacula and start to warm up in the sun. If you are a fellow ophidiophile (snake-lover), you should definitely come join us. If you happen to be more of an ophidiophobe (fearful of snakes), you should *especially* come join us. There might be no better way to overcome such fear (or at least to blunt it) than to learn more about them with a group of enthusiasts who can talk about them, show you them, and share their joy with you. Hope to see you then, either way!

Other club activities: well, as always, check out the great info in the newsletter! Recent events are covered, like HNPNC's participation in the Town of Halton Hills' Race to Net Zero Earth Day event, which was a great success, thanks to the efforts of a whole crew of HNPNC members and directors: Bill McIlveen, John and Margaret Beaudette, Debbie Ervine, Leslie Bissegger, and Don Scallen were all instrumental in making this event a success, and I'd like to send a big "Thank you!" to you all. Everything went very smoothly thanks to you.

Our speaker this month will be Bill McIlveen, one of our resident fonts of wisdom and knowledge. His talk will cover Molluscs, a diverse group of animals that are generally overlooked and under-appreciated. Many don't realize that we have a good diversity of Molluscs in Ontario, that they are vitally important members of the ecosystem, and that many of them in Ontario are Endangered Species. Come out to the meeting to learn more! Bill's talks are always incredibly informative and fascinating.

Our June meeting will be our annual outdoor meeting at Scotsdale Farm, where we will hike the Bluebird Trail to check the bird boxes we monitor there. It's a great time to socialize with other members while we hike. Don't miss it!

See you at the meeting!

Yves Scholten

Below is a nice thank you note from Jennifer Spence at the town, for our participation in the Race to Net Zero event. She has included a photo she took of Margaret and Debbie.

"Hi Yves and the Halton North/Peel Naturalists Club,

Thank you for participating in the Race to Net Zero event, a collaboration between Your Green Homes and the Town of Halton Hills! We are so pleased that you joined us on Earth Day, Saturday April 22, 2023, to raise awareness in the community on actions that will lead to a low carbon community, and to showcase the great work of your environmental group. Your effort and enthusiasm at this event were appreciated, and we couldn't have done it without you!

Between 9:45 a.m. and 4 p.m. we welcomed about 750 guests inside the Acton Arena and Community Centre, to engage with 35 businesses and organizations that offer products and services within our community, and 40 electric vehicles showcased by auto dealers and proud owners!

Attached is a photo that was taken at the event that I thought you would like to have. Your booth looked great and very engaging!

If you haven't done so already feel free to provide feedback on the event.

Thank you and have a wonderful day!

Jennifer Spence, BA
Climate Change Outreach Coordinator"

Talks and Walks

Indoor Events - Talks

Time/Date: 7:30 pm on the second Tuesday of the month

Location: **Hillsview Active Living Centre**, 318 Guelph Street - Unit #9, Georgetown (entrance at the back of the building) Map on last page of the newsletter.

Tuesday, May 9, 2023 at 7:30 pm

Bill McIlveen: An Introduction to Molluscs

During this presentation, Bill hopes to make you a little more familiar with a group of animals that don't get a lot of attention. These are the molluscs which are present in salt water, fresh water and terrestrial habitats. He will be showing the various different types, their ecology, conservation, as well as some information about the surprising number of interactions with humans. A display of assorted specimens is planned.

Tuesday, June 13, 2023 at 7:00 pm (Unless a rain date is required.)

Provided that the weather cooperates, our June monthly meeting will be held outdoors again at the Scotsdale Farm. We would like to monitor the nest boxes that the club started setting up in 2014. We hope that we will have enough people to check all the boxes for nests of Tree Swallows, Bluebirds, and House Wrens and perhaps even a Chickadee. Meet at 7 p.m. in the parking lot at Scotsdale Farm, entrance east off Trafalgar Road, north of 27 Sideroad, Silver Creek.

Outdoor Events

Please Note: More details will follow closer to the event date. Please confirm your participation for each outing to adhere to the ever changing Covid safety protocols.

Acton Swift Watch on Monday, May 29 at 7:00 pm

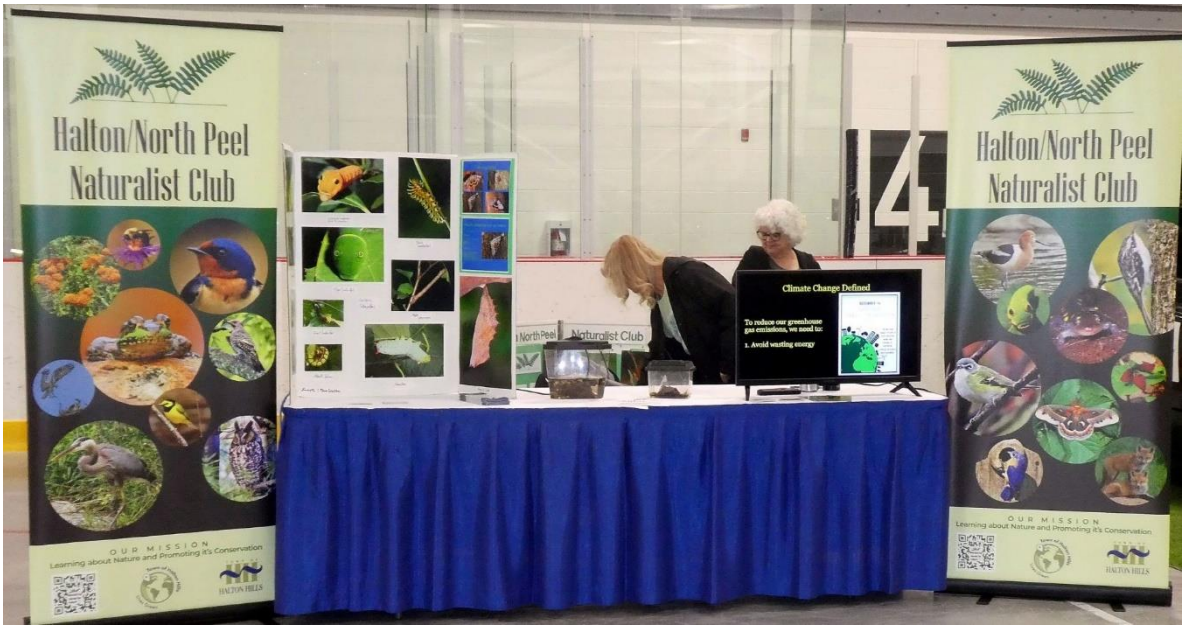
We will meet at the parking lot for Prospect Park near Fairy Lake in Acton at 7:00 pm. We will first check the site of the Osprey Platform the Club erected in late 2022, then we will proceed to Alice Street to tally the Chimney Swifts entering the former Baxter chimney.

HNPNC SATURDAY ADVENTURE WALKS

DATE	EVENT	LEADER
13 May 23	Migrating Songbirds	Ian Jarvie
20 May 23	Snakes (9 am meet at Winners, Georgetown Marketplace, Guelph St. The hike will be at Fletcher's Creek Ecological Preserve)	Yves Scholten
13 Jun 23 (rain date possible)	Scotsdale Bird Boxes	Bill McIlveen
17 Jun 23	Bat Night	Fiona Reid

New HNPNC Display on Earth Day

The Naturalist Club had a chance to bring out its new public display materials at the 'Race to Net Zero' event which took place at the Acton Arena on April 22, 2023. That event was intended to raise awareness of real climate change solutions. A large part of the show included electric vehicles. Our part included a table that had new roll up banners, large colourful photos of moths and some live pond critters including fairy shrimp and salamanders. Also, for the first time, there was a new TV screen capable of displaying a PowerPoint presentation. Overall, the display was as interesting and professional as any in the entire show. Well done!



New HNPNC Display Booth at Acton Arena, April 22, 2023 above and Butterflyway booth staffed by two HNPNC members, Helen Pinchen (on left) and Katherine Shaw (on right). Katherine is also the lead Butterflyway ranger for Halton Hills.

Ichneumon Wasps

Article by W.D. McIlveen (with photos by Irene McIlveen Figs. 4, 5, 6)

We were doing the usual Monday Evening Walk on July 25 on the Caledon Rail Trail a little north of Mississauga Road when someone noted a spectacular wasp sitting on an old stump at the side of the trail. The insect was obviously a type of wasp with a body nearly 2 inches long. It was shiny black with some yellow around the head. Most spectacular was the ovipositor (Fig. 1). It was very thin and when I put a tape measure along side it, the ovipositor was nearly 6 inches. It was amazing how cooperative the wasp was in allowing me to get so close.

The information obtained quickly allowed for an identification of the species. It was a Black Giant Ichneumon Wasp (*Megarhyssa atrata*). They are parasitic on the larvae of Pigeon Horntail Wasps (*Tremex columba*). Those hosts are themselves a type of wasp in the wood-boring sawfly group. The hosts are also quite large which is a prerequisite considering the size of Ichneumon Wasp. The Horntail is also quite a spectacular wasp (Fig. 3). The female Horntail uses her own ovipositor to drill into the wood where she lays an egg in the wood. She does this a number of times to ensure a successful brood. The young larvae feed on the wood in the host stump and can create an extensive network of tunnels within that stump.

The Ichneumon is able to detect the presence of the feeding Horntail larvae, presumably by the crunching of the wood, within the stump. The parasite uses its antennae to sense the presence of the potential host. When a victim is located, the Ichneumon uses that long ovipositor to reach the tunnels of the Horntail larvae. The ovipositor can penetrate 3 inches to find the suitable host tunnel. The Ichneumon passes an egg along the ovipositor until it is dropped into the tunnel close to the host. The egg hatches and the new larva penetrates the Horntail larva. In time, the Ichneumon reaches its full larval size. It emerges from its host, pupates and soon a new Ichneumon is ready to enter the outside world and continues the cycle.

Fig. 1. Black Giant Ichneumonid Wasp (*Megarhyssa atrata*) Cheltenham Rail Trail 2022

Fig. 2. Giant Ichneumon Wasp (*Megarhyssa macrurus*) Rattlesnake Point, 2005

Fig. 3. Pigeon Horntail (*Tremex columba*), Windsor, 2011

Fig. 4. Ichneumon sp. (*Rhyssa humida*), Terra Cotta C.A.

The species we saw was *Megarhyssa atrata* but I did not recall ever seeing that one before. But in my photo collection, I found pictures of the same species that I had taken at the Speyside Tract in 2009. I had seen another *Megarhyssa* (*M. macrurus*) species several times. I am certain that I had observed it at Backus Woods, at Rattlesnake Point, and at a few other locations over the years. The photo (Fig. 2) was taken during the Rattlesnake Point encounter.

There is an estimated 60-100,000 Ichneumon species worldwide. The taxonomy of the family is not entirely worked out yet and there is considerable revisions and refinement still underway. While it is possible to determine most species by following conventional keys and other scientific literature, it takes considerable dedication to understand the taxonomic relationships. At least 37 species in the genus *Megarhyssa* have been described but that total includes other areas of the world. The North American area north of Mexico has a total of four species and two of these are shown in Figs. 1 and 2 respectively. A sample of the other quite different Ichneumon species are shown in Figs. 4, 5, and 6.

Most of the Ichneumon wasps are far smaller than the giant forms that prompted this account. They are really quite common but we usually pay limited attention to them. Some appear at lights including those set up to attract moths. We could probably find them easily hunting among wildflowers if we were a little more attentive. A field guide to the species would help spark more interest in the group.

Figs. 7 and 8 show an unknown Ichneumon wasp in action at Rattray Marsh. At first, it examined a rolled-up leaf of a Dogwood. Having satisfied itself that the leaf contained a suitable host insect, it proceeded to lay its eggs by penetrating the leaf with its ovipositor. The process was much like that of the Giant Ichneumons described at the start of this article. In this case, there was no need for such a long ovipositor and reaching the host would have been much easier than reaching through wood.

Fig. 5. *Acrotaphus wiltii*, Acton

Fig. 6. *Rhyssa* sp. on Scots pine, Duffins Heights

Fig. 7 & 8. Ichneumon checking rolled leaf then laying eggs through that leaf. Rattray Marsh, 2004

Ichneumonid Parasitoid Wasps as well as another family of wasps with a similar role in nature – the Braconidae - are extremely important ecologically by limiting numbers of other insects that are both economically and ecologically important. Many species help control insect pest populations and some have been introduced specifically for that purpose. Some Ichneumons have been introduced as biological control agents to manage such pests as Alfalfa Leaf Weevil, Clover Leaf Weevil, European Corn Borer, Introduced Pine Sawfly, Cereal Leaf Beetle, Larch Sawfly, European Corn Borer, gypsy moth, Codling Moth, and European Pine Shoot Moth. Different Ichneumon species have evolved to feed on different specific hosts or host groups.

And by the way, that long 'stinger' AKA the ovipositor, does not represent a threat to humans. Parasitic wasps have no interest in stinging humans and do not have venom like some wasp species do. While some Ichneumons could potentially jab a human, that would only occur if that human were acting irresponsibly.

The Greatest Threat to Biodiversity: urban expansion and population growth

Opinion and Photos by Don Scallen

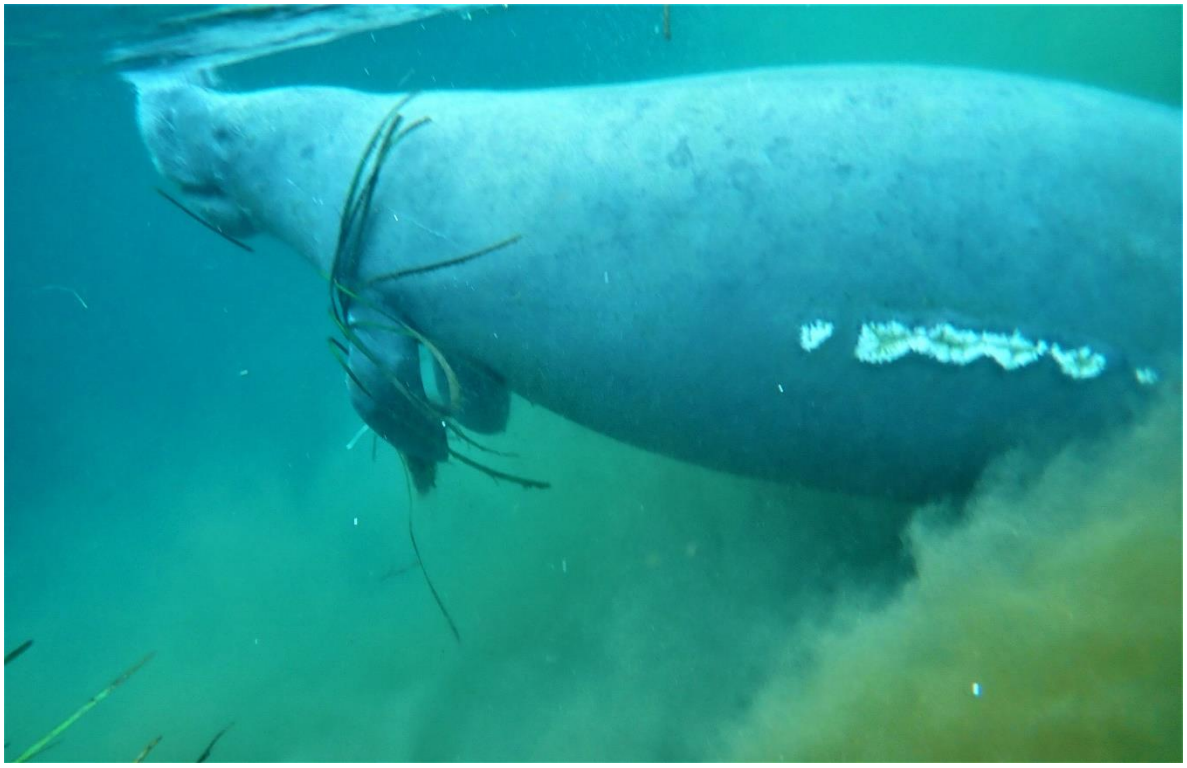
On a recent trip to Miami Florida, I was struck by the similarities between that region and ours. Not, of course, the climate! Just like us Miami is bent on adding tens of thousands of people every year. The expansion of greater Miami into farmland and natural areas continues apace just like it does here. We seem, as a species, unable to imagine a future that doesn't involve constant population increase and associated urban growth.

I spent an evening with a python hunter in the Everglades – a Michigan transplant who has lived in southern Florida for three decades. During that time, he's watched the relentless approach of Miami from the east. He's convinced that urban development will soon swallow all the unprotected land between the Everglades and the Atlantic Ocean.

Similarly, urbanization in the GTA continues to expand northwards. Caledon is forecast to grow from its current 80,000 people to 300,000 by 2051. In southern Florida the bulwark against Miami's expansion is the Everglades. Here it's the Greenbelt. But I fear as development continues unabated, pressure will increase on these protected areas.

We're already seeing the intimations of this pressure with the recent action of the provincial government to remove Greenbelt lands in Durham County while – admittedly – adding land elsewhere.

Expanding our cities destroys biodiversity. An iconic Floridian species provides one example of how this happens. Run-off from cities and from the farms needed to support those cities kills the sea grass that manatees eat. More people in Florida translates into more boats on Florida waterways and more manatee injuries and death from the propellers of those boats.



Manatee with scar from a propeller.

Here in the GTA run-off, among other growth-related assaults, has eliminated much of our brook trout habitat and, may soon threaten the remaining populations we have. And more people mean more cars, leading to increased roadkill of our reptiles and amphibians and increased pressure on parks and conservation areas.

I'm generally a hopeful person but when I muse about our appetite for constant population growth I despair. There is simply no way to sugar-coat the reality that our growing population and urban footprint will continue to destroy biodiversity.

Population growth is the elephant in the room. We pay attention to the repercussions of that growth and rail against its tangible fallout: highway 413, a planned mega-quarry in Caledon, loss of farmland in Halton and Peel, but what we almost never address is the root of those issues – adding tens of thousands of people to the GTA every year.

Environmentalists laud urban intensification as the solution and though that may temporarily halt sprawl – while depriving residents of gardens and yards – what happens when all the available urban land is "intensified"? With population growth unquestioned and uncontested, where do the people go after that happens? How do we manage the increasing impacts of more and more people on our parks, on the Niagara Escarpment, on the Bruce Trail, on wildlife crossing roads. Consider how sections of the Bruce Trail near the GTA were impacted by unprecedented numbers of visitors during Covid. Then ask what the impact on sensitive areas will be when the GTA adds an additional few million people over the coming decades. I need someone brighter than me to explain how rushing blindly into an ever more crowded future, destroying wildlife as we do, is to our benefit.

Does anyone – a politician, environmental planner, futurist – have any notions of what our ultimate population should be? What future are we aspiring to achieve? What, exactly, is the end game?

Bat House Fundraising

Kudos to Rob Best who, with help from his brother, built two bat houses and donated them to our club for fundraising. These are not just any bat houses but rather the equivalent, in batdom, of high-end real estate – roomy bat mansions with three vertical compartments allowing discriminating bats to choose just the right ambient temperature for their daytime snoozing. The only downside is that they might encourage bat snobbery and general unrest among bats that have less posh digs.

Regardless, the first bat house was raffled off for $220 dollars and went to a particularly deserving couple: Kim and Ramona Dobson. Kim was recently recognized by the club for his stellar efforts building select homes for bluebirds, tree swallows and house wrens. Scores of Kim's nest boxes have been put up at Scotsdale Farm and Forks of the Credit Provincial Park and they have been remarkably successful in attracting breeding birds.

The second bat box was auctioned off for $180 at the recent Race to Net Zero Earth Day event in Acton, where our club had a booth.

So, in total Rob Best's bat houses have yielded $400 for club coffers. *Much appreciated Rob!*

Arbor Day Plantings - Introduction

Article and Photos by W.D. McIlveen

The first Arbor Day in North America is claimed by Nebraska in 1872. It soon spread to other states and Canadian provinces. In 1885, Sir George W. Ross, the Education Minister for Ontario, declared Arbor Day to be a school holiday. The day was intended to give the school children an interest in making and keeping the school grounds attractive. The time could be devoted to improving and beautifying school grounds through planting flowers, trees, and shrubs. He stated that "the condition of the school grounds throughout the Province is anything but complimentary to our taste and tidiness as a people." Each year therefore school children throughout Ontario had one day off in May to help their teachers beautify school grounds. In some places, the teacher would lead a walk in the local forest.

At this point in time, it is rather difficult to know exactly what the true long-term impact of the Arbour Days has been. Any flowers or shrubs (other than as a hedge) would be nearly impossible to detect. On the other hand, trees have much better chance of still being detectable because they are generally longer-lived. Given that the declaration of the first Arbor Day was 1885, we can be reasonably confident that any Arbor Day trees were planted after this date.

Tree planting at U. of Guelph tree nursery

Aerial photo of St Williams Nursery

It should be noted that the introduction of Arbor Day occurred at about the same time that the Province of Ontario was growing concerned about the degree of tree removal as land was cleared for agriculture. As a consequence, the government passed an *Act to encourage the Planting of Trees along Highways, 1871*. This was followed by additional legislation in 1883 and 1896. These acts encouraged tree planting along roadsides with an incentive payment of $0.25 for each tree that survived. The trees planted at that time are still evident as rows of large trees along highways in southern Ontario. Those remaining trees are quite large and many have started to decline because they are over-mature. And while we have no record that the trees associated with the tree planting Acts were actually planted at local schools, it cannot be ruled out. The planting of trees at both the schools and along roadsides

shows that similar thinking for both programs was happening. [McIlveen, 2007] The species involved include two main kinds. These are Sugar Maple and Norway Spruce. The Sugar Maples match the prevailing species from the roadside planting.

Arbor Days were celebrated up until about 1960. It was around this time that many of the single room schools were being closed in favour of new, multi-room schools. The new schools were less conducive to Arbor Day activities and it was very common for new school yards to be supplied with landscape trees at their creation. If we presume that tree planting was done for Arbor Day, as of 2020, such trees should be at least 60 years old and not more than 135 years old. That means that any trees would be quite large.

On the matter of Norway Spruce, these were grown at the new Zavitz nursery at the Ontario Agricultural College in Guelph [Bowley]. A limited number of free tree seedlings including Norway Spruce were provided by that nursery in 1905. The nursery was relocated to St Williams in 1908 as a government-owned tree production facility. Free trees were available to farmers in early years. In those years, half a million Norway Spruce were provided. Numbers of Spruce produced increased to 2 million in 1924, to 6 million in 1930, and 33 million in 1959. If one looks at farmsteads around Southern Ontario, it is very common to see small windbreaks consisting of 10-20 Norway Spruce. Although the size of the trees is very variable, a large portion of the trees could easily be from the first half of the 20th Century. A number of Norway Spruce were planted around the schools. It is not certain that they were planted as part of an Arbor Day program but in one case, we do know for certain that the Spruce were planted on Arbor Day.

Pine plantation at Shanahan Tract, 2016

Conservation - Tree planting at Dufferin Quarry 2011

This article is an introduction to the topic of tree planting associated with Arbor Day. Others will follow although a previous article [McIlveen, 2022] about the Speyside Royal Oak also belongs here.

The planting of trees is also associated with many other programs. Arbor Day has been largely replaced by Earth Day. But there are now many other equivalent days that may or

may not be celebrated with tree planting. They included National Tree Day (the last Wednesday in September), Tree Day (January 10) and National Love A Tree Day (May 16 each year).

There is a large number of planting programs in addition to large commercial plantings. The list of the other programs includes compensations as carbon offsets, Memorial Trees, trees planted for reclamation purposes, early roadside tree planting [McIlveen, 2007], Ceremonial Trees, plantings by groups such as the Boy Scouts, plantings at schools, plantings by Conservation Authorities, street tree planting in urban areas, planting for home landscapes, replacement trees for trees that have been lost to agents such as the Emerald Ash Borer, and National Forest Week. There are many other programs. All of these possibilities make it nearly impossible to attribute the source of most trees.

References:

McIlveen, W.D. 2022. The Speyside Royal Oak Story. The Esquesing. Vol. 56 (4): 11-15,

McIlveen, W.D. 2007. Rural roadside trees. Field Botanists of Ontario Newsletter. Vol. 19 (3/4) Fall/Winter 2007. Pp. 13-14.

Bowley, P. (2015). Farm Forestry in Agricultural Southern Ontario, ca. 1850-1940: Evolving Strategies in the Management and Conservation of Forests, Soils and Water on Private Lands. Scientia Canadensis, 38 (1), 22–24.

Update on the Acton Osprey Platform

W.D. McIlveen

The details of the erection of the Osprey nesting platform at Fairy Lake in Action were provided by Don Scallen in the Jan-Feb edition of The Esquesing. The platform was put in place on the north side of Fairy Lake on December 9, 2022. Of course, we could not expect to see any use of the platform by Ospreys at that time of year. On April 20, 2023, I stopped at the Prospect Park boat ramp to see what was happening at the platform. While I was hopeful that an Osprey might be there, I could see a head appearing above the nest structure. A closer look indicated that the head was that of a Canada Goose. Although that was not expected, it was not a total surprise as I knew geese would sometimes accept unusual sites. Once I saw a pair on a nest within a Sugar Maple near Britannia Road and Trafalgar Road. Geese will sometimes nest on flat roofs. I knew that they would nest in suitably-formed trees. Still, one in an Osprey platform was rather unusual. I went back to the site on April 21 to take a few pictures. One of those pictures is attached. The bird on the nest gave an appearance of being settled in for the duration. A second goose swimming nearby in Fairy Lake could have been the mate. We will see how the young goslings fare on their first big step into the big wild world.

Canada Goose on Osprey platform Fairy Lake, April 21, 2023

Spring Things Photo Quiz

Photos by Don Scallen

Answers on page 17

1

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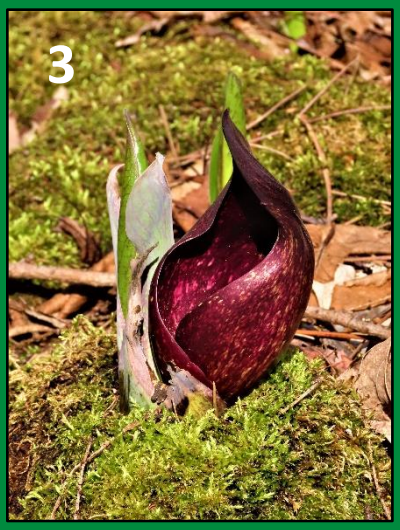

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Answers to the Photo Quiz on page 16

1. Pickerel frog
2. Compton tortoiseshell
3. Skunk cabbage
4. Song sparrow
5. Mourning cloak
6. Ribbonsnake
7. Leatherwood
8. Spotted salamander laying eggs
9. Woodcock

Halton/North Peel Naturalist Club Membership Form

Name: _____

Address: _____

City: _____ Province: _____ Postal Code: _____

Telephone: _____

Email: _____

Application Type: New_____ Renewal_____

Membership Type: Single ($30)____ Family ($40)____

If "Family Membership", please list additional names:

_____

The membership year is September 1 to August 31. Renewals are due in September. For new members who join after April 1, the fees are applied to the following year's membership.

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Participation in our outings involves walking or hiking on various trails. By voluntarily participating, you assume full responsibility for all risks of personal injury. Make sure that any outing you choose to participate in is within your fitness level. Please wear appropriate clothing and footwear.

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Please fill out this form and bring it to our next indoor meeting, or mail it along with a cheque payable to Halton/North Peel Naturalist club to:

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

Halton/North Peel Naturalist Club

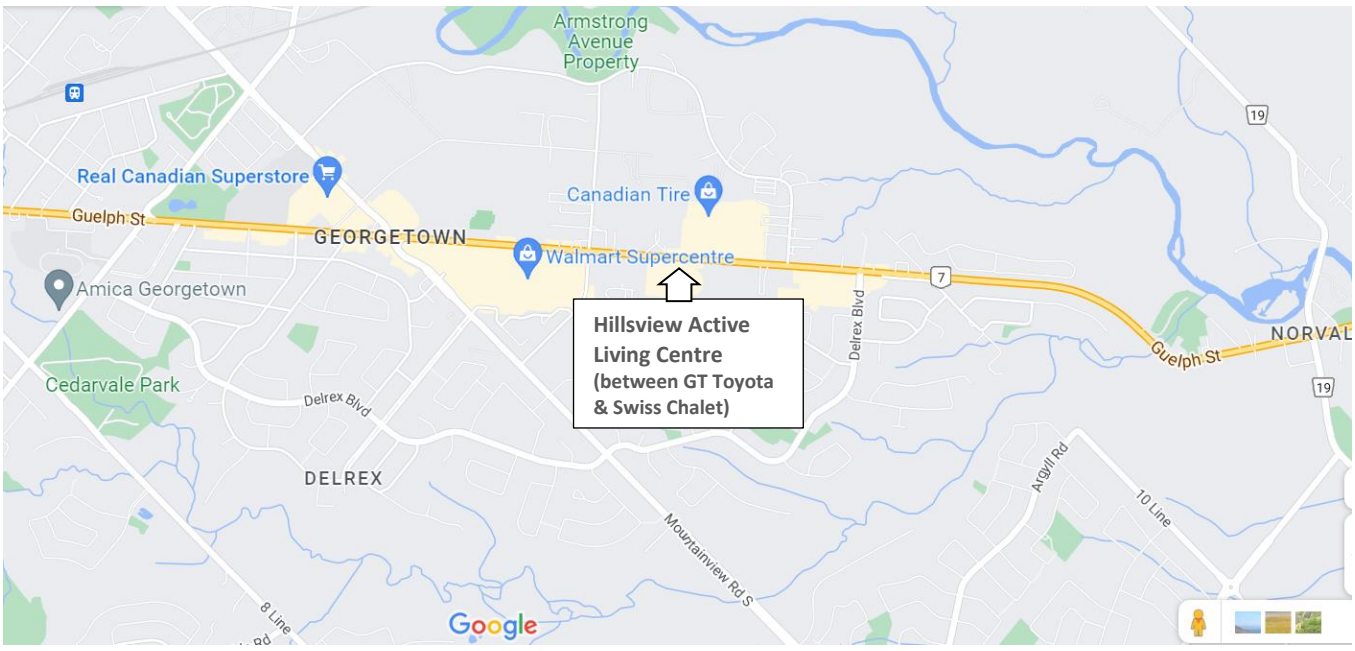
Box 115, Georgetown, Ontario L7G 4T1
Charity Registration number 869778761RR0001
www.hnpnc.com

Board of Directors

President: Yves Scholten yvesjs9@gmail.com
Past President: Don Scallen (905) 876-6180
Vice President: Ian Jarvie (905) 877-1441
Secretary: Helen Pinchen (519) 766-8876
Treasurer: David Williams (905) 877-1539

Appointments

Membership: Leslie Bissegger
Newsletter: Laura Weihs
Webmaster Communications Director: John Beaudette
Member at Large: Fiona Reid
Ontario Nature Rep: Don Scallen
Roving: William McIlveen
Hardy Property Steward: TBD
Crozier Property Steward: Pedro Pereyra

We have returned to **in person meetings** at a **NEW venue**

Time/Date: 7:30 pm on **the second Tuesday of the month**
at
Hillsview Active Living Centre
318 Guelph Street - Unit #9, Georgetown
Note: the entrance is at the back of the building