The Esquesing

Halton/North Peel Naturalist Club

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An immature Bald Eagle and a Northern Raven square off. These two species have expanded their ranges over the last few decades. Both were once nearly eliminated in the GTA and southwestern Ontario. Now they are free to rekindle age-old antagonisms here in the south.

Description & Photo Credit: Don Scallen

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Common Goldeneye male

President's Message

Though we don't always like to think or talk about it, I think we are all aware of the Biodiversity Crisis that is well underway in the Anthropocene world of today. Many consider this to be as serious as the global warming crisis. A major part of this is the so-called "insect apocalypse", as the global insect decline has been dubbed. Insects suffer human prejudice like few other wildlife clades - snakes, sharks and spiders come to mind, but not many other animals share this company. Yet, the glory of a darting Dragonfly in the sunlight, or the joy of a Butterfly alighting on a child's finger, or hearing the trilling chirp of Crickets on a summer evening - these are experiences we can all think of with a thrill of the natural beauty that touches us when we are near them.

Insects are, perhaps more than most more-charismatic species, fundamental to our ecosystems and food-web, and so it behooves us to pay close attention to their welfare and conservation.

The positive news stories in conservation - and there always are some! - are crucial for us all. It is hard to continue paying attention to the news without being negatively affected by it. We need beacons of hope to draw energy and inspiration from.

Dr. Heather Kharouba is joining us at this month's meeting to share some of the promising results from her research on insect ecology and teaching. She is offering us some of that hope and inspiration, in what promises to be an interesting and enlightening talk, so be sure not to miss it!

Then we have birding in November! Ian will be leading a group to get out and tally raptors as they migrate along the lake shores now. However, this is dependent on weather conditions, so we are playing it by ear. Stay tuned and please join us! Bring your hawk-eyes to help spot hawks and eagles soaring on NW winds.

Next month's meeting will be the annual Holiday Season Members edition. If you have several choice photos you would like to share, please sign up to give your mini presentation. We would love to see your beautiful pics! Remember it is a ten-minute time slot, depending on how many presenters turn out, so you will have to choose your best 10 or 12 photos. Many tough decisions to be made....

Looking forward to seeing you all at the meeting next week!

Yves Scholten

Indoor Events - Talks

Time/Date: 7:30 pm on the second Tuesday of the month
Location: **St Alban's Hall,** 537 Main Street, Glen Williams, ON L7G 3T1
Map on last page of the newsletter.

Tuesday, November 14 at 7:30 pm
Dr. Heather Kharouba: Insect Ecology in the era of Climate Change

Insects are facing an unparalleled decline and human activities like habitat loss and climate change, are among the leading causes of this decline. These losses could disrupt insect herbivory and pollination and have major cascading implications for ecological communities and ecosystems.

Despite this bleak outlook, there are reasons for optimism. **Dr. Heather Kharouba** is an Associate Professor in the Department of Biology at the University of Ottawa where she studies global change ecology and insect conservation. Her lab's research focuses on how and why species are responding to global change and what those responses mean for ecological communities, with a particular focus on plant-insect interactions.

Tuesday, December 12 at 7:30
Our annual slide sharing soirée.

This is always fun! Members are invited to share slides and wax poetic about them. Please limit your presentation to 12 minutes or less, or Ian Jarvie may gently tug your frame with a Scottish cromach (Shepard's hook). Let Don Scallen dscallen@cogeco.ca know if you plan to participate. Slides should be contained on a memory stick.

White-winged Scoter, Don Scallen

Outdoor Events - Walks

Saturday, November 18 or Sunday November 19th
Possible Hawk Cliff Expedition*
Leader: **Ian Jarvie**
Departure time**: around 8:00 a.m. but weather dependent.**
***Note: If the winds are simply not favourable for hawk migration, Ian Jarvie may still offer an adventure walk on Saturday the 18th to a closer destination: perhaps to Lake Ontario or Paletta Park in Burlington. Watch your inbox.**

Continuing our **Saturday Adventure Walks**, we are planning an outing to **Hawk Cliff**, a renowned raptor watch location situated just east of Port Stanley on the shores of Lake Erie, where every fall thousands of raptors pass through in migration.
(Raptors won't cross large bodies of water, since water does not produce the energy saving thermals they use. Instead they gather at the lakeshore before skirting around the lake.)
The best conditions are when a strong North or North-west wind is blowing, and we will only know that a couple of days ahead of time. Therefore, we are planning on pencilling in the following dates, hoping that the weather gods will grant us at least one good day:
Saturday 18 November, or **Sunday 19 November** It depends on the winds. A few points to note:
It's a 2-hour drive from Georgetown, so plan on being out most of the day. Carpooling is DEFINITELY recommended.
Bring warm clothing, a chair, food and hot drinks - a strong N or NW wind means it will probably be cold.
Obviously binoculars - and a camera - you may get amazingly close shots of some of these raptors! I was there last Sunday with 2 other Club members, and host of other birders, including the OFO counters and experts who were a great help in ID'ing some of the birds.
Just to whet your appetite, here is a list of the raptors we saw on a trip in late October:

725 Turkey Vultures (definitely under counted!)
7 Golden Eagles
24 Northern Harriers
185 Sharp-shinned Hawks (definitely under counted!)
2 Goshawks
28 Bald Eagles
7 Red-shouldered Hawks
38 Red-tailed Hawks
5 Rough-legged Hawks
18 Kestrels
9 Merlins

2 Peregrine Falcons
4 calling birds
3 French hens
2 turtle doves And
1 partridge in a pear tree.
(just to see if you read the whole message)

Check your inbox closer to the time for updates.
Contact me, **Ian Jarvie** at **auldscot1@cogeco.ca** if you have any questions.

December Adventure Walk

Owl Prowl
Date not yet set. Please watch your inbox
Leader **Yves Scholten**

Christmas Bird Count
Wednesday December 27th
Organizer **Ian Jarvie** **auldscot1@cogeco.ca**

This is an annual club event and a ton of fun. Please consider taking part even if you're a novice birder. You'll find yourself on a team with at least one seasoned birder and will learn more about the birds that tough it out with us in the cold north. Camaraderie is key too. This is a great way to connect with fellow club members. I've done this for decades (Don Scallen) and am always surprised by some of the species we find. There is always a wild card or two, something unexpected. Please join us.

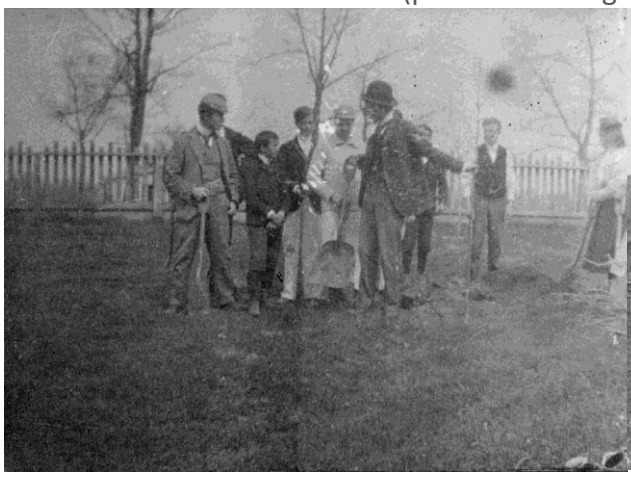
Upcoming winter adventure walks: In the new year we'll offer a tracking outing and our popular snowy owl expedition to the open country of north Wellington and Dufferin counties.

Red-breasted Merganser male, Don Scallen

Arbor Day at Upper Canada College

Article by W.D. McIlveen

Upper Canada College (U.C.C.) was no stranger to the importance of Arbor Day. The photograph (below left) of a planting in 1898 proves this point. The photograph, by virtue of its date, proves that it was for an event at the Toronto campus of UCC. The same sense of importance of tree planting continued immediately after the Outdoor Education program commenced at Norval in 1939 (photo below right).



Arbor Day, Upper Canada College 1898
mikan-33881457

Arbor Day tree planting UCC Norval, 1939

Soon after they acquired the property. UCC launched an ambitious reforestation program at Norval in 1939. At that time, the Norval property had been almost entirely cleared for agriculture, except for the sloped areas. Students planted individual trees at first. Between 1939 and 1965, nearly a half-million trees were planted. This large number required the assistance of a tractor-drawn planter but the students were still called upon to sit on the planter to plant the trees. Almost all of the planting stock were pine and spruce.

It is reported that they started planting in the tablelands off Highway 7. It is also reported that many of the seedlings from the earliest plantings were killed by mice but perseverance eventually paid off. That particular area was eventually sold in 2013 and the housing development is currently recognized as the Enclaves of Upper Canada.

The Maple Leaves Forever project is a project that was created to help replace roadside trees that had died or were lost due to road reconstruction. That project provides a 25% financial incentive to land owners to replace the lost trees. Over eight years, U.C.C. took advantage of that program and planted about 250 Sugar Maple trees along roads, trails and other places on the property. The planted trees were 1.5 metre saplings.

Part of the conifer plantation at U.C.C. visible during bioblitz held on the property in 2017,

View of Arboretum at U.C.C., Norval, 2015.

When U.C.C. purchased an additional 25 acres of property along Winston Churchill Blvd. adjacent to the road curving south to the Village of Norval, they immediately planted White Spruce trees with students. About 300 trees in two rows were planted for future traffic noise abatement. In the early 1990's, U.C.C. planted White Pine and Black Walnut (approximately 150 walnut) saplings in an open area of 2 acres on the property.

In 1965 and with the assistance of York University, an Arboretum was created along the entrance to the U.C.C. buildings. Records indicate that the arboretum originally had 57 species. This was updated to 59 in 2015.

We can confidently conclude that the extensive tree plantings undertaken on the Upper Canada College property in Norval has been the largest participation in Arbor Day activities in Halton. We therefore must recognize the reforestation achievements by U.C.C. as a great success.

Aerial image of UCC campus

Gerry Doekes with HNP Group UCC arboretum, 2004

Walking Sticks

Article and photos by Don Scallen

Walking sticks mating. The female is the plump one

Some birds nibble buds, others may occasionally munch leaves, but sticks and branches are ignored. These woody parts offer little, if any, food value to birds. No wonder then, that some insects have become stick doppelgangers.

Northern walking sticks inhabit forests and the shrubby habitats throughout southern Ontario – basically anywhere their stick exemplars exist. They are common, but we seldom see them. Like songbirds, we lean heavily on our vision to find things. Camouflage that foils birds, stymies us as well.

It's fascinating to ponder that walking sticks have been conjured, in a sense, by the birds that hunt them. If walking sticks were not threatened by visual predators, they would have no reason to look like sticks.

And if walking sticks owe their unique form to the eyesight of birds, it's likely true, that in turn, birds owe some of their visual acuity to walking sticks via a positive feedback loop. Birds push walking sticks to look increasingly like unpalatable sticks, while the walking sticks push birds to hone their eyesight ever sharper.

Japanese researchers have recently discovered that exceptional camouflage is not the only trait that assists walking stick survival. They fed gravid (egg-bearing) walking sticks to birds. Remarkably, some of the unlaid eggs passed unscathed through the birds' digestive tracts.

Walking stick egg about to drop from female's abdomen

Walking Stick eggs

The adaptive value of this is clear. Walking sticks have mobility issues. Not so birds. Eggs passing through their guts might drop to earth kilometres away. These Japanese walking sticks could be thought of as fruit analogues, dispersing their eggs via avian vectors, precisely the same way that raspberries, serviceberries, and many other fruiting plants spread their seeds.

The eggs of our walking sticks drop from the abdomens of the tree-dwelling females in autumn, falling into the leaf litter below. But I do wonder if some of them might catch a flight to new habitats courtesy of birds!

Bioherms

Article by W.D. McIlveen

The chances are rather large that most people have never heard of bioherms. The chances are at least as great that the same people have seen these structures but did not know what they were seeing. The purpose of this present article then is to help people understand one more of the things that are present in our local environment.

First, we need to understand what a bioherm is. Different definitions of a bioherm have been proposed but they mostly agree that they are a product created by a community of organisms that contribute physically and chemically to gather and bind sediment [Pettijohn]. These structures can be viewed as fossilized reefs that were formed in shallow water in ancient times. We generally view such assemblages as living reefs where they occur in recent times. The dominant organisms are algae, but bryozoans and crinoids are common constituents. When algae are involved, we can be certain that the bioherms were formed in relatively shallow water since light would be necessary to sustain the algae growth.

Very simple versions of bioherms include stromatolites. Larger bioherms might be built up over time to be 60 meters thick and extend for more than 1 kilometer [Pettijohn]. The bioherms are built up by sedentary organisms and the surrounding rock that is formed over time tends to enclose the bioherm and is of a different lithology. Some bioherms have captured some of the organic matter deposited by the constituent organisms and over time, that matter has been converted to small deposits of bituminous materials [Armstrong].

Fig. 1 Bioherm on south side of Highway 401 at 1st Line, Campbellville, 2004

Fig. 2. Bioherm on north side of Highway 401 at 1st Line, Campbellville, 2004

Bioherms are restricted to areas where Paleozoic limestone occurs. That geological time period occurred from 360 to 540 million years before present. While that amount of time is so large that it is hard for human minds to imagine, it is still relatively recent compared to the full history of the earth which has been around for about 4.5 billion years. It should be recognized that the long period from the origin of the earth until the relevant part of the Paleozoic period occurred had seen the evolution of appropriate types of life forms including algae. These organisms were essential to the creation of the bioherms under discussion.

In Ontario, most of the exposed limestone or sedimentary rock is visible on the ground surface in Southern Ontario while igneous rock dominates in Northern Ontario. In Southern Ontario, limestone is particularly evident as the face of the Niagara Escarpment. Beneath the Escarpment, we have a thick layer of the bright red Queenston Shale. It is prominent as the valley walls of many of our local rivers including the Credit, Sixteen Mile Creek and Bronte Creek as well as the Cheltenham Badlands. This shale has few fossils and was created during the Upper Ordovician period which lasted until about 443 million years ago. When the Ordovician period ended, the Silurian period began. In our area, that happened within a shallow ocean. Over time, calcium and magnesium carbonate precipitated in the water column and those deposits built up as the limestone that became the Escarpment. The story is much more complex than just described as many different changes in deposition happened over the years. The details of that process are rightfully the domain of geologists. The average reader only needs to appreciate that limestone deposits were slowly accumulating at the bottom of the shallow ocean and that this was the time frame when our bioherms were formed as reefs.

Fig. 3. Bioherm on Campbellville Road west of First Line

Fig. 4. Bioherm exposures on James Bay lowlands west of Attiwapiskat, 2007

While the limestone and dolostone of the Escarpment are familiar to us all the way from Niagara Falls to Milton, up through the Bruce Peninsula and through Manitoulin Island and beyond, those were not the only areas where limestone was being formed. Most people are not likely aware that a similar process was happening in the northern part of the province. Few people get to visit the James Bay area where there are also extensive areas of limestone bedrock. Much of this obscured by a thin layer of swampy muskeg though it does make its appearance above the general surface as bioherms which are the focus of this article. The bioherms appear as slight mounds rising above the seemingly endless wetland (Fig. 4). The age of the James Bay limestone deposits is of a similar Upper Ordovician age, ca 445 million years, as its southern counterpart. The fossil species from both areas are quite similar.

Bioherms are quite common in the Halton area above the Niagara Escarpment [Tovell]. One notable one is located on Highway 401 immediately west of the First Line near Campbellville. It required a road cut to construct the Highway. The south and north exposures of that roadcut are shown in Figs. 1 and 2 respectively. An observant eye will see

that there are about a half dozen bioherms exposed in a series of low limestone outcrops as one travels further west to the Halton border with Wellington County. There are numerous other bioherm exposures along the roads of Nassagaweya Twp. (Fig. 3). As well, there are several additional small rock cuts along Highway 25 between Speyside and Acton.

Fig. 5. Bioherm at Sideroad 25 west of Highway 25 south of Acton

One cut through a bioherm on Sideroad 25 just west of Highway 25 appears to host a snake hibernaculum as Garter Snakes have been noted here at around the time that snakes emerge after winter (Fig.5). There are many cracks and fissures in that rock formation that seem suitable for wintering snakes. Though other bioherms have not been specifically studied in this connection, many others of this type of formation could serve very nicely as winter refuges for our snake population.

References:

Armstrong, D.K. and J.E.P. Dodge. 2007. Paleozoic Geology of Southern Ontario. Project Summary and Technical Document. Miscellaneous Release—Data 219. Sedimentary Geoscience Section, Ontario Geological Survey

Pettijohn, F. J. 1975. Sedimentary Rocks. Third Edition. Harper & Row, Publishers. New York, Evanston, San Francisco, and London. 628 pp.

Tovell, W.M. 1992. Guide to the Geology of the Niagara Escarpment. (With Field Trips). Niagara Escarpment Commission with the assistance of the Ontario Heritage Foundation. 1 volume (various pagings): illustrations, maps, plates.

Searching for Caterpillars with Darwin

Article and Photos by Don Scallen

Forgive me this flight of fancy but how glorious it would be to stroll in the night-shrouded escarpment woods with Charles Darwin. I'm sure he would be awestruck by what flashlights reveal after dark. I'm sure he would marvel again at the power of evolution to create "endless forms most beautiful and most wonderful," as he did in summing up his world-shaking *On the Origin of Species*.

Promethea Moth caterpillar

I can imagine the joy the great man would experience encountering the caterpillars of southern Ontario – the otherworldly crowned slug moth caterpillar, the quixotic promethea moth caterpillar or the surpassing beauty of the laurel sphinx caterpillar.

What insights would he offer into these wildly diverse lepidopteran (moth and butterfly) larvae? What would I learn from him? What unexpected tangents would occupy his thoughts?

This fall, I joined up with friends including Fiona Reid to search for caterpillars after dark with UV flashlights, something the great Darwin didn't have at his disposal. Turns out that most caterpillars fluoresce in black light. Our success rate in finding beguiling nocturnal cats has bumped up significantly.

What would Darwin offer to explain this fluorescence? What theory would he propose to explain why some, like the promethea moth caterpillar, don't glow?

Darwin's effusive appreciation of nature's beauty and wonder sustained him, gave him purpose, ignited a bonfire of curiosity. Darwin, though, was not unique.

Laurel (aka Fawn) Sphinx

While none of us are likely to come up with anything rivaling *On The Origin of Species*, we too can experience the joy, the awe, the mysteries of nature that so inspired its author.

All we need do is ramble outdoors and greet nature with inquiring minds. And one of the best times to do that in early fall is after dark with flashlights in hand – perhaps with the muse of Darwin looking over our shoulders.

Crowned Slug Moth Caterpillar

More photos can be found at https://www.inthehills.ca/2023/10/caterpillars-darwin-would-love/

Results of the 2023 Monitoring of Bird Boxes Established at Scotsdale Farm, Halton Hills

W.D. McIlveen

The Halton/North Peel Naturalist Club has maintained a network of bird nest boxes at the Scotsdale Farm located just north of Silver Creek since 2014. In that first year, sixteen boxes were placed on the property. Another 27 boxes were added to the network in 2015. Some old boxes were already present on the property and these were subsequently incorporated into the network. Most of these have suffered from further deterioration over the years and are no longer functional. All functional boxes have been monitored annually since they were established. The present report is a summary of the results for 2023.

Starting in 2018, the boxes were gradually moved to new steel posts away from the trees and hedgerows which had become overgrown by woody vegetation and vines. Most boxes have now been day-lighted or slightly moved. As of 2022, there were 41 operational boxes. In October, the formerly bright-white baffles were painted with spray paint as a camouflage.

As previously reported. 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 also 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 monitoring. Monitoring of the boxes in 2023 was carried out in the main part of the breeding season on June 14. All of the boxes were cleaned in October when the content of each box was again noted.

The observations made during the respective box checks are summarized in Tables 1 and 2. It has become very apparent that the main species using the boxes (Eastern Bluebird, House Wren, and Tree Swallow) do not breed at exactly the same time. The Bluebirds typically start nesting first while the Wrens construct their stick nests later on top of the nests created by the other species. This means that a difference of only a few days in the monitoring visit date can produce quite different results. Two of the boxes were occupied by Black-capped Chickadees but not until sometime after the June evaluations had been done. The exact number of young Chickadees produced is not known.

The visit date in 2022 was a few days later than in 2021 (June 14 v June 10). This small time difference showed that the young from three of the Bluebird boxes were able to fledge (leaving boxes with no young). The Tree Swallow nests contained young in 2022 instead of mainly eggs seen in 2021. By chance, the first nest box evaluations for both 2022 and 2023 fell on June 14. The tallies for the two years are therefore directly comparable based on the monitoring date. The reproductive totals for the two years were 38 eggs and 105 young in 2022 and 45 eggs and 116 young in 2023.

Another main observation made in 2022 and 2023 was that the vast majority of boxes were being used. In the earliest years, fewer boxes were used. The apparent increase in

nest box use is almost certainly related to the repositioning of certain boxes into the open edge of the fields and away from trees and hedgerows. By comparison, the bird boxes established at The Forks-of-the-Credit were all initially placed in the open at the start of that project and thus they have seen virtually 100 percent occupancy every year. The results at Scotsdale are now catching up.

As noted above, the results obtained from the bird boxes at Scotsdale are summarized in Tables 1 and 2. As mentioned, the majority of the boxes were utilized during the breeding season. The Swallows were the dominant users with 25 boxes in use but Bluebirds made substantial contributions with 11 of the boxes having been used. Wrens occupied 13 boxes over the breeding season.

Reproductive success measured as eggs and unfledged young added up to a total of at least 133. This number does not include the unknown number of Bluebirds that had fledged before the boxes could be checked. Based on average production, this could have contributed about another 12 new Bluebirds to the population. The total quoted is an over-estimate of the actual production. Three Bluebird nestlings died prior to nest cleanout. Also, one Wren nestling died and 5 Wren eggs never hatched.

Table 1. Bird reproduction in bird boxes Scotsdale Farm, June 14, 2023.

Species	Eggs	Young	Total
Eastern Bluebird*	15	5	20
House Wren	17	17	34
Tree Swallow	13	94	107
Total	45	116	161

*2 boxes with young already fledged

!

Table 2. Boxes used in 2023

Species	Jun.	Oct.
Eastern Bluebird	6	11
House Wren	10	13
Tree Swallow	25	17
Black-cap'd Chickadee	0	2
Empty*	*7	*14
Total Used	41	43

*Includes all boxes unused or replaced for any reason

Bird Box Use at Forks-of-the-Credit Provincial Park, 2023

By W.D. McIlveen

A network of ten bird nesting boxes was started by the Halton/North Peel Naturalist Club in 2017 at the Forks-of-the-Credit Provincial Park in Caledon. One of these (Box FC-01) was dedicated to the memory of former club member Valerie Dobson. It is identified by a small plaque. In 2018, the network was extended to 22 boxes. The boxes were of a design suitable for Eastern Bluebirds or Tree Swallows. The boxes were placed in open sites to reduce predation by snakes or certain mammals. The boxes were fixed on metal T-bar fence post supports supplied with baffles.

The boxes were examined again for evidence of breeding birds during 2023 by members of HNP. The first visit was made on June 17 within the main breeding season. The second visit to document the nest box contents and to clean the boxes was made on October 10. The results from the first six years of operation have been routinely reported in various issues of the Naturalist Club's newsletter [McIlveen 2018a, 2018b, 2019, 2020, 2021, 2022]. The present reports the results for 2023.

Contents of one nest box – original nest of Tree Swallow with two blue feathers then sticks placed on top by House Wren

With the exception of Box No. 1, all boxes were used during the 2023 breeding season. That box and pole had been knocked down but it was reinstalled during the October visit. The usual three species – Eastern Bluebird, Tree Swallow, and House Wren - accounted for all the use observed (Table 1). Most of the breeding evidence at the first visit was young birds in the nest. The preponderance of nestlings over eggs in 2023 is almost certainly due to the later visit date in 2023 (June 17 vs June 10 in 2022). This difference allows extra time for the eggs to hatch. Four of the six Bluebird nests had neither eggs nor young but it is not certain if the young in these boxes had fledged before the check was carried out. Production of eggs and young in 2019 and 2020 totaled 89 and 87 offspring respectively. Comparable results in 2021 and 2022 were both 75 young while that for 2023 was 60 young. A casual observation might give the impression that the boxes were becoming less-productive over time. Before such a conclusion is reached, an accounting of the visit dates needs to be made. Later- nesting of the House Wrens almost certainly undercounts the number of young Wrens produced.

Table 1. Summary of bird box use at Forks-of-the-Credit Provincial Park, 2023

Species	Box Use		Box Contents June 17	
	Jun 17	Oct. 10	Eggs	Young
Eastern Bluebird	6	6	0	8
House Wren	5	15	6	13
Tree Swallow	10	11	5	28
Box Missing	1	1	0	0
Total	22	32*	11	49

* Total nests exceed total boxes due to reuse of boxes, primarily by Wrens

Overall, the results from the October evaluation matched the breeding season observations. The greatest difference was that during the intervening time, House Wrens had built nests in fifteen of the boxes making the total Wren tally well over half of the boxes.

The heavy use of the bird boxes over the project's lifetime indicates that the nest boxes have added substantially to the populations of certain bird species. Even with data gaps known from the first two years of operation, and despite the absence of records for the late-nesting House Wrens, the known number of eggs and young produced over the six years stands at at least 434. The species involved represent cavity-nesting species which have no real opportunity to nest in the open meadow habitat. They could certainly feed in the area but nesting would not be possible. Naturally, we would not expect all of the young to survive due to natural mortality forces. While we may not know the exact numbers of birds being added to the wild population, a reasonable assumption is that the nest boxes at least sustain a number equivalent to the number of pairs using the boxes. In 2023, this would be equivalent to the 32 pairs indicated in Table 1.

References

McIlveen, W.D. 2018a. Bird Box Use at Forks-of-the-Credit Provincial Park, 2017. The Esquesing. Vol. 52 (4) pp. 18-19.

McIlveen, W.D. 2018b. Bird Box Use at Forks-of-the-Credit Provincial Park, 2018. The Esquesing. Vol. 53 (2): 9-11.

McIlveen, W.D. 2019. Bird Box Use at Forks-of-the-Credit Provincial Park, 2019. The Esquesing. Vol. 53 (2): 13-14.

McIlveen, W.D. 2020. Bird Box Use at Forks-of-the-Credit Provincial Park, 2020. The Esquesing. Vol. 55 (2): 10.

McIlveen, W.D. 2021. Bird Box Use at Forks-of-the-Credit Provincial Park, 2021. The Esquesing. Vol. 56 (2): 7-8.

McIlveen, W.D. 2022. Bird Box Use at Forks-of-the-Credit Provincial Park, 2022. The Esquesing. Vol. 57 (2): 7-8.

Photos Don Scallen

Photo
John Beaudette

Are Monarch butterflies really at risk?

Article and photo, Don Scallen

Not if you ask Andy Davis, a research scientist at the University of Georgia, who has been studying monarch butterflies since 1997. Davis is the author of a blog called *The science of monarch butterflies.* https://www.monarchscience.org/

I've selected three of Davis's blogs, reporting on recent research findings that the common perception of monarch decline may be wrong. These blogs are well worth reading in their entirety. The most recent of the three https://www.monarchscience.org/single-post/evidence-from-monarch-dna-shows-the-population-has-not-declined published August 28th of this year, details genetic research into monarch populations. One of the researchers was Anurag Agrawal at Cornell (and formerly York University in Toronto). Agrawal's *Monarchs and Milkweeds* is my favourite monarch butterfly publication. Here's one finding from the genetic study: "The bottom line from this new study is that the monarch population size is bigger now than it was before humans modified the landscape of North America 200 years ago, and, that there has been no recent decline in the population size of either monarchs, or common milkweed."

Again, please read the blog in its entirety for greater clarity.

An earlier blog https://www.monarchscience.org/single-post/new-study-published-despite-winter-colony-declines-monarchs-are-thriving-in-north-america-really from 2022 is a longer read but full of interesting information about a study that contradicts the prevailing view that monarch butterflies are in trouble. Here are the key findings summarized by Davis:

- The abundance of breeding monarchs in North America has not declined over the last 25 years. This means that the long-term declines of monarchs at wintering colonies - both in Mexico and in California, are not indicative of how the summer population is faring.
- If the abundance of breeding monarchs has not changed over time, this inherently means the monarchs are not suffering from a lack of summer resources - they currently have everything they need, including milkweed, to produce their summer generation(s).
- This conclusion also means that monarchs should not be considered for endangered species listing either in the U.S. or in Canada.

The third blog from August 8 of this year https://www.monarchscience.org/single-post/the-inconvenient-truth-about-monarchs is the shortest, but for me the most unsettling. This is because Davis – the blogger and scientist – took the time to reach out to various NGO's and governmental organizations with the findings of the research referenced in the two previous blogs. He contacted the Canadian government (which is considering listing monarch butterflies as endangered), the National Wildlife Federation, Environmental Defense Fund, the Xerces Society and WWF among other groups. The response, if he got one at all, was along the lines of "We'll get back to you".

Davis's take on why the NGO's ignored the data is disturbing: "Of course I'm not privy to the inner communications from these groups, but if I had to guess, I would say it is because they *want* people to continue believing monarchs are in trouble, because it is a huge incentive for donations, and for getting people to volunteer, or even to plant a pollinator garden. People will really open their wallets when they hear monarchs are in trouble."

If Davis is right and NGOs are choosing to ignore reputable and extensive research because it may threaten the flow of donations, we have a problem.

It is important to note that Davis, Agrawal, and the other scientists associated with these studies are not monarch butterfly lightweights. They are veteran scientists. Their views are backed by decades of research. Though the findings do not support the standard narrative, their research demands to be more widely known. It deserves to be read, shared, and commented on. If NGOs like the WWF and the National Wildlife Federation don't agree with the conclusions of the research – and I presume they don't – I want to hear from them. I want to know why. All of us who are passionate about conservation, deserve nothing less than a robust exchange of views on this important issue.

From The Web

Ontario Feederwatch Cam (One of the Cornell Birdcam offerings)

https://www.allaboutbirds.org/cams/ontario-feederwatch/?utm_source=Cornell+Lab+eNews&utm_campaign=e8af394c87-Cornell-Lab-eNews-November-2023&utm_medium=email&utm_term=0_47588b5758-e8af394c87-359505645

Other Cornell Lab Birdcams
https://www.youtube.com/@CornellBirdCams

Various Live Nature Cams worldwide
https://explore.org/livecams

Stick Insects (Phasmid) Eggs https://levonbiss.com/projects/phasmid-eggs Take a look at the astonishing architecture of the eggs of walking sticks and related insects.

Common Goldeneye Female, Don Scallen

Photo Quiz

A collection of fall migrants and overwintering birds courtesy of the inimitable Ian Jarvie

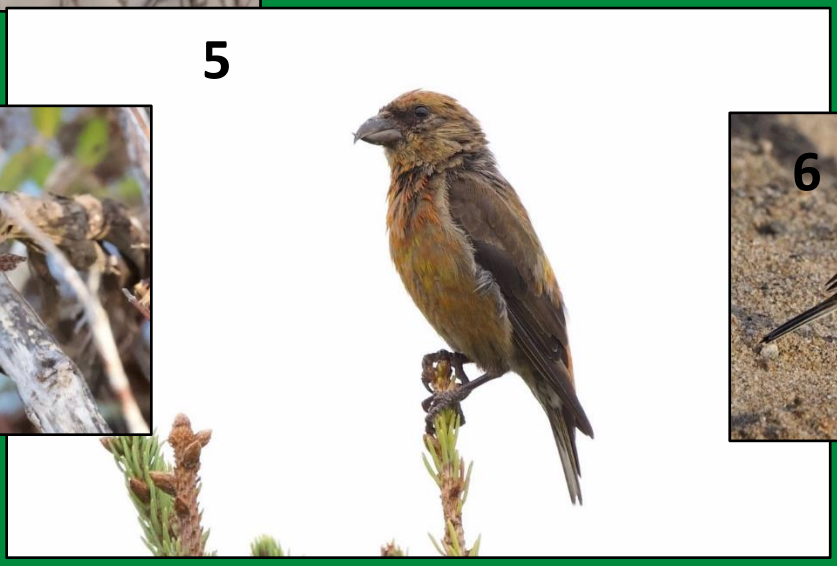
Answers on the next page

1

2

3

5



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8

9

Answers to the Photo Quiz on the previous page

1. Eastern Bluebirds
2. Golden-crowned Kinglet
3. Fox Sparrow
4. Winter Wren
5. Red Crossbill
6. American Pipit
7. Brant
8. Northern Harrier (male)
9. Tufted Titmouse

After fighting their way up Iwo Jima hill at Forks of the Credit, three intrepid club members raise nest box FC-06. May their sacrifice never be forgotten.

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.

****

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.

****

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

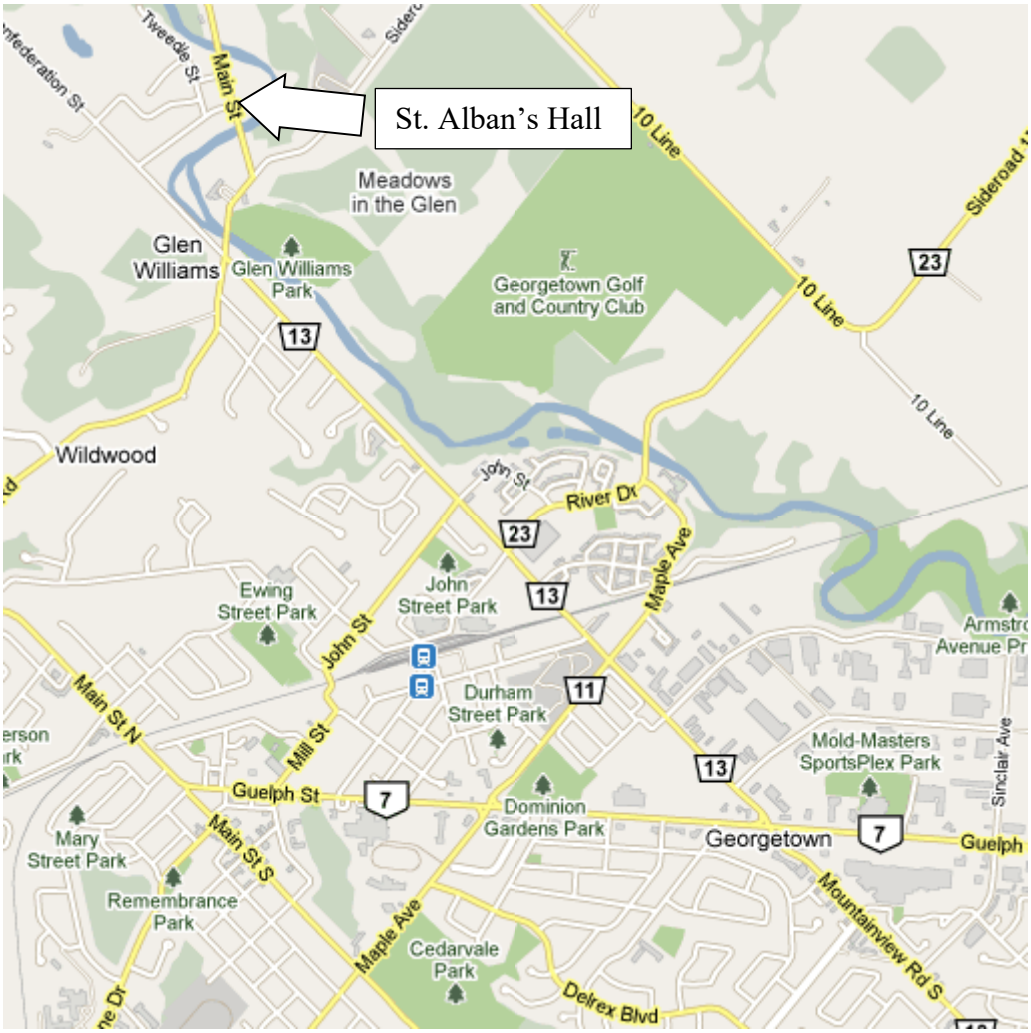
Halton/North Peel Naturalist Club

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: Vacant
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

Meeting Time/Date: 7:30 pm on **the second Tuesday of the month**
at
St Alban's Hall, 537 Main Street, Glen Williams, ON L7G 3T1