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Newsletter of the Halton / North Peel Naturalist Club

Volume 47, Number 2

March-April 2013

Club Activities

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

March 12th, 2013: Hummingbird mechanics - Professor Kenneth Welch.

Hummingbirds are masters of flight. They can hover, turn on a dime and even fly backwards. Professor Welch of the University of Toronto has conducted research to better understand just how hummingbirds manage their aerial acrobatics. Join him to learn more about what makes these fascinating birds tick.

April 9, 2013: Trees of the Urban Forest - Philip van Wassenauer. Philip van Wassenauer is an arborist, past president and director of the Ontario Urban Forest Council. He is currently the principal consultant for Urban Forest Innovations Inc. which specializes in the preservation, enhancement and management of the urban forest. He will speak to us about aging trees - their ecology, their survival strategies and the particular conservation challenges they pose in an urban setting

May 14, 2013: Introducing Children to Nature - Calvin Knaggs. This presentation is about a father and his daughter and the extraordinary experiences they have shared in the natural world. Calvin and his daughter have a special affinity for herpetiles - fox snakes nesting in a compost pile in Norfolk County, ringnecked snakes along Oakville Creek, tiger salamanders at a family farm in Manitoba. Calvin will share his images of these animals and many others and will speak about the value of experiencing nature with children.

Outdoor: See individual outing details for meeting locations and times

March 9, 2013: Tundra Swans at Long Point. Flocks of Tundra Swans stop at Long Point during their spring migration to the 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 around 1:00 p.m. and the outing usually ends in the late afternoon near Jarvis. Bring snacks, water, a lunch or money for the restaurant(s) and layers of warm clothing, etc. Call Ray Blower, (519)853-0171, by Thursday, March 07 for more details.

April 20, 2013: Beamer Conservation Area Hawk Watch, Grimsby. On the way to Grimsby we stop at Scotch Block reservoir and La Salle Park to see waterfowl and early songbirds. Beamer Conservation Area, at the top of the escarpment in Grimsby, provides a large clearing and two fabulous lookouts to search the sky for migrating hawks. Walking trails in the surrounding woods show early wildflowers and songbirds. Bring a lunch and water, hat, sunscreen, binoculars, scope, etc. Call Ray Blower [\(519\) 853-0171](tel:5198530171) for car pooling and other details.

May 19, 2013: Spring Birding at Thickson Wood, Lynde Shores Conservation Area, and Cranberry Marsh. This trip leader has long recommended this as the best day-trip location for spring birding. This cluster of very good birding locations provides a wide variety of habitats including mature forest, meadows, marshes, swamps, 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 weekend has resulted, so far, in trouble-free driving to and from these Whitby birding hot spots. Bring a lunch and water, warm layers of clothing, hat sunscreen, binoculars, scope, etc. Call Ray Blower [\(519\) 853-0171](tel:5198530171) for car pooling and other details

June 11, 2013: Our annual evening outing and the finale of the 2012-13 Halton/North Peel Naturalist Club season. This will be a walk along the Great Esker Trail just north of Georgetown. Aside from its geological interest, the Great Esker Trail boasts an excellent diversity of trees. Meet at the trailhead on the 8th line at **7pm** (a Bruce Trail side trail marked with blue flagging paint) Walking difficulty: moderate. Be prepared for a mosquito or two! Call Don Scallen at [905 877 2876](tel:9058772876) for details

Hello everyone!

Spring is in the air – at last. Chickadees are starting to sing and court, owls may already have young. A friend of mine in Toronto has a pair of Red-tailed Hawks busily piling sticks in her pine tree for their new nest.

For all naturalists, especially those of us in the cold north, it is a time of celebration and a time to get out and see all the changes underfoot. Soon we will welcome salamanders to the ponds, signs of new green growth under the snow, and before long a white carpet of trillium in the woods.

We have some great indoor and outdoor programs in the coming months and I hope to see everyone at these events.

Best wishes,
Fiona

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

Executive

President: Fiona Reid (905) 693-9719
Past President Andrew Kellman (905) 681-3701
Vice President: Don Scallen (905) 877-2876
Secretary: Anne Fraser (905)-877-1844
Treasurer: Janice Sukhiani (647) 408-9515

Appointments

Membership: Valerie Dobson (905) 828-1729
Newsletter: Nicole Charlton (519) 993-6870
Ontario Nature Representative: Freyja Forsyth
Public Relations: Vacant
Webmaster: Andrew Kellman
Crozier Property Steward Marg Wilkes
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

Hairys and Downys

Don Scallen

Hairy and Downy woodpeckers frequent backyard feeders at this time of year. Though different sizes – the hairy larger, the downy smaller – their colouration and patterning is well-nigh identical. The bills tell the tale. Hairy woodpeckers brandish large dagger-like beaks; the beaks of Downys are smaller and more chisel-like.

I've always assumed that downy and hairy woodpeckers were about as closely related as two species could be – that sometime in the relatively recent past, their lineages diverged from a common ancestor.

This happens when a species of animal or plant becomes geographically isolated through some mechanism, such as an ice age. Each group then proceeds on its own evolutionary trajectory to become a different species.

Interestingly, gene sequencing has proven that this process is not responsible for the similarity between downy and hairy woodpeckers. It turns out that they aren't closely related at all. They are both, most assuredly, woodpeckers, but they peck on separate branches in the woodpecker evolutionary tree.

One startling theory suggests that mimicry – like the mimicry that explains the similarity between monarch butterflies and viceroy butterflies – is at work. Just as viceroys benefit from their resemblance to toxic monarchs, downy woodpeckers may benefit from looking like hairy woodpeckers.

To explain how, a study in 2012 proposed that the look-alike downys are able to claim space and resources because hairy woodpeckers mistake them for other hairys. The reasoning continues that since hairy woodpeckers know that fighting each other is potentially dangerous – recall the dagger beak -- they leave the similar looking downys alone as well.

I don't think the last words have been written on this topic. For me the idea that downy and hairy woodpeckers developed their striking similarity as a result of mimicry strains credulity, but then the natural world is nothing if not astonishing.

Photos of these woodpeckers can be found at the following link:

<http://www.inthehills.ca/2013/02/blogs/hairy-and-downy-woodpeckers/>



Downy Woodpecker by Fiona Reid

TUFA DEPOSITS DISCOVERED IN CREDIT RIVER WATERSHED

Leanne Wallis, Credit Valley Conservation. January 2013.

In 2012, Credit Valley Conservation inventory staff discovered a provincially and nationally rare phenomenon along the Niagara Escarpment at Silver Creek and Belfountain. This discovery was of tufa, a soft rock, being actively formed at the emergence of select springs. Tufa is a variety of limestone. It differs from typical Escarpment rock formed on ancient sea beds from calcium-rich shells, exoskeletons and coral. Instead, tufa is formed by calcium precipitated out of water. Bits of the precipitated calcium carbonate can amalgamate to create larger rocks.

Ontario's known tufa deposits are formed at springs and waterfalls, particularly along the Niagara Escarpment. Tufa is only known in Ontario from Brantford, Paris, Dundas, Niagara Falls, and with the discoveries reported herein, Silver Creek and Belfountain. In 2008, the Ontario Ministry of Natural Resources designated a tufa deposit in Brantford as a provincially significant Earth Science Area of Natural and Scientific Interest.

Tufa only forms at springs where just the right conditions exist. First, ground water must contain carbon dioxide picked up from the air, making the water weakly acidic. Second, the ground water must become supersaturated with soluble calcium by dissolving limestone. Third, as the calcium-rich water emerges from the ground, it must release enough carbon dioxide to cause the soluble calcium to solidify into insoluble calcium (rock). The same precipitation process is responsible for the formation of stalactites and stalagmites in caves.

Tufa was first found in the Credit River watershed by the author and assistant Pete Davis at Silver Creek Conservation Area. The author recognized it based on tufa deposits seen on a Hamilton Naturalist's Club hike to Spencer's Gorge (Dundas) led by Dr. Terry Carleton, a forestry professor at the University of Toronto. Dr. Carleton was the first to document tufa deposits at Spencer's Gorge, which he recognized based on his observations of similar occurrences in England. News of the discovery at Silver Creek led to CVC's Scott Sampson reporting possible tufa at Belfountain Conservation Area. A visit by the author, CVC's Dawn Renfrew, biologist Lynda Ruegg, and Dr. Carleton confirmed the report.

Tufa deposits at Belfountain may be more abundant than anywhere else in Ontario. Tufa deposits can be easily observed at this conservation area on north-facing slopes. The best viewing spot is from the foot bridge that spans the West Credit River. The largest and most impressive tufa deposit can be seen from here on the slope on the south side of the river. This tufa deposit is almost completely covered by a blanket of moss in shades of green and red, with a small patch of whitish tufa peeking through.

Tufa deposits are a challenging growth environment for plants because soil is absent, the substrate is rock, conditions are calcareous, and there is a constant flow of cold water. Few plants can function in such environments; many of those that can are mosses, especially those specializing in seepy, calcareous habitat. Our tufa deposits, if not barren, tend to be either dominated by mosses, or populated by hardy plants such as Watercress (*Nasturtium sp.*), Jewelweed (*Impatiens sp.*) and European Coltsfoot



Leanne Wallis at Silver Creek CA Tufa
(Photo by Pete Davis)

(*Tussilago farfara*). The dominant moss on Silver Creek and Belfountain tufa deposits is *Cratoneuron filicinum*. It is not a rare moss, however, there are some provincially rare mosses known to grow on tufa that could be found in future inventories. Interestingly, because photosynthetic activity removes carbon dioxide from the spring water, mosses and other plants actually help create more rock once they become established.

In addition to potentially supporting rare mosses, tufa formation areas may also act as amphibian and dragonfly/damselfly breeding habitat. This is because tufa is often formed on slopes, creating terraces on which small pools of water are formed. Evidence suggests that salamanders (some of which are Species At Risk) may breed in these pools, and as some dragonfly/damselfly species restrict their breeding areas to seeps, they may also be found in these tufa pools. These spring-fed pools may also be an important water source for wildlife, especially if they remain unfrozen in winter months.

Tufa formation is a topic only recently receiving attention amongst biologists, and with increased awareness, the author expects more tufa deposits to be found in the future along the Niagara Escarpment.



Belfountain CA Tufa Deposit (Photo by Lynda Ruegg)



Precipitated Calcium Carbonate in Tufa Pool at Silver Creek CA (Photo by Leanne Wallis)

A call to action on proposed changes to the Endangered Species Act

Caroline Schultz, Executive Director of Ontario Nature, *via Nature Network*

Once again I am reaching out to you to ask whether you would be willing to consider signing a letter to the Premier opposing proposed changes under Ontario's *Endangered Species Act, 2007* (ESA).

As you will remember, last spring the provincial government proposed to make several damaging amendments to the ESA through the budget bill. With your help, we were able to demonstrate widespread public opposition to the amendments, and at the last hour they were removed from the budget bill.

Now the Ministry of Natural Resources is proposing to weaken ESA protections for species at risk through sweeping exemptions that would be created through regulation (with Cabinet approval). The proposed exemptions are very broad – for the most part, sector-wide and/or permanent – and include:

- A five-year exemption for forestry;
- Permanent exemptions for existing pits and quarries, hydro operations and drainage infrastructure;
- Exemptions for planned or approved activities that harm newly listed species, newly discovered species at a site and newly protected habitat. Exemptions would last for the life of the project. This applies to activities regulated under the *Aggregate Resources Act*, the *Planning Act*, the *Condominium Act*, the *Environmental Assessment Act*, the *Energy Board Act* and the *Environmental Protection Act* (renewable energy). It would include pits and quarries, residential and commercial development, electricity, waste management, renewable energy, hydro, roads and other infrastructure, and more;

The proposed exemptions will significantly weaken the standard of protection currently required under the ESA. At the same time, government and public oversight of activities that are harmful to threatened and endangered species will be dramatically reduced.

As a group, we need to again rally to defend the ESA by reaching out directly to our new Premier, Kathleen Wynne. I have attached a letter to Premier Wynne expressing our concerns and asking that the proposed exemptions be withdrawn.

I am asking each of your organizations to consider signing this letter. So far, organizations that have agreed to sign include the Owen Sound Field Naturalists and the Algonquin to Adirondacks Conservation Association as well as the Canadian Environmental Law Association, the David Suzuki Foundation, Great Lakes United, Sierra Club Canada, and more. Collectively, I firmly believe we can make a difference.

If you want to sign on, please send me your permission to add your organization along with a signature. If you already sent us your signature for last April's letter to Premier McGuinty, all we need is your permission to use it. If we don't have your signature on file and you wish to sign this letter, please send us your signature as a jpeg (or another convenient image format).

If you have any questions about any of the information I have sent, please send me an email and I will respond quickly.

In addition to signing the joint letter, I also encourage you to consider sending in individual letters from your organizations in which you can comment on the potential impacts of the changes in your area.

Thank you so much for a quick response. It is much appreciated.

Very best wishes,

Caroline
carolines@ontarionature.org

Halton/North Peel Naturalist Club Membership Form

_____ Renewal or _____ New Member(s) Date _____

Name(s): _____

Address: _____

Postal Code: _____ Telephone: _____

E-mail: _____

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)

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: _____

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

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

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

**Halton/North Peel Naturalist Club
Meeting Location
St. Alban the Martyr Anglican Church, 537 Main Street, Glen Williams**

