Volume 47, Number 3

May-June 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.

- May 14, 2013: Intriguing herps, Calvin Knaggs has introduced his young daughter to the wonders of nature through encounters with a fascinating array of rare and charismatic herps including fox snakes, hog-nosed snakes and tiger salamanders. Along with sharing the joy and wonder of experiencing nature with his daughter, Calvin will provide insights into the camouflage, mimicry and evolutionary convergence of these creatures.
- 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 for details

Outdoor: See individual outing details for meeting locations and times. Also see Summer Walks, last page

- May 19, 2013: Spring Birding at Thickson Wood, Lynde Shores Conservation Area and Cranberry Marsh For decades I have recommended this as the best day-trip location for spring birding. This cluster of very good birding locations provides an impressive variety of habitats including mature forest, 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, water, warm layers of clothing, hat, sunscreen, binoculars, scope, etc. Call Ray Blower, 519-853-0171, for meeting location and times.
- June 8, 2013: Mothing and potluck dinner. Club president Fiona Reid is hosting a special night at her house and woods, in hopes of luring a few more people onto the HNPNC executive, even an hour once a month would help us out! We will meet at 7 p.m., set up lights and sugary bait on trees and look around the forest, then eat dinner and discuss ways in which we can help or improve our club. At 9:30 we will set out to see what species of moths we have attracted, continuing on as late as anyone wishes to stay. Please call Fiona at 905-693-9719 for details (rain date TBA).

President's message

Greetings to all and a warm welcome to warmer weather! This must be the busiest season for us naturalists, with wildflowers coming up, birds arriving every day, frogs calling in the ponds and the world reawakening. It is good to be in Canada!

We have just two more meetings this season then we break for summer and return to our evening sessions in September. I hope some of you will join me and members of the executive for a special moth night in June, and we look forward to seeing you on the summer walks on Monday evenings.

Happy birding! Fiona

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

Executive	Appointments

President: Fiona Reid	(905) 693-9719	Membership:
Past President Andrew Kellman	(905) 681-3701	Newsletter: Ni
Vice President: Don Scallen	(905) 877-2876	Ontario Nature
Secretary: Anne Fraser	(905)-877-1844	Public Relation
Treasurer: Janice Sukhiani	(647) 408-9515	Webmaster;
		Crozier Proper

Membership: Valerie Dobson
Newsletter: Nicole Charlton
Ontario Nature Representative:
Public Relations:
Webmaster;
Crozier Property Steward
Hardy Property Steward
F1993-6870
Freyja Forsyth
Vacant
Vacant
Andrew Kellman
Marg Wilkes
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



Wild Ginger by Fiona Reid

Mimicry

People manage their appearance with clothing, jewelry and hair styles to present a particular image of themselves to the world.

Deception is often involved. A muscled, leather-clad, tattooed man may be a powderpuff, but his fearsome exterior projects a formidable – "don't mess with me!" – presence.

Insects are masters of this bluff. There is a vast array of harmless flies and beetles for example, that have evolved to look like dangerous bees and wasps. This allows them to conduct their business with openness and swagger instead of cowering beneath a leaf or skulking in the undergrowth.

But, like everything in nature, mimicry is complex and nuanced. The viceroy butterfly famously mimics the poisonous monarch butterfly. For years it was assumed that the viceroy was free-loading on the monarch's distasteful reputation, offering nothing in return.

As is often the case in science, this explanation proved too simple. Research revealed that the viceroy doesn't taste good either, so the two unrelated species actually reinforce each other's security.



The bumblebee serves as a common model for mimicry. The **snowberry clearwing moth** (left), unarmed and likely quite tasty, looks like a large bumblebee and no doubt gains some protection from this resemblance.

Some robber flies also look like bumblebees, but their motives extend beyond mere protection, to the sinister. Robber flies mimic the

nectar sipping bumblebees to ambush their prey. They loiter around flowers, waiting for pollinators like bees, wasps and flies to sidle up to the floral bar for a drink.

Then they pounce. Imagine the surprise of the victim held firmly in the robber fly's grasp: "But...but... you're a bumblebee – you don't eat meat – lemee go!"

Humans have come lately to the art of deceit. Insects have been practicing it for millions of years.

Find photos of the insects mentioned in this article at http://www.inthehills.ca/2012/10/blogs/mimicry/

by Don Scallen

Snow Fleas

Late in winter almost every year if one is out and about in the woods, we will encounter an interesting group of tiny organisms on the surface of the snow. These are Snow Fleas (*Hypogastrura nivicola*). Snow Fleas, a species of Springtail, are very small insect-like creatures that are totally unrelated to true fleas that prey on dogs, cats, humans and other mammals. In fact they are no longer even considered to be insects. At one time, the group called Collembola were considered to be a primitive type of insect. Now, due to recent studies, they, along with two other groups, the Protura and the Diplura (two-pronged bristletails), have each been moved to their own Class equal in status to the insects. Collectively, these four groups make up the Subclass Hexapoda or 'six-legged' arthropods.

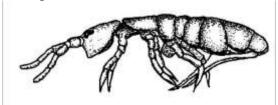


Figure 1. Diagram of a Snow Flea

There are many species of Collembola. They are quite small, about one millimetre in length and most live in the soil where they are seldom encountered, at least knowingly by humans. They can be extremely numerous with populations reaching 250,000,00 per acre. They mostly feed on organic detritus, breaking down leaf litter and the like and aiding in the recycling of nutrients for plants.

The Snow Fleas represent the one Collembolan species that we do see fairly often. They appear in large numbers, and because their dark colour contrasts with the white snow surface, we take note. They tend to aggregate in small depressions such as old footprints in the snow. The depressions likely offer a microhabitat that is just a little warmer, is protected from the wind, and the snow is likely to be saturated with liquid water. In any case, the Snow Fleas appear in large numbers and look much like dust particles. If one looks closely, you can see them jumping about on the surface of the snow.



Figure 2. Masses of Snow Fleas floating on water, Acton, April 30, 2013.

These photos were taken on April 30, 2013 at a small vernal pool along the Guelph Hiking Trail south of Acton. The masses of Springtails floating on the water looked a lot like globs of oil. It is uncertain if these animals were at the end of their days or if they had trouble breaking free from the surface tension of the water. Some of them were certainly still alive and were jumping about. Nevertheless, the photographs give some idea of the abundance of the creatures.



Figure 3. Close-up of Snow Fleas in Figure 2.

Although they have legs to help them move about, Springtails are also equipped with an unusual abdominal appendage called the furcula. This structure is what gives the group its name. It folds beneath the body with the loose end tucked into a receptacle also under the body. The furcula is held under tension and when needed, the tension reaches a level that the end slips out of the receptacle. The furcula snaps against the substrate and this throws the Springtail into the air to escape.

Snow Fleas are able to live quite comfortably in the snow and survive low temperatures owing to a special glycine-rich protein that acts as a form of antifreeze. In addition to the important role in recycling nutrients noted above, Springtails have been reported to provide a valuable ecological service by moving spores of mycorrhizal fungi and destroying spores of plant pathogens. Certain species have been blamed for damaging alfalfa crops. They have also been put to use as indicators of soil contamination owing to their sensitivity to certain chemicals in the soil.

by W.D. McIlveen

Snow Spiders!



enlarged palpal tips used for copulation.

Where there are abundant sources of food, as is the case well illustrated above, there will be predators. I was amazed when I walked in the woods at night, searching for elusive winter moths, to see spiders on the snow surface at intervals of just a few feet. This was on a mild night (relatively speaking) and their sub-nivean burrows may have been flooded with snow melt.

I discovered that these animals are active all winter, mostly below the snow but also on the surface, and their major food is the snow flea. These spiders seem to have big "boxing gloves" that I thought might help them dig, but they are actually the male's

by Fiona Reid



Bird sightings

photo by Ann Fraser

This winter brought Tundra Swans very close to us, just south of Georgetown during April. The agricultural fields southeast of Mountainview and 10th Side Road also hosted Canada Geese, Caspian Tern, and nearby Ring necked Duck, Lesser Scaup, Bufflehead, Ruddy Duck, Coot, Mallard, Redhead, and 7 Hooded Mergansers were seen on one visit by Dave Williams. Who needs Lake Ontario when the birds will come to us!

Halton/North Peel Naturalist Club Membership Form

Renewal or	New Member(s)	Date	
Name(s):			
Address:			
Postal Code:	Telepho	one:	
	E-mail:		
Membership fee for the from September through from December through from March through to from June through to A	to August S I to August S August S	ingle (\$22.50) ingle (\$15.00)	Family (\$40.00) Family (\$30.00) Family (\$20.00) Family (\$10.00)
Do you have any sugge	stions for programs or	field trips?	
(must be signed	WAIVER OF by anyone planning to atter affirm that I am in good he as my personal risk the har	LIABILITY end field trips or other ealth, capable of perfo zards of such participa	rming the exercise required to
In consideration of the Halto release and discharge the Ha from any liability whatsoeve binding upon me, my heirs,	lton/North Peel Naturalist r arising as a result of my p	Club and its officers, of participation in these to	directors, servants and agents
Signature(s):		Date:	
		Date:	
*******	*******	******	*******
Meetings are at St Alba	n's Church in Glen Wi	illiams (see over) s	starting at 7:30 p.m.
Please fill out this form and			-
Halton/North Peel Natu P.O. Box 115, Georgetown, Ontario, L7G 4T1	ralist Club,		

Naturalist Club Evening Walks - Summer 2013

Halton/North Peel Naturalists and South Peel Naturalist Clubs

All walks are on Mondays and start at the meet location at 7:00pm sharp. Please wear appropriate clothing and footwear and be prepared for biting insects.

Date	Location	Meeting Place	Leader
May 20	7243 Sideroad 15, Speyside	Milton at Hwy 401	Fiona Reid
May 27	Cheltenham Badlands / Bruce Trail	Mississauga Rd at King St	Leanne Wallis
June 3	Heritage Trail, Oakville	Old Upper Middle Road parking	Donna Sheppard
June 10	Silver Creek at 8 th Line	8 th Line & Sideroad 27	Leanne Wallis
June 17	Bronte Creek PP	Bronte pooled parking lot	Joyce Lachasseur
June 24	Bennett Side Trail Scotsdale Farm	Scotsdale Farm, 8th Line	Dawn Renfrew
July 1	Osprey Park at 9 th Line	Pondview Way	W.D. McIlveen
July 8	Terra Cotta	Mississauga Rd at King St	Dawn Renfrew
July 15	Riverwood Conservancy	Riverwood Conservancy	Audrey Oswald
July 22	Great Esker Trail	8 th Line, dead end, Georgetown	Dawn Renfrew
July 29	Hewick Meadows, Streetsville	Streetsville Go Stat. parking lot	W.D. McIlveen
August 5	7243 Sideroad 15, Speyside	Milton at Hwy 401	Fiona Reid
August 12	Britton Tract	Milton at Hwy 401	Irene McIlveen
August 19	Rattray Marsh	Green Glade School	Kirsten Burling

Milton at Hwy 401 – Commuter parking lot at SE intersection of Hwy 401 and Hwy 25, Milton Mississauga Rd at King St - Public school at the SW corner of Mississauga Rd and King St. Old Upper Middle Road parking lot - Parking lot at corner of Old Upper Middle Road and McCraney St. W. on east bank of Sixteen Mile Creek near Neyagawa. Note walk route has steep hill into valley

8th **Line & Sideroad 27** - Take Trafalgar road north to Silver Creek then go east on Sideroad to 8th Line which is closed. Meet in former intersection.

Bronte pooled parking lot - Parking lot on west side of Bronte Road (Hwy 25) just south of QEW at lights

Scotsdale Farm, 8th Line - Take Trafalgar road north to Silver Creek then go east on Sideroad to 8th Line. Go north about 500 metres to lane crossing from Scotsdale farm

Pondview Way - Turn circle at east end of Pondview Way. Take 9th Line north of Britannia for about half a kilometre. Turn east onto Osprey Blvd then first right then first left which should be Pondview Way.

Riverwood Gardens - 1401 Burnhamthorpe Rd West North side of Burnhamthorpe, east of the Credit River at Credit Woodlands

8th **Line, dead end, Georgetown -** Take Trafalgar road north to where it joins Hwy 7 north of Georgetown. Turn right onto Sideroad 22 and go east to 'T' intersection with 8th Line. Go to north dead end.

Streetsville Go Station. parking lot - North end of parking lot south of Thomas Street and west of railroad and Queen Street in Streetsville

Green Glade School – Green Glade off Meadow Wood Road, Clarkson

Not as advertised! Some destinations may change if preliminary site visits determine that a site lacks sufficient interesting items. In such cases, the meeting location will remain unchanged but the trip destination will be altered to a location nearby.

For more information, call Bill McIlveen (519) 853-3948 or cell (905) 867-9294