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Newsletter of the Halton / North Peel Naturalist Club

Volume 41, Number 4

May-June 2007

Club Activities

Indoor: Meetings begin at 7:30 pm on the second Tuesday of the month, October to June at St. Andrew's United Church, 89 Mountainview Road South (at Sinclair) in Georgetown unless stated otherwise.

June 12: Guided Hike through Hungry Hollow. Warren Harris, Manager of Parks and Cemeteries, Town of Halton Hills will be leading a hike while explaining plans for the hiking trails. **Meet 7:00 at the St. Brigid School parking lot, 73 Miller Drive, Georgetown. Directions from Guelph and Mountainview:** Mountainview Road South, make a right/go west on Argyll Road, make a right/go north on Miller Drive until you come to St Brigid on your right.

Sept. 11: To be announced.

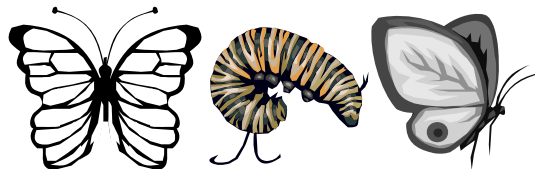
Outdoor: Trips begin at the Niagara Escarpment Commission (NEC) parking lot at Guelphand Mountainview Road, Georgetown, unless stated otherwise. If you would like to meet the group at the trip site, please speak to the trip leader for the location and directions to the starting point.

May 20: Thickson Wood Spring Birding, Whitby. Meeting times and locations to be arranged with trip leader, Ray Blower, (519) 853-0171 in Acton or (905) 444-9454 in Whitby. This trip is scheduled on the Sunday of the Victoria Day weekend to minimize the effect of traffic on participants coming from points west. Meeting times at Thickson Wood can be arranged for any time between 06:00 to 11:00, if the weather is reasonable. Lynde Shores Conservation Area and Cranberry Marsh are the other places visited. All locations are near the cool Lake Ontario, so bring warm clothing, binoculars, scope, water, lunch, hat and sunscreen. These places provide a variety of habitats including mature forest, meadows, marshes, swamps, scrub land and Lake Ontario. Almost any song bird may be seen as well as a variety of the "late" ducks

Young Naturalists

Note: Meetings and outings begin at 1:00 pm the last Saturday of the month.

May 26: Spring Flowers and Pond Dipping. Meet at 1:00 at Fiona Reid's house 7243 15 Side Road, Speyside. Contact Nancy and Andy Kovacs (905) 702-1132.



Evening Walks – Summer 2007 – Complete Schedule See Page 6

President's Message

Ahh! Spring has finally arrived. The spring peepers and the wood frogs have been calling. The juncos have headed north. The birders have headed out to open spots while other nature watchers have into the woods looking for the first spring flowers. The salamanders have gone into the vernal pools, while others have headed under our monitoring boards in search of a good spring feast. Time to get out on the water to enjoy the calmness and tranquility before going to join hundreds of others in the frenzy of Pelee birding.

The spring outings (Beamers and Mount Nemo) have been well attended, aided by gorgeous spring weather! It's good to see so many of you out there enjoying the sites of our area as well as the places further afield.

Our club has been chosen by Conservation Halton to receive a Conservation Award of Excellence for our group's efforts for the past year, largely due to our assistance with the Halton Natural Inventory. Many thanks go towards Bill McIlveen for his dedication and hard work into this project. We will be receiving the award at a ceremony on May 23. If anyone would like to attend please let us know so that we can inform Conservation Halton.

On another note, Dawn Renfrew has been hired to coordinate the Region of Peel and Credit River Watershed Natural Areas Inventory Project. Dawn has a PhD in Botany from UBC and recently worked on an abalone project on Vancouver Island. The main objectives of the Inventory are to assemble existing biological and ecological information, identify information gaps, carry out additional sampling of natural areas and report the results of the study. Bill McIlveen will represent our club on the Management and Technical Steering Committees to be set up later this spring.

On a personal note Andrew and I wish to thank everyone for there words of encouragement as we move into the new world of parenthood. Our future young naturalist is due on July 9th but as with everything else in nature you can never be 100% sure on the date of arrival. Just like spring this year. At this point in time I would like to encourage anyone to run as club president at our October AGM as both Andrew and I will be quite busy trying to learn the ropes. One or both of us are willing to assist the club in another capacity and are willing to stay on as Vice President for now.

Happy spring to everyone!

Sincerely,
Kelly Bowen

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

Executive

President: Kelly Bowen (905) 873-7338
Past-President Andy Kovacs (905) 702-1132
Vice-President: Andrew Kellman (905) 873-7338
Secretary: Janice Sukhiani (905) 693-8227
Treasurer: Marg Wilke (905) 878-6255

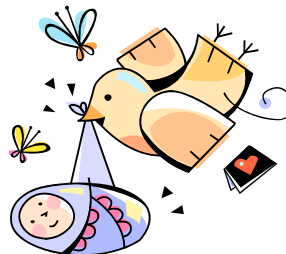
Appointments

Membership: Christine Williams (905) 877-1539
Newsletter: Gerda Potzel (905) 702-1681
Ontario Nature Representative: Teresa Rigg
Public Relations: Vacant
Young Naturalists: Nancy Kovacs (905) 702-1132

Membership for one year: \$20 Single; \$30 Family
The Halton/North Peel Naturalist Club is an affiliated member of Ontario Nature

Email submissions/questions/concerns to: gpotzel@sympatico.ca
<http://haltonnorthpeelnaturalists.org>

All the best Kelly and Andrew!



Outing Report: Tree Identification Hike, April 14

The sun made a feeble showing as we six club members gathered with Charles Hildebrandt in the parking lot at Scottsdale Farm. We were joined by about seven other non-members, including an avid boy of about six years.

Charles began from the parking lot to acquaint us with all the species as we ambled through the farm lanes. He pointed out that Scotch pine was not a native species, but rather seed was brought with early settlers from Scotland. Unfortunately, the seed was of poor quality, resulting in the crooked, rag tangled specimen seen along the back lane. Charles supplied us all with a checklist of 53 deciduous and coniferous trees complete with their Latin names. He introduced us to the "daughter" of the black willow that fell and smashed the bridge over Snow Creek. The "daughter" is a viable tree, about 15 feet in height, rising from the water that flows over its mother, where it remains. He pointed out the differences between hemlock, white pine and white spruce that all grow at the Eighth Line entrance.

We wandered across the field to wonder at the enormous white oak that Kerry has been revering for many years. Kerry stated that the tree is dying, as he has noticed its decline over quite a few years, and we could see the bark lying around its base. Turning westward from the marvelous tree, we pulled up our collars higher facing into the chill wind and headed back to our cars. The sun had deserted us completely by this time. We discovered 26 species in our walk-through, and added bonuses were meadowlarks, a phoebe, and a possible bluebird. We then made our way over to Charles' sanctuary where we found 20 more species. Unusual specimens seen were: black maple, northern pecan, dawn redwood, Kentucky coffee tree, and black ash and green ash. It was enjoyable following Charles through his winding paths lined with crocuses, scilla and snowdrops, blossoming at our feet, and hearing chorus frogs, juncos, and ruffed grouse drumming.

Charles has instituted a bog garden beside the pond run-off and has a variety of ferns planted and marked there. He also turns his hand to propagating cactus in his green house, and it holds a greater variety than I have ever seen in one place.

An engrossing day, completed with a taste of Charles' homemade fruit bread.

Marg Wilke



Upper Canada College (UCC) and Local Sightings;

March 23 - eastern phoebe was back calling on territory.

March 27 - I observed a pileated woodpecker excavating a nest hole in a dead elm tree. Unfortunately a week or so later, strong winds blew the tree over. The species had nested in cavities in nearby beech trees in past years. They are still being observed in that vicinity.

April 10 - at the UCC Norval Outdoor School, an American woodcock was found sitting on eggs, successful only until April 26, when I found the nest without the bird. Empty egg shells were found slightly out of the ground nest with holes in them. It seemed as though some bird (possibly a crow) had been the predator. Had the young hatched, I would think the shells would be cracked to pieces.

April 27 - at dusk I still heard the territorial display flight of a male American woodcock.

April 16 - pine warblers were back singing on territory.

Gerry Doekes

Locoweeds

The term 'Locoweeds' is applied mainly to two groups of plants in the legume family. These are the Oxytropes (*Oxytropis* spp.) and the Milk-vetches (*Astragalus* spp.). In Ontario, we have nine species and subspecies of the former and eleven species of the latter. None are particularly common in our own area. Only two species are known in Halton – *Astragalus canadensis* (Canada Milk-vetch and *A. neglectus* (Cooper's Milk-vetch). For the most part, locoweeds are characteristic plants of the rangelands of central and western North America.



Locoweeds get their name from some of the symptoms that develop in livestock that consume these plants while grazing or from feeding on hay that contains significant quantities of the plants in question. Ruminant animals, cattle and sheep, are susceptible to the disease "locoism". The disease is characterized by weakness and lack of coordination and trembling and partial paralysis. From such symptoms, affected cattle appear to be acting crazy or 'loco' which is the Spanish description. [Some of the symptoms are not too different from those of cattle with Mad Cow Disease (BSE) though BSE symptoms take much longer to develop]. Cattle that consume enough of the plants can be killed quite quickly. It should be understood, that the amount of the toxins involved varies considerably depending upon the plant species involved, their habitat, their location and pasture management factors such as application of herbicides.

The most prevalent toxin associated with most, if not all, of the locoweeds is swainsonine. It is an alkaloid that induces depression, emaciation, in coordination, dry lusterless hair, abortions, as well as congestive heart failure in cattle grazing at high altitudes. Originally, it was assumed that this chemical was formed by the plant tissues. More recently, it has been learned that a group of fungi, mostly of the genus *Embellisia*, are able to produce the toxin on their own and separated from the plant. While they function in many ways like pathogens, and live within the plant tissues, these fungi cause no damage to the plant. These are termed endophytes ('living within plants'). While the fungi may obtain nutrition at the expense of their host plants, the plants probably derive benefits from the association by reducing the overall amount of grazing done by various herbivores including livestock. Relatively little research has

been done on endophytic organisms because they cause relatively little disease and therefore have not attracted much attention.

Some *Astragalus* species contain an additional toxin, miserotoxin (a glycoside). This chemical by itself can cause posterior paralysis, goose-stepping, depression, pulmonary emphysema, and nerve cord damage in cattle as well as acute death.

Astragalus species frequently have another toxin within their tissues. In this case, they are known to be hyper-accumulators of the element selenium. Selenium is an essential element for animals but not likely so for plants. Animals must receive a certain amount the selenium to live but, at high concentrations (i.e. obtained by ingestion of *Astragalus*), they encounter a toxicity problem. At normal healthy concentrations, selenium is known to function in the enzyme glutathione peroxidase that is essential to protecting the integrity of cellular membranes in animal cells. In acute poisoning situations, the symptoms include: abnormal movements, dark watery diarrhea, elevated temperature, weak and rapid pulse, labored respiration, bloating and abdominal pain and dilated pupils. When selenium poisoning is chronic, the growth rate of the cattle is slow, they show reproductive failure, and suffer loss of hair, sore feet, and death.

Depending on the chemical form of the ingested selenium, the toxicity is evident two ways. "Blind staggers" occurs when animals ingest water-soluble selenium compounds naturally found in accumulator plants. Toxicity from eating plants or grain with protein-bound, insoluble selenium is called "alkali disease." Blind staggers is evident in three progressive stages involving visual impairment, staggering because the front legs are not able to support the animal, and finally blindness. Death usually follows quickly after the last stage is reached.

To some extent, the management of locoweed poses problems for land managers. On the one hand, the plants pose toxicity threats to animals and exposure of the livestock to the plants needs to be controlled (including destruction of the locoweed). On the other hand certain species of locoweed are rare and require protection. An understanding of the biology of all the components involved in the locoweed problem is required for a satisfactory outcome for all concerned. The known locations of locoweeds in Halton are restricted to three sites for each of the species and fortunately for their rare status, they do not occur in sites that are likely to feed cattle.

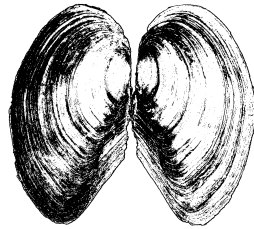
W.D. McIlveen

The Plight of Mussels and Mollusks in Ontario

Recently, several species of organisms were subjected to an evaluation of their rarity by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). In Ontario, nineteen species of plants, animals, birds, etc were evaluated. Of these, the status of ten species was downgraded since the previous list was produced; however, some of the group had not previously been evaluated. Four species, including the Red-shouldered Hawk, were given upgraded status while the others were in about the same position as before.

Two of the species that were downgraded were freshwater mussels. This prompted me to take a look at the current state of freshwater mussels across the province because, as a group, these organisms are in a poor state across North America. About 65% of species across the continent are at some risk of extinction while another 7% have already become extinct. The state of freshwater mussels in Canada was assessed in 2004 and the results were fairly consistent with the state of mussels across the continent. Sixty five percent of the species in this country are in need of conservation action.

In Ontario, we have 41 species of freshwater mussels [Metcalfé–Smith, *et al.* 2005]. These are all members of the family Unionidae. That does not include the Zebra and Quagga Mussels, which though referred to as mussels, belong to an entirely different family, the Dreissenidae. We do not have any comprehensive list of mollusk species in our local area. That situation might be partly rectified during the anticipated Peel Natural Areas Inventory project to be carried out over the next three or four years.



By combining the status information assigned to the Ontario species published on the Natural Heritage Information Centre (NHIC) website with information

included by Metcalfe–Smith, [2005], one can get an idea of the rarity of the different species.

Rank	Description	No. Species
S1	Extremely Rare	11
S2	Vary Rare	7
S3	Rare to Uncommon	8
S4	Common	7
S5	Very common	7
U	Undetermined	1

Overall, 18 species (45%) are either ‘Very Rare’ or ‘Extremely Rare’ using the S Ranking information. COSEWIC shows nine species to be ‘‘Endangered’’ and one considered to be is ‘‘Threatened’’. Not all species have been evaluated yet; therefore, others may soon be added to the list once the evaluations are completed. In fact, sixteen more species are candidates for evaluation under the COSEWIC process.

Among the other mollusks on Ontario, there is also reason to be concerned. Among the combined freshwater species (including the small fingernail and pea clams), terrestrial snails and native slugs, 25 species are considered to be extremely rare and 33 species are very rare. The rare to uncommon group consists of an additional 24 species. In fact, the mollusks in Ontario are poorly known with very few people studying them in any capacity. A great deal more research on the molluscan fauna is required before we can authoritatively state how rare any species is in the province. With very few people studying the land snails for example, there is a great probability that many more species, including introduced species, are waiting to be discovered.

References

Metcalfé–Smith, J., A. Mackenzie, I. Carmichael and D. McGoldrick. 2005. Photo Field Guide to the Freshwater Mussels of Ontario. St. Thomas Field Naturalist Club, St. Thomas. 62 pp.

W.D. McIlveen

Red Bay Weekend – May 25-27, Evergreen Resort – Bruce Peninsula

Organized by the South Peel Naturalists' Club. Adults: \$104.50 per person per night, Seniors: 4 days \$350 for person. Rates cover accommodation and meals Friday dinner to Sunday lunch. Each person will pay his or her own bill directly to Evergreen before leaving on Sunday. There is a registration fee of \$15/person to cover administration and leadership costs, to be paid by Friday, May 19 – cash or cheque payable to South Peel Naturalists' Club.

To arrange registration call organizer Donna Sheppard (905) 815-0933

Accommodation – self-contained cottages with fridge, meals served in central lodge, pets are welcome.

Naturalist Club Evening Walks - Summer 2007
Halton/North Peel Naturalists and South Peel Naturalist Clubs

This year, our evening walks will focus on green spaces in the Sheridan Creek Watershed, the water source for Rattray Marsh Conservation Area. This focus will help with data collection for the marsh restoration initiative currently being undertaken by Credit Valley Conservation, under the supervision of Bob Morris (see May 2006 Newsletter).



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	Trail or Park	Area	Meeting place	Leader
May 14	Birchwood Park	Lakeshore Road. east of Clarkson Road	Winston Churchill at QEW	W. McIlveen
May 21	Birch Glen Park	Valley north of Festavon	Winston Churchill at QEW	W. McIlveen
May 28	Thornlodge Park	Thornlodge Drive. south at Woodchester	Winston Churchill at QEW	
June 4	Jack Darling Park	Jack Darling Park	Winston Churchill at QEW	W. McIlveen
June 11	Rattray	Rattray Marsh	Green Glade School	K. Burling
June 18	Springbank Park	Springbank Road	Winston Churchill at QEW	A. Oswald
June 25	Rattray	Rattray Marsh	Green Glade School	K. Burling
July 2	Sheridan Creek Trail Twin Spruce Park	Southdown Road at Lakeshore	Winston Churchill at QEW	W. McIlveen
July 9	Clarkson Park	Winston Churchill north of railway tracks	Winston Churchill at QEW	W. McIlveen
July 16	Bromsgrove Park	Bromsgrove Road north of Go Station	Winston Churchill at QEW	W. McIlveen
July 23	Meadowood Park	Orr Road at Bradley Museum	Winston Churchill at QEW	W. McIlveen
July 30	Hillside Park	Truscott Diver south at Kelly Road	Winston Churchill at QEW	W. McIlveen
Aug 6	Tecumseh Park, Shawnmarr Park	Indian Road at Woodeden	Winston Churchill at QEW	W. McIlveen
Aug 13	Sheridan Creek Trail	Truscott at Sheridan Creek	Winston Churchill at QEW	W. McIlveen
Aug 20	White Oaks Park	Truscott south; Clarkson to Lorne Park Road	Winston Churchill at QEW	W. McIlveen
Aug 27	Kokaydiwin Park	West of Southdown Road south of QEW	Winston Churchill at QEW	W. McIlveen

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 or Audrey Oswald (905) 820-2571

