

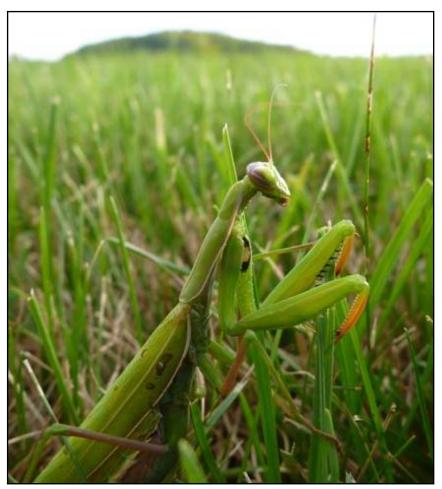
The Orchid

Bulletin of the Peterborough Field Naturalists

"Know ♦ Appreciate ♦ Conserve Nature In All Its Forms"

Volume 58, Number 7 - October 2012 www.peterboroughnature.org

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Praying Mantis, Otonabee Township, September 15 2012. Photo by Rick Stankiewicz.

Welcome New Members!

Carol Horner & Craig Ham

JB & Bev Jaboor

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	Coming Events
Sundays October 7 to October 28 8:00 a.m. Ptbo Zoo Parking Lot	Autumn Sunday Morning Wildlife Walks These popular walks will take place every Sunday from September 2 nd to October 28 th . Most will start at 8.00a.m., carpooling from the parking lot of Peterborough Zoo on Water Street to local sites of interest. The outings generally last around three hours in total. Bring some change to donate toward gas costs and remember to bring binoculars. In most cases the destination(s) will be confirmed on the day. Trip leaders are as follows: Oct 7 – Chris Risley Oct 14 - Jerry Ball (day trip to Presqu'ile Provincial Park – see page 3 for details) Oct 21 – Tony Bigg Oct 28 – Jerry Ball
Wednesday October 10 th 7:30 p.m. Ptbo Library (345 Aylmer St N, downstairs)	PFN Monthly Meeting: "Adventure in Africa: Birds, Mammals and Much More!" PFN members will share stories and photos from a trip to Africa this past spring. First they will discuss various habitats they visited in northwest Tanzania and west-central Kenya. Second they will tell the group about the numerous herbivores found in these habitats and at the carnivores that hunt them. Finally they will tell the group about three groups of birds: storks, coursers and hornbills; and how these have adapted to the variety of habitats found in the region. Brief mention is made of reptiles and of smaller mammals. The talk concludes with a slideshow of mammals, birds and reptiles not discussed in the two principal sections.
Sunday October 14 th 8:00 a.m.	Birding at Presqu'ile Provincial Park An annual trip led by Jerry Ball to view migrants at Presqu'ile, with other stops of interest on the way. In particular, expect to see many interesting wildfowl. Bring a packed lunch, binoculars and, if you have them, rubber boots (not essential). Meet at 8am at the Country Style at the junction of Old Keene Road and Highway 7, east of Peterborough. We will likely car pool, so bring a contribution for gas and entry to the park.
Wednesday November 14 th 7:30 p.m. Ptbo Library	PFN Monthly Meeting: "Windmills & White-nosed Syndrome" Did you know that 2011-2012 has been declared the Year of the Bat? Paul Elliot will discuss some of the threats that are leading to declines in bat populations, including the latest research on the devastating fungal infection responsible for White Nose Syndrome and the toll taken by wind turbines.
Sunday December 2 nd 6:00 a.m.	Bird Watching Trip to the Niagara Region Join a full-day's outing to the Niagara region for some winter bird-watching, especially the rarer gulls. Participants will meet at Tim Horton's on Landsdowne St. West in the Canadian Tire Plaza at 6:00 a.m. Bring binoculars, lunch (we will also make stops at convenient Tim Horton's) and be sure to dress warmly. Leader: Tony Bigg, 705-652-7541 or tanddbigg@sympatico.ca

Coming Events Wednesday PFN Monthly Meeting: "Members' Slide Show" December 12th The December member's' slideshow is an annual PFN tradition. Have some photos from 7:30 p.m. a trip, natural event, or wildlife encounter that you'd like to "show and tell"? Contact Gina (gina.varrin at gmail.com, 705-761-7787). Ptbo Library PFN Monthly Meeting: "Nature's Year" Wednesday February 13th Join local author and Examiner columnist Drew Monkman for a "trip through the year" 7:30 p.m. highlighting the main events happening in nature each month in the Kawarthas. Drew will also highlight species at risk, a few newcomers to our area and some of the potential Ptbo Library impacts of climate change.

Junior Field Naturalists

Fall in the Creek

When: Sunday, October 21st, 1:30 p.m.

"Fall in the Creek", no not really but we will meet at the Miller Creek Conservation Area to see how the fall season changes the wetland. Bring a pair of rubber boots if you want to get a little further from shore. I will bring the nets and some binoculars. Date is Sunday Oct 21st 1:30 at Miller Creek - located along 7th line of SEL township. Hope to see you there...Neil





Effective Placement of Road Mitigation Using Lessons Learned from Turtle Crossing Signs in Ontario

-Kari E. Gunson, Eco-Kare International, 644 Bethune Street, Peterborough, Ontario, Canada, K9H 4A3, kegunson@eco-kare.com

-Frederick W. Schueler, Bishops Mills Natural History Centre, R.R. #2, Bishops Mills, Ontario, Canada, KOG 1T0, bckcdb@istar.ca

To counteract road-kill, a direct consequence of road-wildlife interactions, transportation planners and wildlife biologists are working together to find solutions. Historically, transportation planners have often placed wildlife crossing signs for deer and moose along roads where these animals may pose a traffic safety hazard. More recently, transportation planners are using wildlife crossing signs for smaller animals such as turtles where road-kill may pose a conservation issue. Wildlife crossing signs are commonly used because of their ease and low cost of deployment, however their effectiveness at reducing road-kill with small animals is unknown.

The overall objective for this study was to inform rigorous placement of turtle crossing signs in Ontario, similar to previous research with deer crossing signs in Alberta, Canada; moose crossing signs in Finland; and camel crossing signs in Saudi Arabia. Rigorous and selective placement would improve the ability to measure sign effectiveness, improve sign recognition by motorists and transportation planners, and also allow signs to behave as markers for more



permanent and effective roadside mitigation, e.g. retro-fitted culverts.

We collected relevant information (design, theft and location) from crossing signs placed along roads (Highways, County and Township). We also used 1,293 records of dead-on-road turtle data compiled from various sources (most notably the Natural Heritage Information Centre, Bishops Mills Natural History Centre, and Ontario Amphibian and Reptile Atlas, Ontario Nature) to statistically analyse (Chi-square statistics) where dead-on-road turtles occur in relation to habitat and road type. We then compared whether turtle crossing signs were placed on roads where more dead-on-road turtles were found than expected by chance.

We outline the most pertinent results below:

- We obtained information for 469 turtle crossing signs, and georeferenced locations for 336 signs, 121 paired and 94 unpaired by conducting telephone, email and on-road driving surveys (Figure 1).
- We found that at least 27% of signs were stolen
- We found evidence for at least 10 different design types, however more than 96% of signs were of two types – the aerial flattened view adopted by the Turtle S.H.E.L.L. Tortue in 1998 and tortoise side view adopted by the Toronto Zoo – Adopt-A-Pond in 2009.
- On average turtle crossing signs spanned approximately 1 km length of road
- 19,000 km of the Ontario Road Network (Ontario Ministry of Natural Resources) bisected wetland-forest habitat (validated hotspots) where more dead-on-road turtles are expected to be found than by chance. Validated hotspots determined by published habitat model Gunson et al. 2012.
- 13% of turtle crossing signs did not span a validated hotspot
- Dead-on-road turtles were found more often (p<0.05) on paved provincial highways and county roads

 18% of turtle crossing signs were placed on gravel roads and 32% were placed on local roads where it was less likely to find deadon-road turtles



From this study and supported by scientific literature, signs that are spaced at a meaningful distance (500 m), span turtle habitat (wetlandforest), and are placed on moderate to high volume roads would be located where turtle road mortality is greatest. In addition, selective and informed placement will increase recognition and awareness from motorists, and transportation planners. We also believe that a standardized design for a turtle crossing sign placed along roads

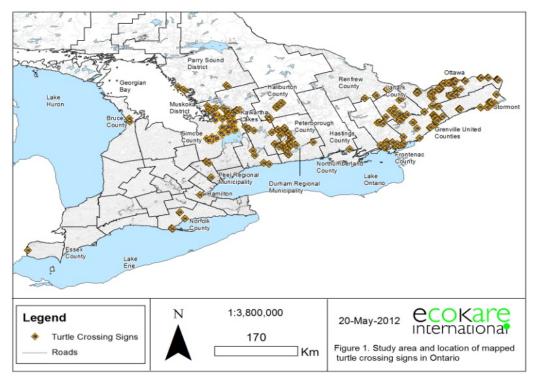
with moderate to heavy traffic volumes would decrease sign theft because signs are less novel and it is less likely that thieves will go unnoticed.

Future work should focus on a more accurate and standardized inventory of turtle crossings signs. In addition, agencies that are involved with deploying turtle crossing signs should prioritize placement using the best available data and information, especially in light of the wide-spread threat of road mortality across the landscape. A co-ordinated regional response that focuses on information sharing and measuring sign effectiveness in an adaptive and rigorous approach will greatly improve the success of turtle crossings signs at reducing road mortality for Ontario's declining turtle populations.

Please contact the authors for more information and look for an upcoming article on this research in Ecological Restoration, Special Issue, December, 2012. Thank-you to the Ontario Ministry of Transportation for their financial support to complete this project.

References:

K.E. Gunson, D. Ireland, F.W. Schueler (2012). *A tool to prioritize high-risk road mortality locations for wetland-forest herpetofauna in southern Ontario, Canada.* NorthWestern Journal of Zoology 8:on-line first



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Leave It to Beaver

-by Sean D. Smith

One evening, early last May, we had a visit from a beaver to our suburban home, near the Otonabee River in 'East City'. Love 'em or hate 'em, beavers are an important part of Canada's history and no other animal, save humans, alters the environment in more significant ways. They are the engineers and architects of the natural world; logging, and building canals, dams and lodges. Because of their nocturnal and extreme work ethic, any of these structures can appear overnight. The results of these works are ecologically important, although a bane for many a landowner. Beavers provide habitat and water conservation, both preventing erosion and purifying water, often over large tracts of landscape.



Apparently lawns, especially unkept ones, provide some nutritious and perhaps more tender supplement to their normal diet of several species of trees, although beavers also enjoy sedges, water lilies and other aquatic plants. Cellulose, which usually cannot be digested by

mammals, is a major component of their diet, and they have specialized microorganisms in their gut to break down this material. In addition to normal food, if you've ever done wetland walks or studies with children, you know the reaction from kids when they learn that beavers re-digest their own fecal pellets, a habit especially useful in winter!



After munching on my carefully cultivated dandelions and weedy front lawn, this individual took a more direct approach. Normally we do not respond to solicitation and I was concerned this might contribute to the Peterborough panhandling problem. After chewing on my denials for additional contributions, this beaver took a nap under my car, but not before leaving behind a comment on my lack of compassion. However, its parting gift was incorporated into my garden.



Note the amount of 'castor' on this animal's back, which of course is reflected in their scientific binomial, *Castor canadensis*. Castoreum waterproofs their fur and is used in territorial 'scent mounts' to warn off intruding

congeners. It also has been used extensively in the past by humans, usually in medicine as an analgesic, anti-inflammatory or anti-pyretic. These uses are attributed to the accumulation of salicin from a steady diet of water-loving willow (salix spp.) trees, from which, of course, the original aspirin was synthesized. Castoreum is still used in perfume production.



There appears to be varying accounts of the density of many mammals' fur and it of course depends on whether one is measuring coarse guard hairs or the dense and more luxurious under-fur. The upshot is that these include some

of the most heavily hunted animals on the planet, with both otters and fur seals still being endangered, while the beaver has reclaimed its former territory. Large cities like Chicago and New York have resident beavers and these symbols of Canada have reached beyond the border of Mexico, not to mention their ill-advised introduction to southern South America.

Comparison of Fur Density in select Mammals

Sea Otter, *Enhydra lutris*: 1,000,000 hairs per square inch

Northern Fur Seal, *Callorhinus ursinus*: 350,000 hairs per square inch

American Beaver: Castor canadensis: 64,500

hairs per square inch

Domestic cat, *Felis catus*:130,000 hairs per square inch

Domestic dog, *Canis lupus familiaris*: 60,000 hairs per square inch

Human, *Homo sapiens*:10,000 hairs per square inch (some of us)

*Infurred estimates



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Blue Jays, Cardinals, Grackles

-by June Hitchcox, courtesy of the Apsley voice

I received another interesting email inquiry, from Bonnie, in early August – a while ago now but thought that if you have had or may have a similar experience in the future, it would certainly be of interest. Bonnie had a Blue Jay visiting her that had lost all its head feathers. Several years ago, we had a Blue Jay like this at our cottage on Jack's Lake and felt very sorry for it, not knowing the cause. There is a chance that these birds were attacked by mites etc. but studies have been made and the answer seems to be that this method of molting feathers is used by a small percentage of adult birds within certain species – particularly Blue Jays; Cardinals and Grackles. Usually, gradual molting begins for the Blue Jays sometime in late July or August. However, a few of them lose all their head feathers at the same time – they become bald or almost bald! Within 2 weeks or so, the Jays will grow new feathers and will look like the birds we all know. Growing feathers takes a lot of energy – food produces energy – and Bonnie's Blue Jay was making good use of their cat's kibble!



PFN Outing to Hunter Farm, Douro-Dummer Township, Peterborough County. September 9 2012. Photo by Martin Parker.

PFN Officers and Directors							
President	Martin Parker	Mparker19@cogeco.ca	745-4750				
Past-President	John Bottomley	johnbottomley@sympatico.ca	742-1524				
Vice President, Program (indoor)	' (Jina Varrin dina Varrin(0) dmail com						
Secretary	Emily Pettypiece	donem.pettypiece@bell.net	750-1145				
Treasurer	Don Pettypiece	donem.pettypiece@bell.net	750-1145				
Membership	Jim Young	jbyoung@persona.ca	292-5444				
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FON Rep	Lynn Smith	smithfam@nexicom.net	944-5599				
Special Publications	Kelly Boadway	kjboadway@gmail.com	775-0756				
Member at Large	Sean Smith	Seansmith64@hotmail.com	875-6178				

Other Volunteers							
Bird Feeders Sean Smith & Don Finigan							
Orchid Diary	Tony Bigg	652-7541					
Orchid Mailout	Bob Quinn						
Jr. Naturalists	Neil Fortin	292-6185					



Harper Park Stewardship Initiative

~Local people making a world of a difference ~

Greetings Friends and Partners:

The Harper Park Stewardship Initiative is pleased to announce a fall litter clean-up and mapping event. This activity will allow us to explore the northern sections of our stewardship area while removing small pieces of litter, flagging larger items for later removal, as well as mapping the location of natural features for future reference.

The <u>Community Stream Steward Program</u>, whose generous loan of GPS units supports this event, will provide a tutorial on the use of the technology. Participants will have an opportunity to assist in creating a map of the northern section of the park that will then be shared with the City of Peterborough Parks and Forestry Department.

When: Saturday October 13, 2012

Time: 1 p. m. until 4 p. m.

Where: The Bridlewood Park entrance to Harper Park.

Particulars: Dress for the weather, and please wear sturdy, waterproof footwear. There are no trails within the park, and the terrain is steep and uneven in some areas. Parking is available on Ramblewood Drive adjacent to Bridlewood Park.

About Harper Park

Harper Park is a 60 hectare urban park located in the southwest end of Peterborough. The majority of the park is zoned as a protected natural area to conserve the sensitive ecology of the approximately 50 ha woodland complex that contains locally significant wetlands. The park provides important winter cover for deer and is home to a number of area-sensitive breeding birds and other wildlife species such as the snowshoe hare and the woodland jumping mouse that are seldom associated with urban areas. Numerous coldwater springs emerge from the woodlands and flow into Harper Creek, supporting a native brook trout population and a high diversity of plant life. The woodland and wetland complexes of Harper Park have been found to contain the highest percentage of native plant species of any park in Peterborough.

Please come out and support this local conservation effort!

Registration is required:

mailto:harperparkstewards@gmail.com or call Kim Zippel at 705.740.0587

We hope to see you there,

The Harper Park Stewardship Initiative

Find out more about Harper Park and HPSI activities at: harperparkstewards.blogspot.ca



The ORCHID DIARY for Aug 30 - Sept 28, 2012

Compiled by Tony Bigg, 652-7541, tanddbigg@sympatico.ca

- A fairly quiet month but with Fiery Skippers butterflies making their first ever appearance in the County.
- Sept 03 A **Ribbon Snake** was seen by Tony Bigg on the rail trail between Bezard and Cameron Lines.
- Sept 07 Tony Bigg saw a **Lincoln's Sparrow** and three **Wison's Snipes** on the rail trail between David Fife and Settlers Lines. Jerry Ball watched a **Praying Mantis** eating a **Clouded Sulphur**. He also saw two Common **Buckeyes** on the Cameron Line to Cty Rd 38 section of the rail trail.
- Sept 08 At 10 am in the morning, Michael Gillespie had three **Sandhill Cranes** fly over him as he was driving east along County Rd. #2 by the swamp just east of Birdsall Rd.
- Sept 13 Walking the rail trail from Cameron to Villiers Line, Jerry Ball noted **Swamp Sparrows, White-throated Sparrows, Black-throated Green Warbler, House Wren, Song Sparrow, Brown Thrasher, Willow Flycatcher, Yellow-rumped Warblers,** and **Blue-headed Vireos**.
- Sept 14 On the 24th of June Jo Ann Caskey saw a doe, White-tailed Deer, with three fawns on the road quite close to her cottage on Chandos Lake. Today she saw them again, three months older, near the same area! All of them looked perfectly beautiful and healthy. In the Trent Wildlife Sanctuary Tony Bigg saw an Osprey, Gray Catbird, Red-eyed Vireo, Philadelphia Vireo, Blue-headed Vireo, Eastern Phoebe, Least Flycatcher, Black-throated Green Warbler, Chestnut-sided Warbler, Palm Warbler, American Redstart, Yellow-rumped Vireo, Magnolia Warbler, and Field Sparrow, among other more common birds.
- Sept 15 At Millers Creek this morning Lynne Cotton saw a **Least Bittern**. It was at a distance but it seemed to be significantly smaller than an American Bittern. We checked Crossley and Sibleys and the black cap and the beak seemed right. He looked to be quite dark in flight.
- Sept 17 On the Cameron to Cty Rd 38 section of the rail trail Jerry Ball saw a **Palm Warbler** and a **Pileated Woodpecker**.
- Sept 18 Mike Gillespie reported three of **Fiery Skippers** both sexes represented visiting the pink Stonecrop in his garden bed. This is **a new butterfly for Peterborough County**. His house is on David Fife Line south of Cty Rd 2. Sean Smith reported that there were still two **Ruby-throated Hummingbirds** feeding on salvia at Ecology Park.
- Sept 19 Today, Sean Smith reported there was a juvenile **Black-crowned Night Heron** off Meadowvale Park, below TASSS, and in the trees a **Blue -headed Vireo**, **Black-throated Green Warbler**, a **Hermit Thrush** along with several **Ruby and Golden-crowned Kinglets**. Jerry Ball saw hundreds of **Common Crackles**, a **Lincoln Sparrow**, **Blue-headed Vireo**, and **Yellow-rumped Warcblers** on the David Fife to Sittlers Line section of the rail trail.
- Sept 21 At Ecology Park today, Sean Smith saw a single young male **Rose-breasted Grosbeak**, several **Black-throated Green Warblers** and single **Chestnut-sided**, **Magnolia**, **American Redstart** and **Yellow-rumped Warblers**. For the last three or four days, Drew Monkman has had five **Purple Finches** coming to his feeders. They have been here for about a week. They are all female or first-year males (which are indistinguishable from the female.)
- Sept 22 A **Tennessee Warbler** was seen in Tony Bigg's garden in Lakefield.
- Sept 25 Walking the Robert Johnston EcoForest in Douro Township, Tony Bigg noted literally thousands of mushrooms, mainly Boletes (possibly **Suillus bovinus**, and **Suillus granulatus**).
- Sept 26 In the last few days, Drew Monkman reports that the number of **White-throated Sparrows** has swelled to about twelve, there is roughly the same number of **Purple Finches**. Tony Bigg saw his first **White-crowned Sparrow** of the fall on the Base toDavid Fife section of the rail trail.
- Sept 27 Pat Roberts saw a **Green-backed Heron** along the Pagoda lake in Jackson Park. She has been walking there in the early mornings for many years and has seen many Great Blue Herons but this is a first. Jerry Ball reported that there were now five male and one female **Fiery Skippers** in Mike Gillespies garden.



Fiery Skipper (new to County) on Stonecrop, David Fife Line, September 17, 2012. Photo by Tony Bigg.



Five-spotted Hawk Moth unfurling its wings, September 23, 2012. Photo by Tony Bigg.



Large Milkweed Bug (Oncopeltus fasciatus), PFN Outing to Hunter Farm, September 9 2012. Photo by Martin Parker.



Hummingbird Clearwing Sphinx Moth, Otonabee Twp, August 21 2012. Photo by Rick Stankiewicz.



ORCHID SUBMISSIONS WANTED

Deadline for submissions for the October issue: Friday, October 26th, 2012

Please send all submissions to: Rebecca Zeran, PFN, PO Box 1532, Peterborough,
ON, K9J 7H7 or via e-mail to: rebecca.zeran@mail.mcgill.ca



Signature:

www.peterboroughnature.org

membership application form

Memberships may be obtained by mailing completed form and cheque to Peterborough Field Naturalists PO Box 1532, Peterborough, ON K9J 7H7

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CONTACT													
Name (a)	(-)						Home Te			al:			
Name (s):						Work Te				el:			
Address:						Receive o snail mail o e-mail Orchid by: o both please			Email(s	s):			
MEMBERSHI	P TYPE & FE	E S	CHEDULE										
Please make ch	eques payable	to P	eterborough	Field	Naturalist	s							
1. Single Adult \$25													
4. Family (co	uple or family	wi	th children [*]	^k) \$30									
4. Family (couple or family with children*) \$30 *Please give the name(s) and age(s) of the children you wish to be enrolled in the PFN Junior Naturalists													
Name A				\ge*	ge* Name						Age*		
MAIN INTER	ESTS												
o Birds	o Butterflies/insects						otany (W	ildflo	wers/trees/	shrubs)			
o Astronomy	o Astronomy o			Aquatic Life			o Geology			o Field Trips			
o Hiking	ng o Conservation					o Other (specify)							
I (name) ;				in the foll	owing			
areas						and we	ould be p	orep	ared to				
o lead an ou	tdoor session		o giv	/e a pi	resentatio	n		0	prepare an	article for The	Orc	chid	
I am interes	ted in the fo	lov	ving:										
o Joining the PFN Executive o Sitting on research or o Working on field projects									rojects				
conservation committees													
o Helping with refreshments at meetings o Please have a member of the executive call me													
AGE GROUP													
This information helps us to understand the needs of our members. If a family membership, please check for each adult													
o Under 20	o 20-29	0	30-39	o 4	0-49	o 5	0-59	o	60-69	o 70-79	0	80< over	
DONATIONS													
Membership fees cover the general operating costs of he club while other sources of revenue are needed to fund special projects such as ecological restoration. You can assist the club by making a donation to help further our work in such areas. The PFN is a registered charity and issues receipts for income tax purposes. All donations are gratefully received and any member of the executive will be happy to speak to you concerning the use of such funds.													
LIABILITY WAIVER													
In consideration of the Peterborough Field Naturalists (PFN) accepting this application, I hereby for myself, my heirs, executors, administrators and assigns forever release and discharge the PFN, their officers, directors, servants and agents from any liability whatsoever arising from my participation in PFN activities, whether by reason of negligence of the PFN or its representatives, or otherwise. I affirm that I am in good health, capable of performing the exercise required for field trips or other activities in which I participate, and accept as my personal risk the hazards of such participation. As a member of the PFN and/or as a parent/guardian of a member under 18 years of age, I have read and understood the above, and accept its term on behalf of all of my underage children.													