



# TORONTO FIELD NATURALIST

Number 595 April 2013



Silver maple flowers photographed by Ken Sproule, Col. Sam Smith Park, March 2009

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### IT'S YOUR NEWSLETTER!

We welcome contributions of original writing of observations on nature in and around Toronto (up to 500 words). We also welcome reviews, poems, sketches, paintings and digital photographs. Please include "Newsletter" in the subject line when sending by email, or on the envelope if sent by mail. Please re-name digital photographs with the subject and your name (abbreviations ok); scale your photos to less than 1 MB each. In the accompanying email include location, date and any interesting story or other information associated with the photograph.

**Deadline for submissions for May issue: April 3**

### NEWSLETTER COMMITTEE

Jenny Bull (co-editor), Vivienne Denton, Karin Fawthrop, Nancy Fredenburg, Elisabeth Gladstone, Mary Lieberman, Judy Marshall, Ruth Munson, Toshi Oikawa, Wendy Rothwell (co-editor).

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### MEMBERSHIP FEES

\$20 YOUTH (under 26)

\$30 SENIOR SINGLE (65+)

\$40 SINGLE, SENIOR FAMILY (2 adults, 65+)

\$50 FAMILY (2 adults – same address, children included)

No HST. Tax receipts issued for donations. Send membership fees and address changes to the TFN office.

*Please note: TFN does not give out its membership list.*

### Toronto Field Naturalists

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Skunk cabbage (*Symplocarpus foetidus*) photographed by Lloyd Mayeda in the Don Valley on March 10, 2013. See also back cover photo which shows the *spadix* (which bears the tiny flowers) enclosed by the *spathe* (a leafy bract), both characteristic of the Arum family (Araceae).

The image at right shows the snow melted around the emerging plant. Skunk cabbage can raise its temperature by cellular respiration, thereby possibly aiding the release of the smell of rotting meat that attracts pollinators. Skunk cabbage is found in wet ground.



# TFN MEETING

**Sunday, April 14, 2013**

**2:30 pm**

## Insect Life Cycles

*James Kamstra, terrestrial ecologist,  
will discuss the range of insect life cycles and  
strategies insects employ to survive the Canadian winter*

**VISITORS WELCOME!**

**SOCIAL: 2:00 – 2:30 pm**

**Special Meeting to appoint Auditor**

**Room 003, Northrop Frye Bldg, 73 Queen's Park East,**

(Immediately southeast of Emmanuel College, south of the Museum subway station exit on the east side of Queen's Park). Enter on either the west or north side of the building. The west entrance is wheelchair accessible.

**For information:** call 416-593-2656 up to noon on the Friday preceding the lecture.

### Next Lecture

May 5 **Ecology of Breeding Yellow-bellied Sapsuckers**, Doug Tozer, ornithologist

### Earth Day Community Clean-up Saturday, April 20

**It's time to pitch in to help Clean Toronto Together!**

Participate in a community clean-up event near you. Or, join the Mayor's Community Clean-up. Or, gather your friends, family and neighbours together and create your own project.

Register your clean-up location

City work crews will pick up the waste you collect

Deadline to register for special garbage pick-up is April 15

**Thank you for helping keep Toronto clean, green and healthy!**

**For more information, including how to obtain  
bags for garbage and recycling,  
visit [www.toronto.ca/litter/clean-up/index.htm](http://www.toronto.ca/litter/clean-up/index.htm)**

### Earth Month Youth Forum

April 27, 2013

Youth aged 15-24 will participate in workshops facilitated by environmental organizations and leaders. Keynote speaker is astronaut and avid environmental photographer Roberta Bondar. \$20

Presented by Earth Day Canada's EcoMentors Program and the Royal Ontario Museum.

Info: [www.rom.on.ca/en/activities-programs/events-calendar/2013-earth-month-youth-forum](http://www.rom.on.ca/en/activities-programs/events-calendar/2013-earth-month-youth-forum) or 416-586-8000.

## TFN OUTINGS

- TFN events are conducted by unpaid volunteers.
- The club assumes no responsibility for injuries sustained by anyone participating in our activities.
- Children and visitors are welcome at all TFN events. Children must be accompanied by an adult.
- If you plan to bring children in a stroller, be aware that there may be steps or other unsuitable terrain.
- Please do not bring pets.
- To get to outings on time, check TTC routes and schedules ([www.ttc.ca](http://www.ttc.ca) or 416-393-4636).
- Outings go rain or shine: check the weather by calling 416-661-0123 so you will know what to wear.
- Wear appropriate footwear for walking on trails which may be muddy, steep or uneven.

- Wed  
 Apr 3  
 10:30 am  
**HAPPY VALLEY FOREST – Salamanders and Birds**  
 Leader: Ann and David Love  
 Come for a walk in the Happy Valley Forest. We will try to find some of the salamanders which call these fabulous woods their home, being on the lookout especially for eastern red-backed, spotted, eastern newt and Jefferson. Early April will also bring the early bird migrants to the forest, and maybe we'll find a flying squirrel! Bring drinking water, lunch optional. Contact Margaret McRae at [REDACTED] or [REDACTED] re car pooling arrangements.
- Sat  
 Apr 6  
 10:00 am  
**ALLAN GARDENS – Nature Arts**  
 Leader: Heidi Holmes  
 Meet at the main entrance to the Palm House (Carlton St just west of Sherbourne St). Bring what you need for sketching, photography, writing and anything you wish to share with the group after lunch. Or just come to see the spring blooms. After lunch at the College Park Food Court.
- Thurs  
 Apr 11  
 10:00 am  
**EAST DON – Nature Walk**  
 Leader: Stephen Kamnitzer  
 Meet at the southwest corner of Leslie St and Finch Ave E. Bring binoculars for a 3-hour circular walk. Optional Chinese lunch afterwards at Leslie and Finch.
- Sat  
 Apr 13  
 10:30 am  
**ROSETTA MCCLAIN GARDENS AND THE LAKESHORE BELOW – Birds and Trees**  
 Leader: Bob Kortright  
 Meet at the entrance to the gardens at Kingston Rd and Glen Everest Rd for a circular walk. Bring binoculars and a snack.
- Sun  
 Apr 14  
 2:30 pm  
**LECTURE at Northrop Fry Building Room 003 – Insect Life Cycles**  
 Speaker: James Kamstra, terrestrial ecologist. There will be a brief business meeting to appoint an auditor. See page 3.
- Thurs  
 Apr 18  
 10:00 am  
**HUMBER RIVER – Nature Walk**  
 Leader: Ed Freeman  
 Meet at the northeast corner of Eglinton Ave W and Scarlett Rd to walk along the Humber River to Weston, ending at Loblaws for lunch. Bring binoculars and lunch if you wish.
- Sat  
 Apr 20  
 10:00 am  
**GERMAN MILLS CREEK – Nature Walk**  
 Leader: Theresa Moore  
 Meet at the northeast corner of Steeles Ave E and Leslie St for a circular walk. Morning only.
- Sun  
 Apr 21  
 2:00 pm  
**SPRING FROLIC IN L'AMOREAUX WOODS – Lost Rivers**  
 Leader: John Wilson  
 Meet at the northeast corner of Birchmount Rd and Finch Ave E. Walk will end at Kennedy Rd and McNicoll Ave. Explore the re-naturalized upper reaches of Bendale Branch, Highland Creek, Enbridge Line 9 pipeline in the Finch hydro corridor, and the extraordinary forest interior of L'Amoreaux Woods. A joint walk with the Toronto Green Community.

Thurs  
Apr 25  
11:00 am

**ROUGE VALLEY – Spring Ephemerals and Nature Walk**

Leader: Peter Money

Meet at Pearse House, east of first bus stop north of the stop at Sheppard Ave E and Meadowvale Rd (currently TTC bus 86A from Kennedy, but confirm with TTC). Bring lunch and binoculars. Circular walk, 3 to 4 hours.

Sat  
Apr 27  
10:00 am

**GUILDWOOD PARK TO EAST POINT – Nature Walk**

Leader: Gisela Bach

Meet at the parking lot at the Guild Inn, 191 Guildwood Parkway (Morningside #116 bus). We will walk along the shoreline of Lake Ontario to East Point Park and discuss invasive weeds and the impact trash has on our environment. From East Point Park we walk along Copperfield Rd through Grey Abbey Park back to Guild Inn parking lot. Bring lunch, binoculars. Wear sturdy shoes and long pants.

Sun  
Apr 28  
1:30 pm

**TAYLOR MASSEY CREEK – Nature Walk**

Leader: Margaret McRae

Meet on Victoria Park Ave outside the Victoria Park subway station for a walk towards the Forks of the Don, probably ending at Coxwell and O'Connor.



**PLEASE HELP ONTARIO'S  
FROGS AND TOADS!**

Submit your sightings and receive a free Frog and Toad call CD! Every sighting you report helps us protect Ontario's frogs and toads and the places they live.

Submit your observations on-line at [www.torontozoo.com/adoptapond/frogwatchontario.asp](http://www.torontozoo.com/adoptapond/frogwatchontario.asp) or contact Adopt-A-Pond at: 361A Old Finch Ave. Toronto, ON M1B 5K7 or by fax at 416-392-4979



Gray treefrog




## PRESIDENT'S REPORT

I attended a seminar about the new Eglinton LRT on February 26 with discussion about streetscape, development styles and greening. It will be nice when they actually start building it.

Charles Chaffey attended the Open House on the East Don Trail Environmental Assessment Study which I couldn't attend as it was on the same night as two other meetings. I hope to be involved in future meetings.

We have included an update on page 9 on the planning for our 90th anniversary celebration on October 4 which is coming along nicely. Please look at the list of jobs that need to be done and let us know as soon as possible if you are willing to fill any of them.

On Wednesday April 24 at 7 pm, the East York Historical Society and Heritage Toronto are presenting *The Art and Science of Warfare during the War of 1812* at the Papermill Theatre at Todmorden Mills. The event is free but tickets must be ordered through the Heritage Toronto website: [www.heritagetoronto.org/lectures](http://www.heritagetoronto.org/lectures). This is an opportunity to view the theatre where our anniversary presentation will take place.

On March 2, Bob Kortright and I attended a meeting of Park People (The Toronto Alliance for Better Parks) and had a TFN promo table there with our new banner and slide show. Park People included us in their presentation, referring to a walk Miles Hearn led for them in Wigmore Park last year. We will be running an outreach program for Park People this year with 12 walks in 12 different wards which will be shorter than the normal TFN walks. I would be happy to hear from people who might like to lead outreach walks for outside groups to teach them about nature in Toronto.

Six people represented us at *Get the Jump on Spring* on February 23 at the Toronto Botanical Garden and sold 4 new memberships. There will be more

promotional opportunities during the spring and summer. Let us know if you would like to participate.

**The W Garfield Weston Foundation** will commit up to \$5 million over the next three years to fund innovative new park initiatives across the City of Toronto. Working in partnership with Park People, the Weston Family Parks Challenge will support projects that spark new ways to operate parks. Successful proposals will enhance Toronto's green spaces and build innovative partnership models for parks. Ultimately, winning projects will lead to new ways for parks to engage the community, connect with nature, bring in volunteers, new sources of funding and non-traditional approaches to park programming and maintenance. Eligible applicants will include registered charities and community agencies, working in partnership with the City of Toronto, the Toronto and Region Conservation Authority, the private sector and/or business communities. The program guidelines can be found on [www.parkpeople.ca](http://www.parkpeople.ca).

As in the past three years, the TFN is using some of its bequest funds to make donations to other charitable organizations for their programs and projects that promote the TFN goals of helping people enjoy, preserve and understand nature. The Funding Request forms for 2013-2014 TFN grants are available on the TFN website ([www.torontofieldnaturalists.org](http://www.torontofieldnaturalists.org)). The deadline for submission is April 12, 2013.

The provincial government is reintroducing the proposed Great Lakes Protection Act, 2013 (Bill 6) and extending the public consultation period to April 26, 2013. For information on the proposed Act, please visit the Ministry of the Environment's website: [ontario.ca/environment](http://ontario.ca/environment), and the Environmental Bill of Rights website at [www.ebr.gov.on.ca/ERS-WEB-External/](http://www.ebr.gov.on.ca/ERS-WEB-External/) where you can search registry number 011-6461. The Ministry will consider all comments received on the previous proposed Great Lakes Protection Act, 2012 proposal, alongside all comments received on the 2013 proposal, so if you have already provided comments, you do not need to resubmit them.

Margaret McRae, President



Ashbridges Bay in April, drawn by Melanie Milanich

## MONTHLY MEETING REPORT

### Nature Where Plates Collide, North Pacific and Himalaya, Sunday March 3

Peter Money, geologist and TFN member

*We thank Peter for sharing, through his knowledge of geology and botany and his expert photography, some of the wonders he has seen in his travels. Peter has kindly provided this summary of his talk for our readers.*



Annapurna South (with dome of Annapurna I, behind right flank), Nepal

We live on the earth's crust, a thin layer that, combined with the underlying upper mantle, is fragmented into plates that can collide, slide along each other, or diverge. This talk focused on segments of two collision zones, one in the North Pacific, the other in the Himalaya, and the life that has migrated to or evolved in these regions. Although these collisions were caused by the same process, the results in the two regions are vastly different.

The collision in the North Pacific is between the Pacific plate and the North American (and other) plates. The collision zone is known as the "Ring of Fire" because of its abundant volcanoes. These occur because most of the Pacific plate crust consists of "oceanic" rocks, about 7.5% more dense than the "continental" rocks of most of the crust on the North American plate. This causes the Pacific plate to deflect downward under the North American plate. When it gets deep enough, melting occurs resulting in volcanoes eventually breaking through the continental crust. Part of the North American plate continental crust is so thin that it is below current sea level, resulting in the shallow continental Bering Sea. Here the "Ring of Fire" volcanoes form the Aleutian chain of currently isolated islands.

Between the glacial maximum of the last (Wisconsin) glaciation, about 60,000 years ago, and about 11,000 years ago, sea level was so lowered by the

water locked up in continental glaciers that the Aleutians were connected to Kamchatka and Alaska as part of the Bering Land Bridge. Many species migrated across this bridge. For example, brown (grizzly) bears migrated from Asia to North America. When sea levels rose, relic populations of plants were isolated on the Aleutian Islands. There probably has been too short a time for evolution of new species on these islands, although a growth form of "bride's feathers" (*Aruncus dioicus*) on remote Attu Island is so different from the mainland form that the process may be well on its way.

The Himalaya results from the collision between the Indian-Australian plate and Eurasian plate. About 40 or 50 million years ago this brought "proto-India" in collision with the Eurasian plate. The thinner continental rocks on proto-India were crumpled up against the thicker continental rocks on Eurasia to form the Himalaya. This collision resulted in a large number of isolated valleys and mountains with differing microclimates and related evolution of



*Rhododendron hodgsonii*, Cheli La, Bhutan

many new species. Rhododendrons, with very restricted ranges both vertically and longitudinally, provide excellent examples of such evolution. The Himalaya has not only provided many evolutionary niches within the mountains, but has had a major influence on regional climate and hence more distant environments.

Article and photos by Peter Money

## EXTRACTS FROM OUTINGS LEADERS REPORTS

### Review of restoration work and park management, Glen Stewart Ravine, Jan 30. Leader: Cara Webster.

We reviewed management issues including biking, dogs off-leash, tobogganing on slopes. We saw red and white oak, basswood, black cherry, yellow birch, witch hazel (flowering), alternate dogwood, and ash species.

### Botany, University of Toronto Greenhouses, Feb. 6.

**Leader: Nancy Dengler.** U of T horticulturists Bruce Hall and Andrew Petrie joined our walk through the collection of exotic plants used for teaching at U of T. Bruce gave us an overview of the Plant Growth Centre, greenhouse construction, indoor grow lights and potting media. Andrew introduced us to Socrates and Bernard, two friendly Australian bearded dragons. In the xerophyte house we looked at cones of *Welwitschia mirabilis*, a gymnosperm from the deserts of Namibia and Angola. This rare 50 year-old plant is a male and his pollen was recently shipped to a female *Welwitschia* at the U of Massachusetts, an unusual long distance romance. In the fern house, we looked at flypaper (sundews, butterworts), pitfall (pitcher plants) and snap trap (Venus fly-trap) carnivorous plants. It was noted that recent TFN speaker Brock Fenton had mentioned Hardwick's woolly bats from Borneo that roost in the pitchers of *Nepenthes rafflesiana* safely above the level of the digestive fluids. These large pitchers catch fewer insects than other species, but benefit from the nitrogen in the bat's waste.

### Snowshoeing, Charles Fell Nature Reserve, Feb 14.

**Leaders: Margaret McRae assisted by Charles Chaffey.** We walked through the woods on the east side from the north to the south, having left a car at each end, and later walked closer to the river through cattails. This was the other side of the river from our walk two years ago. We followed many animal tracks but didn't see the animals. Winter is the only time this marshy area is accessible. We noted alder, cedar, red osier dogwood, spruce, birch, cattails, and a black spider.

### Birds and Plants, Bluffers Park, Feb 16. Leader: Miles Hearn.

We saw Iceland, greater black-backed, ring-billed and herring gulls, as well as pintail, common goldeneye, redhead, red-breasted merganser, kestrel, mockingbird, red-tailed hawk, tree sparrow, crow, and trumpeter swan. Among the many plants we noted white, Colorado and Norway spruce, eastern hemlock, black walnut, butternut, white, Scotch and Siberian elm, autumn olive, Russian olive, and Siberian pea.

### Humber Bay East, Feb 20. Leader: Wendy Rothwell.

The outing was cancelled due to treacherous walking conditions. On my pre-walk, I was intrigued to see a pintail-mallard hybrid (at right).

### Trees and Birds, St James Cemetery to Riverdale Farm, Feb 23. Leader: Bob Kortright.

As the walk started, we heard and then saw cardinals, followed shortly by purple finch at the chapel, chickadees, goldfinch, white-breasted nuthatches, downy woodpecker and, most surprisingly, a brown creeper at the back of the cemetery. Among the expected trees was a large sycamore maple. The path to the Necropolis (oldest operating non-sectarian cemetery in Toronto - since 1850, and oldest crematorium - 1933) took us past many fine Victorian houses with interesting shrubs, and across the upper reaches of Lamb's creek in Wellesley Park to Amelia St, Hillcrest Park, Sumach St and Winchester St. The Necropolis was equally interesting for birds (including several red-tailed hawks and robins) and trees (including *Paulownia*).



Red-breasted merganser pair at Harbourfront, March 2, 2013. Photo: Augusta Takeda

### Birds and Plants, Thomson Memorial Park, Feb 27.

**Leader: Miles Hearn.** Wet snow was falling and there were strong winds. Birds included house finch and hairy woodpecker. Trees seen included black walnut, butternut, crack willow, red and white ash, catalpa, beech, white elm and Douglas fir.



Pintail-mallard hybrid. Photo Wendy Rothwell

## TFN 90TH ANNIVERSARY THEATRICAL PRODUCTION

Papermill Theatre, Todmorden Mills, 67 Pottery Road

Friday, October 4th, evening

### Progress Report

Our planning committee meets monthly and is making good progress. Some positions still have to be filled. We will be meeting with the theatre management later in March to find out exactly what is required so we will have a more complete report in the May newsletter. As that is the last newsletter until September we would like to line up all our volunteers by the time it goes to print at the beginning of April.

Richard Partington is our Director and Stage Manager and Nancy Anderson is heading up the musical department. We will have singers and also a sing-along with audience participation. We will likely divide the presentation into the four seasons. Joe Bernaske is working on some nature walk skits and haikus. Madeleine McDowell is putting together some history on Hurricane Hazel and will do some additional story telling. Joanne Doucette will present "Naturalists in the News" and "aboriginal Glooscap" stories. Margaret McRae will put together a feature on the nature reserves and Richard Partington will do something on the Junior Field Naturalists. Karen McDonald may write a piece on our involvement with the TRCA.

If we have omitted anything you think should be included, please let us know - particularly if you are prepared to write it.

We hope to meet in April with all the members who wish to participate in the musical side, to choose songs and practise them. We are looking for people who **play keyboard or guitar** to help with rehearsals and to accompany the singers at the performance. Please advise us as soon as possible if you can help.

We would like to find someone to **take charge of promotion/publicity** as soon as possible. We plan to sell tickets online from our website.

Other positions to be filled are:

- **assistants in stage management, technology, sound, lighting, stage hands, etc**
- **someone to record the event and put it on DVD**
- **scenery creators**
- **preparing digital content for the projector and running it**
- **creating the program for printing**
- **box office, ushers, refreshment servers and cleanup, etc on the night of the performance**

If you would like to be involved, please advise Richard or Margaret as soon as possible and tell us what you would like to do.

Richard Partington  
Margaret McRae



Todmorden Mills  
drawn by Leslie Mirylees

## SAVE THE SALAMANDERS

The following is extracted from Save the Salamanders website, written by Matt Ellerbeck, the "Salamander Man", at [www.savethesalamanders.com](http://www.savethesalamanders.com)

At first glance salamanders appear to be a type of lizard. However, this is not true. Salamanders are their own distinct group of animals belonging to the order Caudata. Even though they do superficially resemble lizards, there are several differences that separate the two. One visual cue is that lizards usually have external ear-openings and clawed toes. Salamanders lack such features.

Salamanders are also amphibians, while lizards are reptiles. The main differences between reptiles and amphibians are that reptiles are covered in dry scales or scutes, while amphibians have moist skins. Amphibians also produce eggs that are dependent for the most part on water and moisture, while reptiles have shelled-eggs that are terrestrially adapted. Most amphibians undergo a metamorphosis from juvenile water-breathing forms to adult air-breathing forms; reptiles do not.

Salamanders first appeared on Earth some 160 million years ago. Today, there are some 550 different species of salamanders found across North and South America, and in the temperate parts of Northern Africa, Asia and Europe. Salamanders are absent from the southern regions of these continents. There are no salamanders in Australia or Antarctica. Salamanders reach their greatest diversity in the Appalachian Mountains region.

**Newt or Salamander?** Newts are actually a type of salamander. The true newts belong to the subfamily Pleurodelinae of the family Salamandridae, though salamanders from other families may also be referred to as newts. Newts have three metamorphoses throughout their life, an aquatic larva, a terrestrial juvenile stage called an eft, and an adult stage. Although newts are associated with being more aquatic than other salamanders, this is not always the case. Adult newts can either be fully aquatic or semi-aquatic. Semi-aquatic forms live primarily terrestrial existences, but return annually to the water to breed. The terms newt and salamander are sometimes used interchangeably or differently depending on what part of the world you are in.

**Why Salamanders Matter** Salamanders are extremely valuable components of natural ecosystems. Many species are paramount in keeping wetlands healthy. This service is extremely helpful to humans, as wetlands help alleviate floods and droughts and keep water clean and healthy. Salamanders are also often found in both

tropical and temperate forests. Here they are components of the ecosystems that help keep rainforests and woodlands healthy. This is important as both large quantities of oxygen and medicines (derived from plants) come from such habitats, and these are both crucial to human beings.

Salamanders prey heavily on insects and arthropods, acting as a natural form of pest control. This includes consuming ticks and mosquitoes. By preying heavily on such species salamanders help minimize both bites and the spread of disease.

Due to their secretive lifestyle there is much about salamanders that is still not known. This means they could be providing many more benefits than scientists are aware of. This alone makes the conservation of salamanders important. It also warrants the abolishment of trades, industries and practices that harm salamanders or contribute to their population declines.

Aside from the benefits that they provide to the environment, salamanders are intrinsically valuable. Their lives are meaningful and important independent of their usefulness to humans.



**Keep Salamanders Protected** The critical protection that six salamander species receive from the Ontario Endangered Species Act (ESA) is under threat. Revisions to the Endangered Species Act are forthcoming including minimizing restrictions on industries and allowing a myriad of environmentally degrading activities which will imperil already endangered species – including salamanders.

Compared to Ontario's previous Act, the new ESA provides broader protection for species at risk and their habitats, greater support for volunteer stewardship efforts of private landowners, resource users, and conservation organizations, a stronger commitment to recovery of species, increased fines, more effective enforcement, and greater accountability. These important aspects of the ESA should not be changed.

Please write to your local MPP and local Ministry of Natural Resources office to voice your concerns. Let your MPP and the MNR know that keeping Ontario's species protected matters to you, and that you are opposed to amendments that would weaken the Ontario Endangered Species Act.

## KEEPING IN TOUCH

### Northern shrike

On February 13, 2013 fellow TFN member Skip Shand and I were lucky enough to observe a behaviour neither of us had seen before. We were watching a northern shrike actively hunting. The bird landed on the road where it appeared to catch a snack before flying up to perch on a wire. The surprise came when we saw it regurgitate something.

I knew about owl pellets but didn't realize shrikes also do this. Of course it makes sense. Skip adds that other birds are evidently known to upchuck undigestible bits too. Shrikes eat small birds, mammals, reptiles and insects, sometimes storing their prey on a thorn or barbed wire. The *Sibley Guide to Bird Life and Behavior* states shrikes regurgitate "pellets of fur, feathers, bone, and chitinous material".

Northern shrikes breed across the continent in the far north and winter in the northern states and in southern Canada, including our area. A few are found every winter in Toronto. Very small numbers of the endangered and closely related loggerhead shrike breed in southern Ontario and winter in the southern U.S.A.



Northern shrike photographed by Norah Jancik in Thickson Woods, March 2008 (from TFN website)

That day around the Holland Marsh and Keswick areas we saw another northern shrike, two snowy owls, several horned larks and a flock of about 200 redpolls, all exciting to see, but for me the highlight was observing and learning about another aspect of bird behaviour.

Marilynn Murphy

*Continued on next page*

### SAVE THE SALAMANDERS *continued*

**What You Can Do** Salamanders should never be handled. They have very absorbent skin and the oils and salts from human hands can seriously harm them. Chemicals such as insect repellents, sunblock and lotions can further cause damage which could result in secondary skin infections. Struggling can result in bone and muscle injuries. The only time they should be handled is to move a salamander from a road where it may get run over (if possible, wet hands before).

Use sand instead of road salt during the winter. Salt ends up in nearby wetlands to the detriment of salamanders.

#### **Ontario's Endangered Species Act (ESA)**

From Ontario Nature at [www.ontarionature.org/protect/campaigns/endangered\\_species.php](http://www.ontarionature.org/protect/campaigns/endangered_species.php)

The ESA is a promising law that sets a high standard for species at risk legislation in Canada. But the Ministry of Natural Resources has put forward recommendations that would weaken the law, putting species at risk in even greater danger.

Visit the website (above) to learn more and to read the letter sent to the Premier by Ontario Nature and more than 50 other organizations.

Many municipalities get their water supply from natural sources which can have extremely negative effects on salamanders. Help by reducing water usage in the house, and use rain barrels around your property.

When visiting woodlands and forests, stay on designated paths. Walking over leaf litter, rocks and logs, and flat-boards can crush and kill salamanders that are hiding under these natural forms of shelter. Do not collect fallen logs, stumps or wood from forests, wetlands or other areas for fire. These materials act as important shelters and hiding spots for salamanders.

Habitat loss is one of the biggest issues that salamanders face. Protect your city's natural habitats. Learn where the natural habitats are in your community and then try to work with the conservation authority or department of parks and recreation to promote the conservation and understanding of the parks, ponds and wetlands in your town.

Climate change is among the most serious threats that salamanders face. Changes in temperature and humidity levels, desertification and drought wreak havoc on salamanders, which are generally adapted to moist cool climates and may require very specific conditions to thrive. We need to reduce our carbon footprints and support policies that can mitigate global warming.

KEEPING IN TOUCH *continued***Snake Encounters**

Here's a compilation of my snake encounters:

**Ghana:** I was four. Bush was being cleared. Snakes being hit on the head. I picked one up to show Mummy and it rattled. All the workmen yelled "Anne, drop it!" Thus began my fear of snakes. Any time I move countries, I have a snake dream.

**Connecticut:** a) In a State Park in spring I saw a writhing cluster of well over a hundred snakes in a deep hollow. Did not go in for a closer look.

b) Swimming in a lake when something brushing my legs. "Weeds," they said! As I got out, they told me it was water snakes. Never spoke to that person again!

**Boston Museum:** Black Beauty, about 20 feet long. I wanted our daughter to be unafraid so...we touched it. Beautiful feel, gorgeous colours.

**Cambridge, England:** I had "the dream", called out, my husband reached over to soothe me. Then I *knew* there was a snake! My scream woke up many.

**Scarborough:** a) Garden backed onto Morningside Park. When I saw a garter snake all the old fears roared to the surface and I thought "I cannot live here!"

b) We used to have a small shallow pond and very few raccoons, which seemed to encourage garter snakes. I put a large notice on my tool basket: Do not jump if see snake! Within weeks I was gardening with a couple of garter snakes coiled and basking in the flower bed. I knew they were not poisonous and a friend said the bite was not too bad. I still don't know if he was right.

c) I opened the basement screen door and saw 9 inches of wiggling snake, head sticking out, perhaps seeking refuge for the winter? I helped it out with a long stick.

d) A 4 ft buff and brown ringed snake passed casually through the garden. I called the zoo and described it to Tom Mason who suggested I catch it if it reappeared! I set out a trash can and a long stick! Six hours later I thought I was mad to even consider this approach to identification! I removed the sophisticated catching equipment. To this day I do not know what it was.

e) My son-in-law's brother had a rescue collection of 6 assorted snakes. Constrictor Smug was 18 feet long. At first I could not sleep there. His mother fed them and sat on the sofa with a rainbow snake in her lap. The snake roamed the living room and had to be rescued from the glassed in fireplace. Eventually I got used to their presence and even house- and snake-sat for a few days.

**Yucatan Holiday Resort:** I saw an eight foot snake about 20 feet away. We kept walking.

**Rouge Park:** My last viewing of a snake was on a TFN walk. A harmless, small, tiny, pencil sized slim brown snake. Just the way all snakes should be!

Anne León

**Milksnake**

I am a friend of Anne Leon. We have a ravine property and Highland Creek is close by. A while ago Anne and I were speaking about snakes and I mentioned how I had seen a long unusual one in our back garden a few years back (May 2007). It was not the usual garter snake like those I had seen in our garden before. Fortunately I had my camera close by and took a photo before it slithered away. I found it so interesting that it was moving in a zig-zag way so that it was along the cracks between the paving stones on our patio and almost the same colours so I almost did not see it until it moved!!! Then it really startled me!! I have not seen this one or one like it, before or since that day.

Susan Ackerman

Ed.: This is an eastern milksnake. According to *Familiar Amphibians and Reptiles of Ontario*, milksnakes are primarily nocturnal. "It is noteworthy that all populations of milksnakes in Toronto are associated with old buildings or are found on sites that once had farm buildings," says author Bob Johnson. "I have occasionally found [one] stretched out in the sun along a path. Snakes raise their body temperatures to aid digestion or to speed the development of embryonic eggs. Milksnakes will vibrate their tails when disturbed... but are harmless and can be beneficial. They feed on young snakes and small rodents.

## TORONTO WILDFLOWERS: MAY-APPLE AND TWINLEAF

May-apple and twinleaf are members of the Berberidaceae (barberry) family. The family includes 14 genera and some 650 to 700 species. Most species (about 600) are members of the genus *Berberis*. May-apple (*Podophyllum peltatum*) and twinleaf (*Jeffersonia diphylla*) are each members of genera that include only a few species.

According to the *ROM Field Guide to Wildflowers of Ontario*, *podophyllum* is derived from the Greek *anapodophyllum*, a word in turn a compound of the Greek *anas* (duck), *podos* (foot) and *phyllos* (leaf); referring to the leaf shapes of members of this genus. *Peltatum* describes the positioning of the leaf stalk near the centre of the leaf blade. *P. peltatum* is about 30 to 40 cm tall with white flowers, 3 to 5 cm across, hidden beneath its large leaves. Sterile plants have a single leaf whereas flowering plants have paired opposite leaves. May-apple refers to this species' supposed blooming period and superficially somewhat apple-like berry. This locally very common species is as likely to bloom in early June as in late May. Although a forest plant, it seems to persist for years in cleared areas. It is confined to eastern North America, in Ontario only in and south of the Georgian Bay eco-region, east to Nova Scotia, and in the US in and south from Minnesota to New England.



May-apple, *Podophyllum peltatum*

The *ROM Field Guide* notes that *Jeffersonia* commemorates Thomas Jefferson, third US president, known for his enthusiastic support of scientific exploration. *Diphylla* means two-leaved, in this case not an accurate term. Twinleaf leaves are divided into paired leaflets, which results in each leaf appearing to be two leaves, hence the specific name. *J. diphylla* is 15 to 20 cm tall with white flowers up to 3 cm across.



Twinleaf, *Jeffersonia diphylla*

It is a species of moist rich forest and floodplains. It was in bloom in late April to mid-May 2005, the last time I looked for it. This locally rare species was recorded in TFN's *Vascular Plants of Metropolitan Toronto* (2nd ed. 1994) at several localities in the Humber drainage and near Etobicoke Creek. This latter occurrence and at least one Humber occurrence are in forest fringes near the outer margins of floodplains. In Canada, it only occurs in Southern Ontario and Manitoulin Island. Its US range includes northeast Iowa to New York and south to Georgia and Alabama.

May-apple flowers, although sometimes difficult to see, are common enough not to present a serious challenge, provided your knees allow you to get down to peer under may-apple leaves. Locating and describing twinleaf occurrences, on the other hand, could be a real contribution to knowledge of the local flora.

Article and photos by Peter Money

## REPORTS FROM TFN GRANT RECIPIENTS

### **TRCA Kortright Centre Field Trip Bus Grant** by Sophia Chum, Supervisor, Themed Education

This year marks the third year of the School Field Trip Bus Grant Program, an exciting initiative created by Toronto and Region Conservation as part of our commitment to making environmental and outdoor education accessible to students in the City of Toronto.

As a strong advocate of the importance of reconnecting young people with nature and helping them develop a love of our natural world, the Toronto Field Naturalists (TFN) has been a valued supporter since the program began in 2010.

Recognizing that transportation cost often presents a barrier to participation in field trips, the program offers classes who wish to experience nature-based education programming at our Kortright Centre for Conservation a \$250 bus grant to help reduce or eliminate this financial burden.

A total of 42 bus grants have been made available for the 2012-2013 school year. Despite the uncertainty that has resulted from the ongoing teacher labour issue, the demand for bus grants has not dampened. We are pleased to have awarded 31 grants to date, providing nearly 1,300 students from 30 different schools the opportunity to discover and enjoy our outdoor classroom.



Last May, we hosted an event at the Kortright Centre to celebrate the success of the program and to recognize TFN for their instrumental role in making it possible. Joining us for the ceremony to honour TFN was a group of students from Courcellette Public School, one of our bus grant recipients, who used the occasion to deliver their message of appreciation.

We, too, are grateful to TFN, whose generosity has allowed us to continue our efforts to cultivate and nurture the next generation of ecoliterate citizens.



### **Toronto Wildlife Centre**

by Jula Coey, Development Coordinator

The car had left the snapping turtle broken and bloody, but alive. She, like thousands of turtles in the spring, was en route to a nesting site when she was hit. Thanks to the support of a Toronto Field Naturalists grant, Toronto Wildlife Centre (TWC) was able to provide this turtle (and many others) with the expert medical and rehabilitative care that saved their lives.

Ontario's turtles are in decline and 7-out-of-8 species (including snapping turtles) are considered species-at-risk. The effects of losing even one breeding age female turtle can impact the population. For example, snapping turtles don't start to lay eggs until they are at least 17 years old, and the chance of offspring surviving to adulthood is small. In comparison, a doe fawn could breed as early as 6 months old, depending on her size.

When an injured, pregnant turtle is in recovery at TWC, she is housed in an enclosure containing a nesting substrate. If she lays her eggs while in care, staff incubate them—carefully adjusting heat and moisture levels. Without the perfect conditions, they will not hatch. Any tiny turtles that emerge are given a chance to grow a bit larger, but are quickly released back into the wild. Despite their misleading size, newly-hatched turtles are completely independent the moment they break through the shell. With luck, eventually these little ones will lay eggs of their own.



This Blanding's turtle was brought to TWC with a badly broken shell. Metal hooks and wire hold the pieces together tightly and allow the shell to heal properly.

Along with the treatment and release of injured turtles, public education is imperative to change the bleak outcome for Ontario turtles. The grant from TFN has supported the creation of turtle-related education material that will be used to increase awareness about turtle issues in time for the 2013 breeding period.

Education is critical because many people don't even know that Ontario's turtles are under pressure or the importance of saving even one breeding adult. Road mortalities can be reduced if people drove more slowly

in turtle mortality hotspots (eight have been identified in Southern Ontario) and helped turtles cross roads (always move them across in the direction they are facing and only if it is safe for you to do so).

Taking turtles from the wild to keep as pets is also a contributor to their decline. Not only is it almost impossible to care for a wild turtle properly (TWC has admitted countless turtles deformed, colourless, or with soft shells because they have not been fed properly or had enough exposure to sunlight), it is also illegal.

Happily, not only was the injured snapping turtle released, but so were her babies. All five! When it comes to slow growing snapping turtles, every single one counts, no matter how small.



These young snapping turtles (hatched at TWC) experience freedom for the first time

□ In 2010 TFN sponsored Tessa McCarthy Barnes from Wilberforce, ON, as a delegate to Ontario Nature's Youth Summit. The experience suited her perfectly, particularly the Summit's focus on community development. That Tessa was a worthy recipient of TFN's support, and that she has followed her dreams since that Summit, can be seen in this recent article reporting on her sessions of voluntary community work in Kenya, and on her current educational plans: [www.haliburtonecho.ca/2013/03/04/teen-reflects-on-life-changing-african-adventure](http://www.haliburtonecho.ca/2013/03/04/teen-reflects-on-life-changing-african-adventure)

Tessa is an admirable young woman, remarkably experienced for one who has not yet entered university. TFN can be proud to have supported her at an early moment in what begins to look like a lifelong humanitarian journey!

Best wishes, Skip Shand

### Teens: Apply for the 2013 Young Ornithologists Workshop!

The 2013 Doug Tarry Young Ornithologists Workshop will be held at Long Point Bird Observatory near Port Rowan, Ontario, from August 3 to 11.

Participants will receive hands-on field ornithology training, including bird banding, censusing, field identification, birding trips, preparing museum specimens, guest lectures, and more!

Six of Canada's most promising ornithologists between the ages of 13-17 will be selected to attend, and will receive the Doug Tarry Bird Study Award to cover all on-site expenses.

**Applications are due April 30, 2013**

For more information see [www.bsc-eoc.org/organization/bscnews.html](http://www.bsc-eoc.org/organization/bscnews.html) or email LPBO at [lpbo@birdscanada.org](mailto:lpbo@birdscanada.org)

## FROM THE ARCHIVES

Extracted from TFN Newsletter No. 7, March 1939

The northern shrike is a winter visitor which comes to us in greater numbers some winters than others. This variation is probably cyclical in character, varying with the prevalence of food, i.e. mice, shrews, etc. in the north.

The shrike was relatively common this last winter though rare the previous two winters. It closely resembles the migrant [Loggerhead] shrike, its relative, which nests here during the summer, and which is just now arriving with the first wave of spring birds. The winter bird is larger, and has fine markings on the breast. It

is a trim bird in mature plumage – with its motif of grey, white and black. But many of our visitors are very brown, being first-year birds. A casual observer might easily mistake the shrike for a mockingbird but one glance at the bill will reveal the error, for the shrike has a heavy hooked bill. Further examination will show that its color pattern is different. Yet it resembles the mockingbird in voice as well as in dress, for he who has



Northern shrike drawn by Diana Banville

been privileged to hear the brilliant, rollicking spring song of the shrike will have to confess that the mocker can scarcely do better. Lonely and silent as a rule with us, the shrike, if at all vocal, is usually given to rattling croaks, wheezy, creaking sounds, and jubilant shouts of ‘joiee, joiee’ when in possession of prey – so that it

comes as a startling revelation to the observer to suddenly hear this find, rich, prolonged song from the butcher bird.

The northern shrike lives on mice and small birds mostly. It is bold, fierce and courageous, taking birds as large as starlings and attacking even crows and

hawks. What it catches and does not eat at once it hangs in the crotches of bushes not far above the ground – two to four feet on the average. Sometimes it impales the prey on thorns, especially in hawthorn trees. This bird plays its part, a valuable part, in the balance of nature along with the gentler birds, and it has its own wild beauty like the peregrine falcon.

R.M. Saunders

## WEATHER (THIS TIME LAST YEAR)

### April 2012

April settled down from the extreme warmth of March. The monthly mean was exactly equal to the average of the past 30 years downtown (8.1°) and just 0.2° above at Pearson (7.3°). There was a brief spell of warmth mid-month, and then a series of frosts. Temperatures fell to -2.4° at Pearson Airport on the 18th and -0.3° downtown on the 28th. These frosts damaged fruit trees and other plants that had started growing in March. Vegetation was about three weeks ahead of normal, about the same as in 1998.

Wood frogs and spring peepers had done most of their

early chorus in March, but there was a revival during the few warm days in mid-April.

Dryness remained a concern. Total precipitation was in the 40-45 mm range in Toronto. This is moderately below-normal, but it came on the heels of a dry, snowless winter. Local snow fell late in the month, with 1.4 cm at Pearson on the 23rd and a few higher amounts on the Oak Ridges Moraine north of the city. Sunshine at 223.0 hours was also well-above normal but not in record territory.

Gavin Miller

## COMING EVENTS

If you plan to attend any of these events, we recommend that you contact the organizing group beforehand to confirm time and place.

### Jim Baillie Memorial Bird Walks – Toronto Ornithological Club

Aimed at the intermediate birder, but beginners also welcome. Free to the public; no advance registration required. Sat Apr 27, 8 am – 2 pm. Leslie Street Spit. Leader: John Carley. Early spring migrants, warblers, sparrows. Information: [www.torontobirding.ca](http://www.torontobirding.ca)

### High Park Walking Tours

1st and 3rd Sundays of each month, 10:30 am to noon. Meet at the benches across the road south of Grenadier Restaurant. Information: [walkingtours@highpark.org](mailto:walkingtours@highpark.org) or [www.highpark.org](http://www.highpark.org)

- Apr 7. My Favourite Trails, Sarah Doucette, City Councillor
- Apr 21. Lost Waterways, Leo deSorcy

### Rouge Park Weekly Guided Nature Walks

Explore Rouge Park's trails with a Hike Ontario certified volunteer leader. Information: visit [www.rougepark.com/hike](http://www.rougepark.com/hike), e-mail [hike@rougepark.com](mailto:hike@rougepark.com) or phone 905-713-3184 Monday thru Thursday.

### Harbourfront Centre

Through June 2013. Uncharted Waters: Toronto's Enigmatic Harbour. An outdoor photography exhibition that explores the spectacular environmental and cultural resource that is the harbour of Toronto. Information: [harbourfrontcentre.com/visualarts](http://harbourfrontcentre.com/visualarts)

### Thickson's Woods – Earth Day Garlic Mustard Blitz

Sat Apr 20. Meet at 9:00 a.m. at the entrance to the woods off the Waterfront Trail. We need scouts with keen eyesight to play detective, search for stray plants and mark their location for the eradication crews. Bring a small spade, trowel, hoe or favourite tool. Info: [www.thicksonswoods.com](http://www.thicksonswoods.com), [nature@thicksonswoods.com](mailto:nature@thicksonswoods.com) or call 905-725-2116.

### Canadian Pollinator Conservation 2013: Next Steps

Apr 10, 9am - 4pm. University of Toronto. Registration \$40, includes lunch. Info: [pollinatorpartnership.ca/nextsteps.htm](http://pollinatorpartnership.ca/nextsteps.htm) or contact [PollinatorConservationCanada@gmail.com](mailto:PollinatorConservationCanada@gmail.com)

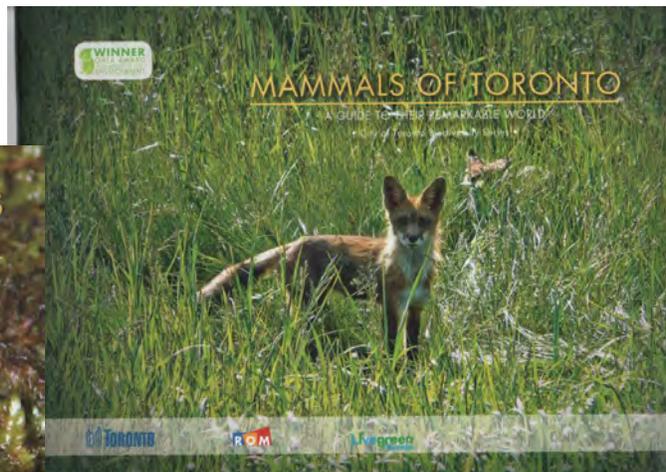
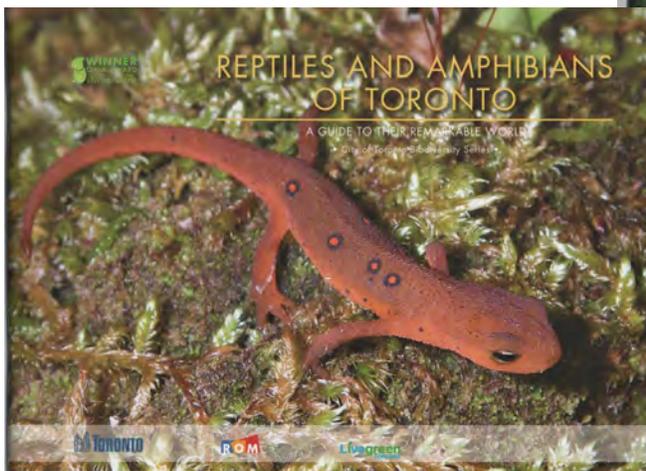
### Carden Nature Festival

Fri May 31 – Sun Jun 2. A smorgasbord of environmental delights, showcasing the uncommon beauty of the Carden Plain, an alvar located between Orillia and Lindsay, and an Important Birding Area home to many at-risk grassland birds. Close to 100 nature-related events. Info and registration: [www.couchichingconserv.ca](http://www.couchichingconserv.ca)

## City of Toronto Biodiversity Series

2 new titles just out!

**Reptiles and Amphibians of Toronto  
and Mammals of Toronto**



Check your local  
library for copies.

## DIGITAL IMAGE PROCESSING

Sometimes you have a picture that you like but has one or more imperfections that make it less than ideal (too dark, raindrop on lens, slightly out of focus, etc.). Using image processing software, you can turn an unacceptable picture into one worth keeping. Even if you have what you think is a good image, you can usually improve it using one or more of the techniques described below.

GIMP (Gnu Image Manipulation Program) is freely distributable software that can be used to retouch and process images (available at [www.gimp.org](http://www.gimp.org)). It is capable of performing many functions, only a few of which are described in this article.

Figure 1 shows the Toronto skyline. It's dark and the horizon is not parallel to the edge of the picture.



Fig 1:  
Original  
Image

**ROTATING** Use the **Rotate** tool to rotate the horizon by many degrees or fractions of a degree (Fig 2). You may also want to use this tool to rotate a butterfly image, for instance, so that the head is at the top.



Fig 2:  
Rotated  
Image

**RESIZING - SCALING OR CROPPING** Use the **Scale** and/or **Crop** commands if you want a smaller image. The images above have been scaled to retain all the information of the original in a smaller size (actually

you don't retain all of the information as pixels are discarded during the scaling process). Crop the image to the desired width and height if you want your image to emphasize certain details (no pixels are discarded). In Fig 3, the original (rotated) image has been cropped (and then scaled) to more clearly show the Toronto skyline.



Fig 3:  
Cropped  
Image

### ADJUSTING BRIGHTNESS AND CONTRAST

Adjust the brightness and contrast to lighten or darken the image and increase or decrease the difference between light and dark. As shown in Fig 4, the brightness and contrast of the image have been increased.



Fig 4:  
Bright-  
ness and  
Contrast  
Adjusted

**SHARPENING** Use the **Sharpen** command to adjust the "focus" of your image by accentuating edges. You can select the amount of sharpening. For an image with a lot of fine details such as a bird feather, too much sharpening can produce unwanted effects. Sharpening is a little bit subtle to show in a small printed image, but unless you have a perfect image it can make a noticeable difference in what you see on your monitor. Note that you need a fairly decent image to begin with. You can't take a badly focused image and expect to be able

to correct it. Fig 5 shows a detailed view of a black-capped chickadee’s feathers before and after applying the sharpness operation. A large sharpness value was used to exaggerate the effect. Normally I would not use this amount of sharpening.



Fig 5: Before and After Sharpness Adjusted



**ADDING TEXT AND GRAPHICS** You can provide additional information to your image by adding text and graphics elements using the **Text** and **Pencil** tools respectively (Fig 6). The font size and colour are selectable as are the line width and colour. The text can also be rotated by an arbitrary amount.



Fig 6: Adding Text and Graphics Elements

**REMOVING UNWANTED ARTIFACTS** Sometimes you have a slight imperfection in an image such as a raindrop on the lens or a lens flare artifact caused by unwanted light effects within the lens system. You can use a combination of techniques to get rid of these artifacts. Use the **Smudge** tool to blend adjacent areas of the picture together. You can magnify the image and

use a smaller smudge tool to do increasingly detailed work on the artifact. Using the **Free Select** tool, it may be appropriate to select a small adjacent area of the image. You can then copy and paste this area over the blemish and use this as a starting point for the smudging process. For really detailed work you can also use the **Colour Picker** tool to select the colour of an individual pixel which can then be used to paint any adjacent pixels. Fig 7 shows a Virginia tiger moth with a rain drop on the lens marring the end of the wing. I have used all of the above techniques to remove the raindrop.



Fig 7 Before and After Artifact Removal



**ORDER OF OPERATIONS** If using a number of these techniques on one image, I perform rotation (if necessary) first, followed by scaling or cropping, brightness/contrast adjustment and artifact removal. Note that the rotation operation leaves blank areas at the corners of your image as the software does not know how to fill in these areas. After rotation, you can either crop a smaller image that doesn’t include these areas, or in the case of a small rotation, use the smudge tool to blend the background into the blank areas. The sharpening operation should be performed last unless you are adding text and graphics. Once the text and graphics elements have been processed, any subsequent processing would only degrade them.

In conclusion, before you hit the delete key or accept a picture with a shrug and say “It’s okay I guess,” you may want to try one or more of these techniques.

Ken Sproule

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Skunk cabbage (*Symplocarpus foetidus*) photographed by Lloyd Mayeda in the Don Valley, March 10, 2013. See also inside front cover.