Bill Rapley, Conservation and Education
Programs at Toronto Zoo: Stimulating Action to
Save Species and Protect Habitats
As the first veterinarian at Toronto Zoo when it
opened in 1973, and now Executive Director, Bill
Rapley knows a lot about this 710 acre urban park,
Canada’s largest zoological gardens.
Zoos have evolved from the small concrete-caged
menageries of the 19th century to present
day multi-faceted learning centres. Here people of
all ages are welcomed and urged to get involved in
an array of programs, zoo camps, volunteer and
leadership opportunities. Here the wider
community is invited to participate in citizen
science, such as Adopt a Pond, Frogwatch, and
Ontario Turtle Tally. Habitat restoration efforts
and Bioblitzes, such as at Rouge Park, where 1700
species were identified, are a huge success.
Around the world many species are at risk today,
with 52% of wildlife now gone. The International
Union for Conservation of Nature, IUCN.org, the
world’s first global environmental organization,
has lots of information and updates on species
around the world.
Toronto Zoo is involved in the captive breeding
and reintroduction into the wild of 300 species,
such as zebras and rhinos from Kenya, Peregrine
Falcons, Trumpeter Swans, Massassauga
Rattlesnakes and Pandas. They work with a wide
array of partners in other institutions and
universities, doing genetic and bar coding
analyses, and wildlife disease studies, such as in
wolf populations in Algonquin Park. The
expanding Great Lakes Program has seen 71,500
salmon fry released since 2009, involving 600
participants in 16 schools.

Zoo staff has many events and workshops to
engage people in different areas, such as on First
Nations Reserves, which contain some of the most
biodiverse habitat, and in conjunction with Parks
Canada.
Bill’s presentation covered so much ground I
couldn’t possibly do it justice, but I have to
include two images that really stayed with me.
The first was a photo of children swimming with
a polar bear, the glass between them not visible.
The second was the orangutans going ape for
iPads. They use them to play memory and
painting games, and even to skype with orangutan
friends in other locations. “But watching videos is
their favourite.”
So much to see and do and learn at Toronto Zoo.
We’ll just have to go there!

WIN LAAR

FEBRUARY OUTING

Due to bad weather we changed our format for
this year’s outing to the Haldimand region.
In the morning we attended the Haldimand Bird
Observatory AGM. Here we heard two
presentations, one by Jenna McDermott and the
other by Jody Allair.
Jenna began by giving us an outline of the
differences between sun grown coffee plantations
and shade grown coffee in Nicaragua. She pointed
out that both fauna and avifauna were not present
in sun grown plantations, while in shade areas
wildlife was present.
Jenna the told us about her study of Gray
Cheeked Thrushes in Newfoundland. Apparently
she found that the population here was in decline
while in other parts of Canada the population was stable.

Jody took us to Hawaii and described bird life there. He mentioned that many native species were now extinct due to importation of rats, pigs and other creatures. On an interesting note, he told us that many of the native species had evolved from Eurasian species such as Bramblings and Rose finches over many years. The Hawaiian Hawk apparently evolved from a Swainson’s Hawk.

As I said, bad weather precluded us from further birding, but we did take a long ride home by travelling through Cayuga and Dunnville. Along the way we found Snow Buntings, Wild Turkey Bald Eagle and 2 Red-tailed Hawks.

RICK YOUNG

A YEAR IN THE LIFE OF A HERPER

Nature photographer, biologist, and educator, Kyle Horner, loves herps and has made it his “lifelong mission to share their beauty with the world.” He certainly did a fine job of piquing our interest at the March meeting.

Before surveying the herps of Ontario, Kyle, explained that herps include Reptiles and Amphibians even though they are not closely related. They have been studied together because they are both vertebrates, they both are ectothermic, and historically they are kept in the same section in museum collections. He also, humourously, compared birders to herpers. Apparently, we birders are pleasant and approachable souls that are up at dawn, looking up and exchanging jargon like bins and lifers, while herpers are suspicious characters that rise at noon, spend their time looking down and have not yet discovered the value of jargon. Herpers are much like herps as they are rare and difficult to observe and they seldom venture from their preferred habitat.

Kyle took us on a year-long photographic herping trip starting in March in Southern Ontario, just in time for the mating and egg laying season of Spotted Salamander, Blue-spotted Salamander, Spring Peepers, and or course, Wood Frogs who are waking up from being frozen solid. Later came Northern Leopard Frog, Green Frog, Midland Painted Turtle, and the Garter Snake that can even be seen on warm winter days.

In late April and May the herpers head to the Canadian Shield of Central Ontario in search of a different complement of salamanders, frogs and snakes. Among the highlights were the Red-spotted Newt that is a salamander that lives in the water as an adult or as a Red Eft on land. Silent Lake Provincial Park features an orange variant of the American Toad that seems to have adapted to blend in with the ground covering of fallen orange pine needles. Snakes included Eastern Hognose which is not poisonous, and the Eastern Massasauga Rattlesnake which is Ontario’s only venomous snake.

In the autumn herpers head to Illinois which boasts an impressive species list. It is the intersection of several ranges so that a number of reptiles and amphibians more common in the Ohio River valley, Wisconsin and Canada, the great western plains, and the Gulf Coast can all be found in Illinois. The Green Tree Frog, considered
the “jewel of the eastern forest” can be found in the cypress swamps, and the Cave Salamander can be found living in the seeps of mountain caves. The must-see snakes are Western Mud Snake with its bright red belly, and two vipers, the 6 foot long Copperhead and the Timber Rattlesnake which is extirpated from Ontario.

Herpers that cannot make it through the winter without a sighting head to Florida to see Alligators, Crocodiles and lots of frogs, snakes, and lizards. They return in time for the spring rains and the local salamander and frog mating seasons – the cycle begins again.

Kyle’s enthusiasm and lovely pictures have turned our thoughts from birds and bins to rubber boots as the salamander rains begin.

Margaret Pickles

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**CONTRIBUTIONS**

Your editing team would like to thank you for your contributions that make this an interesting and valuable newsletter.

Please send contributions to:
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**ANNUAL DINNER PRESENTATION**

It was a wonderful turnout for the 2015 Annual Dinner Meeting at Betty’s Restaurant on April 11th. Over 70 members and guests were present to celebrate the club and enjoy a presentation given by Bob Curry on “Hunting Ontario’s Wild Orchids”. Dinner was a delicious combination of home cooking and scrumptious pie, followed by an entertaining photographic journey of Bob’s adventures in wide-flung field and forests throughout the province. Bob is involved with a number of nature groups and has been a member of the Niagara Falls Nature Club for many years, giving his first NFNC presentation back in 1985 on the Niagara Glen. Since then he has also spoken to us about amphibians and butterflies, and there seems no end to his plethora of nature expertise. For the past several years he (and his wife and “hunting” partner, Glenda), have turned their attention to orchids. The “hunting” reference relates to the evasive nature of this treasure-like plant family. Indeed, it requires prowess and skill to track them down and capture them (on film).

There are approximately 62 species (and forms) of orchids in Ontario, making it one of the largest plant families. They are also one of the most diverse, with habitats ranging from treetops to bogs, and various sizes and shapes.

Bob began his presentation with a brief introduction to orchids, and then plunged right into his search for orchids in the *Cypridium* genus, the lady slippers (referred to as “Cyps”). With amazing photos, Bob explained that these flowers look different in different stages of their life cycle, prompting him to return to the same plant many times to photograph all the different looks. Even the angle of photography is important, as the front, top, and side views are completely different.

*C. candidum* (small, white lady’s slipper) is one of the rarest Cyps in Ontario. Bob was lucky enough to find it on Walpole Island in May, 2013 with the help of Clint Jacobs, a member of the Walpole Band. This little flower is a prairie species, induced to germinate by fire. It is a lovely purple colour with red dots and a yellow swathe above the lip. There is some concern that this species is becoming rarer due to its fire requirement and its hybridization with hardier yellow lady’s slippers.
The famed naturalist John Muir reportedly wept at the sight of another orchid, *Amerorchis rotundifolia*. Bob found this species on July 8, 2014 (although he didn’t weep – or at least didn’t mention that he did) near the Sleeping Giant on Lake Superior. Ontario orchids, unlike their tropical cousins, don’t like hot weather, and *A. rotundifolia* is no exception. It has large round leaves, a purple and white flower with large purple polka dots and curly, delicate petal edges. Another species, *Neottia auriculata* is uncommon in Ontario and found also on the Lake Superior shoreline. Bob’s photo of this plant highlighted the amazingly sparkly nature of the petals, an ethereal quality that must contribute to the love of these plants.

Orchids dislike competition and have special adaptations that help them find solitude; some are adapted to the acidic environments of bogs, some the basic nature of fins in order to find niches that give them more leg room. The Prairie White, a delicately fringed orchid, is a good example of a species that can not escape competition with local grasses and is becoming choked out in certain areas. The *Corallorhizas* or coral roots are also interesting as they acquire all of their nutrients from rotting materials in the soil. From tiny, unimpressive flowers to ornate, colourful petals and presentation, orchids seem unlimited in their disguises. It is no wonder that the search for this treasure continues here in Ontario, and around the world, and also that the achievement of capturing their beauty and intricacy on film remains an elusive and tantalizing goal. Thank you to Bob for taking us all on a journey with him through the wilds of Ontario, so that we could also appreciate this amazing plant family (without getting our feet muddy).

Kiera Newman

BUFFALO ORNITHOLOGICAL SOCIETY

BIRD COUNT [BOS]

A few members of our club took part in a bird count for the BOS on 12th April this year. Some of the birds recorded were Eastern Blue bird, Eastern Phobe, Horned Lark, Savannah Sparrow and American Kestrel but the highlight of the day was a Yellow Headed Blackbird. All of these species were observed in the Municipality of Niagara-on-the-Lake. Paula Clark was the sharp eyed observer who spotted the rare bird.

Rick Young

Yellow Headed Blackbird
By Paula Clark

Horned Lark
WELCOME NEW MEMBERS  
Loraine Brown 
Kara & Ian Visser  
Bill Rapley and wife.

A VISIT WITH KAY MCKEEVER  
OWL FOUNDATION FOUNDER

Tara Darling and I, along with our young daughters, Emmy and Skye, visited Kay McKeever at the Owl Foundation in Jordan on a crisp April morning this spring. As we entered her driveway, we could see a multitude of custom-built owl abodes forming an eccentric village all across her property. A few snowy owls peeked out at us from behind protective screens, but most were hidden in their sanctuaries, healing from whatever illness or injury had brought them here. Kay’s assistant, Rita, met us with a smile at the door and escorted us into a sunny windowed room where Kay sat, looking spry and comfortable, in her chair. Beside her, on her own perch, was her faithful Great Grey owl, Big Bird. The girls were ecstatic—a live owl sat in front of them, various cats lay curled in chairs around them, and through the large windows they could watch the live action of a busy birdfeeder bustling with chipmunks, squirrels, and an assortment of colourful birds.

Turning their attention back to “Mrs. McKeever”, they took turns asking the questions they had carefully prepared:

Emmy: What made you decide to take care of owls?
Kay: My love of owls goes back a long way. My father used to travel and would bring back souvenirs for me. I remember one time he went to Europe and came back with a book for me about Snowy owls. The story was about a mother owl and she had four babies on her back. I think I figured that these animals really loved their children and so I began to love them.

Emmy: What did you like to do when you were young?
Kay: I was outside a lot. I liked to collect animals. I would bring them home to look at. I especially liked to collect insects. My favourite was to collect tomato caterpillars. I would watch them and observe how they always had their heads hanging from the plant. I showed my father and he said are you sure it is their heads that are hanging? How do you know? Well, I said, of course it is their heads, you can see the eyes there plain as day. My father suggested that I take a second look. I did not believe him at first but when I took more time studying them I began to see that the "eyes" were just markings on the back end of the caterpillar. Can you girls think why they have markings like this?

Emmy: So that the birds are tricked.
Kay: That is exactly right. Yes, I loved being around animals.

Skye: Are all the owls here orphans?
Kay: The owls are here for different reasons. Some of them we went to get or were brought to us because they were found abandoned. Most of them were hurt, often by being hit by cars on the highways. You see, owls are birds of prey and they often stay near roads so that they can catch mice or other small animals as they cross the road or if they are injured by cars. But when they swoop down, they, themselves, sometimes get hit and injured. Then someone finds them and calls us to see if we can help them.

Emmy: Where do Great Grey Owls, like Big Bird, live?

Kay: The Great Grey Owl is found in the north, it can be found up near the Arctic Treeline. It likes to eat small rodents. If it is a poor year for hunting they may venture further south.

Skye: What is the biggest and smallest owl in Canada?
Kay: One of the smallest owls is right above us (she points to the enclosure built into the side wall) (she sets her fingers to about 7 inches apart). The Flammulated owl is just a bit smaller. Both are from the West Coast. The smallest owls around here are probably Saw-Whet owls. The biggest (heaviest) owl is the Snowy owl, but the Great Grey owl has a wingspan just as big. Rita, will you pick up Big Bird and see if she will spread her wings out? (Ooh and awes from all of us as Big Bird stretches her magnificent wings out to around 4 feet).

At the end of our visit, Kay holds Big Bird on her arm and brings the owl to her lips. She blows warm air into the soft plumage of the owl’s
neck. The bird turns and grooms Kay’s face gently. As the two friends share a moment, we glimpse the rare bond that sometimes forms between a human and a truly wild animal. Big Bird turns back and looks at us, one eye alert and alive, the other hazy, sightless. We thank Kay for the visit, the girls each take an offered cookie to go. Rita walks us back to the door, giving the girls a last peek at another resident – a Boreal owl in a high hallway enclosure. The girls (and Tara and I) are enraptured by Kay’s life – by a home built to encompass nature, not shut it out; by a career spent helping to heal injured owls and then release them into the wild, and by the reality that a love of nature can be the focus of life, not just a hobby. What a wonderful memory for us to keep forever.

Big Bird’s Story (as told to us by Kay)

Twelve years ago, on a frozen northern highway near the Quebec border, a Great Grey owl dove for prey and was hit by a big truck. The speed of the truck carried her with it, plastered to the front grill, until the owl was blown onto the hood of another, smaller, truck, going the opposite way. That truck driver pulled over and the Great Grey rolled off, tumbling into a ditch toward the shore of Lake Ontario. The driver picked her up by the legs and put her in the truck bed. She was unconscious and her face full of blood. The young driver and his mother called around for someone to take her and found Kay and her husband, Larry, who had been operating the Owl Foundation since the 1970’s.

Kay referred the truck driver to a nearby veterinarian in Peterborough and the owl was taken there for assessment. The vet called Kay and reported that the animal was very badly injured and that he would put her down painlessly and quickly. Kay said no, not yet, let me see her first. A member of nature club in Peterborough drove the owl all the way to Kay’s place. Kay gave her water and electrolytes through a catheter, and soon, despite a broken jaw and blinded eye, the owl grew healthy again. She named her Big Bird. Owls need both eyes to hunt and fly, so despite their goal to return their owls to the wild, Big Bird remained with Kay. And has been with her ever since.

Tara Darling & Kiera Newman
On Wednesday, January 21, members of our club were pleased to host Dr. Tracy Gregg from the University of Buffalo’s Department of Geology. Tracy, a volcanologist, shared stories from her research expeditions where she compared magma from volcanoes of the Pacific mid-ocean ridge. To observe and collect geological samples 2 to 4 km below the ocean’s surface, scientists descend in HOV Alvin, a human occupied vehicle. Barely large enough for 3 people and sinking through water at 4°C, this unheated titanium sphere can withstand the extreme pressure of the deep ocean. The descent takes over an hour and a round trip can be up to 8 hours long.

Submerged in complete darkness, HOV Alvin’s light shines on the ocean floor revealing shiny glittery lava flows. When hot magma comes into contact with cool water the crystals have no time to grow, so immediately turn to glass. Volcanoes underwater do not create ash, as pressurized water prevents bubbles from forming in the lava and there are no explosions. Black smokers are created when magma heats the seawater to 400-600°C. This hydrothermal fluid dissolves minerals from the rocks and as it cools, precipitating around the vent, a black plume forms.

Dr. Gregg described and shared pictures of fascinating creatures living 2000m below the ocean surface, capable of surviving in this harsh environment. With no sunlight, chemicals leaching from the lava flows are the base of the food chain. Along with shrimp, crabs, mussels and fish, many unique organisms are able to feed on chemosynthetic bacteria. Our audience was amazed by diverse images of massive anemone, swimming sea cucumbers and tube worms feeding on sulfur from volcanoes. Tracy noted that new species have been discovered each time she has been on a deep sea ‘cruise’ and she ended her presentation by saying, “You never know exactly what is going to happen at sea, but you always learn something, and it is always interesting”.

Kerry Kennedy

At our Annual Dinner Meeting, April 11, 2014, our club recognized one of our club members who works tirelessly on behalf of Niagara Falls Nature Club. Joyce Sankey is extremely committed to our club and to bringing awareness to land issues in the Niagara Region. During our monthly Board of Directors meetings she inspires us with her land issue reports, detailing the issues and the actions that she has taken, and the successes that have resulted.

Joyce has earned the respect of individuals in many levels of authority, both locally, regionally, and provincially for her informed and measured contributions on environmental matters. On behalf of our club, she has written numerous letters in favour of conserving our lands and natural areas, to regional and city councils, OMB, conservation authorities, land developers, as well as letters of support for other organizations’ conservation concerns. She has become the “voice” of the Niagara Falls nature club.

She has co-ordinated Natural Areas Inventories for both the City of Niagara Falls and the Niagara Peninsula Conservation Authority, and was a strong voice in persuading the Niagara Parks Commission to abandon plans for a zip line in Dufferin islands.

Her concerns provided the catalyst for a recent article in Ontario Nature magazine on the NPCA and on governance in general of Conservation Authorities. She asks pertinent questions, rejects wishy-washy answers, and for those who do not hold responsible land stewardship as their top priority, she is adept at holding their feet to the fire.

As a member of our Board of Directors Joyce Sankey is not eligible for any of our established awards, but the board felt her accomplishments should not go un-lauded. Accordingly they created a special award of appreciation for her.

During a recent campaign in which Joyce was involved, it was noted by an official that it was only “extreme nature club members” that were concerned by their questionable actions. We feel that Joyce should wear the title of Extreme Nature Club Member proudly, because she is indeed extreme!

Extremely dedicated;
Extremely involved;
Extremely aware;
Extremely effective; and
Extremely good at all that she does for our club and our environment.
And we are extremely appreciative and proud to have her on our side!
As Joyce accepted The Extreme Nature Club Member Award, she noted that she was extremely surprised by, and appreciative of the award.

**WEEKEND OUTING**

This year’s weekend outing will be to the McGregor Prov. Park area.
We will base ourselves in Port Elgin.
Dates are from Friday 11th September until Sunday 13th September.
Members or friends interested in participating contact:-
Kerry Kennedy 905-892-4932
or Rick Young 905-734-6226

Colonial Motel
Phone 519-832-2021
e-mail colonial.amiller@gmail.com
Kerry has list of other motels in Port Elgin