



FEATURE

Conservation Technician, Alissa Fraser shares her turtle incubation project.



Photo by A. Frase

INSIDE THIS ISSUE

- New fruit orchard to feed local families
- Introducing Janet Rogers
- Top five reasons for environmental
- From the ground to the sky: supporting research at rare
- Becoming a "household word" in the . GTA and beyond
- The value of citizen science
- Shared roots
- It's all connected
- Ask a researcher
- Nature notes
- rare to me volunteer blog
- Leadership

Why we brake for turtles: on rare's new turtle hatchery and the risk of roads

By Alissa Fraser, Conservation Technician

Depending on where you live, a turtle wandering across the road may not be an uncommon sight. Unfortunately, this sight is becoming much less common as populations decline. Currently seven of eight Ontario turtle species are designated 'at-risk,' largely due to habitat loss caused by human activity such as the destruction of over 70 per cent of southern Ontario wetlands and road construction. Turtles have been around for millions of years and have adapted to many threats, but cannot keep up with fast-paced changes in the modern urban landscape.

The biggest threats facing Ontario turtles today include habitat destruction and fragmentation, road mortality and poaching for food or pets. Some species, especially snapping turtles, are persecuted due to their intimidating appearance. Turtles require large home ranges since they migrate to hibernation, breeding and nesting locations, and must frequently cross roads in the landscape. The shoulder of a road provides ideal nesting conditions for turtle species that prefer warm, sunny sites with gravel substrate for laying eggs. This makes them highly susceptible to road mortality, and nests are at risk of being compacted by cars or destroyed due to road maintenance. Loss of just a few adult turtles can make a population vulnerable since some species do not reach sexual maturity until they are approximately 18-20 years old and it can take decades for a turtle to successfully replace itself in the wild.

So what can we do to help? At rare, we are trying to help on both fronts, restoring and protecting habitat as well as improving the success rate of nests, by incubating nests that are at risk in the Waterloo Region and Wellington County areas. The artificial incubation project started this spring with a 700 egg capacity, and has already received an overwhelming number of calls from concerned community members reporting vulnerable nests. Eggs have been

Why we brake for turtles

continued from cover

collected from road shoulders, driveways, parking lots, high traffic paths, playgrounds and even from roadkill. All successful hatchlings will be released within a couple days of hatching at the closest safe location to where the eggs were collected.

You can help by keeping an eye out for turtles, especially during peak nesting season in June, contacting rare if you have information about a vulnerable nest, helping turtles cross the road and reporting or taking injured turtles to a rehabilitation clinic. Report all turtle sightings to databases such as Ontario Nature and the Ontario Turtle Tally and advocate for better protection of our wetlands and improving wildlife corridors, especially across roads.

Meet The Turtle Project coordinator:

Alissa Fraser, a graduate of the University of Toronto and Sir Sandford Fleming College, has always been passionate about wildlife, especially reptiles. She began working with turtles as a Species at Risk Field Assistant for the Upper Thames River Conservation Authority with a focus on species at risk recovery for the eastern spiny softshell turtle through the collection and incubation of vulnerable nests.

Joining the *rare* team as Conservation Technician, she initiated the artificial incubation project in order to protect the vulnerable turtle nests within the Waterloo Region and Wellington County areas.



Photo by A. Abram

If you are interested in making a donation to the turtle project, please visit our website and select A Natural Investment from the Donate Now options. Or call the office and let them know you would like to help!

New fruit orchard to feed local families

By Taryn Jarvis, Property, Facilities & Gardens Coordinator

The Springbank Community Gardens at rare are growing again. This spring, the vision of a fruit orchard within the Springbank Food Bank Gardens came to life with support from a wide variety of local organizations and schools.

The Cambridge Sunrise Rotarians are celebrating 100 years of Rotary this year and one part of their celebration is a donation of 100 trees to rare. Fifty of those trees are fruit bearing varieties that have been planted within the Springbank Food Bank Gardens at rare.

The gardens at rare were also the recipient of two grants supporting this new orchard. One grant from Tree Mobile paid for nine fruit trees along with an online Beginner Fruit Tree Care course attended by our gardens coordinator, and a grant from the Whole Kids Foundation that included the purchase of ten fruit trees.

But planting an orchard takes more than just trees. Groups such as Rockway Mennonite Collegiate, Cambridge Community Living, Farrow and The United Way helped rare's garden staff and land management team remove invasive buckthorn trees from the site, while Southwood Secondary School and Cambridge Sunrise Rotary helped with the planting. Now, combined with the few fruit trees that were already on site, rare's Springbank Food Bank Gardens has a fruit orchard of over 70 trees so that by 2019, fresh fruit will be harvested and included with the thousands of pounds of food being sent to local food banks.

The installation of a deer-exclusion fence to protect the young, delicate trees from hungry browsers came next. Nathanael Harper, rare's Springbank Sustainability Intern, is writing an Orchard Management Plan that will ensure future gardeners have access to the best guidance on the yearly care and maintenance of this special addition to the rare garden program. ■■



Introducing 2017 Eastern Comma Writer-in-Residence

We are pleased to introduce Janet Rogers as our 2017 Eastern Comma Writer-in-Residence. A Mohawk/Tuscarora writer from Six Nations in southern Ontario, Janet was born in Vancouver, British Columbia, lived in Stoney Creek, Hamilton and Toronto, Ontario and has been living as guest on the traditional lands of the Coast Salish people (Victoria, British Columbia) since 1994. Janet works in the genres of poetry, spoken word performance poetry, video poetry and recorded poetry with music. Janet is also a radio broadcaster, documentary producer, media and sound artist.



Throughout September and October, Janet will be living in North House, a solarpowered home situated in rare's natural environment. Writers are welcomed to the rare property for these two months to immerse themselves in the natural landscape and biodiversity around them. Janet says she is comforted and honoured by the invitation and acknowledges that she will get a lot of writing done because a residency is a "recipe of time, focus and inspiration." In addition to the writing, Janet looks forward to connecting with the local community. who are also invited to be a part of her welcome and to visit again at the end to hear more about her work.

If you would like to receive an invitation, drop Laura Klein a note at laura.klein@raresites.org



Top five reasons for environmental education

By Emily Leslie, Gill Ratcliffe Educator

In a world where information is at our fingertips, either in the classroom or at home, it can often be forgotten that learning can happen as soon as you step out the door. There are so many distractions in today's world that prevent us from going outside and exploring, which makes environmental education all the more important. There are many benefits that go along with learning outdoors, and these are just a few!

EXPERIENTIAL LEARNING

Being in an outdoor environment takes learning to a different level. Environmental education goes beyond the classroom and allows students to actually experience what they are learning rather than just reading it from a book. It keeps learning fun, interesting and allows students to step out of the box!

NATURE DEFICIT DISORDER

More and more, children, youth and adults alike are not being exposed to the outdoors, resulting in disconnect with the environment and health implications. Being exposed to nature and the outdoors can increase focus, decrease anxiety and depression, and improve overall physical and mental health!

3 IGNITES CURIOUSITY

Look under that log, stop and smell the flowers, feel the mud with your fingers. Using the senses as a part of learning enhances observation skills in ways that a classroom setting cannot provide.

4 CREATING A CONNECTION TO THE LOCAL ENVIRONMENT

Environmental education allows for participants to take an explorative look at the nature surrounding them. It provides the chance to explore new areas and to see what really exists in amongst the urban sprawl, creating appreciation for the importance of outdoor spaces.

5 GOOD FOR ALL AGES

You don't have to be a kid to learn outdoors! Every time you step in the forest, there is a chance to learn something new. Whether it's a new bird call, a plant you have never seen before, or the different relationships within an ecosystem, being in nature provides ongoing learning opportunities and discovery for all ages!









From the ground to the sky: supporting research at rare

By Jenna Quinn, Program Scientist — Research Priorities, Partnerships & Monitoring

For many, curiosity fuels a love of nature. There are endless questions to ask about rare's properties, with subjects ranging from microbes in the dirt, through the complex behaviours, needs and interactions of wildlife, to the influence of wind, water, light, noise and people. Each year, rare supports at least one graduate student tackling one such question in environmental research. Since 2009, more than \$45,000 has been awarded to 16 students.

Thanks to significant support this year from the Ages Foundation Fellowship and Bursary Program at the Cambridge & North Dumfries Community Foundation, rare was able to award bursaries to three additional exceptional students. Not only does this funding allow for an immediate increase in the number of projects undertaken by promising new career researchers, but their results add to the data *rare* is tracking, making the lessons learned all the richer.

Heather Cray, a PhD candidate from the University of Waterloo, is looking at earthworms, or "ecosystem engineers," as she calls them.

Earthworms influence the plants growing in prairie habitats by eating and burying seeds, so Heather's study will add information to our understanding of the complex food web that helps these habitats get established and grow.

Moving skyward, Victoria MacPhail from York University is investigating the decline of bumble bees in Canada and the role citizen scientists can play in helping to track this decline (read more about the project on pg.8). Heidi van Vliet, also from York University, is using sites at *rare* and elsewhere to understand better how Savannah Sparrows are affected by agricultural intensification. Both women are focusing on species undergoing significant decline in North America, and their work can have valuable impacts on conservation planning for these and other declining species.

Jonas Hamberg, University of Waterloo, is also interested in conservation and is helping to inform restoration projects, particularly in urban areas, by looking at noise pollution something that has been shown to have negative effects on not only wildlife, but people too. Many city dwellers seek out nature as a place of peace and quiet, and Jonas is considering the abilities of different habitats and plant communities to reduce noise.

We thank the Cambridge & North Dumfries Community Foundation and the Ages Foundation for the opportunity to support these ambitious projects and look forward to tracking the results and lessons learned from these and all rare research projects.





Yes – I support early career conservation researchers!

Donor Name
Mailing Address with City and Postal Code
Telephone emai
Yes, I would like to receive email updates from <i>rare.</i>
■ I'll join rare's Bedrock Club! I would like rare to receive my pre-authorize monthly donation of \$, to be automatically withdrawn on the 15th every month through: ■ My chequing account ("Void" cheque enclosed)
■ Credit Card
■ I am enclosing a one-time gift of: ■ \$250 ■ \$100 ■ \$50 ■ \$20 or \$

Payment	Information	:

Please send cheques payable to rare Charitable Research Reserve 1679 Blair Road OR Cambridge, ON N3H 4R8 Please provide credit card information VISA Name as it appears on the card Card No. Signature You may also donate securely online through raresites.org/donate

Name to appear on Founding Donors list, to be displayed permanently at rare upon completion of the capital campaign:

Becoming a "household word" in the GTA & beyond

By Christine Thompson, Major Gifts Manager Thanks to Dean and Noreen Peroff who opened their home and garden in Toronto, rare's effort to become a household word got a major boost. More than 100 Torontonians now understand how our great quality of life in this country depends on vibrant economic opportunities AND the high quality of life that comes with conserving natural spaces.

Dean and Noreen have been involved with rare for many years, first through a business relationship, but continuing on long after. And by joining the ranks of our largest donors they have set an example to others.

Board Chair, Keith Ainsworth, and Executive Director, Dr. Stephanie Sobek-Swant, described rare's increasing role as an international research institute

and growing urban land trust, while University of Toronto's Dr. David Punzalan talked about why he travels to rare to do research where he can be assured of longterm access to the property, itself a case study for understanding the impact of an upstream urban population. The work at rare provides a model for many other communities around the world.

The importance of *rare's* work for everyone was made especially clear by renowned Canadian writer, Jane Urquhart, a rare International Ambassador. She spoke of the importance of having access to some landscapes that don't change and read from her newest book, A Number of Things.

The event created new friends and volunteers for *rare* in the GTA and beyond, and raised more than \$70,000. ■■



To learn how you can host an event or make a donation, contact Christine Thompson, Major Gifts Manager at 519-650-9336 x118 or christine.thompson@raresites.org

The value of citizen science

By Allie Abram, Monitoring Technician

While out exploring nature, many of us take note of what we see around us. While one person might notice bird songs, another may be fascinated by the smallest ants, or the tallest grass. No matter your specific passion, age or expertise, you can can importantly add to biodiversity knowledge in your area by contributing to citizen

science. Making this activity all the more valuable is the work of Paul Hebert and his team at the University of Guelph.

In 2003, Dr. Paul Hebert's research group attracted international attention with their proposal to use barcodes of DNA sequences to help with species identification and discovery in much the same way a supermarket scanner uses the familiar black stripes of the UPC barcode to identify your purchases. Since that time DNA barcoding has become the largest research program in biodiversity science and has the potential to be one of Canada's most

significant contributions to the world in any domain. Hebert readily took advantage of the opportunity to work on the rare properties and the bioblitz, which now occurs around the world, has become an annual feature at rare, expanding to involve citizens in a 24-hr, 'round the clock, effort. In its first year, Hebert's colleagues noted that,

"One of the most striking aspects of the sampling that was undertaken at the rare Charitable Research Reserve was the speed with which it was collected, sorted, identified and released to the public. Four months of continuous sampling plus one day of concentrated bioblitz-ing recovered around 3,500 species and more than 1,000 new species records for the reserve itself. Directly identifying all species sampled using traditional morphological methods, even with the best identification keys and experts on hand (which is unlikely given the dearth of expert taxonomists, especially in Canada), would take orders of magnitude more time to complete. Another exciting aspect of our survey is that all of the data collected is now publicly available. Sequences have been submitted to genbank, data can be viewed on GBIF (hosted by Canadensys), and all records have been





The value of citizen science

continued from page 5

included as supplementary material in the published article. All specimens collected have now been deposited at the Biodiversity Institute of Ontario and are available for morphological examination."

Citizen scientists — community members, often working in collaboration with, or under the direction of scientific experts — are invaluable to scientific programs around the world, including those at *rare*. Citizen science allows researchers to maximize data collection, and can be used for projects at both community and global scales. In addition to the contributions to the scientific community, citizen scientists learn about nature and environmental issues, get involved in community projects, spend time outside and improve their own scientific knowledge.

As noted above, in addition to traditional pen and paper methods for data collection, citizen scientists increasingly feed information directly into online databases. While some databases are specialized for a particular species or group of species such as ebutterfly, the Ontario Reptile and Amphibian Atlas, ebird and eddmaps, others, like inaturalist, aim to capture all species. Many allow you to upload pictures and GPS coordinates from your phone or personal device right in the field through easy-to-use apps. The collection of mass quantities of data, gathered at the same

time, anytime, anywhere offers enormous savings in time and money.

In July 2017, we held our third annual bioblitz. Through intensive surveys, guided blitzes and public nature hikes, we managed to make more than 1,200 observations in a 24-hour period including documenting 500 species that call *rare* home. Data continues to trickle in, but one exciting highlight is an observation of flying squirrel, not documented at *rare* since 1980. Look for a full breakdown of results and highlights in the Winter Edition of the *rare review*.

As the Ecological Monitoring Technician at *rare*, I cannot emphasize enough my appreciation for the citizen scientists and volunteers who devote their time and expertise to the monitoring programs here. Without them, many of these programs would not be as successful.

Thanks to all the participants, volunteers and funders who made the 2017 BioBlitz event a success. This Canada 150 Signature Project was made possible with support from TD Friends of the Environment and the Community Fund for Canada's 150th, a collaboration between Cambridge & North Dumfries Community Foundation, the Government of Canada and extraordinary leaders from coast to coast to coast.

Shared roots

By Armen Poladian, Supervisor, Gosling Engageme

Species on this planet all have roots, roots that are intertwined in an interdisciplinary system. Where a tree might have roots grown deep into the soil, my roots are planted in my motherland of Armenia. Through my travel to Armenia and my work at *rare*, I've also come to recognize the important roots provided by children and the community.

I recently traveled to Vanadzor, Armenia, to volunteer at a children's day camp run by the Armenian Youth Federation (AYF) of Canada. From the moment I landed and met my fellow youth counsellors, I knew I was going to have an awe-inspiring experience. This was my second time in Armenia, the first being as a 12-year-old in 2004 where I participated in a tour of the country with the AYF Juniors. Now, the approximately 60 children that I and my counsellor partner would have under our care were in that very age group and we were there to give back, teach, learn and grow with the children of Armenia.

I hold a bachelor of environmental studies from the University of Waterloo, and have a deep passion for environmental sustainability. This was a great opportunity to improve environmental sustainability in my motherland. I hoped to bring together for their mutual benefit the AYF efforts with those of another project I supported in Armenia, the Armenia Tree Project (ATP).

Last September I planned and hosted a fundraiser for my 25th birthday, asking that any gifts be donations to this



ement Organizer

important reforestation effort going on in Armenia's cities and villages. Before my trip, I contacted the ATP for a chance to collaborate. I was very happy when they agreed with my idea to distribute flowers to the children to teach them about the beauty that encompasses our natural environment. ATP also offered to teach a short EnviroEd class to the children.

I was truly left in awe when, even with no structured recycling programs in Armenia, camp children responded to my questions about recycling by indicating that not only was it a common occurrence in their homes to reuse, but they also understood the importance of keeping our home planet clean and sustainable for future generations.

I learned that not only are my roots in Armenia, but that the children of our planet are our roots, and that geographic boundaries disappear when it comes to conservation and caring for our planet. Between this trip and my work at *rare* as an Engagement Organizer, I know it takes a whole community to ensure that *rare's* motto – intact in perpetuity – will be a promise kept. I encourage you to get involved - take the raresites pledge to indicate that you support conservation values at raresites.org, volunteer at the gardens, attend a guided hike, host a charity birthday party and ask your friends to make a gift in your honour to rare. I'm convinced that every action big or small, can make a difference! ■■





It's all connected

By Joy Roberts, Ph.D.

On his most recent visit to rare, International Ambassador, David Buckland, applauded rare's ability to operate at both the local and the global level. "Naturally, good things happening at smaller scales contribute to an improved planet; but rare goes far beyond that to publish research findings from the reserve in international journals — which also brings together brilliant thinking from around the world."

Buckland led a hike at *rare* in February when the contours of the landscape were especially visible. The group walked the Grand Allée and observed changes in the remnant old-growth forest, Indian Woods, staying away from the river trail, in keeping with rare's policy to protect bald eagle feeding sites from November to March.

A founder of Cape Farewell in the U.K., Buckland is now planning a new venture, TROUT, on an abandoned, 7-acre trout farm north of Dorchester, on the Sydling Water. Two barns will be re-built for artists' residences and the headquarters of Cape Farewell. Artists are central to Cape Farewell's efforts to spur action around climate change and they will be active at TROUT, working with the ecological site and surrounding farmers, many of whom now use organic practices. For example,

artists Chris Drury and Kay Syad spent two years in this valley making the book Exchange, now published by Littler Toller Books, containing narratives of the farmers, as well as Syad's poetry alongside Drury's art. Drury buried 100 sheets of archive art paper on one of the farms for a year where it absorbed a record of the macro Biome of the soil. Marks clearly seen in the surrounding sheep hills reference the earth works of early stone-age settlements dating back 3,000 years.

Buckland often mentions *rare's* similar appreciation of its rich past called on, not just as a history lesson, but also as a base for current programs and a signpost to the future. Indigenous objects found at rare go back more than 10,500 years and rare is learning how to embed Indigenous ways of knowing into their efforts and to reciprocally engage and support Indigenous communities.

Big picture thinking guides much of the land management work at rare, understanding that systems need to be integrated. For example, the Bauman Creek restoration project and the work of Canada Research scientists on water issues couldn't be done without protected lands. It's all connected.

Buckland's project back in the UK will use principles similar to those that have governed rare.

With the relevant permissions and working with the Environment Agency and Dorset Wildlife Trust, he hopes to restore the ecological integrity of the water-meadows and land and link it to surrounding properties in the entire valley. An old watercress bed will begin producing organic cress and four of the trout tanks will be restored to grow Brown Trout. Otters are known on the Sydling Water, and Egrets and Herons are frequent visitors, as are Kingfishers.

The final permissions for the land and building development are coming through and David will soon begin the restorations and ecological land- and water-scaping; meanwhile resident swans have just produced a clutch of three cygnets.

To learn more about David's recent work and the Cape Farewell project visit:

> http://www.bucklandart.com/ http://www.capefarewell.com/





ASK A RESEARCHER

You've asked, and we've answered!

Victoria MacPhail is a PhD candidate in the Faculty of Environmental Studies at York University. Victoria has dedicated much of the last decade to pollinator preservation in Canada and is this year's Ages Foundation Fellowship recipient at rare. Her work currently focuses on the decline of native bumble bees in Canada and what citizen scientists can do to help.

If you ever see something at *rare* that leaves you wondering, don't hesitate to get in touch with us. We welcome your calls and emails to 519-650-9336 or rare@raresites.org.

To learn more about Victoria's work and lab visit: http://collasheila.wixsite.com/ pollinators/publications.

QUESTION

How can people best help protect declining bumble bees in Canada?

ANSWER Bumble bees are probably the best known of our native pollinators; their typically yellow and black fuzzy bodies can often be seen buzzing from flower to flower in our gardens, fields, forests and wetlands. Unfortunately, perhaps a third of the fortyplus bumble bee species in Canada are experiencing declines. This is likely due to increasing threats from pesticides, habitat loss, invasive species, climate change, parasites and pathogens. To reverse these declines, we need to learn more and take action.

The BumbleBeeWatch.org citizen science program is one way for people to learn about the diversity of bumble bees around them and to help researchers learn more about these important species. It is easy to get involved: grab a camera, find some flowers, snap a picture of any bumble bee seen, and upload it to the website. There is an optional interactive key on the website that helps you identify bee species, and all identifications are verified by regional experts. In the three years since the site launched, we have received over 16,000 submissions from across North America (5,000 from Ontario alone), including new records of rare species found in people's back yards!

In 2016, I began a PhD in the Faculty of Environmental Studies at York University in an effort to find the answers to questions related to the value of citizen science data and how it can it be used to answer the large-scale

questions of what is causing bumble bee decline in Canada. In addition to analysing existing data, I have been undertaking my own surveys across Ontario to collect more data. I am excited that one of my field sites is the rare Charitable Research Reserve! A very high quality site with multiple habitats, *rare* holds the potential of new rare species to be observed, particularly as several of the declining bumble bee species in Ontario are commonly found in grasslands like those

One of the easiest ways to help save the bumble bees is to garden with them in mind. Try to have plants that will provide food for the bees from early spring (e.g. willows, cherries) through to late fall (e.g. asters, goldenrods). If you have a larger property, ensure there are some undisturbed areas that they can nest and overwinter in.

Share your findings! Download the Bumble Bee Watch app, then, whenever you see a bumble bee, take a photo and click to submit: it could be a rare species! At *rare*, we'd love to hear from you as well! If you're walking the trails at *rare* and snap a pic, share with us on social media – we're on Instagram, Twitter and Facebook!

By Victoria MacPhail, York University, Ages Foundation Fellowship



Nature notes

By Ross Dickson & Bill Wilson, Community Volunteers

Spring 2017 at *rare* will be remembered for erratic cool and wet weather and a June flood. Only a few species other than humans appeared to be inconvenienced. MIGRANT TREE SWALLOW flocks massed in along the Grand River until flying insects emerged on chilly mornings.

Pat Deacon documented one new sedge species to the property in May. CAREY'S SEDGE is both regionally and provincially rare.

Julie Reid photographed a PAINTED SKIMMER dragonfly May 27 in the Thompson Tract, a new species to the *rare* list. Owen Lucas, *rare* Ecological Monitoring Assistant, was fortunate to see both a BALTIMORE CHECKERSPOT and a MILBERT'S TORTOISESHELL butterfly June 19, respectively rare and uncommon in Waterloo Region. "The first sighting at *rare* of the endangered MONARCH butterfly was May 23, compared to the 2009-2016 average of June 9," said Allie Abrams, *rare* Ecological Monitoring Technician.

Spring bird migration was monitored most days at the confluence of the Grand and Speed rivers by Bill Wilson. Overwintering BELTED KINGFISTHERS along the river corridors are invariably male; a female seen March 9 near the confluence is suggestive of spring arrival. Four SANDHILL CRANES "roosted" in the shallow baylet March 12-17, photographed by Don Thomas. Easily overlooked, four CACKLING geese on March 23 was unexpected. Three RED-BREASTED, six COMMON and four HOODED mergansers on April 1 was an uncommon one-day tally as were four mixed-aged BALD EAGLES April 8; eagle

numbers along the Grand River increase each year.

A regional rarity, a GREATER WHITE-FRONTED GOOSE first seen on a *rare* island April 11 by Bill Wilson, became a daily visitor to Riverside Park in Preston, until May 16 according to Ruth Kroft. A PIED-BILLED GREBE on the Speed River March 27 shown in the accompanying photograph by Don Thomas was another sign of spring.

Colorful wood warblers seek out diverse habitats during spring migration. The volunteer bird monitors and other birders at *rare* found 20 species including CAPE MAY, MOURNING and CANADA warblers and NORTHERN WATERTHRUSH.

The first OSPREY sightings at nesting platforms were March 30 at George Street (Sandra LaChance) and April 1 at Osprey Meadow (Leanne Grieves). By late June, three chicks were seen on each nest by Donna, Marco and Brian DeBruin.

Jason Bracey noted 7 sparrow species during monitoring in the aptly named Sparrow Research Field May 28. Birds photographed this season by Mike Weissmann included the elusive NORTHERN ROUGH-WINGED SWALLOW in the Cliffs Forest May 9.

COMMON RAVENS (one or two each time) were noted throughout spring in flight near the Hogsback but no nest was found. A family group including non-wary fledglings stood on Whistle Bare Road June 28.

Do you have a memorable nature sighting you wish to share? Share it on social media using #rareMoment or submit it to rare@raresites.org with the subject line: "rare Moment"

WELCOME PROGRAM COORDINATOR & FACILITATOR, MACKENZIE

Mackenzie Lespérance joined *rare* in September 2017 as the Program Coordinator & Facilitator with generous support from the Ontario Trillium Foundation.

Mackenzie is a mixed race Anishinaabe woman of Turtle Island (North America). Throughout her growing years, Mackenzie's spirit, body and mind was fed and nurtured by two wonderful parents along the Trent Severn River near Healey Falls, Ontario. At age 18 she left home in pursuit of a postsecondary education at the University of Guelph, completing a Bachelor of Science in plant biology and a Master of Science in plant agriculture. While at University, Mackenzie also spent a lot of her time critically thinking about the issues facing Indigenous peoples of Turtle Island. She was able to do this by actively participating in a number of campus initiatives such as the Aboriginal Students Association, the Aboriginal Resource Centre Advisory Committee, the President's Advisory Committee on Aboriginal Initiatives and Project Serve Canada.

Mackenzie is committed to a life-long learning journey that includes the 'new' and the 'old way' which refers to western and Indigenous knowledge systems, respectfully. She hopes that through her role at *rare*, these two knowledge systems will stand side by side with equality.





rare to me: a volunteer's passion

By Laura Klein, Gosling Engagement Coordinator

It turns out you don't always need experience or expertise to make a difference. Laura Brown, volunteer since 2015 at the rare Springbank Food Bank Gardens, wants people to know that anyone has the ability to help others while also completing rewarding work. Her passion for gardening began not long before she discovered rare and reserved her first community garden plot. She had no idea it would turn into something she felt so passionate about, enabling her to build friendships and to have learning opportunities while also contributing to her community.

Every week, Laura can be found volunteering her time to do "everything and anything" to help out - stirring up the dirt at the start of the season, weeding in the summer, harvesting in the fall and, throughout the growing season, delivering plants or produce.

It isn't only the peaceful nature of the gardens and the beautiful location that attracted Laura to volunteer at rare. "This is the largest food bank garden in the area,



so I feel this garden needs volunteers the most," she said. The continuous learning opportunities come about because many of the community gardeners and volunteers are extremely knowledgeable.

Take Peter Ramgolam, an international consultant to the poultry industry. This summer, he and his daughters -Chelsea, Antoinette, Anne Marie and Paula - had big smiles as they talked about the conversations they have with other gardeners who are drawn by the Ramgolam's garden's beauty and richness. "To grow things organically takes some experimenting," he said. "My wife Analiza picked every beetle off some of our plants — one by one." Now a branch, stuck into the ground like a leafless tree, encourages birds to perch and eat those unwanted

bugs. "Next year I am going to give them somewhere to nest. It seems to be helping." And because eggplants will rot if they touch the ground, Peter and Chelsea have put small boards under the heavy fruit, giving them just enough height to avoid the damp ground. Peter grew up on a farm in Guyana, on the South American continent but considered part of the Caribbean. All his life he has appreciated delicious food that can only be produced with the freshest ingredients.

Like Peter and his family, Laura believes time in the garden is personally rewarding and builds community spirit. She uses the word "magical" many times and she describes rare as a "hidden gem in Cambridge." Referring to last year's harvest that brought over 6,700 lbs of fresh produce to local food banks, she said, "It's wonderful to bring nutritious organic food to people who need it." Seeing the delight on their faces as zucchini, squash, tomatoes, kale and lettuce were unpacked was a highlight she won't soon forget. "We are so grateful to all of our volunteers whose helping hands give back to the community and rare," says Taryn Jarvis, Garden Coordinator at rare. "The Springbank Food Bank Gardens are largely volunteer driven and it's the selfless help from people like Laura who make this important community resource thrive." Growing food is also a great way to connect to conservation; like Peter and his family, we know it takes healthy land to grow healthy food.



Leadership

BOARD OF DIRECTORS

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 Leslie Pearson, Community Volunteer, Oakville
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Simon Poladian, Owner, Eagle Towing Equipment

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Partnerships & Monitoring

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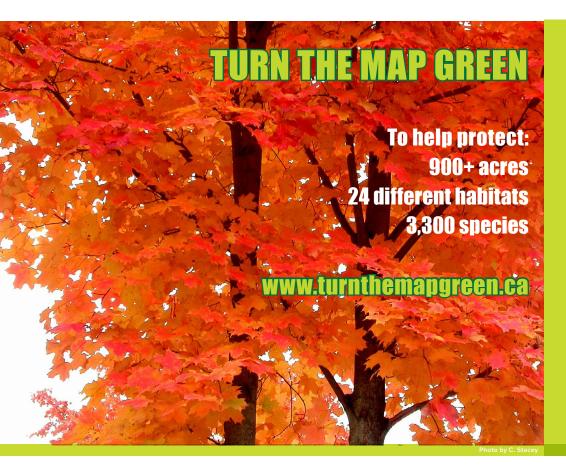
CONTACT US

1679 Blair Road Cambridge, ON N3H 4R8

Phone: 519-650-9336
Toll Free: 1-866-927-3866
Fax: 519-650-5923
rare@raresites.org
raresites.org

Objects found on the property go back more than 10,500 years and the *rare* Charitable Research Reserve acknowledges the Chonnonton people ("people of the deer") on whose traditional territory we live and work, and we offer respect to our Haudenosaunee, Anishinaabe and Métis neighbours as we strengthen our relationships with them.

Review Fall 2017



FEATURE

Conservation Technician, Alissa Fraser shares her turtle incubation project.

INSIDE THIS ISSUE

- 2 New fruit orchard to feed local families
- 3 Introducing Janet Rogers
- **3** Top five reasons for environmental education
- **4** From the ground to the sky: supporting research at *rare*
- **5** Becoming a "household word" in the GTA and beyond
- **5** The value of citizen science
- **6** Shared roots
- 7 It's all connected
- **8** Ask a researcher
- **9** Nature notes
- 10 rare to me volunteer blog
- **11** Leadership





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