



Photo by J. Dillon & J. Moser

FEATURE

DAAD RISE Research Intern, David Winger, shares his *rare* experience while exploring Ontario forests.



Photo by J. Dillon & J. Moser

INSIDE THIS ISSUE

- 2 Eating locally in winter
- 3 Beautiful & beneficial: planning your native species garden
- 4 Why not pursue the snowshoe?
- 5 Be the one to make a difference for nature - help turn the map green
- 6 3,300 Species and counting: 2015 *rare* BioBlitz
- 8 Custodian of the planet
- 9 Nature notes
- 10 In harmony with nature; *rare* to me, Nancy Froklage
- 11 Leadership

A Canadian research experience: exploring Ontario forests

By David Winger, DAAD RISE Research Intern at rare

Hello Canada! My name is David and I am an exchange student from Eberswalde University for Sustainable Development, Germany. Studying International Forest Ecosystem Management close to Berlin, my major includes a six month internship placement. I had the opportunity to partner with the Deutscher Akademischer Austauschdienst (DAAD) / German Academic Exchange Service. This publically funded organisation represents the German higher education system abroad and creates ties between institutions around the world. They recognise the *rare* Charitable Research Reserve as an official “non-governmental research institute,” making it eligible for an international scholarly exchange program and funding. With the freedom to go anywhere in the world I chose Waterloo Region and *rare*.

Here is why: I was looking for a small research institute, yet with a strong scientific focus. I wished for just enough

responsibility and flexibility to work on a project independently, but without being forced to start entirely from scratch. I longed for an organisation that combines and addresses multiple aspects of current environmental issues and could provide the opportunity to explore them in different ways. I am thrilled to have found *rare*, an organisation that embodies all those ideas.

My stay here has been full of good experiences and lasting memories. Assessing the occurrence of Emerald Ash Borer (EAB) and its impact on the local woodlots, I have worked on a project that is important to *rare* and southern Ontario, but also has global relevance and application. To find management strategies that prevent or at least soften the impact of invasive species such as EAB is one of the most critical tasks in today’s conservation efforts.

It means also to do more than just protecting your backyard and looking
rare review **1**

A Canadian research experience: exploring Ontario forests

continued from cover

after the forest nearby. Our impact on the environment reaches far beyond political or geographic boundaries and so it seems only logical to me to make an effort to fully understand the magnitude of our actions and current issues.

To learn about alternative approaches to environmental problems that are present

everywhere is ultimately what I was hoping to gain and something that I will take home with me. ■■

In his spare time, Dave is also an avid chef and memorialized his stay at rare with the building of a communal pizza oven at our Springbank Farm Community Gardens. Thank you, Dave!



Top, DAAD RISE Research Intern, David Winger. Photo by M. Constantin; bottom, onions harvested at Springbank Farm Community Gardens. Photo by D. Radoslav



Eating locally in winter

By Dan Radoslav

At Springbank Farm Community Gardens we are passionate about local food! We aim to provide a space for our community to grow their own local organic produce and offer a healthy variety of foods to our local foodbank through the Community Roots Cambridge Self Help Foodbank Garden. Eating local is a great way to help the environment and growing your own food can be a satisfying labour of love, but how do you keep up the momentum in the winter months when our food mileage can really increase in Canada? Canning, pickling and proper food storage practices can help you eat local long after the last harvest, and if you are really keen, you might even consider canning, storing and freezing enough to last until the next growing season!

To get you started, consider these helpful tips:

Carrots, potatoes, garlic, onions, beets, cabbage, leeks, turnips and radishes can be stored well into the winter months with

little to no preparation. Storing food is very straight forward, you simply have to know what conditions certain foods like and which last the longest - for example, keeping carrots in a cool, damp bucket of damp sand is a great storage alternative if fridge space is limited.

Canning and pickling is a little bit more labour intensive but overall is really just like cooking; get the ingredients and follow the instructions. And you can pretty much can and pickle anything - beets, beans, onions, asparagus - just don't forget to keep things sterile and follow contemporary recipes and safety recommendations. A great way to make sure you are maximizing your efforts is to get hands-on experience from an expert - we recently welcomed Su Edwards, canner extraordinaire, to lead a workshop on pickling beets with her crowd-pleasing recipe.

Check out The National Centre for Home Food Preservation (NCHFP) <http://nchfp.uga.edu/> for more information and great tips for preserving your locally grown food. And keep an eye on our events calendar for the next *rare* canning event - these canned and pickled foods make great gifts! ■■

SPRINGBANK FARM COMMUNITY GARDEN PLOT RENTALS - COMING SOON!

Nothing tastes sweeter than a tomato picked fresh from the vine. Pair it with some fresh basil, drizzle a bit of extra virgin olive oil, a little bit of salt, and maybe layer it between fresh mozzarella and you have yourself the perfect lunch.

Welcome to Springbank Farm Community Gardens, where those interested in growing their own fresh organic produce, like being outdoors and enjoy a sense of community, gather every season. You're invited to join this bustling, multicultural, multigenerational community where knowledge is shared and relationships are forged - all in the name of education and responsible land stewardship.

Keep an eye out for online registration starting in February, or contact Gardens Coordinator, Dan, for more details at daniel.radoslav@rarsites.org or 519-650-9336 x 115.



Native species, Cone Flowers. Photo by D. Crowell

Beautiful & beneficial: planning your native species garden

By Carleigh Pope

Winter is a great time to start planning your garden, and with proper thought and consideration, you can make your natural space a safe haven for native birds and pollinators. When thinking about what to plant, it's almost equally important to think about what not to plant – invasive plant species!

Many invasive plant species were originally brought to North America as ornamentals such as Common Buckthorn (*Rhamnus cathartica*), Japanese Barberry (*Berberis thunbergii*), and even Giant Hogweed (*Heracleum mantegazzianum*). It's no wonder then that they are often found in garden centres and nurseries as beautiful additions for your home garden.

But these species can wreak havoc in natural habitats by outcompeting native vegetation, replacing food sources for native wildlife, and changing water dynamics.

Here are some of the most problematic invasive species that you should try to avoid in your landscaping plans, and their native counterparts that we encourage you to plant instead. Gardening with native species is easy, and can have beautiful results, not to mention benefits for native pollinators and other wildlife!

If you decide to garden with non-native species, be mindful that they are not listed as invasive. It also wouldn't hurt to ask your nursery if there is a concern of their products being sprayed with insecticides that harm pollinators. ■ ■

AVOID INVASIVES

COMMON PERIWINKLE (*Vinca minor*): An evergreen ground cover that boasts long-lasting blue-purple blooms. Common Periwinkle spreads through a dense network of underground roots that make it very challenging to eradicate from an area without diligent excavation.

FLOWERING RUSH (*Butomus umbellatus*): Often used in water gardens, Flowering Rush is native to Eurasia and can grow in a variety of water levels. Like many aquatic invasive species, Flowering Rush spreads through a dense network of roots – even a small root fragment can invade new areas!

WHITE MULBERRY (*Morus alba*): Originally brought to North America to start a silk industry, White Mulberry is a problematic invasive tree because it readily hybridizes with the endangered species Red Mulberry (*Morus rubra*).

PLANT NATIVES

FOAM FLOWER (*Tiarella cordifolia*): This native groundcover is an excellent alternative to Common Periwinkle because of its persistent foliage that remains throughout the winter.

NORTHERN BLUEFLAG IRIS (*Iris versicolor*): A beautiful native ornamental for wet gardens, Northern Blueflag Iris is a great plant for pollinators and other wildlife. Like Flowering Rush, Northern Blueflag Iris can grow in water up to two metres deep so it makes a perfect addition to most water gardens.

CHOKECHERRY (*Prunus virginiana*): This small tree is a great addition to any garden space and provides edible fruit for birds and people. It has a wide-reaching root mass making it perfect for gardens that require some stabilization such as slopes or riparian edges.



Invasive species, Common Periwinkle. Photo by L. Cymbaly



Photo by J. Dillon & J. Moser

Why not pursue the snowshoe?

By Gerrit Kamminga

It's a gloriously serene winter day and the sun is illuminating a vast, wavy sea of unexplored snowfall. You are feeling cagey and the effects of winter cabin fever have crept up on you, and you're craving fresh air and a natural experience. Unfortunately those snow drifts are taller than you care for and you would prefer to not unbury your leg with each step. Luckily there is a solution presented by one of the oldest inventions in human history: the snowshoe!

According to Snowshoe Magazine, snowshoes originally appeared as solid slabs

of wood strapped to the user's feet and have been used for thousands of years across the world. They were an essential tool for travel throughout the Northern Hemisphere - used by trappers, hunters, explorers, surveyors, and even soldiers. In North America the snowshoe is closely tied to our First Nations as an important tool for winter survival. In the harsh Canadian winter snowshoes were an absolute necessity for moving around safely and allowed for essential hunting and gathering. Life without the snowshoe would have been impossible so it is no surprise that it holds ceremonial significance for many First Nations. For more information check out www.snowshoemag.com.

At the *rare* Charitable Research Reserve, we provide various snowshoeing opportunities. Our *Every Child Outdoors* (ECO) winter programs incorporate snowshoe hikes and are available for elementary and secondary school groups through January and March, in addition to March Break

ECO Camp for young explorers aged six to 12. We will also be running a snowshoe hike for all ages in February (check our events calendar for more details), and for independent snowshoe exploration at *rare*, the Maple Lane and Grand Allée trails are excellent and available for public daytime use throughout the winter.

Please contact *rare* Senior Educator Gerrit Kamminga at gerrit.kamminga@raresites.org or 519-650-9336 x. 123, or visit raresites.org for more information on winter programming. ■■



Registration Opening December 2015

2016 MARCH BREAK
ECO CAMP



Photo by T. Schooley



Eastern Comma Writer-in-Residence, Lee Maracle. Photo provided by L. Maracle

EASTERN COMMA WRITER-IN-RESIDENCE

It was an incredible privilege to have prolific First Nations author and instructor, Lee Maracle, live and work at North House this fall as the Eastern Comma Writer-in-Residence. Her time was spent writing a wonderful short story about a mink that is trying to find his father's landscape amidst an increasingly developed urban world. It was a wonderful and enriching experience to have Lee become a part of *rare*'s collaborative Eastern Comma program that features art and science.

COMING SPRING 2016: The first Eastern Comma Visual Artist-in-Residence, Meg Harder. Meg does incredible visual art works in mixed media, installations, print making, performance art and sculptures. She graduated with a Bachelor of Arts, Honours Fine Arts from the University of Waterloo and completed an exchange at the Bezalel Academy of Arts and Design in Jerusalem. Meg went on to be the 2014 Kwatrslab Artist-in-Residence in Kitchener. Now living and working in Waterloo Region, Meg continues to produce thought provoking visual art pieces. We're looking forward to welcoming Meg as she explores the relationship between science and art, and the common inspiration they share: nature.

The Eastern Comma Visual Artist-in-Residence is jointly funded by Musagetes and the Region of Waterloo Arts Fund. The *rare* Charitable Research Reserve gratefully acknowledges their support.



Be the one to make a difference for nature – help turn the map green

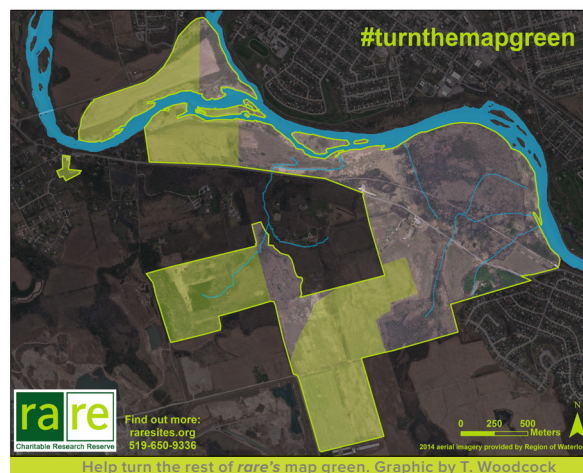
By Erika Kastner

The benefits of connecting with nature is not necessarily a new concept – we are frequently starting to see more literature and reports that argue that the more time you spend outdoors the healthier you will be, mentally and physically. A recent study conducted by Parks Canada indicated that Canadians spend 90% of their time indoors. This combined with a sedentary lifestyle, elevated stress and hectic pace of urban lives has produced an increasingly ailing population disconnected from nature, and we have seen the drastic effects on our wellbeing with the rise of obesity, chronic disease such as diabetes, poverty, and a lack of concentration. This alarming trend sheds a light on the importance access to nature plays in our lives.

The Region of Waterloo is one of the fastest growing urban centres in the country, and with our increasing population it is critical to provide our community with a natural space to spend time outdoors and connect with nature. The eight kilometers of trails at **rare** offer a first-hand experience in the beauty and wonder that comes with immersing yourself in the natural world, and our 110 community garden plots at Springbank Farm provide the community

with the opportunity to grow organic produce and connect even further with the natural environment. Our *Every Child Outdoors* (ECO) environmental program provides children with hands-on activities where they have fun in nature and explore being a young scientist – sparking a passion for nature and training the next generation of environmental conservationists. As a land trust, we protect 900+ acres intact and in perpetuity so that our community – locally, nationally, and even internationally – can have a space to unplug from the technologies that are weighing so heavily on us and recharge our minds, bodies, and spirits by plugging into nature.

The Turn the Map Green campaign is a community and grassroots effort to ensure that our early investments can continue to build on a strong foundation and that the lands that **rare** currently protects are here for the community and for future generations to enjoy. Through conservation, research, and education **rare** is providing an outlet for the community to connect with nature and think critically about their environment. But for these efforts to be sustainable and to allow our grandchildren



to still see all the different animals and plants that call **rare** home, we need your help.

What part of **rare** have you always wanted to connect more to? The riverside cliffs? Your favourite tree in Indian Woods? Your garden plot at Springbank Farm Community Gardens? Take ownership of your beloved space and symbolically adopt a piece of **rare**, no matter how small. You can help ensure that this space and all its inhabitants are given the protection and care that they need.

Visit www.turnthemapgreen.ca today and instantly see the impact of your donation – watch the map turn green right before your eyes. Or make a one-time donation by filling out the card below, or give monthly by becoming a member of our Bedrock Club. Be the one to make a difference for nature – help turn the map green. ■■



Yes – I can help turn the map green!

Donor Name _____

Mailing Address with City and Postal Code _____

Telephone _____ email _____

☐ **I'll join **rare's** Bedrock Club!** I would like **rare** to receive my pre-authorized monthly donation of \$ _____, to be automatically withdrawn on the 15th of every month through: ☐ My chequing account ("Void" cheque enclosed) ☐ Credit Card

☐ **I am enclosing a one-time gift** of: ☐ \$250 ☐ \$100 ☐ \$50 ☐ \$20 or \$ _____

☐ Yes, I would like to receive email updates from **rare**.

To send in a donation, fill in form and cut here.

Payment Information :

Please send cheques payable to

rare Charitable Research Reserve
1679 Blair Road
Cambridge, ON N3H 4R8

OR

Please provide credit card information ☐ VISA ☐ M/C ☐ A/E

Name as it appears on the card _____

Card No. _____

Expires _____ 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: _____

3,300 Species and counting: 2015 *rare* BioBlitz

By Jenna Quinn

There has been a long history of information collected about the 900+ acres now owned and stewarded by *rare*. Plants, animals and other species have been documented since the 1970s from graduate research, environmental assessments, inventories, and consulting reports. These documents predate the extensive surveys undertaken by *rare* since the early 2000s by staff, researchers, advisors, and local experts. With all this past and continuing effort to understand the diversity of species that reside here, it comes as a surprise that nearly 70% have yet to be discovered. This is just one exciting piece of information gleaned from *rare*'s first BioBlitz.

A BioBlitz is a one-day event that engages a large group of people to inventory all the species in a given area, and provides a snapshot of the biodiversity of that area at a given time. These types of events have many benefits, and can contribute to local, national, and international assessments of biodiversity, particularly on the status and trends of many species, including dangerous invaders and declining species at risk.

More than 100 participants arrived at the *rare* ECO Centre shortly after noon on August 16th to take part in the first ever *rare* BioBlitz, staying until the wee hours of the morning. Partnering with the Biodiversity Institute of Ontario and the 6th International Barcoding Conference, hosted by the University of Guelph, attracted international expertise to *rare* for a one-of-a-kind opportunity. Scientists from 18 countries and 30 institutions got to experience a Canadian landscape with 24 different habitat types first hand.

Armed with field guides, bug nets, binoculars, sample jars, buckets, and more, small groups ventured out across the reserve to see what they could discover. Back at the Slit Barn, a mobile lab was set up so participants could bring back samples for identification and processing. Thousands of samples were brought to the Biodiversity Institute following the blitz, and individual organisms were barcoded based on their DNA and added to a growing global database. The process works much like reading a product barcode at the checkout of a



rare BioBlitz participants identifying mushrooms. Photo by M. Fatahi



Left: Specimens from the *rare* BioBlitz. Photo by 10 Archives; Right: *rare* BioBlitz participant identifying fish. Photo by M. Fatahi



supermarket. Particularly for groups like insects, mushrooms, and spiders, which are challenging to identify visually, for example due to their small size or similarities of species, DNA barcoding allows you to match your organism to a database of barcodes that includes more than 500,000 species worldwide- and growing!

During nearly 12 hours more than 1,100 new species were documented at *rare*, bringing our total number of species to over 3,300. While more charismatic species like birds and butterflies have been well documented at *rare* through monitoring and citizen sightings, this BioBlitz shows the magnitude of species living in relative obscurity that we easily miss, such as tiny insects, spiders, and fungi. Of the nearly 200 new species of spiders documented, three are new records for the province of Ontario, including the crab spider, *Xysticus winnipegensis*.

At night, participants searched for moths, owls, and bats, and even surprisingly discovered a previously undocumented bat at *rare*, the Hoary Bat, adding to the number of mammals known on the reserve.

According to the International Union for Conservation of Nature (IUCN), we are experiencing an unprecedented loss of biodiversity across the globe; the greatest

1 mm



Crab Spider, *Xysticus winnipegensis*. Photo by Biodiversity Institute of Ontario

demise since the dinosaurs went extinct 65 million years ago. Climate change, habitat loss, invasive species, pollution, and over-exploitation of natural resources are all contributing factors. Events like this BioBlitz that incorporate DNA barcoding technology allow for rapid identification of species, to improve and share biodiversity knowledge around the world. Working with incredible partners at the Biodiversity Institute of Ontario and all the BioBlitz participants, a data release paper was published in Biodiversity Data Journal just one week after the *rare* event. Of all the information we acquired, one number most strikingly represents the opportunity and potential of a place like *rare*- estimates show that our inventory is only approximately 30 percent complete! With a seemingly endless number of species to explore and questions to ask, what will you discover at the next *rare* BioBlitz? ■■

The rare BioBlitz will be held annually each summer and will be open to public participation. More details will be announced soon for the 2016 BioBlitz.

WELCOME TO THE NEIGHBOURHOOD

Butterflies Galore!

In addition to the over 1100 new and various species identified at the *rare* BioBlitz, five more species of butterflies were added to the list this summer. Observations from butterfly enthusiast Julie Reid and monitoring intern Tim Skuse added the Eastern Pine Elfin, Dreamy Duskywing, Silvery Blue, Indian Skipper, and the Ocola Skipper.


















Silvery Blue. Photo by T. Skuse

Even more exciting news: the Silvery Blue and Ocola Skipper were previously undocumented in Waterloo Region.

Now 90% of Waterloo Region butterfly species have been observed at *rare*.

Happy fluttering!

	NEW SPECIES FROM BIOBLITZ	TOTAL SPECIES @ <i>rare</i>
	2	2
	198	198
	7	7
	9	9
	778	1610
	6	6
	3	31
	0	13
	0	231
	1	38
	0	10
	60	251
	18	18
	103	921
	3	3
TOTAL	1,102	3,348

Species at *rare*. Graphic by J. Quinn; Icons by aLf, E. Boatman, M. Caron, A. Chen, J. Cozzette, gulia, N. Kinling, P. Kolodziejksi, L. Patnick, J. Santos, Sma-rtez, C. Touati





ArtCOP21 event at North House; Beyond Crisis. Photo by E. Kastner

INSPIRED BY CHANGE

As the world's leaders gathered in Paris for the 21st Conference of Parties (COP21), the United Nations Conference on Climate Change in December, the rest of the world was invited to have their own dialogue through an initiative called ArtCOP21. By taking the conversation out from underneath a scientific lens, and out of boardrooms and negotiation halls, ArtCOP21 sought to connect people to the climate challenge through art and culture.

In total, 531 events were registered with ArtCOP21 in 53 countries, four of which were in Canada (all in Ontario), and only one in Waterloo Region – Inspired by Change. Together with Divest Waterloo, BRIDGE Centre for Architecture & Design, and Community Renewable Energy Waterloo (CREW), *rare* invited the public to celebrate ArtCOP21 through an art exhibit and a series of film screenings. An overwhelming submission of art work, sold out shows, and even audience engaged Skype discussions with *Beyond Crisis* director, Kai Reimer-Watts, and *Haida Gwaii: On the Edge of the World* key player, Severn Cullis-Suzuki (a *rare* International Ambassador), proved that the fight on climate change isn't just reserved for scientists and politicians. As the organisers of ArtCOP21 put it: climate change is a people issue, and without active engagement of citizens worldwide in the urgency, value, and opportunities of a transition away from fossil fuels, it would be impossible to embrace a greener, sustainable future.

Thank you for being a part of the conversation!

Custodian of the planet

By Joy Roberts

Custodian of the planet. That's the title the *New York Times* gave to Maurice Strong in 1975. By then he had managed to convince 113 countries to gather in Stockholm for the first meeting of its kind, called the Conference on the Human Environment. Speaking in a recent glowing tribute to Mr. Strong's accomplishments in *The Globe and Mail*, John Ralston Saul quotes the opening lines of Strong's speech:

"We have determined that we must control and harness the forces, which we have ourselves created. We know that if these forces can be effectively controlled, they will provide everything that life on this planet desires and requires; but if they are permitted to dominate us, they will have an insatiable and unforgiving appetite."

When he died on November 28, 2015, Maurice Strong had gone from a life of poverty to one of significant wealth — some speculate in the billions — he had access to corridors of power around the world and he was relentless in working for the causes he believed in — primarily the environment and the role of indigenous peoples.

He was also highly controversial. He didn't have a traditional career path and his fierce independence and reserved manner made him seem secretive to some. He worked his way into senior business positions at Dome Petroleum in Calgary, at Power Corp in Montreal, even starting Petro-Canada at the behest of Pierre Trudeau — a move that would anger many in Alberta for decades to come. He was also Chairman and CEO of Ontario Hydro in the early '90s. For his work in the energy field, Strong called himself an "environmental sinner."

When Strong was in Waterloo Region, he made time for a discussion about *rare*'s

vision and plans for the future. Polite and attentive, he applauded *rare*'s work to make an impact locally while working on research that was important here and around the world. He said, "I am spending a lot of time in China and I know that [*rare*] would be very much of interest to the many groups that are now working on projects of their own. I am committed to helping [*rare*] find a 'twin' project for mutual benefit."

He was also on the International Advisory Board of Toyota and found occasions to raise *rare*'s work among his colleagues there. He was hopeful that the 2005 World Exposition in Aichi, Japan with its emphasis on nature and the environment, might be an occasion for significant progress in this regard.

At the Rio Earth Summit in 1992 — where 12 year-old Severn Cullis-Suzuki, now a *rare* International Ambassador, made her famous speech — participants adopted a UN Framework on Climate Change, proposing actions aimed at stabilising atmospheric concentrations of greenhouse gases. Since then, a Conference of Parties (COP) meets annually to review the Convention's implementation. Now 21 years later, COP21 took place in Paris in spite of terrorist attacks (seemingly unrelated) barely two weeks before it was due to open. The goal was to achieve a legally binding and universal agreement on climate, with the aim of keeping global warming below 2°C or even less.

Maurice Strong's death just days before COP21 means he didn't live to see the outcome but I suspect no one will deny that it was largely due to his efforts that we reached this point in global discussions of climate change. ■■

Mist on the Grand. Photo by P. Kelly





Black-throated Blue Warbler. Photo by M. Weissmann

Nature notes

By Bill Wilson

Snakes are important to *rare's* education programs. Kids at the *rare* day camp spotted a "baby" MILK SNAKE, approximately 25 cm in length, much to their delight and *rare* volunteer, Ross Dickson's. Near the *rare* ECO Centre, Joy Roberts photographed a SMOOTH GREEN SNAKE of which several sightings were also reported along *rare* trails throughout the summer.

DOUBLE-CRESTED CORMORANTS are dispersing from the lower Great Lakes breeding colonies throughout southern Ontario. Observed roosting and feeding at the Confluence throughout the summer, a peak number of 32 was observed, the highest number recorded to date at this location. Now that's a "gulp of Cormorants!"

Trail walkers, Liz Ramshaw and Julie Reid, reported GIANT SWALLOWTAIL and HARVESTER BUTTERFLY, respectively, in early August.

Some days during migration, bird banders are usually busy at their nets and data recording table; some days there's time to ask "what's yellow or orange.... and NOT a Baltimore Oriole?" Answers: AMERICAN REDSTART, MONARCH BUTTERFLY feeding nearby, immature BLACKBURNIAN WARBLERS, CLOUDED SULPHUR butterfly, and a 1941 Studebaker in position for a photo shoot in front of the *rare* ECO Centre.

Ross Dickson found BEAR'S HEAD TOOTH FUNGUS (*Hericum americanum*) growing on a dead tree trunk on one of his *rare* walkabouts.

A migrating BLACK-THROATED BLUE WARBLER was reported on September 2 by Mike Weissmann. A common breeder in the Canadian Shield, this forest-interior warbler probably bred in southern Ontario

prior to settlement deforestation. A future nester at *rare*?

While monitoring on October 22, Barb and Glenn Mockford observed "many" YELLOW-RUMPED WARBLERS on their migration stopover through *rare*. How long does a migrant remain? On the same day, bird bander, Ross Dickson, recaptured eight of these warblers previously banded by him – one from 14 days earlier. Possibly an individual on a "migration vacation"?

Observed on October 15-17, 19, & 20 by Bill Wilson, WHITE-RUMPED SANDPIPER is a new addition to *rare's* bird list.

Tony Zammit observed a BELTED KINGFISHER fly-by – four in total – on October 24 at the Confluence.

While monitoring regeneration habitat with Jerry Guenther and Bill Wilson, Bill Read flushed an AMERICAN WOODCOCK. Identifying a flushed bird from cover benefits from past field experience; perhaps being the slowest flying bird at eight kph (The Bird Almanac) contributes to identification of this species.

Members of Waterloo Region Nature together with bird monitors at *rare*, participated in the annual Hamilton Fall Count on November 1. Seven of the 88 species tallied on the Cambridge/North Dumfries sector of the count were observed only at *rare*. David Gascoigne and John Lichty, for example, spotted the only FIELD SPARROWS (two). An "old field" species, the current increase in numbers of breeding pairs at *rare* reflects the increase in regeneration habitat.

Jillian Bracey, with the assistance of her Dad, Jason, observed three PURPLE FINCHES on November 7 while birding the *rare* River Trail. Ron Pittaway predicts in his annual Winter Finch Forecast for Ontario Field Ornithologists that "Many (not all) should migrate south out of Ontario this fall because... tree seed crops are generally low in northern Ontario." ■■

NATURE SIGHTINGS:

#rareMoment

"The Bald Eagle: a remarkable example of successful species recovery efforts, and a truly remarkable sight to see. The first time I saw a Bald Eagle was at *rare*, near the southern edge of the property. I had just finished the last day of butterfly monitoring in the late summer of 2014. As I headed back to my car, a Bald Eagle emerged from the Hogsback tree line, and soared overhead. I stopped and stared in amazement; it felt somewhat surreal. It was a beautiful reminder of the successes that can come from conservation efforts, and a sign that I was exactly where I should have been at that moment, doing my part to help restore and conserve this amazing property that so many species call home."

– Erin Sonser, *rare* volunteer & former staff,
August 21, 2014

Do you have a memorable nature sighting you wish to share? Tweet or Instagram using the hashtag #rareMoment or submit to rare@raresites.org with the subject line: *rare* Moment



Bald Eagle. Photo by N. Lightfoot

HAVE SOME *rare* FINDS OF YOUR OWN?

Contact *rare* Nature Notes by emailing rare@raresites.org with "Nature Notes" in the subject line.



Photo by A. Todd

UNION GAS SUPPORTS EVERY CHILD OUTDOORS



A massive THANK YOU to our friends at Union Gas for their support in helping to preserve, protect, restore and improve *rare* - a natural resource in Waterloo Region.

This summer, Union Gas team members lined up, shovels in hand ready to dig and build planter boxes at *rare*'s solar powered living lab, North House. Providing native plants, herbs, vegetables and supplies for construction, Union Gas built and planted garden boxes that play an integral role in *rare*'s *Every Child Outdoors* (ECO) environmental programming, as they aid in teaching visitors about sustainable living and the benefits of gardening with native species.

"At Union Gas, we care about the environment," said Murray Costello, Union Gas district manager for Waterloo/Brantford, who was on hand to help out. "That's why we are here today and why we support important environmental education programs such as *Every Child Outdoors*."

Thank you Union Gas, for helping train the next generation of conservationists and your generous support!

In harmony with nature; *rare* to me, Nancy Froklage

By Cheyanne Richardson

The overgrown vines and old shed are no match for the positive smile and can-do spirit of one of *rare*'s most dedicated volunteers. Whistling and working away in the backyard garden of Lamb's Inn under the warm fall sun you may have seen Nancy Froklage – always with a smile on her face and often a pair of garden shears or other tools in hand!

It is the idea of *rare* that sparks a light in Nancy's eyes "to know there is always an osprey soaring, swallows swooping, deer grazing, butterflies fluttering, salamanders rustling in the leaves, and fish acting fishy, whether I am there to see it or not...it is our very own piece of wilderness smack dab in the middle of an urban area. It is miraculous."

Nancy, a retired librarian and teacher, found an opportunity to continue to lead a purposeful life when she began to volunteer with *rare* over four years ago. As Nancy describes it, she sees *rare* as a place that someone like famous Canadian author Margaret Atwood, a fervent conservationist, would envision. In Atwood's *MaddAddam* trilogy, a bone chilling dystopia about the consequences of blithely continuing on our current destructive path, a dedicated group of people tries to nurture nature back to health. This dedication and passion for protecting the environment is what attracted Nancy to start volunteering with *rare*.

Over the years, Nancy has been actively involved with the *Every Child Outdoors* (ECO) education program, volunteering with both Summer and March Break ECO Camps and her vibrant and enthusiastic personality has also been a welcomed

addition to many fundraising initiatives, including the annual **Walk & Run for *rare***. Nancy's current favourite project at *rare* is to bring the heritage gardens at the reserve's administrative headquarters, the historic Lamb's Inn built in 1837, to their original splendor.

As a retired educator Nancy hopes to work with *rare* to inspire many more young people to join the fight to preserve nature. She feels strongly about training the next generation of conservationists and hopes that places like *rare* become more commonplace in urban planning, rather than exceptional.



Nancy hard at work restoring the heritage garden at Lam's Inn. Photo by C. Richardson

The *rare* reserve wouldn't be able to accomplish its conservation, research and education mission without the passion and dedication of many volunteers and supporters like Nancy. There are many opportunities to become involved with *rare*, and we would love to have you as part of the *rare* family. Contact Cheyanne at cheyanne.richardson@raresites.org or 519-650-9336 x 126 for volunteer and other support opportunities- and thank you for everything you do!



THANK YOU to the many volunteers, participants, pledgers, and sponsors who made this year possible. Thanks to your efforts, just over \$23,000 was raised in support of the *Every Child Outdoors* (ECO) environmental program and training the next generation of conservationists!

Watch for registration in early June 2016 - see you next year!

Interested in becoming more involved with the **Walk & Run for *rare***? Consider becoming a volunteer or corporate sponsor. Contact Cheyanne Richardson for more details at cheyanne.richardson@raresites.org or 519-650-9336 x. 126.

Leadership

BOARD OF DIRECTORS

Keith Ainsworth, Chair of the Board;
Electrical Engineer; retired CEO, COM DEV
International
Gerald Achtymichuk, Family Physician
Peter Krause, President, Krause Corporate
Solutions
Brian McGee, Chartered Accountant; Partner,
Zeifman & Company LLP
Angela Tsementzis, Architect; B.E.S. B.Arch,
OAA, LEED AP

INTERNATIONAL AMBASSADORS

Ljubodrag Andric, Photographer; latest work
Visible Cities
Michael Barnstijn, retired Partner, RIM;
Philanthropist; Musagetes Foundation
David Buckland, Founder, Cape Farewell
www.capefarewell.com; Director of Art from
a Changing Arctic
Ed Burtynsky, OC; Photographer; Subject of
award-winning documentary, Manufactured
Landscapes
Geneviève Caron, Award-winning
Photographer
Severn Cullis-Suzuki, Environmental Activist;
Speaker; Television host; Author
Ron Dembo, Founder, Zerofootprint
www.zerofootprint.net
Louise MacCallum, retired Software
Engineer; Philanthropist; Musagetes
Foundation
R. Murray Schafer, Composer; Educator;
Environmentalist
Sheila O'Donovan, Founder, Lisaard House
Jane Urquhart, OC; Author
Morden Yolles, Multi-award-winning
Structural Engineer; Restaurateur;
Photographer

ENVIRONMENTAL ADVISORY COMMITTEE (EAC)

Chris Dalton, Avocational Archaeologist,
Licensed by the Province of Ontario
John MacDonald, Archaeologist
Colleen Mercer Clarke, Coastal Ecologist,
Landscape Architect, University of Waterloo
Stephen Murphy, Professor and Associate
Chair, Undergraduate Studies, Environment
and Resource Studies, University of
Waterloo
Mark Pomeroy, Fisheries Biologist, Stantec
Consulting Ltd.
Bill Wilson, retired Teacher; Naturalist; Bird
Monitoring Coordinator, *rare* Charitable
Research Reserve
Brett Woodman, Terrestrial and Wetland
Biologist, Natural Resource Solutions Inc.
Tony Zammit, Aquatic and Terrestrial
Ecologist, Grand River Conservation
Authority

EDUCATION ADVISORY COMMITTEE (EDAC)

Jason Bracey, Teacher, Department Head of
Geography, Southwood Secondary School
Louise Dawe, retired Teacher; Community
volunteer
Christopher Giesler, Teacher, Southwood
Secondary School

ARCHAEOLOGY COMMITTEE

Chris Dalton (see previous)
John MacDonald (see previous)

RESEARCH ADVISORY COMMITTEE (RAC)

Stephen Murphy (see previous)
Rick Haldenby, Professor, Architecture,
University of Waterloo
David Lieberman, Associate Professor, John H.
Daniels Faculty of Architecture, Landscape
and Design, University of Toronto
John Straube, Associate Professor, Civil and
Environmental Engineering, University of
Waterloo

CAMPAIGN AND COMMUNITY CABINET

Keith Ainsworth (see previous)
Sheila Ainsworth, Chair, Lisaard House
John K. Bell, Chairman, The Onbelay Group
Greg Buzbuzian, Owner, Knar Jewellery
Stewart Campbell, Sales Representative,
Cushman & Wakefield; Partner, BlackTree
Capital
John English, CM; FRSC; Director, Bill Graham
Centre for Contemporary International
History, Trinity College/Munk School of
Global Affairs, University of Toronto
Valerie Hall, President, Stonefields
Management Inc.
Ahmad Hammoud, Owner, Salon Butterfly
Jackie Hatherly-Martin, Chartered
Accountant, HM Advisors
Keith Martin, Chartered Accountant, HM
Advisors
Hulene Montgomery, retired; Consultant to
philanthropic and community organizations;
Community volunteer
Douglas McMullen, retired; Community
volunteer
David Mitten, Executive Director, Siding and
Window Dealers Association of Canada
Simon Poladian, Owner, Eagle Towing
Equipment
Joy Roberts, retired; Consultant; Community
volunteer
Paul Ross, Partner, KPMG
Irene Schmidt-Adeney, Writer, Ayr News
Hugh Thompson, President, Cambridge Towel;
CEO, Thompson Centre for Art and Design

VOLUNTEER AND CONSULTING ADVISORS

John Baljkas, Graphic design consultant, MFA,
RGD Affiliate Member, Professor, Conestoga
College
Ken Dance, President, Dance Environmental
Inc.
Valerie Hall (see previous)
Joy Roberts (see previous)

EASTERN COMMA COMMITTEE

Shawn Van Sluys, Executive Director,
Musagetes
Alissa Firth-Eagland, Curator, Musagetes
Karen Houle, poet & philosopher, University
of Guelph
Smaro Kamboureli, Avie Bennet Chair in
Canadian Literature, University of Toronto

EMERITUS

Paul Koch, Marketing & Management
Consultant; Civic entrepreneur
Doug Larson, Professor Emeritus, College of
Biological Sciences University of Guelph
Alan Morgan, Professor Emeritus, Earth and
Environmental Sciences, University
of Waterloo

STAFF

Stephanie Sobek-Swant
Executive Director
Roger Oei
Senior Operating Officer
Gerrit Kamming
Senior Educator
Erika Kastner
Development & Communications Officer
Carleigh Pope
Junior Conservation Ecologist
Jenna Quinn
Program Scientist - Research Priorities,
Partnerships & Monitoring
Dan Radoslav
Property Maintenance & Gardens
Coordinator
Cheyenne Richardson
Community Stewardship Coordinator
Kim Robichaud
Administrative Coordinator
Christine Thompson
Major Gifts Manager
David Winger
Forest & Health Monitoring Intern
Tom Woodcock
Planning Ecologist

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



The *rare* Charitable Research Reserve
would like to acknowledge the
Attawandaron people on whose traditional
territory we live and work and offer respect
to our Haudenosaunee, Anishinaabe, and
Métis neighbours as we strengthen our
relationships with them.

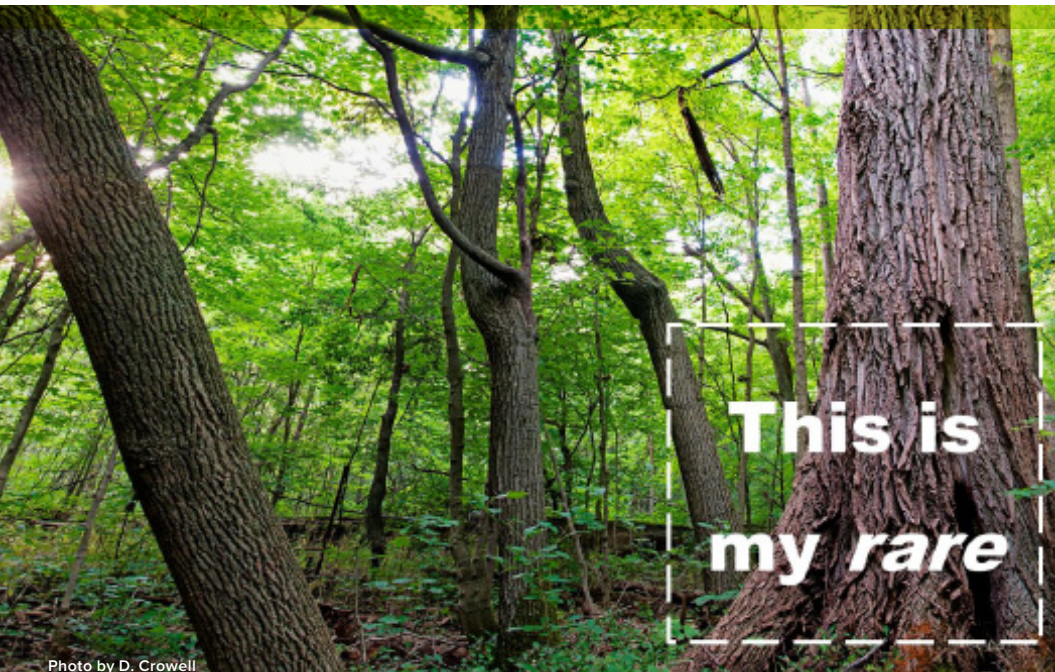


Photo by D. Crowell

TURN THE MAP GREEN FOR AS LITTLE AS \$2

Symbolically adopt your piece of *rare* today!

www.turnthemapgreen.ca



FEATURE

DAAD RISE Research Intern, David Winger, shares his *rare* experience while exploring Ontario forests.

INSIDE THIS ISSUE

- 2 Eating locally in winter
- 3 Beautiful & beneficial: planning your native species garden
- 4 Why not pursue the snowshoe?
- 5 Be the one to make a difference for nature - help turn the map green
- 6 3,300 Species and counting: 2015 *rare* BioBlitz
- 8 Custodian of the planet
- 9 Nature notes
- 10 In harmony with nature; *rare* to me, Nancy Froklage
- 11 Leadership



facebook.com/raresites



[twitter/raresites](https://twitter.com/raresites)



youtube.com/user/raresites



raresites.wordpress.com/



instagram.com/rare_sites/

