2025- 2026

Fall/Winter Review

promoting a biodiverse & sustainable world now & for generations to come

Honey Mushrooms "Armillaria gallica" on *rare's* River Trail, Photo by Erin Clark

Land Acknowledgement

The ***rare* Charitable Research Reserve** stewards over 1,450 acres of land, but we are not the first to do so. Most of the land currently in our care is located within the Haldimand Tract, which spans six miles on either side of the Grand River and is the territory of the Onkwehon:we Peoples of the Six Nations of the Grand River. It is also territory of the Mississaugas of the Credit Anishinaabe First Nation. In addition, we steward land at the border of the Upper Canada Treaty No. 3 and Treaty 19 from 1818 which is also territory of the Mississaugas of the Credit Anishinaabe First Nation. We honour and respect the sovereignty of these First Nations and their ancestors. The lands we steward are home to many other First Nations, Métis and Inuit who have moved to the area from across Turtle Island.

As a settler-founded and -led organization, we make this land acknowledgement in admission of the cultural and historical harm inflicted by settlers on Indigenous Peoples that has led to generational trauma and systemic injustices that persist to this day, including the dispossession of land. We acknowledge that the lands we live on, work on and derive benefit from were taken away from the original stewards, and it is our goal to restore that connection and to work towards building ethical, reciprocal relationships with the local First Nations of the lands where ***rare*** is situated.

We commit to learning about and acting on our responsibilities as settlers of these lands and unlearning our cultural and historical biases that contributed to making these systemic injustices possible in what we now call Canada.

Who We Are, What We Do and Why We Do It

The ***rare* Charitable Research Reserve** is a community-based urban land trust and environmental institute which stewards over 1,450 acres of land across eight properties in Waterloo Region and Wellington County.

By working with people throughout our community, including local Indigenous Peoples, ***rare's*** staff, advisors and volunteers seek to protect environmentally sensitive lands and landscapes for the health and benefit of the local environment, wildlife and current and future generations. Using diverse ways of knowing, we seek to educate the community in the importance our natural areas have in building climate resilience and fostering the health of the environment, and all who live within it.

We believe in honouring place, in conserving diversity, in embracing Indigenous knowledge and in committing to relationships and Indigenous resurgence. We believe in strengthening science, in building diverse, equitable and inclusive communities and in training the next generation to steward these lands for the benefit of all. We seek to offer the community—including Indigenous Peoples, the international community and future generations—not only a diverse network of connected natural areas, but a model of conservation that demonstrates the link between ecological integrity and economic stability, which is critical for the enhancement and quality of life of the planet.

Stories Rooted in Land & Community

As another season turns, we pause to notice what the land is teaching us: the seeds that took hold, the roots that deepened and the possibilities still waiting just beneath the surface. This edition of our newsletter gathers stories where conservation, creativity and community meet. You'll read about clay pressed with wildflowers, thousands of turtles making their way home with a little human help and young people stepping boldly into leadership for food security.

These updates open a window onto a deeper rhythm, what we at ***rare*** call conservation as a living relationship. From our partnership with the Canadian Clay & Glass Gallery to hosting the first FREED cohort at the ***rare*** Conservation Campus, we've been reminded that learning doesn't always begin, or belong, in a lab or classroom. It begins on the land, through experience, story and community collaboration.

Humming beneath these stories is the quiet pulse of our 2025 to 2030 Strategy and Plans, set to launch this winter. But if you know ***rare,*** you know it's never "just" a plan. It's a commitment to bold, unsettling questions: How do we want to live? What does the land ask of us now? Can a conservation organization be a space for imagination—beyond traditions that have too often caused harm?

In 2026, you'll see these questions take shape in new and unexpected ways. Artistic inquiry will expand through our evolving relationship with Musagetes Foundation and the return of the Long Dash Festival. Research will stretch further into justice and climate action. And our land-based programs will continue to grow skills and relationships between people, places and possibility.

There's more ahead, and not all of it can be named just yet. We hope you'll read on, and that sometime this fall or winter, you'll find your way to our trails. Many are open year-round, and often the best way to imagine the future is by walking through the present. Having just finished my 130km trek on the Avon Trail, part of which is now traversing ***rare*** at Schneider's Woods, my feet are a bit sore but my mind feels recharged with excitement. None of ***rare's*** work would be possible without the many people that already walk with us: volunteers, donors and community members who remind us every day that conservation is collective. Thank you for being part of ***rare!***

Warmly,

Stephanie Sobek-Swant

Executive Director, ***rare*** **Charitable Research Reserve**

Springbank Garden, Photo by Peter Kelly

Conservation Through Collaboration: CRH Dufferin Aggregates

By Christine Thompson
*Gifts Manager at **rare***

At ***rare***, we believe support should never feel transactional. Donors and sponsors are part of the ***rare*** family. That means finding meaningful ways for people to engage—ways that reflect their values and create shared impact.

A recent example comes from CRH Dufferin Aggregates, one of our Corporations for Conservation sponsors. Rather than offering a standard benefits package, we sat down with their management team to ask: What would make this partnership truly valuable for you—and for nature?

Through several conversations, CRH shared that they wanted staff to connect with biodiversity right on their property. Together, we co-created a butterfly monitoring program.

With guidance from our Conservation Scientist and Monitoring Intern, ***rare*** staff visited the site's stormwater pond and meadow. In just half a day, we designed four transects—pathways for staff to walk and observe butterflies during their breaks. Employees learned to identify common species and began building an annual inventory of butterfly populations. Over time, this will not only support CRH's certification goals but also deepen their employees' appreciation of the living systems around them.

This is what true partnership looks like: an industrial site becomes an outdoor classroom, employees become community scientists and conservation becomes a shared responsibility.

The CRH story is just one example of how conservation thrives when people are invited to take part. You don't need to be a corporation with a meadow to monitor butterflies—small actions add up to big change.

- Plant pollinator-friendly flowers on your balcony or in your yard.
- Join a ***rare*** volunteer day in the food bank gardens or on our trails.
- Take part in community science, from salamander monitoring to bird counts.
- Support ***rare*** as a monthly donor, knowing you're part of every conservation success story.

Whether you're a business or an individual, you are more than a supporter. You are a co-creator of a healthier, more resilient future.

At ***rare***, we're grateful to partners like CRH Dufferin Aggregates for reminding us that conservation isn't something we do alone—it's something we grow together.

If you or your organization are interested in building a partnership through our Coporations for Conservation initiative, please contact, ***rare's*** **Gift Manager, Christine Thompson at** *christine.thompson@raresites.org*

"While looking for a partner to support our Biodiversity Management activities, we decided to work with **rare** because of their knowledge and expertise, as well as their proximity to our Dufferin Aggregates Paris Pit where we have several initiatives already happening. The **rare** team really helped us by engaging with our Paris site staff and show them how monitoring butterflies can actually be fun, in addition to demonstrating the work we do together to rebuild habitats and ecosystems !

On top of that, we got the opportunity to be at their Career Fair which was very well organized and we got the chance to meet students who share the same passion as us!"

Mejasoa Razafimihary, Director, Communications at CRH Canada

Photos: **(Above)**: CRH Dufferin Aggrefates staff members practicing their butterfly catching skills. Photo by Ecological Monitoring Assistant. **(Left)**: ***rare*** staff, holding a butterfly caught for monitoring. Photo by Mike McTavish.

Give the Gift of Nature

and protect the bonds that make nature strong

Looking for the perfect gift to show your loved ones that you care for them and want the best for their future? Give them a future where natural spaces are protected for the well-being of all? At ***rare***, everything is connected. We don't just protect individual species within the over 1,450 acres of environmentally sensitive lands we steward, we protect the web of natural relationships where plants, animals, fungi and more support each other. These species cannot survive without these relationships, and neither can we. With your gift, these lands and the species that make them home can be protected now and for your loved ones' future.

Simply select one of the five species pairs below, visit raresites.org/donate, select 'Gift of Nature,' list your gift recipient, and we will send you an eCertificate to share with your loved one who will receive the gift of nature. (minimum $20 donation required).

Canada Anemone

My white blooms & roots are used in Indigenous medicine. You can find me in late spring in meadows, streambanks & lakeshores, but I couldn't be here without my pollinating partners like:

Carpenter Bee

Monarch Butterfly

I am one of the most recognizable butterflies, taking generations to migrate to Mexico & back. I help my good friend produce hundreds of silky seeds & my good friend helps me thrive.

Milkweed

Potter Wasp

I am a wasp, but I'm solitary & harmless to humans. I hunt insects that are problems for agriculture. I couldn't survive without one of the last blooming flowers of the season like:

Goldenrod

Lichen

Partnerships are who I am. Algae & fungi, helping to turn stone into soil. While Goldenrod may feed species in late fall, I'm here for winter, providing emergency sustenance for many species, like the:

White-Tailed Deer

Oak Tree

One of the greats of the forest, I stand tall with majestic branches & support biodiversity. My flowers provide food for squirrels, bees & butterflies. My acorns feed 31 different species of mammals, including deer, badgers, squirrels & wood mice. My branches hold the nests of up to 39 different types of birds. My roots, branches and the folds of my trunk provide a home for up to 2,300 wildlife species, including 1,178 invertebrates. Support me, & you support:

All Species at *rare*

Field Research in Ecology & Evolution Diversified: Empowering the Next Generation of Field Researchers

By Alannah Grant
University of Guelph PhD Candidate, Newman Lab, Department of Integrative Biology & Co-Director, FREED Guelph

In August, ***rare*** hosted the 2025 University of Guelph FREED field trip. Field Research in Ecology and Evolution Diversified (FREED) is a graduate student-led grassroots initiative dedicated to increasing access to field research opportunities for Black, Indigenous and racialized (BIPOC) undergraduate students. Through immersive, week-long field trips, FREED offers hands-on workshops focused on building community and technical skills in ecology, evolution and conservation.

Now in its third year at the University of Guelph, the 2025 FREED trip marked an exciting milestone. From August 3 to 9, the FREED team, along with thirteen undergraduate students, visited ***rare*** facilities, including the on-site research lab and the diverse landscapes, to participate in experiential learning and deepen their connection to nature.

The week featured a wide range of engaging workshops delivered by graduate students and industry professionals. These workshops included bat mist netting, invasive phragmites management, an introduction to birding and a water quality and benthic invertebrate identification workshop led by ***rare's*** Senior Educator, Istafa Sufi, and the 2025 ***rare*** Chain of Learning Assistant, Amelia Upper.

That same week, ***rare*** also hosted the ECO (Every Child Outdoors) teen camp. Participants from both programs came together for several joint activities, including an insect pinning workshop led by the Centre for Biodiversity Genomics, a career fair featuring professionals from ***rare*** and FREED's partner organizations and a nature-based scavenger hunt. The scavenger hunt paired ECO campers with FREED participants, allowing them to put their newly acquired naturalist skills into action.

The shared events provided participants from both programs with valuable opportunities in mentorship, skill and community building, highlighting the power of inclusive place-based education to inspire the next generation of conservation leaders.

Quote from Alannah Grant, University of Guelph FREED Co-director and PhD Candidate conducting research at ***rare***: "We were incredibly excited to have FREED take place at ***rare*** this year! 2025 was the first year that my co-director, Jonathan Chu, and I organized an excursion exclusively for University of Guelph students, which made the event even more meaningful to both of us. ***rare*** holds a special place in both of our own journeys through science, so it was a privilege to share this place with the FREED participants.

Each year, our workshops cover a broad range of skills in ecology, evolution and conservation, and we aim to equip students from diverse academic backgrounds with new knowledge. ***rare*** is home to such a wide range of species and habitats, which allowed us to do exactly that.

We are especially grateful to the ***rare*** staff for generously sharing their time, space and expertise. Their support helped make this a memorable experience for both our team and the FREED participants."

If you are interested in learning more about ***rare's*** collaborations with FREED or how you can get involved, please email ***rare's*** **Senior Educator, Istafa Sufi at** *istafa.sufi@raresites.org*

Impressions of Nature: Students Blend Art & Ecology

By Sabrina Boyer
Family Centre Coordinator & Studio Technician at Canadian Clay and Glass Gallery and Istafa Sufi
*Senior Educator at **rare***

In May, ***rare's*** Education team collaborated with the Canadian Clay & Glass Gallery and 20 students from the Waterloo Region District School Board (WRDSB) Alternative Education program, New Dawn. In this unique program, we blended artmaking with time spent on the land. Guided by ***rare's*** Senior Educator, Istafa Sufi, and the Gallery's Family Centre Coordinator & Studio Technician, Sabrina Boyer, we began with a hike along ***rare's*** Osprey Trail to the Grand River. Along the way, students learned about the ecosystems that thrive there and the species of plants and animals that call it home. Istafa and Sabrina ran a clay plate-making workshop directly on the trail, not far from the river, surrounded by the sounds and smells of the landscape in which the group was working. Students gathered wildflowers and leaves that caught their attention. Some were drawn to colour, while others were drawn to texture. A few took a more experimental approach, carving into their plates, trimming them to a new size and shape, or rubbing soil and bark directly into the clay's surface for added texture.

The clay plates, which Sabrina had pre-made at the gallery, became canvases for the students' discoveries. Each plant left an impression, sometimes subtle and sometimes deep, before being brought to life with colour. Participants used water scooped from the river to rinse brushes, further tying the work to the workshop setting.

The most impressive thing was the individuality in each piece and the sense of connection between the students and their surroundings. Whether through botanical imprints, carved lines or embedded natural materials, each plate became a record of a personal encounter with the land.

If you are interested in learning more about ***rare's*** collaborations with Canadian Clay and Glass Gallery or how you can also get involved, please email ***rare's*** **Senior Educator, Istafa Sufi at** *istafa.sufi@raresites.org*

Photos: **(Opposite Top)**: Members from the ***rare*** education team and FREED strike a pose at the ***rare*** ECO Centre & Slit Barn. Photo by Aleksandra Dolezal **(Opposite Bottom Right)**: Senior Educator, Istafa Sufi and FREED members exploring benthic invertebrates. Photo by Istafa Sufi. **(Opposite Bottom Left)**: Members of FREED talk with teen ECO Campers. Photo by Istafa Sufi. **(Centre)**: Plants pressed in to a clay plate. Photo by Sabrina Boyer. **(Bottom Left)**: Conservation summer students Jillian, Kathryn, Skylar, Candace and Veneeta out in the field removing Giant Hogweed. Photo by Rosalind Snyder. **(Bottom Right)**: A photo of a young Jillian Bracey at ***rare*** with her father and the former Minister of Education, Liz Sandals. Photo provided by Jillian Bracey.

From Camper to Co-op Counsellor: a *rare* Experience

By Jillian Bracey
***Southwood Secondary School Student & high school co-op student at rare* 2025**

In July 2025, I had the privilege of being a high school summer co-op student at ***rare.*** During my time at ***rare,*** I had the opportunity to work with the land management, research and education departments. Throughout this internship, I was able to experience so many new things, which allowed me to gain an understanding of different career paths while expanding my knowledge of the environment.

Some highlights for me were the Giant Hogweed removals, butterfly monitoring and benthic invertebrates! Working with benthic invertebrates was a special highlight for me because many years ago, I was a camper at ***rare's*** Summer ECO Camp, and my favourite camp memory was always exploring benthic invertebrates—small, spineless animals that live in soil or other organic materials in water. It was a full-circle moment as my first experience with benthic invertebrates was as an ECO camper and this most recent experience was as an ECO camp counsellor.

The ***rare*** team was incredibly welcoming and very knowledgeable; I had a great time working with everyone. I think the most challenging part was the Giant Hogweed removal due to heat, attire and the amount of the invasive plant. Through this challenging experience, I learned about perseverance, teamwork and communication—for that I am so grateful.

I loved this co-op position, and I now have a better understanding of the environmental work sector, as well as post-secondary options. I am very grateful for my time at ***rare,*** and I hope to return sometime again in the future.

Blanding's, Painted & Snapping... Oh My! *rare's* Biggest Turtle Season Yet

By Rosalind Snyder
Conservation Technician at ***rare***

The 2025 turtle season started as it always does, with the non-stop ringing of the turtle hotline letting us know nesting season has begun. From roadsides, to trails, to playgrounds, to baseball diamonds, people from across Waterloo Region and Wellington County called our hotline to let us know about at-risk nests in their community.

As a result, we were able to collect 107 nests—the most since the beginning in 2017. At the end of the season, we released over 2,500 hatchlings back into their habitats. The ***rare*** team also placed nest protectors over additional nests to keep them safe from predators throughout the summer, adding protection to 46 more nests. Special thanks to local youth and community members who generously donated their time and skills to support our program through constructing nest protectors. We also thank members of the public for reporting at-risk nests and taking the time to speak with ***rare,*** and asking how to help and sharing stories about the turtles who live in their community.

"What stood out most was the community's involvement. We received hundreds of calls to ***rare's*** turtle hotline, and even during fieldwork, curious passersby often stopped to ask questions and share their own turtle stories. That level of engagement reminded me that conservation isn't just a job, it's a collective effort." Emily Crawford, Master of Wildlife Biology Intern, University of Guelph

A special highlight of this season is that we were lucky enough to rescue two Blanding's turtle nests, all thanks to the efforts of our Wildlife and Habitat Intern, Candace Park and Natural Resource Solution Inc. intern Tasha Sawatsky. Blanding's turtles are characterized by their bright yellow throat and chin, which is most prominently seen when they are out basking, as well as their highly domed shell. Blanding's also make their habitats in shallow lakes, ponds and wetlands. Protecting these nests is significant as Blanding's turtles are listed "Threatened" and are very rare in the area due to the reduction in wetland habitat. Previously, only one other nest was collected in 2023. 25 Blanding's hatchlings were released back into their habitat, a small but meaningful step in the conservation of our local species at risk. This year, we also collected our highest number of painted turtle nests, collecting 14 nests and releasing 105 hatchlings.

While all of our turtles have been released, turtle season is ongoing, with snapping turtle nests likely still hatching into mid-October. Other hatchlings will hunker down for the winter and emerge in the spring. If you see nest protectors in your community, please leave them be so the nests can remain protected throughout the winter!

Thank you to the dedicated efforts of the ***rare*** staff, our dedicated group of volunteers in Wellington County, the Ontario Turtle Conservation Centre, who cared for injured hatchlings and nests that were affected by predators and passionate community members. These actions allowed another generation of turtles make it back home safely. While they have a challenging road ahead out in the wild, we gave them a head start, and we know that the hatchlings that do survive will be caretakers of their ecosystems for decades to come.

"Helping protect their nests and giving more hatchlings a chance to survive was a powerful reminder that even small, hands-on actions can make a real difference for species at risk," Bethany Loesack, Master of Wildlife Biology Intern, University of Guelph.

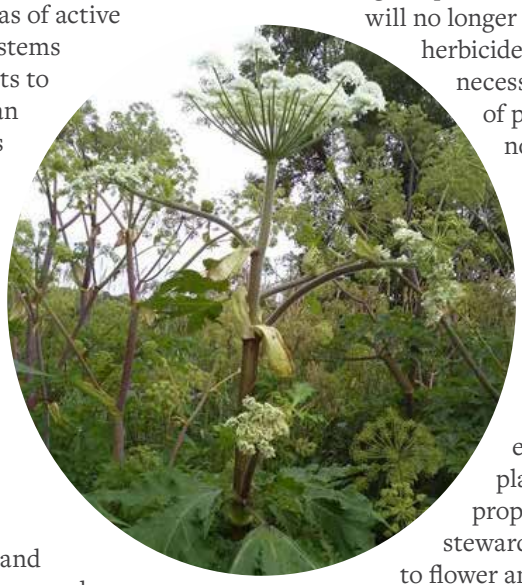
Learn how you can help by contacting ***rare's*** **Conservation Technition, Rosalind Snyder at** ***rosalind.snyder@raresites.org***

Photos: **(Above)**: Blanding's hatchling ready for release. Photo by Candace Park. **(Left)**: Conservation Technician Assitant, Candace, releasing Blanding's turtle hatchlings. Photo by Rosalind Snyder.

Trouble in the Watershed: Hogweed's Spread & the Need for Collective Action

By Tom Woodcock
Planning Ecologist at ***rare***

Properties owned and stewarded by ***rare*** include several kilometres of shoreline on the Grand, Speed and Eramosa rivers, in addition to large areas of active floodplain. These systems provide many benefits to wildlife and to human settlements in terms of water storage, flood control, water quality and much more. As responsible property stewards committed to conservation, ***rare*** is continuously battling invasive species. Giant Hogweed is often present in shoreline and floodplain areas, where seeds are transported and deposited by flood waters in winter and spring. Giant Hogweed is a growing threat due to its highly invasive nature and the potential to cause serious injury to humans (and pets) who touch the invasive species' sap. Giant Hogweed can also crowd out native species and spread rapidly via water in floodplain habitats. Plants that are allowed to go to seed can produce thousands, which are carried by winter and spring flows downstream to new areas. The plant may sprout in unexpected places near the river, where recreational users may come in contact with it.



Giant Hogweed began to appear on floodplains in Cambridge and North Dumfries in increasing numbers in 2014 and 2015. In 2015, 422 plants were removed from our floodplain areas, and a concerted effort each year gradually reduced those numbers, until only 16 plants were discovered and removed in 2020. However, since that time, there have been dramatic year-over-year increases on ***rare*** properties, with 730 plants removed in 2021, 994 in 2022, and 807 in 2023. A doubling of this three-year average was observed in 2024, with 1,485 plants removed by ***rare*** staff. In 2025, more than 2,000 individual plants were observed, including monocultures of small plants that were not yet old enough to flower. Staff had to redirect their efforts to ensure the flowering plants did not go to seed. It is nearing the point where mechanical control will no longer be effective, and spring herbicide applications will be necessary, where regulations of proximity to water are not violated.

The continued strain on staff and resources to address Giant Hogweed infestation on our property cannot continue, particularly when easily observed plants on upstream properties not stewarded by ***rare*** are left to flower and go to seed. Hot weather and cumbersome protection gear make control demanding and dominate the effort to the detriment of other stewardship activities.

We also want to acknowledge the efforts of the small, but mighty, Giant Hogweed Mitigation Project volunteer group, who attack the plant upstream from ***rare*** working hard to mitigate the numbers that end up downstream, but it is a never-ending battle.

A collaborative basin-wide plan and initiative is needed, bringing together affected parties such as municipalities, environmental organizations and landowners to create a comprehensive strategy to address Giant Hogweed in the short- and long-term through both response and preventative measures.

Funding for these efforts at ***rare*** comes from Invasive Species Centre. To learn more about how you can get involved contact ***rare's***

Planning Ecologist, Tom Woodcock at *tom.woodcock@raresites.org*

Photos: **(Left)**: Giant Hogweed plant. Photo by Rhiannon Moore. **(Below)**: Former Conservation Technician Assistant, Kathryn posing with giant hogweed. Photo by Rosalind Snyder. **(Bottom)**: Former Assistant Conversation and Garden Technician, Veneeta in hogweed protective gear with hogweed plant in behind. Photo by Rosalind Snyder.

Watching Underfoot for Below-Ground Invaders: Jumping Worms in Canada

By Mike McTavish
Conservation Scientist at ***rare***

The research team at ***rare*** is helping keep watch for a new, below-ground ecological threat: jumping worms. While most of the earthworms found in Canada are non-native species introduced from Europe, jumping worms comprise a distinct family of earthworms, native to Asia. Introduced through global horticultural trade, jumping worms have been found in the United States since the late 1800s. There were isolated sightings of jumping worms in Canada in 2014, followed by a large increase in observations in 2021.

Since jumping worm invasion is still relatively new, this is a critical time to identify new populations and try to slow their spread as much as possible. ***rare*** is helping with this effort in Ontario with a new jumping worm early detection and education program to empower community members with the knowledge needed to identify, report and slow the spread of invasive jumping worms.

Canadian soils have been largely earthworm-free since the last glaciation, and our ecosystems and vegetation are largely unaccustomed to earthworms. While the rapid decomposition of organic matter and mixing of the soil by worms can be helpful in a garden or agricultural field, native vegetation benefits from a more intact soil surface and a slower release of nutrients. Compared to non-native European earthworms, jumping worms up the ante by transforming topsoil and organic matter into bare, loose granules (called casts or castings) at a much faster rate. This altered topsoil can lead to poorer performance of plants in both natural areas and in the garden.

Jumping worms hatch in the spring and are most obvious by late summer and early fall. The first sign to watch for is the pile of loose, crumbly casts that look like dried coffee grounds. While some European earthworms will also leave casts on the surface, they form small piles, whereas the jumping worm casts create a more continuous layer. Jumping worms live within this cast layer and will "jump" or twitch in an energetic S-shaped motion when picked up or otherwise disturbed. You can also check the clitellum of mature earthworms (the ring-like collar found near the head); on jumping worms, the clitellum is milky white and fully encircles the body, while on European earthworms, the clitellum sits only on the top and sides like a saddle.

Once a suspected jumping worm has been seen, observers are encouraged to report the sighting to EDDMapS, a public database platform for tracking the spread of invasive species. ***rare*** staff contribute to the verification of images submitted to the platform to help confirm suspected sightings. This database of information plays a key role in understanding the early distribution and spread of new invasive pests like jumping worms. Following a confirmed observation, while there are currently no effective large-scale control methods for jumping worms, small and contained infestations (e.g., in a pot or raised bed) can be eradicated by solarizing the material under a tarp or black plastic. For larger infestations, the primary goal is to slow the spread to new areas by not moving plants or soils and cleaning off tools and footwear. Slowing the spread limits the stress on our native habitats and gardens and allows time for those ecosystems to adapt to the new conditions.

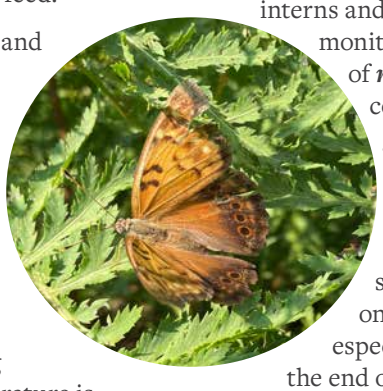
Keep an eye out underfoot for any new below-ground invaders and stay tuned for more educational resources and info sessions from ***rare.*** **Please also report suspected sightings to EDDMapS (https://www.eddmaps.org/) or for more information, contact** *research@raresites.org.*

Photo: (Below): Jumping worm. Photo by Mike McTavish

rare's Butterfly Team Catches a Streak of Firsts

By Morgan Humphrey
*Ecological Monitoring Assistant at **rare**, 2025*

Summer is a great time to observe butterflies in Ontario. If you are lucky enough, you might see these colourful insects fluttering around grasslands, forest edges or resting on a flower to feed.



Butterflies are not only bright and beautiful—they have intricate relationships with plant species. First they feed on certian plants during their caterpillar stage, which are referred to as host plants. As adults they pollinate, those plants are referred to as nectar plants. Butterflies are also ectothermic, meaning that their internal body temperature is regulated by the temperature of the external environment. This makes them very sensitive to temperature and, thus, good indicators of weather and climate change effects. These insects are also key food sources for other animals, including birds and mammals. Because of this, butterflies are indicator species, meaning that the presence, abundance and composition of the butterfly community indicate the health of the ecosystem.

Each year from May to August, ***rare*** runs a butterfly monitoring program led by the research department, supported by summer interns and volunteers. The butterfly monitoring team surveys four of ***rare's*** properties weekly, counting butterflies as they go.

Early July is peak season for butterflies in Cambridge, with many species emerging all at once. The 2025 season was especially exciting because from the end of June to the beginning of July, there was an eight-day streak of first seasonal sightings of different butterfly species, which is very impressive. After those first few lucky days, the pressure was on for the ***rare*** butterfly monitoring team, and they delivered. Some of the "season's first" butterfly species from the streak included the American lady, Baltimore Checkerspot, Great Spangled Fritillary, Hackberry Emperor, Tawny Emperor, Coral Hairstreak, Banded Hairstreak, Silver-Spotted Skipper, Northern Broken-Dash Skipper, Delaware Skipper, Dun Skipper, Crossline Skipper and Dion Skipper. By mid-July, over 3,000 individual butterflies were recorded, and around 250 reference photos were taken. That's what we call a success!

Are you interested in being a part of the ***rare*** butterfly monitoring team? Volunteers are a key piece of ***rare's*** research and monitoring activities. Contact our **Conservation Scientist, Mike McTavish, at** *research@raresites.org* to be included on the Research and Monitoring team's volunteer list

Photo: **(Above)**: Tawny Emporor butterfly found on the Cliffs and Alvars trail. Photo by Morgan Humphrey. **(Below)**: Ages Foundation Logo. **(Bottom)**: Katie Mountjoy collecting diatom samples, Photo by Paul Mountjoy (along the Beaver River, not at ***rare***, but same kind of sampling)

Research & Art intertwined at *rare*: The 2025 Ages Foundation Fellowships & Bursaries

By Mike McTavish
Conservation Scientist at rare

Since 2009, the Ages Foundation has supported research and arts at ***rare*** through its Research Fellowship and Bursaries program. To date, over $100,000 has been awarded to researchers and artists tackling environmental issues in collaboration with ***rare*** . This year's funding from the Ages Foundation provided awards to post-graduate students from $1,000 to $5,000.

Here are the 2025 award recipients:

Juliana Magditsch is an MSc student at the University of Guelph and one of the recipients of a $5,000 top project award. Using chipmunks as a study species, Juliana's research seeks to quantify the impacts of urbanization on physiological and behavioural stress in wildlife. Results of this study will help develop conservation strategies to mitigate the negative effects of human-modified landscapes on wildlife.

A second $5,000 top project fellowship was awarded to **Justyn Mahanger**, a PhD student at York University. Justyn is applying an equity, diversity and inclusion lens to study community gardens as a component of local municipal food systems in Ontario. By applying this unique perspective, Justyn hopes to address issues of accessibility, equity and social inclusion in community gardens.

The Ages Foundation also provided $1,000 bursaries for three additional projects. **Danielle Petti** is a PhD student at Western University, creating biodegradable art using natural materials that will break down and reintegrate into the landscape. **Katie Mountjoy** is an MSc student at McMaster University cataloging the diversity of diatoms — microscopic algae encased in glass— across different habitats. **Jason Phoenix** is a PhD student at the University of Waterloo investigating the best methods for restoring tallgrass prairie on former agricultural lands.

The 2026 Ages Foundation Fellowship and Bursaries program will open for the next round of applications in the new year. Applications for research and art projects at ***rare*** are welcome year-round. See ***raresites.org/research*** for more information.

Hot, Cold & Wiggly: The Triple Life of Compost at Springbank Farm Hub

By Charlie Gibbs
*Food Access Stewart at **rare**, 2025*

The Springbank Farm Hub's composting got a big upgrade this summer when our friends from the Cambridge Food Bank donated their Actium Composter to ***rare.*** Moving the Actium Composter from the foodbank in Galt to the Springbank Farm Hub was quite an ordeal, as a crane and an eighteen-wheeler were required to get the job done.

What is an Actium Composter? It is a mechanism that encourages hot composting, where insulation and regular turning of the compost allow for a hot, (between 30-70°C,) and oxygen-rich environment. We measure the temperature daily to monitor the progress of the composting. When the temperature gets to 55-70°C we know that most weed seeds and pathogens are being sterilized, and aerobic microorganisms are thriving, making nutrient-dense compost. These organisms work fast to decompose organic material, and in one to two months, we can have a two-yard batch of gorgeous, cured compost. To make this luscious compost, the Springbank Gardens staff pick up boxes of compostable food scraps from the Cambridge Food Bank to bring back to the composter when they drop off the fresh organic produce grown at ***rare*** twice a week.

In addition to the hot composter, the Springbank Garden Hub uses two other types of composting. One of these is cold composting, which is when organic matter, whether it be unwanted plants in the garden or vegetable scraps from the kitchen, is placed in a pile and used as needed. ***rare's*** cold compost pile is lovingly deemed the "Compost Mountain" by the ***rare*** staff and summer ECO campers. Every summer, ECO campers, while exploring the importance of compost, help garden staff keep "Compost Mountain" clean by finding non-compostables (plastic, twine, garden tags, etc.) as they climb and play. This type of composting takes one to two years to produce a cured compost. Compost is considered cured when it is left to sit until its core is at air temperature. It's important to cure compost because microorganisms work hard decomposing organic matter and without proper time for that process to slow down, the compost may keep going and decompose your seeds and plants!

The third type of composting used at ***rare*** is vermicomposting. Vermicomposting uses the power of worms, red wigglers in ***rare's*** case, to break down organic material faster than in our cold compost pile. Red wigglers produce worm castings that provide an excellent source of nutrients for our food bank garden. The worms receive organic material from staff and community gardeners. They love most vegetable scraps, paper and eggshells, but citrus, oil and alliums are not good for them. Our vermicompost setup has two sections. One section is for feeding the worms compostable materials, and the other is for "resting," where the worm castings are harvested for the gardens. They are switched when the feeding side is full, which allows the passive rotation of worms from side to side, thus encouraging them to vacate usable compost on the resting side for the scraps on the feeding side.

All three composting methods help make ***rare's*** gardens thrive and produce thousands of pounds of produce for the Cambridge Food Bank. Thanks to all the composting efforts, ***rare*** feeds the land and the critters of ***rare,*** grows amazing food and creates beautiful sights each year, all in addition to ensuring nourishment for years to come.

Photos: **(Top)**: ECO campers exploring "Compost Moutain." Photo by Taryn Jarvis. **(Left)**: ECO Camper help feed the worms in the Vermicomposter. Photo by Taryn Jarvis. **(Bottom)**: ECO camper emptying the Actium Composter. Photo by Taryn Jarvis.

My time at *rare*

By Charlie Gibbs
*Food Access Stewart at **rare**, 2025*

Working for ***rare*** is truly a one-of-a-kind experience. As a member of the Gardens and Facilities team from March 2025 until the end of October 2025, I have had the great honour of working with the land throughout the seasons. Planting, caring for and harvesting vegetables, herbs and fruits have filled my days at ***rare.*** As an organic gardener, there's no better experience than getting to learn the ebbs and flows of the growing season by working in spring, summer and fall. Additionally, harvesting fresh produce for donation to the food bank is one of the most rewarding aspects of my job here. The Cambridge Food Bank does incredible work feeding those who need it most, and I am so proud of ***rare's*** contributions.

Whether it's meeting folks who've come to help at the gardens or at big events like the spring Plant Sale, interacting with the local community is so rewarding. I've loved learning from individuals who bring their own skills and perspectives to the gardens in addition to to passing on my own knowledge and experience. Speaking of the job itself doesn't even cover how incredible it is to work with ***rare*** staff. Everyone at ***rare*** is working on a diverse set of projects, which means being a staff member means you get an inside scoop on the local flora and fauna. Staff at ***rare*** are kind and collaborative, and I'm grateful to have been a part of the team.

Charlie's position was funded in part Kinder Credit Union. Are you interested in supporting experiences of young professionals? Contact ***rare's*** **Gifts Manager, Contact Christine Thompson, at *christine.thompson@raresites.org***

Greens & Teens: from School Gardens to the Slit Barn, a Fresh Mobile Market Grows at *rare*

By Evan Krulicki
***Garden Assistant at rare*, 2025**

This summer, ***rare*** collaborated with the Cambridge Food Bank and Youth in Food Systems to bring a weekly fresh food market to the ECO Centre and Slit Barn on Thursday afternoons. Fresh and local fruits, vegetables and meat were sold by students working with the Youth in Food Systems group, the Cambridge Mobile Food Market, part of the Cambridge Food Bank, and JC Cattle Co., which grazes its beef cattle on ***rare's*** Preston Flats off Fountain Street as part of a regenerative agriculture project.

Youth in Food Systems is a local initiative that aims to improve the local food systems and access to fresh affordable food while also providing high school students with experiential learning opportunities in agriculture, food access and basic life skills. Each week, the Youth in Food Systems team brought a variety of fresh fruits and vegetables grown at local high school gardens.

Each week, the Cambridge Mobile Food Market offered a different assortment of fruits and veggies. Offering a "mixed basket," this mobile food market operates under a "pay-what-you-can" system. The standard basket price was ten dollars; however, folks experiencing financial restrictions had the option to pay less. Similarly, customers could pay extra, allowing the donation to cover the cost of produce for individuals who weren't able to pay as much.

Also present was our ***rare*** information booth! Customers could talk to a ***rare*** staff member about the organization and get information about upcoming events, trails and projects. It was a wonderful opportunity to meet more people within the community.

rare hopes to run the Fresh Food Market again in 2026, allowing high-quality and locally grown food to stay easily accessible in our community .

Photos: (Left): Charlie with beebalm during a tour of the Springbank Farm Hub with Kindred Credit Union. Photo by Taryn Jarvis (Right) Student from the Youth in Food Systems working in the Springbank Garden at ***rare***. Photo by Veneeta Paray (Bottom) The Cambridge Food Bank's Mobile Food Market van that attended the Fresh Food Market at ***rare's*** ECO Centre and Slit Barn every Thursday this Summer. Photo by Taryn Jarvis.

Leave a Natural Legacy

Protecting the environment and tackling the climate crisis, now and for the future

Why Consider Leaving a Natural Legacy?

Think back to when you first felt the wonder of nature. Was it lying beneath a tree, sunlight streaming through the leaves? Swimming in a clear creek? Or perhaps it was when you returned years later—only to find the trees gone, or the water no longer clear.

Often, it's someone close to us who helped shape those values—a parent, grandparent, sibling, friend or even a child. Many parents of ***rare's* ECO campers** share that their children come home eager to teach their families what they've learned about the natural world. What better way to honour that spark than by leaving a gift in your Will that protects nature for them—and because of them?

Through ***rare's* Natural Legacy Program**, you can make a tribute gift that carries your values well into the future. Thanks to donor commitment, more than **1,450 acres of ecologically significant lands** are already protected forever, safe from shifting government priorities.

By including *rare* in your Will, you:

- Safeguard more lands of ecological significance in Southern Ontario for the next 20, 50 or even 100 years.
- Ensure children and future generations have the same chance to learn, play and be inspired by nature.
- Reduce taxes on your estate and maximize what you leave for loved ones.

No matter the size, every legacy gift is a powerful promise: that nature will endure, and that the lessons and wonder it inspires will continue for generations.

Photo by Unknown

"rare is a charitable foundation with a unique focus in Canada – it owns property and encourages long-term research on ecological restoration and monitoring and integrates this into community education programs. There is no other organization like this in Canada."

Stephen Murphy
Professor & Associate Chair, Undergraduate Studies, Environment & Resource Studies,
University of Waterloo &
rare Environmental Advisory Committee

Anyone can leave a legacy to the environment

From bequests in your Will, to gifts of stock, securities, insurance or retirement funds, there are many ways to ensure nature thrives long into the future.

Photo by Jeff Moser & Jeannette Dillon

Ways to Leave a Natural Legacy

Leaving a gift to ***rare*** is easier than you might think and can often provide tax advantages while supporting your loved ones, too. Here are a few options:

Bequests by Will

After providing for family and friends, you can name ***rare*** as a beneficiary of a specific asset, a portion of your estate, or the residue of your estate. Think of ***rare*** as your "Charity Child."

Gifts of Life Insurance

A new or existing policy can be donated to ***rare***, allowing you to make a substantial future gift with a relatively small monthly or yearly payment.

Stocks & Securities

Donating stocks, securities or mutual funds directly to ***rare*** may be more cost-effective than selling them first and giving cash. You'll also receive a charitable tax receipt for the full value.

Gifts of stock or securities donated around the end-of-year holidays must be received by our broker on or before December 6 to ensure the transaction can be completed before the December 31st deadline. You will receive a charitable tax receipt for the closing price of the shares on the day we receive them.

RRSPs/RRIFs

You can name ***rare*** as a beneficiary of all or part of your retirement funds. It's a simple way to make a lasting difference.

No matter the size of your gift, you'll be part of protecting nature, inspiring children and ensuring future generations experience the same wonder you've cherished.

Note that the information provided here is general in nature. Donors planning a significant gift should seek independent legal and/or financial advice.

Contact Us

Let us know that you've included ***rare*** in your estate plans so we may acknowledge you in our recognition and keep you informed of special information sessions and events.

Please feel free to contact me directly for a confidential discussion around your legacy goals:

Christine Thompson
Christine.Thompson@raresites.org
519-650-9336 x118

For your advisors:
***rare* Charitable Research Reserve**, 1679 Blair Road, Cambridge, ON, N3H 4R8
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Support our natural spaces; donate to ***rare*** at
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Background Photo: Foggy Forest. Photo by Jeff Moser & Jeanette Dillon.

WHAT'S COMING UP

2025/2026

ONGOING — **YOGA IN THE GARDEN**
Keep an eye on our events page for dates!

ONGOING — **CONVERSATIONS FOR CONSERVATION**
Keep an eye on our events page for dates and location!

MARCH — **A *rare* FIND ART AUCTION**
March 2026

MAY — ***rare* PLANT SALE & ECO MARKET**
May 10, 2026, ECO Centre & Slit Barn

JULY — **THE LONG DASH FESTIVAL**
July 25 - 26, 2026, ECO Centre & Slit Barn

SEPT. — ***rare* TRAIL PARTY & 25th ANNIVERSARY CELEBRATION**
September 20, 2026, ECO Centre & Slit Barn

www.raresites.org/events

Photo by, Rita Ross

REGISTER NOW!

Frog Eyes. Photo by Peter Kelly

rare

2025-2026 Fall/Winter Review