GEORGIAN BAY LAND TRUST
gblt.org

FALL 2024

LANDSCRIPT

PROTECTING **GEORGIAN BAY'S** WILDERNESS LANDS

Georgian Bay's Magnificent Moths

Species Spotlight: Common Juniper

The Corridor Project

Light Pollution at the Cottage

photo: Virgin Tiger Moth by Tyson Shank

The Corridor Project:
Our First Summer

The Corridor Project is an ambitious initiative to connect the existing protected lands along the eastern shore of Georgian Bay, safeguarding one of Canada's most ecologically rich areas. This corridor will create a stretch of wilderness that serves as a refuge for over 50 species at risk and countless other plant and animal species. As climate change continues to disrupt habitats, preserving such spaces is critical, allowing wildlife to move freely and adapt to shifting conditions.

This past spring, the Georgian Bay Land Trust reached the first major milestone in the Corridor Project when a momentous agreement was signed with the Township of Georgian Bay to conserve a 553-acre network of township land stretching from Honey Harbour to Twelve Mile Bay. This land surrounds and provides an added layer of conservation protection to an additional 32,900 acres of crown land.

With the Southern Corridor established, our focus now turns to stewarding these lands and setting up agreements to protect the proposed middle and northern sections of the corridor. We are currently in the consultation process with municipal and Indigenous partners, working to bring the vision of the Corridor Project to life in a way that benefits all Georgian Bay communities.

Our Corridor stewardship team: Joey, Adam, and Hayden

A spotted salamander found during corridor surveys

Georgian Bay Township Mayor, Staff, and Council joined us in September to celebrate the Southern Corridor. We are so grateful for the township's partnership in this important conservation project.

Summer Stewardship

The Corridor Project's additional land has meant expanding our team of staff. Full-time Corridor Project Ecologist, Adam Grottoli, joined us in the spring to take on surveying and stewarding the Corridor Project lands. Adam was joined in his fieldwork by two summer corridor students, Hayden O'Brien and Joey Trusler.

The Corridor Stewardship Team made significant strides in monitoring and stewarding the Southern Corridor this summer. The team completed ecological inventories across 230 of the 553 acres under our protection, identifying key species and ecosystem types. From towering hemlock forests to vast open fens to familiar granite rock barrens, the team made their way through the diverse landscape of this part of eastern Georgian Bay. As they went, they mapped this mosaic of unique ecosystems. They documented 23 provincially significant species, from rare grass-like sedges to the snakes and turtles which frequent many of the cottages along the bay. Each observation of these species brings us closer to a fuller understanding of their needs and how to best protect them.

The team also began night-time acoustic surveys with Passive Acoustic Monitors to record bat activity on corridor lands. Data from these surveys will inform not only the Georgian Bay Land Trust, but will also contribute to the continental monitoring of bat populations through the North American Bat Monitoring Program.

The project is not without challenges, however. An important part of stewarding the corridor is ensuring that the conditions laid out in the Conservation Agreement are met. These conditions encourage human recreational use of the land on existing trail networks, but do not permit habitat destruction, garbage dumping, or unauthorized trail expansion. In our surveys this summer, the corridor team identified areas where people are currently using the land, which will require regular monitoring as part of our stewardship plan. Furthermore, patches of the invasive common reed (*Phragmites australis*) were found. Once established, this invasive reed can outcompete native plants, creating a monoculture that is unsuitable for the animals who live there. Our corridor team removed phragmites from two locations. However, the existence of the plant prompts the need for annual removal to keep it under control, with the ultimate goal of eradicating it from the area.

The efforts made just this summer bring into focus the importance of this initiative. The Georgian Bay Corridor is not only a haven for wildlife but also a vital component in maintaining the health of the region's forests, wetlands, and water systems. Protecting these natural spaces ensures that future generations will continue to live alongside the rich biodiversity and ecological benefits of Georgian Bay's unique landscape.

Help Complete the Corridor

The Georgian Bay Land Trust is working hard to complete the middle and northern sections of the Corridor Project, which would extend the corridor through the Townships of the Archipelago and Carling. We need the help of donors who are interested in making a commitment to the future of Georgian Bay. If this could be you, please visit gblt.org/corridor or contact Janet at (416) 440-1519 x104 or janet.brough@gblt.org to learn more.

Species Spotlight:

Common Juniper *(Juniperus communis)*

They are a prickly part of everyday life around Georgian Bay – but how much do you know about the common juniper?

To start, this is a plant that unites most of the northern hemisphere. The common juniper has the largest native range of any conifer, and is found throughout much of North America, Europe, Asia, and parts of North Africa. It grows on mountain slopes, rugged plains, cliffs, fields, and of course our Georgian Bay rock barrens. But you wouldn't always recognize it right away, as regional varieties can look very different. In Europe, for example, they are often the size of a small tree. The variety found in the Georgian Bay area is *Juniperus communis var. depressa*, with "depressa" referring to its low-growth.

The juniper is what is referred to as a "dioecious" species, meaning that the male and female reproductive parts grow on separate plants. In the spring, male plants release bursts of pollen from tiny yellow cones that develop on the tips of their branches. Female plants have their own tiny cones that hold the juniper seeds and receive the windblown pollen.

Like other conifers, junipers are classified as "gymnosperms", meaning "naked seed". This means that their seeds develop out in the open, in contrast to most plants (known as "angiosperms") whose seeds develop within ovaries (fruits). What's interesting, however, is that the juniper is one of a few gymnosperms that has evolved a way to produce something remarkably like a fruit. Juniper seeds begin developing as part of a traditional cone on the female plant, but rather than open up as a pinecone would, the scales of these cones swell up forming spheres. This is what we know as the blue juniper "berry" – technically a cone and not a berry at all! Fortunately for junipers, birds are still happy to eat them, and their seeds get distributed throughout the landscape. Humans too have a long history of using juniper "berries", most famously in gin, but also for other culinary and medicinal purposes.

Junipers are a hardy plant that do well in open, rugged landscapes. They tolerate drought well and don't like shade. In some ecosystems, they are early colonizers after a fire or other disturbance, and later replaced by taller trees. In Georgian Bay however, they are an established species with a long-standing presence. Common junipers thrive in Georgian Bay's rugged landscape and play a critical role in our rock barren habitats. The plants provide shelter and shade for small animals in otherwise exposed rocky environments, and are a good place to look for thermoregulating snakes. The "berries" are a food source for birds and the bushes provide a good place to build a nest. Those who have read about our avian research may remember that Prairie Warblers, which have a thriving Georgian Bay population despite being very rare in other parts of Canada, nest almost exclusively in common junipers here.

The common juniper is not the only juniper species we have on Georgian Bay – the red cedar tree is actually a member of the *Juniper* genus. If you look closely at the red cedar you can see the same blue juniper "berries" on its branches.

The common juniper is a special plant – interesting in its biology, distinctive in appearance, and very Georgian Bay. Give this plant a little extra love the next time you pass one by!

Do you have a species you'd like to see spotlighted in an upcoming issue? Send your suggestion to ***info@gblt.org****.*

A Summer in Photos

Our team was busy this summer with stewardship, events, surveys, and outreach. Here are a few highlights:

Our first public event of the summer, a bird walk in Honey Harbour.

The whole field team at the start of the season. Our biggest ever!

Aaron searches for birds during our Big Day fundraiser. Our team saw 133 species, breaking the record for this area!

We spent a week in August tackling phragmites with the help of some amazing partners. Thank you to everyone who helped us clear this invasive reed from our protected wetlands.

Fieldwork creates plenty of opportunities to develop wildlife photography skills!

Getting up close with wetland plants during a property survey.

Property Spotlight:

Walter T. Christenson Nature Reserve and Cooper Cliffs

We are happy to welcome two new properties to the Georgian Bay Land Trust network!

Walter T. Christenson Nature Reserve

93 acres – Carling Township – donated anonymously

The Walter T. Christenson Nature Reserve is a wonderful addition to conservation efforts in inland Carling Township. It lies in close proximity to the Upper Shebeshekong Wetland Conservation Reserve, and protects part of the Shebeshekong River that flows from the conservation reserve into Georgian Bay. Protecting this river is important for long-term habitat connectivity throughout the area, as are the rich wetland habitats on either side, home to numerous species at risk.

The 93 acres of the Christenson Nature Reserve contain forest and rock barrens, a river, and three different wetland types. One of these is a black ash swamp, an endangered habitat due to the effects of the emerald ash borer beetle. In our site visits we have documented eight species at risk on this land, including the five-lined skink, monarch butterfly, and painted turtle. However, habitat features indicate that up to 13 additional at-risk species are likely to benefit from its protection.

Wetlands like those at the Christenson Nature Reserve are at the heart of Georgian Bay's ecology, and are the reason we enjoy a healthy environment, abundant wildlife, and clean fresh water. We are so grateful to this property's donors for choosing to protect this essential part of our landscape.

Black Ash Swamp

The black ash is one of five native ash species in Ontario, known for its corky bark, yellow fall leaves, and wood that separates easily into strips for basket-weaving. It grows most often in wet areas, and when it is the dominant tree, it forms its own wetland type: the black ash swamp. These swamps provide important habitat to breeding birds and other species. Twenty-five percent of the black ash's global range is in Ontario.

The black ash was added to Ontario's endangered species list in 2022, due to the spread of the emerald ash borer (EAB), an invasive beetle that is slowly making its way through the ash population of North America. The EAB lays its eggs under the bark of ash trees, where the larvae then hatch and feed on the tree. The vast majority of ash trees affected by the EAB die within a few years. Unfortunately, it is expected that most of North America's mature ash population will succumb as the beetle spreads. The black ash appears to be particularly susceptible compared with other common ash species.

There is concern that as black ash die, the wetlands they dominate may experience permanent ecological change. Ontario's recovery strategy for the black ash emphasizes the importance of conserving healthy populations wherever possible, in order to maintain a seed back for future restoration. We will continue to monitor the health of the black ash swamp at the Walter T. Christenson Nature Reserve and undertake future stewardship actions as necessary.

Cooper Cliffs

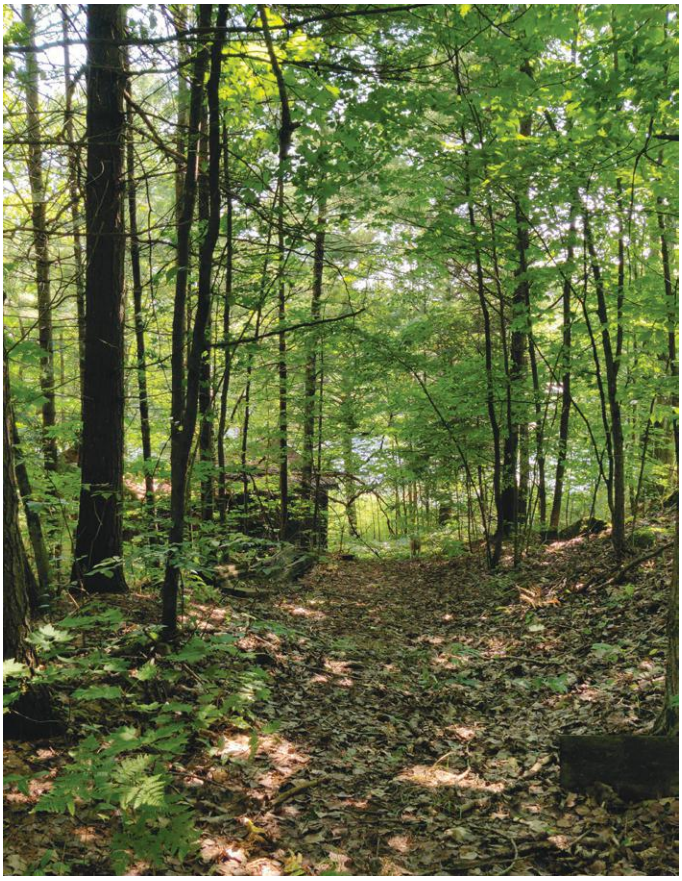
2 acres – Go Home Bay – donated by Wendy Camirand

Cooper Cliffs is a 2-acre property located along the Go Home River, donated to the Land Trust in a bargain sale agreement by Wendy Camirand. It contains classic Georgian Bay mixed forest and rock barrens, as well as small coastal and interior wetlands.

This property is a unique acquisition for us, in that it is located in close proximity to other cottage development and has the potential to include a local base for staff accommodations and research as the Land Trust grows. Our intent is to manage the property to protect natural features and carry out restoration, with the option to build a permanent base for the organization if and when the time is right.

Thank you Wendy for your generosity in contributing to the Land Trust's work in this important way!

Are you interested in exploring conservation options for your property? **Visit gblt.org/landowner** to learn more.



Welcome to our new LandScript Editor, Tory Cadotte

We are very happy to introduce LandScript readers to our new volunteer Editor, Tory Cadotte!

Tory is a lifelong cottager in the Sans Souci area, whose summers now involve exploring Georgian Bay with her kids, and volunteering as Program Director with the Sans Souci and Copperhead Association.

Tory has spent much of her career in healthcare administration where she has been involved in creating communications and outreach materials to improve patient care. One of her little-known skills is being able to identify plant and tree species, thanks to her undergraduate degree in environmental anthropology and forestry.

Tory's combination of skills and passion for the Georgian Bay environment make her a perfect fit for the role of LandScript Editor, and we are thrilled to have her on the team!

Thank you Andy!

This June marked the retirement of our longest-serving board member, Andy Fabens.

Andy joined the Land Trust board in 2006, bringing legal expertise and a passion for Georgian Bay to our work. He has been a thoughtful and committed Director ever since, and a reliable presence on the other end of the phone at board meetings.

Andy's family cottage is in Nares Inlet, and he has been a helpful liaison between the Land Trust and the Bayfield Nares Islanders Association, on whose board he also served. Andy has also been Lead Steward of the Thomson Reserve for many years, helping us care for this unique and beloved property in the community.

Andy will continue his other important volunteer work, including leading the Great Lakes Basin Conservancy, an American organization supporting conservation on the Great Lakes.

Thank you Andy for your years of service and your commitment to the Bay we all love!

Moth Species of the Eastern Coast of Georgian Bay

by Stefani Matis, Conservation & Protected Areas Assistant, Georgian Bay Land Trust

Georgian Bay, with its stunning landscapes and diverse ecosystems, is home to a variety of moth species that captivate naturalists and enthusiasts alike. This summer, the Georgian Bay Land Trust field staff spent some of their free time observing and learning about these beautiful insects.

Using a bucket trap built by summer research student Tyson Shank, the team was able to document a total of 330 species at the research field station. The trap was made from a funnel and a blacklight attached to a bucket, with layers of egg cartons inside to give the moths somewhere comfortable to hide. Since the majority of our local moth species are nocturnal and attracted to light, the trap was left out in the forest overnight and collected in the morning. Disassembling the moth trap was like opening a present on Christmas morning; we would all gather around anxiously to discover what species we were able to attract overnight! Photos were quickly taken before releasing each individual back into the wild and starting the process of identifying each species using field guides and the iNaturalist app.

Photo: Tyson Shank

Here are ten notable species we observed this summer:

Lettered Habrosyne Moth *(Habrosyne scripta)*

Photo: Stef Matis

The lettered habrosyne moth is a distinctive species found throughout North America that gets its name from its mottled grayish-brown forewings that resemble scribbles or letters. The caterpillars, often green or brown and flat in shape, feed on raspberry and blackberry leaves.

American Lappet Moth *(Phyllodesma americana)*

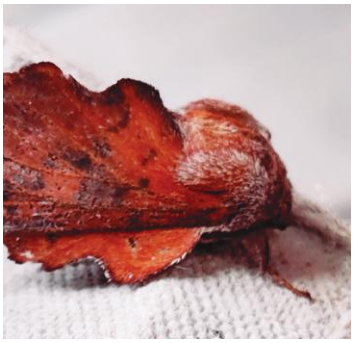


Photo: Stef Matis

The American lappet moth gets its name from the edging of its unique wings. At rest, its forewings fold upward, giving it an interesting triangular shape when viewed from the front. These characteristics help camouflage the moth, giving it a leaf-like appearance.

Io Moth *(Automeris io)*

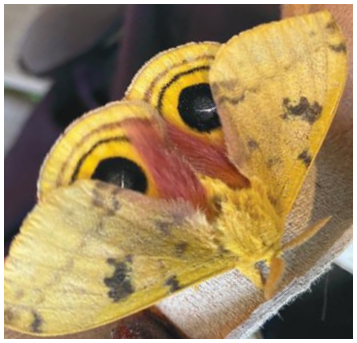


Photo: Tyson Shank

The io moth is known for its stunning yellow wings adorned with distinctive eye spots, which act as an anti-predator defense mechanism. Predators may be startled by a sudden reveal of the eye spots as they mimic the eyes of a larger animal, giving the Io Moth a chance to escape. These spots also serve as a 'false target' causing predators to strike their wings rather than the vital parts of the moth's body.

Scarlet-winged Lichen Moth (*Hypoprepia miniata*)

Photo: Tyson Shank

The scarlet-winged lichen moth is known for its striking red wings that contrast beautifully with its dark body. This bright colouration serves as a warning signal to predators that they are unpalatable and toxic to eat. They can be found in woodlands and lichen-covered habitats, often resting on tree trunks, rocks or lichen-covered surfaces. This moth's larvae primarily feed on lichens, making it an integral part of ecosystems along the eastern coast of Georgian Bay.

Virgin Tiger Moth (*Apantesis virgo*)

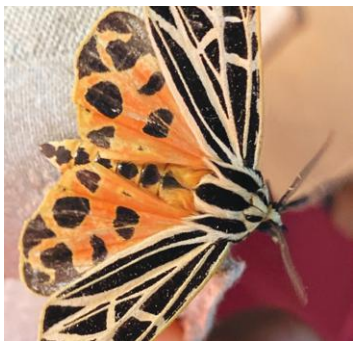


Photo: Tyson Shank

One of several similar looking tiger moth species, the virgin tiger moth is notable for its pale yellow-orange wings adorned with slanting lines and black 'cutouts'. Its hindwings are reddish-orange with bold black spots. Like other tiger moth species, its caterpillars are fuzzy with many spiky hairs which can make them difficult to touch.

Blinded Sphinx (*Paonias excaecata*)

Photo: Tyson Shank

With a wingspan of 3-4 inches and vibrant pink hindwings featuring bold eye-spots, the blinded sphinx was a notable addition to our summer moth counts. This species' caterpillars, like many other sphinx moths, bury into soil or leaf litter to pupate. There, they spend the winter in their cocoons where they undergo metamorphosis, emerging as fully formed nocturnal pollinators in the late spring/early summer.

Banded Tussock Moth (*Halysidota tessellaris*)

Photo: Stef Matis

A frequent visitor to our moth trap, the banded tussock moth is known for its soft, fluffy appearance with beige-brown wings featuring darker bands edged in black. It also has distinctive blue-green lines on its thorax. With a wingspan of about 1.5 to 2.5 inches, this moth is commonly found in gardens and fields, particularly where its host plants, such as birches and willows, are abundant.

Modest Sphinx (*Pachysphinx modesta*)

Photo: Tyson Shank

The modest sphinx is a fascinating species known for its robust body and impressive wingspan of 3 - 4.5 inches. This moth is typically found in woodlands, where its larvae feed on various plants, including poplars and willows. Its subtle colouration helps it blend into its environment, making it a master of camouflage.

Pale Beauty (*Campaea perlata*)

Photo: Tyson Shank

The pale beauty is a light green moth, with two lines running across its wings. It is an adaptable species that feeds on a wide variety of trees and shrubs, and is found across most of Canada and the United States. Its caterpillars have a built-in antifreeze that allows them to survive arctic winters. These caterpillars are also known as fringed loopers, referring to the "fringe" that hangs down by their legs to help obscure their shadow and increase camouflage, and "looper" describing the inchworm-like way it walks.

Basswood Leafroller Moth (*Pantographa limata*)

Photo: Stef Matis

The basswood leafroller moth's fascinating behaviour is reflected in its name. The caterpillars of this species feed exclusively on leaves from basswood trees, which they roll up into little shelters for themselves. The caterpillar constructs its shelter by making a series of small cuts in the leaf, and stitching them together with silk. The adult moth's wings have a distinctive pattern of purplish-brown lines and splotches on a light background, with a faint metallic sheen.

If you would like to see more photos and information about the moths we observed this summer check out our "GBLT Cottage Moths 2024" project on iNaturalist. Happy mothing!

Georgian Bay **QUERY:**

How is light pollution impacting the Georgian Bay environment, and what can we do about it?

The glowing sky of southern Georgian Bay can be seen in this 20-second exposure taken from the Lizard in Cognashene. Photo by Sarah Koetsier

Imagine walking outside at midnight in Toronto, and seeing the milky way. Until the 20th century, this miraculous sight was an ordinary part of life even in the world's major cities. Now, what was once a universal experience has become a precious commodity, experienced by only a lucky few.

Over the past 100+ years, a steady increase in artificial outdoor lighting has led to unprecedented levels of light when there should be dark. The World Atlas of Artificial Sky Brightness, published in 2016, estimated that 80% of the world's population, and 99% of North Americans, live in light polluted places. And a 2023 study comparing data from citizen science observations around the globe found that over the past decade, the average amount of artificial light in the night sky has increased by up to 10% per year.

For so many reasons, those of us who get to spend time in the Georgian Bay area are extremely fortunate. The ability to see a sky full of stars is one of them. But even here, nighttime light levels are increasing, as nearby cities grow and people everywhere install newer, brighter lights. What does this mean for wildlife, and for ourselves?

For wildlife, it's important to realize that light pollution is habitat destruction. Most animals, plants, and insects depend on dark spaces, for mating, feeding, rest, regrowth, or internal regulation. When light invades these places, lifecycles are disrupted. Imagine how you would be affected if there was a bright light on in your bedroom every night.

In the case of frogs and toads, artificial light can change their patterns of nighttime mating calls. Bats change their hunting habits based on light, and many nocturnal mammals move through the landscape differently. Prey animals who rely on darkness for safety may come out and feed less.

Moths are a classic example of creatures affected by light, and the increase in outdoor lights has scientists seriously worried about the future of their populations. A single light can attract hundreds of moths and other insects, who may be killed from the heat or become easy targets for predators. As the world's insect population steeply declines, the more we can protect insects from this danger the better.

Large-scale light pollution from cities and other bright areas is well-documented to impact bird migration. Most birds migrate at night, and can find themselves drawn off-course and into glowing cities, where they must then navigate a dangerous urban environment. An Environment Canada study found that approximately 25 million birds are killed flying into buildings each year in Canada, and most of this happens during spring or fall migration.

Plants are impacted by light pollution too. Just like animals, the amount of light and dark that plants are exposed to influences a multitude of internal processes. Since plants don't move, even individual lights can have a big impact. Studies have shown that trees growing near streetlights tend to flower sooner in the spring, and hold onto leaves later in the fall. Both of these

changes can make the tree more susceptible to frost damage. Light can impact plants' leaf and root development too, and make them more vulnerable to stressors like pollution or drought. Excess light in an area can also change the overall ecology of the habitat, as some plants will survive and multiply under constant light while others will suffer.

Last but not least, light pollution has human health implications. Our exposure to light and dark governs our circadian rhythm, which regulates hormones including serotonin, cortisol, melatonin, and dopamine. Studies have linked light exposure at night to increased rates of depression, cancer, insomnia, diabetes, heart disease, and possibly Alzheimer's disease.

Light pollution is concerning, but the great thing is that it's easy to make a difference. Just by changing how you use lights on your own property, you can have an impact on the plants, animals, and humans living in your immediate vicinity. And if we all get on board, we'll see the difference in the sky too.

So, what are the best practices for Georgian Bay residents and cottagers who want to be responsible with their lighting?

If your municipality has any local bylaws or regulations around lighting, you can start by familiarizing yourself with them. Georgian Bay Township introduced a Dark Sky bylaw in 2022, and several municipalities have guidelines around light in their zoning bylaws.

In general, outdoor lighting should follow the five guidelines laid out by DarkSky International in the graphic below, and be: useful, targeted, low level, controlled, and warm-coloured. Some specific ideas for Georgian Bay:

- **Switch your outdoor lights on only when you're using them, or put them on a motion sensor.** With the exception of lights marking navigational hazards like docks or markers, most outdoor lights do not need to be on all night.
- **Use lights that are shielded and aimed only where they're needed,** rather than shining out into the sky. Just by reducing the amount of wasted "spillover" light, we could have a significant impact on light pollution.
- **Consider the purpose of your outdoor lights**. Lighting used for decorative reasons can be pretty, but can also detract from the natural beauty of starlight and moonlight. If you do have decorative lights on your property, turn them off when you're no longer outside to enjoy them.
- **Look for lights with low-level and warm-coloured light.** Blue-white light is 5x more disruptive to circadian rhythms and tends to be significantly brighter than yellow light.

Most of these ideas can be applied in urban or suburban environments as well – if you're a cottager, you can think about this at home too! Much of the light that we've become accustomed to in the last few decades is not really needed, and a few simple changes can make a big difference in preserving the beauty and benefits of dark nights.

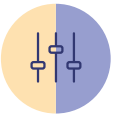
We are very lucky that in Georgian Bay it is still possible to see a sky full of stars. Let's all do our part to honour the dark and the wildlife around us.

Five Lighting Principles for Responsible Outdoor Lighting

DarkSky

IES Illuminating Engineering Society

Responsible outdoor lighting is

1 Useful	**Use light only if it is needed** All light should have a clear purpose. Consider how the use of light will impact the area, including wildlife and their habitats.	
2 Targeted	**Direct light so it falls only where it is needed** Use shielding and careful aiming to target the direction of the light beam so that it points downward and does not spill beyond where it is needed.	
3 Low Level	**Light should be no brighter than necessary** Use the lowest light level required. Be mindful of surface conditions, as some surfaces may reflect more light into the night sky than intended.	
4 Controlled	**Use light only when it is needed** Use controls such as timers or motion detectors to ensure that light is available when it is needed, dimmed when possible, and turned off when not needed.	
5 Warm-colored	**Use warmer color lights where possible** Limit the amount of shorter wavelength (blue-violet) light to the least amount needed.	

Rev. 08-2023

Summer Research Update

By Jacqueline McLean and Tyson Shank, Summer Research Students, Georgian Bay Land Trust

In 2023, the Georgian Bay Land Trust launched several research programs with goals to better understand some of the species cottagers have a unique opportunity to see on the Bay. This summer was year two of our prairie warbler and eastern whip-poor-will studies. Research students Tyson and Jacqueline collected data on the territory size of prairie warblers, and the habitat use and nest site selection of eastern whip-poor-wills. Along the way, key milestones were achieved, and important lessons were learned!

Prairie Warblers

Continuing from last year's efforts, a total of 17 male prairie warblers were trapped and fitted with radio transmitter tags this summer to track their locations. One individual was a recapture from last summer, providing exciting evidence for males returning to the same breeding grounds in the Georgian Bay area. Of the total 17 birds captured, 12 wore tags designed to emit radio signals during daylight hours and were tracked using a handheld receiver and antenna by our summer students. The other five birds wore tags that emit signals at night and were detected by nearby Motus towers.

We collected 160 data points from the tagged birds including the discovery of three nests, multiple fledglings, and some interesting behaviours! Prairie warblers have typically been observed on island edges in dry areas with lots of common juniper, however one tracked bird was found to be frequenting a wet thicket swamp on most days. The reasoning for this is not yet understood, but it goes to show why understanding these birds' territories is important to their conservation. Additionally, two male birds were seen a few times in close proximity to each other, appearing non-aggressive while near a nesting female! Nesting birds are typically quite territorial, but this marks the second year in a row where prairie warblers have been seen near another individual's nest without any aggression.

Eastern Whip-poor-wills

This year saw a lot of advancement in our eastern whip-poor-will project, marking the first year radio tags were deployed, activity of individuals was tracked, and nests were found. Eight radio transmitter tags were deployed, allowing us to track these birds' movements. Both daytime and nighttime tracking were performed, with data being collected on the areas these nocturnal birds roost in during the day, as well as the areas they frequent at night for singing and foraging. Early results included some unexpected observations, including several instances of whip-poor-wills roosting in very wet swamps, as opposed to drier forests. On other occasions, the birds were seen roosting as high as 15m from the ground, high in the forest canopy, which was much higher than what has previously been described by other studies.

Vegetation surveys were also performed around two eastern whip-poor-will nests in order to identify key features which may influence nest site selection. This included compiling

A male prairie warbler newly fitted with a radio tag. Photo by Jacqueline McLean

Eastern whip-poor-will banding. Photo by Jacqueline McLean

a list of nearby vegetation, and taking measurements of vegetation height and canopy cover. Plant communities within a 250m radius of each nest were also mapped and classified as a more broad-scale approach to study territory selection.

Overall, this summer saw many new insights into the behaviour and territory usage of prairie warblers, and the habitat use and nest site selection of eastern whip-poor-wills in the Georgian Bay area - an understudied segment of both of these birds' breeding ranges. The discoveries by the Georgian Bay Land Trust research programs offer important insights on how to further protect and support the landscape and unique flora and fauna that call Georgian Bay home.

The tracked location of an eastern whip-poor-will roosting 8m high in a Balsam Fir.
A) Photo depicting the roosting location without any visual aids. Photo by Tyson Shank. B) A zoomed-in photo showing the sleepy tagged male. Photo by Jacqueline McLean.

One of our summer research students, Tyson Shank, tracking tagged prairie warblers. Photo by Jacqueline McLean

Prairie warbler banding. Photo by Jacqueline McLean

Georgian Bay
Snapshot

The Lizard
By Fran Stephens

This image was captured by Summer Conservation Intern Fran Stephens while out on her property stewardship work. Conservation Interns are an indispensable part of caring for our busiest visitor properties and supporting summer events and fieldwork. Thank you Fran and Victoria who did this work so well this summer!

Join us at Bayscapes!

We are looking forward to welcoming you back to Toronto's Wychwood Barns for Bayscapes! Join us for an evening celebrating Georgian Bay with art, entertainment, and friends old and new.

And once again, you'll be able to bid on the amazing paintings, photographs, items and experiences in the online auction from anywhere in the world!

Bayscapes will take place on Friday, November 22nd, from 7-10 pm at the Wychwood Barns (601 Christie Street, Toronto). The online auction will be live from November 15-23.

Visit **gblt.org/bayscapes** for details and tickets.

TributeGIFTS

Received from May 2 – September 23 2024

In Memory

Beverley Ballantyne
R. Noel Bates
Samuel A. Beauregard
Fred Beck
Sean C. Belshaw
Arthur Halpenny
Dora Louise Halpenny
George Stanley Hamilton
Cliff Harding
Bill Holton
Laurie Hornell
Marilyn King
Charles Wallis "Wally" King
Madelon Macleod
Catherine Coleman Percival
Bill and Jan Trimble
Heather J. Trusler
Terry Ukrainec
David Yule

In Honour

Douglas Alexander
Fred Beck
Wendy Cadman
Marnie Griggs
Sandy M. Swick
Deb Woods

FALL 2024

CONSERVATION LEADERSHIP

gblt.org

PROTECTING GEORGIAN BAY'S WILDERNESS LANDS

A CONSERVATION PLAN FOR
75,000 acres AND **50 species at risk**

20+
Community events each year

2,000
annual visits to recreational community properties

17
RESEARCH projects hosted on our properties

14
BIRD-TRACKING stations in our network

9,826 acres
of protected natural areas

32,900 acres
protected through other conservation measures

10
provincially significant wetlands

500+ species
monitored through property inventories

130+
PROPERTY STEWARDS

Sponsors

Thanks to our generous sponsors

GEORGIAN BAY Spirit Co.

TATHAM ENGINEERING

Georgian Bay Land Trust
120 Eglinton Ave. E., Suite 1000
Toronto, ON M4P 1E2
gblt.org | info@gblt.org | 416.440.1519

The Georgian Bay Land Trust acts to preserve the wilderness lands of eastern Georgian Bay and the North Channel through strategic conservation planning, land securement, stewardship, conservation research, and education.

LandScript Editor
Tory Cadotte
landscript@gblt.org

Executive Director
Bill Lougheed
bill.lougheed@gblt.org

Conservation Director
Aaron Rusak
aaron.rusak@gblt.org

Corridor Project Ecologist
Adam Grottoli
adam.grottoli@gblt.org

Senior Development Officer
Janet Brough
janet.brough@gblt.org

Communications Director
Sarah Koetsier
sarah.koetsier@gblt.org

Conservation & Protected Areas Assistant
Stefani Matis
stefani.matis@gblt.org

Office Administrator & Executive Assistant
Suzanne Legault
suzanne.legault@gblt.org

We are a registered Canadian charity (#13195 8811 RR0001)