LANDSCRIPT
preserving our unique archipelago
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www.gblt.org

The Ecological, Economic and Tax Benefits of Conservation Agreements

by Bill Lougheed, GBLT Executive Director

Ecological Benefits

There is more than one way to protect wilderness. A Conservation Agreement is a very important conservation tool that every landowner or conservation supporter should know about. Each of us can play his or her part in protecting Georgian Bay's coast with its white pine, red oak and hemlock forests, its critically important wetlands, its geologically important expanses of exposed Canadian Shield, its rare and not-so-rare plants and animals, and perhaps most importantly its open spaces and wilderness places.

The species *Homo sapiens* is sometimes not mentioned when the preservation of species and habitats are discussed. This is an unfortunate oversight. Our place in, and enjoyment of, wild places is of critical importance. With a good balance between development and conservation, terrestrial expanses are preserved and respected. We all benefit; the physical and psychological effects of unspoiled wilderness are transformative. These very positive effects of nature on human health (including longevity) have been documented through peer-reviewed scientific studies. No small benefits from nature!

Some context with regard to land conservation's role on Georgian Bay: our eastern shore is an extremely tortuous archipelagic coastline, and has a total coastal length of more than 5,300

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Howard Easement

kilometres. This necessarily means that water and air quality within our world's largest freshwater archipelago depends upon the health and integrity of this massive *terrestrial drainage area*. This requires healthy forests, healthy and diverse vegetation and open ground to filter precipitation and store moisture, to filter precipitation-bound air pollutants, to provide carbon sequestration, and to regulate run-off.

Thankfully, landowners in Georgian Bay continue to pursue Conservation Agreements (CAs or Easements) and thereby retain ownership while protecting their property's natural space beyond their lifetimes. This legacy is attached to the deed and so passes on to heirs and all future owners of the property. The action benefits neighbours, communities and regions. While CAs ensure that the landowner (and future landowners) remain(s) full and sole owner of the property, the CA provides entrusted conservation protection. That portion of property covered by the agreement (easement) can never be altered by types of development that may cause harm to the natural attributes or conservation values of the property. Public access is not allowed unless permitted by the original landowner and specified in the CA. In return for the public good provided by "green space conservation" the governments of Canada, New Zealand, the USA and Australia provide financial benefits to those who choose Conservation Agreements as a means to preserve open spaces and natural places.

Some History

CAs are grounded in 200 years of British Common Law. In North America, the US led the way via the Tax Reform Act of 1976 and the Tax Reduction and Simplification Act of 1977 that provide tax benefits for gifts of Conservation Easements to promote conservation in the United States. In Ontario, Conservation Agreements (Easements) were given legal authority through the Conservation Land Act, RSO 1990, c.28.

The number of CAs has grown exponentially in the US over the last two decades. As of October 2014, 105,883 American landowners had protected 22,204,790 acres of land through Conservation Agreements on all or part of lands they own. At least 1,370 CAs have been registered by recipient agencies on about 350,000 acres of private land in Canada. In Canada, the majority of CAs have been used to ensure biodiversity and in a lesser role to protect farmland and ranch land. The Nature Conservancy of Canada recently completed a Conservation Agreement protecting the largest intact native fescue grassland remaining on the eastern slopes of the Alberta Rockies involving some 30,500 acres.

Each Conservation Agreement's terms are tailored to fit the particular property, the natural features to be protected, and the interest of the landowner.

Tax Benefits

The principal benefit of a Conservation Easement is that it helps preserve the conservation values on your land. Think of it as a managed forest plan and beyond. But it can also relieve you of certain income taxes, depending upon your particular circumstances.

CAs are gifts. The donor is recognized under both Canadian and American tax laws. When a Conservation Easement is donated to the GBLT, we issue a tax receipt for the fair market value (FMV) of the CA. This value is determined through an appraisal by a Certified Canadian Appraiser. The FMV of the CA can be used to reduce personal income tax over a period of up to 10 years (applies to both Canadian and American owners). The FMV of the CA can also be used to reduce capital gains when selling or passing along to offspring. You may be able to claim your donation against a larger portion of your income if your CA protects lands that qualify as "ecologically sensitive" under the Ecological Gifts Program. Georgian Bay's Eastern Coast designation as a UNESCO Biosphere Reserve has helped, and our experience has been that the vast majority of land parcels we have dealt with qualify under the Ecological Gifts Program.

Economic Benefits

Studies consistently demonstrate that more balanced residential development that includes the preservation of open space helps reduce a community's overall tax burden. On average, municipalities and townships with more open space have lower taxes than communities with more residential development and fewer natural spaces.

Examining the cost of community services is a yardstick used by analysts to evaluate the fiscal impacts of different types of land use. These analyses weigh anticipated economic benefits from various forms of development against the cost of delivering services and supporting infrastructure, such as roads and schools. These studies conclude that converting open space to residential development almost always costs more in supporting new required services than the community can expect to realize in taxes and other benefits.

Although only indirectly applicable to us, a survey by the National Association of Realtors (USA) found that 50 percent of buyers would be willing to pay 10% more for a house near a park or protected open space. Open spaces mean retained or increased property value.

Protecting open space, including privately owned natural lands, provides numerous economic benefits to Georgian Bay. Townships that conserve natural spaces promote economic growth, increase revenues from recreation, reduce tax burdens, allow for better and more reasonably balanced infrastructure spending, and most importantly, foster healthier lifestyles.

In closing, Conservation Agreements are a gift that benefit all and are a means to protect Georgian Bay forever.

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Property Spotlight: The Thomson Reserve in Nares Inlet

by Molly Mulloy, Thomson Reserve Steward

Robert Thomson, the last of the Pat Thomson family and a fixture in Nares Inlet since the early 1920s, recently made his final generous bequest to the GBLT. This seventh parcel of land brings the total Thomson Reserve to 15 acres, and encompasses virtually all the privately owned land on the southern shore of Nares. The Thomson Land Trust property, adjacent to the Pointe au Baril Conservation Reserve, consists of both islands and mainland, and is rich in biodiversity.

Thomson coastal wetland

The property contains representative examples of open and treed rock barrens, interior wetlands and forests, and coastal meadow marshes. Rare and significant flora communities are found in many sections of the Reserve. The island has a variety of vegetation including mature pines, a cedar grove, birch and other tree species, poison ivy, native shrubs, berry bushes, and wildflowers. Thomson Trust shorelines have varied littoral zones ranging from rocky outcrops to mucky bays to marsh offering a significant array of eco-zones and ideal habitat for many species, including a number of "at risk" reptiles, nesting and migrating birds, mammals, and a large number of plant species. The recent bequest also includes the signature white house and surrounding buildings where Mrs. Pat, as she was fondly known (actual name Anne Darsie Thomson) spent many summers raising her three boys Tom, John, and Robert.

Around the house, rose bushes, trees, and lilacs line pathways. Beyond the house, the property is largely bare and rocky with lichen, wildflowers, berry bushes, shrubs, and sparse stunted deciduous and coniferous trees. Reefs finger out toward the open, separated by tiny inlets lined with wetland plants including cranberry, fall orchids, sedges, and sundew.

On the southeast side of the main island is a protected bay harbouring a significant water lily and cardinal flower wetland, beautiful mature white pines, and two small rocky pine-treed islands. Heading inland, the high gneiss shoreline of the large tract of mainland is lightly tree-covered, and the southern shores have deep swales containing wetland species.

Further inland, on the western side of a two-fingered bay, is a large round peninsula with open bedrock shoreline containing cedar thickets, oak and pine forest, and a small bog. The property's western shoreline borders the boat channel, across from a little island, also left to GBLT. Habitat for beaver, mink, and otter is nestled in a marsh behind, with dams, a lodge and numerous wetland species.

Throughout the property, signs of moose, mink, otter, beaver, fox, and the occasional wolf and black bear indicate that a variety of mammalian wildlife frequent this area. Patient naturalists may sight many rare and threatened reptiles, including the Eastern foxsnake, Eastern Massasauga rattlesnake, five-lined skink, and a variety of turtles and frogs.

The Thomsons were generous contributors to Nares life, welcoming all to their well-used paddle tennis courts and Sunday church services on their front porch. The Thomson brothers' love of the inlet and their neighbours is evident in the many enduring gifts given to Nares families—ranging from memories of adventures and scavenger hunts, to pocket knives, binoculars, kayaks, and wood working tools. John, a scout leader, spent hours teaching children the intricacies of archery, orienteering and knot tying. Tom was an expert in local botany and compiled a booklet of wildflowers. This interest was shared by Robert who transplanted many trees and maintained a garden outside the cottage. The brothers were avid readers and devout Christians. In latter years, their Nares summers were made possible by devoted help from Daniel and Joanna Werner and family, who are from one of the original Nares Inlet clans.

The Thomsons' significant gift of land creates a fully protected eastern shoreline in Nares Inlet. Preserved in perpetuity by the GBLT, this generous gift is a great example to all who care about Georgian Bay and the preservation of its natural habitats for future generations.

Congratulations to our King Family Bursary Winners

by Sarah Matthews, Honey Harbour

In February 2015, the GBLT had the honour of awarding the King Family Bursary to two talented individuals: Kendall Flower and Jillian McDonald. 2015 is the second year of the bursary program and over 50 applications were submitted from visual artists, scientists, musicians, and authors. The bursary application submission parameters were projects that further advanced the GBLT's mission of promoting appreciation of the eastern shore of Georgian Bay and its unique environment, and each winner was awarded $3,500 to put toward completing her proposed project. Thank you to the 2015 jurors: artist Ed Bartram, author Andrea Curtis (2014 GBLT bursary winner), and GBLT board member Peter Koetsier. Additional thanks to artist John Hartman for his guidance to the Bursary volunteer team.

Kendall Flower

Kendall Flower is an accredited landscape architect with professional expertise in the areas of ecological restoration, design for sites and low impact development technologies, and community engagement. As the final component of her Masters in Planning degree with the University of Guelph, Kendall's project will explore, evaluate and propose alternative models to the relationships between policy, governance and conservation in the Georgian Bay Littoral Biosphere Reserve.

Kendall's Statement:
It's a wonderful honour to be a recipient of the King Family Bursary. Georgian Bay has brought an incredible amount of enjoyment to my life, influencing my choices in professional direction, academic focus and recreational interests. I hope that that this project will mark the beginning of my contribution back to the bioregion, toward its long-term conservation and management.

Jillian McDonald

Jillian McDonald is a Canadian artist who divides her time between New York and Canada. She is Associate Professor of Art at Pace University. For her project, Jillian plans to conduct research on Georgian Bay and produce an artwork titled *Spirit Lake*. She will spend time in the region exploring legends and oral histories and gathering video footage in order to create a multi screen video portrait of the Bay, haunted with its spirits of land and sea; nature's remarkable and unexplainable forces.

Jillian's Statement:
It is an opportunity of a lifetime to work in the iconic Canadian landscapes of Georgian Bay, made famous and unforgettable by the Group of Seven. Once called both "Calm Sea" and "Spirit Lake", Georgian Bay is made extraordinary by its snaking granite rock formations carved by glaciers, a sprinkling of lighthouses, endless islands, its bio-reserve, windblown whispering pines, and the various flora and fauna of the eastern and northern shores. I anticipate many opportunities to show the "Spirit Lake" work publicly and internationally, both through exhibitions and screenings and lectures.

Welcome Jason Wagar, Director of Development

by Bill Lougheed, Executive Director, GBLT

The GBLT is delighted to welcome Jason Wagar to our team. In Jason we have found a high-achieving and able Director of Development.

Jason holds a Masters in Charity Marketing and Fundraising from the Sir John Cass Business School at City University London, and comes to us after three years as the Senior Manager of Individual Giving and Foundations at the Toronto International Film Festival (TIFF). A Certified Fundraising Executive (CFRE), he is an Instructor of Fundraising at Ryerson University and has previously worked as the Manager of Donor Services and Marketing with the Toronto Foundation.

Jason's personal experience with land trusts began when his cottage community on Lake Ontario joined together to save a large parcel of land from development. He was inspired by the process and has become a firm believer in the role of land trusts and philanthropy in land preservation. Jason also has professional experience in the area, having worked with two land trusts to establish and grow their endowment funds during his time with the Community Foundation for Kingston and Area.

Development work builds an organization's ability to grow and to raise money. It is a profession requiring skills that interweave: resource research and analytics, brand building, formulating a sound, relevant and on-target Case for Support, designing strategic messaging, managing and building personal relations, and conveying a charity's mission in a personal way to others. Appealing for money is only one part of the skill set and work load in the cycle of fundraising. Giving comes from all the work leading up to the gift. Jason has the education and the work experience to fill this big role.

Jason started with the GBLT in May, and is looking forward to meeting many of you throughout the summer. We're thrilled to have him with us and look forward to the talent, energy, and expertise that he will bring. Please join us in welcoming Jason to the GBLT!

2015 Grenville Volunteer Award Winner – Tom Scoon

by Janet Lougheed, Go Home Bay and Geordie Dalglish, Pointe au Baril

A man who always has time for the GBLT; a man who has always understood the need to make friends and to hear their counsel; a man who knows how to make things happen.

Every year we struggle to choose a Grenville Award recipient from among our 300 generous and committed volunteers. There is one though who is truly a standout.

Tom Scoon assumed a leadership role with the GBLT the moment he started in 2004. At various times Tom has served as Board Chair, Land Protection Chair, Stewardship Chair and as an Advisor and a Steward. He really is the man for all reasons.

Land

"I believe land acquisition for protection is the number one role for the GBLT". Tom in fact marshalled his own neighbours to jointly donate their property in Laura Bay. With our first executive director Wendy Cooper, Tom penned the first policy for the GBLT on acceptance of land. He chaired the Land Protection committee for over 10 years. Tom started the neighbourhood land protection committees working within the shore communities to identify local land protection (land donation) opportunities. Tom worked with Wendy Cooper to organize meetings with local groups of realtors and lawyers to promote awareness of the GBLT and outline the GBLT role in land protection on the Georgian Bay.

Stewardship

Tom also chaired the Stewardship committee and crafted the first stewardship policy. He understands our long-term responsibility to look after land once acquired. The original policy outlined how we take care of our properties, and the process for steward reporting. Tom has been a steward for over 10 years for his donated Pointe au Baril property.

Fundraising

As a fundraiser, Tom engaged every friend he had to donate. Tom managed to land a major gift from a non-Georgian Bayer for the Sandy Island project. In concert with Ian MacLeod, Tom raised over 1 million dollars towards the Little McCoy acquisition, and was a major donor himself. Tom was one of the original members of the "Leaders of the Bay" program in which a donor commits a major gift over a 5-year period.

Friend

Tom has picked up and taxied many visitors in the Pointe au Baril area. With his wife Pamela, the Kernaghans and the Kopas, Tom hosted a GBLT cocktail "awareness" event at the Ojibway Club, then another a few years later at his cottage. He gave Joseph Hartman his boat to take photos of Little McCoy for the donor book. He has hosted visiting photographers, Wendy Cooper and various GBLT volunteers while they work on the Bay. Tom is a consistent attendee at all GBLT events, but in particular the photography and art auctions. Tom has always bid on and purchased art in support of the GBLT. We must also recognize Pamela who has supported Tom through all of these activities and has juggled her personal schedule to accommodate the many demands the GBLT has made of him.

Tom has been invaluable to the GBLT for his endless passion for the land, for his financial help, and for providing his time and assistance when needed for any project.

We are fortunate to have Tom Scoon on our side in conservation. Energetic, creative and committed, Tom leads by example and his dedication has helped preserve countless wild places.

Thank You to our Editor, Cathie Bowden!

For the past eight years it has been our privilege and good fortune to have Cathie as our *LandScript* editor. She is stepping aside after production of this current issue as positive new life changes have altered her availability. We are very fortunate to have Laura Sunderland, also from Cognashene, join the team as a volunteer to take over at the helm, starting this summer.

Cathie insisted on accuracy in grammar, spelling and punctuation, and the *LandScript* has benefitted enormously from her requirements for correctness. Aside from the purely technical, Cathie also had a terrific eye for layout, graphics, and photos. She was able to conjure up in her mind's eye how an issue would look and read even when she had little more than article topics and page allotments. This has been a huge asset to staff scrambling for content.

Cathie ushered in many changes during her tenure: she changed newsletter production from 3 compact issues per annum to two larger and more complete ones, she introduced several regular column features, and we went from monochrome ink to full colour. The evolution of the *LandScript* under Cathie's direction has been really quite dramatic; our newsletter is now a genuine professional periodical. The *LandScript* has contributed significantly to the success of the GBLT, and Cathie has been instrumental in much of its production.

From the entire GBLT community, thank you to Cathie Bowden for giving us the best newsletter on Georgian Bay and good luck in your future endeavours!

Georgian Bay Query:
What are the threats presented by Phragmites australis?

By Kristyn Ferguson, Program Director, Georgian Bay-Huronia, Nature Conservancy of Canada

Common Reed is the common name for *Phragmites australis* ssp. *australis*, but throughout North America this villain is commonly referred to simply as "Phrag". If you think you haven't encountered this species before, just turn your head while driving down a major highway or country road in southern and near-northern Ontario. The big, elegant, fluffy-headed grass growing in the ditch is Phrag. It's been named North America's most dangerous invasive species, and it's likely coming soon to a wetland or shoreline near you. This harmful invasive species can form dense monocultures, displacing native plant species, and preventing native bird and reptile species from nesting and living in their usual wetland homes. It moves at a rapid-fire pace to swallow entire habitats within a few short years once it is established in an area. It spreads by both seeds and an underground rhizome system, attacking from all angles. It's difficult to control by the conventional means of digging, pulling or cutting, and typically requires an application of herbicides to eliminate it completely. In Canada, no herbicide has been approved for over-water use to date, so that option is only feasible when the ground under the Phrag is dry, and only by a licensed pesticide applicator with appropriate approvals from the provincial government.

Don't give up hope though! If enough Ontarians (and Canadians, and North Americans) pull together, we can make a dent in this species' forward march and ruthless takeover of our beautiful wetlands and shorelines. The first step is identifying it correctly. Less frequent, but still present, the native species of Phragmites (simply *Phragmites australis*, also known as Common Reed) can be found in similar habitats to its alien cousin. Before you hire a licensed pesticide technician or spend your Sunday hacking down stems from your beach, first figure out which of the two Phrags you have in residence.

One of my favourite resources to use is this technical guide put out by our friends at Michigan State University, where the threat of Phrag is also very acute. You can find the guide here: http://mnfi.anr.msu.edu/phragmites/phragmites-native-non-native.pdf. It advises that the presence of several characteristics (see chart on the next page) will determine if the Phrag you're looking at is native, or non-native.

Young, newly established stands of non-native Phrag can look a lot like native Phrag, with red stems, sparse seed heads and less robust individuals. If you're not sure, check your glumes!

Once you've determined that you have the non-native Phrag on your property, or in a favourite natural area, it's time to think about what steps to take to control it (having ensured that you have permission from the landowner or agency responsible for the piece of land you're interested in, if it's not your own).

If the area dries out later in the season, consider hiring a licensed pesticide applicator to apply herbicides to the plant that will effectively eliminate it after 1-2 seasons (for small patches). If the ground on which the Phrag grows is primarily underwater, you can impact the vigour of the population using a technique known as cutting and flooding. With a simple pair of hand clippers, cut the Phrag stems under the water, as close to the root as you can. This will flood the root system and hinder the plant's ability to thrive. I've observed a population of Phrag that grows in a wet ditch on the border of some significant wetlands, which has been cut and flooded for several years, that is no longer spreading laterally, and is no longer producing seed heads. It is stressed out, to coin a phrase, and a couple of dedicated landowners in the Tiny Beaches area of Nottawasaga Bay are the proud providers of the stress. You too can and should take it upon yourself to battle this invasive species that has put conservation groups, governments, and private landowners on red alert across the continent.

Phrag has been marching into Georgian Bay steadily over the past several years, popping up in a variety of habitats, and landowners as well as conservation groups such as the Georgian Bay Land Trust and Nature Conservancy of Canada (among several others) are sitting up and taking notice. Success in invasive species removal can best flourish in an environment of collaboration, commitment and enthusiasm, and it can start with you, this summer.

LEARN ABOUT AND REMOVE INVASIVE PHRAGMITES WITH THE NCC'S KRISTYN FERGUSON AND THE GBLT

Sunday August 9th, 2015
Arrive at 9:30 a.m. for a 10:00 a.m. start
The session will last until approximately 1:00 p.m.
Sandy/Ingersoll Islands (please see News and Events at www.gblt.org)

CHARACTERISTIC	NATIVE PHRAGMITES	NON-NATIVE PHRAGMITES	NOTES
Density and Size	• scattered stems • other native species present • up to 2 m/ 6.5 feet tall	• dense monocultures • dense thatch of stems on ground • excludes native vegetation • up to 6 m / 20 feet tall	
Seedheads	• sparse	• thick	
Stems	• red and shiny segments along entire stem	• dull and tan	Non-native Phragmites can show some red segments along the rhizomes (running roots)
Leaf Colour	• Yellow-green	• Blue-green	
Leaf Sheaths	• lower leaf sheaths fall off easily	• leaf sheaths cling tightly to stems	The sheath is the bottom part of the leaf that encircles the stem
Ligules	• 0.4–1 mm • more likely to shed and fray	• 0.1–0.4 mm	The ligule is a membrane; an extension of the leaf sheath at the point where it meets the blade. Do not measure fringe of hairs at top of ligule. See illustration in guide; handling a few stems of Phrag will accustom you to measuring ligules
Glumes	• 4-7 mm	• 2.6-4.2 mm	Phragmites seedheads have many branches. Each branch has a number of spikelets, and each spikelet includes a number of florets. At the base of each spikelet are two bracts, called glumes. See illustration in guide. Again, handling seedheads will familiarize you with glumes
Black fungal spots	• Small, round, black spots of a native fungus are found only on native Phragmites	• No round black fungal spots present	Other varieties of dark fungi may grow on the non-native Phragmites, but not the particular fungus that can be a helpful diagnostic for identifying native Phragmites.

A Gift from a Young Conservationist

Earlier this year the GBLT received a kind contribution, accompanied by the note below, from Addison Hartley of Sprucedale, Ontario. We were impressed firstly by Addison's generosity, but also by his developing sense of environmental responsibility.

We need to capture the interest and imagination of Addison's generation to ensure the future good health of Georgian Bay and the planet at large. Thank you Addison for thinking of us, and for the inspiring gift.

Dear Mr. Lougheed,

I learned about you (GBLT) when I offhandedly picked up one of your pamphlets. It was the fox on the front that drew me to it. I had been saving for a charity donation for a while, and when I saw your aims I decided to support your organization.

I spent the first 8 years of my life in Vancouver, and then moved across the country to London ON. I now reside just outside of Sprucedale. I am home schooled by my Mother, and have traveled to England, Brazil, Spain, Italy, Greece, Scotland and Hawaii. I have seen enough of the world to know the importance of saving the most beautiful parts. I hope the money is useful.

Addison Hartley, age 12

Addison's main interests in life are fencing, canoeing, classical music, playing the violin and piano, military history, and religion. He loves going on expeditions on his family's property in Sprucedale. He feels very patriotic about the Netherlands and has just been to Portugal where he travelled around the countryside investigating forts designed to keep Napoleon's Grand "Armee" from capturing Lisbon. He looks forward to paddling in Georgian Bay this summer.

His mom, Juliet Nero, explains Addison's education: Our homeschool lessons are based on the Waldorf curriculum that offers experiential and varied learning opportunities. The goal is to create more questions than answers about the subjects we study and to awaken the curiosity that is innate in every person. Hence Addison's forward-thinking worldview.

Species at Risk: Snapping Turtle

by Ellen Moody, Pointe au Baril, GBLT Steward, Little McCoy

The natural history of the snapping turtle (*Chelydra serpentina*) is long and complex. A truly ancient reptile, snapping turtles have existed as a species for 40 million years.

The Ontario Ministry of Natural Resources (MNR) permits the hunting of this species at risk, despite the fact that snapping turtle populations cannot sustain significant adult mortality because of the late age at which individuals reach sexual maturity, and the low probability of offspring surviving to adulthood. After thriving for millions of years in aquatic ecosystems, the snapping turtle is now in trouble.

The snapping turtle is the largest freshwater turtle in Canada, and is definitely Ontario's most prehistoric-looking turtle species. Its long tail has a series of triangular spikes along the top. The upper shell (carapace) is tan or olive to black in colour, has a coarsely serrated front edge and three long longitudinal ridges, and is often covered with algae because the turtle spends so much time in the water. The carapace in this species can reach 47 centimetres. Unlike most other Ontario turtles, the snapping turtle has a very small lower shell (plastron) and cannot withdraw into its shell for protection when threatened.

On land, this turtle's only defence from predators is to snap repeatedly and attempt to scare them away. In water, the snapping turtle rarely snaps at people or other potential threats and will simply swim away if threatened.

The snapping turtle can be found in almost any freshwater habitat, though it is most often found in slow moving water with a soft mud or sand bottom with abundant vegetation. This species may inhabit surprisingly small wetlands, ponds and ditches. It hibernates in the mud and silt on the bottom of lakes and rivers, usually close to shore.

Snapping turtles mature very slowly. Females do not start to lay eggs until they are between 17 and 19 years old. They dig a nest in late May or June in an open area, usually one with loose, sandy soil. The nest site is often the side of a road, an embankment or a shoreline, but the females will use almost any area they can excavate. A single clutch usually consists of between 40 and 50 eggs, which hatch in the fall. The hatchlings are 2 to 3 centimetres in length.

Snapping Turtle, photo by Cathie Bowden

The probability of an individual hatchling surviving to adulthood is very small. A female snapping turtle would have to lay about 1,400 eggs during her lifetime in order for one of her offspring to survive to adulthood. One adult snapping turtle that lays an average of 34 eggs per year would need to survive 58 to 60 years to replace herself in the population with another adult snapping turtle.

Snapping turtles only occasionally emerge from the water to bask. Despite their highly aquatic nature, they do not swim particularly well and are often observed simply walking on the bottom. They are omnivorous and feed on various aquatic plants and invertebrates, as well as fish, frogs, snakes, small turtles, aquatic birds and relatively fresh carrion. Approximately 90 percent of their diet consists of dead animal and plant matter. This species plays an important role in keeping lakes and wetlands clean. Adult snapping turtles have few natural enemies, but both hibernating and young turtles are occasionally victims of opportunistic predation by otters and mink. Raccoons, foxes, skunks, and opossums often eat snapping turtle eggs.

The threats of habitat loss and degradation do not affect the snapping turtle as severely as they affect other species at risk. Like most of Ontario's turtle species, it has a late age of maturity and a slow reproduction rate, and adults normally live a very long time in the wild, up to 70 years for many individuals. As a result, the loss of even a few adult turtles from a population every year is enough to cause that population to decline, and this makes snapping turtle populations very vulnerable to threats such as road mortality, hunting and poaching. Even though the removal of adults is a serious threat to this species, and despite the snapping turtle being a listed species at risk in Ontario, hunting snapping turtles is still legal in Ontario (the legal limit is two turtles per person per day). The Ontario Multi-Species Turtles at Risk Recovery Team has strongly urged the Ontario government to remove the snapping turtle from the list of game species in Ontario, but so far has been ignored.

Due to their long life span, snapping turtles bio accumulate many toxins from their environment, and in addition to any negative effects this bioaccumulation has on the turtles, it makes them very unsafe for human consumption.

Snapping turtles benefit ecosystems in several ways: turtle eggs are a highly nutritious food that mammals and birds can feed to their young, turtles clean waterways by consuming dead fish and other decaying matter, and turtles create channels that fish, amphibians and smaller reptiles use to move through muddy wetlands. The loss of snapping turtles would eliminate these substantial ecological services and reduce the quality and productivity of Ontario's wetlands and lakes.

Species Spotlight: Eastern Chipmunk

by Ian and Maureen McGibbon, Cognashene, GBLT Stewards "Wabeno Point"

Chipmunks are part of the Sciuridae tribe that includes squirrels, chipmunks, marmots, ground hogs, and prairie dogs, all of which are rodents. There are three subgenera of Chipmunks: the Western, Siberian in Asia, and Eastern. There are 23 different species within the Western designation residing in western North America, but only one species each in the latter two. The word chipmunk is said to have come from the native word *ajidamoonh*, which translates literally as "one who descends trees headlong". Others attribute the name to their "chipping" sound. There are differences in habits between these species. For example, the Western Chipmunk does not hibernate in the winter and only has one set of offspring each year, but the Eastern Chipmunk undergoes partial hibernation and has two sets of offspring, one in the spring and the other in summer.

The Eastern is the largest chipmunk and grows to 28 cm in length and 125 grams. Its habitat is the deciduous forests in eastern Canada and United States. The most common and known herbivore diet of the Eastern chipmunk are seeds, nuts, mushrooms, fruits, buds, grass, shoots, fungi and other forms of plant matter, most of which is harvested from the ground. They are, however, really omnivores and will also consume insects, arthropods, small frogs, worms, cooked chicken and bird eggs. Lately there have been confirmed reports that they also occasionally will eat small birds and other small rodents, even baby squirrels. Cheek pouches allow chipmunks to carry multiple food items to their burrows for either storage or consumption. Chipmunks themselves are part of the food chain and are preyed on by large birds, foxes, raccoons, snakes, wild cats, and weasels. Their average life span is 3 years in the wild.

Chipmunks' lives revolve around their extensive and hidden underground burrows. They will initially dig a metre or more down and then dig a central pocket for a den. They will dig other tunnels outwards and put the dirt in the original tunnel so there are no visible signs of their entrances. The tunnels can be 3 to 30 metres long and each chipmunk has its own burrow. They use the burrows for safety, sleeping, food storage, giving birth and hibernation and keep them very clean. The offspring gestate in about 30 days, and then leave their parents in 2 months to fend for themselves.

There are conflicting discussions on how "deep" a hibernation chipmunks experience. The consensus is that their body functions slow down into a state of torpor, but they will occasionally eat their locally stored food and at times head out of the den in search of other food. Thus they have been observed outside at various times in the winter.

Chipmunks provide the useful ecological function of spreading various seeds and fungi around the forest.

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Eastern Chipmunk, photo by Suzanne Britton: www.ironphoenix.org

GUEST BOOK QUOTES

From the Lizard guest book:

"One of the most spectacular areas in the world - Georgian Bay. We've travelled by boat from Midland to Killarney for the last 15 years and never get enough. Keep it as natural and beautiful as it is."

Andrew & Barbara Bialon, Oakville

THE FOLLOWING TRIBUTE WAS INCLUDED WITH A CASH GIFT FROM A GENEROUS ANONYMOUS DONOR TOWARDS THE PURCHASE OF LITTLE MCCOY ISLAND

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the clams
the snails
the Massasauga rattlesnakes
the garter snakes
the painted turtles
the other turtles
other wild animals of all kinds
the salamanders
the frogs and the tadpoles
the other amphibians
the pickerel
the large, small mouth and rock bass
the pike, musky and lake trout
the guppies
the wild rice, grasses, vines, mosses
the reeds and rushes
the butterflies of all kinds
the ants and caterpillars
the birds of all kinds
the flowers of all kinds
the pink granite, gneiss and other rock

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2,000 tickets printed, Prize value: $27,000

Welcome GBLT Summer Students

Thomas Tawaststjerna is enrolled at Dalhousie University in the Commerce Co-op Program. Along with his passion for the outdoor Georgian Bay lifestyle, Thomas also enjoys ski racing and ski coaching. He is a graduate of the National Ski Academy in Collingwood, Ontario. Thomas has spent many summers at his cottage in Cognashene where he has been involved with the Recreation Program as both a participant and a staff member, and has also worked in construction and cottage maintenance in the area. Tom enjoys working with both children and adults, sharing with them his appreciation for the land, water, and wildlife. This is Tom's second year working with the Georgian Bay Land Trust and he is excited anticipating another great summer on the Bay.

Connor Ward has just completed his first year in economics at Wilfrid Laurier University. Connor graduated from Bill Crothers Secondary School. In the summers Connor lives at his family cottage in the southernmost reaches of Go Home Bay. Connor devoted previous summers to coaching sailing at the Go Home Bay Sailing School and doing part-time property management. Connor's love for the Bay and its rich natural scenery grew from time spent exploring the wilderness, sailing on the open waters and catching sunsets with friends. "Part of what makes Georgian Bay unique is how well the community maintains it. I hope that generations to come will be able to experience the Bay as I have, and I look forward to doing my part in maintaining the natural state of Georgian Bay."

Conservation Quest
at American Camp Island

Kids aged 8 to 11 are invited to come and learn about the natural Georgian Bay environment and conservation of its land, species, and water.

Tuesday, August 18th
Arrive @ 10:30 for 11:00 am start
Please pack a lunch and drinking water.
See you there!

Photo by Marion McLeod

THIS TIME IT HAS FOUR LEGS.

GBLT PHOTO CONTEST 2015 - WILD MAMMALS OF GEORGIAN BAY

Capture a wild Georgian Bay mammal with your camera and enter the GBLT's 2015 Photo Contest.

Maximum 3 entries – please no photos smaller than 3 MB. The deadline for submissions is September 15th, 2015.

For contest details and to upload your submission, please visit our NEWS page at www.gblt.org.

If you have questions, please call (416) 440-1519 x102.

Upcoming Events – Summer 2015

JULY 11TH – Champlain's 400 year Legacy – 5 pm, The Schoolhouse, Sans Souci
The GBLT presents historian Jamie Hunter who will give a talk in recognition of the 400th anniversary of Samuel de Champlain's arrival on Georgian Bay. This is in conjunction with the SSCA's July potluck.

JULY 26TH – Exploring the Thomson Reserve – 2 pm, Thomson Reserve, Nares Inlet

JULY 28TH – Disc Golf and Rock Walk on Painted Rocks – 9:30 am disc golf, 11:30 am picnic*, 1 pm rock walk with Dr. Nick Eyles – Painted Rocks, Bayfield

JULY 29TH – Celebrating the Umbrellas – 12:30 pm picnic*, nature walk with geologist Dr. Nick Eyles and guest biologist TBA, Umbrella Island, Sans Souci

JULY 30TH – Rock Walk on Brébeuf Island – 11:30 am picnic*, 1 pm rock walk with Dr. Nick Eyles, Brébeuf Island, Honey Harbour

AUGUST 3RD – Picnic at Iron City – 11:30 am, Iron City Fishing Club
Enjoy great food and browse the work of local artisans. Contact Sarah for tickets – all proceeds to the GBLT.

AUGUST 8TH – The Walkervilles Concert – 3 pm, hosted by Steve Geraedts, Cognashene
Hear this up-and-coming Canadian Motown/funk/soul band at a private concert in Cognashene to benefit the GBLT. Contact Sarah for tickets.

AUGUST 9TH – Phragmites Identification and Removal Session – 9:30 am – 1 pm, Sandy and Ingersoll Islands, Sans Souci
Kristyn Ferguson of the Nature Conservancy of Canada will lead this informative workshop.

AUGUST 15TH – Hole in One Challenge and Cocktails – 4 - 6:30 pm, hosted by Doug Grundy, Go Home Bay
Show off your "dock golf" skills and enjoy cocktails with friends in support of the GBLT.

AUGUST 16TH – Art and Photo Workshop with celebrated artists John and Joseph Hartman – 12 noon, West Lookout, Pointe au Baril
Bring your camera or art supplies and prepare to be inspired by this incredible landscape!

AUGUST 18TH – Kids' Conservation Quest – 10:30 am - 1:30 pm, American Camp Island, Wah Wah Taysee
Bring kids aged 8-11 for a picnic* and conservation and environment themed activities.

AUGUST 19TH – Cocktails on the Lizard – 4:30 pm, The Lizard Island, Cognashene
Join the GBLT for an informal cocktail gathering on one of our most beloved properties. BYOB.

*Bring your own picnic

For more information on any of these events, please visit www.gblt.org or contact Sarah Koetsier at (416) 440-1519 x102 or sarah.koetsier@gblt.org.

Tribute Gifts

Received from December 19th 2014 – May 13th 2015

In Memory

Sally Bastedo
Fred B. Conron
George German
Alan Milliken Heisey
Keith Coleman Hendrick
Kenneth Reid Kent
Ruth E.H. Langley
Bill and Dorothy Leonard
Frances Lohr
Bruno Lorenz
Peter and Mary McCullough
T.D. Melhuish
Jack Mollenhauer
Molly Montgomery
Judy Ridout
Alexander (Sandy) Stewart
D. Bruce Wells

In Honour

Derek and Liz Bate
John, Jenn, Caitlin, and Eric Bate
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Landscript Editor: Laura Sunderland ..... landscript@gblt.org
Executive Director: Bill Lougheed ..... 416.440.1519 ext 101
Director of Development: Jason Wagar ..... 416.440.1519 ext 104
Land Protection Program Manager: Brooks Greer ..... 416.440.1519 ext 103
Communications & Office Administrator: Sarah Koetsier ..... 416.440.1519 ext 102
General Information ..... 416.440.1519 ext 102

Georgian Bay Land Trust
920 Yonge Street, Suite 609
Toronto, Ontario M4W 3C7
email: info@gblt.org
www.gblt.org