A NEWSLETTER FROM THE CATARAQUI REGION CONSERVATION AUTHORITY

CAT TALES

FALL 2019

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Get Cat Tales delivered to your inbox. Sign-up at **crca.ca/online-services**.

Popular #HikeCRCA Challenge Returns for 2019

With hundreds of participants flocking to various CRCA conservation areas, as well as the always popular Cataraqui Trail, it was a forgone conclusion that the Cataraqui Region Conservation Authority (CRCA) will once again organize another #HikeCRCA Challenge for 2019.

This is an opportunity for individuals, groups, or families to spend some quality time together in nature, exploring the various trails at CRCA-owned properties and possibly win some great prizes. The #HikeCRCA Challenge runs from 8 a.m. Sept. 1, 2019 to 8 p.m. on Oct. 31, 2019 and features a simple, three-step process.

First, hike the designated 'challenge trail' at each of our conservation areas and at least one 'designated section' of the CRCA-owned Cataraqui Trail and find the special challenge sign with the #HikeCRCA logo. To find the challenge trails and designated section of the Cataraqui Trail visit the website at the bottom of this article.

The second step is to take a 'selfie' with each of the challenge signs and post it to social media – Facebook, Twitter or Instagram – and make sure that the hashtag #HikeCRCA and the location are included in the post.

Finally, once you have hiked the designated challenge trails at each of our eight conservation areas, and the portion of the trail on the Cataraqui Trail, fill out the challenge form to enter our grand prize draw. All eligible entries as of the closing of the contest will be put into a random draw for the prizes.

Back for another year is the Family-Friendly Challenge, introduced last year. For this special challenge, a family only has to visit four out of the nine locations. They will be able to enter a draw for a special family challenge prize. Besides that, and the regular grand prize, there will also be draws for four CRCA annual passes, which gives users entry to both Little Cataraqui Creek Conservation Area and Gould Lake Conservation Area.

The CRCA is appreciative of the generous sponsors who help make the #HikeCRCA Challenge a success.

For more information, including full contest rules, visit **https://crca.ca/hikecrca**.

CREATURE FEATURE: GREEN HERON *(Butorides virescens)*

A bit shy, a bit secretive, and somewhat elusive, the Green Heron tends to stay away from areas of high traffic, especially from humans, preferring to live, feed, breed and nest near small bodies of water or areas with dense vegetation, where they can go about their business unperturbed.

Green herons are also loners, preferring their own company for most of the year, and when spotted by a human or a predator, will get jumpy, flick its tail and raise and lower its chest – usually unleashing its distinctive cry before bolting into the air to seek privacy and cover.

Compared with other herons, the Green Heron is significantly smaller, reaching just 44 cm, or 17 inches in length – and looking smaller as it often pulls its neck in close to its body. It is called the Green Heron for good reason, as adults have what has been described as a shiny, dark green head, and greenish-black back with wings that are gradients of green from a grey to more blue colouring. It has a distinctive chestnut brown neck with a white vertical stripe down the middle, and short yellow legs. Females are usually somewhat smaller than males and have a duller and lighter colouring, especially during the mating season. All Green Herons have a long beak that comes to a sharp needle-like point.

The preferred habitat for feeding is around wooded ponds, rivers, streams and wetlands. As they are shorter in stature than other well-known types of heron, they rarely stand in the water to hunt, preferring to hunt from the shoreline or vegetation beside or even overhanging the body of water. Most Green Herons prefer to stay out of sight in daylight, preferring to be more active during sunrise and sunset. They are solitary hunters and will either move to a new locale or scare off another bird if it approaches.

PHOTO BY: NICOLE WATSON PHOTOGRAPHY

The menu of choice for these birds includes a varied diet of small fish, frogs/toads, and aquatic arthropods, and have also been known to eat leeches or even small rodents if the opportunity affords itself. A crafty species, Green Herons actually 'fish' for their watery delicacies, using bait. They will sometimes drop small bits of food, insects or other small objects in the water to attract fish, which they will then pounce upon, using rapid reflexes, uncoiling their elongated neck and piercing or clutching their prey with their rapier-like beak. They have also been witnessed taking a medium or larger frog in its beak and drowning it underwater before consuming it.

The male Green Heron chooses the nesting territory which is usually nearby other Green Heron nests, but only within a small, sparse grouping. The nest itself is generally in a tree, bush or shrub between five to 30 inches off the ground, although sometimes, if secluded and protected by enough foliage, nests will be constructed right on the ground. Nest building is a co-operative venture with the male essentially setting up the foundation before the female takes over, as her mate continues to bring raw materials, which are small sticks.

In most examples, females lay between three to five pale green/pale blue eggs at a time, although having as low a number as two or as high as seven is not unusual. As with nest building, both parents share in keeping the eggs warm and safe over the 19 to 21-day incubation period. When born, mom and dad Green Heron share in regurgitating food and feeding the hatchlings, which are usually ready to fly about three weeks after hatching. The little ones are still fed by the parents for a few more weeks after taking flight, and at that time they are also apparently quite adept at swimming. Each mated pair has one or two broods per year. Both parents also work hard to keep up a steady defense of the nest and breeding area, attempting to fend off attacks from other herons, other bird species, snakes and racoons, seeking to pilfer their nests of eggs or helpless hatchlings.

Green Herons that live in the northern U.S. and much of eastern Canada, including in the Cataraqui Region, are migratory, leaving for southern climes in late September or early October, returning in mid March to mid April. Breeding is usually well underway by the end of May. One interesting observation made by scientists studying the breed is that thus far, climate change has had a negligible impact on the Green Heron's migratory patterns and the locations from which it migrates each autumn, with the duration and territory much as the same as it was 100 years ago.

According to statistics gleaned by the Cornell Lab of Ornithology, the overall population of Green Herons has declined 1.5 per cent, on average, each year from 1966 through 2014, which is a cumulative decline of 68 per cent with a fairly even geographic spread of the decline. This is still only enough for most conservation organizations to rate it of low concern as a species. Populations in the state of California have bucked the overall trend, registering a small overall increase over the period of the studies.

- Sources, Wikipedia, All About Birds (Cornell Lab of Ornithology), Audubon Field Guide.

CATARAQUI REGION CONSERVATION AUTHORITY

CAT TALES

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When the Waters Recede: What to Do After the Flood

It's a question that is becoming more pressing as the onset of unpredictable climate has led to more frequent and devastating floods across Ontario. What do you do with the debris that has washed up on your property after a flood? Who should you call to have it removed? The simple answer is: you are responsible.

Garbage and debris that washes up on your property is your responsibility to dispose of properly. To make this process easier, often a municipality will waive the tipping fee at the landfill for a limited time, but you should check with your local municipality to see if this is available to you.

For example, in some municipalities in Ontario, bins are put out at key locations where residents could deposit flood debris that had washed up on their property, aiding in the clean-up process. As the water receded further, municipal staff also put out additional bins to collect used sandbags.

For residents of the City of Kingston, large debris, construction materials and demolition waste that are too heavy or too large to be packaged with household trash will not be collected in regular garbage pick-up. These items can be taken to any of the following waste transfer locations. A fee for disposal is typically charged based on the weight of material being dumped.

- Progressive Waste Solutions, 1266 McAdoos Lane, **613-548-4428**;
- Kimco Steel Sales Limited, 1325 John Counter Boulevard, **613-542-1822**;
- Waste Management Canada, 62 St. Remy Place, **613-549-7401** extension 252;
- Westendorp Disposal, 1709 Westbrook Road, **613-384-8555**.

It's important to remind residents of the Cataraqui Region that not everything that washes up on your property needs to be removed. Natural debris, such as logs, branches and rocks, may actually improve the wildlife habitat on your shoreline and can be left in place unless it causes a safety hazard.

Woody debris can help protect your shoreline from erosion. Turtles use logs to bask and fish use underwater branches and logs to hide from predators and lay eggs. On land, logs provide essential habitat for small mammals, certain woodpeckers, toads and salamanders, many of which are species at risk.

Check out some other important information regarding property clean-up after a flooding event as per the Kingston, Frontenac, Lennox & Addington Public Health Unit (KFL&A):

- Replace sand in sandboxes and clean any play structures that may have been contaminated by bacteria.
- Till garden beds. Do not consume any produce from vegetable gardens impacted by flood water, as it could contain harmful contaminants. After re-establishing garden beds, remember to always wash produce before consumption.
- Properly clean-up any areas where fluids may have leaked from vehicles such as cars, boats, ATVs, etc.
- Standing water can pose various health risks (e.g., pails, old tires, or other containers with water can become places where mosquitoes breed) and should be removed.

Wells on rural properties should be tested after flooding events for e-coli and other bacteria. For further information and where to get water testing bottles visit the Public Health Ontario website at **https://www.publichealthontario.ca/en/laboratory-services/well-water-testing**.

The Leeds, Grenville & Lanark District Health Unit notes some other dangers related to flooding on properties. Many submerged items with sharp edges may not be seen and can cause injury. Fast moving flood waters pose a drowning risk, even for skilled swimmers, due to the unexpected currents and submerged hazards.

Sandbags are excellent ways to help stave off floodwaters and protect your property including any structures, such as houses, barns, garages and storage sheds. But once the flood has ended, the soggy sandbags are now a potential health hazard. In a news article about the 2019 flooding in central Ontario, the Simcoe County Health Unit said it's important to dispose of used sandbags safely and effectively, as they are usually contaminated with bacteria and other pollutants that could be harmful to human health and the environment. According to the article, sandbags may be contaminated with oil-based or fuel products, hazardous chemicals, salt, sewage or septic waste. This is echoed by health units around the province, including the Kingston, Frontenac, Lennox & Addington Public Health Unit.

Sandbags should be treated as municipal waste and residents should wear appropriate protection when handling to reduce their exposure to bacteria. Residents should also wash their hands after touching sandbags and shouldn't reuse the sand in areas where it may come in contact with people or pets. Residents should also not dispose of sand in wetlands or shoreline areas, because that same contamination will only spread into the ecosystem.

In some of the hardest hit parts in Eastern Ontario, municipal governments have partnered with volunteer groups to help remove the hundreds of thousands of sandbags used in flood mitigation, but in most other municipalities, as noted above with other flood waste, it is the responsibility of the resident or property owner to safely dispose of the used sandbags at a municipal landfill.

Here are some practical tips to help mitigate future flooding problems:

Take a few minutes to look around your property and note where items are stored, both during the summer and the winter, as well as the likelihood that they will be damaged or swept away in a future flood. Chemicals typically kept near the shoreline, such as gas and oil, are especially damaging when they get into the water and should be kept in a secure location well above the high-water mark. Use the recent flooding as a guide for where you should and shouldn't keep possessions on your property.

Watershed planning staff with the CRCA always recommend having a healthy shoreline with lots of native trees, shrubs and vegetation to help reduce erosion on your property during a flood event. Possessions on your property are also more likely to stay put.

KFL&A Public Health also offers some tips on how to prevent damage and contamination during flood events. Avoid pumping out your septic tank before or during a flood. Flood waters can force an empty tank out of the ground causing damage. If you have a sewage pump, turn it off until the flood conditions end.

- Ensure that your basement sump pump is not connected to your sewage system and that roof downspouts are directed away from the sewage system. If floodwater enters your home, do not pump it back into the sewage system.
- If possible, do not use your sewage system during flood conditions. If you must use the system, reduce water usage by limiting bathing or showering, using a laundromat for laundry, and not running the dishwater. A portable toilet is a good option.
- When the flood conditions have ended, you can use your sewage system again. If you experience problems with sinks draining or sewage backups, contact a licensed sewage system pumper or installer to inspect and service your sewage system. It is recommended that you pump the septic tank (and pump chamber) as soon as possible.
- Again, when it comes to flood debris, check with your own municipality to see if there is any assistance available to help with clean-up, including with the disposal of used sandbags, with the understanding that ultimately it is the responsibility of the property owner to safely and securely dispose of flood debris.

If you own property along a watercourse or lake, there may have been significant damage done to the shoreline itself that requires fixing. Even though this is repair work, it is still important for property owners to understand that they need to have the proper permits from the CRCA for certain activities. As with any new shoreline project, it's best to contact CRCA staff prior to beginning to determine the permitting requirements as well as if any other government agencies need to be involved, such as the Ministry of Natural Resources and Forestry.

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When the Waters Recede: What to do after the flood

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You may require a permit from the CRCA if your project is:

- in the channel of a watercourse or drain, in a lake, pond or a wetland
- within 15 m of a floodplain
- within 50 m of the top of bank of a river, stream, lake or other watercourse
- within 120 m of a provincially significant wetland
- within 30 m of all other wetlands greater than 0.5 ha.

Activities requiring approval within regulated areas include:

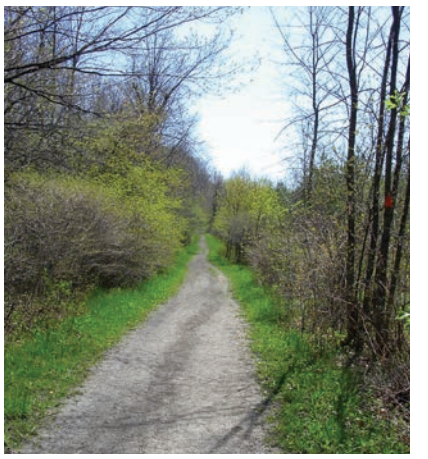
- construction, reconstruction or placing a building or structure of any kind
- any change to a building or structure that changes its use, increases its size or increases the number of dwelling units
- grading of the site
- temporary or permanent placing, dumping or removal of material originating on site or elsewhere
- alteration to watercourses (including municipal drains); bridges, culverts and other infrastructure; and channel and shoreline alterations
- all works in the water, e.g. docks, boathouses, dredging, etc.

For application forms, visit https://crca.ca/planning-permits.

Depending on the scope and size of the project, property owners should also consult an excavating contractor, marine contractor and/or professional engineer that can provide technical advice as to the best way to proceed on a specific site. In reviewing plans and issuing approvals, CRCA staff work with landowners and contractors to identify workable solutions that are environmentally sound. To get the advice or permitting information you need before planning shoreline repair work, contact CRCA Development Officer Kristin Wozniak at **613-546-4228 ext. 288**, or email **kwozniak@crca.ca**.

For updated information about flood levels, and steps the CRCA is taking to lower risk and protect people and property, visit **https://crca.ca/watershed-management/watershed-information/flood**.

Undiscovered Country in the Heart of the City – Check out the Marshlands Conservation Area



It's not one of the best known of CRCA's conservation areas, but it is one of our most important, especially for our commitment to environmental protection within the City of Kingston.

Since the formation of the Cataraqui Region Conservation Authority in 1964, it's been a long-term goal of the organization to acquire the floodplain area and wetlands along the Little Cataraqui Creek. As it's become available on the open market, the CRCA has successfully acquired more and more of this land over the ensuing decades, ensuring that we can protect the floodplain and provincially significant wetland from being developed and retain its natural state. This area provides habitat for a variety of wildlife, acts in flood mitigation and is a delightful green space in the middle of a bustling urban community.

The ongoing acquisition plan includes the floodplain and wetlands along the main branch of Little Cataraqui Creek between Lake Ontario in the south and the Little Cataraqui Creek Conservation Area, located just north of Highway 401.

At present the CRCA owns most of the eastern shores of Little Cataraqui Creek between King Street and Princess Street, portions of land along the west side of the creek as well as a small parcel of land at the corner of Portsmouth Avenue and John Counter Boulevard. Two other public landowners, the City of Kingston and Correctional Services of Canada also own significant portions of floodplain and wetland along Little Cataraqui Creek.

Although currently known as the Marshlands Conservation Area, over the decades, many local residents have referred to it as the Little Cataraqui Creek Valley Lands, Cataraqui Marshlands Environmental Protection Area and Cataraqui Bay Marshlands Conservation Area.

Marshlands Conservation Area is open from 7:30 a.m. to dusk every day, with the main entrance at 1214 Trailhead Place, just off King Street in Kingston. Most of the area has been left in its natural state, with the only facilities being a trail and a parking lot at the trailhead.

In the early 1970s, the Rideau Trail Association developed a portion of the Rideau Trail on part of the CRCA property on the east side of Little Cataraqui Creek between King and Princess Streets, with the trailhead located just north of King street. The Rideau Trail features 387 kilometres of cleared and marked trails running from Kingston to Perth and on to Ottawa. The trail is maintained by volunteers from the Rideau Trail Association, while the CRCA maintains the parking lot and surrounding area at the trailhead. The Rideau Trail Association is a charitable organization that maintains and champions the Rideau Trail, arranging self-propelled outdoor activities such as hiking, snowshoeing and cross-country skiing on the trail and in nearby areas.

For more information on the Rideau Trail Association visit **https://www.rideautrail.org**.

For more information on the Marshlands Conservation Area, visit **https://crca.ca/conservation-lands/conservation-areas/marshlands-conservation-area**.

Popular CRCA Forest Therapy Walk Program Continues This Fall

The Cataraqui Region Conservation Authority (CRCA) is continuing its innovative and immersive Forest Therapy Walks program, as a way of encouraging area residents to reconnect with nature in a deeper, more meaningful way.

The practice of Forest Therapy was founded through the Association of Nature and Forest Therapy Guides, based in California. The founders of this mindful, healing and connective practice were inspired by the Japanese practice of "Shinrin-yoku" which translates as "forest bathing." Research has determined that spending time in nature not only strengthens the human immune response and reduces stress, but also makes us more creative, mindful, and content in our lives. It may also inspire an environmental ethic that leads to positive changes in our behaviour, and a decreasing personal impact.

There will be a special Fall Equinox Walk on Monday, Sept. 23, from 5:30 to 7:30 p.m. at the Little Cataraqui Creek Conservation Area. After that, there will be a walk on Sunday, Oct. 27, from 9:30 a.m. to 12 noon and one on Thursday, Nov. 7 from 1 to 3:30 p.m., both also at the Little Cataraqui Creek Conservation Area. For folks interested in a deeper dive into the Forest Therapy concept, a special three-week Fall Forest Therapy Walk Series will take place over consecutive Thursdays – Sept. 19, Sept. 26 and Oct. 3, from 1 to 3 p.m. at Little Cataraqui Creek Conservation Area.

The cost for one walk is $20 per person, which includes the gate fee, while the cost for the Fall Forest Therapy Walk Series is $60. Register for this walk at **www.crca.ca/forest-therapy-walks or www.crca.ca/online-services**.

Forest Therapy Walks are organized and facilitated by the CRCA's Senior Conservation Educator, Stana Luxford Oddie who is accredited by the Association of Nature and Forest Therapy Guides and Programs. Luxford Oddie has more than two decades of experience connecting people of all ages to nature.

The aim of the Forest Therapy Walks is to get you out of your head and into your sensing body, to a deepened relationship with the more-than-human world. In Forest Therapy, the guide opens the door and the forest is the therapist.

A Forest Therapy Walk is a slow and mindful experience that combines walking, sitting, standing or laying down. Everything is an invitation, so participants are invited to do what feels most comfortable to them. An entire Forest Therapy Walk experience will be no longer than one kilometre and can last between two to three hours depending on the requirements and desires of the participants.

Everyone can benefit from Forest Therapy Walks such as, but not limited to, people recovering from illness, youth, active military personnel, veterans, people recovering from loss, students, professionals, parents, people looking to better their mental health, first responders and seniors - anyone who is looking to de-stress, slow down, heal and connect with nature.

Private, one-on-one Forest Walks are also available. You can fill out a special booking form that will request information about any special needs or requests and sign up a personalized walk with our guide.

For more information on the CRCA Forest Therapy Walk, or to sign up for either the public sessions or a private session, visit **https://crca.ca/foresttherapy/**

WHAT'S HAPP

LITTLE CATARAQUI CREEK CONSERVATION AREA (KINGSTON)

Conservation Area open during daylight hours. Outdoor Centre open 9 AM to 4 PM. Gate Fee: $3.50 for children 12 and under, $5.00 for adults, maximum fee $15 per car. We accept cash, tap enabled debit cards and tap and chip credit cards at the gate.

Are you a regular at our weekend events or Maple Madness? Frequent our ski and snowshoe trails in the winter? Consider purchasing an Annual Pass. Passes are available for $85 per year and provide entry to Little Cataraqui Creek and Gould Lake Conservation Areas. Buy your pass online at **www.crca.ca/online-services**.

FALL EQUINOX FOREST THERAPY WALK

Monday September 23 (5:30 TO 7:30 PM) REGISTRATION REQUIRED

Join Forest Therapy Guide Stana Luxford Oddie and experience this healing and connective practice. A forest therapy walk is a slow and mindful practice that can combine walking, sitting, standing or lying down. Everything is an invitation, so participants can do what feels most comfortable to them. De-stress, slow down, heal and connect with nature. Cost is $20 per person. Register online at **www.crca.ca/online-services**.

BUG SAFARI

Sunday October 6 (1:00 TO 2:30 PM) REGISTRATION REQUIRED

Join in on the bug safari and see what friends live in the marsh and on land at Little Cataraqui Creek Conservation Area. You'll even get to use some of our cool bug catching equipment. All of our bug friends get put back gently in their homes. Cost is $4 per person which includes the gate fee. Register online at **crca.ca/online-services**.

FALL COLOURS WEEKEND

Saturday, October 12 to Monday October 14 (9:00 AM to 4:00 PM)

Enjoy the fall foliage at Little Cataraqui Creek Conservation Area. Bird watch or go for a hike and enjoy the beautiful fall colours - CRCA staff will be on hand to suggest routes and provide maps. Come into the Outdoor Centre and purchase a snack and a hot drink or just sit and enjoy the colourful view from the West Hall. There will also be an activity for children in the West Hall with colouring sheets and rock painting. Gate fee is $5 for adults, $3.50 for children under 12 with a maximum fee of $15 per car.

REPTILES, AMPHIBIANS AND WINTER – HOW DO THEY DO IT?

Sunday, October 20 (1:00 PM) REGISTRATION REQUIRED

Join Kenny Ruelland from the Reptile and Amphibian Advocacy project and learn how reptiles and amphibians have adapted to survive our Canadian winters by means of brumation. Cost is $4 per person which includes the gate fee. Register online at **crca.ca/online-services**.

THE REAL BAT MAN

Saturday, October 26 (1:00 PM) REGISTRATION REQUIRED

FOR AGES 7 AND UP

Bat expert Matt Saunders is back by popular demand. Matt will introduce you to the fascinating world of bats. Seating is limited, so be sure to come early. Matt's one-hour presentation is suitable for ages seven and up. Cost is $4 per person which includes the gate fee. Register online at crca.ca/online-services. Bat house construction follows – kits will be available to purchase for $20 after the talk. You can stay and assemble your bat house with us (please bring a hammer) or take it home to build.

FOREST THERAPY WALK

Sunday October 27 (9:30 AM TO NOON) REGISTRATION REQUIRED

Join Forest Therapy Guide Stana Luxford Oddie and experience this healing and connective practice. A forest therapy walk is a slow and mindful practice that can combine walking, sitting, standing or lying down. Everything is an invitation, so participants can do what feels most comfortable to them. De-stress, slow

down, heal and connect with nature. Cost is $20 per person. Registration is required – register online at **www.crca.ca/online-services**.

BIRDS 101: RAPTORS

Sunday, November 3 (1:00 PM) REGISTRATION REQUIRED

Join Carolyn Bonta and learn all about raptors of Ontario. The presentation will cover local species such as hawks, eagle, osprey and owls. Cost is $4 per person which includes the gate fee. Register online at **crca.ca/online-services**.

FOREST THERAPY WALK

Thursday November 7 (1:00 TO 3:00 PM) REGISTRATION REQUIRED

Join Forest Therapy Guide Stana Luxford Oddie and experience this healing and connective practice. A forest therapy walk is a slow and mindful practice that can combine walking, sitting, standing or lying down. Everything is an invitation, so participants can do what feels most comfortable to them. De-stress, slow down, heal and connect with nature. Cost is $20 per person. Registration is required – register online at **www.crca.ca/online-services**.

CREATURES OF THE NIGHT HIKE

Saturday, November 9 (6:30 PM) REGISTRATION REQUIRED

Enjoy the brisk fall air and learn about the creatures that come out at night at Little Cataraqui Creek Conservation Area. Be sure to register early – this popular hike fills up fast. Cost is $4 per person which includes the gate fee. Register online at **crca.ca/online-services**.

FORAGING WORKSHOP

Sunday, November 17 (1:00 PM) REGISTRATION REQUIRED

Forager Barbara Roch will present her favorite wild plants and mushrooms alongside recipes and novel ideas for "invasive" plants. Take home a two-cup 'wild' tea bag we will prepare. Cost is $4 per person which includes the gate fee. Register online at **crca.ca/online-services**.

ENING IN 2019

DIY SUSTAINABLE HOLIDAY DECORATING

Sunday, December 1 (1:00 p.m.)
REGISTRATION REQUIRED

Bring the beauty of nature into your home this holiday season. Join Joli from Bella Fiore Farm and create a swag or centerpiece for your table or an outdoor arrangement for your entrance using sustainably sourced garden grown materials. Please bring your own bowl, urn, vase, platter, tray, or anything suitable to hold your greenery. Some greenery and decorative items will be provided but it is encouraged that you bring dried flowers, branches, pinecones, berries etc. to supplement your creation. Registration is required and enrollment is limited. Cost is $4 per person which includes the gate fee. Register online at **crca.ca/online-services**.

LANTERN HIKE

Saturday, December 7 (6:30 PM)
REGISTRATION REQUIRED

Join us under the stars as we explore the trails of Little Cataraqui Creek Conservation Area. Afterwards warm up with a hot drink by the fireplace back at the Outdoor Centre. Cost is $4 per person which includes the gate fee. Register online at **crca.ca/online-services**.

OUTDOOR HOLIDAY PARTY FOR THE ANIMALS

Sunday, December 15 (1:00 PM)
REGISTRATION REQUIRED

Take a break from the bustle of this busy season with some time outdoors. Bring your family out and join us for an outdoor celebration. We will feed the birds, play some games and have a great old time. We will also leave a nature present for our animal friends. Cost is $4 per person which includes the gate fee. Register online at **crca.ca/online-services**.

MAC JOHNSON WILDLIFE AREA - BROCKVILLE

FALL FESTIVAL

Saturday, October 19 (10:00 AM to 2:00 PM)

Admission is $5 per car. The Friends of Mac Johnson Wildlife Area are hosting their annual fall celebration with activities for the whole family. Enjoy the fall colours on a hike along our trails and complete our fall scavenger hunt. The Mush Larose dogsledders are back with their dog carts! Races start at 11:00 am. The CRCA will be providing kayaks and canoes free of charge so you can paddle and watch the waterfowl on the pond. Youth and kids can make bird feeders. The Friends will host a Barbecue at the Nature Centre, payable by donations, and accompanied by live music. After lunch, you can make popcorn and toast marshmallows at the fire pit near the pond. (Check Facebook in October for details).

FROG & TURTLE TALK

Sunday, October 20 (1:00 PM)

Join local frog advocate and conservationist Matt Ellerbeck to learn about the conservation concerns and general biology of frogs and turtles. This event will also feature a meet and greet with several live animals. The talk will start at 1:00 PM at the Mac Johnson Wildlife Area Nature Centre, at the Debruge Road entrance.

LEMOINE POINT CONSERVATION AREA - KINGSTON

TD TREE DAYS – TREE PLANTING

Saturday, October 5 (9:00 AM to Noon)

Help plant 400 trees at Lemoine Point Conservation Area at the TD Tree Days Event. Join TD employees, CRCA staff and the Friends of Lemoine Point at 9 a.m. at the Coverdale Drive parking lot (north entrance). Bring your shovel, gloves and proper footwear. For further information and to register visit **www.tdtreedays.com/events/1339**

FRIENDS OF LEMOINE POINT AGM

Wednesday, November 13 (7:30 p.m.)

Join the Friends of Lemoine Point at their Annual General Meeting at the Ongwanada Centre in Kingston on Wednesday November 13 at 7:30 p.m. The night will include their business meeting and a special presentation.

#HikeCRCA Challenge

September 1 to October 31

Grab your family and friends and take part in the Third Annual **#HikeCRCA** Challenge. Hike the designated "Challenge Trail" at each of our Conservation Areas and on the Cataraqui Trail, take a photo with the challenge signs, post your photos on social media, then fill out the Challenge Entry Form for a chance to win some awesome prizes. Complete the full challenge (9 trails) or try the shorter family challenge (4 trails). **#HikeCRCA** takes place from Sept. 1 to Oct. 31. Visit **www.crca.ca/hikecrca** for challenge rules and a list of Conservation Areas and designated trails. Good luck and happy hiking.

CRCA Boasts A Full Slate of Innovative, Interactive Conservation Education Programs for All Ages

The Cataraqui Region Conservation Authority (CRCA) offers a wide range of quality curriculum-enriched outdoor and environmental education programs for all ages at Little Cataraqui Creek Conservation Area in Kingston and Mac Johnson Wildlife Area in Brockville. All of our programs foster a strong connection to nature by guiding students with their head, heart and hands. Our Conservation Educators have over 40 years combined experience teaching pre-school to adult-age learners and enjoy passing on their love and extensive knowledge of nature and the outdoors.

NATURE PROGRAMS

The CRCA offers nature programs for early learners, home learners and children ages 6 to 11. These Programs take place at Little Cataraqui Creek Conservation Area in seasonal blocks that allow children to make friends and feel at home in the beautiful forest, field and wetland spaces of the Conservation Area.

The Early Learners program is for preschool children ages 2.5 to 4 years old and their caregivers. Throughout the program participants will experience a connection to nature through hands-on, immersive opportunities. Our Nature Program for home learners and children ages 6 to 11 will encourage participants to explore the wild spaces of Little Cataraqui Creek Conservation Area and lean about nature and conservation. Both programs foster a strong connection to nature by using our head, heart and hands. Participants will have the opportunity to experience the seasonal changes and connect with the land at a pace that feels right to them.

SCHOOL PROGRAMS

Primary School Programs accommodate various grade levels, needs and are designed to be a springboard for action and understanding and strive to be relevant to learners so that they can connect to the natural world effectively and organically. Our Conservation Educators enjoy working with young learners and passing on their love and extensive knowledge of nature and the outdoors. All programs are two hours in length and are available mornings and afternoons. The start and end times are flexible to adapt to busing schedules. We encourage full day visits where you and your class can take in two education programs or journey on your own through the Conservation Area.

For 2019-2020 there is a new full-day program a Little Cataraqui Creek Conservation Area called Forest School for Kinders. Participating classes will experience a full day of forest immersion, where students will gain a sense of independence, confidence and forge meaningful relationships with themselves, each other and the forest. Using their senses children visit various explore sites such as the Forest Kitchen, Nature Exploration, and Water Play. Children investigate the explore sites at their own pace allowing for greater opportunity for discovery and learning.

JUNIOR & INTERMEDIATE

Junior and Intermediate programs as well as Secondary School programs also accommodate various grade levels, needs and are designed to cross many subjects within the appropriate curriculum for each grade level, increasing in detail and comprehensiveness through each level.

As with Little Cataraqui Creek, the Junior & Intermediate School Programs as well as Secondary School Programs at Mac Johnson accommodate various grade levels and curriculum needs. Our facilities include a heated Nature Centre with washrooms and 532 hectares of mixed forest, fields, pond and wetlands. During the winter, a natural skating rink is maintained on the pond when conditions permit. There are 11 km of trails for hiking and cross-country skiing.

For further a full list of programs and booking visit our website at **www.crca.ca/education**. If you don't see what you are looking for, please contact our education staff, we will do our best to accommodate you – **educate@crca.ca**.

ADULT EDUCATION PROGRAMS

The Cataraqui Region Conservation Authority also offers a range of outdoor and environmental education programs for adult learners. All of our programs are English as a Second Language (ESL) friendly. Programs are geared towards different language ability levels that introduce new vocabulary, concepts and connections to nature. We engage adult learners at various levels to gain a greater understanding of conservation and nature. If you don't see what you are looking for, let our staff know and we will do our best to accommodate you. We also offer Forest Therapy Walk programs, visit the Forest Therapy page at **crca.ca/foresttherapy** for further details.

Combine your program with other great activities for a terrific day in the outdoors or do your own education program. Our education staff would be pleased to make suggestions about what you can do with your class. Little Cataraqui Creek Conservation Area has a variety of habitats including wetland, field and forest.

There are also great recreation facilities including picnic areas and a 14 km trail system which is groomed for cross-country skiing during the winter. The entrance fee for school groups to use our facilities is $3.00 per person.

You must make a group booking to use our facilities by calling (**613) 546-4228 ext. 222** or toll-free **1-877-956-CRCA (2722) ext. 222**.

CRCA Tree Planting Programs Still in Effect

Proper forestry practices can provide wind and water erosion protection, can make poor land more productive and can create wildlife habitat. In addition, trees can provide windbreaks and shade, helping to reduce heating and cooling costs. Trees also take in carbon dioxide and release oxygen, helping to reduce greenhouse gas emissions.

It is for these reasons that the CRCA believes it is crucial to maintain a tree planting program for rural landowners which helps offset a portion of the cost in partnership with funding agencies. Initially this was under the popular and successful 50 Million Tree Program (Forests Ontario and the Ministry of Natural Resources). This program was terminated following this year's spring planting due to provincial cutbacks.

In June, the federal government brought forth $15 million dollars over four years to continue the objectives of the former 50 Million Tree Program. The 50 Million Tree Program had an annual budget of $4.7 million and had planted more than 27 million trees across the province since 2008. Its goal was to have 50 million planted by 2025.

According to a recent CBC News article, the federal funding will provide support for the planting of 10 million trees, bringing the program's total to 37 million. The new program is still in development, and qualification requirements, including number of hectares and the cost per tree have not been announced. Announcements containing the details of the new program are expected early this fall.

Landowners can also order trees through the CRCA and do the planting themselves. There is a minimum order of 500 seedlings and individual species can be ordered in multiples of 50. Group orders are welcome.

Anyone interested in planting trees through any of these initiatives is asked to contact Rick Knapton, CRCA Forestry Co-ordinator at **rknapton@crca.ca**.

Tiny Wasps Introduced to Help Stem the Spread of Emerald Ash Borer

Natural Resources Canada and the CRCA have partnered in a biological program to help fight and address future populations of the Emerald Ash Borer (EAB) at Lemoine Point Conservation Area. The program involves the timed release of three species of parasitoid wasp in EAB infected Ash tree stands. The three species of wasp prey on either the egg or larval staged EAB.

According to information developed by American government researchers, including the Department of Agriculture and the US Forest Service, biological control "is the practice of importing and releasing natural enemies from a pest's native range to control populations in the area of introduction." Since the EAB originated in northeast Asia, Chinese and American scientists spent years searching out natural enemies which could be introduced in the U.S. (and subsequently Canada).

Two Chinese 'parasitoid' species of very tiny wasps and one Russian species have been introduced specifically as part of the Canadian program. One species is Tetrastichus planipennisi, which attacks the emerald ash borer larvae as they feed under the bark. The adult female wasp lays eggs inside the borer's larvae, eventually killing the host as they grow. Studies have shown that up to 50 per cent of EAB larvae can be hit with parasites from this species alone.

The Oobius agrili species can hit upwards of 60 per cent of EAB eggs during the summer, after its been introduced. Extremely tiny female wasps from this species seek out eggs, which are laid in crevices and in between layers in the bark of ash trees. When they find an egg, the mother wasp injects its own egg directly inside. When the baby wasp hatches, it grows and feeds on the EAB egg, killing it.

When another parasitic wasp was shown to not handle the colder climes, a Russian substitute, the Spathius galinae was introduced. It operates in a similar manner as the T. planipennisi as it injects eggs into the larvae, with the young wasp larvae devouring it from within. All the wasps are between one and four millimetres and do not sting humans. They are reared in special production facilities, alongside ongoing research into their effectiveness as the biological control programs continue throughout Canada and the United States.

CRCA staff, with direction from Natural Resources Canada, have been releasing the wasp species throughout the summer 2019. The program has been active in Ontario for several years and has hopes of protecting the next generation of Ash species in North America.

The voracious, seemingly indestructible and highly resilient emerald ash borer is a pest that truly defines the concept of the invasive species, and one that is of growing significance throughout the continent.

The adult beetles are generally about 8.5 millimetres long and 1.6 millimetres wide, and feature what is actually kind of an attractive bright metallic green hue.

These adults don't live very long and are primarily around strictly to mate, with the females going on to lay anywhere from 40 to 200 eggs. This is where the true problem lies. The eggs are usually housed in the various cracks and crevices in the bark on all species of ash trees. When they hatch the larvae then begin to methodically chew – or bore – their way into the more vulnerable interior of the trees, particularly their vascular system. Like our bloodstream, this is how trees receive and spread water, nutrients and sugars.

Sources with both the Canadian and American governments report that once the emerald ash borer has made its home in a woodlot, 99 to 100 per cent of the ash trees in that stand will be dead within six to 10 years. And the emerald ash borer doesn't pick on the old and weaker trees; it will go after younger, healthier trees as well. Those under 10 years old are then killed before they reach the age when they would begin to create seeds. Not only does the pest kill lots of trees, but it kills many that would have helped to perhaps prop up the species.

While the bug only migrates a few kilometres a year naturally, the movement of logs, lumber, firewood and wood chips by people is what is causing the spread to be more rapid. After starting its journey in Michigan, the emerald ash borer has spread across all parts of southern Ontario, including the catchment area of the Cataraqui Region Conservation Authority, and is now appearing in western parts of Quebec. It has even been spotted as far north as Sault Ste. Marie.

Trees infected with emerald ash borer have some distinctive characteristics: trees appear to be thinning at the crown, have lots of dead branches and leaves are turning yellow. The adult beetles emerge in the late spring, from the middle of May to the end of June and exit from a D-shaped hole. The larvae are generally creamy white in colour with a light brown head.

The first report of the beetle in North American came in 2002 in Michigan, although scientists believe that the first few insects or larvae had actually arrived a few years earlier. They were most likely brought in packing crates or palettes that came over from Asia in the cargo holds of ships. The impact of the devastation the emerald ash borer continues to unleash is remarkable in its scale. The removal of an entire species from an ecosystem will logically have repercussions on the remaining flora and fauna. It means loss of habitat and food sources, decreased biodiversity making these areas even more vulnerable to other invasive species.

One of the biggest challenges facing those looking to stop the onslaught is that the emerald ash borer is not readily detected when it first moves into a new area. It's only after the pest has become relatively well established in an area that it is discovered and by that time, it's probably too late.

If you spot signs of an infestation, call the Ontario Ministry of Natural Resources and Forestry at **1-800-667-1940** or the Canadian Food Inspection Agency at **1-800-442-2342**. There is also the Invading Species Hotline at **1-800-563-7711**, or **http://www.invadingspecies.com/report/**

Foundation News and updates

In addition to enjoying fun in the sun, the Cataraqui Conservation Foundation Board of Directors spent the summer working on a variety of activities.

PREPARING FOR FALL EVENTS

In September, we will be participating in the annual Princess Street Promenade. Come out Saturday, Sept. 28 and visit our booth. We'll be there to meet with you as you stop in to ask us your questions about the Foundation. Back at our booth this year, by popular demand, will be our display of local water bugs for the kids to check out.

THANK YOU TO OUR DONORS

We would sincerely like to thank all of our donors for their generosity over the past few months. We've received a great response from our Partners in Education campaign, with many responding to our request to help us raise money in support of environmental education for youth. Thank you for your ongoing commitment to, and belief in, the value of showing our children the importance of nature.

We have also been connecting with private business owners across Kingston and Brockville to encourage them to step up and help support their local conservation authority and the great work they do. In particular, we would like to thank Trailhead Kingston for their generous support for and commitment to the great outdoors. Their donation will go to support all the great work that the CRCA does. Without the donations from Trailhead, and others like them, many of the events and activities the CRCA provides would not be possible. Thanks again!

TRAILHEAD KINGSTON

If you or your business would like to donate, you may do so directly through Canada Helps at **https://www.canadahelps.org/en/charities/cataraqui-region-conservation-foundation/** or by contacting us through our website at **https://cataraquiconservationfoundation.com/contact-us**

HIKE CRCA CHALLENGE

The Foundation would like to remind everyone of the Hike CRCA challenge and encourage them to get out and enjoy the wonderful properties in our community until Oct. 31! We have donated some lovely prizes for you to win so make sure to visit the CRCA website and register for this annual event!

GROWING OUR ENDOWMENT FUND

As we mentioned in the last newsletter, one of our priorities this year is to raise funds in support of an Education Endowment Fund. Creating an Endowment Fund would help us make sure children are able to come to our conservation areas and get immersed in the outdoors every year, helping to grow the next generation into environmental stewards. The Foundation is looking for the support of large corporate/ private donors, to help us establish the Endowment Fund and make sure kids always have the opportunity to learn about the natural world that's all around them. If you are interested, please contact us through our website at **https://cataraquiconservationfoundation.com/contact-us**

LEAVE A LEGACY

The Foundation is part of the Eastern Ontario Leave a Legacy Group. This partnership allows the Foundation to be part of a larger group of organizations that foster estate planning and donations to charitable organizations through will and trusts. For more information, visit **CataraquiConservationFoun-dation.com**

JOIN US IN OUR WORK

We are always looking for new members to volunteer or join our Board of Directors. Do you have a passion for the environment? Are you a regular user of the CRCA properties? Do you have an interest in educating future generations about the importance of the environment and conservation? Do you want to assist in the acquisition of land for conservation purposes? Then please consider joining us and help the Foundation grow and continue its valuable work. We need your time, ideas and enthusiasm to help us in our mandate to support the activities of the Cataraqui Region Conservation Authority.

For more information contact us at **catconservationfoundation@gmail.com** or through our website.

Protecting Your Drinking Water Key Message Behind New Video

Over the last 10 years, the Cataraqui Region Conservation Authority has supported a Drinking Water Source Protection Program (DWSP) to ensure the safety and sustainability of drinking water throughout the area. As a way of letting folks know of the progress made in this endeavour, and to get them thinking, talking and taking action, the CRCA has produced an entertaining and informative short video to help demystify the science behind source water protection.

Created in collaboration with Belleville-based Lot 48 Film Company, the animated information video gives residents an introduction to the concept of source water protection in the Cataraqui Region and ways to assist in the process. With the increase of social media, clips and short videos have proven to be an excellent method of outreach and education. CRCA felt it important to capitalize on this and engage the local community by developing our own DWSP video, which will be shared online for municipalities and other partners to promote within their communities. Many may remember the minute-long six o'clock news clip on CKWS speaking to program planning and implementation, but it is outdated, and required a refresh with more accessible, generalized content.

This new video is meant to be a fun and accessible way to learn about the importance of source water protection, and something that people will be happy to share with friends and family through social media. It's an excellent vehicle for beginning important conversations about the vulnerability of our surface and groundwater and offering easy ways everyone can get involved in protecting the drinking water of the Cataraqui Source Protection Area at the source, for generations to come.

A key objective of the overall program has been educating stakeholders, especially the general public, of the objectives and strategies. It's important to emphasize to residents within the Cataraqui Region the value of protecting our water – at its source. Since the program success is based on community involvement, understanding the importance of protecting the sources of our water and how specific policies put in place goes about doing that is critical, especially since there are efforts residents can do every day to help. The Cataraqui DWSP is a multi-phase process that requires consistent effort and a commitment from everyone in the watershed, including residents. This video is one way to ramp up that process.

Funding for the video was provided by the Ontario Drinking Water Source Protection program under the Ontario Ministry of Environment, Conservation and Parks. The video can be found on the home page at **www.cleanwatercataraqui.ca**, on the Cataraqui Region Conservation Authority website at **www.crca.ca**, and through CRCA social media channels and the websites of the various municipal governments within the Cataraqui Region.