



CAT TALES

Fall 2013 Issue

IN THIS ISSUE...

- Fall means back to school and back to weekend events in our conservation areas. Find out more about our school programs on page 12 and our public events on pages 6 and 7.
- Flooding was a major problem in Alberta this past spring and Toronto this past July. Could it happen here too? Last year we were dealing with drought. Read about it on pages 1 and 4.
- Our Creature Feature this issue is a little warbler called the Common Yellowthroat. See page 2 for the details.
- What's the latest on the Cataraqui Source Protection Plan? The latest updates are on page 3.
- We have been busy in our conservation areas over the last few months. Photos and stories are on pages 8, 9, 11 and 12.
- Get an update on our staff, board members and summer students on pages 5 and 12.
- The Cataraqui Conservation Foundation is now accredited by Imagine Canada. They are also busy making Gala plans. See page 11.
- Plus monitoring for muskrats and waterfowl. Stories and photos on pages 3 and 10.

Extreme flooding events in Calgary and Toronto – can it happen here?

Over the past couple of months (and over the past few years) we've seen some extreme flooding events in Canada – most recently in Calgary and Toronto. There are some people that wonder whether these same events, or worse, could happen in the Cataraqui Region Conservation Authority (CRCA) watershed. The short answer is yes, to some extent at least, and in fact we have seen some similar extreme events right here in Kingston, Brockville and surrounding areas over the last few years.

During the colder months (spring in particular), extreme events are usually a result of a rain storm combining with warm temperatures, with lots of snow still on the ground that melts. This was the situation in Calgary and area. In the CRCA, this is the kind of event that represents the greatest potential for flooding on larger, rural watercourses.

During the warmer summer months, the greatest potential for flooding comes from thunderstorm events, lots of rain falling over a short period of time, filling up parking lots and streets, with catch basins and storm sewers not being able to carry the water off the hard surfaces quickly enough such



Extreme rainfall events such as the end of Hurricane Frances in 2004 in Kingston can cause streets to flood. This is because storm sewers and other infrastructure cannot handle the large flows and runoff that occur suddenly.

as in Toronto. Urban watercourses, small watercourses, and urban areas in general are the most susceptible to flooding from events of this type.

For some perspective, and comparisons, here are some details of recent extreme events across Canada, and in the CRCA area.

This past July in Toronto severe thunderstorms resulted in flooding of streets, low-lying areas and storm sewer back-ups. Much of the rain came down in a few hours. Pearson Airport received 126 mm in only a few hours while the down-

town received as much as 97 mm of rain.

Low areas along Don River and other rivers were flooded. The Don Valley Parkway - a major transportation route was also flooded. Along the Humber River, some shore protection and dams constructed to protect against the Hurricane Hazel flood in 1954 were damaged.

In this part of Ontario, our level of flood protection is the 1 in 100 year flood also known as a 1 per cent probability event. If the Toronto event occurred over a 24-hour period, it would

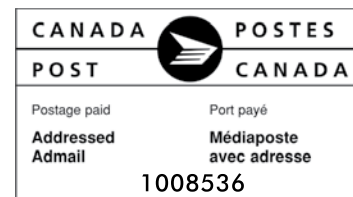
be the same as a 1 in 100 year flood event. However it happened in just a few hours, resulting in a much more extreme event – about twice as much rain as a 1 in 100 year event.

Calgary and other parts of southern Alberta experienced massive flooding in June 2013 as a result of thunderstorms combined with snow melt. Calgary received about 50 to 60 mm of rain over two days. Areas in the mountains, the headwaters of the rivers, received as much as 250 mm of rain

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**Cataraqui Region
Conservation Authority**
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Creature Feature

Common Yellowthroat (*Geothlypis trichas*)

The Common Yellowthroat is a species of warbler that can be found throughout North America. Males have an olive back, a bright yellow throat and chest, a white belly and a distinct bandit-like black face mask with a white or grey border above. Females have a duller colouration and lack the black face mask. The males sing a distinct "witchety witchety witch" song that can be often heard fluttering throughout the Cataraqui region in the summer months. Both males and females utter a short jip call when a potential predator is spotted. Males are very territorial, will chatter when they hear other males singing and will fight each other if they get too close.

When choosing a mate, females tend to prefer males with larger masks.

These small songbirds live in diverse habitats, including marshy areas, grasslands, and even some open forest regions. They prefer areas near wetlands with lots of thick, low vegetation to provide them with cover from predators, which include carnivorous birds such as Merlins and Red-Tailed Hawks, mammals such as foxes and raccoons, and gray rat snakes.

They lay one to six white eggs per clutch with gray to black flecks in nests that are concealed in scrubby bushes. They always take care to never fly directly into their nests in order to elude predators.

They also have to try to keep hidden from Brown-headed Cowbirds, as females of this species like to lay their eggs in Yellowthroat nests! When a Yellowthroat finds a Cowbird egg in its nest, they may either abandon it altogether or build a new one on top of the unwanted surprise. If the Cowbird egg goes undetected and is able to hatch, this can have very negative effects on the Yellowthroat offspring. The baby Cowbird will eat more food than the young Yellowthroats, and may even push the young Yellowthroats onto the ground.

The diet of Common Yellowthroats consists mainly of insects and spiders, but they have been known to occa-



Photos/Wikimedia commons

sionally eat seeds. They forage on or near the ground, plucking their prey from leaves, low branches and flowers. In certain lucky instances, they may catch a meal while they are in mid-air. Generally, they tend to perch in one area and snatch ants, flies, beetles, wasps, grasshoppers and other tasty morsels as they find them, using a technique known as "gleaning".

While the Common Yellowthroat is currently categorized as being a species of least concern (meaning their population trend is stable), their numbers have been slowly declining. According to the North American Breeding Bird Survey data, Yellowthroat populations have been decreasing by approximately 0.9 per cent per year since 1966, most likely due to habitat degradation and loss.



The Common Yellowthroat was one of the first bird species to be described by Carl Linnaeus, the father of modern taxonomy, from the New World when a specimen was found in Maryland in 1766. Top photo: Female Bottom Photo: Male



Local municipalities busy preparing for the Cataraqui Source Protection Plan

CRCA staff are helping our municipal partners get ready to implement the Cataraqui Source Protection Plan. We anticipate that the plan will come into effect next year, and municipalities and others will need to prepare for some aspects in advance. The Conservation Authority has received provincial funding for this purpose

through March 2014.

The source protection plan will help prevent harm to local sources of drinking water – with a focus on 12 municipally-owned systems that serve local communities. It was submitted in August 2012 to the Ontario Minister of the Environment for review and approval. The Minister's review is still ongoing.

Comments are anticipated by fall 2013.

The proposed plan is available at www.cleanwatercataraqui.ca/sourceProtectionPlan.html.

Municipalities will be responsible for many aspects of the plan. They will need to ensure that their land use planning documents, such as official plans and zoning by-laws,

provide safeguards for development in vulnerable areas around drinking water sources. They will need to review other public documents, such as emergency response plans and road salt management plans, in light of drinking water source protection. Seven of the 12 municipalities in the area will also need to appoint risk man-

agement officials and inspectors to oversee site-specific planning.

We are helping municipalities to understand their responsibilities and opportunities, building on our collaborative approach to research and planning. As in the past, we are also collaborating with other Conservation Authorities across Ontario – making efficient use

of public dollars and sharing lessons learned. The source protection plan also includes tasks for provincial ministries and local public health agencies, and we are therefore also working with staff from those organizations.

The next issue will include a further update on the status of the source protection plan.

Monitoring for muskrat

As mentioned in our *Creature Feature* in our last issue (Winter/Spring 2013) the muskrat is a large aquatic rodent that calls marshy areas home. As it turns out, they are also a good indicator of the impacts of water levels.

The CRCA is par-

ticipating in a muskrat monitoring program. This is part of a Ministry of Natural Resources initiative to look at the effects of water level regulation on Lake Ontario. Muskrats are considered to be a good ecological indicator of water level impacts.

Quinte Conservation and the Central Lake Ontario Conservation Authority are also participating in this program as they have a number of coastal wetlands on the Lake Ontario shoreline.

"Water levels were low in the fall of 2012 and winter of 2013," said CRCA biologist Tom Beaubiah. Mr. Beaubiah is responsible for overseeing the monitoring program.

Monitoring began in February 2013 and involved locating muskrat lodges in the coastal wetlands. The work was done during the winter as it's easier to access these areas at that time of year.

Before any of the Conservation Authority staff could venture out on the ice to do the monitoring, they received ice safety and rescue training in January at Little Cataraqui Creek Conservation Area.

In the Cataraqui region, staff found



Ice safety training was done for staff from the CRCA, Quinte Conservation and the Central Lake Ontario Conservation Authority in January at Little Cataraqui Creek Conservation Area. The training was done as part of the muskrat monitoring program. Monitoring staff went into the reservoir wearing both survival suits and regular winter clothing. They practiced rescuing themselves as well as their partners.

that coastal marshes that did not have any water level controls did not have muskrat lodges. Parrott's Bay was the only area where a significant number of muskrat lodges (eight in total) were found. Two

lodges were found in Hay Bay, the mouth of Little Cataraqui Creek and one of two sites on Wolfe Island.

(Copies the Winter/Spring 2013 issue of *Cat Tales* are available at the CRCA Administration Office or on

our website at www.cataraquiregion.on.ca.)



Additional projects supported under the Ontario Drinking Water Stewardship Program

In the previous issue of *Cat Tales* we shared the good news that over 65 landowner projects across the area had been supported by the Ontario Drinking Water Stewardship Program, representing a provincial investment of over \$360,000.

Although the program has wrapped-up for now, the CRCA was able to allocate over \$25,000 in

remaining provincial dollars to seven additional projects during the first part of this year. Landowners were eligible for fuel, septic and water well projects in portions of the groundwater wellhead protection areas at Cana (Kings-ton Mills), Lansdowne and Mallorytown.

No new funding has been allocated to the program at this time.

Extreme flooding events in Calgary and Toronto – can it happen here?

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over three days, with snow remaining on the ground.
The Bow River through downtown Calgary peaked at the highest recorded level, based on 100 or more years of record. This was approximately twice the flow of the 2005 flood, and 30 per cent larger than the previous maximum flow in 1932. Statistically, that suggests it was more extreme than the 1 per cent probability event (1 in 100 year), potentially as extreme as the 0.1 per cent probability event (1 in 1000 year).

We have experienced a couple of recent extreme events in Kingston and eastern Ontario. In July 2011 downtown Kingston was flooded as a result of thunderstorms. Almost 100 mm of rain fell in just four

hours – the equivalent of more than a 1 in 100 year flood.

The storm moved east across the city, affecting mostly the downtown area. Areas north of Highway 401 did not receive nearly as much rain. The result was a lot of street flooding, basement flooding and storm sewer surcharges.

The amount of rain that fell, similar to the Toronto event of 2013, would have represented the 1 per cent probability event if it had fallen over 24 hours, but instead was a much more extreme event. This event could be compared very closely to the Toronto 2013 event, though it covered a much smaller area.

In September 2004 the remnants of Hurricane Frances dumped 100 to 150 mm of rain over 12 hours

across eastern Ontario. This resulted in street flooding, sewer backups and storm sewer surcharges in Kingston.

Little Cataraqui Creek water levels reached the modeled floodplain levels. One to two-hour rainfalls were about normal, but the 12-hour and 24-hour accumulations were well in excess of the 1 per cent probability event.

So why do streets flood and storm sewers overflow during heavy rainfall events as described above? Should they be designed to accommodate higher water flows?

Currently storm sewers are designed to pass the 20 per cent probability event – a 1 in 5 year event. At some point, this was decided as a reasonable compromise between the cost and the benefit of having larger

pipes in the ground. This is the standard across much of Canada. This standard for pipe sizing means if a more extreme event happens, the storm sewers cannot contain the water. It backs up in the streets, or sometimes in basements. This is generally the problem during summer storm events in urban areas, the water cannot be removed from the streets and parking lots fast enough, and it builds up, causing flooding.

The cost of excavating and installing pipes large enough to handle the 1 per cent probability event (1 in 100 year) is considered to be too great for the benefit it provides, let alone for a less frequent event. Theoretically, if the 1 per cent probability event only occurs every 100 years, and the lifespan of the pipe

is only 50 years, then you will install the infrastructure twice for every single use. While that is not actually the case, and the 1 per cent probability event could occur every year, or even multiple times in one year, or could also not occur for 200 years, the consideration of the cost must be balanced with the use.

These days, streets are typically designed to contain the flows associated with a 1 per cent probability event within the asphalt of the roadway (curb to curb), at a depth of no greater than 30 cm (1 ft). This is largely so emergency vehicles can still pass along all streets without risk of being flooded, or washed away. Older parts of cities were not designed with this in mind, and so can flood much deeper in places,

as has been seen in a few locations in Kingston and in Toronto.

So, in summary, can extreme events such as those that recently occurred in Calgary or Toronto occur here in eastern Ontario? The answer is yes, though the exact same circumstances or conditions may not be the ones that cause the problems here, and the problems may not be exactly the same.

The general information provided in this article comes from a variety of sources, including Environment Canada rainfall and streamflow records, studies and reports, news articles from multiple sources (websites, TV, newspaper), textbooks, and people present for the extreme events, as well as CRCA records and files.

Water levels improve in 2013 in CRCA watershed

2012 was a drought year. We received about 80 per cent of the normal rainfall for the year, but during February, April, May, July and August we received only half the normal rainfall. In November, we received almost no rain at all, the driest November in about 100 years. Stream flows were well below normal from early May through the rest of the year, lake levels fell throughout the year, and groundwater levels were low enough that a number of wells went dry across the region.

2013 has been another story. Through the winter, we had snow and melt events that helped push up the groundwater levels. At one point before the spring

freshet we had as much as twice the snow water equivalent (amount of water if the snow melted) on the ground as normal. But we had a normal freshet, creeks filled up, but no flooding problems.

Following that we had some dry weeks, and there was a worry that we might be back to another drought situation. And then we got rain. The rain amounts in April and May were close to normal, though we had saw a pattern with a few days of dry period and then a larger rain event, and then repeated. Those conditions filled up the creeks and lakes, and put us on the short road back to normal conditions.

In June, we had a number of larger rain events, and ended up with almost twice as much rain in June as normal. Creeks were flowing at spring levels at times, lakes were also at spring levels,

and the ground was soaked through. At this point, the watersheds were showing signs that things were definitely back to normal, stream flows were falling slower between rains and springs were running. At the time of writing this article (mid-July) stream flows are still well above normal for this time of year, and lake levels are about normal.

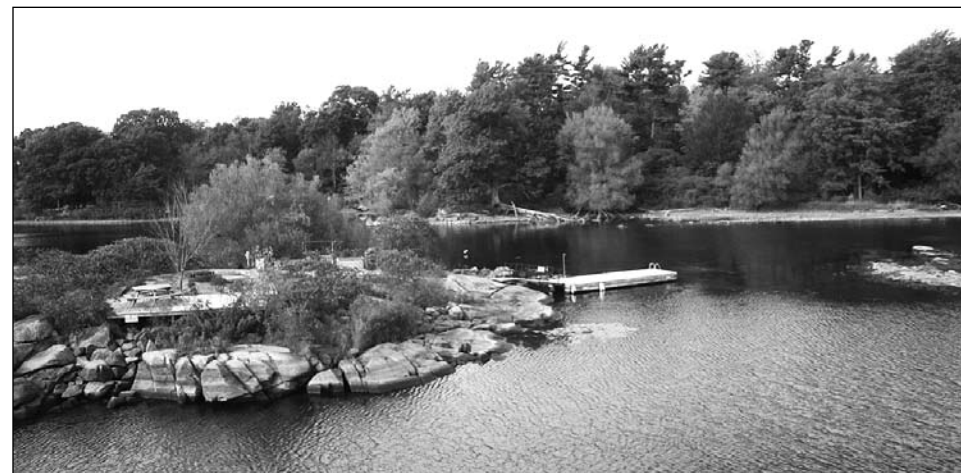
With the rain from the past few months spread across the province, even the Great Lakes levels were rising back up to normal. The average levels for June 2013 of Lake Ontario at Kingston and the St. Lawrence River at Brockville were right about normal, and in mid-July the levels were holding at the normal level.

It appears that conditions are back to normal for now, the long-term forecast over the next three to four months from Environment Canada is

also forecasting normal conditions into the fall, so things

should remain average until then. And we'll just have to

wait and see what happens after that.



In 2012 the drought affected water levels throughout the Cataraqui Region including the St. Lawrence River and Lake Ontario shown here. This year, thanks to regular rainfall water levels are close to normal.



Comings and Goings

In May, we welcomed Marketing Intern Laura Burton to the CRCA staff. The Marketing Intern position is shared with the Township of Elizabethtown-Kitley. Laura is also based at the municipal office.

The position is funded through the 1000 Islands Community Development Corporation through the federal Youth Internship Program. Laura will be working with the CRCA to help market and promote Mac Johnson

Wildlife Area in Brockville as well as working with the Township on promoting economic development and tourism.

A move and a new baby prompted Casey Sharp's departure from the CRCA at the end of June. Casey had been the Communications and Marketing Officer since January 2011. In July Casey and husband Rob welcomed a new baby girl, Blaire, into their home. They now live in Ottawa.

Replacing Casey is

Krista Fazackerley. Krista comes to the CRCA from the Frontenac Community Futures Development Corporation where she has worked for the past four years.

The CRCA also hired a number of summer students to help with various jobs. Stephen Bohan and Ryan Poulton worked as Resource Planning Assistant and Lands Planning Assistant. Stephen helped the planning and regulations staff with reviewing planning and permit applications. Ryan assisted

with the inventory of CRCA lands.

Our summer program ran once again at Gould Lake Conservation Area thanks to our crew of students supervised by Heather Ferguson. Tristan Sashav, Megan Ross, Stephanie Gannon and Kallista Smith worked at the gatehouse, did property maintenance and rented canoes and kayaks.

At the Little Cataraqui Creek Conservation Area Outdoor Centre, Hailey Esdon worked as the Outdoor Centre Of-

fice Clerk for the summer. She performed a variety of administrative and maintenance duties including answering inquiries, making bookings and taking care of rental groups.

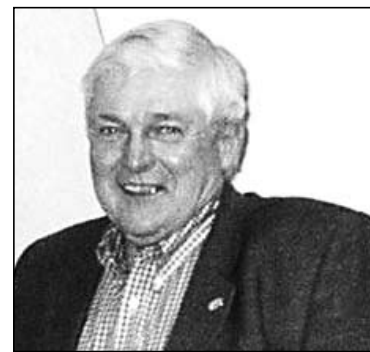
The Nature Explorers Camp was also based at the Outdoor Centre for the summer. Read more about our summer camp and meet our staff on page 12.

Sarah Sutherland assisted staff in CRCA administration office with document management, filing, and other

administration and communication duties.

Brock Sheen joined the operations staff to assist with property maintenance and various projects in conservation areas and on other properties.

On a sad note, former CRCA board member and Chair Bill Elliott from Napanee passed away in the spring. Bill was a founding member of the CRCA and was our Chair in 1976. Our condolences go out to the Elliott family.



CRCA founding member and former Chair Bill Elliott passed away in the spring.



Casey Sharp, former CRCA Communications and Marketing Officer, moved to Ottawa and welcomed a new baby girl into the family.



Krista Fazackerley is the new Communications and Marketing Specialist at the CRCA.



Laura Burton, Marketing Intern (left), is working for the CRCA and the Township of Elizabethtown-Kitley. She is shown here with Gerry MacAfee of the Friends of Mac Johnson Wildlife Area.

30 Year Service Award



Stephen Knechtel, General Manager/Secretary-Treasurer, was recognized for his 30 years of service at the annual general meeting in January.

Steve began work at the CRCA in 1982 as a Water Resources Technician. He worked in water management until becoming the General Manager in 2004.

Congratulations Steve!

Pictured are: Board Member Lisa Osanic, Stephen Knechtel and Chair Allan McPhail.

Plan for tree planting in 2014

If you are a rural landowner in the CRCA watershed and are interested in making your property a little bit greener, consider our tree planting program.

We deliver tree-planting programs in partnership with Trees Ontario and the Ministry of Natural Resources on a cost-sharing basis. You need to have at least one hectare of land and be willing to sign a 15-year planting agreement.

You can also order trees from us and do

your own planting. There is a minimum order of 500 seedlings and species can be ordered in multiples of 50. Group orders are also welcome. Get together with your neighbours and help reduce greenhouse gases!

To find out more, please visit the CRCA website at www.cataraquiregion.on.ca.

Trees Ontario is also hosting a series of landowner workshops this fall at various locations around the province. One was held on Septem-

ber 4 at the Little Cataraqui Creek Conservation Area Outdoor Centre. Another will be held on October 22 from 6:30 to 9:30 p.m. at the Elgin Lions Community Hall in Elgin. To register for a workshop, please visit the Trees Ontario website at www.treesontario.ca.



Enjoy the beauty of fall in our conservation areas. Each area offers places to enjoy nature, see the fall colours, relax outdoors or get active. You can even take part in some fun activities or learn some new outdoor skills. For maps, information about our conservation areas and to find out more about the Cataraqui Region Conservation Authority please visit our website at www.cataraquiregion.on.ca.

Little Cataraqui Creek Conservation Area

Fall School Programs

Monday, September 9 to Friday, December 6
We offer curriculum-based conservation education programs for elementary and secondary school students as well as pre-schools and adults. Visit www.cataraquiregion.on.ca for details.

Species at Risk Sunday, October 6 (2:00 p.m.)

Canada is home to over 500 species at risk and approximately 200 can be found in Ontario alone! Join Tim Wood, Species at Risk Coordinator for the Leeds-Grenville Stewardship Council for an informative presentation on species at risk. You will be introduced to species at risk in Ontario and the natural history of specific species at risk in eastern Ontario. Tim will also explain the factors contributing to the loss of biodiversity and discuss things we can do to help. The presentation will also include information about incentives and stewardship programs to help landowners and organizations.

Fall Colours Weekend Sunday, October 13 and Monday, October 14 (10:00 a.m. to 4:00 p.m.)

Enjoy the fall foliage from the water, paddling the Little Cataraqui Creek reservoir. Canoe rentals will be available at the Outdoor Centre. Our full fleet will be available from 10:00 a.m. until 3:00 p.m.; the last canoe must be in by 4:00 p.m. If canoeing is not for you, take a hike on our trails. CRCA staff will be on hand to suggest routes and provide maps. Come into the Outdoor Centre and purchase a slice of pie and a mug of cider, or just sit and enjoy the colourful view from the West Hall.

Earth Caching Sunday, October 20 (2:00 p.m.)

Get the family out for the afternoon to try your hand at earth caching. It is similar to

geocaching except you "take only pictures and leave only footprints." Once you get to the earth cache you take a picture of it and you can post it on the geocaching site as a logged visit. Bring a GPS and a digital camera.

The Real Bat Man Sunday, October 27 (2:00 p.m.)

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. Bat house construction follows. Kits will be available to purchase (while supplies last) after the talk. You can stay and assemble your bat house with us (please bring a hammer) or take it home to build.

Compass and GPS Workshop Sunday, November 3 (2:00 to 3:00 p.m. Map and Compass / 3:00 to 4:00 p.m. GPS)

Join Trailhead for this low key in-the-field experience with map and compass and/or GPS. From 2:00 to 3:00 p.m. learn how to use your compass to guide you to a location, deal with obstacles along the way and run a straight course through the bush. From 3:00 to 4:00 p.m. learn how to use your GPS for navigation. Both sessions will take place

Nature Photography Workshop Sunday, November 10 (2:00 to 4:00 p.m.)

Explore the possibilities of nature photography in every season. Join avid photographer Meredith Westcott on a late autumn walk in search of photographic treasures. Designed for beginner digital photographers, this two hour session touches on basic photography skills and how to see nature's art through a lens. Please wear weather appropriate clothing because a large portion of this session will be spent outdoors. Bring your own digital camera. Session will be cancelled if the weather conditions are poor. Please register in advance as there is limited space. Cost is \$15.00 for annual pass holders and \$21.50 for non-pass holders (this includes the gate fee).

Creatures of the Night Hike Saturday, November 16 (6:30 p.m.)

Get out for a breath of brisk fall air at our evening walk and take in a full moon. Come out to learn about the creatures that come out at night at Little Cataraqui Creek Conservation Area. Meet at the Outdoor Centre.

The Wild Side of Sandy Pines Wildlife Centre Sunday, November 24 (2:00 p.m.)

Forever Green Gala Saturday, November 9 Royal Military College Senior Staff Mess Reception at 6:00 p.m., Dinner at 7:30 p.m.

Tickets are \$125 per person (tax receipt for portion) It's time for the Cataraqui Conservation Foundation's annual fundraising gala dinner for conservation education. Enjoy music by Cliff Edwards at the reception. Bid on some great items at the live auction with Tim Potter or at the silent auction tables. The Conservation Awards will also be presented. For tickets and information please call (613) 546-4228 ext. 221.



in the bush off-trail so dress accordingly. You must bring your own compass and GPS. All ages welcome.

Come learn what the Sandy Pines Wildlife Centre is all about. See pictures, hear animal calls and play the famous turtle crossing game to learn one of

the crises that turtles are facing. Sandy Pines has animals that can be sponsored through their website which makes for a wonderful alternative Christmas gift.

Outdoor Christmas Party for the Animals Sunday, December 8 (2:00 p.m.)

Take time for some nature during the bustle of this busy season. Bring your family 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.

Lantern Hike Saturday, December 14 (6:30 p.m.)

Explore the trails at Little Cataraqui Creek Conservation Area by moonlight and lantern light. Afterwards warm up with a hot drink by the fireplace back at the Outdoor Centre.

Mac Johnson Wildlife Area

Fall School Programs

Monday, September 16 to Friday, December 6
We offer curriculum-based conservation education programs for elementary and secondary school students. Visit www.cataraquiregion.on.ca for details.

Outdoor Movie Night Saturday, September 28 (7:00 p.m.)

Come out and enjoy an outdoor movie with the family at Mac Johnson Wildlife Area. The movie being shown is Raiders of the Lost Ark - Indiana Jones (1981) and is rated PG. Dress warmly, bring your blankets, lawn chairs and flashlights. There will be snacks and drinks available for purchase in the Nature Centre. Admission is free but donations are welcome.

Fall Festival Saturday, October 5 (11:00 a.m. to 3:00 p.m.)

Admission is \$5 per car The Friends of Mac Johnson Wildlife Area are hosting their annual fall celebration. The dogsledders are back with their dog carts for a second great year! You can also enjoy the fall colours and watch the

waterfowl on the reservoir in a canoe or kayak courtesy of the CRCA. If the fresh air makes you hungry, the Friends will have a barbecue lunch available at the Nature Centre.

My Ecological Footprint Saturday, November 23 (1:00 p.m.)

Get introduced to the basic concept of the ecological footprint at Mac Johnson Wildlife Area. Through indoor and outdoor activities you can examine your own footprint and compare footprints to those of other cultures. By the end of this event, you will have the basic action plan to reduce your footprint and move towards living more lightly on earth. Meet at the Nature Centre at 1:00pm to participate in this exciting event.

Winter Walk Saturday, December 7 (1:00 p.m.)

Enjoy the start of the holiday season with a "where do they go in the winter" walk. There will be a guided walk that discusses migration, hibernation and winter active animals at Mac Johnson Wildlife Area. After the guided walk, warm up with hot chocolate at the Nature Centre.

Lemoine Point Conservation Area

Native Plant Nursery Sale Saturday, September 28 (9:00 a.m. to 3:00 p.m.)

Spruce up your garden this fall with some help from the Friends of Lemoine Point. This one-day sale includes a great selection of native trees, shrubs and wildflowers. Proceeds go to the Native Plant Nursery. The nursery is located at the Coverdale Drive (north) entrance to the conservation area.

Cataraqui Trail

Horseback Trail Ride Sunday, October 20 (9:00 a.m.)

Meet at the Lennox and Addington Snowmobile Club Clubhouse to head west for a fundraising trail ride at 9:00 a.m. After the ride, meet back at the clubhouse for a barbecue. Watch the Cataraqui Trail website www.cataraquitrail.ca for further details..



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Join Trailhead for this low key in-the-field experience with map and compass and/or GPS.



Bat expert Matt Saunders is back by popular demand. Matt will introduce you to the fascinating world of bats. Sunday October 27.



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Come learn what the Sandy Pines Wildlife Centre is all about.



Join Tim Wood, Species at Risk Coordinator for the Leeds-Grenville Stewardship Council for an informative presentation on species at risk October 6.



We offer curriculum-based conservation education programs for elementary and secondary school students.



Join the Cataraqui Trail Horseback Trail Ride fundraiser Sunday October 20.



Explore the possibilities of nature photography in every season. Join avid photographer Meredith Westcott on a late autumn walk in search of photographic treasures. Sunday November 10.

Boardwalk replaced at Little Cataraqui Creek Conservation Area

Over the course of the summer, CRCA staff worked on replacing the main boardwalk at Little Cataraqui Creek Conservation Area. The boardwalk is located immediately north of the Outdoor Centre and acts as a main access to the hiking and ski trail network.

Demolition of the old boardwalk and construction of the replacement began on July 2. At press time the boardwalk was nearly complete. The project will be completed by the time you receive this issue of *Cat Tales*.

The new boardwalk consists of 18 sections that are 12 feet long by 6 feet wide. Each section is built like a floating dock, with plastic flotation underneath and wood decking on top. The sections are attached to each other and anchored to ramps at either end of the boardwalk. Small bump-out areas have been added to allow for a place for people to stop and view the wildlife or just enjoy the scenery.

"The boardwalk design was based on recommendations that we received from Queen's engineering students," said Sean Watt, CRCA Watershed Engineer. This was one of our student projects supervised by Mr. Watt.

The Kingston-Frontenac Rotary Club donated \$30,000 to cover the cost of materials for construction of the boardwalk. Their generous contribution will be recognized at an official opening that



These photos show the progress on the Little Cataraqui Creek Conservation Area boardwalk project. The first photo shows portions of the old boardwalk supports with new sections on the boardwalk under construction. As sections of boardwalk were completed they were slid into place. CRCA operations staff install decking on the boardwalk.

will take place this fall.

CRCA operations staff Richard Horton, Ian Brown, Tom Brooke and Brock Sheen demolished the old boardwalk and

built the new one. Photos of the demolition and construction are provided above. Additional photos are available on the CRCA Facebook page.

Above: About 250 people participated in the Crossfit Brockville challenge held in June at Mac Johnson Wildlife Area.

Below: Also in June, staff from the Royal Bank in Brockville volunteered at the tree nursery as part of their celebrations for their Blue Water program. They also donated \$1000 to the Friends of Mac Johnson Wildlife Area.



Right: Students from Ecole Ange Gabriel and the Youth Volunteer Corps, as well as Brockville Employment and Education Centre and the Friends of Mac Johnson Wildlife Area participated in the spring clean-up on Saturday April 20.



Lots of projects and activities at Mac Johnson Wildlife Area

Despite poor weather conditions students from Ecole Ange Gabriel, the Youth Volunteer Corps, Brockville Employment and Education Centre as well as many volunteers from the Friends of MJWA participated in the spring clean-up at the MJWA on Saturday April 20th.

Through their hard work the clean-up covered both the south and north portions of the Wildlife Area. Supplies for the clean-up were provided through the Brockville City Wide Community Clean-up, Tim Hortons and the CRCA. The Friends of Mac Johnson Wildlife Area provided a barbecue lunch and refresh-

ments.

Many thanks to all those who braved the weather and made the day a big success!

The Friends of Mac Johnson Wildlife Area also participated in a work bee the past spring to do some trail improvements at the south end of the Wildlife Area. They also helped to install some signs. An additional trail work bee is planned for the fall.

Local radio host Bruce Wylie from Bell Media led a morning hike every other Wednesday during the spring. Participants met in the south parking lot to join Mr. Wylie for an easy hike with commentary about the area. Mr. Wylie is a long-time supporter of Mac Johnson Wildlife Area. He plans to resume the regular hikes in the fall.

Crossfit Brockville

held a fundraising event at Mac Johnson Wildlife Area on June 8. Activities took place in and around the north parking lot and picnic shelter. The event was a fundraiser for Families of Canadian Soldiers. Approximately 250 people participated in the event.

Also on June 8 staff from the Royal Bank in Brockville volunteered at the tree nursery at Mac Johnson Wildlife Area. They assisted with potting trees and shrubs in the nursery as part of their celebrations for their Blue Water program. They also donated \$1000 to the Friends of Mac Johnson Wildlife Area. Way to go RBC!

Don't miss our exciting fall line-up of events at Mac Johnson Wildlife Area. See pages 6 and 7 for details or follow us on Facebook and Twitter.



Sugar shack and reservoir access upgraded at Little Cataraqui Creek Conservation Area

Just in time for our annual Maple Madness program held in March and April, new grills and cooking equipment were installed in the sugar shack. To meet current safety standards, ventilation hoods were also added above the cooking surfaces.

One of the challenges in doing this work is the fact that there is no electricity available in the sugar bush area. The cooking equipment uses propane, but a generator was required to run the ventilation system.

Funding assistance and technical advice for the upgrades was provided by Union Gas in Kingston.

The new cooking area and the great weather during Maple Madness help to boost the number of pancakes sold this year. We sold just over 15,000 pancakes in 2013. In 2012 we sold 10,600 pancakes and in 2011 it was 12,500.

The number of visitors in 2013 was 11,300 - also up, likely due to the good weather we enjoyed in March and April.

Last year, the two sets of stairs leading to the Little Cataraqui Creek Reservoir from the warming huts were removed. Both were in poor condition and needed to be replaced. These stairs provide access to our skating rink in the winter and our canoe dock in the spring, summer and fall.

It wasn't a big problem during the winter months because the skating rink was not open much due to poor ice conditions. The ice



New cooking equipment and overhead ventilation was installed in the Sugar Shack just in time for Maple Madness at Little Cataraqui Creek Conservation Area. Support posts for the new stairs providing access to the Little Cataraqui Creek Reservoir were installed last December. The stairs were completed this spring. They provide access to the canoe dock during the spring, summer and fall and to the skating rink during the winter months.

is also easily accessible from the service road just north of the warming huts.

However, it's a bit more difficult for canoes and kayaks when the dock isn't in place. The water at the service road is very shallow and muddy making it difficult to launch canoes and kayaks. Earlier this past

summer, the stairs were completed and the dock was installed.

The two sets of stairs have been replaced with one wide set of stairs, making it much easier to move canoes and kayaks from the shore to the water. It will also provide easy access to the skating rink next winter.



New docks were installed at the Loughborough Lake Boat Ramp (shown here with CRCA operations staff Richard Horton) and at Sydenham Lake Boat Ramp.

Improvements made at CRCA boat ramps

Three of the CRCA's boat ramps received some upgrades from our operations staff this past spring and summer.

New docks were installed at both Sydenham Lake and Loughborough Lake Boat Ramps. At Elaida Lake Boat Ramp near Athens, the entrance, ramp approach and parking area were gravelled and graded to improve both drainage and the surface of these areas.

The CRCA's boat ramps and water access points provide public access to many area lakes within our watershed.



Muddy conditions and poor drainage at Elaida Lake Boat Ramp required the placement and grading of gravel along the entrance road, at the parking lot and at the ramp.

Staying on the trails protects Lemoine Point Conservation Area

Your little off-trail walk couldn't possibly cause any environmental damage, right? Wrong!

Over time repeated trampling of trees, shrubs and other plants can result in those plants disappearing, leaving bare soil that can begin to be eroded. The animals, birds, insects and other species that rely on that vegetation for food sources, protection from predators or places to nest can no longer rely on that habitat.

I know what you're thinking. I'm just one person, how can I possibly hurt the environment by doing a little off-trail walking? Multiply that by hundreds or even thousands of conservation area visitors doing the same thing and maybe the picture will become a little bit clearer.

Lemoine Point Conservation Area is one of the CRCA's best-loved and most heavily-used conservation areas. People want to get some exercise and fresh air, walk their dogs and enjoy nature. We want to make sure that the nature continues to be there for people to enjoy.

During the spring and summer we have been making improvements to the approved trails at Lemoine Point Conservation Area in order to clearly identify which are the right trails to use.

Early this fall, we will begin closing the informal trails and installing signs explaining why it's important to stay on the approved and maintained trails. Other signage will also be improved. You will also find information at our kiosks about our work to maintain a healthy natural environment at Lemoine Point Conservation Area.

We will also be recruiting volunteers to speak with visitors about the importance of staying on the trails. If you are interested in helping out, please give us a call at (613) 546-4228 or e-mail crca@cataraquire-gion.on.ca.

Watch for more information about this important initiative on the CRCA website as well as on our Facebook and Twitter pages.

Treetop Trekking on hold

In our last issue of *Cat Tales*, we reported that Treetop Trekking would be setting up operations at Little Cataraqui Creek Conservation Area this year. The plan was to set up zip lines, rope bridges and climbing ap-

paratus in the sugar bush to be used during the spring, summer and fall after the Maple Madness program. Unfortunately, Treetop Trekking is unable to proceed at this time so the project is on hold.



CRCA staff monitoring for waterfowl



Amanda Mallory records the location of a nesting box.



Kimberly Denison examines a nesting box. During monitoring, photos are taken at each box recording the condition and nesting outcome.



This photo provides a good example of what we are looking for.

The CRCA is participating in the Ducks Unlimited (DU) Wetland Care Program and have DU Conservation Agreements at seven of our conservation properties. One of the main aspects of this program is installing nest boxes.

Why install nest boxes? Some waterfowl, like the wood duck nest in tree cavities of mature trees. Human impacts have reduced the availability of suitable nesting spots. Installing nest boxes encourages and increases the nesting success. Nest boxes have been installed along watercourses in areas that have suitable wetland habitat. Other waterfowl such as the hooded merganser

and goldeneye will also use the boxes.

Most of the nest boxes were installed in 2010, with our first monitoring efforts in the winter of 2011. Our goal is to monitor the boxes each winter during ice conditions. Nest box maintenance is also done at this time. Nest boxes are surveyed to document usage, nesting success and condition of the nest box.

When looking at nest box usage we look at whether they have been used by waterfowl or other birds. Often other birds will take advantage of the nest box using it for nesting or for winter shelter. These species include the tree swallow, northern wren, common grackle, starling, saw-whet and screech owls. Screech and saw-whet owls, other resident birds will use the boxes for

cover and often you will find collection of bones (owl pellets) from an owl's processed dinner in the boxes! Paper wasps and honey bees have also been known to use the nest boxes.

Nesting success is determined by looking for evidence like nesting down from the mother hen, membranes from hatched shells, hatched eggs and/or small broken egg fragments. Sometimes there is evidence that the nest was used but unsuccessfully, likely because of predation. For example, we will find things like shells broken open at the centre of the egg with the dried yolk visible. The most common predator is the raccoon but squirrels, snakes and weasels are also predators.

When monitoring, we also look for evidence of *dump nesting*

and *dummy nests*.

Dump nesting happens when more than one hen uses a single box and lays at least 18 eggs. In some cases one can find 30 and up to 50 eggs in one box. This can occur for many reasons including lack of available nest sites, predation and nearby human activity that scares the duck away. Often it is a juvenile hen that, maybe not knowing quite what to do, that will follow the mature hen and lay eggs in the same box after she is finished. A hen returning to a nest that has many eggs dumped often will abandon it.

Some bird species, such as the northern wren, will make decoy or *dummy nests* that are used to reduce predation. This is what we found this year at Lyn Creek where dummy nests were built above waterfowl

nests.

While monitoring, we also assess the condition of the nest box, predator guard and height of the box. Wind and frost heave can tilt poles and wreak havoc on predator guards. Changes in the height and general condition of the box are recorded. We remove old nesting material and replace nesting shavings, tighten any loose screws or mounts, repair or replace predator guards.

Completed surveys are then submitted to the Ducks Unlimited to be entered in a province-wide database. This data is gathered to monitor the presence of waterfowl species in the area and to provide nesting habitat on or near CRCA properties.

There are a total of 54 boxes under our 15-year agreement

with DU, including ten boxes still being monitored from former agreements. The areas and number of nest boxes installed include:

- five on Collins Creek
- nine at Gould Lake Conservation Area (plus four previously installed boxes)
- eight at Little Cataraqui Creek Conservation Area
- two on Lyn Creek
- five at Parrott's Bay Conservation Area and
- five at Mac Johnson Wildlife Area (plus six previously installed) and
- Millhaven Creek and wetlands.

In 2013, the CRCA's Millhaven Creek wetland property was included in a conservation agreement. Ten boxes were installed and will be monitored yearly by the Kingston Field Naturalists.

FOUNDATION NEWS

Cataraqui Conservation Foundation accredited by *Imagine Canada*

A number of years ago, the Cataraqui Conservation Foundation signed up for the *Imagine Canada Ethical Code* program, a program that was intended to provide some assurance for donors that the Foundation met a certain level of accountability and transparency for its fundraising activities. This program is in the process of being strengthened and reshaped into a peer-reviewed standards program. As reported in

the Winter/Spring 2013 *Cat Tales* the Foundation embarked upon a project in 2012 to achieve accreditation under the new approach.

The *Imagine Canada Standards Program* is a Canada-wide set of shared standards for charities and non-profits designed to demonstrate their compliance in five fundamental areas:

- board governance
- financial accountability and transparency

- fundraising
- staff management and
- volunteer involvement.

It helps organizations mitigate risk by ensuring that staff and volunteers understand and meet their legal, financial and fiduciary responsibilities.

"Our policies and procedures in the five areas of compliance were evaluated by a group of volunteers from the sector, and were found to be compli-

ant with the Standards Program. The accreditation process helped the Foundation board look critically at how it has operated and provided us with a capacity building initiative to position the Foundation for a major initiative to mark its 50th anniversary in 2015," explains President Betty Boone.

The *Imagine Canada* June 18, 2013 media release announcing the accreditation of

the Foundation among 24 charities and non-profits highlighted the following goals of the program:

"Among the Standards Program's goals are the ability to increase an organization's transparency and capacity, and to strengthen public confidence in individual organizations and the nonprofit sector as a whole."

"The Foundation

board," Mrs. Boone noted, "is very proud to be able to join this select group of charities and non-profits, now numbering 45 across Canada, and looks forward to achieving new levels of support in the communities included in the watershed served by the Cataraqui and Region Conservation Authority for outdoor education and the acquisition of environmentally sensitive land."

Plan to attend the Forever Green Gala

Foundation directors have been busy over the last few months making plans for their annual fundraising gala in November. This year's event will be held on **Saturday, November 9** at 6:00 p.m. at the Royal Military College Senior Staff Mess.

The event features a gala dinner, live and silent auctions, musical entertainment and helping to raise funds for a very worthy cause – the CRCA's conservation education programs.

The 2013 Conservation Awards will also be presented at the gala.

This year, the musical entertainment at the reception will be provided by Cliff Edwards. Tim Potter will be our auctioneer. Also back by popular demand is last year's MC Lisa Ray, a local radio personality. Cliff, Tim and Lisa add a lot of fun and good humour to the Foundation's gala.

Event sponsorships and donations of items to the live and silent auctions are

always welcome. Please call the CRCA office if you are interested in participating.

Tickets are \$125 per person and a tax receipt will be provided for a portion of the ticket price. If you are interested in attending, please call the CRCA office at (613) 546-4228 ext. 221 to buy your tickets.

It promises to be a great evening! It's also a great way to do some early Christmas shopping.

Cataraqui Trail celebrates the completion of a link and Bike or Hike fundraiser

In May, the Cataraqui Trail Management Board celebrated the long-awaited completion of the link between the Cataraqui Trail and the K&P Trail.

On paper, the connection has been in place for some time, but on the ground has been a different story. Surface improvements and the completion of a bridge now mean that you can hike or cycle to and from Kingston to Harrowsmith and then along the Cataraqui Trail.

The two trails intersect in Harrowsmith at what we like to call the Harrowsmith Hub. New signage and a bench were officially unveiled on May 29. Additional work will include the construction of a parking area and other improvements to enhance the visibility and accessibility of the trail network.

The Cataraqui Trail also hosted their annual Bike or Hike fundraiser in August in Yarker. The event was held a month earlier than in previous years in the hopes that there would be better weather.

The weather certainly cooperated but there were about the same number of participants as in previous years. The Lennox and Addington Snowmobile Club's clubhouse in Yarker provided the home base for the barbecue lunch and silent auction.

A final tally of the funds that were raised was not available at press time.



Foundation President Betty Boone



Returning to this year's Forever Green Gala are MC Lisa Ray and auctioneer Tim Potter.



An official opening on May 29 celebrated the linkage of the Cataraqui and K&P Trails in Harrowsmith. New signs and a new bench were unveiled. Participants came from the Cataraqui Trail, County of Frontenac and Township of South Frontenac.



Nature Explorers Camp finishes another successful season

With the summer coming to an end, the Nature Explorers Camp has completed another successful season! The eight weeks of camp could not have been better, thanks to the incredible staff team consisting of Camp Supervisor *Fungi* (Jess Pelow), Camp Instructors *Violet* (Amber Morton), *Feather* (Rosie Gatenby), and *Daffodil*

(Holly Ottenhof), and Camp Apprentice *Chickadee* (Katey Day).

This year we added new skills activities such as fire building, and brought back some camp favourites including salamander searching, marsh dipping, and shelter building. We also gained new knowledge of our local wildlife, and saw our first Luna

Moth at Little Cataraqui Creek Conservation Area!

Overall, we had over 170 smiling campers, 16 visits to Gould Lake, seven Leaders-in-Training, five superhero visitors and one amazing summer!

We look forward to even more hiking adventures, outdoor skills and nature knowledge next summer.



Pond dipping is a popular activity for participants in the Nature Explorers Camp



Nature Explorers Camp staff included (top, left to right) Rosie Gatenby, Amber Morton, Holly Ottenhof, (middle) volunteer Katey Day, (bottom) Jess Pelow.

Nature programs for early learners and home learners offered at Little Cataraqui Creek

Based at the Little Cataraqui Creek Conservation Area Nature Program for Early Learners (ages 2.5 - 5) brings children together with their parents to experience the great outdoors through songs, stories, puppets, hiking and exploration.

The Nature Program for Home Learners (6 - 11) is a drop off program that brings children together to experience the great outdoors through games, hiking and outdoor exploration as well. Children

aged 12 to 14 can participate in a leadership and training program, assisting the conservation education staff. Participants will come away with new nature skills and a greater connection to the natural world.

Advance registration is required. For details visit our website at www.cataraqueiregion.on.ca or pick up a registration form at the CRCA Administration Office or Outdoor Centre.

Cost is \$56 for eight sessions for early learners and home learners.

You can register by e-mailing Dianne Doyle at ddoyle@cataraquiregion.on.ca or calling (613) 546-4228 ext. 221 or 1-877-956-CRCA (2722) ext. 221.

Time to book 2013-2014 school programs

The CRCA offers curriculum-based conservation education programs for elementary and secondary school students at Little Cataraqui Creek Conservation Area in Kingston and Mac Johnson Wildlife Area in Brockville. Program calendars based on primary, junior-intermediate and senior divisions and subject areas were mailed to elementary and secondary schools in late August.

We also offer nature programs for early learners (2.5 - 5 years old) and home learners (6 - 14 years old) and adult learners with an English as a Second Language and retiree specialty focus at the Little Cataraqui Creek Conservation Area.

To help save on bus costs and the environment, we welcome and encourage two classes or larger groups to participate at the same time. Consider giving your students an opportunity to connect with nature for either a half-day or even a full day.

Our conservation education programs aim to teach learners through their head, heart and hands and "...we believe that by instilling awe and respect for the natural



Instincts for Survival is a popular school program. Students explore the relationships in a food web by role-playing the predator-prey relationship.

environment today leads to a conservation ethic in decision-making for tomorrow."

Our education staff aim to provide support to educators in transferring what students experience during field trips at our conservation areas back to school. We strive to provide teachers with resources and tools to use the outdoors in order to cover the curriculum and cultivate a connection to nature in their school yards and local outdoor spaces.

Detailed information about all of our school programs is available on our

website.

Bookings for our school programs can be made now for all of our programs throughout the school year by e-mailing or calling our friendly education staff:

- Stana Luxford Oddie at Little Cataraqui Creek Conservation Area in Kingston – educate@cataraquiregion.on.ca or (613) 546-4228 ext. 251 or 1-877-956-CRCA (2722) ext. 251

- Brenda Graham at Mac Johnson Wildlife Area in Brockville – edmjwa@gmail.com or (613) 923-1526.

Union Gas provides helping hands to the CRCA

Union Gas provided staff and equipment from their Kingston office to help CRCA staff with some conservation area improvements at Little Cataraqui Creek Conservation Area at the end of August.

Despite very wet weather, a lot of work got done. Barbecues and stands were removed from the picnic areas. The privy vault in the picnic area near the dam was demolished and filled in. Some digging and ground work was done in the sugar bush area.



Staff and volunteers from Union Gas in Kingston assisted with the removal of barbecues in the picnic areas and ground preparation in the sugar bush at Little Cataraqui Creek Conservation Area.

