



GRAND Actions

The Grand River watershed newsletter



November/December 2016 • Volume 20, Number 4

What's Inside:

Features

- 2016 Honour Roll Award for David Lamble1
- Grand Safari 3

What's happening

- A field trip for the climate 4
- Students help GLNC 5
- Heritage workshop 5

Look who's taking action

- Belwood cleanup 6
- Brantford new forest 6

What you can do

- Three ways to help bees 7
- Give a Park Pass 6
- Reservoirs are low 8

Calendar 8



David Lamble nets birds and 2016 Honour Roll award

By Janet Baine
GRCA Communications Specialist

David Lamble fell in love with bird banding in the 1970s and he received the GRCA's top conservation award as a result of his work with birds.

Lamble spends about 200 days a year out in the fields, forests and wetlands banding birds, mostly in the northern part of the Grand River watershed.

On Thursday, October 20, he received the Grand River Conservation Authority's top conservation award — the 2016 Honour Roll Award — for his dedication to the scientific practice of bird banding. Only one of these awards is given out by the conservation authority in any given year.

“People should know that a number of wildlife species are in danger and if we are going to help them, we need to know more about them,” he says.

Bird banding means catching a bird, assessing its health, age and sex, installing a metal band with a unique number around its leg and then releasing it back into the wild.

Over the decades, Lamble has caught and banded about 200,000 birds of nearly 200 species. His birds end up all over the world — they are caught, recorded and released by other banders or are found and reported back to Lamble through the banding office at the Canadian Wildlife Service.

“The thing I've learned most is birds are smarter than we think. They learn very quickly and can

Cover photo

David Lamble removes a red-breasted nuthatch from a net to band it.

Photo by Janet Baine





From left are GRCA Chair Helen Jowett, Joel Pegg (co-ordinator of Youth Outdoors Day), John Rowe, Dr. Paul Karrow, Bob Desautels (The Neighbourhood Group of Companies), David Lamble (Honour Roll Award recipient) and Joe Farwell, CAO of the GRCA. Stories about each Watershed Award recipient will be featured in upcoming issues of Grand Actions.

exploit certain resources,” he says. Woodpeckers, for example, are more common in the Grand River watershed in recent years as a result of the Emerald Ash Borer insect that is killing ash trees. Once a rare find, woodpeckers of all kinds are now common and Lamble believes EAB is the

reason their numbers have risen.

Another trend he has noticed is that swallows are declining because there are few places where they can nest and raise their young. Barn swallows used to use barns, but there are fewer barns and the new ones have a different design without swallow nesting

habitat. Swallows also nest under bridges, but these are also constructed differently, without swallow nesting locations. Lamble has brought this to the attention of bridge builders, who can incorporate nesting areas within new structures.

Lamble holds a master banding permit, which means he can have sub-permittees working with him. At the moment he has four sub-permit holders and one apprentice working with him. Banders can only get a permit by learning from other banders. There are only 300 master permit holders in Canada, so it is not easy to travel the distance required to work with a master bander on a regular basis and get a permit.

Gypsy bander

Unlike most master banders, Lamble is not associated with a specific bird banding station, so he calls himself a gypsy bander. He moves to different places as he targets a variety of species throughout the year. He monitors and bands at 400 bird boxes every year, including two sets of boxes at Luther Marsh Wildlife Management Area. He also regularly bands at Belwood Lake Park.

A retired teacher, Lamble enjoys sharing his love of banding with others. He gives as many people as possible the chance to hold and release birds, so they too can experience the wonder and fragility of these distance travellers. He does banding demonstrations every year for students at Guelph Lake Nature Centre and has brought birds into school over many years.

“I’m really keen on having kids learn about banding. They can’t band, but you can show them how to hold a bird and let it go. Once someone has captured a bird and then let it go, they have a much better understanding of how beautiful and how fragile they are. It is that interaction that speaks to the child in all of us, adults and kids,” he says.

Later, placing a recently banded mourning dove from his backyard in the hands of a visitor so she can release it, he says, “You have probably never seen a more beautiful mourning dove than this one.”

He is so right — there is something magical about releasing a bird back into the wild.

For more information on the Watershed Awards see www.grandriver.ca/awards.



Clockwise from left are a barred owl, an osprey chick and a mourning dove during banding by David Lamble.

UW students take a Grand River safari

By Pieter van der Zaag,
Visiting professor

From Sept. 6 to 12 nearly 50 graduate students from the University of Waterloo embarked on what I call the Grand River Safari.

This is a unique group of students who come from different backgrounds, disciplines and cultures. They study the same watershed, listening to a variety of stakeholders and other experts, discussing the problems and challenges of the watershed, identifying underlying drivers and causes of environmental change and critically assessing possible avenues of action. This watershed journey is very capably coordinated and led by Mark Servos and Simon Courtenay, with the assistance of Maricor Arlos and Sondra Eger.

Being an RBC Visiting Fellow to the Water Institute, this Dutchman was privileged to participate in this Safari, allowing me to get to know Waterloo staff and students, and also to get acquainted with a river that I didn't know. I can now add the Grand River to my list of favourite watersheds.

Over time the Grand watershed has



Pieter van der Zaag on the Shand Dam.

witnessed massive changes, particularly with respect to land use, the use of its water resources and the construction of hydraulic works. This has led to major modifications of the river flow regime and water quality.

Temperature of the river water during summer is a “hot” item, in particular for fishers and the trout themselves. I never realized that cold water is a resource to be treasured. Colder water is older water, stemming from groundwater, so any action that increases infiltration of rainfall water and boosts base flows is good for trout. As nearly always is the case, slowing the flow adds value.

Some stories stuck. The legacy of the production of Agent Orange in Elmira on local groundwater bodies and seepage flows into the river made a deep impression. How much has our value system changed over the last two generations on either side of the ocean! In The Netherlands we used to view the river Rhine as an efficient sewer not more than 50 years ago.

Farmers are keepers of the land

Farmers are the keepers of the land and thus very important stakeholders in the watershed. As land owners they directly feel the consequences of any new policy that regulates the watershed. Yet farmers come in different shapes: from small holder dairy farmers using traditional technologies to the most advanced vegetable and ginseng producers.

I was particularly impressed by the staff of the GRCA, not only their professionalism and dedication, but in particular the manner in which they engage with farmers. Whereas they might have formal authority, they prefer to earn it through taking the interests of farmers seriously, jointly exploring ways to improve land use practices that decrease harmful effects on the river and tailor any intervention to the specific characteristics of each farmer. GRCA staff clearly prefer to nudge and use the carrot rather than the stick. The same holds for how they deal with municipalities that need to decrease spills of untreated wastewater. This is called leading from behind.

This strategy resonates with the Dutch strategy of “polderen” — a verb that is derived from the iconic Dutch “polder” watershed, a piece of land that was formerly a lake or part of the sea and is now drained and enclosed by dikes and “reclaimed.”



Photo by Maricor Arlos

Conservation specialist Anne Loeffler of the GRCA shares her experience of working with farmers to improve water quality.

Polderen means to seek consensus among stakeholders if there is an issue to be resolved, rather than top-down enforcement — as if we are all shareholders in a dike: we all have to cooperate or else the dike will fail and we all suffer.

First Nations water ceremony

The Grand River Safari wouldn't have been complete without the First Nations water ceremony, which was a moving event. It impressed me, and I think all others taking part in it, that we form integral part of the watershed, sojourning for a while in this beautiful space that we borrow from the generations to come.

The water flowing through the watershed connects these different facets, issues and people. Journeying through it is therefore an apt didactical method to promote interdisciplinarity in academia. Well done, Waterloo! I look forward to the research findings that will emanate from this great group of future water leaders!

Pieter van der Zaag is professor of integrated water resources management at the UNESCO-IHE Institute for Water Education in Delft and professor at the Delft University of Technology, The Netherlands.

WHAT'S HAPPENING

A field trip for climate's sake

By **Tamara Anderson**
Resource Interpreter

On a crisp October morning, Grade 4/5 students from Our Lady of Providence Catholic School in Brantford arrive at the Apps' Mill Nature Centre to try a new climate change program provided by the nature centres.

They started out by learning about carbon sinks — forests, oceans and other natural areas that absorb and store carbon dioxide. This slows the progress of climate change.

The first challenge for the students was to go into the forest, find and measure trees to



Photo by Tamara Anderson

Students measure a maple tree to find out how much carbon it holds during a day of learning about climate change at Apps' Mill Nature Centre.

learn how much carbon dioxide each tree had absorbed in its lifetime. They were amazed to discover that a moderately-sized sugar maple with a diameter of 41 cm had absorbed almost as much carbon dioxide as the average home emits in electricity use each year.

"I will need to plant at least 80 trees in my lifetime just to have electricity in my home," one boy exclaimed in surprise.

New climate change game

Games are a great way to teach kids, so nature centre staff developed a climate change game that the students experienced.

The class was divided into two teams — the Guardians and the Oncelers. The Guardians played the role of superheroes in the watershed, trying to reduce carbon dioxide emissions. Their rivals, the greedy Oncelers (based on a character in *The Lorax* by Dr. Seuss), were villains trying to heat up the watershed by increasing carbon dioxides. Each team worked hard on their task.

At one point, the Oncelers emitted so much carbon dioxide that they unleashed a severe storm and one of their players (a parent volunteer) used a water gun to spray and tag the Guardians. Fortunately, the Guardians soon found a way to permit four of their players to "level-up" and become

trees that could tag the Oncelers and trap the carbon dioxide molecules that they were carrying.

After lots of excitement, laughter and learning, the game ended with a wrap-up on the importance of reducing carbon emissions and taking care of the planet's very important carbon sinks.

This is a complex issue to teach to students. As the David Suzuki Foundation has noted, tree planting increases carbon sinks. But it is also essential to seek longterm solutions. These include energy conservation and using renewable energy.

It was a "tree-mendous" day with a very keen class of future stewards of the watershed.

This program fits with the "Conservation of Energy and Resources" unit in Ontario's Grade 5 science curriculum.

Tree measure tool

The tree measuring activity was inspired by Acer's carbon calculator for trees: www.acer-acre.ca/treebiomasscal and the work of the Science Education Research Center at Carleton College, Minnesota.

To learn more about the nature centre programs like this, please visit www.grandriver.ca/SchoolPrograms.



Photo by Sara Wilbur

Students in the Beyond Borders program created some video ads to help the Guelph Lake Nature Centre fundraising campaign that will result in a new nature centre.

Students help GLNC campaign

By Emma Keesmaat
Beyond Borders student

Some Grade 12 students in Guelph have jumped on the band wagon and joined the campaign to raise funds for a new nature centre at Guelph Lake Park.

On a beautiful day in October, 46 Grade 12 students came together in the forests of Guelph Lake Park to meet a challenge.

They were given the task of creating short 30-second and two-minute videos to attract donations and raise interest in the new Guelph Lake Nature Centre that is planned for the property.

The students were split into groups and given a day to brainstorm, film and edit videos. It was a tough challenge, but perfectly suited to the driven and motivated students who are part of Beyond Borders, an experiential learning program of the Upper Grand District School Board in Guelph. The program is business-oriented and provides students with skills such as leadership, problem solving, time management and organization.

The new nature centre will be located inside Guelph Lake Park about a half-kilometre from the current nature centre. The new site has already been landscaped with trees, wetlands and a pollinator park, thanks to volunteers and donations.

The videos were meant to create nostalgia in those who have history at the nature centre, hoping to remind them of the place they love so much. Donations are needed to construct a new education centre as the Grand River Conservation Foundation works towards its goal of raising \$3 million for this project.

They used phones, GoPros and other cameras to create ads that highlighted the beautiful scenery that surrounds the area.

Staff from the GRCA critiqued the videos, along with Susan and Emily Frasson members of the Honorary Campaign Chair Family, and Nicole Visentin from a local marketing firm, Intrigue Media. Intrigue will air the winning videos at a network of doctor's offices and public places in Guelph.

"I was so impressed with what the students were able to capture in such a short time," said Sara Wilbur, executive director of the Foundation. "This will bring our campaign to a broader audience, seen through the eyes of the students. They are Guelph Lake kids and we are too."

As William Shakespeare once wisely said, "One touch of nature makes the whole world kin".

To make a donation to the new centre, visit www.grcf.ca or call the Foundation at 1-877-29-GRAND.

Register for the Heritage Day Workshop Feb. 15-17

Mark your calendar, February 15 to 17, 2017, for a special three-day heritage day gathering showcasing the Mississaugas of the New Credit First Nation, their lands, their waters and their people.

The GRCA's Heritage Working Group is marking its 20-year Heritage Day anniversary through a unique partnership with the Mississaugas of the New Credit First

Nation by celebrating Ontario and Canada's 150th anniversary and by recognizing their contributions to Ontario and Canada.



New Credit First Nations

The three-day Heritage Day Workshop and Historical Gathering will feature more than 20 indigenous and non-indigenous speakers and scholars. These include Donald B. Smith, author of *Mississauga Portraits* and history professor emeritus at the University of Calgary, who has a special interest in the history of aboriginal Canada. Peter H. Russell, professor emeritus in political science with the University of Toronto and chair of the Research Advisory Committee for the Royal Commission on Aboriginal Peoples, will also make presentations.

On the first day, February 15, speakers will address the issues before Canada's confederation in 1967. The focus of the second day, February 16, will be the issues around the time of confederation, and the final day, February 17, will focus on post-confederation.

Register now for one, two or all three days. This is a free event, but preregistration is required by sending an email to Historical.Gathering@outlook.com or calling 905-768-0100 to reserve your spot. Please note that space is limited and the GRCA is not handling registration.

GRCA volunteer profile

Belwood Lake volunteer cleanup

By **Bronwen Buck**
GRCA Volunteer Coordinator

Belwood resident Amanda Stornebrink's desire to "be the change" in her community means she is the November volunteer of the month at the Guelph Wellington Volunteer Centre.

When she discovered the Grand River Conservation Authority was expanding its volunteer program, she called immediately. Her environmental ethic coupled with a strong sense of place meant she was disappointed by the amount of waste left along the Belwood Lake shoreline after the summer. She suggested that the GRCA hold some volunteer events around her beloved stomping grounds. In the fall of 2015 and 2016, she was instrumental helping initiate GRCA cleanups at the Belwood Lake Bridge.

She went above and beyond the role of most volunteers involved in cleanup events. Since the events were also listed on the Great Canadian Shoreline Cleanup website, Stornebrink fulfilled the duties of Great Canadian Shoreline Cleanup site

LOOK WHO'S TAKING ACTION

coordinator. She helped spread the word, suggested critical places to concentrate effort, and tallied the amount of trash collected by the volunteers.

More waste collected

In 2015, volunteers gathered over 300 lbs. In the second event this October, more than 700 lbs of garbage including clothing, beverage cans and discarded furniture were collected.

Having many volunteers join the cleanup made her feel "wonderfully happy and extremely grateful," she wrote.

To find out more about the GRCA's volunteer opportunities, visit www.grandriver.ca/volunteer.

The GRCA gratefully acknowledges the Ontario Trillium Foundation and the Grand River Conservation Foundation for supporting the volunteer program.

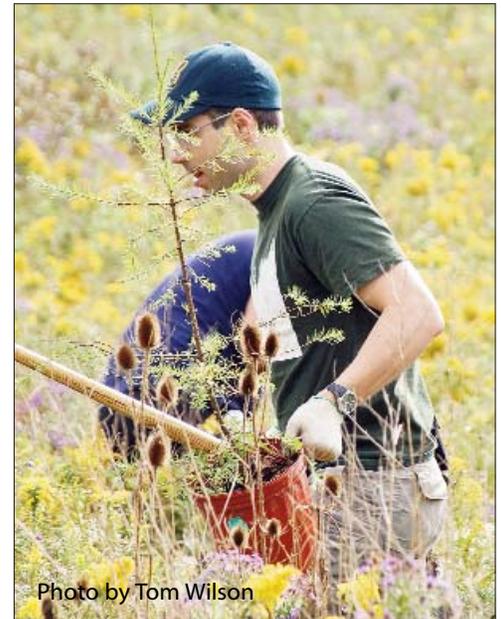


Photo by Tom Wilson

Students were among those who planted trees at the New Forest in the City in Brantford in October.

Brantford Forest grows volunteers

Brantford's New Forest in the City took five years and is nearly complete.

Over 57,000 native trees have been planted on the site, which has grown from 51 to 78 acres. A legion of dedicated volunteer tree planters has also grown in Brantford thanks to this project. They will move to a new site next year, leaving this as a legacy for future generations.

It will grow up into a Carolinian forest and has trails, bridges and lots of beauty. Next spring, the finishing touches will be carried out — a few plantings will be done and the trails will be regraded.

"It was such a pleasure to work with so many people on this project. It really shows how community groups and individuals can work together, and we have a new project lined up for next year," said GRCA forestry specialist Jessica Robbins.

The New Forest is on land that couldn't be developed beside Braneida Industrial Park and is bordered by Henry Street, Garden Avenue and Highway 403.

This project was led by the Brant Tree Coalition, the GRCA, City of Brantford, County of Brant and industrial partners.

A booklet has been published by the Brant Waterways Foundation about the project.



Photo by Bronwen Buck

Amanda Stornebrink contacted the GRCA when she heard the volunteer program was expanding and she has helped organize cleanups at Belwood Lake. She is the volunteer of the month for the Volunteer Centre of Guelph Wellington.

Three ways to help pollinators through winter

By Karen Buschert
Conservation Services

Pollinators will be grateful if you give them places to snuggle up for a cozy winter.

While some, such as monarch butterflies, head south, most stick around to endure freezing temperatures, just like the rest of us.

Honey bees generate enough heat to survive the winter by clustering together in their hive and eating the honey they produced during the summer.

Mourning cloak butterflies find sheltered spots for winter. Their metabolism slows down to conserve energy through a process known as torpor. In spring, these butterflies are among the first to emerge and can be seen in the sugar bush feeding on the sap of leaky maple trees.

Black swallowtail butterflies spend part of their larval life cycle in diapause, a state of dormancy. They spend the winter in a chrysalis in suspended animation, then transform into a butterfly when the warm spring arrives.

Here are three things you can do to help:

1. **Be a messy fall gardener.** Hidden habitat is destroyed in a very tidy garden. Leave tall grass, fallen leaves and other plant material in your garden. This provides perfect winter shelter for tiny insects. Many native

WHAT YOU CAN DO

bee species survive underground in burrows, in hollow stems and cavities in wood. Spring is a better time to cleanup after insects have emerged and abandoned their winter shelter.

2. **Vigilantly protect natural areas.** Woodlots, wetlands, streams and hedgerows have a critical role in sheltering insects and wildlife. Leave these areas undisturbed to provide insect habitat.
3. **Build bee homes.** You can provide extra habitat for overwintering insects by building homes from something as simple as bundles of hollow sticks. More elaborate wood 'hotels' have lines of drilled holes (see inset photo). Female bees will lay eggs within these holes. The eggs develop into larvae which emerge in spring. Here is a link to more information on bee hotels: seeds.ca/pollination/making-bee-nests.

There are many rewards for helping pollinators through the winter — 2017 will bring more butterflies, local honey and produce. You will also have helped alleviate the worldwide decline in pollinators.

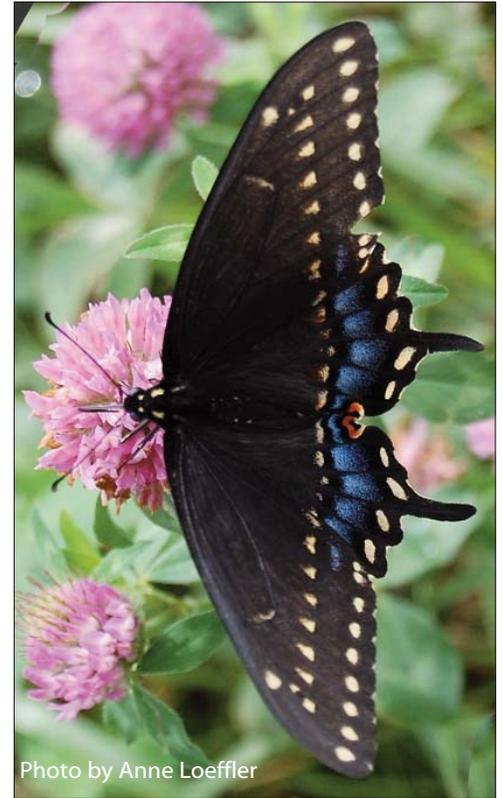


Photo by Anne Loeffler

The black swallowtail butterfly spends the winter in a chrysalis attached to a twig.



Photos by Angie Koch

Stacked pallets or sheets of plywood make good winter homes for native bees. They can be filled with cones, leaves, hollow stems and other natural material. Inset: drill holes of various sizes on an old piece of lumber to turn it into a bee hotel. The plugged holes are occupied.

Give a gift that lasts 365 days this holiday

The GRCA has new holiday gift cards that can be purchased online or at the GRCA head office for family and friends.

The cards cost \$125 and can be redeemed for a Grand River Parks Membership pass that will be valid for a year.

This pass allows entry into all 11 Grand River Parks and Luther Marsh throughout the operating season for a full year for the card holder and up to five friends in a vehicle. The benefit of the gift card is that the year doesn't start until the card is exchanged for the park pass.

Winter programs are being developed for Laurel Creek, Belwood Lake, Rockwood, Shade's Mills and Pinehurst Lake. These programs dependent on weather.

Buy passes online at www.grandriver.ca or in person at the GRCA head office at 400 Clyde Road in Cambridge.



Photo by Bronwen Buck



Photo by Janet Baine

Reservoirs are low

A visit to Guelph and Belwood lakes this fall was a shock for many who had not seen the reservoirs this low before.

At Guelph Lake (left) the former tree-lined road came above the water so that visitors could walk along roads normally under water. At Belwood Lake (top), shoreline cleanup volunteers had a much bigger shoreline to clean up than they did last year. Reservoir levels were similar to what they were

in 2007, which was also a dry year. The entire watershed remains in Level 2 Low Water Response, meaning voluntary cutbacks of 20 per cent for water users across the watershed.

About Grand Actions:

This newsletter is produced up to six times a year by the Grand River Conservation Authority.

Website:

Current and back issues as well as complete subscription information is available online at www.grandriver.ca/GrandActions.

Submission deadlines:

The deadlines are the 15th of February, April, June, August, October and December. Submissions may be edited for length or style. Photos and events are also welcome. We do our best to publish items, but we are not able to guarantee publication.

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THE GRAND CALENDAR

Winter Adventure Days at Shade's Mills, Guelph Lake and Laurel Creek

Registration is open for Winter Adventure Days at Shade's Mills, Guelph Lake and Laurel Creek nature centres. There are a variety of registration options that include single days Dec. 28 to 30 and four days together Jan. 3 to 6. Daily outdoor activities allow kids to explore the fields and forests around the nature centres. For details and to register online visit www.grandriver.eventbrite.ca.

Heritage Day Workshop, Feb. 15 to 17

The Heritage Day Workshop is a three-day gathering showcasing the Mississaugas of the New Credit First Nation, their lands, their waters and their people.

The GRCA's Heritage Working Group is marking its 20-year Heritage Day anniversary through a unique partnership with the Mississaugas of the New Credit First Nation.

The three-day celebration will feature more than 20 indigenous and non-

indigenous speakers. The gathering is being held at the Mississaugas of the New Credit First Nation community centre. Email Historical.Gatheirng@outlook.com or call 905-768-0100 to reserve. Space is limited.

Order trees from the GRCA any time before March 1

Landowners can order trees to be planted on their own properties of 2.5 acres or more (exclusive of buildings) from the GRCA until March 1. Orders must be for 200 seedlings or 20 saplings or more. For more information or to arrange a visit to your property, check www.grandriver.ca/trees, email trees@grandriver.ca or call 519-621-2763.

Campsite bookings for Grand River Parks opens March 1

Campsites can be booked for the 2017 season both online and over the phone starting March 1. The camping reservation website is www.grcacamping.ca and the phone number is 1-877-558-GRCA (4722).

Note: All GRCA events and updates are posted online and available at www.calendar.grandriver.ca

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100%



A gift of
nature



givegrand

What do you give someone who has everything? A tree, of course! Or how about a metre of nature trail?

Choose to *Give Grand* this holiday season. A gift of \$30 will plant and support one local tree, or will help develop one metre of trail.

\$30

plant a **TREE**
build **TRAILS**

Each donor receives a thank you letter, tax receipt and a beautiful holiday card for gift giving. If you prefer, we can send the card directly to the recipient so it arrives in time for the holidays.

It's easy to give:

- Go to www.grcf.ca and click Donate Now
- Call 1-877-29-GRAND
- Email the GRCF at dhartley@grandriver.ca

Place orders by December 16, 2016. Charitable receipts will be issued for donations.

The Grand River Conservation Foundation

supports priority programs of the Grand River Conservation Authority. These programs enrich the natural values of the Grand River watershed and encourage people to enjoy, and learn from, the outdoors.



www.GRCF.ca