



# GRAND Actions

The Grand River watershed newsletter



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### Cover photo

*This wooden covered bridge was built in 1992 in Guelph and is an inspiration to photographers and artists, including Eustacio Dionisio, who submitted this photo to the GRCA photo contest.*



[www.grandriver.ca](http://www.grandriver.ca)



## New heritage bridge inventory

By Janet Baine

GRCA Communications Specialist

Hunting for bridges in the Grand River watershed is more likely to become a weekend passion for some people now that a full-colour inventory of bridges is complete.

About a third of the 678 bridges in the inventory have heritage value and listings of these include a colour photo along with a full description. If you are curious to find the oldest or most unusual bridge, or even learn a few details about the bridge you cross every day on the way to work, this inventory may help. Photographers, artists and historians will find it interesting.

"People are drawn to bridges and there are many hidden gems that some people will be interested in finding," says Barbara Veale, coordinator of policy, planning and partnerships for the GRCA.

Bridges demonstrate the role of rivers in the

early industrial and cultural development of Canada. They are a factor that led to the Canadian Heritage River designation for the Grand, Speed, Eramosa, Nith and Conestogo rivers in 1994.

In addition to the tourism and heritage value, the inventory has a very practical use, Veale says. "About two-thirds of the bridges do not have any heritage value so that immediately screens them out and will expedite matters when bridges are being looked at for repair or replacement. This is helpful to municipalities to streamline their Environmental Assessment process."

The inventory was completed over the past year by the Heritage Resources Centre at the University of Waterloo with funding from several sources, most notably the province. The inventory, called *Arch, Truss and Beam: The Grand River Watershed Heritage Bridge Inventory* was published in April and includes maps to help locate the bridges, which are listed by municipality. Copies have been made available to the municipalities, the GRCA and First Nations. While there are no extra print copies available for purchase, the inventory is

Grand River Conservation Authority



1. Bridge 27 on Sideroad 20 is one of seven remaining bowstring bridges in Centre Wellington, where there were once 36 bowstring bridges.

2. Bridge 10 in Melancthon Dufferin is a truss frame construction that dates to 1920.

3. The second oldest bridge in the Grand River watershed on Glen Morris Road East in Brant County, constructed in 1854.

Photos by Melissa Davies

available online at [www.grandriver.ca](http://www.grandriver.ca) and also on the Heritage Resources Centre's website by June.

"The history of bridge construction is important to understanding the cultural and developmental evolution of any area. It has relevance not just locally, but speaks to the development of Canada as a nation," writes author Lindsay Benjamin in a section of the inventory about the history of local bridges.

An earlier bridge inventory was completed in 2004 and had information about 70 heritage bridges in it, so this is more comprehensive. The new inventory incorporates research from the Region of Waterloo's bridge study called *Spanning the Generations*. If you have questions about the bridges, please call 519-888-4567 ext. 36921 or email [hrc@uwaterloo.ca](mailto:hrc@uwaterloo.ca).

## DID YOU KNOW?

# Grand bridges

**By Lindsay Benjamin**  
Heritage Resources Centre

**The oldest bridge:** is a masonry arch bridge built in 1837 that crosses Mill Creek in Cambridge. The second oldest bridge in the watershed was constructed in 1854 on Glen Morris Road East in Brant County.

**Most controversial bridges:** The Caledonia and Cayuga bridges are both impressive multi-span structures. The Caledonia bridge is a nine-span concrete bridge constructed in 1927 and is the longest bowstring arch bridge in Canada. It is slated for demolition. The Cayuga bridge, a truss

steel bridge built in 1924, is in the process of being replaced.

**Bridge captured in literature:** Wellesley Bridge Number 6 spans the Nith River and is a literary landmark within the community. It was featured in Jane Urquhart's award winning Canadian novel, *The Stone Carvers*. It is on Township Road 18 South.

**A suspension bridge:** There is in fact a suspension bridge in the Grand River watershed. It crosses the Nith River near New Hamburg in Wilmot Township on private land.

**The prettiest pedestrian bridge:** Heffernan Street Footbridge, constructed in 1914 that crosses the Speed River in Guelph.

**Most spectacular bridge:** David Street Bridge that crosses the Irvine River and is near Elora. While the pier was constructed in 1867, the bridge itself was constructed in 2004.

**Interesting private bridge:** Old Fourth Line Bridge in the Township of Centre Wellington, built in 1908, is the oldest remaining concrete arch bridge in the watershed. It is located on agricultural property.

**Oldest covered bridge:** West Montrose Covered Bridge, aka the "Kissing Bridge" is the oldest surviving covered bridge in Ontario.

**Newest covered bridge:** Crosses the Speed River in central Guelph and was constructed in 1992 by 400 volunteers from the Timber Framers Guild of North America who were attending a conference.

**Municipality with the most designated bridges:** The City of Guelph has five designations under the Ontario Heritage Act.

**Hidden gem:** MacPherson Bridge on 12th Line in East Garafraxa is a two-span tied

double concrete bowstring arch bridge built in 1921. It is the only remaining bowstring arch bridge in the Township of East Garafraxa and is one of very few double bowstring arch bridges built in the Grand River watershed.

## MILESTONES

# Rockwood 50 years young

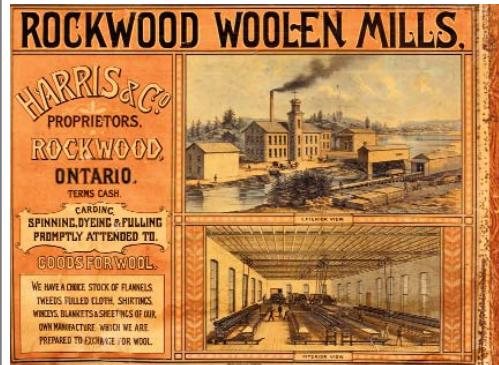
Rockwood was the fourth Grand River conservation area to open and it turns 50 this year.

Its breathtaking beauty makes it unique to southern Ontario and certainly the most photographed of the GRCA's conservation areas.

The land once belonged to three sons of pioneer John Harris — John Richard, Thomas, Joseph and their brother-in-law Thomas Wetherald started the Rockwood Woolen Mills in 1867, the year of Confederation. This date can still be seen carved into a square of limestone at the top of the ruins. Business flourished and at one time the mill employed 80 people. Over the decades the mill was powered by the water of the Eramosa River, steam and hydro.

However in 1925 it closed and owner William Harris decided to use the stunning landscape that surrounded it for a park that was called Hi-Pot-Lo Park.

Visitors were charged an admission fee. Many people came for the quaint and rugged scenery, including author Lucy Maud Montgomery.



From top, clockwise: Rockwood entrance when it was Hi-Pot-Lo Park, tan advertisement for the mill products and the mill in winter before the fire in 1965.

In 1959, the GRCA purchased the mill and 79 hectares of land from the Harris family. A couple of years later, the road system, parking lots, gatehouse and pavilion were constructed, laying the ground work for the conservation area to open in 1963 around the time that the beach area, picnic areas and campsites were developed.

## 85,000 visitors

Today, over 85,000 patrons visit every year to enjoy the geological wonders of the park and visit the historic and beautiful mill ruins. The park offers 110 campsites, canoeing, hiking, fishing and swimming. The pond is stocked with brown trout each spring.

The geology includes over 200 potholes of varying sizes, a cave system and steep limestone cliffs that were left behind when the Wisconsin glacier melted at the end of the last ice age.

Rockwood's biodiversity is uniquely intertwined with the local geology. The plant communities and species on the property were inventoried intensively in the late 1960s and early '70s as part of the International Biological Program. Over 300 plants and animals were found during a 24-hour inventory.

Much of Rockwood is designated by the province as a significant area for earth and life science.

You can show up at Rockwood Conservation Area on a beautiful weekend and notice that the park is popular for visitors who speak a multitude of languages from around the world. But on an evening in June, you can put your canoe into the lake and be alone with the nesting swallows.

## WHAT'S HAPPENING

# Bobolink study at Luther Marsh

By Janet Baine  
GRCA Communications Specialist

**S**ome of the bobolinks that are singing their bubbling musical song at Luther Marsh Wildlife Management Area will have a tiny bit of extra weight on their journey to and from South America over the next year.

They will be part of a research project that is looking into why the number of bobolinks is declining. This medium-sized songbird is found in grasslands and hayfields at Luther Marsh and it is one of 56 threatened species in Ontario. It also undertakes one of the longest annual migrations of any North American songbird, making a round trip of

approximately 20,000 km.

Dan Kim from Oregon and Roz Renfrew from Vermont have worked with bobolinks and geolocators in the United States. In May and June, they will be at Luther Marsh working with Canadian Wildlife Service songbird biologist Mike Cadman, a student and some volunteers.

"We'll be searching the area for nests, and watching birds to map territorial boundaries. Then we'll be using mist nets in those locations and sound playbacks (using iPods and small speakers) to lure the birds into the nets," explains Cadman. "The birds will each be banded with a government band, and given a unique three colour-band set of anklets, as well as the geolocator. We'll also be taking a small blood sample as part of a larger study on bobolink parasites."

The researchers hope to band 20 males and 20 females. They expect the research will show that the bobolinks at Luther are linked to various locations in South America. Next year, these same birds will need to be recaptured and the data downloaded to find out where they have been, Cadman says. This data will be added to data about this species in other sites across Canada and the U.S. to see what may be causing the decline in bobolink.

During their summer breeding season, male bobolinks are black with a white back and yellow collar. By late summer, males lose their breeding plumage to resemble the female's tan colour with black stripes.



Photo by Kevin Tupman

Bobolink are in decline and researchers will learn more about them.

Bobolinks are hard to see because they feed on insects and seeds on the ground. They seem to appear out of nowhere and can be spotted flying in the sky or over the tops of vegetation.

As a wide ranging species that migrates in and out of Ontario, there are likely several causes for their decline. Along their migration route and in their wintering areas in South America, they are considered a pest of grain crops. A decline in grassland habitat combined with other factors is leading to less habitat for the bobolink. Mowing hay during the breeding period may inadvertently disturb nesting adults and young birds and destroy eggs and nests. Haying is tending to occur earlier over time due to modern hay production practices such as earlier maturing seed mixtures and shorter crop rotation cycles.

Research using geolocators is quite new for songbirds, because this device has only recently become small enough at less than one gram that the small birds can carry them without any problems, Cadman says.

#### New bobolink habitat

Glenaviland Development Corporation is paying for 16 hectares of grassland habitat at Conestogo Lake Conservation Area. Under the Ministry of Natural Resources' Endangered Species Act, a permit obliges Glenaviland to replace grassland habitat that is being lost due to a new residential and golf course development planned for Drayton. The company is maintaining two times as much grassland habitat as is required for 20 years.

## The Jeffersons are moving in

It's confirmed — the Jeffersons are living at Taquanyah Conservation Area in the southern Grand..

Jefferson salamanders are endangered provincially and nationally and are protected under the Ontario Endangered Species Act.

"This year despite the cooler start to spring, I sampled a record number of salamanders at Taquanyah," says Lindsay Campbell, restoration specialist with the GRCA. She samples at two vernal ponds that were confirmed as breeding ponds for the first time this year. A vernal pool is a temporary water body that fills with water from melting snow, storm water or groundwater during the spring. These pools usually dry up during the summer.

It has been a good year for salamander in the southern Grand River, Campbell says. She found eggs that are most likely Jefferson salamander, but could be Jefferson-Blue spotted complex salamander. Interestingly, GRCA staff take a small tissue sample from the tail to test the salamanders DNA to find out which species it is, because this is the only way to know for sure. A visual inspection is not enough.

These results will help the GRCA assess the current salamander population at Taquanyah and to enhance or mitigate threats to their habitat. Last year DNA results confirmed that Jefferson salamanders are at Taquanyah.



A salamander found at Taquanyah is measured.

Adults live in moist, loose soil, under logs or in leaf litter. Your best chance of spotting a salamander is in early spring when they travel to woodland ponds to breed. They lay their eggs in clumps attached to underwater vegetation. By midsummer, the larvae lose their gills and leave the pond and head into the surrounding forest. Once in the forest, Jefferson salamanders spend much of their time underground in rodent burrows, and under rocks and stumps. They eat primarily insects and worms.



## Join the challenge and win prizes

The GRCA and its partners have kicked off a new hiking campaign called Healthy Hikes.

Healthy Hikes encourage people to energize their body and mind by spending more time in nature at GRCA conservation areas, nature centres and trails. Participants can also hike at more than 270 other conservation areas throughout Ontario managed by Ontario's 36 conservation authorities. The program continues until Oct. 31.

Ontarians are encouraged to take the Healthy Hikes challenge by registering online and then recording their time spent hiking at [www.healthyhikes.ca](http://www.healthyhikes.ca). They can earn bonus points by participating in qualifying activities at conservation areas and nature centres. Information on GRCA events is on the GRCA website at [www.grandriver.ca/calendar](http://www.grandriver.ca/calendar).

There are \$2,500 worth of great prizes up for grabs for Challenge participants. These include a grand prize of a \$1,200 Merrell gift card, donated by Merrell, a leading supplier of hiking equipment.

Research shows that spending time outdoors provides many health benefits. These include increased energy and immunity, increased weight loss and fitness, increased Vitamin D production, reduction in symptoms of anxiety and depression, and



The healthy hikes challenge encourages people to boost their body and mind by getting out into nature on hikes. The GRCA is offering many family based activities at conservation areas through this program.

a reduced risk of diabetes, heart attacks, and cancer.

The GRCA has many kilometres of trails in its conservation areas and nature centres. As well, the GRCA owns the Cambridge-Hamilton-Brantford Rail-Trail and the Elora-Cataract Trailway. Information on all of these is available on the GRCA website.

Across Ontario, conservation authorities collectively own over 2,500 km of trails. The conservation areas that they operate help protect ecologic features such as wetlands, forests, rivers and streams, and great lakes shoreline, all of which contribute to our overall health and well-being. The air we breathe, the food we eat, and the water we drink are impacted by the health of the natural environment.

Other organizations partnering with the GRCA, Conservation Ontario and the conservation authorities include the Canadian Mental Health Association, Trees Ontario, York Region, the Ontario Trails Council, Ducks Unlimited Canada, The Bruce Trail Conservancy and the David Suzuki Foundation.

Healthy Hikes events are taking place at many GRCA parks, including Rockwood, Laurel Creek in Waterloo, Pinehurst Lake near Paris, Brant, Elora Gorge and Shades' Mills in Cambridge.

Full details of these events are available online.

attract more visitors during quiet times of the year, and also to maximize revenue during the busy summer season and on long weekends.

The parks are entirely dependent on gate fees for their operating costs. No tax dollars are used to operate the parks.

More information on each park, including fees, can be found in the Parks section of the GRCA website at [www.grandriver.ca](http://www.grandriver.ca). Camping reservations can be made at [www.grcacing.ca](http://www.grcacing.ca) or by calling 877-558-4722.

The GRCA park system records more than 1.1 million paid visits a year. It has about 2,500 campsites, making it the second largest network of campgrounds in the province, second only to Ontario Parks.

## Movies in the park

Come watch movies under the stars starting at dusk every Friday night beginning June 7 until the end of September at Shade's Mills Conservation Area on Avenue Road in Cambridge.

The movies are free for season pass holders and day pass holders. Or, up to six people in a vehicle can gain admission for a special flat fee of \$10 on Friday nights starting at 8 p.m.

"This was very successful last year when we did it for the first time. We had people coming from all over and we have a great schedule of family favourites planned for this summer as well," says Brian Hunt, park superintendent.

The food concession will be open and offering snacks and drinks. Visitors should bring lawn chairs and blankets to sit in front of the big screen. Cancellations due to poor weather or schedule changes will be posted on Facebook and twitter or call the park at 519-621-3697.

Movies start shortly before sunset, and the times vary between 8:45 during the longer days of June and July and 7:15 p.m. by September.

The movies are all rated parental guidance (PG) or general admission (G)s. Specific movies for each Friday are listed in the Newsroom on the GRCA website at [www.grandriver.ca/newsroom/news.cfm](http://www.grandriver.ca/newsroom/news.cfm) and also on [www.grandriver.ca/calendar](http://www.grandriver.ca/calendar).

Email [bjhunt@grandriver.ca](mailto:bjhunt@grandriver.ca) or call 519-621-3697 for more information.

# Keeping cattle out of the river in Wellesley

By Janet Baine

GRCA Communications Specialist

Cattle producers in Wellesley Township are outstanding fence builders.

They are most likely tops in Ontario, if not in Canada. The Waterloo Cattlemen's Association received a 2012 Grand River Conservation Award for the work done by beef farmers in Wellesley.

About 70 Wellesley Township farmers have fenced 37 km of waterways in this township on the west side of Waterloo Region. The fencing was constructed over the past 15 years to keep 2,800 cattle out of the rivers and streams. We all know what comes out of cattle when they are cooling off on a hot day in a stream, so fencing helps protect drinking water for the communities downstream. It also helps slow down erosion of the stream banks.

The cattle producers also planted 20,000 trees between the fences and the rivers to stabilize the stream banks and help filter any runoff before it gets into the water.

"Participation in Wellesley Township exceeds anything we have anywhere else in the Grand River watershed. They are setting an example for cattle producers everywhere — in Ontario and beyond," said Anne Loeffler, conservation specialist with the Grand River Conservation Authority who worked with the beef producers through the

## LOOK WHO'S TAKING ACTION

Rural Water Quality Program. She said the cattle farmers are looking far beyond their own fence lines and are great neighbours to the water users downstream by protecting the water from manure runoff, pathogens and sediment.

"There is no law that states that livestock must be fenced out of watercourses, but the practice is strongly recommended. It's an act of stewardship and speaks of the community's respect and caring for others in the watershed," Loeffler said.

Wellesley cattlemen have invested at least 4,000 hours in 80 stream fencing projects. The capital costs of fences was about \$400,000.

"It is quite amazing to have the entire length of the Conestogo River in our municipality fenced and cattle free. What a great achievement and environmental improvement for water quality in the Grand River watershed. The cattle producers of Wellesley Township are to be commended for their individual and cumulative efforts," said Susan Duke, recently retired clerk of Wellesley Township who submitted the nomination for the award.

The creeks which drain into the Nith River on the western side of the township are also well fenced. Fences aren't necessary on



Photo by Anne Loeffler

Cattle grazing beside the river are kept away from the river thanks to fencing installed by farmers. This helps to keep the water cleaner.

### Benefits of environmental work:

- Stable streambanks
- Improved resiliency to extreme runoff
- More abundant fish
- Better water quality
- Fewer algae blooms
- Cleaner water downstream

cropped fields, but the GRCA encourages tree buffers along waterways to stabilize the banks and filter runoff, Loeffler said.

Several school groups have helped plant the trees, helping to educate the next generation about the importance of protecting water quality.

Cattle producers have also spent millions of dollars on other environmental projects. These include manure storage facilities, nutrient management plans, erosion control projects, upgrading fuel tanks and wells and decommissioning unused wells. All of these projects improve water quality.

"Kids who swim in the creeks apparently come out of the swimming hole cleaner than when they went in, and that's an improvement from 15 years ago," Loeffler said.

Information about all seven 2012 watershed award recipients and video links are available online at [www.grandriver.ca/awards](http://www.grandriver.ca/awards).

## A grand adventure raises funds for trees

For two years running, Derek Lippert and JP Bartle of the landscape firm Quiet Nature Ltd. paddled the Grand River, from the scenic upper reaches to Lake Erie at Port Maitland.

It was seven days, 250 km and one Grand River. The pair raised over \$3,000 each of the past two years for the GRCA's tree planting program. Judging from their photos, they had lots of fun doing it and enjoyed the glory of the Grand and the communities along the river.

In 2012 the water was low whereas in 2013 it was high. They left April 21 this year and



Photos by Janet Baine

**Stocking the rivers with brown trout:** Each year volunteers stock 40,000 brown trout in the Grand and Conestogo rivers using canoes and buckets. Photos 1 to 5 are taken on the Conestogo River and photo 6 is taken at Soper Park in Cambridge. The fish are supplied by the Ontario Ministry of Natural Resources. Brad Knarr (photo 4) takes time off from his job to organize the stocking on the Conestogo each year. Volunteers are from Google in Kitchener, the Rotary Club, local angling clubs and community groups. Many people come every year. Al Newsome organizes the stocking on the Grand River, while Friends of Mill Creek organize stocking on Mill Creek.

completed their journey April 27 at Port Maitland early on an unusually calm Lake Erie morning. They posted a video showing the serenity of the lake at that moment.

"Derek and JP have done a great job — not just of raising funds for tree planting, but also for raising the profile of the Grand River as a great natural resource in our community. Following their trip was very inspiring," says Sara Wilbur, executive director of the Grand River Conservation Foundation.

By providing source to mouth insight into the river, Derek and JP hoped to increase awareness of watershed-wide environmental issues and tourism potential while raising funds for the tree planting and naturalization efforts.

They collected many sponsors who donated prizes for donors and held a draw for these prizes after they completed their trip.



Photo of the pair of Grand Adventurers at the start of their trip in Riverview.

# Still space available in some day camps

The GRCA offers many environmental day camps for kids six to 16 at Apps' Mill near Brantford, Laurel Creek in Waterloo, Rockwood, Belwood Lake near Fergus and at Guelph Lake.

While many camps are full, there is still lots of space during some weeks.

Day camp programs at GRCA facilities offer numerous opportunities for children to

learn about the environment while enjoying the outdoors.

They are action-packed with a focus on the environment, but also geared to specific interests such as art, survivor skills and fishing. Campers participate in activities such as pond studies, bug hunts and environmental games for younger kids. Older children may go on a canoe trip, learn to fish or participate in a naturalist-in-training program.

Registration and availability information is available at [grandriver.eventbrite.ca](http://grandriver.eventbrite.ca) or visit [www.grandriver.ca](http://www.grandriver.ca) to learn more.

## THE GRAND CALENDAR

### 2 Rivers Festival set to go June 9 to 16, Guelph

Two dozen partner organizations are holding 30 free events focused on the Speed and Erathosa rivers in Guelph. This festival begins on Canadian Rivers Day. These two small rivers were granted Heritage River designation in 1994 along with the Grand River. The events include hikes, paddling, water-related talks, performance, river heritage and children's events. The annual Speed River Clean Up takes place Sunday June 9th. There will also be a free concert and celebration on June 15. This is the second year of the festival.

The Guelph Lake Nature Centre is holding two events that are part of this festival. They are a walk to the nature centre Tuesday June 11 at 6:30 p.m. and catching crayfish in the river Sunday June 16. at 1 p.m. by the covered bridge.

See [www.2RiversFestival.org](http://www.2RiversFestival.org) for the full schedule.

### Bringing back Mill Creek, Sunday, June 16, 2:00 p.m. to 4:00 p.m., Aberfoyle

Mill Creek, Puslinch and Cambridge Friends of Mill Creek is celebrating 15 years of stewardship along Mill Creek by holding a series of walks to highlight the work that has been done. This second walk starts at the Puslinch Community Centre in Aberfoyle.

For more information and to register, see the Friends of Mill Creek website at [www.friendsofmillcreek.org](http://www.friendsofmillcreek.org).

### Healthy Hikes challenge at many locations until the end of October

The Healthy Hikes events offered by the GRCA are part of a provincial challenge that allows people to win prizes when they participate in Healthy Hikes events. These events at the GRCA are primarily geared to families and children and are taking place until the end of October. Healthy Hikes events are taking place at many GRCA parks, including Rockwood, Laurel Creek in Waterloo, Pinehurst Lake near Paris, Brant, Elora Gorge and Shades' Mills in Cambridge. A complete listing is available on [www.grandriver.ca/calendar](http://www.grandriver.ca/calendar).



The tree planting weather allowed for some good photo opportunities.



It was a cold and snowy day when the Guelph Rotary Forest was planted this year. Lots of trees went in across the watershed this spring.

## About Grand Actions:

*This newsletter is produced bi-monthly by the Grand River Conservation Authority.*

### More information:

Current and back issues as well as complete subscription information is available online at [www.grandriver.ca/GrandActions](http://www.grandriver.ca/GrandActions).

### Submission deadlines:

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

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