



# GRAND Actions

The Grand River watershed newsletter



July/August 2013 • Volume 17, Number 4

## What's Inside:

### Features

A cold water stream reborn .....1

### Foundation

Taquanyah restoration ... 2  
Paddle raises \$50,000 ... 3  
Donation to tree nursery . 3

### Taking Action

The Kings forest ..... 4  
Wind breaks ..... 5  
Saving ash trees ..... 6

### What's happening

Heritage river 20th ..... 7  
New splash pad ..... 8

Calendar ..... 8

## Cover photo

*Volunteers with Trout Unlimited Canada spend a muggy July day in the cold waters of Mill Creek to repair a beaver baffle.*

Photo by Bill Christmas



## A cold water stream reborn

**By Janet Baine**  
GRCA Communications Specialist

**B**rook trout don't know it, but volunteers with the Ted Knott Chapter of Trout Unlimited Canada have been working very hard to make a new home for them in Mill Creek near Cayuga.

TUC volunteers have been at it for seven years. They've put more than 2,000 volunteer hours into this little stream that needs lots of love. Their work is above and beyond that done by many partners on the Taquanyah New View project, but stream improvement is also the reason why this project at Taquanyah Conservation Area is so important to conservationists.

"Bring on the brook trout!" says Bill Christmas, the president of the Ted Knott Chapter and the

leader of this project. "We have a huge success story on the cusp of completion."

When the dam at Taquanyah was removed in 2004-2005, the sluggish warm waters of the reservoir were replaced by a stream which found a new path. However a lot of work needed to be done to help the stream to become a healthy habitat for trout.

"We have been blessed with a great volunteer community in Haldimand, being supported by nine different organizations, but mostly Habitat Haldimand. Over 100 individuals have worked with us on this project. Regardless of their affiliations, they are passionate about the impact we have had," Christmas says.

Volunteers worked with the Haldimand Rural Water Quality Program (delivered by the GRCA) and the landowners along Mill Creek outside of the conservation area. They installed fencing to keep farm animals out of the water and helped to arrange for a \$6,000 livestock crossing for animals on one property.

This work helps provide better aquatic habitat



between Taquanyah and Lake Erie, which is a goal for both the GRCA and the Ministry of Natural Resources.

Beavers drowned 12 hectares (30 acres) of hardwood forest near the creek and also braided the lower stream into five flows, says Christmas. That's when volunteers installed beaver bafflers —devices that confused the beavers so their dams don't work properly and they give up and move elsewhere.

This TUC Chapter was formed eight years ago by Christmas to cover Halton, Hamilton and Haldimand. It has about 80 chapter members, with 10 from the southern Grand. TUC has worked with 16 groups on this project and enlisted help from a 4H club and their parents, stewardship rangers, the Woodlot Owners Association and others. Many volunteers are required on work days to get in the creek to move rocks and trees, and install and maintain the beaver bafflers.

“The support given by the community has been exceptional. It bodes well for the future, with so many young people becoming active and dedicated. They now own this stream for the rest of their lives,” Christmas wrote in a recent article.

Funders for this work include the Haldimand Rural Water Quality Program, Izaak Walton Fly Fishing Club, TD Friends of the Environment Fund, Trillium Fund, Haldimand Stewardship Foundation and Union Gas Centennial Fund.

# New life for old dam site

**By Janet Baine**

GRCA Communications Specialist

**I**t took a decade and a lot of work, but Mill Creek near Cayuga has finally been restored to a coldwater stream surrounded by a landscape of ponds, wetlands and Carolinian woodlands.

Perseverance has paid off for the organizations that have worked together to restore the former site of the Taquanyah Reservoir. It is one of the few coldwater streams in the Southern Grand River watershed.

The Grand River Conservation Foundation helped to bring together the partners and the \$250,000 needed for the project on the GRCA property, which is also home to the Taquanyah Nature Centre.

The project also brought together the GRCF and the Six Nations of the Grand River who were key participants. Six Nations, through their Eco-Centre, received a \$125,000 Ontario Trillium Foundation grant to cover part of the costs and also helped develop the plans to ensure their needs were met.

Mill Creek is just a few kilometres long, but it is at the heart of the Taquanyah project.

The Grand River Fisheries Management Plan says that removing small dams, such as

## GRCF

Taquanyah, is a good way to improve fish habitat. Dams raise water temperature, contribute to poor water quality and block fish migration.

For several decades, the dam on Mill Creek created a reservoir that local people came to like. But the reservoir held warm, sluggish water that was suitable only for carp.

### Supported removal

When local residents learned the dam was damaging aquatic life and that the problem would get worse with time, they decided to support removal of the dam. The input and passion, as epitomized by the members of Habitat Haldimand, inspired the new view of Taquanyah.

Dam removal was completed in 2005, leaving an empty, moonscape terrain where the reservoir floor used to be. Once the dam was removed, the water temperature in Mill Creek dropped by about 8C.

Between 2005 and 2012 the land was rehabilitated to create many different types of habitat. More than 10,000 trees and shrubs will transform parts of the property back into a Carolinian forest. Other plantings provide a buffer between the creek and the land. Volunteers with Habitat Haldimand worked extensively with landowners in the area to plant trees and shrubs along the creek on their properties. They have added fencing to keep livestock out of the water.

The next step will be finding out if trout from the Grand River can be stocked in the little creek.

“We couldn't have done this without the help of the Grand River Conservation Foundation,” says Warren Yerex, retired GRCA supervisor of aquatic resources.

He remembers a meeting where Ron Clark, a GRCA board member from Haldimand County, said he and his wife Nancy would provide substantial funding for this project as long as matching funds were found.

### Many funding partners

The Trillium Foundation grant helped cover the cost of four wetland features and



Photo by Bill Christmas

Volunteers spend a Saturday in July repositioning a beaver baffle at the upstream end of Taquanyah. It had mysteriously migrated downstream through the dam because of clamps that were slipping. The volunteers devised a stronger anchoring system and re-anchored it. From left are Wade Dowling of Habitat Haldimand and Vic Cairns of TUC.

earthen dykes that were designed by Ducks Unlimited Canada. A \$25,000 grant also came from the Great Lakes Guardian Community Fund to complete the project in 2012. Along the way, Habitat Haldimand, Shell Environmental Fund and Wetland Habitat Fund also contributed. Volunteers such as Trout Unlimited were dedicated to improvement of the area.

“To me this is a great new space for people in Haldimand County,” Sara Wilbur, executive director of the Grand River Conservation Foundation says. “The project took on a life of its own and there was great momentum as many partners created a unique conservation hub for the community. It is free to visit and a tremendous value for kids and families – there is nothing like it in the area.”

By this fall, new interpretive signs will be added along the trails. An event to reopen Taquanyah and celebrate the 40th anniversary of the nature centre will take place this fall.

### About Taquanyah

The Taquanyah Nature Centre was completed in the fall of 1973 and was the first interpretive nature centre that was designed by the GRCA. At the time, there were nature centres at Lake Belwood, Laurel Creek and Apps’ Mill and school board staff originated and supervised the outdoor programs at those centres. In contrast, Taquanyah was staffed by the GRCA.



## Canoe Trip Raises \$54,000 for GRCF

Warm weather and great river flows made the second annual Grand River Conservation Foundation canoe excursion from Cambridge to Paris a great success.

More than 40 people gathered on Sunday May 26 to enjoy the sun, wind and each other’s company, all in support of the GRCF’s conservation projects.

Guests enjoyed a mid-day riverside picnic – complete with a visit to “the old sycamore”, a familiar landmark for canoeists – along the sparkling water.

Guide Garth Potruff shared background on native traditions along the river and advice on how to avoid poison ivy. The outfitter, Canoeing the Grand of Kitchener, generously supported the big flotilla of canoes.

With the support of the Macquarie Group Foundation, which matched participants’ donations, \$54,000 was raised. This foundation is the philanthropic arm of the international company associated with Macquarie Private Wealth Inc. based in Kitchener. The GRCF extends a special thank you to Rob Caldwell of Macquarie for taking the lead in making the day such a success. Participants in the event are previous donors to the GRCF.

## A conservation partner at Burford nursery

The heart of the GRCA’s reforestation program lies in Brant County at the Burford Tree Nursery.

This is where trees and shrubs are grown for reforestation projects throughout the Grand River watershed.

Roger Davis has purchased trees from Burford for years. In 2012 he visited the nursery, asked superintendent Bruce Graham to show him what was needed, then he made a significant donation. Thanks to Roger, Burford has a new storage shed and a new traveling irrigation sprinkler system to keep young trees healthy during dry weather.

“It means a lot to me to get this support,” says Graham. “It helps the nursery, which is important to the authority’s tree planting program. Roger said he really feels that he

has helped us out. He will see the new building go up and the travelling sprinkler is a big help to this place.”

### Foundation Annual Report

Roger Davis is one of the many generous donors profiled in the 2012 GRCF Annual Report. The report is in the final stage of production and will soon be available on [www.grcf.ca](http://www.grcf.ca).

“The year 2012 was a banner year for conservation in the Grand River watershed, with contributions made by more than 530 donors and the most funds raised in our history,” says Doug Brock, the chair of the GRCF and a Waterloo resident. “In these challenging economic times, that’s a real testament to people’s commitment.”



It meant a lot to Bruce Graham at Burford Tree Nursery to receive support for new equipment and a storage shed.

# Growing the Kings forest in Brant

By Janet Baine  
GRCA Communications Specialist

Len and Sue King are true forest lovers. They live on the edge of a forest with five or six kilometres of trails and many special places.

Over the past 35 years, the Kings have planted and nurtured 50,000 trees on their 20 hectare (45 acre) property. They received a 2012 Grand River Conservation Watershed Award for creating and caring for their forest.

The Kings know that trees have many environmental benefits and that they are spectacularly beautiful. When they built their home on their property in Onondaga Township in 1977, it was surrounded by farm fields. Their forest started with three

## LOOK WHO'S TAKING ACTION

rows of trees they planted to shelter their new home against the winds. These trees now stand tall and majestic, and they call it their “tree line” because from there to the back of the property it is now mostly forest.

Len was named a provincial Green Leader by Trees Ontario in 2008. Sue and their three grown daughters — Sarah, Katherine and Jessica — also dedicated a lot of time to nurturing the forest over the years.

Planting is only the first step to creating a

forest, as some trees need to be taken down to make room for others to mature, while pruning is also essential. Trails were made so that the Kings could have access to the trees to care for them.

“The thing that people miss is that it is really not a tragedy to cut trees down,” Sue

said. “It hurts at first, you want to transplant the trees, but then you need to give other trees room to grow.”

The Kings have planted close to 20 species of trees, including high bush cranberry, American larch, chestnut, black walnut, Kentucky coffee tree, tulip trees and Ohio buckeye.

“Our grandchildren will harvest these

“The thing that people miss is that it's really not a tragedy to cut trees down. It hurts at first, you want to transplant the trees, but then you need to give other trees room to grow.”

-Sue King



Len and Sue King have created a forest with several kilometres of trails. They planted many Carolinian trees including tulip trees, high bush cranberry, buckeye, and hybrid chestnut. A forest requires lots of time to maintain including cutting down invasive trees and removing some trees to give others space to grow and they use the harvested wood.

trees. We wanted to leave the world a better place,” Len said.

He is a retired civil engineer who studied at a time when there were no undergraduate environmental courses and the only environmental programs were at the PhD level. He worked on landfill remediation for the Region of Hamilton-Wentworth early in his career and retired as building commissioner for Hamilton.

They often take forest walks, and Sue’s favourite spot for reading is a chair in the forest a short distance from her front door. In winter, they cross-country ski, snowshoe or skate on their pond at the edge of the forest.

Government assistance to landowners for tree planting reduces the cost and is really beneficial, King said. When he started planting, it cost only one cent to plant a tree thanks to subsidies from the provincial government. That gradually increased to 10 cents, then 30 cents and then jumped to 60 cents. The Kings stopped planting several years ago because the cost of tree planting had increased, and instead they focused on maintaining their forest.

In recent years thanks to new programs, tree planting has gone to 15 cents per tree, and they are planting again. The GRCA helps out by analyzing the soil, advises on tree species that are best for the terrain and a planting program. Len also collects seeds and nuts from his Carolinian trees and plants them to grow more trees himself.

“When private landowners plant trees on their property we all reap the benefits, whether it be through moderating climate, recharging groundwater, improving air and water quality, or increasing wildlife abundance,” said GRCA supervisor of forestry operations Nathan Munn, who has worked with the Kings. “In the fragmented landscape of the Fairchild Creek subwatershed, the forests on the King’s property are important to local and migrating wildlife by providing increased habitat.”

A video about the Kings and other watershed award recipients is available on [www.grandriver.ca/awards](http://www.grandriver.ca/awards).

*This is the last in the series of 2012 Watershed Award recipient stories. The 2013 Watershed Awards recipients have been selected and will receive their awards in October.*



Photo by Mark Funk

This newly-planted windbreak is made up of spruce and cedar trees. The farmer planted the windbreak with the GRCA’s assistance in order to reduce wind erosion in this area, which has light and sandy soils. Funding is available for projects such as this, thanks to the GRCA’s Rural Water Quality Program.

## Wind breaks around the Grand

**By Janet Baine**  
GRCA Communications Specialist

This spring GRCA staff helped landowners plant 73 windbreaks totalling 25.5 kilometres in length.

Many of the new trees stood out in the field after the spring planting. A black or white plastic “mulch” is laid on top of the soil to hold moisture around the tree roots and to stop weeds from growing.

But by July, these trees have nearly disappeared among crops such as beans, corn, hay and wheat. The trees are planted in rows that farmers can easily move agricultural equipment around.

In a few years, however, the trees will stand tall in the field, helping to stop soil erosion and increase the productivity of the land upon which they grow.

As you drive through the countryside you can see these rows of trees among crops in some fields.

Three GRCA forestry specialists work closely with landowners on projects such as this, and they find there is a lot of interest

among landowners. They always encourage people to contact them about planting projects including wind breaks.

Mark Funk, one of the forestry specialists, says he has many landowners on his list who he is working with at the moment.

“We’re pretty well swamped right now, but we really like people to call and get their name on the list for a visit or get the information they need. I wish we could see everyone who calls in right away, but there are not enough hours in the day,” he says.

GRCA staff do site visits and help determine the best species and location for planting. They also know about funding programs to cut the cost of these projects, thanks to the Rural Water Quality Program.

### For more information

Landowners can check [www.grandriver.ca/treesales](http://www.grandriver.ca/treesales) for information about the tree planting programs, or call 519-621-2761 to talk to a forestry specialist. You may also email [trees@grandriver.ca](mailto:trees@grandriver.ca) for more information.

# A strategy to keep ash trees in the Grand

By Janet Baine  
GRCA Communications Specialist

The GRCA board has approved a strategy to combat Emerald Ash Borer (EAB), which will be a big issue for a new generation of tree specialists.

This small insect first appeared in Ontario in 2002 and its arrival is bad news for ash trees. It takes two to four years for an infested ash tree to die. An infestation within a region, such as the Grand River watershed, will kill all the ash trees within a decade.

Once the borer is living within a tree, it

becomes weak and will be more likely to come down in a strong wind, causing damage to property or people. The EAB infestation is expected to cost the GRCA \$5 to \$10 million over the next five or 10 years. Most of the cost will be due to removing hazardous trees.

So far neither the federal or provincial governments have offered financial assistance to conservation authorities or municipalities.

“This is a big issue for the GRCA. It is on par with Dutch Elm Disease that wiped out elm trees. People remember streets lined with elm trees that were wiped out. For those of us who weren’t around at that time, this will be the issue we’re going to be dealing with for many years to come,” says Nathan Munn, the supervisor of forestry operations for the GRCA.

Dutch elm disease spread to Ontario in 1967 and devastated elm trees until they were pretty much eliminated in southern Ontario.

Fortunately, most of the forests within the Grand River watershed are below 20 per cent ash composition. This means that after the disease kills the ash trees, 80 per cent or more of the trees will still remain standing in forests, so few local forests will be lost due to the problem.

“It will be more of a hazardous tree issue, because we have ash trees along our trails, near our campsites and in our parks. The amenity value of our parks,” Munn says. It will also have a major impact in urban areas, where many of the elm trees were replaced with ash trees.

A comprehensive tree inventory is underway this summer with a focus on high use areas such as campgrounds, cottage areas and trails.

The GRCA strategy aims to monitor the problem and prism traps were set out on some ash trees around the watershed in June. These traps attract male insects from a one-kilometre radius. They don’t measure the concentration of insects, but will detect their presence.

As part of the inventory process, some trees will be selected to be saved by injections of a bioinsecticide. Because of costs, this will be considered only for a very small fraction of the ash population, in cases where the tree or its genetic value of the tree is particularly high. The injections need to



Photos by Kevin Tupman

GRCA staff members prepare a trap for installation. In the spring, traps were installed by the GRCA throughout the watershed to monitor the progress of the insects.



Photo by David Cappaert

take place every two years and are more costly for bigger trees. It costs about \$200 to 500 per tree to do the injections. Insecticide treatment will preserve some trees and replacement planting will also take place.

The biggest job and the biggest expense will be removing trees as they become a hazard, Munn says. The GRCA will also continue to help private landowners find funds and offer advice, as well as encourage tree planting. It plans to support initiatives to raise awareness about this issue.

### About EAB

Native to eastern Russia, northern China, Japan and Korea, the ash borer is well adapted to Ontario's climate. EAB has killed tens of millions of ash trees since it was first discovered in North America in 2002. The potential damage of this insect rivals that of Dutch elm disease.

EAB larvae attack and kill healthy ash by tunnelling under the bark, cutting off the supply of nutrients and water.

Adult beetles are a bright, metallic green colour and are about 1.25 cm long. Although they feed on the leaves of the tree, they cause relatively little damage compared to the larvae.

There are many alternatives to ash trees and homeowners are also able to save a tree through bioinjection.

### Signs that an ash tree is infested:

- Declining tree health
- Dieback in the crown
- Epicormic shoots (new shoots growing from the main stem or base of the tree)
- Vertical cracks in the bark
- Heavy seed production
- D-shaped exit holes are seen when adult beetles emerge from under the bark
- Woodpeckers eat the EAB larvae, so their presence on a tree can be a sign of an infestation

# Join the heritage river celebration

Next year marks the 20th anniversary since the Grand, Speed, Eramosa, Nith and Conestogo rivers were declared Canadian Heritage Rivers.

This national recognition was achieved in 1994. It was the beginning of national and international attention for this watershed. These were the first rivers in southern Ontario to be given this national honour.

It was an important turning point for this watershed since these are also urban rivers. The designation is based on outstanding river-related cultural features and outdoor recreational opportunities found within the Grand River watershed. Three other southern Ontario rivers, the Humber, Detroit and the Thames, have since been designated.

"It would be really great if celebrations can take place along all these rivers," says Barbara Veale, coordinator of policy, planning and partnerships. "Designation of these rivers was symbolic of a real turning point during the 1990s. It has generated a sense of local pride in our river heritage and given these rivers national and international attention."

The GRCA will celebrate this occasion at GRCA events such as the 2014 Heritage Day



Workshop and the 2014 Watershed Awards ceremony.

Likewise, groups and municipalities are encouraged to celebrate their Canadian Heritage River by:

- Incorporating commemorative activities and the heritage river theme into your 2014 events such as Canada Day celebrations, Doors Open, festivals, heritage showcases, interpretive walks, river clean-ups and tree planting.
- Organizing a special activity to celebrate the 20th anniversary such as canoeing the length of the Grand River or sponsoring a river-themed art or photography exhibit (this was done by some groups in 2004 for the 10th anniversary),
- Erecting interpretive heritage markers or local community plaques.

For more information about the Canadian Heritage River designation, visit [www.chrs.ca](http://www.chrs.ca) or [www.grandriver.ca](http://www.grandriver.ca).



Photo by Chris Murray

It has been a great year for the green roof at Laurel Creek thanks to lots of rain. Several green roofs have been installed on GRCA property over the last few years.



Photo by Al Standing

## Cool new splash pad at the gorge

A new splash pad at Elora Gorge Conservation Area is ready to pour water on all the willing little squirts who visit.

The new facility opened in June. It has 18 spray and splash features in 2,100 square feet. The splash pad was installed for \$340,000 because an old swimming pond was removed in 2010. It is close to where the pond used to be. A berm around that pond was starting to fail, so it had to be removed.

In addition, Brant Conservation Area has a newly renovated and updated concession stand by the pool.

## THE GRAND CALENDAR

### Youth Outdoors Day, Luther Marsh Wildlife Management Area, Sept. 14.

A fun-filled day of outdoor activities that is free to all youth ages 9 to 16 and is limited to the first 200 who register in advance. They may have the opportunity to build bird houses, band birds, try a bow and arrow or fly fishing, use a dip net or learn about camping. Registration is free and can be done online at [www.youthoutdoorsday.com](http://www.youthoutdoorsday.com).

### Play some Dam Golf, Galt Country Club, Sept 23

The fairways of Galt Country Club are the perfect place to enjoy the Grand River on an idyllic September afternoon.

The only thing that would make this experience better is the opportunity to support a great dam cause. On September 23rd you could have the opportunity to do both during the Best Dam Golf Tournament. This tournament, held in partnership with the Ontario Stone, Sand and Gravel Association, will help raise funds for the Parkhill Dam project. So far more than \$250,000 has been raised to support the development of this hydroelectric system in Cambridge.

If you're interested in golfing in September or are interested in supporting the project, please visit [www.grcf.ca](http://www.grcf.ca) for more information.

### Run for the Toad, Pinehurst Lake Conservation Area, Saturday Oct. 5

Runners and walkers representing many provinces and states participate in this event, which is Canada's biggest trail event. The 25 and 50 km trail race sells out long before the event starts. Refer to the website [www.runforthetoad.com](http://www.runforthetoad.com) for more information.

### Heritage Day Workshop, Feb. 14, 2014

Mark your calendar to attend the 17th annual Heritage Day Workshop taking place in Ohsweken at Six Nations Polytechnic. The theme for 2014 is Crossroads of Conflict, Pathways to Peace: Legacy of a Living Culture. This workshop is the third and last Heritage Day Workshop focused on the influence of the War of 1812-14 on the people, places and events in the Grand River watershed. The event is sponsored by Six Nations of the Grand River, Chiefswood National Historic Site, Six Nations Tourism, Woodland Cultural Centre, Grand River Conservation Authority and the Heritage Working Group of The Grand Strategy. More details about registration and program details will be posted to the GRCA website in early fall.

**Note: Seventy GRCA events for August and September are listed in the calendar section at [www.grandriver.ca](http://www.grandriver.ca).**

## 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.

### To subscribe by e-mail:

[GrandActions-subscribe@grandriver.ca](mailto:GrandActions-subscribe@grandriver.ca)

### To subscribe by mail, change your subscription of for information:

Janet Baine, *Grand Actions* editor  
Phone: 519-621-2763, Ext. 2302  
E-mail: [jbaine@grandriver.ca](mailto:jbaine@grandriver.ca)  
Mail: Box 729  
400 Clyde Road  
Cambridge ON N1R 5W6

This publication is printed on Rolland Enviro100, an FSC certified, environmentally-friendly paper. The paper is manufactured using 100% post-consumer fibre and is processed chlorine-free using biogas energy.

