



# GRAND Actions

The Grand River watershed newsletter



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## Cover photo

*Sid Hester, 97, poses in front of the forest he began to plant in 1969.*

Photo by Janet Baine



# Hester's grand forest

**By Janet Baine**  
GRCA Communications Specialist

Around the time they retired, Sid and Ray Hester started planting trees.

Now 97, Sid Hester lives surrounded by his spectacular forest and credits the trees with helping him live a long life.

"I've tried to do all the outside work myself and that's why I've lived to be 97," he said. It was his role as caretaker of his forest that helped to keep him active through his retirement.

By the time they finished planting, the Hesters had planted 94,000 trees on nearly 40 hectares of land. They received a Grand River Watershed Conservation Award for their tree planting back in 1991, although at that time it was called a Certificate of Appreciation. The Hesters' forest made a huge improvement to their part of the watershed where trees are desperately needed.

The property is one that Sid and Ray purchased soon after they came to Canada in 1948 from

England. At first they opted to farm. They grew vegetables and fruit and kept Holstein cattle, pigs and chickens. Although they knew nothing about farming when they started, they learned quickly and worked hard for 10 years. But, they found it was a lot of work for little return. Eventually they decided to take jobs as well and move elsewhere — Ray worked as a teacher, while Sid took courses to become a health inspector.

Around 1969 they retired and returned to the farm which had deteriorated in the hands of renters for many years. They got to work fixing up the old farm house and planting a forest.

"The trees have grown a lot and quite rapidly," Sid said. They planted mostly black walnut trees with some red pine. They spent a lot to plant and maintain their forest, but this was an investment.

The pine trees were planted with two goals in mind: to keep the black walnut trees growing straight and eventually to also provide a source of revenue. The pine did help the walnut trees grow



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tall and straight during the early years, but they were killed earlier than expected by the toxicity of the black walnuts.

### A forest investment

Black walnuts can be very valuable. Hester said he and his wife didn't need the money, so they didn't chop down the black walnut trees to sell the wood. But it was something they could have done if they needed to. To him, the forest is an investment. It doesn't require much maintenance now as it matures, like it did in the early years.

"This is one of the most remarkable plantings in the watershed and most remarkably, Mr. Hester is now 97 and still looking after this spectacular forest," said Martin Neumann, supervisor of terrestrial resources, who went out to see the forest last fall. "A creek winds through this property, making the entire planting a strong riparian benefit in an area of the watershed with low forest cover. The size, longevity, species mix

and owner's age all contribute to making this a special accomplishment."

Neumann said that many land owners look at tree planting as a cost, rather than a source of income or a way to invest for the future, as Sid has done.

"We're proud of it, you know, and it was a full-time job for years and years. Now it doesn't need much attention. I've never seen the trees grow like they have this year," said Sid as he looked at his forest.

## Students raise funds for habitat

When Grade 5 student Jaimee Courts noticed a few dead animals by the roadside, she decided she would do something about it.

"She came home from school one day and

said Mom, I'm going to change the world," said Kim Courts, her mother. At first Jaimee was going to hold a carnival to raise funds for new habitat, but her parents suggested she downscale to a garage sale with lemonade and baking. The funds raised would be donated to the Grand River Conservation Foundation. Jaimee wanted the money to be used to restore natural areas and provide habitat where animals can live.

At school the next day, Jaimee enlisted some friends to help her carry out her plan. At first they were going to keep it a secret and surprise the school staff after the money was raised. But in the end students were telling other students, and there were helpers from three different Cambridge schools — Silver Heights Public School, Our Lady of Fatima and Saint Elizabeth. Jaimee told the principal of her school, Silver Heights, she had an announcement made and made a flyer. The students (and Jaimee wishes they could all be named because she appreciated the help of all of them) baked, got up early to set up and brought lots of things to sell. Even Mayor Doug Craig, who is a neighbour, dropped by and bought some banana bread.

"It was worthwhile. We can help save a variety of animals that live nearby," said Jaimee when she brought a money box with \$330 to the Grand River Conservation Foundation executive director Sara Wilbur. She also met Kevin Tupman, a natural heritage specialist who helps create habitat for plants and animals.

"It was inspiring to meet her," Tupman said. "It's encouraging to know that there is a new generation that cares about wildlife habitat and the environment."

## Toyota helps improve trails

Toyota Motor Manufacturing Canada and its employees are donating both time and money to improve the environment in the Grand River watershed.

The Cambridge company has donated \$100,000 to the Grand River Conservation Foundation to be used to care for trails and natural areas owned by the Grand River Conservation Authority. A list of projects is still being developed.

TMMC President Brian Krinock said



Photo by Janet Baine

Jaimee Courts and her brother Kyle turn the cash box containing \$330 raised at a garage sale June 16 over to Sara Wilbur, executive director of the GRCA and Kevin Tupman, a natural heritage specialist.



Toyota staff members find a way to carry wood for bridges down a trail at Starkey Hill near Guelph.

"Toyota Motor Manufacturing Canada has enjoyed a long history with the Grand River Conservation Authority. Many of our team members look forward to relaxing with their families at the local conservation areas, and we hope that this donation will support the ongoing stewardship of the GRCA."

For the second year, volunteers from the company spent time working on trail improvement and tree planting projects on GRCA properties.

"These volunteer days are just one more way that Toyota is getting involved in the protection of our natural world," said Sara Wilbur, Executive Director of Grand River Conservation Foundation.

"Their commitment is more than just a cheque – it's a wide-ranging philosophy. We are so pleased to have worked with Toyota for so many years."

Six teams of five people worked near Glen Morris and Guelph in May.

They pruned trees and made other improvements on the Cambridge to Paris Rail Trail, planted trees and put up anti-beaver cages in Guelph. They improved the trail at the Starkey Hill Conservation Area on Arkell Road in Puslinch Township, near Guelph.

These are the latest ventures in a long-standing relationship between Toyota and the GRCA.

## Cambridge-Paris trail improved thanks to Cowan Foundation

The Cowan Foundation has made a three-year commitment to provide \$75,000 to support the renewal of the 75 km rail trail network owned and managed by the Grand River Conservation Authority.

Two interpretive signs, two benches and a stone marker were unveiled in May by representatives of The Cowan Foundation, Cowan Insurance Group, the GRCA and the Grand River Conservation Foundation, the fund-raising arm of the GRCA. The stone marker is at the trail parking lot in the village of Glen Morris, while the signs and benches are located just north and south of the parking lot.

"The GRCA rail trails greatly enrich community life, by granting free public access to outdoor recreation," said Heather McLachlin, President of Cowan Insurance Group. "We are pleased to support the trails that wind through many of the communities where Cowan Insurance Group and Frank Cowan Company have offices, and many of our employees, clients and business partners live and work."

The new interpretive signs help trail users learn more about the environmental and ecological significance of the trail corridor.

One sign provides information on the rare Carolinian forest found in the area. Because of the moderating effects of the Great Lakes, this part of southern Ontario is home to trees, plants and animals that are more typically found in the Carolinas.

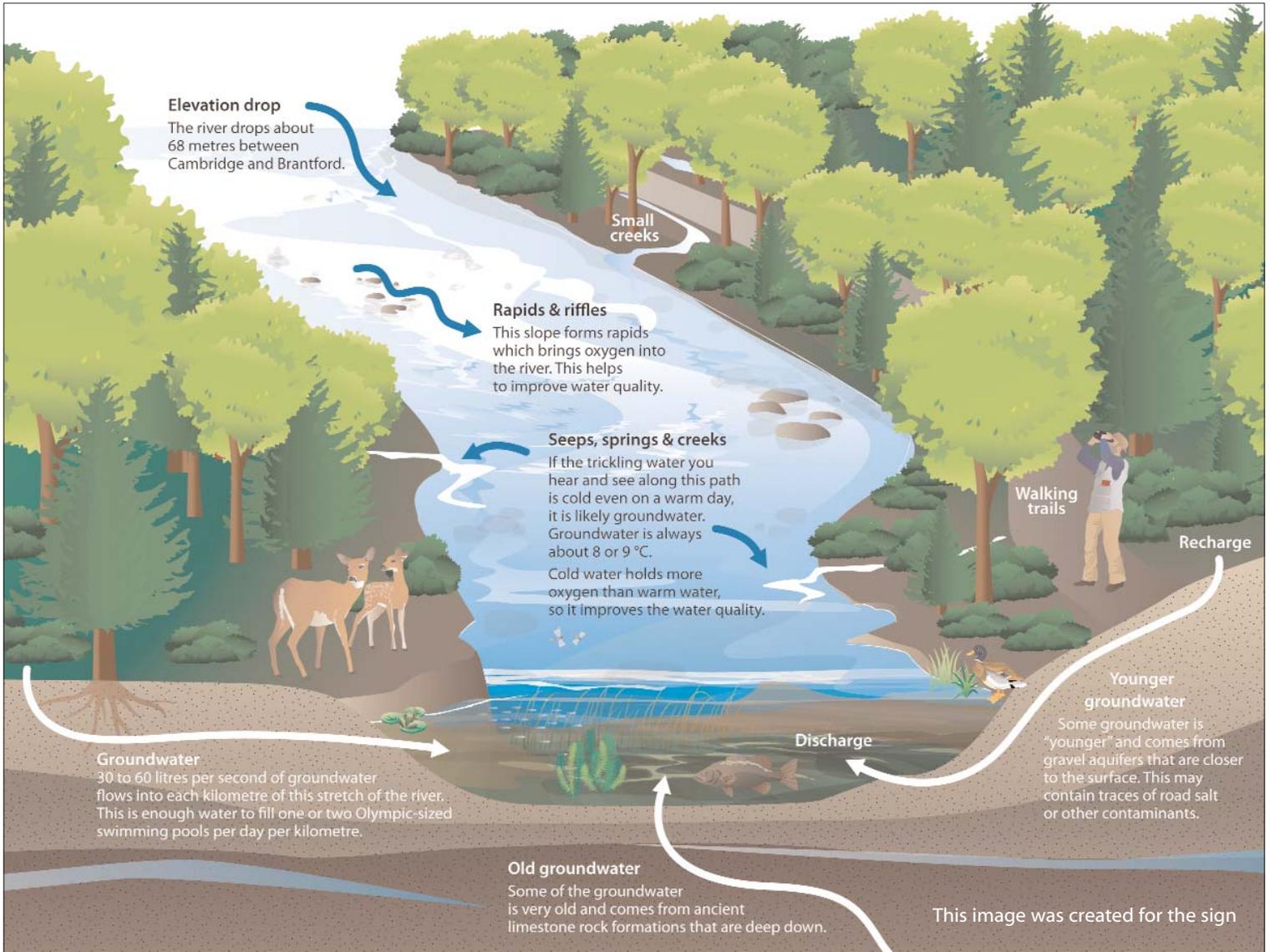
The second sign explains the hydrogeology of the stretch of the Grand River between Cambridge and Paris that is often referred to as the "recovery reach" because water quality improves as it passes through the area.

The Cowan Foundation is a charitable foundation that exists because of the success of Cowan Insurance Group, Frank Cowan Company, The Guarantee Company and Millennium Credit Risk Management. Together the family of companies provides insurance and risk management products and services, and assists employers with their group benefits, retirement and health and disability management plans.



Photo by Janet Baine

Andria Jinkinson-Brown and Tracy Spark look at the new sign along the trail near Glen Morris. It features a description of why this stretch of the river is called the recovery reach.



## DID YOU KNOW?

# Recovery reach of the Grand

The section of the Grand River between Cambridge and Brantford is very special — not only because it is a popular area for paddlers, cyclists and hikers, but also because water quality improves as the river flows towards Brantford.

There are four cities and lots of farms upstream, and by the time the Grand River gets to Glen Morris, its water has been well used.

Fortunately, the river cuts through the Galt-Paris Moraine which is a source of cool, clear groundwater. The addition of the

groundwater to the river results in an improvement in water quality.

About 30 to 60 litres per second of groundwater flows into each kilometre of this stretch of the river. This is enough water to fill one or two Olympic-sized swimming pools per day per kilometre.

Hikers and cyclists will see small wetland areas and hear trickling water. This is where ancient limestone rock formations and hidden groundwater sources rejuvenate the Grand River.

If the trickling water along the trail is cold even on a warm day, it is likely groundwater,

which is always 8 or 9 degrees. Cold water holds more oxygen than warm water, so it improves the water quality.

Like a gentle slope, the river drops about 68 metres between Cambridge and Brantford. This slope is about the height of a 20 storey building.

This slope causes rapids and brings oxygen into the river, which also helps to improve water quality.

### Cleaner water for Brantford

This groundwater is especially good for Brantford, because all the city's drinking water comes from the Grand River. Some of the groundwater is very old and comes from ancient limestone rock formations that are deep down. Some groundwater is "younger" and comes from gravel aquifers that are closer to the surface. This may contain traces of road salt or other contaminants.



Queen snake

### Threatened in Ontario

The recovery reach of the Grand is one of the few places in Ontario where the slender, olive-brown queen snake lives.

This water snake is on the Species at Risk list and is listed as threatened. Queen snakes are water snakes that live on large bodies of water with rocky shores. They like to eat crayfish, and lots can be found along this stretch of the Grand because of the water quality.

The queen snake is the only Ontario snake with stripes along its pale yellow belly.

## WHAT'S HAPPENING

# Friday movies under the stars

This summer, you can watch movies under the stars starting at dusk every Friday night until Labour Day weekend 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 an hour before show time.

"The movies are proving to be a real hit," said Brian Hunt, park superintendent. He was looking for a way to improve programming and offer an activity for families. The movies have been attracting many visitors since they started in June.

The food concession is offering snacks and drinks. Visitors bring lawn chairs and blankets to sit in front of the big screen.

The movies are all rated parental guidance (PG) or general admission (G).

Any cancellations due to poor weather and schedule changes are posted by Friday afternoon on the GRCA website, on Facebook or mentioned on Twitter @grandriverca. E-mail the park or call 519-621-3697 for the movie information.

The movies are funded in part by the Grand River Conservation Foundation.

### Movie schedule:

**July 27** - Toy Story 3, Rated: G, Start 8:45 p.m.

**August 3** - The Pirates! Band of Misfits, rated: G, Start 8:45 p.m.

**August 10** - The Lorax, Rated: G, Start 8:30 p.m.

**August 17** - The Muppets, Rated: G, Start 8:20 p.m.

**August 24** - The Incredibles, Rated: PG Start 8:10 p.m.

**August 31** - ET The Extra-Terrestrial, Rated: PG Start 7:55 p.m.

**September 7** - Tangled, Rated: PG Start 7:45 p.m.



Susan Bryant and her granddaughter Sloane sit atop a well maintained well.

# Test your well water regularly

By Susan Bryant

Water Guide Well Aware Program

Feeling guilty that you haven't tested your well water in a few years?

No need to hide your head in shame. You have lots of company! There are about 8,000 private wells in Waterloo Region, and less than a third of them get tested for bacteria in any given year — even though the testing is free.

Spring and fall are the best times to put water testing on your to-do list. Typically during the spring, there is lots of water from the snow melt and rain. This can increase the risk of bacteria getting into your well if it's not sealed properly or if it's located in an area where water pools. If your drinking water is free of bacteria in spring, it's probably safe to drink year round. But regular checks are best, since conditions can change. Public Health suggests three water tests a year are ideal.

Sometimes people put off testing because they're afraid the results will be bad — and they'll be forced to make expensive repairs or install a new well. Not true. Nobody's watching to see whether you test your water



Movies at Shade's Mills are proving to be popular. They take place each Friday night.

or forcing you to upgrade your well. Private wells are the homeowner's responsibility. Public Health and other agencies offer information and encouragement to help you keep your water safe, but taking action is up to you.

If your test shows bacteria in your water, there's no reason to panic. Most bacteria won't harm you. But some kinds, such as E. coli will. This is why having none in your water is best. Correcting a bacteria problem in your drinking water is often easy and inexpensive. Well professionals report that they fix two out of three cases of bacteria getting into wells simply by replacing the well cap so the seal is tight.

In fact, the chances are very good that test results will show your water's just fine. Since 2008 in Waterloo Region, an average of one in 34 private water samples showed evidence of E. coli bacteria. And information suggests that there have been no cases of E. coli outbreaks linked to private water supplies.

Water filters that are not changed or properly maintained can also increase bacteria levels. Again, fixing the problem is usually simple and inexpensive — a matter of replacing a cartridge or an ultraviolet light bulb.

Like all household appliances, the well itself sometimes needs repairs and upgrades. A good well is sealed from top to bottom so that bacteria can't get in. Ideally, the water from your tap comes only from the aquifer at the bottom of your well — with no holes or cracks where water from near the surface can leak into the well. It's those leaks that may carry bacteria.

Water tests are your early-warning system. Most often, the results reassure home owners that all is "well" with their drinking water. Sometimes, a bacteria count signals that you should call in a well professional to identify and fix the problem. That way, you can ensure safe and healthy water for you and your family.

Water tests for bacteria are free in Waterloo Region, and you can pick up and drop off test bottles at a number of convenient locations.

#### Resources:

- 💧 See or call your public health unit to find a bottle location near you.
- 💧 Rural non-farm homeowners can

book a home visit from a qualified water guide. In Waterloo region, call REEP Green Solutions at 519-744-9799 or e-mail [info@reepgreen.ca](mailto:info@reepgreen.ca) to book an appointment or visit [www.reepgreen.ca](http://www.reepgreen.ca).

- 💧 Farmers in the Grand River watershed may be able to take advantage of the Rural Water Quality Program. Many farmers qualify for subsidies for well upgrades and decommissions. See [www.grandriver.ca](http://www.grandriver.ca), email [ruralwater@grandriver.ca](mailto:ruralwater@grandriver.ca) or call 519-621-2761 for details.

## Kudos for nature centre

Guelph Lake Nature Centre staff received a certificate of appreciation from St. James High School in Guelph.

The certificate was given out at an event at the River Run Centre in Guelph. The certificate is "to honour their expertise, dedication, professionalism and passion in delivering outstanding education and programming for St. James students and all



Greg Meredith leads a class at Guelph Lake Nature Centre.

the students of the Wellington Catholic School Board," said Ivan Ius, a geography teacher who made the presentation to Dan Schneider who received it on behalf of the nature centre staff and the GRCA.

St. James students have been attending environmental classes at Guelph Lake Nature Centre since 1982, so this is the 30th anniversary. The Wellington Catholic District School Board has been ensuring that every elementary school student spends a day each year at the nature centre. The long standing program at St. James and the Catholic board's other two high schools builds on the environmental foundation that is developed in the elementary grades.

Guelph Lake Nature Centre is the busiest of the GRCA's five nature centres. There is currently a fundraising campaign to replace the nature centre, a former house, with a larger purpose-built facility through the Grand River Conservation Foundation.

## Hard water and water softeners

Water Softener Facts is a website that provides information about water hardness and water softeners.

It was created through a partnership between the Region of Waterloo and the City of Guelph, where the water is hard because so much of it is groundwater which contains lots of minerals.

Water is considered hard when it contains large amounts of dissolved calcium, magnesium and other minerals. These minerals cause film formation on drinking glasses and residue on bathroom fixtures. It can also build-up in pipes and appliances or reduce the efficiency of heating elements in water heaters.

Selecting the right water softener can be a difficult task, because not all water softeners are created equal. They vary in the amount of water and salt they consume.

The environment is currently suffering from heightened levels of sodium chloride and water softeners are a contributor to that problem. By selecting a softener that uses less water and salt, you can help to conserve and protect our precious water resources while lowering expenses at the same time.

"This website is a great resource for



The water in the Elora Gorge, may look soft in this photo, but it is hard. This photo was submitted to the GRCA photo contest and taken by John Bryne.

residents with hard water,” said Gregg Zwiers, senior hydrogeologist at the GRCA.

The website aims to help people understand what key items to look for when selecting a water softener. It compares different softeners and describes how they work. Results from testing conducted by the Region of Waterloo and City of Guelph on locally available residential water softeners are available on the website. These units were tested over time to accurately record their salt, water and energy consumption under consistent parameters. The website is [www.watersoftenerfacts.ca](http://www.watersoftenerfacts.ca).

## Wiski soda at the GRCA

There are murmurs around the GRCA about “whiskey soda,” but staff members aren’t talking about a mixed drink.

“Wiski Soda” technology could be considered the Macintosh of the water management world. The name “Wiski” is from Water Information System Kisters. Soda is the platform for data acquisition.

Evidence of this technology purchase by the GRCA will be noticeable sometime next year when new interactive features are incorporated into the GRCA website. But most people will only ever see a small part of what it can do.

“This doesn’t just replace our databases, because what we currently have is not capable of allowing us to do as much. It expands how we can use the information,” said Mark McKinnon, co-ordinator of information technology at the GRCA. “It gives us a lot more growth capacity and it provides us with a framework for the future.”

This system organizes the GRCA’s monitoring data and will result in more accurate and complete information.

It will be used by GRCA staff, researchers, municipalities and the public. It can help predict future rainfall, water flows and water quality or look back over time to detect trends or the biggest dump of rain.

It makes data available to researchers in its raw form and will save staff time in organizing data for researchers.

The information technology department and engineering technical staff are working together to implement this suite of integrated tools. It is one framework for all the data the

GRCA collects at time intervals. This includes 81 parameters such as river flow, rainfall and hydro generation. The data is collected at 216 locations throughout the watershed. At some sites, only one parameter is measured, such as water temperature. At other locations, such as a major dam, 50 different things are measured. All together when you multiply the parameters by the number of sites, there are more than 2,100 “time series data sets” that are integrated into Wiski Soda. More can be easily added.

At this point, the technology has been installed on a multi-server system, the data has been assembled, characterized and imported into Wiski Soda. The next step is what McKinnon calls “cutting the apron strings.” This means moving from using information in the older databases that are separate from each other to the one new framework.

### New interactive features

In 2013 watershed residents will likely notice better information on the GRCA’s website. For example, the river data section now has graphs that show water flow at various locations over the past seven days. The new system will be interactive, and allow people to check historic flows and create their own graphs. A canoeist, for example, may remember paddling between Cambridge and Paris on the May long-weekend two years ago and will be able to compare that level to what is expected this year.

Estimating the impact of climate change on a local level or calculating the improvement that results from a wastewater treatment plant upgrade will be easier.

Later this year the GRCA expects to host a workshop on Wiski Soda for provincial agencies, municipalities and other conservation authorities which are using it.

### Wiski soda by the numbers

- ◆ 81 kinds of measurement, such as rainfall and flows
- ◆ 216 locations within the watershed where information is collected
- ◆ 2,100 sets of time related data
- ◆ 1 framework



Photo by Sophie Gibbs

A white admiral butterfly photographed along the rail trail. This photo was submitted to the GRCA photo contest.

## Landowner fined for laneway

The owner of a property on County Road 109 in East Garafraxa Township in Dufferin County must pay a fine and remove a laneway he built through a wetland.

Thomas Bruce Gowland was found guilty on June 21 by Justice of the Peace Alston A. Guinness following a trial in Caledon court. He was fined \$3,000 and also ordered to pay an additional victim surcharge of \$600.

Gowland had been charged under Section 28 of the Conservation Authorities Act with undertaking development in a regulated area without a permit from the GRCA. He had pled not guilty to the charge. The laneway was about 250 metres long and four metres wide.

In July 2010 the GRCA received information that the laneway was under construction. GRCA staff visited the site, saw the laneway and had discussions with Gowland. Several days later the GRCA sent a letter asking him to cease work. The charge was laid in November 2010.

## THE GRAND CALENDAR

### Wild Crafters, Pinehurst Lake Conservation Area, Saturday, Aug. 4, 1:30 p.m. to 3:30 p.m.

A drop-in program to learn some wild-craft and make something to take back to your campsite. Children under 16 must be accompanied by an adult. Meet at the Sunset Pavillion. Free with park admission.

### Youth Outdoors Day, Luther Marsh Wildlife Management Area, Sept. 10.

This is a chance for 250 young people 9 to 16 years old to learn about the outdoors through hands-on experience and nearly three dozen stations. 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).

### ForestFest, Shade's Mills Conservation Area, Saturday Sept. 29, 10:00 a.m. - 3:00 p.m.

This is a free event for the whole family to celebrate the International Year of Forests. Activities include forest walks, bug hunts, tree harvesting demonstrations, saw mill demonstrations, tree planting, critters creatures and creepy crawlies, guided bird walks and horse drawn wagon rides through the forest, as well as other forest displays and activities.

### Run for the Toad, Pinehurst Lake Conservation Area, Saturday Sept. 29.

The 25 and 50 km trail race is in its 10th year at Pinehurst! Runners and walkers representing many provinces and states participate in this event, which is Canada's biggest trail event. Please refer to the website [runforthetoad.com](http://runforthetoad.com) for more information and register early as this is always a sold-out event.

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

The GRCA and other conservation authorities administer regulations that control development near wetlands, along watercourses and their flood plains, steep slopes and the Lake Erie shoreline. Regulated areas make up about one-third of the Grand River watershed.

In recent years, the GRCA has stepped up enforcement. Most cases are resolved through negotiation with landowners and court action is not necessary.

Landowners planning to undertake a project near a wetland, stream, river or other regulated area should contact a resource planner at the GRCA. E-mail addresses and phone numbers are available on the GRCA website and a "Map my property" link will help a landowner tell if any parts of their property are regulated.

## 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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