



GRAND Actions

The Grand River watershed newsletter



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Cover photo

A pair of osprey which live near the Grand River during mating season.

Photo by Kevin Tupman



Reality TV and the GRCA

By Janet Baine
GRCA Communications Specialist

If you can't get outside and enjoy nature, why not sit back and watch a bit of GRCA reality TV?

Thanks to many partners working together, the GRCA has a webcam on an osprey nest at Belwood Lake near Fergus.

This has generated lots of attention and dramatically increased visits to the GrCA website and social media. Kindergarten students in Brantford tuned in and drew pictures.

Osprey watchers can review the past four hours when they check the live feed.

Here are some answers to the questions that people have asked.

Which is the male and which is the female?

The two adult ospreys have been named Bella and Woody (for Belwood) and it is not so easy to tell them apart. However, when they are side-by-side in the nest, you can see that Bella is bigger, as

female ospreys are larger than males. She also has more black on her head above her eyes, with the black forming a line down the centre of her head.

Her male counterpart, Woody, has more white on his forehead and the feathers at the back of his body are noticeably narrower. It would be easy to mistake these as tail feathers, however, osprey have a broad wingspan, and it is the wing feathers that occasionally stick out at the back before they are fully tucked away.

When did the eggs hatch?

The first hatched May 29 and the second on May 30. Unfortunately one died very quickly. The third was still incubating when this issue was published (June 3). Incubation takes about 36 to 40 days. The nesting period is a quiet time. The young osprey will stay in the nest until they fledge in August.

Bella did most of the incubation, but Woody spelled her off from time to time. Occasionally, for a very short time, the nest may be vacant, but the parents are always nearby keeping a close watch.



Woody (left) and Bella (right) are nesting at Belwood Lake. Bella is bigger and has more black on her head. She is on the nest more.

After the eggs hatched, Woody will do the fishing to feed Bella and the young family. Bella will stay on the nest for about four weeks, until the young osprey can fend for themselves on the nest, and then both parents will go looking for food.

Why are there black birds on the nest?

The small black birds that appear to be on the edges of the large osprey nest are mostly starlings. The starlings have a nest underneath the osprey nest.

Are ospreys monogamous?

Ospreys are monogamous, and the same breeding pair usually comes back to a nesting site year after year. While ospreys have nested at this location for several years, we don't know how long Bella and Woody have been using this site.

What do they eat?

Ospreys live exclusively on live fresh fish which they dive down to snatch from the nearby water.

The fact that osprey are now nesting at several locations within the Grand River watershed means the ecosystem can support them and supply enough fish. They are excellent anglers and live up to 25 years.

Are they disturbed by the camera at night?

The GRCA webcam uses infrared light at night, creating a black-and-white image of the nesting birds. This does not bother ospreys. Like humans, the osprey are not capable of seeing infrared, so are not bothered by it. The camera is designed to use infrared to "see" at night, creating a clear nighttime image without any colour.

Are they disturbed by noise?

A mechanical noise has been heard at times. The GRCA's IT department, which has

made this project possible, has done some troubleshooting and suspects that the mechanical clicking sound is coming from the camera's iris. It automatically adjusts for changes in lighting. While this can be loud at times to webcam viewers, the noise is not heard by the birds and does not disturb them. The GRCA is working with the camera manufacturer and also adjusting the microphone settings to solve these problems.

Ospreys also become used to human activities, as they have at this nest site. The sound of passing cars and gatehouse activities do not disturb them.

Are these birds banded?

The adults are not banded. Ospreys are banded before they are old enough to fly and leave the nest. The GRCA hopes to have the young banded by bird bander David Lambie, who does lots of work banding osprey and other birds at Luther Marsh.

Do ospreys migrate?

While we don't exactly know where these osprey go in winter, some osprey are fitted with tiny solar-powered satellite transmitters and this shows that the osprey from Ontario live in South America during the winter.

Please let us know on social media what you think the names of the young hatchlings should be.

Watch Bella and Woody live www.grandriver.ca/osprey

TAKING ACTION

Community pollinator project

By Jim Dyer and Lorna Ferguson

Bees and their kin have for too long been the unsung heroes of almost every terrestrial ecosystem.

Since the turn of the millennium, however, awareness of insect pollination has mushroomed in scientific literature. Public awareness has also expanded, but not as quickly.

This is the story of how a volunteer group in Cambridge took on the challenge of creating and maintaining a pollinator habitat. At one hectare (2.5 acres), this was a big project and the first of its kind in the region.

Healthy wild bee populations need places to build nests and gather pollen and nectar from pesticide-free flowering plants. Pockets of urban parkland are perfect for this. These spaces also provide habitat for other types of pollinators and beneficial insects, as well as nesting sites for song birds and wildlife. This is an issue where public involvement is critical.

A main hurdle in promoting pollinator habitat projects in the early days was safety



Photo by Paul Willms

Many volunteers have shared the work of creating and maintaining the pollinator preserve. They hold one workday in the spring to plant and another each fall to prepare plots for the next spring planting.



Photo by Jim Dyer

There are many bee species that look like this.

concerns about possible bee stings.

Two basic facts helped to dispel this fear. The first is that most bees have little need to sting, because they are not social. Only the honey bee and the bumblebee are truly social and therefore may occasionally sting to protect a nest. The second is that the most dangerous episodes of multiple stings come from social wasps, particularly yellow jackets that hang around garbage cans and are relatively uncommon in most urban parkland.

Many factors converged to result in the Cambridge Pollinator Preserve. Cambridge was already the focal point of an Environment Canada project to develop a citizen science pollinator monitoring program. Although federal funding for this initiative ran out before it could succeed, this program increased awareness of native wild bees in Cambridge years ahead of other cities in southern Ontario.

The second ingredient was high citizen interest and municipal programming on environmental issues. City Green, one of the leading environmental programs in Cambridge, has been very supportive of pollinator conservation.

A retired off-leash dog run that was beside

the clubhouse for the Ancient Mariners Canoe Club (AMCC) on George Street became available for the project.

This club already had a clear sense of environmental stewardship for the river. Members look after river access maintenance, do annual river cleanups and landscape the Lisaard House Hospice. The AMCC had already planted trees for two years along the border of the dog run overlooking the Grand River.

The AMCC board of directors approved the project in 2009, followed by city council in early 2010. Work started immediately, when three redbud trees were planted, followed by the first annual planting day that spring. Since then, successful planting workdays have been carried out every spring thanks to the sweat equity of volunteers.

A wide range of native flowering trees, shrubs and herbaceous wildflowers have adapted the plant mix to the microclimate and soil of the site. Watering is done only for the new plants. In the beginning the work was intense. Now that the preserve is established, most of the work is limited to a day in spring and another in fall.

Permanent pollinator display

The project also has a permanent outdoor education centre. This information was adapted from the pollinator display in the lobby of the Cambridge Butterfly Conservatory which had just been retired. The club raised \$23,000 to install the set of weather-resistant outdoor panels. The centre was officially opened in September 2012.

The education centre gave a new mission to the pollinator project team to raise awareness and carry out educational programs about pollinators. As the first such habitat project to go into operation in the region, the Cambridge Pollinator Preserve, supported by the AMCC, is ideally suited to carry out this mission.

We encourage all age groups to visit the site on a bright summer day to see pollinators at work in the flower patch.

Jim Dyer and Lorna Ferguson are on the AMCC team that led the Cambridge Pollinator Preserve project. Other team members include Bob Fraser, Jim Graham, Cheryl Graham, Val Simpson, Merrily Walker and Donna Whittier. Paul Willms provided support.

Teaching Nature

Fraser Gibson is a retired environmental educator who has fostered environmental values for children and adults over the past 35 years.

He received a 2014 Grand River Watershed award from the GRCA.

Gibson began teaching in 1967, integrating outdoor and environmental education into his curriculum. Although the Kitchener resident is now retired, he continues to volunteer in nature-related and educational activities.

“Throughout his adult life he has been a steady, enthusiastic supporter of conservation and environmental protection. He has promoted these values as a teacher, but more so as a volunteer after retirement,” wrote friend and former colleague Frank Glew when he nominated Gibson. Glew is also a retired teacher who received this award many years ago.

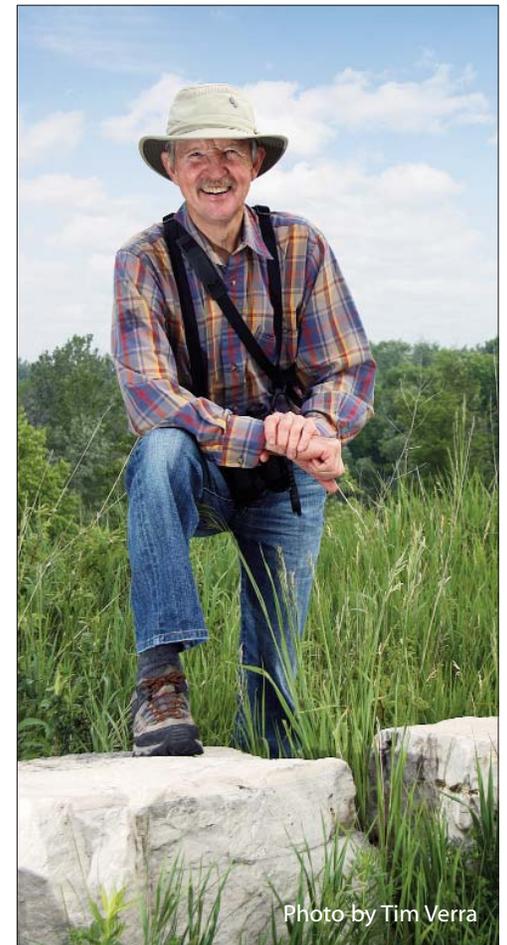


Photo by Tim Verra

Fraser Gibson at Huron Natural Area in Kitchener.

Top native plants at this site

Trees: Canadian serviceberry, eastern redbud

Shrubs: Bush honeysuckle, ninebark

Flowers: purple coneflower, wild bergamot, black-eyed Susan, New England aster

Fraser helped establish Kitchener's Natural Areas Program (KNAP) by sitting on the original collaborative committee and later leading hikes and family events. Each year for KNAP Earth Day, he prepares materials so that families can make chickadee bird boxes and then install them across the city.

"Fraser believes the worst thing we can do is to ruin the earth for the next generations," Glew continued. "The critical importance of environmental education has been a driving force for him.

"His core environmental values of respect and responsibility for all forms of life and habitat, including humans, are the pillars of his actions. He not only knows people must learn to respect nature, but they must go over the apathy line and act on those values in order to make them meaningful. He has carried these values from the classroom to his volunteer work with the public."

Since retirement, Fraser has served as a director for Waterloo Region Nature (formerly Kitchener-Waterloo Field Naturalists) and Ontario Nature. He has also been involved in many citizen science projects. Fraser has led walks for local environmental groups. Glew says he can always be counted on to volunteer and provide an excellent job.

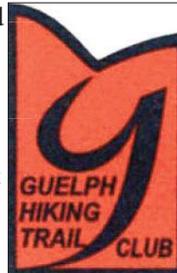
Fraser was given an Honorary Lifetime Membership to The Friends of Killarney Park for his many years of dedicated work editing trail guides, chairing committees, promoting environmental education and serving as the organization's president.

GHTC growing membership

Dave Culham, president of the Guelph Hiking Trail Club, grew up hiking and is ensuring that local kids, including his own, are "cultured" in hiking.

Culham thought of hiking as a solitary experience until he came to Guelph.

"I went on my first hike with the Guelph Hiking Trail Club and fell in love with the club. I was surprised by how much I enjoyed hiking with other people who shared this interest and brought insights and perspectives that I didn't have," he says. "I've hiked with a botanist who knows about plants and a geologist who knows about rocks. I found I was gaining a lot more from hiking with others than I did hiking by myself."



The club received a 2014 Grand River Watershed Award.

Initially he noticed that the members tended to be older than he was, as a father of young children. When he joined the club's executive committee in 2009, he recognized the beginning of a turn around under then GHTC president Kathy Somers, who had started several programs to attract a wide variety of new members, especially families and children. These programs have really taken off.

The club now has 250 memberships

(about 150 are family memberships) and it offers about 250 outings a year. The number of participants on hikes is also on the rise, as is the number of new hike leaders.

The Guelph Hiking Club was founded 43 years ago and most of its 80 kilometres of trails were developed soon after it formed. The focus now is on moving sections of trail off the road and into natural areas by fostering relationships with landowners, as well as finding new side trails. In 2014, the club opened new trails on the former Ontario Reformatory lands in Guelph.

"Now I think Guelph has one of the healthiest hiking clubs in Canada. We reach out in many new ways," Culham says. He is quick to add that this is a team effort with many hike leaders, board member and volunteers who bring skills from all walks of life to ensure the club is growing and attracting families, university students and new members of all ages to the trails, events and the great outdoors.

Really successful kids hikes

"Too many kids are not getting out anymore and are not connecting with nature. We have really successful kids hikes with over 50 kids," Culham says.

Kids of all ages are divided into two groups on these hikes — the slower "tortoises" and the faster "hares." They start and end at the same place, but take a different route when they hike. There are also about six volunteer children's hike leaders and a fast sign-in process. Kid's hikes include activities, such as 12 things to find while on the hike.

The Guelph Hiking Trail Club itself has always been a leader in the province. Hike Ontario, the provincial hiking organization for 30 clubs and trail associations in the province, was founded 40 years ago with the help of some hiking Guelphites. The provincial organization came back to its roots last fall when GHTC organized the annual Hike Ontario Summit and welcomed hikers from across the province.

Check out the club's events listed on www.guelphhiking.com. These include a hike on Saturday, June 13 from Guelph's covered bridge on Gordon Street to the West Montrose bridge 24 kilometres away.



Photo by Bill Shifflett

The Guelph Hiking Trail Club provides hikes for people of all ages and interests, making it one of the most successful hiking clubs in Ontario.



Big Brothers Big Sisters of Guelph has started a new program to get kids outside called Environ-Mentoring. It takes advantage of funding from the Foundation that helps cover the fees for the program, thanks to a donor.

WHAT'S HAPPENING

Outdoor education enriches children's lives in many ways

Research shows there are many benefits to outdoor activities, especially for children.

- Kids who learn and play outdoors have:
- longer attention spans
 - more creativity
 - higher levels of self-confidence
 - higher standardized test scores
 - greater academic success
 - significant improvements in cognitive development
 - less myopia, or short-sightedness
 - a better understanding of and respect for nature.

More than 40,000 students attend GRCA nature centres each year. Summer Adventure Camps — which are booking up quickly for the summer — are held at five locations and have many different themes to appeal to a variety of interests.

The GRCA's outreach programs include many community events, 100 park activities, water festivals in three communities for school children and many tree planting events that are open to everyone.

On weekends and weeknights, the GRCA hosts cubs, guides, brownies and scout programs; environmental birthday parties; and programs for organizations.

The GRCF raises funds to support the facilities and the students attending programs.

Little brothers and sisters get outside at nature centres

Environ-Mentoring is a brand new program, unique to Big Brothers Big Sisters of Guelph, which provides environmental education for at-risk youth.

The program got underway last fall. It is a group initiative where the "Bigs" (volunteers) and "Littles" (mentees) go on outings to learn about nature, wildlife and their surroundings.

BBBSG partners with the Guelph Lake Nature Centre on this program. The goal is for the young participants to develop an understanding of environmental and conservation issues while they also have fun.

"We have had an overwhelmingly positive response from the Bigs and Littles, who've participated in the fall 2014 Environ-Mentoring season," wrote Darryl Blake, development writer with BBBSG. "In addition, we've secured further funding for another season, so we would like to begin arrangements to book programming."

Researchers have found repeatedly that getting outside and learning about nature is good for physical and mental health for people of all ages and backgrounds.

Like other community programs for children at GRCA nature centres, this one qualified to receive financial support from a donor through the Grand River Conservation Foundation to bring the cost down.

BBBSG took this one step further. It found additional support from environmentally-motivated organizations such as Agrium Inc.

FOUNDATION

In this way, the program was offered at no cost to the families, which have little disposable income.

So far, the group has participated in GPS navigation workshops, gone snowshoeing, toured dams in the area, and taken part in several other outdoor classes. It will continue with activities during the summer.

While the GRCA's nature centres provide programs on a cost-recovery basis, programs for organized, non-profit youth groups such as Scouts, Guides, church youth groups and naturalist clubs are available at a subsidized cost. This subsidy is thanks to a generous grant to the Foundation.



Photo by Rhonda Spingley



Young paddlers receive canoeing instructions at Laurel Creek Nature Centre before going out on the water.

Put safety first on water

People get into serious trouble and sometimes die in the Grand River, its tributaries and the reservoirs, but there are many ways to put safety first and reduce the risks.

June 6 to 13 is Water Safety Week, an annual campaign to educate Canadians about how to stay safe around water and prevent drowning incidents.

Wear a lifejacket

According to the Canadian Red Cross, wearing a life jacket could eliminate up to 90 per cent of all boating-related drownings, so the biggest preventive measure anyone can take is to wear a PFD when canoeing, kayaking, tubing, on a raft or SUP (stand up paddle board), or in a motor boat. Also ensure that family and friends do the same.

Experienced paddlers wear a PFD at all times as a matter of habit. It is the occasional paddlers who are easy to spot on a river, because they are often the ones who do not wear PFDs.

Alcohol is suspected in half of boating-related fatalities, so drinking and boating of any sort do not mix.

Lifejacket loaner program

For 10 years, all Grand River Parks have had a life jacket loaner program for swimmers at beaches and pools.

This program got underway after a tragedy at a park when two brothers drowned. Park staff have life jackets on hand to loan out for

free with a small, refundable deposit or photo ID as security.

Temperatures and flows

Paddlers and anglers need to be aware of the fluctuating river flows and also temperatures.

Spring and fall are the most dangerous times, because river water is much colder even when the air temperature may be warm. This is when it is necessary to wear a wetsuit or drysuit when paddling and the water is moving quickly and take extra care if you are fishing.

View www.grandriver.ca/riverdata before you go out to check the river flows and temperatures.

Trees can also come down across a river, resulting in

Danger on the Eramosa

A dangerous trip on a beautiful warm day on the Eramosa River is a reminder to put safety first for all river recreation.

A large tree had come down during the winter across the entire river. A downed tree is one of the most dangerous obstacles that a paddler can encounter on fast-moving water. A tree that is partially or completely submerged can block the river, but the real danger is being swept into the submerged tree branches and becoming trapped.

When flows were 4 cubic metres per second (cms) on Good Friday, the tree was

not yet submerged and paddlers could get under the tree safely by ducking low as they passed under it.

However, a week later, a combination of melting snow and rain meant that three times as much water was flowing down the river which was now at 12 cms. Unfortunately, the tree crossed at a blind turn where Blue Springs Creek joins the Eramosa. The day was sunny and warm, lulling paddlers into the sense that nothing could go wrong.

Several boats capsized at the spot, including canoes carrying young children. A kayak was swept away and not found. Fortunately, some very experienced paddlers were able to rescue those who capsized. Rescuers are not always around, and they, too, are at risk when helping others. No one in Cambridge can forget that a police officer died while attempting to rescue a boy at Parkhill Dam in 1998.

The incident is a reminder to paddlers to be aware that danger can lurk around the corner on a fast-moving river, and to ensure they and those they are with have the skills to handle such a situation. Paddling in a group is much safer. Training on the water with a qualified instructor is best and there are many courses available locally.

Interestingly, removing a downed tree in a river is the responsibility of the property owner, who may not even be aware that the tree has come down, or may not realize that the tree is a danger to paddlers. As a result, the tree may not be removed. On a roadway, a downed tree will be removed by the municipality, or emergency services. However this is not the case with a tree on a river. In this case, there was very little that the GRCA could do, aside from contacting the property owner about the problem tree. In this case, it was removed by paddlers.

Dam safety

Dams are much more dangerous than they may appear.

The GRCA owns 29 dams and there are over 100 other dams within the watershed. Water surges through gates or over the dam, creating strong undertows and backwash below the dam, where you can be pinned below the water. Areas above and below a dam are dangerous waterways for boating, fishing, swimming and winter activities.



Photos by Mark Funk



Digger or chimney crayfish

Unlike other species, digger or chimney crayfish don't live in streams and waterways. GRCA staff found these crayfish on a farm in northern Wellington County near Arthur. Trees are being planted around this site to help protect wetland habitat. These crayfish are semi-terrestrial and live in burrows with as many as four entrances. The homes have a large terminal chamber which is usually below the groundwater table. The entrances are conspicuous due to tall "chimneys" (right) made from mud. These crayfish live in wetlands and also roadside ditches and creek banks.

Storm spotters help Environment Canada

CANWARN is the eyes and ears of Environment Canada.

It is made up of about 6,000 volunteer storm watchers from across Canada who are trained to report severe weather.

Geoff Coulson, a warning preparedness meteorologist with Environment Canada, spends late April and most of May holding storm spotter training sessions in communities across Ontario, including a session at the GRCA.

Many of the video clips Coulson uses to illustrate different types of storms were posted by people who put themselves at risk, which is never a good idea, Coulson said. He urged all storm spotters to ensure that their own safety and that of others around them is the first priority.

Storms can change direction, and they move quickly. They break glass easily and people are not safe in cars, or behind windows, because these are not protective barriers.

"As you get closer to the storm, you get disoriented and may not know what part of the storm you are in," he said, which is

another reason to keep a distance.

Social media has changed storm spotting over Coulson's 30-year career, because people put themselves at risk in order to post photos and videos to social media.

Coulson noted that this is the 30th anniversary of a tornado in Grand Valley that resulted in fatalities and severe damage.

"If one of these events were to happen today, there would be many more fatalities, and it would be more dangerous," he said. This is because the population has grown and there are more people living in the path that the tornado took.

CANWARN is an acronym that comes from Canadian Weather Amateur Radio Network. It started in 1987 with amateur radio operators and has since expanded. The volunteers help Environment Canada to inform the media and public through contributions that are included in Environment Canada Weather Watches and Warnings.

"Lots of technology helps, but one part of the storm we don't have a good handle on is what is happening under the storm,"

Coulson said, so volunteers can describe the hail, rain, damaging winds and location, which may help Environment Canada warn others in the path of the storm.

Coulson described and showed images of single-cell, multi-cell and superstorms. There is an Ontario Storm Prediction Centre in Toronto that operates 24/7. Fortunately, most tornadoes in southern Ontario are relatively weak and difficult to detect.

Most storm damage comes from the debris that the strong winds pick up and carry.

On average, Ontario has more than 100 severe weather events from late April to early October. Of those, 50 to 60 have damaging winds, 20 have heavy rain or flooding, 20 have significant hail and there are 12 about tornadoes.

Environment Canada also uses data that is recorded by volunteer weather watchers who are part of the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS), featured in an earlier issue of Grand Actions. It is available to anyone on under the "view data" tab on www.cocorahs.org/canada.



Photo by Kevin Tupman

Successful Brant burn

Perfect weather led to a very successful prescribed burn on six hectares of mature tallgrass prairie habitat at Brant Park in April.

Burns are held periodically to create or improve tallgrass prairie habitat at specific locations on GRCA land. Tallgrass prairies require occasional fires to remove non-native invasive plants and woody plants and help germinate native prairie seeds.

The GRCA hires an experienced contractor to develop and carry out these burns. This will help bring back native species and habitat for native wildlife.

Burns require very specific conditions and must be carried out during early April when the weather is dry.

THE GRAND CALENDAR

Fly Fishing Forum, June 6

A day of on-river seminars and many related events about fly fishing sponsored by Friends of the Grand River. This is a great way to learn more and meet other anglers at Belwood Lake Park. For more information, see www.grandriver.ca/events

Movies every Friday night

Starting June 12, family movies will be shown at Shades' Mills Park every Friday night throughout the summer, weather permitting. Check the events calendar for details. If a movie is cancelled due to weather, this will be listed on the GRCA calendar and Facebook page.

2Rivers Festival June 9 to 14

This year's festival features 11 free river-related events in Guelph. From canoeing, kayaking, hiking and cycling, to river restoration and celebration. Details are available on www.2riversfestival.org.

Annual River Fundraising Dinner June 22

This event is supporting the new Guelph Lake Nature Centre and takes place at three restaurants: The Woolwich Arrow Pub (The Wooly) in Guelph, Borealis Grille & Bar in south Kitchener and Borealis Grille & Bar in

Guelph. Tickets for dinner and beer pairing are \$60. Please call the restaurant of your choice or visit them online for more information at www.neighbourhoodgroup.com.

Grand Food Truck Festival, Sunday June 21

Join us at our second annual Grand Food Truck Festival. Seven food trucks will be serving gourmet food in beautiful Brant Park. You'll want to take advantage of the 1.25-acre pool and splash pad, drop a line in the water, and try your hand at some nature-based crafts and more. The festival takes place from 11 a.m. until 6 p.m. and is free with paid park admission.

Conestogo Lake Fishing Derby, July 5

Try your luck at catching catfish, smallmouth bass and pike at this annual event. Prizes awarded for the longest fish in adult and children's categories, 8 a.m. to 3 p.m. Meet at the boat launch. This is one of many fishing derbies on the Grand River. It costs park admission plus \$1.

Note: This calendar provides a selection of upcoming events. All events at the GRCA's conservation areas and nature centres are posted on www.grandriver.ca/events.

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.

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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