



GRAND RIVER
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Giving nature a helping hand

Restoring a lost landscape involves more than letting nature take its course

By Janet Baine
Communications Specialist
Grand River Conservation Authority

It takes more than time to transform a farmer's field into a wetland, forest or grassland.

It takes a team of specialists who have spent years studying nature and learning her ways.

Over the years the Grand River watershed has lost most of its natural areas. To help make up for the loss, the GRCA tackles projects to recreate them.

One recent project involves transforming 36 hectares (89 acres) of farm fields near Dunnville into a wetland.

There are no trees in the low-lying farm fields there to help create a wetland habitat, so bulldozers were brought in to create what conservationists call "pits and mounds." They dug holes and left a pile of

earth beside each hole to simulate the holes left when a large tree falls in the forest, pulling up earth with its roots. Water collects in the holes, providing habitat for new life.

The first pits were dug in Dunnville in December 2005 and by the following spring, when GRCA staff arrived to seed the area, they saw that the pits were already teeming with tadpoles. Native seeds planted in the spring of 2006 are returning the fields to nature, while salamanders from the nearby slough forest are moving into the pits to breed.

Creating a natural area involves a lot of planning and thought.

"Restoration is an evolving science," explains Martin Neumann, supervisor of terrestrial resources. "If you look at our work from a high level, everything the GRCA is doing in the watershed is restoration. Everything is to make the watershed healthy."

Letting nature take its course won't work because many new factors have come into play in the densely populated Grand River watershed.

"Pollution, climate change and non-native plants

Continued on Page 6



A controlled burn, like this one at the F.W.R. Dickson Wilderness Area, near Cambridge, is used to mimic the effects of a forest fire, which cleans out underbrush, creating room for rare, native species to grow.

Along
the
Grand

Grand outdoors

Enjoy a great summer close to home with a visit to a GRCA conservation area.

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Your \$ at work

See how the GRCA spends your money on making the Grand River watershed a healthier place

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Green energy

'Green energy' is being used to power up some GRCA nature centres.

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THE GRAND RIVER

A Canadian
Heritage River



The GRCA

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A Message FROM THE CHAIRMAN AND THE CAO

The new environment



Poll after poll shows that environmental issues — notably climate change — are top of mind with Canadians these days.

In a way, we're living in a "new environment." First, there is the new physical environment that scientists predict will come with global warming.

Second, there is the new social and political environment that is taking hold, as more people begin to appreciate the effects of the interaction of humans and the natural world.

Experts agree that climate change is occurring. However, there's a lot less certainty about what it will mean at the local level, here in the Grand River watershed.

Will we get more snow or less? Will big summer thunderstorms become more common? Will we face longer, deeper droughts? Will more hurricanes track our way in the fall?

Climate change — and the extreme weather it could bring — presents the GRCA with a special challenge. We have a significant investment in dikes, dams, river gauges and other infrastructure that helps to protect us from spring floods and summer droughts. Much of that infrastructure is middle aged. Although it is still in good shape, climate change could place new, heavier demands on it in the future.

That means that it will become even more important to invest in improvements and modernization of these critical facilities. That is going to require the close co-operation of the GRCA, its municipal partners and the senior levels of government as we assess what the needs are, what the costs will be and how to pay for it.

The prospect of climate change is also responsible, in large part, for the changes we are seeing in public attitudes about the environment.

The concerns go beyond global warming. Canadians are concerned about a whole host of environmental issues. They see toxic chemicals, air pollution and water pollution as life-threatening concerns.

We can see this "new environment" playing out in national and provincial politics, where parties are now fighting to see who can be the greenest.

We can also see how important this issue has become at a local level in the emphasis that our residents and municipal

leaders are putting on environmental issues.

It is good to see this growing commitment to environmental issues in all levels of government and among citizens at large.

It is also important that we work together on this, because many of these issues can't be resolved by just one agency or just one level of government.

One particularly good example is the protection of our drinking water supplies.

Last fall, the Ontario legislature passed the Clean Water Act which will set the stage for the creation of drinking water protection plans across Ontario.

Some critics of the act have said that it represents an unnecessary imposition of the heavy hand of government bureaucracy.

That's wrong. The central feature of source water protection planning is that it calls for a collaborative approach to protecting drinking water. Conservation authorities, municipalities, farmers, businesses, residents — they will all be involved and will all have a say in developing our source water protection plan and deciding how it will be implemented.

The work that will be done on source water protection is one example of the kind of broad-based effort that needs to be brought to bear on our long list of environmental issues.

Every day, we see new evidence that more people see the links between a healthy environment, healthy communities and healthy economies. Working together, we can strengthen those links and give ourselves, and our children, the environment they deserve.



Alan Dale
Alan Dale
Chairman



Paul Emerson
Paul Emerson
Chief Administrative Officer

WHO SPEAKS FOR YOU?

The municipality where you live appoints one or more representatives to the GRCA board to oversee the budget and activities of the Conservation Authority. They speak on your behalf at the GRCA.

Townships of Amaranth, East Garafraxa, East Luther Grand Valley, Melancthon, Southgate: Tom Nevills

Townships of Wellington North and Mapleton: Pat Salter

Township of Centre Wellington: Shawn Watters

Town of Erin, Townships of Guelph-Eramosa and Puslinch: Brad Whitcombe

City of Guelph: Vicki Beard, Mike Salisbury

Regional Municipality of Waterloo: (Cambridge, Kitchener, Waterloo, North Dumfries, Wellesley, Wilmot and Woolwich) — Jane Brewer, Kim Denouden, Jean Haalboom, Ross Kelterborn, Claudette Millar, Jane Mitchell (GRCA 1st vice-chair), Wayne Roth, Jake Smola, Bill Strauss, Sean Strickland

Town of North Perth, Township of Perth East: George Wicke

Regional Municipality of Halton: (Halton Hills and Milton) — Barry Lee

City of Hamilton: Anna Kramer

County of Oxford: (Blandford-Blenheim, East Zorra-Tavistock, Norwich) — Alan Dale (GRCA chair)

City of Brantford: Robert Hillier, Vic Prendergast (GRCA 2nd vice-chair)

County of Brant: Robert Chambers, Brian Coleman

Haldimand and Norfolk counties: Lorne Boyko, Craig Grice

Protecting resources is a big, complex job

The mandate of the Grand River Conservation Authority is to protect and preserve the natural resources of the watershed.

It's a big and complex job with many varied and interconnected parts to it.

To organize the work, the GRCA has broken its activities into seven broad categories. Here are some highlights from each area for 2006.

Reduce flood damages

The GRCA's role: The GRCA operates reservoirs, builds and maintains dikes, and has a sophisticated flood forecasting and warning system to protect the communities of the Grand River watershed.

During 2006:

- An improved warning system for New Hamburg – a frequent site of flooding – was developed in partnership with Waterloo Region.

- A flood warning was issued in December when a rare storm surge, driven by high winds, sent water crashing along the Lake Erie shoreline near Port Maitland. The level of Lake Erie rose so high that water actually backed up the Grand River channel to Dunnville. The GRCA issued other flood warnings during the year in January, March and July.

- A September thunderstorm washed out parts of Coronation Boulevard where it crosses Groff Mill Creek in Cambridge for the second time in recent years.

Improve water quality

The GRCA's role: A key responsibility of the GRCA is to protect water quality. One way it does this is by storing water in reservoirs during spring runoff, and then releasing this water during dry months to keep rivers flowing.

During 2006:

- The GRCA collected more than 300 water samples at locations throughout the watershed to learn more about water quality.

- Plans for new water quality gauges to be installed in Kitchener and York were developed.

- The Rural Water Quality Program gave out more than \$521,000 in grants to support 206 projects to protect water on farms in Waterloo Region, Wellington County and Brant County. The program

itself was given an Award of Rural Excellence by the Foundation for Rural Living.

Protect natural areas

The GRCA's role: The GRCA protects natural areas such as wetlands, forests and river valleys by a variety of means: regulation, land purchases and cost-sharing programs. The GRCA alone owns 20,000 hectares of land which it manages to promote biodiversity.

During 2006:

- The GRCA led several projects to return parcels of land to a natural state by building new wetlands at Luther Marsh Wildlife Management Area, restoring former farmland near Dunnville and developing a wildlife corridor near the Guelph Lake Nature Centre.

- More than 35,000 trees were planted on GRCA land and another 64,000 trees were planted on private land. The Burford Tree Nursery produced 106,000 trees.

- Projects to promote and develop the Grand River fishery were undertaken by a special co-ordinator hired to advance the Grand River Fisheries Management Plan.

Ensure secure water supply

The GRCA's role: GRCA reservoirs are critical to the water supply of watershed communities. Water released from the reservoirs over the course of the summer ensures there is enough water in the river to meet the needs of communities.

During 2006:

- During the driest part of the summer about 75 per cent of the flow at Kitchener was water from GRCA reservoirs. Flow augmentation at other locations: Grand Valley, 90 per cent; Guelph, 67 per cent; Cambridge (Galt) 59 per cent; and Brantford, 40 per cent.

- Several municipalities continued to develop long-range water supply plans – Guelph and the Region of Waterloo – with the assistance of the GRCA.

Support watershed planning

The GRCA's role: Municipalities and landowners look to the GRCA for advice on ways to include environmental protection in land use plans and developments.



Members of the Mill Creek Rangers build a new channel for the creek in Puslinch Township. The new channel diverted the creek around an old swimming pond, making the water cleaner and cooler. The Mill Creek Ranger program is a community-based effort which hires students to undertake restoration work in the summer.

During 2006:

- The GRCA updated the regulations it administers to control development around wetlands, flood plains, slopes and the Lake Erie shoreline.

- Updated aerial photography, available on the GRCA website, allows landowners to learn what parts of their properties are covered by GRCA regulations. The website section is called the Grand River Information Network (GRIN) and provides a wide range of information about land, water and land use in the watershed.

- Work started on detailed plans for Chilligo, Howell and Freeport creeks in the Kitchener-Cambridge area.

Environmental education

The GRCA's role: The GRCA operates five nature centres which provide outdoor education for students, as well as special environmental programs for the community.

The GRCA also supports many educational events throughout the watershed to raise the level of environmental understanding.

During 2006:

- More than 51,400 adults and children took part in programs at GRCA nature centres.

- Tree planting, games and displays on environmental themes were all part of

Sunoco Earth Day at RIM Park, Waterloo.

- About 400 people took part in the Sixth Grand River Water Forum where speakers included Environment Minister Laurel Broten, Herb Gray of the International Joint Commission and Environmental Commissioner Gord Miller.

- The ninth Heritage Day Workshop in Cambridge focused on the role of heritage in economic development.

- Children learned where their water comes from and how to protect it at Children's Water Festivals in Waterloo-Wellington and Brant-Brantford.

Outdoor recreation

The GRCA's role: Twelve conservation areas and many thousands of hectares of conservation land provide residents with many places to enjoy the beauty of the watershed.

During 2006:

- There were more than 1.1 million paid visits to conservation areas.

- 75 kilometres of rail-trails attracted thousands of users.

- A beach safety program was launched, including a life-jacket loaner program.

- Access was improved at two parks: a new ramp was built at Rockwood Conservation Area and work started on an accessible fishing pond at Belwood Lake.



Our outdoors at your doorstep

GRCA conservation areas are a great place to get away from it all – without spending hours on the road or a fortune on gas

For more than half a century, the GRCA has operated some of the province's premier recreation areas, featuring all the best the Grand River watershed has to offer.

From the lush land around Luther Marsh, to the rushing waters of the Elora Gorge and the wide expanse of the Grand near Byng Island, there's something for nature lovers of all types in the watershed.

The GRCA operates 12 conservation areas offering thousands of campsites, hundreds of kilometres of trails and plenty of places to drop a line and catch a trout, bass or pike.

Byng Island Conservation Area – Dunnville

This 190-hectare park is set amid a Carolinian forest that is perfect for bird-watching, hiking, fishing, canoeing and boating on the Grand or Lake Erie. The

campground has about 375 sites. The park also has a 0.8-hectare (two-acre) swimming pool with a picnic area and playground nearby.

Brant Conservation Area – Brantford

This 185-hectare park has more than 450 campsites nestled in a bend of the Grand. The huge 0.6 hectare (1.5 acre) swimming pool is great for the whole family. The park has picnic sites, three playgrounds and plenty of trails. It's a popular stopping off point for canoe trips.

Pinehurst Lake Conservation Area – Paris

A mature Carolinian forest shelters a spring-fed kettle lake, where swimmers, boaters and anglers can enjoy a sunny afternoon. The nine-hectare lake has a sandy beach, with a playing field and picnic area nearby. Trails wind through the forested

140-hectare park, which has about 300 campsites.

Shade's Mills Conservation Area – Cambridge

This day-use park is along the eastern edge of the city. It's a popular spot for picnics, swimming, fishing and non-motorized boating. There's a disc golf course, with discs for sale at the gatehouse. The park has 14 km of hiking trails through a mature hardwood forest surrounding the 36-hectare reservoir.

Laurel Creek Conservation Area – Waterloo

Just minutes from the downtowns of Waterloo and Kitchener, this park offers a quiet place to relax and enjoy the outdoors. Swimming, windsurfing, hiking and bird-watching are popular activities at the 294-hectare park. The park has more than 130 campsites and picnic facilities.

Rockwood Conservation Area – Rockwood

Towering limestone cliffs, caves and glacial potholes are a



Soaking up the sun at Pinehurst Lake Conservation Area near Paris.

few of the natural wonders at Rockwood. There are hiking trails along the lake and Eramosa River. The lake is also stocked each spring with trout. The park has more than 100 campsites, a swimming beach, picnic areas and a miniature golf course.

Guelph Lake Conservation Area – Guelph

This 1,600-hectare lake, created by the construction of Guelph Dam in 1976, is a favorite spot for picnics and hiking and camping on its 440 sites. It's also the home to major events including the Hillside Festival and triathlons. Windsurfers and sailors can catch the wind on the lake, which has two beaches.

Elora Quarry Conservation Area – Elora

The centre of attraction is the 0.8 hectare (two acre) limestone quarry encircled by sheer cliffs up to 12 metres high. This day-use park is tree-covered, making it a great spot for picnicking.

Elora Gorge Conservation Area – Elora

Limestone cliffs plummet 22 metres into the bubbling Grand River as it makes its way through the Elora Gorge. Hiking trails line the gorge. Tubing down the

rapids is an exciting and popular attraction. The 200-hectare park has about 350 campsites, picnic shelters and playgrounds.

Conestogo Lake Conservation Area – Drayton

Conestogo Lake is in the heart of Mennonite Country. The Y-shaped lake, created by Conestogo Dam in 1958, stretches six kilometres up each arm. It offers fishing, boating and swimming. The campground has 175 sites. Picnicking and hiking are other popular activities.

Belwood Lake Conservation Area – Fergus

The 1,350-hectare lake was created with the construction of the Shand Dam in 1948 and provides boating, water-skiing and some of the best fishing around. The park has picnic grounds, a stocked fishing pond for youngsters and a swimming beach on a spring-fed quarry. Downstream is a premier fly-fishing reach.

Luther Marsh Wildlife Management Area – Grand Valley

A biological treasure in the river's headwaters and home to many rare species, Luther Marsh offers hiking, biking, skiing, birding, hunting and great nature photography.

FOLLOW THIS SIGN TO THE CONSERVATION AREAS		UNSERVICED CAMPSITES	HYDRO & WATER SITES	FULL-SERVICE CAMPSITES	DUMPING STATION	SWIMMING FACILITIES	BOATING	PLAYGROUND	TRAILS	CROSS-COUNTRY SKIING	CONCESSIONS	SIZE (HA)
BELWOOD LAKE	(519) 843.2979					Beach	M		3K		S	1,347
BRANT	(519) 752.2040	270	140	30		Pool			1K		F-B	184
BYNG ISLAND	(905) 774.5755	235	148			Pool	M		1K		F-B	190
CONESTOGO LAKE	(519) 638-2873	75	100			Beach	M		2K		F-B	2,348
ELORA GORGE	(519) 846-9742	312	165	69		Beach			5K		F-T	200
ELORA QUARRY	(519) 846-5234					Beach					F	32
GUELPH LAKE	(519) 824-5061	305	135			Beach	NM		5K		F-B	1,607
LAUREL CREEK	(519) 884-6620	76	54			Beach	NM		8K	8K	B	294
LUTHER MARSH	(519) 928-2832								27K			5,200
PINEHURST LAKE	(519) 442-4721	105	185			Beach	NM		8K	13K	F-B	104
ROCKWOOD	(519) 856-9543	50	45			Beach	NM		10K		F-B-G	79
SHADE'S MILLS	(519) 621-3697					Beach	NM		14K	10K	F-B	177



Driving tours a great way to see Grand River Country

The Grand River watershed is loaded with historic sites, scenic vistas and great places to enjoy outdoor fun.

Now it's easier to find your way to all of this, thanks to Grand River Country, a promotional organization joining together the GRCA and tourism marketing organizations from up and down the Grand.

Grand River Country has developed four driving tours of the watershed, with a particular focus on the many old mills that dot the landscape.

Many of the mills were built in the 1800s to produce flour or to power textile factories.

Over the years, most have been converted to other uses, ranging from private residences to stores and restaurants.

But no matter what their use, they still represent a commanding presence on the river bank, and are an important part of the heritage of the Grand River watershed.

The tours cover: Guelph,



Fergus, Elora and St. Jacobs; the Cambridge area; Brantford and Six Nations; and Haldimand and Six Nations.

Interactive maps on the Grand River Country website show the key attractions on each tour. Maps can be downloaded showing the route and stopping points.

The Grand River Country website also provides information on many other activities in the Grand River watershed, including paddling, hiking, fishing, shopping and sightseeing.

Grand River Country publishes an annual brochure, Journey the Grand, which contains maps and information on GRCA conservation areas, Grand River communities and activities.

Copies of the brochure are available at conservation areas, tourism offices throughout Southern Ontario or online at www.grandriver.ca or www.grandrivercountry.com



The Caledonia Mill has graced the banks of the Grand River since the 1850s and is a feature of one of the new driving tours developed by Grand River Country.



Putting your money to work to protect the environment

The board of the Grand River Conservation Authority has approved a 2007 budget calling for expenditures of \$23.7 million.

That represents an increase of just 2.6 per cent over the 2006 budget. The average contribution of each of the 925,000 watershed residents is \$8.19 per year, compared to \$7.66 in 2006.

Watershed management and monitoring: \$7,571,300

Activities include operation of flood and erosion control structures such as dikes and dams; flood forecasting and warning; water quality monitoring; restoration and rehabilitation projects; watershed and subwatershed studies, and administration of floodplain regulations.

Environmental advisory services: \$675,500

This program involves reviewing municipal planning documents and recommending environmental policies for floodplains, wetlands and other environmentally significant areas; providing advice and information to municipal councils on development proposals and severances.

Watershed stewardship: \$2,668,300

The watershed stewardship program includes activities associated with providing service and/or assistance to private and public landowners and community groups on sound environmental practices that will enhance, restore or protect their properties. Some activities are operation of the Burford Tree Nursery and tree planting programs; the Rural Water Quality Program; implementing projects under the Grand River Fisheries Management Plan; providing conservation information through brochures, publications, the web site and media contacts.

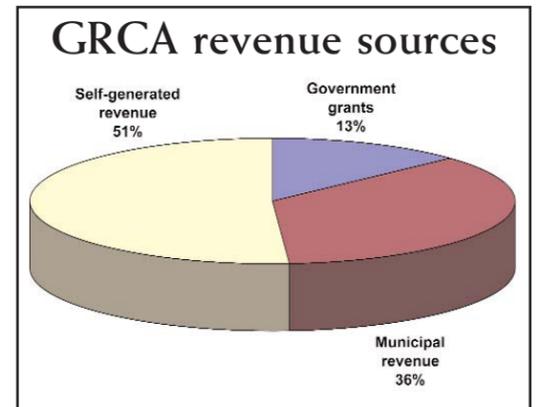
Conservation land management: \$3,540,500

This includes expenses and revenues associated with the acquisition and management of land owned or managed by the GRCA including woodlots, provincially significant wetlands, passive conservation areas, rail-trails and cottage lots at Belwood and Conestogo lakes. Activities include forestry disease control, woodlot thinning and hydro generation.

Recreation and education: \$6,321,900

Recreation: This includes the costs associated with operating the GRCA's 12 active conservation areas that offer camping, hiking, fishing, swimming, skiing and other activities at its parks. The parks record more than one million visits each year and are financially self-sufficient in their operating costs.

Education: The GRCA operates five nature centres, which provide curriculum-based programs to about 50,000 students from six school boards and independent schools throughout the watershed. In addition, about 10,000 members of the public



attend day camps and weekend family events.

Corporate services: \$2,699,681

This includes the cost of administrative functions such as accounting and human resources, as well as the cost of insurance, consulting and legal fees and expenses relating to the general membership board.

Where your money goes...

The municipalities of the Grand River watershed contributed about 36 per cent of its revenues. The cost, per person, is about \$8.19 a year.

Here's how it will be spent in 2007:

\$8.19 used for	Your cost in 2007
✓ Watershed studies	\$.04
✓ Resource inventory & environmental monitoring	\$1.30
✓ Flood forecasting & warning	\$.57
✓ Flood & erosion control structures, ice management	\$1.58
✓ Floodplain regulation	\$.47
✓ Resource management support cost	\$.35
✓ Municipal plan input & review	\$.16
✓ Private land tree planting, forestry	\$.33
✓ Soil & water conservation, stream management & restoration	\$.56
✓ Conservation information	\$.66
✓ Conservation land property taxes	\$.16
✓ Administration/head office facilities	\$2.01

The per person levy was calculated by dividing the portion of the GRCA's total general municipal levy \$7,580,000 by the estimated number of residents (925,000) in the Grand River watershed. The \$8.19 was then applied to the net cost of the various GRCA program areas that are partially funded by municipalities.



Watershed restoration

Continued from Page 1

and insects have transformed the watershed. There is hardly a place that remains untouched," says Neumann, whose department has the task of planning, implementing and monitoring the progress of restoring natural landscapes.

An example is a six hectare (15 acre) piece of land in Guelph that is slated to become a forest. There's a nearby hedge of buckthorn, which is an invasive species, brought to North America from Europe in the 1800s. It needs to be pulled out so native species such as hawthorn and cedar can grow there, Neumann points out.

There's a whole spectrum of activities that can be considered part of watershed restoration, he says.

At one end, it might mean planting a single tree or asking farmers to wait a couple of weeks before taking off their first hay in order to allow ground-nesting birds to leave with their young.

Intensive work

At the other, it can mean intensive and costly transformation of the landscape. In some cases, the actions can be quite dramatic, such as setting a controlled and carefully planned fire to recreate tallgrass habitat.

All of those activities, from the simplest to the most complex, and everything in between, help restore watershed health, says Neumann.

Each spring for the past three years the GRCA has conducted controlled burns to recreate fire-driven ecosystems and promote native vegetation, creating wildlife habitat and enriching forest soils. Fire used to come naturally with lightning strikes,

but decades of fire suppression means tallgrass habitat is rare. Fire was also used by Natives to clear land for farming. Only about three per cent of the tallgrass habitat that once covered southern Ontario remains.

Added marshlands

An estimated 65 per cent of the wetlands of the Grand River watershed have been lost over the past 200 years and this number is as high as 85 per cent in some areas. In addition to the Dunnville Marsh, the GRCA has added marshlands at Luther Marsh near the headwaters in the north of the watershed. Dams have been removed at Taquanyah near Cayuga and Chilligo Creek in Cambridge, resulting in major restoration projects and a new look for these areas.

Natural areas are essential to the 925,000 watershed residents for many reasons. Wetlands store and filter water, so they help ensure the quality and quantity of water for communities, businesses and wildlife.

Natural areas provide habitat to support diversity and keep ecosystems healthy. Some natural areas are places where watershed residents can connect with nature and participate in recreational activities.

At the beginning of the 20th century, tree cover in the watershed was only five per cent, while Environment Canada recommends 30 per cent tree cover to maintain a healthy environment. A concerted effort over many decades by numerous groups and individuals means tree cover now averages 19 per cent across the watershed, but there is still a long way to go.



Trees and nuts are planted in the new "pits and mounds" created in a former farm field near Dunnville. Reshaping the landscape provides homes for plant and animal species.

Of the 14 per cent increase, the GRCA might be responsible for two or three per cent since it has planted 26 million trees over the past 60 years, Neumann says. A million trees a year used to be planted, but fewer government incentives have resulted in only around 100,000 trees a year being planted in recent years.

"If we want to get to 30 per cent forest cover, we need to plant more trees one way or another," Neumann explains.

The GRCA tends to plant trees more strategically and also emphasizes diversity of forests, rather than the large monoculture plantations that were sometimes planted in the past.

The primary objective is to protect water quality but it's also done in such a

way as to create wildlife corridors to allow animals to move to different areas.

The GRCA owns about three per cent of the land in the watershed, but that includes about eight per cent of the forests and many of the watershed's most significant habitats.

When it is all added up, an estimated one-fifth of the most environmentally significant habitat in the watershed is owned by the GRCA.

"We have a responsibility and an obligation to take good care of the significant habitats that we have. We need to make sure we are looking after our backyard as we encourage others to do the same, so we are doing our best to lead by example," Neumann says.



Greg Meredith, an interpreter at Guelph Lake Nature Centre, shows a screech owl to his daughter Coral.

Where curiosity grows...naturally

Environmental issues have never been more important to the future generations of our planet and there is no better place to learn about them than at the GRCA nature centres.

With five nature centres in Guelph, Waterloo, Cambridge, Brantford and Cayuga, the GRCA provides accessible outdoor education programs to every school board in the Grand River watershed.

More than 40,000 children visit the nature centres each year for fun, exciting and educational experiences that teach them about water, wetlands, forests and the plant and animal species that surround them. Each program is designed to match the Ontario school curriculum.

However, the nature centres are more than just outdoor classrooms. They are places where families, groups and communities can learn about the environment of the Grand River watershed.

Here's a sample of the many programs GRCA nature

centres offer:

■ **Environmental day camps:** Offered at Guelph Lake, Laurel Creek (Waterloo), and Apps' Mill (Brantford). These camps provide children between the ages of 6-16 with environmentally-focused, exciting summer fun.

■ **Community events:** Owl Prowls, Frog Frolics, Dam Tours and our Annual Maple Syrup Festival are just some of the many special events that provide entertainment for the entire family.

■ **Environmental Birthday parties:** Splash around in a stream or snuggle up with a snake for a birthday experience you're child will never forget.

■ **Scout and Guide Programs:** Our specially designed badge programs provide participants with a great learning opportunity. Ask about how a recent special donation has made these programs even more affordable!

For more information on programs and events, see the Nature Centre or Calendar sections of the GRCA website at www.grandriver.ca



Watershed winners

The winner of the 2006 GRCA Watershed Awards have shown their dedication to the environment by helping to protect rivers, rebuild forests and protect rare and endangered species.

The awards are presented annually to individuals, groups and corporations for outstanding examples of conservation and environmental work.

In 2006, a special Honour Roll Award was also given to the late Archie MacRobbie for his decades of service.



Foundation past presidents: Robert Murray (left), Marilyn Murray and John Harris.



Isabelle MacRobbie receives the Watershed Honour Roll Award on behalf of her husband, the late Archie MacRobbie, from Paul Emerson (left), chief administrative officer of the GRCA and Alan Dale, chair of the GRCA.

Watershed Honour Roll

Archie MacRobbie

The recipient of the 2006 Honour Roll Award had a long career with the GRCA and in municipal politics in Wellington County. He was a member of the GRCA board for 25 years, representing Guelph/Eramosa, Puslinch and Erin until his death in July 2006. He served as chair from 1991 to 1997 and also served several terms as vice-chair. During his tenure, the Grand



Archie MacRobbie

River system became a Canadian Heritage River. He also oversaw the restructuring of the GRCA board to ensure all members were included, informed and involved. In municipal politics, he served many years on Puslinch Township council and also sat on Wellington County Council, where he was chosen warden in 1980.

Watershed Awards

Trees for Peel

This community group has organized more than 100 stewardship projects in the former Peel Township (now part of Mapleton Township) since 2001. Working with several other groups, they've planted more than 75,000 trees, installed decorative signs and gardens at entrances to various communities and helped with plantings at a local school.

Reuter Walkers

Based in the Allan Reuter Centre for seniors, this group holds regular hikes on the trails in the Cambridge area. But they do more than hike – they collect litter and pay the cost of installing benches along the trails. They also do clean-ups at Shades' Mills and Pinehurst Lake conservation areas and donate to several environmental groups.

Barb and Tom Parker

The Parkers are the sixth generation to live at Cove Valley Farm in Milton where they grow crops and raise pigs and cattle. They've done considerable work

to protect the three streams running through their property, including fencing off creeks to keep livestock out, planting trees and building a manure storage facility and concrete feeding area.

Rotary Clubs of Cambridge

The four Rotary clubs marked the centennial of the international organization by adopting Dumfries Conservation Area in Cambridge. They paid for a large road sign and an interpretive kiosk and have held clean-up and trail maintenance days. The clubs have committed to support future projects, as well.



Conservation Foundation past-presidents

Three former presidents of the Grand River Conservation Foundation were honored for their work supporting conservation programs. Bob Murray, president from 1987-90 helped



The Reuter Walkers on a hike.

establish the conservancy forests program and chaired the planned giving committee. John Harris was president from 1990-94 and led the \$1.5 million fundraising program to build four rail-trails that are now part of the Trans Canada Trail. Marilyn Murray, president from 1997-2000, set up the foundation's endowment fund and was chair of the recent \$2.2 million Living Classroom-Campaign for Outdoor Education.

David Morris

This Brantford resident has a keen interest in preserving and enhancing the shrinking Carolinian forests of southwest-

ern Ontario. They are home to many rare and endangered species. He maintains a nursery of about 500 Carolinian trees such as pawpaw, tulip trees, red buds and northern pin oaks, for which he collects seeds which he gives away to others to plant.

Walt Crawford

Walt, who died in 2005, was an active and enthusiastic supporter of the Grand River fishery. He was a strong public advocate of the Grand River Fisheries Management Plan and helped create the world-class brown trout fishery on the Grand upstream of West Montrose.



Walt Crawford



Barb and Tom Parker



David Morris



A young participant in a Trees for Peel planting event.

Do you have a nominee?

Do you know a group, family, business or individual who should be applauded for their efforts to improve the Grand River watershed? If you know of a worthy candidate for a GRCA award, get a copy of the one-page nomination form and return it to the GRCA by June 30.

Nomination forms are available:
 Online: www.grandriver.ca
 Phone: 1-519-621-2761; E-mail: grca@grandriver.ca





The GRAND RIVER CONSERVATION FOUNDATION

Green energy: A new dimension of learning

Visitors to the GRCA's Apps' Mill Nature Centre near Brantford have noticed something new over the past few months.

A turbine atop a 30 metre tower turns in the wind while two nearby solar panels absorb light. The power they generate travels into the building through underground cables where it powers equipment in a

series of terrariums housing a variety of animals.

This new renewable energy demonstration site is one of the first things students see when they get off the bus at the centre – and then the questions begin.

Through the support of the watershed community during the past six months the Grand River Conservation Foundation

has financed two of these sites, designed to teach watershed children about the value of renewable energy for the future.

S.C. Johnson & Son Ltd., a longtime supporter of Apps' Mill Nature Centre, provided money to develop the site. Now, about 7,000 children per year who take part in curriculum-based outdoor education and environmental programs will have the opportunity to learn how solar and wind energy create electricity, making the centre less reliant on fossil fuels. The site was unveiled at the 25th anniversary celebration of the centre in October 2006.

Supported by OPG

At the GRCA's Taquanyah Nature Centre, west of Cayuga, a similar project has been developed through the generosity of Ontario Power Generation. At maximum capacity, the wind turbine will generate 1,000 watts and the solar panel about 75 watts of electricity per hour, which will be used to help power equipment at the centre. About 2,000 students from throughout the southern Grand River watershed attend this



Unveiling of the new "green energy" demonstration project at Taquanyah Nature Centre: Rob Lyng, environment manager of Ontario Power Generation (left); MPP Kevin Flynn (Oakville), Parliamentary Assistant to the Minister of Energy; Alan Dale, chair of the GRCA are joined by students and nature centre interpreter Patty French.



Peter Krause, then chair of the GRCA, and Drew Franklin, president and general manager of S.C. Johnson and Son, Limited unveil the monitoring panel for the "green" energy equipment at the 25th anniversary of Apps' Mill Nature Centre

Centre each year.

Both projects received additional support from the Community Conservation Initiatives program of the Ontario Ministry of Energy, to develop curriculum around the sites and provide interpretive signs that will educate both students and other visitors.

These projects reflect the foundation's longtime commitment to outdoor education for children.

With the foundation's support, the GRCA operates five nature centres throughout the Grand River watershed which provide curriculum-based outdoor education programs and community environmental programs to more than 50,000 children and adults each year.

About the foundation

For more than 40 years, the Grand River Conservation Foundation has improved our quality of life by enriching the natural values of the Grand River watershed and encouraging people to enjoy, and to learn from, the great outdoors.

For more information:

- phone toll-free 1-877-29-GRAND
- e-mail foundation@grandriver.ca
- click on www.grandriver.ca/foundation



Golf tournament honours Archie MacRobbie

Tuesday, June 26 marks the Foundation's second annual Golf Tournament. This year we honour the memory of Archie MacRobbie, a longtime GRCA supporter who served on the board for 25 years,



Archie MacRobbie

including seven years as chair. Many knew Archie from his many years of political involvement in Puslinch Township and Wellington County – and for his fun-loving approach to life. He also served as the warden of Wellington County, its highest position.

The tournament will take place at the Galt Country Club. Tickets are \$225, which includes dinner, lunch, prizes and a day of exceptional golf.

For more information, click on

www.grandriver.ca/foundation and follow the links.



Learn more about the Grand River Conservation Foundation at www.grandriver.ca/foundation