

GRAND

THE GRAND STRATEGY NEWSLETTER

ACTIONS

Volume 8, Number 4 - June 2003



Grand River
Conservation
Authority



The Grand:
A Canadian
Heritage River

INSIDE

Feature

West Nile virus
and wetlands 1

Look who's taking action

Conserving water
in the home garden 2

Healthy Wetlands
for the Upper Grand 3

River land donated
to the GRCA 4

Grand entrance
at Port Maitland 5

Milestones

Celebration marks
Grand's anniversary
as heritage river 6

What's Happening

Water Forum
set for Sept. 12 6

Artists take a look
at water issues 7

Now available

Grand canoe route
covered in book 8

Did you know? 8

Cover photo

*Luther Marsh, at the
north end of the Grand
River watershed is a
major wetland complex
of the watershed. Photo
by Keith Murch.*



West Nile and wetlands

Healthy wetlands keep mosquitoes at bay

By Steve Racey

There has been much discussion in the press lately about the West Nile virus, with most predicting a bad year for mosquito populations.

One recent newspaper article included a photo showing an angered woman with a wetland in the background indicating that the swamp behind her property was the source of all her mosquito problems.

I'm amazed at how much ignorance still exists when it comes to the importance of wetlands in our communities and countryside.

While the Number One reason for protecting wetlands remains that they serve as a source of clean drinking water, they also provide flood control, habitat for wildlife and recreation.

Contrary to popular belief, a healthy wetland

will also do an amazing job at keeping mosquitoes under control.

Many people may think draining the wetland in their area will help control mosquitoes. This is because mosquitoes require standing water in which to breed. If there is no standing water, there are no mosquitoes. In fact, mosquitoes have a very short life cycle, typically between four days and a month, but their eggs can remain dormant for over a year and will hatch when flooded with water. Therefore even after a wetland has been drained, unless it has been completely filled in, it will still hold enough water or take in enough water in spring to breed mosquitoes.

The answer to mosquito population control can be achieved with the balance of nature. A healthy wetland provides the habitat for many unique animals, including natural enemies of

• Continued on Page 2

mosquitoes. These predators keep the population low. Certain birds, tadpoles, frogs, toads, turtles, fish and insects live in these wetlands and feed on mosquito larvae and/or adults.

The following insects are the natural enemies of mosquitoes: Dragonflies, damselflies, water strays, backswimmers, and predacious diving beetles. These animals and insects need a healthy wetland to survive and you won't find them in the typical areas where the common northern house mosquito (*Culex* species) thrive.

Only seven of the 57 species found in southern Ontario are potential carriers of West Nile virus. The carrier, the *Culex* species, is an urban mosquito which breeds mainly in small areas of open water, cans, containers, pots, birdbaths, pool covers, rain gutters, rain barrels and discarded tires. The northern house mosquito does not breed in wetlands; therefore, spraying or draining wetlands would be ineffective in the control of West Nile virus.

Bats, while traditionally having a bad reputation arising from fear of half-truths and legends, can eat up to 500 mosquitoes an hour on a summer night.

Bats thrive on insects

A typical little brown bat consumes half its body weight in insects during a single evening! Species of bats that occur in Ontario pose no risk to humans and are an important part of a wetland ecosystem.

Restoring a wetland decreases mosquito populations in two ways: by providing proper habitat for the natural enemies of mosquitoes, and by preventing or reducing flooding (in areas that aren't normally wet and thus support mosquitoes and not their predators).

A recent U.S. mosquito control project in Essex County, Mass., restored a 600-hectare wetland and the mosquito population dropped by 90 per cent. The experts there now know that wetland restoration is synonymous with genuine mosquito control.



With drained wetlands, you can expect blooms of mosquitoes after every rain and if you are tired of donating blood, consider restoring or creating a healthy wetland. Within days, natural predators of mosquitoes will return.

Not only will you be reducing the mosquito population, you'll also be creating an excellent wildlife habitat, reducing the likelihood of flooding on adjacent ground and improving groundwater quality.

The best control of the spread of the West Nile virus is public education and taking responsibility for ourselves. Mosquitoes have been around for millions of years and draining wetlands will not make them go away.

Using pesticides, such as the larvacide Methoprene, can lead to deaths and deformities in amphibians, crustaceans and fish. This is because most insecticides are broad spectrum in their killing power. Overhead spraying is even worse, creating possible side-effects as lethal and dangerous as the symptoms of the West Nile virus.

Although pesticides sometimes produce short-term results, their long-term use often results in a pest that is resilient to the chemical with all the natural predators long since eliminated. I am constantly reminded: Humans aren't the only species on earth, we just act like it.

Steve Racey is an Elmira naturalist who does volunteer work monitoring wetlands for Environment Canada.



LOOK WHO'S TAKING ACTION

Conserving water in the home garden

By Michael Bradley
GRCA arborist

The dry summers of the past few years have made gardening a challenge. Water is a necessity to keeping a good garden. However, some gardening practices can be wasteful of water. Here are some water-wise tips for the home gardener.

- A layer of mulch applied to the surface of the soil helps reduce the rate at which the soil dries. Shredded bark, wood chips or cocoa bean shells are excellent mulches for perennial plants and shrubs. Straw or dead leaves can be used as mulch around vegetables.

- Garden layout can take advantage of available moisture. Place moisture-loving plants in areas where moisture is present, such as near downspouts or in low areas. Grouping plants that prefer moisture together allows you to water them more frequently without watering the whole garden.

- Plant selection can help to conserve water in the garden. Native prairie wildflowers such as black-eyed susan, New England aster, and tall coreopsis thrive in a hot, dry environment. Tall grasses such as big bluestem, Canada wild rye, and prairie dropseed also tolerate low moisture.

- When you have to water, water wisely. Water in the early morning when there is less chance of evaporation. Water your plants only when they need it, and water the plants deeply. Avoid using sprinklers that shoot water into the air; this is wasteful and inefficient. Use soaker hoses, drip irrigation, or apply water by hand.

Wise use of water in the home garden can help in water conservation efforts and can also result in a garden that requires less maintenance and can free up the home gardeners time for relaxing and enjoying the summer.



The Townline project during and after construction of the berm in March 2003

Healthy Wetlands for the Upper Grand

By Mike Williams
Healthy Wetlands Co-ordinator

In the summer of 2002, the Grand River Conservation Authority, Ducks Unlimited Canada (DUC) and the Dufferin/South Simcoe Land Stewardship Network joined forces to increase awareness of wetland values in the upper Grand River watershed through a new project called Healthy Wetlands for the Upper Grand (HWUG).

The upper Grand region was chosen as the focus for this project for several reasons including a relatively intact wetland base and its importance as a headwaters and source area for the watershed. There is also a history of involvement by Ducks Unlimited Canada in the area, including several wetland restoration projects near Luther Marsh.

The overall objective is to enable and assist farmers and other rural landowners to adopt sustainable wetland stewardship practices that will result in improved rural water quality and other benefits to their operations and to the local community.

This three-year project (2002-2005), will illustrate the benefits of wetlands to rural landowners by providing educa-

tional materials, workshops and utilizing a series of on-the-ground demonstration sites. All demonstration projects must have a wetland component and will highlight practices such as small wetland excavations or impoundments, buffer strips or livestock exclusion fencing/alternative watering sources. The intention is to have landowners view these demonstrations as templates and employ these practices, where suitable, on their own property.

In order to highlight wetland benefits

to others who regulate or influence land uses and activities that landowners undertake, these projects will also serve as demonstration sites for municipal representatives, drainage superintendents, local pond excavating contractors and other conservation agencies.

Since HWUG kicked off in August of 2002, a project co-ordinator has been hired to manage the project and search for innovative demonstration sites.

In March construction began on the first two demonstration sites, both of which involved small wetland restorations adjacent to municipal surface drains.

Berm built

One of these sites is located in the northern extreme of the Luther Marsh Conservation Area on an 80-hectare parcel owned and managed by the GRCA. Approximately 400 metres of berm were constructed to restore 2.9 hectares of wetland habitat that will enhance the wildlife value of the existing idle grassland and reforested uplands. The wetland basin is uneven in nature, which provides for varying depths and much habitat diversity.

The wetland has now filled and it is already attracting numerous waterfowl and shorebirds. Waterfowl surveys on this site revealed use by mallards, blue-



The portion of the Upper Grand covered by the Healthy Wetlands program

winged and green-winged teal, Canada geese, lesser yellowlegs and even a cormorant. A red-tailed hawk was also recorded perched on a tree overlooking the wetland.

In addition to providing wildlife habitat, this site will highlight the benefits of wetland restoration adjacent to surface drains. Converting idle or marginal farmland along surface drains into wetlands (where suitable) can improve downstream water quality and moderate floods by intercepting and filtering surface runoff. Additionally, wetlands trap suspended sediments in surface runoff, which could mean fewer ditch cleanouts and, therefore, tax savings for residents and municipalities.

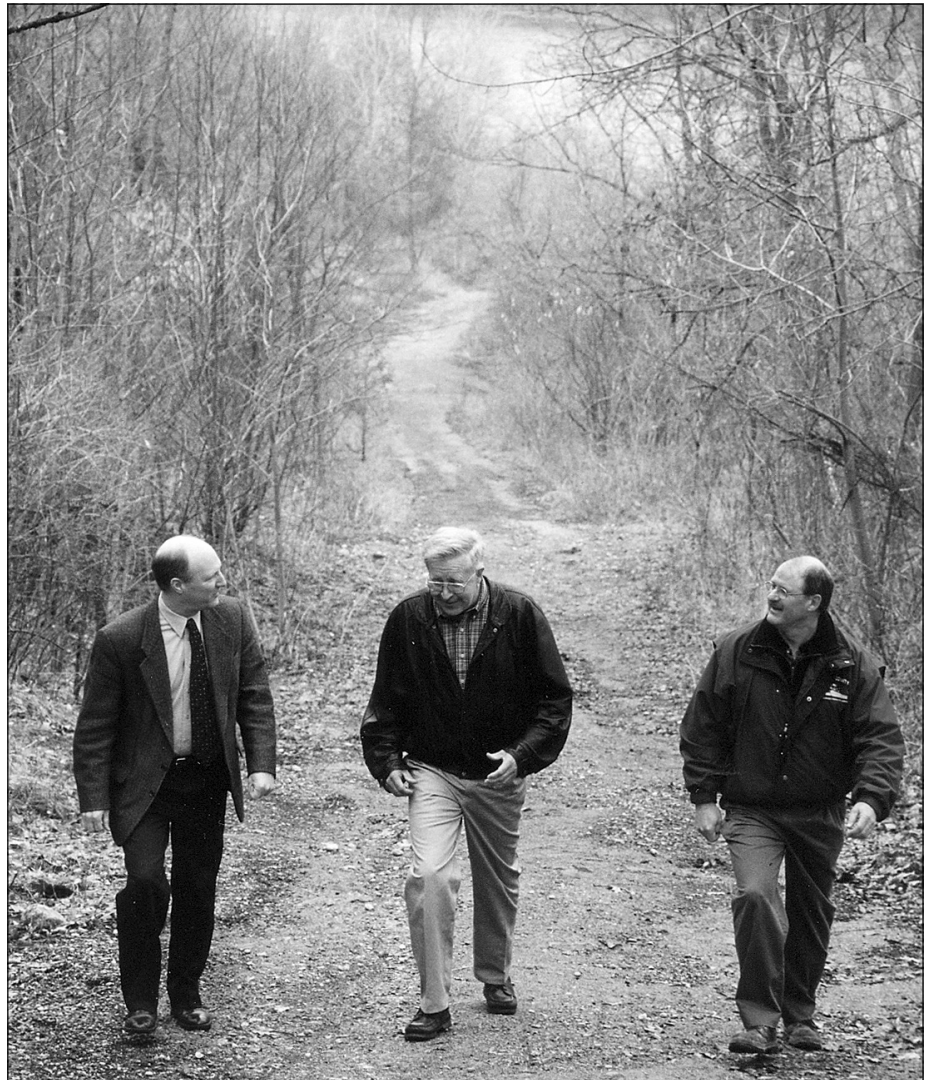
Many supporters

Many funding organizations and supporters have acknowledged the vital contribution of wetlands to the sustainability of rural communities in the upper Grand.

Financial support for this project has been pledged by several sources including a \$135,000 grant from the Ontario Trillium Foundation. More financial contributions have come from TD Friends of the Environment Foundation, Ontario Ministry of Natural Resources/Ontario Stewardship Program, Wetland Habitat Fund, Shell Environmental Fund and the Community Fisheries and Wildlife Involvement Program.

The HWUG project is also supported by the Dufferin Federation of Agriculture, the County of Dufferin and local municipalities. The GRCA is one of the three main implementation partners for HWUG, which is a testament to its commitment to conserve wetland habitat in the headwaters region of the Grand River.

For more information on HWUG or if you think you may have a suitable demonstration site in the project area, please contact Mike Williams, HWUG Project Coordinator at 519-928-2362 or by e-mail at m_williams@ducks.ca



Paul Emerson, CAO of the GRCA (left), joins Bob Albrough, president of Nelson Aggregates, and Peter McComb, sales superintendent of Oak Park Sand and Gravel, on a tour of the land donated to the GRCA.

River land donated to GRCA

A high-profile stretch of land along the Grand River near Brantford has been donated to the Grand River Conservation Authority.

The 23-hectare property, owned by Nelson Aggregate Company of Burlington, has 800 metres of frontage on the east bank of the river, north of Highway 403. It's bounded on the east side by the SC Johnson Trail and on the north by Powerline Road.

Nelson operates an aggregate quarry to the east of the donated property. The quarry will be closed in a year and that

property sold for industrial development.

The riverfront property is a great acquisition, said Paul Emerson, chief administrative officer of the GRCA.

"We feel at the GRCA it's important to put some of those sensitive lands into the public trust for the long term."

Bob Albrough, president of Nelson Aggregate said the company has been considering giving the land to the GRCA for five years. Discussions began two years ago between Emerson and his longtime friend, Peter McComb, sales superintendent of Nelson subsidiary, Oak Park Sand and Gravel.

Emerson said the property could eventually become the site of a new

river access point. There is a parking lot adjacent to the Johnson trail, and a laneway down the slope of the property to the river.

The property is also within the "Exceptional Waters" reach of the Grand River, which stretches from Paris to Brantford. It was chosen for the provincial program because of its outstanding combination of natural features including its geology, topography, aesthetics and its high quality as a natural habitat. As part of the program, considerable study has been done on topics such as fish habitat, recreational use of the river and trails, access and other issues related to natural heritage and public use.

Grand entrance at Port Maitland

The entrance to the Grand River has been given a facelift with a \$5 million upgrade to the Port Maitland piers and lighthouse.

Crumbling concrete on the deck of the west pier has now been replaced with smooth concrete leading to the steps up to the Port Maitland Range Light. Work has also been done on the east pier.

The project was undertaken by the federal government. Upon completion the pier is being taken over by the County of Haldimand, which hopes the refurbished pier will enhance the tourism business in the area.

Haldimand Mayor Lorraine Bergstrand says the repairs will add greatly to the overall aesthetics and viability of the Port Maitland facilities and will make them a real asset to the residents of Port Maitland, Dunnville and the rest of Haldimand County.

Erie-Lincoln MP John Maloney said "The County of Haldimand has clearly demonstrated an interest in managing and developing the area's waterfront assets for the benefit of the community."

"With the assistance of the federal government, the redevelopment of the waterfront will provide a destination



The west pier in Port Maitland, at the mouth of the Grand River, has been rebuilt and the lighthouse refurbished as part of a \$5 million project of the federal government.

having appeal to foreign, regional and local residents alike," said Maloney.

When the work was announced in 2002, Maloney said the project became possible through the co-operation and partnership of Haldimand County, the GRCA and the Six Nations of the Grand River working in concert with the federal government.

Port Maitland harbour comprises 24.2 hectares of property consisting of two river entrance piers and marginal wharves at the mouth of the Grand River.

The west pier has been reinforced and armour stone placed along the inner portion. A new concrete deck has been

placed along the entire length of the west pier. On the east pier, a portion was demolished and the remaining portions were reconstructed into an armor stone breakwater.

Repairs to the 1898 lighthouse involved the replacement of the exterior metal siding, cleaning and painting of the building's interior and exterior. Improvements were made to the automation building located on the west side of the parking lot, including replacement of the roof, rehabilitation of the electrical service, removal of contaminated soil from the building basement and cleaning and paint of the interior and exterior.



MILESTONES

Milestones are progress or products of *The Grand Strategy* Joint Work Plan.

Celebration marks Grand's anniversary as heritage river

The Grand River provides the common thread that links natural and cultural features and landscapes throughout the watershed. Settlers were attracted to the Grand River valley because the river offered transportation, power and water supply. This rich history is evidenced by the many heritage features/values that remain intact today.

In 1987, the Grand River Conservation Authority spearheaded a participatory process within the Grand River watershed to have the Grand River and its major tributaries declared a Canadian Heritage River. The Grand River and its major tributaries achieved this coveted status in 1994 on the basis of outstanding human heritage features and values and the diversity and excellence of recreation opportunities in a natural setting.

Since 1994, there has been an ever-growing awareness of the river's worth. Residents explore and enjoy its many natural and cultural resources in growing numbers, and the general level of concern for the way the river is treated has increased. This has resulted in many individual, collaborative, and community-based efforts to improve watershed health, increase heritage awareness and conservation and celebrate the river.

The number of submissions received each year for the Grand Actions Registry evidences this ground swell of interest and activity. Everything from performing and visual arts, events, educational seminars, and planning policies, to hands-on environmental and heritage protection and restoration work is included. A wide range of individuals,

community groups, agencies, municipalities, schools, businesses, First Nations, and others participate.

The year 2004 marks the 10th anniversary of the Grand River as a Canadian Heritage River. It's time to celebrate! To mark this occasion, the Grand River Conservation Authority is hosting a community celebration on June 7, 2004 in conjunction with the 4th Canadian River Heritage Conference to be held at the University of Guelph, Guelph, Ontario. This event will take place at Guelph Lake Conservation Area. Be sure to mark your calendars and plan to attend! More information regarding the event will be forthcoming as plans come together.

There are all kinds of ways for you to celebrate as well. Commemorate this milestone in your events and activities throughout 2004, plan some special events, or give us your ideas. Remember to let us know about your event or activity well in advance so that we can highlight it in the Grand Actions newsletter.

For more information, contact:
Barbara J. Veale, Coordinator of Policy Planning and Partnerships, Grand River Conservation Authority, 400 Clyde Road, PO Box 729, Cambridge, Ontario N2R 5W6, Phone: (519) 621-2763, Fax: (519) 621-4945, Email: bveale@grand-river.ca

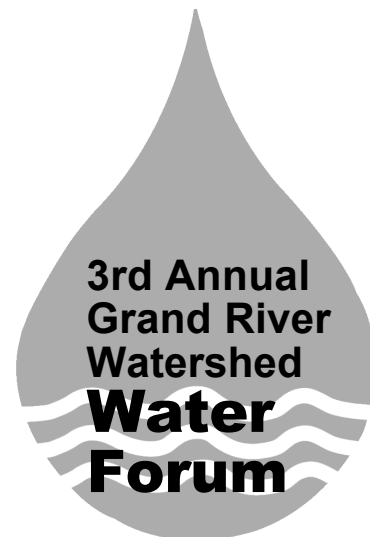


WHAT'S HAPPENING?

Water Forum set for Sept. 12

In its first two years, the Grand River Watershed Water Forum has become an important gathering of experts on water issues, trends and initiatives.

The third annual Water Forum is scheduled for Friday, Sept. 12 from 8 a.m. to 4 p.m. It will be held on the grounds of the GRCA at 400 Clyde Road, Cambridge.



This year, the theme of the forum is "Building Blocks, Breakthroughs and Opportunities."

The program will provide government leaders, businesses, farmers and others with the information they need to protect and improve our vital water resources. Speakers representing government agencies, environmental organizations, industry and farm groups will discuss innovative technologies, the latest information in watershed management and the impact of new government legislation and regulations.

A new part of the program this year will be the presentation of a report on the State of the Grand River Watershed by GRCA Chief Administrative Officer Paul Emerson.

Keynote speakers at the 3rd Annual Water Forum are:

Global Water Perspectives: William Cosgrove, Vice-President, World Water Council. Mr. Cosgrove operates a consulting firm, Ecoconsult Inc. of Montreal, providing advice on strategic planning, institution building and sustainable development in the water and power sectors. Previously, he worked with the World Bank as a water resources specialist in North Africa and the Middle East then also *Cosgrove*



as a vice-president.

He joined the World Water Council in 1998 as Director of the Water Vision Unit. The World Water Council is an International Water Policy Think Tank dedicated to strengthening the world water movement for improved management of the world's water resources.

Water and Watersheds: Stephen Born, Professor of Urban and Regional Planning, University of Wisconsin-Madison Dr. Born has been associated with the University of Wisconsin since 1969. From 1974 to 1977 he served as director of the State Planning Agency and later as Wisconsin State Energy Director. He has also worked in natural resources and government policy planning in Thailand, Tunisia, Mexico, New Zealand and Australia.



Dr. Born is currently vice-chairman of the board of trustees and chair of the National Resource Board for Trout Unlimited. He is a leading researcher and expert on innovative approaches to watershed management.

Gordon Miller, Environmental Commissioner for Ontario. Mr. Miller is responsible to the Ontario Legislature for monitoring government compliance with the Environmental Bill of Rights so the integrity of Ontario's ecosystems are conserved for future generations. He worked for Ontario's Ministry of the Environment and Energy for 14 years, as a scientist, pollution abatement officer, Manager of Training and Development, and District Manager of ministry environmental programs delivered to a large area of northeastern Ontario.



Miller
For more information on the forum, registration and sponsorships visit the GRCA web site at www.grandriver.ca.



Waning Summer Day by Homer Watson is one of the water-themed artworks on display at the Homer Watson Gallery.

Artists take a look at water issues

Artists across the province are putting their concern for water quality issues on display in a series of exhibitions taking place at 67 galleries in Ontario.

They're taking part in an effort called The Water Project, organized by the Ontario Society of Artists.

Among the galleries participating is the Homer Watson House and Gallery, 1754 Old Mill Road in Kitchener. It is showcasing the work of five artists, including Homer Watson, Canada's first noted landscape artist (1855-1936). His early Victorian house was the home of the Doon School of Fine Arts during the 1950s and 1960s and is a national historic site.

"The concept for The Water Project first evolved more than two years ago when a group of OSA artists became concerned about the quality and safety of our drinking water in the aftermath of the Walkerton crisis," said Janice Mason

Steeves, president of the OSA. "The aim of this project is to provide a forum for artists to celebrate water and to bring public attention to water quality issues."

The Watson exhibition features landscapes with water flowing through them.

In addition, the exhibit will feature works by Bill Downey, who is known in the area for the paintings he created to raise awareness of the Walter Bean Grand River Trail.

Potter Simon Taylor and sculptor Marg Mallory-Smith, the gallery's two artists-in-residence, also have works in the show. Taylor's work will include pieces created through his sampling of different clays located near the Watson homestead, while Smyth's work includes beautifully crafted papier-mache sculpted forms.

Don Routly will also be featured with several of his watercolour pieces that reflect places in society where people feel tranquil and calm, generally places that have water.

The exhibition runs until Aug. 10. The gallery hours are Tuesday to Sunday, noon to 4:30 p.m.



NOW AVAILABLE

Grand canoe route covered in new book

A new book on great Canadian canoe routes includes chapters on the Grand River and its comeback as one of the best canoeing rivers in the country.

The book, *More of Canada's Best Canoe Routes*, was edited by Alister Thomas and his a follow-up to *Canada's Best Canoe Routes*, published in 2000 by the Calgary-based author who grew up in the Kitchener-Waterloo area.

In the new book, a chapter by Thomas describes the significant improvement in the health of the Grand River during recent decades.

Another chapter provides a description of canoeing the Grand from Shand Dam, near Fergus, to its mouth on Lake Erie at Port Maitland.

The chapter was written by Eric Thomlinson, a founder of the Ancient Mariners canoe club of Cambridge, who is described in the book as "The Grand's unofficial protector and advocate."

The book was published by Boston Mills Press of Erin, Ont. and is available in local bookstores.



DID YOU KNOW?

- Lightning usually appears before the rain, in a thunderstorm setting, so do not wait for rain before suspending activities when thunder and lightning are visible.

- In March 1861, a mass of ice, timber and flood trash (including a scow) swept over the upper Caledonia dam striking two sawmills, and piling up as high as the roof of McKinnon's mill.

The building was moved four or five feet and filled with ice.

- Dr. John Scott was the first settled physician in Berlin. He took up residence in 1835, after working through the cholera epidemic in Galt. He became the first Reeve of Berlin, and the first Warden of Waterloo County, although he died in 1857 at the early age of 42.

- Basswood trees traditionally provided fibres for string and ropes for the indigenous people of this area. Wounds were sometimes sutured with threads from the inner bark of basswood or a fibre from the long tendon of a deer's leg.

About this newsletter

This newsletter is produced as a communications tool by the Grand River Conservation Authority on behalf of the partners in The Grand Strategy. This newsletter can be seen on the Internet at www.grandriver.ca

For information on

The Grand Strategy contact:

Barbara Veale,
GRCA, 400 Clyde Road,
Box 729, Cambridge, On. N1R 5W6
Phone (519) 621-2763 Ext. 274
Fax: (519) 621-4844
E-mail: bveale@grandriver.ca
Web site: www.grandriver.ca

For newsletter submissions contact

Dave Schultz, GRCA
Phone: (519) 621-2761, Ext. 273
Fax: (519) 621-4844
E-mail: dschultz@grandriver.ca

Newsletter submissions must be made by the 15th of the month prior to publication and may be subject to editing for length or style. Tax deductible donations and sponsorships toward the cost of producing this newsletter are always welcome.

Publications Mail

Agreement #144871



The Grand Strategy Calendar

The Water Project - Until August 10. A collection of art works with the central theme of water. Works by Homer Watson, Bill Downey, Simon Taylor, Don Routly and Marg Mallory-Smyth. The Homer Watson House and Gallery, 1754 Old Mill Road, Kitchener. (519) 748-4377. www.homerwatson.on.ca
Hours: Tuesday through Sunday, noon to 4:30 p.m.

150th Anniversary Celebration of the Waterloo Historical Society, July 5. Join the Waterloo Historical Society and Doon Heritage Crossroads as they feature the region's history and growth over the past 150 years. Informal talks and discussions on the origins of our towns and villages; how the big industries evolved; and the development of our region. Doon Heritage Crossroads, 10 Huron Road at Homer Watson Boulevard, Kitchener. (519) 748-1914. www.region.waterloo.on.ca

Cayuga Fest, July 18-19 Downtown Cayuga. Parade, children games, crafts, entertainment, dancing, baby contest, antique vehicles, food vendors, artisans, pet show, beer garden, yard sales, bingo, fish fry, youth demos, more. Majority of events free. (905) 772-3583

Water Wise at Doon Heritage Crossroads, July 27. A variety of hands-on activities, demonstrations, displays and exhibits will challenge visitors to consider the importance of water to ourselves as individuals and to society at large, both past and present. Take home some useful tips and water saving devices. Doon Heritage Crossroads, 10 Huron Road at Homer Watson Boulevard, Kitchener. (519) 748-1914. www.region.waterloo.on.ca