

GRAND ACTIONS

THE GRAND STRATEGY NEWSLETTER

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Grand River
Conservation
Authority



The Grand:
A Canadian
Heritage River

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Cover Photo

This aerial photo was taken between Cayuga and Caledonia. It clearly shows a wooded riparian (riverside) zone in the foreground and some small farm woodlots in the distance. This type of landscape is typical of the southern part of the Grand River watershed.



OUR GRAND RIVER FOREST HERITAGE

by Virgil Martin, Regional Municipality of Waterloo

What would it have been like to walk through the forest of the Grand River Valley 200 years ago? Would it have looked much different from any forest we can find today? How big were the trees? Was it an endless, unbroken sea of trees? What wildlife might we have encountered? What impact, if any, had humans made on the forest to this time?

Such questions often colour my thoughts as I stroll through a woodland remnant. By a remnant, I mean a patch of pre-settlement forest that survived the massive transformation of the landscape—from forest to farmland and urban areas—that swept southern Ontario. I believe such remnants are different and distinct from other kinds of woodland in the Grand River Valley today. Although every acre in the Valley was more-or-less cut over at some time in the past two centuries, and there have been many changes to the ecosystem, what remains is of considerable cultural, scientific and economic importance.

Remnants of the pre-settlement forest are

still commonplace throughout the Grand River watershed. As the settlers of the nineteenth century chopped their way across their holdings, some “bush” was retained, usually at the rear of the farm, where it combined with the neighbours’ woodlots. The need for fuel and the annual run of maple syrup moderated the penchant for clearing land. These forest remnants, arbitrarily relegated to mid-concession, impart a characteristic pattern on the landscape.

It is not always easy to distinguish between a true remnant and a woodland that has re-established on former agricultural land. After something less than a century, a secondary forest begins to look something like a remnant. But a discerning eye will detect many differences. In regrowth situations, the biggest trees are likely to be poplar, basswood, elm, pine or willow. Hawthorn, apple and buckthorn may still survive in the understorey. Maple and ash have attained only moderate diameters, except perhaps along an old fence-row. Many typical woodland

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FOREST

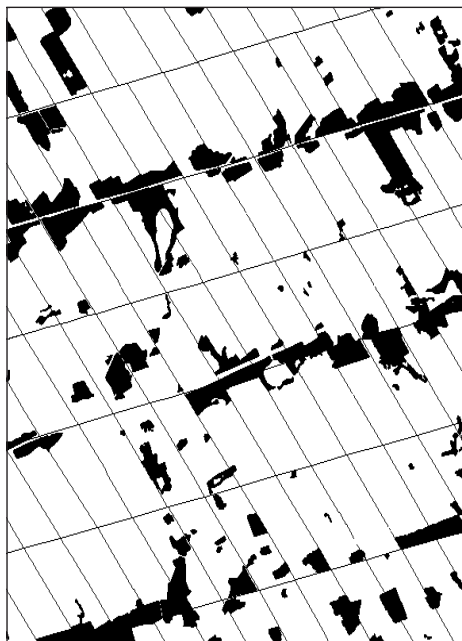
from page one

species such as beech, yellow birch, hemlock, and American yew have probably not yet arrived. Weeds such as garlic mustard, Tartarian honeysuckle and other mostly non-native species are evident, while ferns and woodland wildflowers are generally absent. There are few stumps of any size; none that are large. The forest floor has a barren, unnaturally-even look, and it lacks a humus layer except for twigs and small branches.

Contrast this with a true remnant. Here the largest trees are likely to be shade-tolerant maple and beech, interspersed with a good variety of other species. There are shrubs such as viburnum, leatherwood and, in the south, flowering dogwood and spicebush. The typical assemblage of ferns and woodland wildflowers are here—trillium, hepatica, trout-lily, jack-in-the-pulpit, Solomon's seal, violet and many more. Stumps, snags and rotting logs provide habitat for an amazing diversity of mosses, fungi, insects, snakes, toads, frogs, salamanders, mice and shrews. The hummocks and hollows, which developed when large trees were uprooted by the wind, provide varied conditions essential for many plants and animals.

It is in the soil itself where the greatest contrasts occur. An incredibly rich micro fauna and flora is associated with ancient forest soils. In our area, leaf litter decays slowly, aided primarily by the work of fungi. But agriculture has introduced earthworms, none of which are native to southern Ontario, and they are much more efficient at removing the leaf litter. Their actions may account for the barren soil of the secondary forest, a condition, which inhibits germination of many native plants and deters ground-nesting and foraging birds (such as the once common ovenbird) and small mammals.

Although an old-growth stand is



The patchwork of woodland in Wilmot Township reflects the survey of lots and concessions. Many of these patches are remnants of the presettlement forest. The map was generated from the Region of Waterloo's Geographical Information System, which is used to inventory and monitor changes in woodland cover across the Region.

almost certainly a remnant of the pre-settlement forest, not all remnants are necessarily old-growth. In fact, most are not. The term properly applies to the collective age and structure of trees; but I am more interested in the ecological integrity of the whole forest—in everything from canopy to subsoil and the countless generations of plants and animals that have made it what it is today. From a heritage perspective, what matters most is how representative a remnant is of the pre-settlement forest from which it was carved. Although I prefer to see old-growth remnants, given patience and appropriate management, I know they can be returned to this state.

Not so renewable are the original forest soils, and the plants and animals dependent on them. The damage caused by total clearing and plowing is long lasting and not quickly erased. From England, we learn of a woodland that

even after 800 years under forest cover shows unmistakable signs of having once been farmed. Plow furrows can still be traced, and certain farm weeds are still there, whereas some species associated with nearby "primary" woodlands are not.

In other words, it is not reasonable to expect that we can "create" ecologically equivalent remnants in any reasonable time frame. That is not to say that restoration efforts are not worthwhile, rather that we should not expect to match what took nature thousands of years to accomplish.

Even if we know nothing about the history of a site, a good indicator of its status as a remnant is the balance between native and non-native species. A remnant can be expected to have a high percentage of native species. Another approach is to consider what portion of the area's original flora and fauna is still here today. We must keep in mind that many animals at the top of the food chain have been extirpated—bear, wolf, cougar, lynx, fisher, marten, barred owl and red-shouldered hawk. Other once abundant inhabitants, such as the passenger pigeon, wild turkey, sweet chestnut and American elm, are gone or greatly diminished. Combined with the tremendous loss of area and the effects of fragmentation, we should expect that compensating changes in the ecology of the forest are still very much underway.

At a modest scale, change is natural to the forest ecosystem. Wind, ice storms, disease, insects, drought, flooding, fire, or old age take their toll on forest trees, leaving openings in the woods. Increased sunlight and reduced competition contribute greatly to diversity in the forest, as many plants and animals depend on the temporary conditions available only here. Such openings are essential to the maintenance of the forest, as they allow a new generation of saplings to establish, and eventually recruited to the canopy.

There is much more we can and should learn about ecology and forest management from these remnants. But we are steadily losing this heritage to development in both urban and rural areas. Many remnants are being degraded through poor management practices like garbage dumping, drainage, grazing, inappropriate cutting or heavy public use. And we have not yet even done a comprehensive inventory of them!

As the song says: "You don't know what you've got 'til it's gone." In Europe, because remnants are so scarce and because the connection to the pre-settlement forest is so remote, a considerable respect is accorded to such sites. We, too, must learn to think of them, and treat them, as part of our heritage, in the same way we have begun to recognize buildings, historic sites, artifacts, etc., as priceless and irreplaceable.

Virgil Martin is the Planning Information Specialist with the Planning and Culture Department, Regional Municipality of Waterloo. He has a passion for natural history, especially birds, ferns and mosses, and has written two books about the history and landscapes of the area.



MILESTONES

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

Are We Making Headway?

The designation of the Grand and its tributaries as a Canadian Heritage River was celebrated in 1994 with much fanfare. Watershed residents in all walks of life were called upon to undertake actions to improve the health and heritage of the watershed. What has happened? Are we making a difference?

Over the past five years, the Grand River Conservation Authority has been working with watershed municipalities, agencies, community groups, educational institutions and First Nations to identify watershed issues and priorities for action. To ensure that we can continue to enjoy good watershed health, it was determined that several key issues must be addressed. These include improving water quality, ensuring adequate water supply, protecting the natural environment, conserving heritage resources and promoting sustainable outdoor recreation, cultural and eco-tourism. *The Grand Strategy* was initiated as a network of partners to undertake actions to meet these issues head-on. Under the umbrella of *The Grand Strategy*, several priority actions were identified. Partners committed to:

- Expanding the Rural Water Quality Program.
- Pursuing excellence in wastewater treatment.
- Slowing increases in water use and advocating the wise use of water.
- Protecting ground water resources.
- Developing long term water quality and water budget/water supply plans.

- Maintaining the water control system.
- Implementing a Fisheries Management Plan.
- Developing community-based plans that advance forest, wildlife and natural heritage management.
- Developing community riverfront plans.
- Developing the watershed's potential for outdoor recreation, cultural and eco-tourism.
- Building a sense of community around the river and celebrating successes.

How have we done so far? Judge for yourself. Outlined below is a summary of some of the projects that have been initiated to tackle the key issues. These actions represent only a portion of the energy, enthusiasm and support for *The Grand Strategy* that has been demonstrated over the past five years.

Water Quality

The Rural Water Quality Program sponsored by Waterloo Region and many other partners resulted in

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The newly-upgraded wastewater treatment plant at Cambridge (Preston), close to the banks of the Grand River, is part of municipal efforts to improve water quality.

MAKING HEADWAY

from page three

60 projects being completed on 35 farms in Waterloo Region to help landowners take a lead role in reducing pollution from rural areas. In 1999, the program was expanded to Wellington County by the County and the City of Guelph. More than 40 site visits have already been completed. The ultimate goal is to expand the Rural Water Quality Program throughout the watershed and to increase participation in the program.

Municipalities are upgrading **Wastewater Treatment Plants** which improves water quality downstream. Plants in New Hamburg on the Nith River and in Cambridge (Preston) on the Grand River have been upgraded. In 2000, construction will begin on the Elmira plant upgrade on Canagagigue Creek. Investigations are under way for other plants nearing capacity.

Incorporated into the Rural Water Quality Program in Waterloo Region and Wellington County are **Groundwater Protection** activities.

In 2000, Centre Wellington, Erin, Mapleton, Oxford County, Perth County, Melancthon, Dundalk, and others will develop groundwater management strategies (protection, monitoring) with assistance from the Ministry of Environment's Groundwater Protection Fund.

Long-term Plans for water quality and water supply are in progress. Information and computer models needed to plan for long-term, sustainable water management have been designed and tested. Consolidated information on climate, geology, soils, topography, land cover, land use, river flow, river water quality, water well records, groundwater aquifers, permits to take water, and water use is avail-

able. We can now answer some basic questions – questions like “If we buffer streams with trees and other natural vegetation, will this reduce our flooding problems?” “Are there parts of the watershed where we use more groundwater than rain replenishes each year?”

In this rapidly changing watershed, there are more water users, and more wastewater to handle every year. Action must be taken to keep our river system healthy in the face of these changes. With the tools now at hand, the Water Managers Working Group will formulate a long-term sustainable water management plan in 2000.

Water Supply

To reduce our large per capita consumption of water, Waterloo Region and the City of Guelph are sharing their experiences in implementing **Water Efficiency Programs** with water manag-

ers from other watershed municipalities. The Water Managers Working Group is developing a drought contingency plan with major water users in the watershed, to deal with the current drought on the river system if it continues into the year 2000.

The **Water Control System** was improved. In addition to reconstructing a

weakened floodwall in downtown Cambridge, the GRCA installed new gates at Conestogo and Guelph dams. Other essential maintenance and testing on water control structures, including flood monitoring equipment and the flood warning system was carried out. In 2000, with more cuts expected in provincial grants for maintenance of the water control system, it is increasingly urgent to establish new funding arrangements.

Natural Heritage

The **Fisheries Management Plan** was completed and is now being implemented. Several community-based projects to improve fisheries habitat took

place in Devil's Creek, Thompson Creek, Kenny Creek and Gilbert Creek. An action plan to improve fish habitat in the Grand River from Inverhaugh to West Montrose was completed. In 2000, when corporate funding is obtained, the Caledonia Fishway will be reconstructed.

With public participation, a management plan will be prepared for the Grand River Tailwater (Brown Trout) fishery. Many other actions planned for 2000 will ensure continued implementation of the Fisheries Management Plan.

The **GRCA Forest Management Plan** was completed and approved for properties owned by the Grand River Conservation Authority. In 2000, this will be expanded with a **Watershed Forest Plan** being developed with community participation. This will lay the foundation for good management of all public and private watershed forests, and set a framework for people to take action on their own lands.

Human Heritage, Outdoor Recreation and Eco-tourism

Community Riverfront Plans are being designed and implemented. Major progress was made in Guelph with the completion and implementation of the Guelph River Systems Management Study, including the Alf Hales Memorial Trail near the River Run Centre. The Cambridge River Integration Study is in progress and focusing on making the river an integral part of that community.

The Walter Bean Grand River Community Trail Corporation began building the trail system linking North Dumfries, Cambridge, Kitchener, Waterloo and Woolwich, as recommended by the Waterloo Corridor Conservation Plan. Sections of the Trans Canada Trail have been registered in the Grand River watershed.

In 2000, the Ramsey Trail will be established in Caledonia. Additional

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parts of the Trans Canada Trail will be registered in the watershed with the goal of having the Grand River portion of the trail fully linked and developed within a few years.

The Heritage Day Workshop in February 2000 will focus on “*River Towns: Building on a Grand Heritage*,” and highlight opportunities to develop and promote the river as the living, vibrant heart of our communities.

The **Grand River Scenic Parkway** was designated and attractively signed. The parkway follows existing routes along the southern section of the Grand in Haldimand-Norfolk and Six Nations lands. **Grand River Country** is being promoted as a tourism destination. Grand River Country signs are planned for Highways 401 and 403 and opportunities will be explored to extend the Grand River Scenic Parkway further north.

Community Pride and Spirit

The Grand River is the focus of many events and celebrations including Riverfests in Cambridge and Brantford, Canada Day Celebrations in Caledonia, and the Mudcat Festival in Dunnville. In 2000, let's have fun and enjoy the watershed and the river with our families and friends.

The **5th Anniversary of the Grand as a Canadian Heritage River** was celebrated at the River Run Centre overlooking the Speed River in Guelph. During this ceremony the Grand and the Fraser Rivers were twinned. Linking of two Canadian Heritage Rivers established a sense of pride and community in both watersheds' achievements. The twinning will promote the exchange of river management expertise between two Canadian Heritage Rivers.

There is now clearly a greater awareness of the river's worth. Residents explore and enjoy its many natural and cultural resources in



Amethyst Award winners and members of the Grand River Fisheries Management Plan Implementation Committee celebrate their success.

growing numbers, and the general level of concern for the way the river is treated has increased. This has resulted in many community-based and collaborative efforts.

The **Grand Actions Registry** annually recognizes and celebrates the efforts of many to make the Grand River valley “an ever better place in which to live, work and play”. The 1999 Registry featured over 1,000 activities. The **Grand Actions Newsletter** reaches over 5,000 readers with information about important watershed issues and who is taking action.

The **Grand River Foundation** invited people to “Take a Stand for the Grand” by becoming a **Grand Champion** and made a commitment to establish a **Clean Water Action Fund** to finance priority actions around water quality.

Can We Do Better?

Certainly – with your continued enthusiastic support and involvement. As we embark on a new millennium, share your efforts to improve the watershed and take pride in your achievements. Help others to do the same. Together we can continue to make this a healthier watershed for ourselves and our children.

Amethyst Awards

The Grand River Fisheries Management Plan was made possible by the hard work and dedication of members of the Grand River Fisheries Management Plan Implementation Committee. This band of partners takes special pride when any one of them is recognized publicly for the excellent work that was accomplished by the partnership.

Each year, with the Amethyst Awards, the Province of Ontario recognizes outstanding achievements by Ontario public servants. The 1999 recipients included 13 Ministry of Natural Resources staff who worked, with members of 12 other partner organizations, to bring the dream of the Grand River Fisheries Management Plan to fruition.

On December 15, 1999, Felix Barbetti, Drew Cherry, Daryl Coulson, Doug Dodge, Joad Durst, Brad Gerrie, Larry Halyk, Jack Imhof, Bill Murch, Craig Selby, Norm Smith, Art Timmerman and Anne Yagi received the award for “...fulfilling the hopes of numerous groups that share interests

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AMETHYST

from page five

in the Grand River ecosystem..."

The prestigious gathering at Queen's Park included the Ontario premier, Mike Harris, and a "cheering section" of other members of the Grand River Fisheries Management Plan Implementation Committee.

It is encouraging when hard work and the dedication of many, many hours of personal time are appreciated. Other members of the partnership have also been recognized publicly.

In 1998, Felix Barbetti and Warren Yerex of the GRCA were co-winners of the The Record's Bruce Buckland Award for co-chairing the committee that created the Grand River Fisheries Management Plan.

Congratulations to the 13 Amethyst winners and to all the partners who worked so hard to produce the Grand River Fisheries Management Plan.



WHAT'S HAPPENING?

Mackenzie King's Canada

In December, the Kitchener-Waterloo community celebrated the 125th anniversary of the birth of William Lyon Mackenzie King, Canada's 10th and longest serving prime minister. Mackenzie King was born in Berlin (Kitchener) on December 17, 1874.

The first event was a citizenship court on December 16th to welcome new Canadians. It was held in the newly-named Mackenzie King Room at the Citizenship Office in Kitchener. Ken McLaughlin, professor of history at the University of Waterloo, spoke about Mackenzie King and his links with Kitchener as well as his government policies, which included the introduction of the Canadian Citizenship Act in 1947.



William Lyon Mackenzie King as a young man of 15 years.

That evening, Woodside National Historic Site, the boyhood home of Mackenzie King, hosted a special event. Visitors viewed the house by lamplight and learned about Victorian Christmas traditions.

On December 17 and 18, over 90 people attended a conference held to highlight the legacy of William Lyon Mackenzie King. The conference was sponsored by the History Department of the University of Waterloo, the K-W Multicultural Centre and Woodside National Historic Site. Professors, historians and students discussed the life and times of MacKenzie King, his government's policies and his influence in the development of Canada.

At Kitchener City Hall on December 17th, a portrait of Mackenzie King was unveiled in Kitchener City Hall. The portrait, painted in 1925, was recently restored by the City of Kitchener. The event, and a special dinner, was attended by Mackenzie King's niece, great nephew and great-great nephew.

On December 18th, the Waterloo Historical Society hosted a walking tour

of "Mackenzie King's Berlin." This tour will become one of the community walking tours that are offered to the public.

This community celebration presented an excellent opportunity to forge new partnerships between the University of Waterloo, the K-W Multicultural Centre, Woodside National Historic Site and the local heritage community. The groups plan to work together on more projects in the future. For more information contact Kim Seward-Hannam at Woodside National Historic Site at (519) 571-5684.

January Correction

The photo of Car 797 in the January newsletter was taken at the Paris station in the 1950s by George Krambles. The article should also have made clear that the Halton County Radial Museum is about 2 km south of Rockwood.

Environmental Sustainability Awards

Nominations are requested for the 2nd Annual Environmental Sustainability Awards for the Region of Waterloo. Categories for the awards include agriculture, business, community, education, and natural heritage. Nominations are restricted to projects based within the Region of Waterloo or people who live and/or work within the Region.

The awards will be presented on June 8, 2000. Nomination forms must be submitted by March 27, 2000, to the Environmental Awards Selection Committee, c/o Chris Carsjens, The Chamber of Commerce of Kitchener and Waterloo, 80 Queen Street North, P. O. Box 2367, Kitchener, ON N2H 2367.

For more information or to request a nomination form, contact Chris Carsjens at (519) 576-5000.



LOOK WHO'S TAKING ACTION

City of Kitchener

A new park in Kitchener will be a boon both for humans and fish. An abandoned gravel pit, on the northwest side of the Victoria Street bridge over the Grand River, is being developed as an aquatic habitat and recreation area. The park is being created by the City of Kitchener Parks and Recreation Department and many other partners.

Ponds that connect to the Grand River will eventually be used as resting and spawning areas by large fish. Fish and wildlife shelter is provided by stumps, boulders and plants placed in the ponds and by native tree and shrub plantings on the banks. A large parking area is available and there is a canoe access trail to the river. The area can also be reached by public transit.

A hiking and cycling trail, with wheelchair accessibility, is being developed and will become part of the new Walter Bean Trail. Even the short trail sections now completed are already popular, especially with seniors. Public swimming is prohibited (and dangerous) because of the fish structures in the ponds and the harmful impact of humans on the fish habitat.

The park is made possible by the generous donations of time and money from many community groups. Stanley Park Optimist Club donated \$35,000 and labour to the project. Other partners and volunteers include Mark Peterson and Associates, Grand River Collegiate Institute, Anchor House, K-W Field Naturalists, Hope Harbour, Ministry of Natural Resources, GRCA, Biotactic and the Rotary Club.

Monitoring of the aquatic resources is being carried out by Dr. Chris Bunt and students of the University of Waterloo. Minnows are appearing in

the new ponds; leopard and green frogs have already become established and a pair of great blue herons regularly feed and rest there. It is hoped that eventually, the established natural area will become a valuable outdoor classroom for local schools.



DID YOU KNOW?

- After glaciation, there were no native earthworms in the Grand River watershed. Our present earthworms are descendants of worms introduced accidentally or by design from Europe and other areas.
- Earthworms and their eggs can travel accidentally in the root balls of transplanted trees and shrubs, on farm implements, and even on muddy footwear.
- Earthworms breathe through the moist skin over their entire body and have 5 pairs of muscular hearts.
- Augustus Jones (1763-1836), a resident of Brant County, was one of Ontario's best known pioneer land surveyors. A good friend of Joseph Brant and trusted associate of Lieu-
- tenant Governor, John Graves Simcoe, he prepared the way for early settlement in the Grand River watershed.
- Most original surveys of land within the Grand River watershed were laid out in a rectangular grid pattern with no consideration for natural features of the land. An exception was the German Company Tracts of Waterloo and Woolwich townships. Here the surveyor laid out each lot to provide access to a stream.
- According to Samuel Strickland and other sources, in 1853 a good axeman could cut an acre of forest in eight days for a wage of five dollars an acre with board. At that time a household could burn two trees daily for winter warmth and cooking.
- The Globe and Mail, November 20, 1925, gives an account of a Puslinch Station raccoon weighing from 80 to 90 pounds. This "whale of a coon" was shot by Thomas McConnell, and provided a pelt weighing 15 pounds.
- A century-old plantation at Guelph's Ontario Agricultural College is still markedly different

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Bickle Pond is adjacent to Kitchener's new Victoria Street park and is part of the City's efforts to restore and improve the fisheries habitat of the Grand River.

DID YOU KNOW?

from page seven

- and less diverse than a “natural” forest.
- E. J. Zavitz, the “father of reforestation” started his career at the Ontario Agricultural College in Guelph in the early 1900s. Remnants of some of Zavitz’s first plantings are still visible on the arboretum grounds at the University of Guelph. Zavitz went on to

start the St. Williams Forest Station, and to reforest eroding “blowsands” areas throughout Ontario.

- Mapleton Township is the only place in the Grand River watershed where mature (planted) honeylocusts grace roadsides and homesteads in large numbers.
- William Lyon Mackenzie King (1874-1950) a former Prime Minister of Canada, organized the Department of Labour, and was recognized

as an authority on industrial relations. King introduced unemployment insurance in 1940 and family allowances in 1944. His tenure as Prime Minister, of over twenty-one years, was longer than that of any other Prime Minister in the Commonwealth.

- In 1930 Mackenzie King appointed Cairine Wilson as the first woman senator.
- “It is what we prevent rather than what we do that counts in government”. William Lyon Mackenzie King, August 26, 1936.



THE GRAND STRATEGY CALENDAR

A Year on the Grand, February 6 to April 16, 2000, at the Homer Watson House and Gallery, Kitchener. Batik landscapes by Linda Risacher Copp, original guitar music by Wayne Bridge, and a videographers view of the river by Paul Kelly. For information call (519) 748-4377 or visit the website at www.homerwatson.on.ca

Heritage Day Multicultural Festival, Sunday, February 20, 2000, at the Wellington County Museum and Archives, from noon to 4 p.m. Live entertainment, food, children’s games, cultural displays. Admission \$1 per person. The Museum is located between Fergus and Elora. For information call (519) 846-0916.

Heritage Day Workshop, Monday, February 21, 2000, Cambridge Arts Theatre, Cambridge. The Heritage Working Group is hosting a workshop on the theme *River Towns: Building on our Grand Heritage*. For information or to register, contact Brenda Sims by February 16, 2000 at (519) 740-4650 ext. 4649. Email: simbs@city.cambridge.on.ca

International Society of Arboriculture, February 23-25, 2000. Ontario Chapter 51st Annual Educational Conference and Tradeshow, Niagara Falls. For information and registration, contact 1-888-463-2316.

Rural Tourism Conference, “Beyond the City Lights”, February 28-29, 2000, at Seneca College, King City. For information contact Cathy Bartolic, 1-800-668-6284, ext. 229. Email: bartolic@oati.com

Brant Woodlot Owners Association Annual Meeting will be held at the end of March - Contact Bruce Zavitz at 519 448-9406 for details.

Soil and Water Conservation Society - Ontario Chapter Workshop, March 23, 2000. The all day workshop on *Assessing the Vulnerability of Ontario’s Water Resources to Climate Change* will be held at GRCA Headquarters, Clyde Road, Cambridge. For more information contact John Parish at (905) 877-9531. Email: jparish@aztec-net.com

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 (without photographs) on the Internet at www.grandriver.on.ca/gractndx.html

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For newsletter submissions

Contact the Editor, Liz Leedham, c/o Barbara Veale at the above address. Newsletter submissions must be made by the 15th of each month to be included in the next month’s newsletter, and may be subject to editorial change. Tax deductible donations and sponsorships toward the cost of producing this newsletter are always welcome. Please contact Barbara Veale at (519) 621-2761, ext. 274 for more information.

Publications Mail

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