

rare At A Glance

Founded in 2001, the **rare** Charitable Research Reserve exists to preserve, intact in perpetuity, a 913 - acre land reserve along the Grand and Speed Rivers. It is not only a beautiful cultural landscape in one of the fastest growing areas of the country, but includes trees more than 230 years old and provides over 24 habitat types – including 6 of 8 pre-settlement landscapes - that are home to a diversity of organisms some of which are species at risk regionally, provincially, nationally and globally. Located within the designated Blair-Bechtel-Cruickston Environmentally Sensitive Landscape, **rare's** lands provide a natural laboratory for scientific study, research-based education programs, archaeology and trails.

Together we are stewards of this magnificent natural jewel, striving to protect it, because of its role in our lives, economies, and even our survival. Our goal is to preserve the land for future generations by focusing on research, education, conservation, and ecological restoration.

Volunteers do not necessarily have the time; they just have the heart. Elizabeth Andrew

The above quote immediately brings to mind all the volunteers we have had the pleasure of working with at **rare**. With their shared passion for the environment and this wonderful and unique property, they have been the embodiment of this year's Volunteer Canada volunteer recognition theme, *From Compassion to Action*. With each action taken, **rare** volunteers have helped us achieve many successes this year and in our relatively short history.

Our heartfelt thanks to each and every one of you for all that you do in ways big and small. Those who help plan for the future - who inspire rooms full of people with presentations – who answer phone calls, file, sort, copy, and prepare pamphlets – who research and teach – who lecture and hike - who plant, weed and harvest... you give of your time with determination, perseverance and optimism, and have become **rare's** champions. Simply put, we could not do it without you. You are the heart of our organization. **Thank you.**



Photo by: Anna Bracey



Photo by: Jason Bracey

Inside This Issue

Volunteer Profile -----	2
Confluence -----	2
Nature Notes -----	4
Creating a Chain of Learning --	6
Here We Grow -----	8
Our Readers Ask -----	9
Bald Eagle Workshop -----	10
Featured Events -----	11
Earth Hour -----	11
Leadership -----	12

Masthead and Butterfly Photos by: Jessica Grealey



Volunteer Profile: Sue Trotter



As an Elementary School teacher for the Waterloo Region District School Board, currently teaching kindergarten at New Dundee Public School, Sue Trotter has a reputation for being able to get a class of 5-year-olds settled down with only a quietly spoken word.

After meeting Sue just once, you understand why she is so effective in the classroom; and her demeanor is kind, and respectful. Her commitment to education becomes evident very quickly, it has been a motivating passion in her life.

Sue is a committed community volunteer. Serving as co-chair for the *Guelph Lecture – On Being Canadian* in its inaugural years, serving as a member of the Board of Directors at the Waterloo Regional Children's Museum (President 2001-2004), developing the Museum's Kids Inspiring Change program, and advocating for peace-making skills programs in schools are just a few of the projects Sue has shown leadership in over the last decade. Her work earned her the YMCA Strong Role Model Peace Medal in 2005. It is no small coincidence that all of these projects, along with her involvement with *rare*, have a hands-on component that encourage children of all ages to connect with education in practical ways, both in and out of the classroom.

When asked what it was about *rare* that drew her to become involved, Sue replied "it was a sense of wonder that over 900 acres of land had been protected for us, coupled with a deep sense of responsibility – such a gift requires a whole community of care." The project struck a chord with her. It resonated with her fundamental belief that people need to connect with their natural

environment and that children will only grow to become environmental stewards when they feel a bond with nature. It was with this philosophy that Sue, as a member of our Education Committee, helped to develop *rare's Chain of Learning* model and through the embrace of that model, *Every Child Outdoors (ECO)*, an initiative that is really starting to come alive with recent support from the Ontario Trillium Foundation and the Lyle S. Hallman Foundation.

One of the key links in the *Chain of Learning* are the children who can take the excitement of learning home to their families and out into the community, helping to create change. Sue recalls one of these moments in her own home when her son Adam was in grade 2. The Blue Box recycling program was just starting in Waterloo Region. One day, Adam came home from school and asked for a reusable container for his lunch, instead of a paper bag. With the words of a child a household changed its interaction with the environment. With *ECO's* initial goal of 20,000 students over the next four years, it is Sue's and *rare's* hope that another 20,000 households will also improve their interaction with and subsequent impact on the environment!

On a more personal note, Sue and her husband Norm recently celebrated 30 years together, and are looking forward to more celebrations: their daughter Meredith graduates with her doctorate in Bioinformatics from the University of Dunedin in New Zealand in the spring and their son Adam has wedding plans for next year.

Thanks, Sue! We appreciate all you do.

*And children's faces looking up
Holding wonder like a cup* Sara Teasdale

Confluence by Guest Author, Bob Burt

It is difficult to stand at the confluence of the Speed and Grand rivers without being moved by the beauty. The picturesque view, combined with the rich cultural history and the features that make the confluence important from an environmental and ecological perspective also make it a truly unique place.

The confluence is a year-round haven for bird watchers, home to a number of rare plants and has played an important historical role in the development of Upper Canada in the early 1800s. "It has always been known as a special place," says Art Timmerman, a fish and wildlife biologist with the Ontario Ministry of Natural Resources. "I've seen the sky there just full of birds," Timmerman continues. The broad expanse of river and

floodplain, meadow and cliff habitat along the Grand River and lower Speed provides an important wintering area for waterfowl. The river and adjoining woodlots serve as a significant winter habitat for Bald Eagles and provides a migratory stopover for waterfowl and migratory songbirds.

Waterloo Region recognized the confluence for its ecological significance several years ago when it designated it an environmentally sensitive policy area. The designation recognizes the area's importance as a home and feeding grounds for some birds and a stop off point for others. Birders have documented at least eight

continued on page 3

species of gulls, twenty-seven species of warblers as well as thrushes, ruby-throated humming birds, belted kingfisher, wood ducks and black-billed cuckoo along with a variety of ducks and geese, blue heron and red-tail hawk. Bald eagles have been regular and popular visitors since the late 1980s. Others such as the American Bittern, common loon, and snow goose have been known to seek refuge at the confluence after being blown down or forced off course by storms.

So what makes the confluence so inviting to birds? The open water is probably the most important factor drawing birds during the winter, explains Timmerman. Eagles are among a number of birds that need the open, shallow water to catch fish. Timmerman speculates that a faster flowing current and groundwater entering the river keep the river from freezing during the winter. "We know that at one point the groundwater is at 8° to 10°C and the river water is at 0°C." The confluence is also home to some rare and endangered fish such as the Black Redhorse and Silver Shiner, Timmerman noted.

The limestone cliffs on the west side of the Grand River provide habitat for several plants considered nationally or regionally significant. They include hackberry, hawthorn, Canada Plum and Eastern Cottonwood.

Some of the confluence lands stewarded by **rare** will be taken out of agricultural production this year and left to regenerate naturally. That's all part of **rare's** plans for ecological restoration and an effort to have the land returned to its natural state. (please see page 6 & 7, **rare review**, Winter 2008 issue).

Just as Waterloo Region recognized the ecological and environmental significance of the confluence several years ago, the City of Cambridge drew attention to its historical importance in 2000, when it agreed to rename a section of Linear Park near the confluence Settlers' Fork. The name change was prompted by the Preston and Wanner Mennonite Churches. A committee representing the churches recommended the name change as a way of recognizing the historical significance of the area.

Research done by church members at the time indicated that the area where the Speed merges with the Grand River was the site of some of the earliest farms and was a reference point for settlers moving on to other areas in

Waterloo Region. The first settlers in the interior of Upper Canada settled at the confluence in 1800. They were mostly Mennonites from Pennsylvania looking for religious freedom and inexpensive farm land. The rugged and tumultuous journey from Pennsylvania using Conestoga Wagons is a testament to the pioneering spirit of the first white settlers in this area. While they were the first white settlers, archeologists have found evidence of habitation near the confluence dating back nearly 10,000 years.

The City of Cambridge also recognized the cultural and natural heritage of the Confluence through a Legacy Cambridge initiative. With funding from the City of Cambridge, the Friends of the Confluence erected



Photo by: Heather Wilson

two-sided interpretive panels entitled *A Place in Time* at the Confluence. The panels highlight landscape features, the natural history and the cultural significance of the Confluence and the panoramic view of **rare**.

A Place in Time provides information about:

- The Grand and Speed Rivers
- Linear Park and Trail
- Settlers' Fork
- Sturdy Park
- The vista of neighbouring **rare**

References:

Waterloo Region document describing ESPA 36
rare review winter 2008

City of Cambridge Archives

Waterloo Township through Two Centuries:
Elizabeth Bloomfield

Nature Notes by Bill Wilson



The corn harvest on Blair Flats of **rare** began during mid-November, resulting in 100s of waterfowl, mainly CANADA GEESE and MALLARDS arriving daily to feed on the waste corn. (Note: Harvesting of crops on Blair Flats after mid-November takes place at night because of the High Risk Zone for

overwintering Bald Eagles. See Winter 2008 **rare review**).

Following the prescribed protocol developed by the Ontario Ministry of Natural Resources (OMNR) and the Bald Eagle Monitoring Teams covering the mid-reaches of the Grand River between Kitchener and Brantford, our monitors declared "our" overwintering BALD EAGLES to have arrived for Winter 2008 on **November 23, 2007**. During the period November 23 to December 23, there was considerable hunting activity by eagles within the reaches of the river through **rare**: eagles were observed on 22 of the 31 days during this time period.

While observing an adult and subadult BALD EAGLE in and about the vicinity of the CRACK WILLOW upstream of the Confluence, Bill Wilson observed two SNOW GEESE on **November 27**, a seldom-seen migrant in this region.

Ruth Kroft reported a GREAT BLACK-BACKED GULL along the river on **December 5** and again during the first week of March. The largest (and fiercest) of North American gulls, the "black-backs" arrive in late fall and early winter and are normally gone by mid-winter. During 1970s to 1990s, small numbers (fewer than 20) would frequent the Confluence to rest and preen. In the early winter of 1998, however, more than 100 were observed at the Confluence. These numbers have not been observed again; in fact, only 1 to 3 have been observed at any one time in the last several years. Why? Locally, changes in landfill practices in the late 1990s at the Erb Street Waste Management Site substantially reduced the opportunity for feeding by large numbers of gulls (Virgil Martin pers. comm.). Provincially, Type E botulism has been rampant among this species in recent years resulting in large die-offs according to Environment Canada.

During a birding hike through the restoration fields at **rare** on **December 7th**, Jerry Guenther and Bill Wilson tallied 200+ seed-eating migrants including COMMON REDPOLL, AMERICAN TREE SPARROW, DARK-EYED JUNCO and AMERICAN GOLDFINCH.

Raptors hunting within **rare** this winter included: AMERICAN KESTREL, MERLIN, COOPER'S HAWK, SHARP-SHINNED HAWK, NORTHERN HARRIER, RED-TAILED HAWK, NORTHERN SHRIKE, GREAT HORNED OWL and EASTERN SCREECH-OWL.



Photo by: Michael Barnstijn

Jerry Guenther spotted three GADWALL among the rafts of puddle ducks gathered above the Confluence on **December 8th**. Prior to the 1950s, this dabbling duck was a rare migrant through Ontario. In 1955, a nest was found at Luther Marsh and subsequently in the 1960s the population increased in the lower Great Lakes basin, particularly along the lakes' shorelines. This species has bred in Waterloo Region although no breeding evidence was found during the 2001-2005 Ontario Breeding Bird Atlas period.

rare lands not within the High Risk Zone for overwintering BALD EAGLE are annually monitored during the Cambridge Christmas Bird Count. The 2007 count took place **December 27**. Highlights of the **rare** lands coverage included: 1 GREAT HORNED OWL, 1 EASTERN SCREECH-OWL, 12 WILD TURKEYS, four species of woodpecker including two PILEATED WOODPECKERS and seven RED-BREASTED NUTHATCHES. Coverage was undertaken by Jason Bracey and Christopher Giesler.

Three BALD EAGLES – an adult, a subadult and a juvenile – perched in the same tree on **rare** cliffs on **December 29**. This unique observation was made by Ruth Kroft and Andy and Kim Kelly. The reaches of the Grand River through and along **rare** continue to provide hunting and feeding opportunities as well as perch sites for resting and preening (see examples of sightings this winter below). One of the eagles' winter survival strategies is to sit in a large-limbed tree overlooking the river. By remaining in such a position for long periods of time – up to 90% of the day according to field studies – eagles reduce their energy expenditure. Unfortunately, this winter a very few individual people continue to ignore the signage at **rare** and walk their dogs on the river trail within the High Risk Zone for overwintering Bald Eagles. This disturbance causes eagles to flush from their perch trees along the rim of the cliffs.

continued on page 5

On **January 10, 2008**, the annual OMNR Waterfowl Count took place between Conestogo and Paris. Monitoring sites (27) included four on reaches of the Grand River through **rare**. This year's counters included Art Timmerman (OMNR), Karine Beriault (OMNR) and volunteer, Bill Wilson. Sixty percent of the day's waterfowl tally was observed within the reaches of the river through **rare**. The Confluence of the Grand and Speed rivers has been recognized as an important wintering and stopover site for waterfowl since the 1970s when Regional naturalists, Craig Campbell and Larry Lamb, proposed the Confluence as a Regional Environmentally Sensitive Protection Area (ESPA 36). After sunset on the waterfowl count day, Wilson counted and recorded waterfowl gathered in the baylet and along the shorelines upstream of the Confluence where they roost for the night: CANADA GOOSE (~400), MALLARD (~250), COMMON GOLDENEYE (119), BUFFLEHEAD (41), COMMON MERGANSER (22), AMERICAN BLACK DUCK (<20).

On **January 23**, Greg McQuillan watched an eagle feeding on a fish in the field across the river from the Village of Blair. On a snowy, blustery mid-morning, **January 28**, Marilyn Armstrong and Bill Wilson observed 5 BALD EAGLES in the vicinity of the Confluence – perched in the CRACK WILLOW, on the ice and, at times, in flight – during a one-hour period. On **February 28**, Marilyn Armstrong observed 3 adult BALD EAGLES “squabbling” on the ice upstream of the Confluence over a fish.

The annual BALD EAGLE Monitoring Project continued in winter 2008. This year, 27+ volunteers monitored bi-weekly from January to March, from 20 to 24 locations along the river. An unprecedented 15 BALD EAGLES were counted between Conestogo and Brantford on **January 26** during the second of six monitoring sessions. This total included 11 adults, 2 subadults and 2 juveniles.

On **January 26**, Jason Bracey and a friend tallied six WHITE-TAILED DEER and 48 WILD TURKEYS during a Saturday hike along Cruickston Creek. From a distance, they watched through binoculars a rusty-brown-coloured COYOTE consuming a rabbit.

An evening audio and observation: Andy Steinberg heard at least 3 COYOTES serenading him during a late winter reconnaissance, **February 24**, for owls. During 2008, Andy will continue the monitoring of breeding birds at **rare** that he began in 2007. This year he is also monitoring owls and species that breed

early in the year. A pair of RED-TAILED HAWKS, a year-round resident at **rare**, are nesting in the Hogsback. Red-tails that overwinter in southern Ontario begin the breeding cycle as early as late January or February. Please report any owl sightings – visual or audio – to Andy Steinberg, 519-744-8961.

The **rare** owl prowl on Tuesday, **February 26**, led by Jason Bracey produced both GREAT HORNED OWL and EASTERN SCREECH-OWL.

Friends of **rare**, including Betsy and Darrell Ackford, Andy and Kim Kelly and Wynn Watson, report as many as 4 MUTE SWANS feeding and roosting between the **rare** cliffs and islands upstream of the Galt County Club and the waterway along the country club. This swan, native to Eurasia, became established in eastern North America in the late 1800s. The population in the Lower Great Lakes Region has almost doubled between 2002 and 2005. Lack of predators of both cygnet and adults, and long-term increasing winter temperatures (think of European winters) are contributing to this increase that is likely to continue, according to the Atlas of Breeding Birds of Ontario (2007).

Two classes of students in the Environmental Studies program at Southwood Secondary School observed six WHITE-TAILED DEER and five WILD TURKEYS on their hike at **rare** with teacher, Jason Bracey, on **February 29, 2008**. Earlier this winter, on **December 22**, an 8-point buck with three does was observed by Jason Bracey at **rare**.

RED-BELLIED WOODPECKER breeds within the mature hardwood forests of **rare**. This woodpecker prefers forests with large-diameter trees and snags such as those found in Indian Woods and some pockets of mature hardwood in the Cliffs and Alvar sector of the property. This cavity-nester begins nest excavation in early to mid-April. In winter, Red-bellied Woodpecker is

continued on page 10



Photo by: Michael Barnstijn

Creating a Chain of Learning

Locally ...

There are many reasons to live and work in Waterloo Region. We believe one of those reasons should be that, here, children are given unprecedented opportunities. If you've read the profile elsewhere in this issue on Sue Trotter – one of the Region's outstanding teachers and a volunteer in many local education efforts – then you will know about one of the special people who inspire and guide **rare's Every Child Outdoors** project, designed to give 20,000 children access to hands-on education on the property over the next 4 years.

Every Child Outdoors is how **rare** puts its *Chain of Learning* into effect. Beginning with some of the top scientists and practitioners who guide the research and restoration work on the reserve's 913-acre property, programs and projects are developed to answer questions in various fields of ecology and to test these answers. Senior students who undertake this work then develop modules that can be performed by even the youngest students. Thanks to the Ontario Trillium Foundation and the Lyle S. Hallman Foundation's program support we will soon be able to ensure **Every Child Outdoors**.

Raising the Barn for Every Child

Key to **Every Child Outdoors** is the 1840s Limestone Slit Barn at the heart of **rare's** education facilities. The barn is a beloved local icon in need of repair – *only a very few such barns are left in the entire province*.

When renovations are complete, the barn will be a three-season interpretive facility and function as an orientation site for visitors to the property. It will also be a community space for special events. With the support of the Good Foundation, the Kitchener Waterloo and Area Community Foundation, and individuals, the campaign to renovate the Slit Barn is well underway. Gifts of any size are welcome and will continue to make a difference. With your help, we will hear young voices echoing through the building this September!

Nationally... Stewards of a National Treasure

Waterloo Region is also important for what it provides to the rest of Canada; we are known as leaders in so many areas. At **rare**, we attempt to fulfill our national responsibility by leading the way in environmental research and education. Our first responsibility is to ensure that the 913-acres, stewarded by the charity on behalf of the public, remain intact, in perpetuity.

As Dr. Stephen Murphy, who is an Associate Professor in Environment & Resource Studies at the University of Waterloo, as well as Vice-Chair, Society for Ecological Restoration Ontario and on the Board of the Parks and Protected Areas Research Forum in Ontario, says, "**rare** is a charitable foundation with a unique focus in Canada – it owns property and encourages long-term research on ecological restoration and monitoring and integrates this into community education programs. There is no other organization like this in Canada. Some organiza-



Photo by: Pirak Studios



for Every Child

tions fund research, some own property for conservation and related purposes, some focus on education about the environment. **rare** does all of this and does it in an important context."

And Brian Craig, former senior science advisor with Environment Canada, points to Indian Woods as "one of the finest examples of remnant old-growth Carolinian forest remaining in Canada." He also says that the escarpment, cliffs and alvars along the Grand River are "of great national and provincial significance and offer an excellent opportunity for parallel monitoring and research activities with universities and agencies along the Niagara Escarpment." Thanks to your help and vigilance, we can be good stewards of a national treasure.

Internationally... Our Students Getting A World of Opportunities

It doesn't take much to imagine how connected **rare's** lands are to international concerns. Climate change is on everyone's mind, whether they are talking about the economy in China or the rainforests in Brazil, to mention just two very obvious topics.

Thanks to one of our International Ambassadors – David Buckland of Cape Farewell www.capefarewell.ca – **rare** is going to be able to link its local education efforts with kids across the country and give them an international experience that they will never forget, and that will inspire classrooms around the world. On September 8, 2008, a former research vessel will depart from Reykjavik with a crew, a team of scientists and twenty-four youth from around the world.



How Many Expeditions Do You Know That Could Help Save The World?

Thirteen of those youth are representing each of Canada's provinces and territories. Thanks to David Buckland's efforts, **rare** is sending two other Canadian youth, one from Southwood Secondary in Cambridge and one from Carson Graham in Vancouver. They will represent us to the world through live webcasts and daily blogs, making their experiments and projects accessible to schools across the country.

Our Region wouldn't have this opportunity without **rare's** International Ambassadors and their respect for our community's foresight in saving 913 acres, intact, in perpetuity – that's thanks to you!

☒ **YES! I support rare's Chain of Learning!**



1679 Blair Road
Cambridge, Ontario
Canada N3H 4R8

+ 519 650 9336 voice
+ 519 650 5923 fax

rare@reresites.org
www.reresites.org

name _____

mailing address _____

city _____ postal code _____

telephone (please include area code) _____

☐ **YES!** Please add my email address to your list of people receiving e-news of **rare**:

☐ **YES! I support rare's Chain of Learning. Here's my donation of:**

☐ \$500 ☐ \$250 ☐ \$100 ☐ \$50 ☐ \$25 ☐ Other \$ _____

Please designate my gift to:

☐ **rare's** Every Child Outdoors Limestone Slit Barn

☐ **rare's** participation in 2008 Youth Arctic Expedition

☐ Please use my donation for **rare's** most pressing need

Charitable tax receipts will be issued for all gifts of \$10 and more, and upon request for gifts under \$10.
Charitable number 87761 5914 RR0001

Donate Today

On-line: visit www.raretome.ca and click on Donate Now to give once or monthly by credit card on a secure donation site

By mail: please complete and return this reply card with your cheque made out to: **rare Charitable Research Reserve** OR with your credit card information:

☐ visa ☐ m/c ☐ a/e Card No: / / / / / / / / / / / / / / / /

name on card _____ phone (please include area code) _____

expiry date _____ signature _____

How you would like to be recognized? Your name (or the name of someone you designate) will be displayed permanently on the property. Please print clearly how you would like this name displayed:

At **rare**, we respect your privacy and value your support. We carefully treat your personal information in accordance with applicable Canadian privacy legislation. Please contact t: 519-650-9336 x.111 if you no longer wish to receive information from **rare**.

Here We Grow! Springbank Farms Community Gardens

For stewards of the land, winter is a time of reflection and planning for new seasons, while spring is a time to leap into action. Sustainable agriculture has always been an important part of **rare's** vision, and a significant amount of time and energy has gone into planning how to implement it in a way that best reflects **rare's** goals and meets a need within the community. We believe we've done that and are thrilled to share our plans for our new **Springbank Farm Community Gardens!**





Photo by: Martha Gay Scroggins

Our vision and plan is to create a vibrant multi-generational, multi-cultural, diverse community at Springbank Farm that involves growing and educating others about growing. We feel, and we've heard from some of you who share our thinking, that **rare's** role will be one of education, community involvement and support, as opposed to primary production. There is a great deal **rare** can offer urban-living community members in order to support a sustainable food system.


One of the ways we will achieve this is to offer garden plots at nominal fees to the community – individuals or groups – to grow their own organic crops, and setting up a series of demonstration gardens that visitors can tour to learn about growing techniques for use in their own backyards. The plans also include such features as new interpretive trails and a composting learning centre. Not only will visitors learn organic techniques, but also the importance of sustainable agriculture and food systems in the big picture of responsible living.


Each garden is being designed to reflect something significant about people and our place in nature.


 The native plant garden will teach which plants are (and are not) native to the area, and why it's important that we foster native plant communities. It will also demonstrate the pros of gardening with native species to ensure ease of care and water requirements.


 The medicinal plant gardens will demonstrate the human history of dependence on the herbaceous species in our environment to keep us healthy and heal us when we are not. The Native North American medicinal garden will be in the form of a medicine wheel, and will show a plethora of native herbs that have historically been used for healing in Native communities. This will reflect an element of the rich Native culture and history of the local area. The European herb garden will reflect the image of a traditional herbalist's backyard medicine cabinet from centuries ago.

 The culinary herb garden will be built in Victorian style to reflect how gardens may have been designed when the area was originally settled by Europeans. There will be a large variety of herbs used in cooking planted here.

 The vegetable gardens will demonstrate different methods of growing one's own food organically in a limited amount of space. Space-saving techniques include raised beds, dense planting, and the use of trellises.

 The seed-saver's garden will teach the skill of saving one's own seed, which is something that was an integral part of gardening before the days of large-scale seed companies and their wide-spread catalogues. This is an enormously valuable skill in these times of major loss of diversity within our food crops.

 The flower beds will provide habitat for butterflies and other pollinators, and a beautiful source of cut flowers for sale. The butterfly garden (integrated into the flower beds) will offer the opportunity to learn about one aspect of how the natural environment is connected with our gardening and other land stewardship activities.

 The composting centre will be a simple demonstration of how best to compost in your backyard, thus preserving the extremely valuable resource of healthy, nutrient-rich soil in our local food systems.

These gardens will be established over the next two years with the help of community groups and volunteers, with ample space left for expansion and new projects spearheaded by community members.

We're delighted to be able to continue to offer community members access to local food by partnering with Plan B Organic Farms CSA program. Plan B and **rare** are working together to offer **rare** as a pick-up location for Plan B's fantastic organic produce. Please see <http://www.planborganicfarms.ca/> or call **rare** for more information.

These exciting changes, along with the recruitment of a new Environment Education Director (Leslie Work) at **rare**, will enable us to have the resources necessary to develop curriculum based on the community gardens project that will allow teachers and students from local schools to meet some of their class requirements in a beautiful, diverse, hands-on outdoor environment. We are very excited about the evolution of **rare** organics, and encourage you to become involved. Please contact the project's manager, Amanda Newell, at 519-650-9336 x 122.

Our Readers Ask...

Q: I know **rare** is doing work on alien plant species. How did all these invasive plants get here and where did they come from?

A: The vast majority of the time, the answer is the same; we brought them here. Whether intentionally or unintentionally introduced, exotic species have been making their way into Canada's ecosystems since the time of European settlement. Many of the worst terrestrial invasive plants we see today were brought here from Europe at the close of the 18th century for aesthetic gardening, agricultural purposes, or simply in order to make Canada look more "homey". At the time these plants were introduced, people knew very little about the ecology, structure and function of natural systems, let alone how these exotic plants would interact with other species in Canada's natural landscapes. It was also thought that these plants would not be able to survive in the wild without the nursing care of garden owners or farmers. And many of them don't, but the ones that do, **really** do.

In fact research, knowledge and awareness about the effects of these exotic introductions on natural systems are growing at such a phenomenal rate, that the subject has branched into an entirely new science! Invasion biology, a subset of ecology, is the study of the species that become invasive in a system, their effects on the system they have invaded, and the remediation of such invasions. Worldwide acknowledgement of the potential threats associated with exotic introductions has led to key policies regarding the sale and transportation of live organisms across borders.

Despite this growing knowledge, there's lots of work to do!

The number of exotic plants that have naturalized (i.e. established and succeeded) in Canadian ecosystems is estimated to be around 800 plant species (University of

McGill, 2008). Since quantifying the effects of all these species takes time, there's a lag phase between research discoveries and policy development. Nevertheless there are a number of ways that you can help stop the spread of invasive exotic plants from getting into our local habitats.

Pretty but Dangerous Plants in Waterloo Region

One of the principle ways invasive species make their way into natural areas is by escaping from residential and landscaping gardens. There are a variety of exotic plants that are still commonly planted and sold in nurseries that have been discovered to invade and disrupt natural ecosystems.

The following is a short list of plants that may be easy on the eyes, but certainly aren't easy for other plants to co-exist with:

- Common Lilac
- True-Forget-me-nots
- Yellow Iris/Yellow Flag
- Common Periwinkle
- Lily-of-the-Valley
- European Highbush Cranberry
- Honeysuckles: Japanese, Morrows, Tartarian,
- Privet (most privets are native to Europe)
- Mossy Stone-Crop.

For more information about the effects these pretty but invasive plants have on our ecosystems, join us for a community workshop on May 24 and keep an eye out for our new biodiversity page on our website, coming later this year (see **rare review** Fall 2007, page 8).

Article Response by Lauren Cymbaly
References: University of McGill. 2008. The Canadian Biodiversity Website.
<http://canadianbiodiversity.mcgill.ca/english/>



Common Lilac
Photo by: Lauren Cymbaly



Tartarian Honey Suckle
Photo by: Lauren Cymbaly

rare Bald Eagle Workshop



Photo by: Jason Bracey

The annual **rare** Bald Eagle Workshop this year was held on Saturday, February 9 and, as in other years, was filled to capacity. Despite the snowy conditions and relatively poor visibility, all participants had the opportunity to observe our "target species". Spotting telescopes were provided by Marilyn Armstrong, Jason Bracey, Jerry Guenther and Bill Wilson.

During the indoor portion of the workshop, Bill Wilson outlined to participants the background concerning the life history and at-risk status of the Bald Eagle. Key habitat features that define wintering habitat were observed during the outdoor portion as well as described in summary during the indoor portion.

Participants examined plumage characteristics in a series of images of eagles at distance in flight and on perch trees in order to learn how monitors age Bald Eagles at distances greater than 300m.

Three members of the OMNR provided an update on the mapping of Bald Eagle wintering habitat on the Grand River. They answered questions concerning the status of the OMNR Guidelines for Mapping Habitat of Overwintering Bald Eagles as well as the new Species-at-Risk legislation.

Also in attendance at the workshop were many volunteers with the local Bald Eagle Monitoring Team. Their

efforts as monitors were acknowledged by both the OMNR and workshop participants. OMNR district ecologist, Donald Kirk, informed the group that the Guidelines prepared by the Guelph District Office with input from the monitors had been approved by the OMNR Southern Region Main Office in Peterborough. Art Timmerman stated that mapping would proceed and, in due course, the mapping of identified overwintering habitat through **rare** and other reaches of the river upstream and downstream would be forwarded to Region of Waterloo staff so that the protection of overwintering Bald Eagle habitat can be addressed in the forthcoming new Regional Official Plan.

Nature Notes by **Bill Wilson** *continued from page 5*

often seen and heard among the large mature maples and other deciduous trees that line the laneways of **rare** and within the sheltered canopy of trees lining Cruickston Creek within the Hogsback. This winter, Preston residents, Larry and Shirley Allen, observed over two days in **February**, an adult RED-BELLIED WOODPECKER visiting their bird-feeder on Rose Street, flying from the narrow strip of wooded slope located on the north side of the Grand River opposite **rare**. Several species of woodpecker including RED-BELLIED and PILEATED WOODPECKERS have been observed crossing the river from **rare** to feed in trees along this slope. Likely the Red-bellied at the Allen's feeder is such a visitor. Other "visitors" from **rare** have also taken advantage of the food supply on the opposite side of the river at various times of the year including breeding birds such as COOPER'S HAWK, SHARP-SHINNED HAWK, GREAT HORNED OWL, ORCHARD ORIOLE and ROSE-BREASTED GROSBEAK.

On **March 8**, Marilyn Armstrong observed 200+ "thirsty" CEDAR WAXWINGS at the Confluence. Numbers were flitting from tree branches to the shoreline, taking in water.

The baylet upstream of the Confluence along the **rare** shoreline provides shelter from not only the river's current but also from high winds and storms. During the massive snowstorm of **March 8**, more than 280 COMMON GOLDENEYES roosted overnight, joined by six BUFFLEHEADS and a drake HOODED MERGANSER.

A flock of 70+ AMERICAN ROBINS flew over the Confluence on March 9. With up to 40 cm of snow covering the landscape, fruit-bearing trees would be their main food source; very few fruit remained on the HACKBERRY about the Confluence.

Featured Events

Introduction to Archaeology with John MacDonald Sunday, June 1 from 10:00 am to 1:00 pm

Have you ever stood at the archaeological display in the **rare** admin building and wondered about the artifacts on display, wanting more information on how old they are or how they were found? Then, come out and enjoy this presentation which introduces different archaeology techniques and showcases some of the artifacts found on **rare** property from different eras (Paleo-Indian, Archaic and Woodland).



Staff Photo

Butterfly Workshop with Jessica Grealey Saturday, July 26 from 9:00 am to 12:00 pm

If you have ever wanted to learn how to tell a Monarch from a Viceroy then this workshop is for you. It will help you develop your identification skills and provide a background on butterfly natural history, field identification, and migration as well as how to create and maintain butterfly habitat.

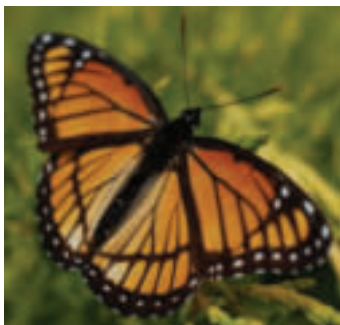


Photo by: Jessica Grealey

Earth Hour

At my home, Earth Hour became a wonderful conversation starter. I and my children, ages 3 and 5, walked around the house together on a scavenger hunt. The aim? To find things we could turn off. Turning things off led us to talk about consumption, which helped us identify ways that we could do better.

Our evening snack was Ontario-grown apples instead of bananas that had travelled thousands of miles. We talked about how trees helped clean the air and the importance of protecting our forests. My lesson came when my daughter observed it was great that we had a tree in our front yard. Yes, *a tree*. We have a lot of work to do!

These experiences with my children during Earth Hour brought to mind the words of WWF-Canada President & CEO Mike Russill, who makes the point in their spring newsletter that it was a 'one-hour lights-out event to demonstrate the need for action on climate change,' but adds that it is 'something bigger, something longer than one hour.' It is imperative that we are collectively recognizing the need for, and subsequently demanding, change.

I'd like to congratulate the founders, coordinators, promoters and participants of Earth Hour. It was amazing, and powerful.

Patti Leather
rare Executive Director

Natural Harmony Exhibition



A message from Hugh Thompson and John Bell

Artists Hugh Thompson and John Bell present their work and exhibit, Natural Harmony - a celebration of the natural aesthetic.

It is a comprehensive body of work that will illustrate the balance and beauty that surrounds us, and, will protect and preserve this moment in time, forever. The harmony and sympathetic relationship that has existed all down through history between Earth, Sea, and Sky is, as has been

well documented, under the greatest strain imaginable. The spaces for peace, tranquility, and quiet contemplation are encroached upon from all sides by urbanization.

This exhibition will, we hope, illustrate the historical balance between ourselves and the natural world. It will underscore the need to protect and preserve the natural aesthetic, in fact, not merely in word or pictorial record.

We hope you enjoy the works, and are provoked to contribute and assist in noble efforts such as **rare**.

This exhibition runs from May 22nd – June 6th at the **rare** administrative offices. All works will be on sale with a portion of the proceeds going to support **rare**. For more details please contact Hugh Thompson at 519-212-0163 or via email at hthompson@rogers.blackberry.net.

Photos supplied by: Hugh Thompson and John Bell

Board of Directors

Keith Ainsworth, Chair of the Board; Chairman,
COM DEV International
Gerald Achtymichuk, Family Physician
Paul Koch, Marketing & Management Consultant;
Civic Entrepreneur
Peter Krause, Trillium Environmental Consulting Inc.;
International Director, International River Foundation
Brian McGee, Chartered Accountant; Partner, Zeifman
& Company LLP
Angela Tsementzis, Architect

Environmental Advisory Team

Chris Dalton, Avocational Archaeologist,
Licensed by the Province of Ontario
Larry Lamb, Manager Ecology Lab, Adjunct Lecturer,
Environmental Studies, University of Waterloo
Doug Larson, Faculty Member, College of Biological Sciences,
University of Guelph
Alan Morgan, Faculty Member, Earth Sciences,
University of Waterloo
Stephen Murphy, Faculty Member, Environment
& Resource Studies, University of Waterloo
Martin Neumann, Supervisor of Terrestrial Resources,
Grand River Conservation Authority
Bill Wilson, retired Teacher; Naturalist; Regional Co-ordinator,
Ontario Breeding Bird Atlas

Ambassadors

Michael Barnstijn, retired partner, RIM; Philanthropist;
Musagetes Foundation
David Buckland, Founder, Cape Farewell
www.capefarewell.com; director of *Art from a Changing Arctic*
Ed Burtynsky, Photographer; subject of award-winning
documentary, *Manufactured Landscapes*
Seymour Cullis-Suzuki, Environmental activist; speaker;
television host; author
Ron Dembo, Founder, Zerofootprint www.zerofootprint.net
Louise MacCallum, retired software engineer; Philanthropist;
Musagetes Foundation
Sheila O'Donovan, Founder, Lisaard House
Jane Urquhart, Author
Morden Yolles, Multi-Award winning structural engineer;
restaurateur; photographer

Building Committee

Chris Dalton, (see previous)
Graham Lobban, Lobban Stroud Ltd. Building Inspections
Robert Milligan, Environmental Health Analyst
Val Rynnimeri, Faculty Member, School of Architecture,
University of Waterloo

Archaeology Committee

Chris Dalton, (see previous)
John MacDonald, Archaeologist, Timmins Martelle Heritage
Consultants Inc.

Education Committee

Jason Bracey, Teacher, Southwood Secondary School, Cambridge
Susan Trotter, Teacher, New Dundee Public School

Directors of Research

Doug Larson, Co-Director (see previous)
Stephen Murphy, Co-Director (see previous)

Campaign Cabinet

Keith Ainsworth, Chairman, COM DEV International
John K. Bell, Chairman, The Onbelay Group
Greg Buzbuzian, Owner, Knar Jewellery
Stewart Campbell, BlackTree Capital
Valerie Hall, Administrator, Musagetes Foundation
Doug McMullen, retired, CIBC Development Corporation
Simon Poladian, Owner, Eagle Towing Equipment
Joy Roberts, retired; consultant
Hugh Thompson, President, Cambridge Towel; CEO,
Thompson Centre for Art and Design

Staff

Patti Leather, Executive Director
Sharon Bowes, Community Outreach Coordinator
Ken Dance, Consultant, Dance Environmental Inc.
Peter Kelly, Research Director
Amanda Newell, Natural Heritage Manager
Christine Rier, Community Relations Manager
Ian Rowett, Bookkeeper
Leslie Work, Education Director

Contact Us!

rare Charitable Research Reserve
1679 Blair Road, Cambridge ON N3H 4R8

Phone: (519) 650-9336

Fax: (519) 650-5923

Email: rare@raresites.org

Website: www.raretome.ca and www.raresites.org

