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### Annual General Meeting & First Elections

Friday, October 26, 2007

ALL WELCOME

9 AM Forum:  
Exploring the

Nature of Climate Change

4 PM: CCC AGM  
Natural Treasures  
Book Launch

CC Conservation Awards

Reception

R.S.V.P. Page 10

Best Western Stoneridge  
Inn & Conference Centre  
6675 Burtwhistle Lane,  
London, Ontario  
(at hwy's 401 & 4, exit 177)

Nominations for Directors  
can be submitted  
in writing.

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# Carolinian Canada

fall 2007

Newsletter of the Carolinian Canada Coalition

## Bee Trouble

### Biodiversity Trends:

### Small Creatures Linked to Big Changes

by Lorraine Johnson, Editor, Carolinian Canada newsletter

“Where’s the box with the ‘gee whiz’ bees?” asks Laurence Packer as he opens drawer after drawer of meticulously arranged specimens at the bee lab he runs at **York University**. “Oh, I thought you said ‘Cheez Whiz,’” says Cory Sheffield, a post-doc researcher and expert on the bees of eastern Canada.

Such playful camaraderie was much in evidence during a recent visit to Packer’s lab, but his search for the “gee whiz” bees acknowledged a more sobering reality: bees are not considered charismatic by most people, and, as such, are often relegated to the sidelines of conservation attention. (It was only recently, for example, that the Committee on the Status of Endangered Wildlife in Canada convened a subcommittee on arthropods. Packer is co-chair.)

“Bees are the miner’s canaries. All other things being equal, bees are almost ten times more likely to go extinct than other organisms,” says Packer. While the evidence for this depends on a relatively complex explanation of bees’ sex-determining characteristics, Packer’s basic point is simple: “Bees are really good indicators of the state of the environment.” And some of the research coming out of Packer’s lab indicates that a number of native bees are in trouble. (While there has been a lot of press about the dramatic declines in non-native honeybee populations, there has been little focus on what is happening to native bees.)

Sheila Colla, a Doctoral student at York, has been studying bumblebees, and her research is the first to document the staggering decline of bumblebee species in eastern Canada. Using baseline data from a 1971-1973 study done by Dr. R. Macfarlane of the **University of Guelph**, Colla documented significant declines in a number of bumblebee species that had been common in the 1970s. “Several of the 15 bumblebee species that Macfarlane found in southern Ontario show evidence of decline over the past 30 years,” says Colla. For two species, Colla could not find a single specimen, despite the fact that she sampled Macfarlane’s original sites once a week from April to October in 2006. (Interestingly, she found that populations of two species had exploded—two species that do well in urban habitats.) Digging deeper, Colla decided to focus on one particular bumblebee, *Bombus affinis*, that in the 1970s was one of the top four most common species of bumblebee in southern Ontario. Using museum records to determine where *B. affinis* had been collected in the past, Colla travelled to fifty sites in Canada and the U.S. doing hand collection with nets to try to find the species. During three summers of field work in 2004-2006, she found *B. affinis* in just one spot—at the Pinery Provincial Park in southwestern Ontario. (continued on page 4)



*“Bees are the miner’s canaries. All other things being equal, bees are almost ten times more likely to go extinct than other organisms”*

## Student Award Leads to Win, Win, Win

### Stewardship Research Along the Grand River

by Patti Leather and Nikki May

Lauren Cymbaly, an Environmental Studies Coop student from the **University of Waterloo**, was looking for a challenging summer job to gain experience in the environmental field and earn money for school. A group called **rare Charitable Research Reserve** was looking for an exceptional student to help with their invasive species monitoring and management program. **Carolinian Canada Coalition**, in partnership with the Faculty of Environmental Studies, University of Waterloo, is piloting a competition for projects that support CCC’s conservation goals and provide work for student interns. (continued on page 4)





# Carolinian Canada Forum 2007: Prominent Speakers Focus on Southwestern Ontario

On behalf of the **Carolinian Canada Coalition (CCC)** Board of Directors, I invite you to attend our annual forum on Friday, October 26, 2007 in London, Ontario. It will be a day of discussion, exploration, networking and celebration. You can register for the entire day or join us at the reception.

Forum 2007 will explore the impacts of climate change on southwestern Ontario's unique natural features, benefits of green infrastructure, and best practices for an uncertain future. Whether you are engaged in a national, provincial, community, or personal conservation initiative, this event is an ideal opportunity to expand your knowledge and networking capacity for stewarding and sustaining healthy southwestern Ontario landscapes in the face of climate change. The Forum begins at 9 am, includes a plenary followed by two concurrent streams of panel discussions and lunch. We encourage you to participate in our display and poster area. This is your chance to promote your group or project and share your experiences.

Everyone is invited to our celebratory reception following the forum. Forum wrap-up, AGM, *Natural Treasures* Book Launch and Conservation Awards begin at 3 pm. Please join us to celebrate the growth of Carolinian Canada Coalition and the many groups and individuals who are making a difference in the ecoregion. You may register for the forum or RSVP for the reception at [www.carolinian.org](http://www.carolinian.org) or by calling 519-433-7077.

We look forward to seeing you there.

Michelle Kanter  
Executive Director

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## **Election of CCC Board of Directors**

Following the 2007 Forum program, the Coalition will hold its first Annual General Meeting as a corporation and hold elections to install CCC's first elected Board of Directors.

The number of Directors will total up to eighteen and not less than ten with both group and individual representatives. Director terms will be staggered from one to three year terms. Nominations are now being accepted.

1. The deadline for forwarding written nominations from members in good standing and seconded by members in good standing to the CCC office, is September 14, 2007.
2. The recommended slate of the Board Development Committee, and those who have been nominated in writing prior to the annual meeting shall stand for election at the AGM on October 26, 2007.
3. An election by ballot will be held if necessary.
4. To be eligible to vote, one must be a member in good standing for a minimum of four weeks prior to the Annual General Meeting.

A membership may be purchased using the Forum 2007 registration form on page 10.



*The Carolinian Canada Coalition connects hundreds of groups and individuals across southwestern Ontario to protect and restore the unique nature and healthy landscapes of the Carolinian Life Zone, Ontario's most ecologically diverse region.*

**We invite submissions of articles for the newsletter. For editorial guidelines, please contact: [newsletter@carolinian.org](mailto:newsletter@carolinian.org).**

**Subscribe to our free, monthly on-line CCC ECO-NEWS, and you can receive (and post) updates on events and projects across Carolinian Canada. To subscribe, send an e-mail to [enews@carolinian.org](mailto:enews@carolinian.org)**

Carolinian Canada News, Fall 2007

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Editor: Lorraine Johnson

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**ERRATUM:** On page 9 of the Fall 2006 newsletter, the photo of a Cucumber Magnolia flower was misidentified as that of a Tulip-tree flower. Apologies to the photographer and to our readers.

# Unique Niagara Natural Gems Recognized

## Provincial and Municipal Governments Celebrate Carolinian Canada Sites

Good Friday, April 6<sup>th</sup>, was a cold and blustery day with frequent snow squalls, but the weather didn't stop a small crowd from gathering as heritage plaques marking two natural gems in the Niagara Region were unveiled.

Surrounded by hardwood forest on the lip of the Grimsby-Winona Escarpment, people congregate every year to watch hawks and other raptors fly overhead on their spring migration. This year, the Beamer Hawkwatch event was enlarged to include a celebration marking the stewardship efforts of two Niagara communities.



THE ONTARIO  
TRILLIUM  
FOUNDATION



LA FONDATION  
TRILLIUM  
DE L'ONTARIO

Grimsby – Winona Escarpment and Beamer Valley, and the Willoughby Clay Plain near Niagara Falls are two of five Carolinian Canada Signature Sites located in Niagara Region. Jim

Bradley, Minister of Tourism, Culture and Recreation, Tim Hudak, M.P.P. Erie-Lincoln, Bob Bentley, Mayor of Grimsby, Doug Ransom, Chairman of the Niagara Peninsula Conservation Authority, and Gordon Nelson, Chairman of the Carolinian Canada Coalition, all helped to commemorate this event by describing the unique natural features of the two areas and applauding local and regional efforts to preserve them.

These two natural areas contribute significantly to the health of the local landscape. The Grimsby-Winona Escarpment and Beamer Valley site is one of the most extensive escarpment forests in the Niagara Region. Here, Forty Mile Creek cascades over two large waterfalls and trails offer spectacular views of the valley. Rare Carolinian birds such as the Tufted Titmouse and Louisiana Waterthrush breed in the forests and tens of thousands of hawks migrate overhead between March and May.

The Willoughby Clay Plain near Niagara Falls is one of the largest forest and wetland complexes in the eastern Niagara Peninsula, and includes Carolinian trees such as Swamp White Oak, rare Pin Oak, and Pignut Hickory. This natural area also serves as a significant water source for Tee, Usshers, and Black Creeks, which flow through surrounding farmland.

*Each site has a unique story to tell*

In 1984, the Carolinian Canada Coalition identified 38 critical, natural areas in Carolinian Canada that remained unprotected. Building on generations of good stewardship by far-sighted individuals and communities at these sites, considerable effort has been dedicated to their continuing conservation by landowners, community groups, and agencies. Each site has a unique story to tell. The Carolinian Canada Heritage Plaque project celebrates these stories and the natural and cultural legacy that we have inherited.



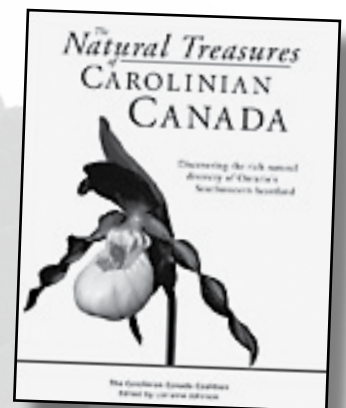
*The mood was celebratory at the unveiling of two Carolinian Canada Signature Site plaques in the Niagara Region.*

## HOT OFF THE PRESS!

### CCC Contributors Create First Major Book About Carolinian Canada

The Carolinian Canada Coalition is thrilled to announce that our long-awaited book, *The Natural Treasures of Carolinian Canada, Discovering The Rich Natural Diversity Of Ontario's Southwestern Heartland* will be published this fall by James Lorimer & Company. Edited by Lorraine Johnson and with essays by well-known scientists and naturalists, this fully illustrated book includes more than 100 colour photographs of the flora and fauna of the region.

CCC was overwhelmed by the generosity of photo and text contributors in developing this project over the past two years. The result documents southwestern Ontario's rich biodiversity, intense challenges and strong conservation community. It will be an important reference for years to come and useful for building awareness. Beyond the science, this book invites you to explore your region through the perspective of experts who have an intimate connection to Carolinian Canada's unique nature. Kevin Kavanagh and Steven Price, involved in the early work of CCC, provide a introduction to the zone, highlighting the diverse landscape. Unique plants, forests, prairies and wetlands are described by leading botanists Wasyl Bakowsky, Gregor Beck, Allen Woodliffe and Deborah Metsger. The great diversity of animal life from mammals to mussels is portrayed vividly by specialists in each field, Sandy Dobbyn, Jon Mccracken, Michael J. Oldham, Shawn Staton, Alan Dextrase and Paul Pratt. Notes on caring for nature on the edge and human footprints in Carolinian Canada are provided by Tom Beechey, Michael Troughton, William Deyoung, Ric Symmes and Gordon Nelson. This book captures decades of experience in the field, and will inspire readers to support the conservation of our important natural heritage.



Please join us for the *Natural Treasures* Book Launch on October 26, 2007 at 4:30 pm, following the Coalition's AGM in London, Ontario. Lorraine Johnson and other contributors will be on hand for signing. Copies 'hot off the press' will be available at the launch or in bookstores in October; copies may also be ordered from Carolinian Canada Coalition. The cost is \$34.95, payable by cash or cheque to the Coalition. (You may use the membership form on page 10 to order.) CCC recognizes and thanks the many volunteers and contributors who made this project successful including Lorraine, the CCC book committee and the Nature Conservancy of Canada for their financial support.



# Dr. Troughton's Passion

## A Heritage Landscape Guide for the Thames

Residents and visitors of the Thames Watershed will benefit from the legacy of Dr. Michael Troughton. Before his passing, Dr. Troughton's personal passion was the development of the Thames Watershed Landscape Guide. He initiated a partnership between **Carolinian Canada Coalition** and the **Thames Canadian Heritage River Committee** (TCHRC) to publish it in 2008. His work is an important legacy for us all.

In his words, "The Thames Watershed Landscape Guide will increase active appreciation for the unique natural and cultural features of the Thames, a heritage river and major watershed in Carolinian Canada." The guide, authored by Troughton, DeYoung and Quinlan, covers six major landscapes and describes over 45 sites to encourage exploration of the watershed by residents and visitors alike. The watershed is home to over half a million residents and major centres including Chatham, London, Stratford and Woodstock, as well as many rural municipalities.



Michael Troughton

The lighthouse at the mouth of the Thames River at Lighthouse Cove is a fitting symbol of the Guide, tying together the cultural and natural history of the Thames landscape.

The Guide supports the goals of both organizations to promote understanding of the rich heritage of the Carolinian Life Zone. It follows Landscape Guides developed for other areas, including the Grand River Watershed that has been eagerly adopted by schools and other target audiences. Bill DeYoung, who worked closely with Dr. Troughton, is coordinating the project and funding is provided generously by the Ontario Trillium Foundation, an agency of the Government of Ontario.



### Carolinian Canada Student Research Program

#### CALL FOR APPLICATIONS FROM POTENTIAL EMPLOYERS

Is your group involved in a project that can contribute to the understanding of stewardship in Carolinian Canada?

**Carolinian Canada Coalition** and the **University of Waterloo** invite potential employers to apply for 50% cost-sharing in our 2 year pilot project to involve youth in targeted stewardship research such as:

- environmental planning
- natural areas management
- habitat restoration
- species at risk

Students will be hired by successful employers from the UW Faculty of Environmental Studies co-operative education program. Up to a \$5,000 match is available for each 4 month work term. Application forms and deadlines are given at [www.carolinian.org](http://www.carolinian.org).

(continued from page 1)

### Bee Trouble

Beyond the documentation of decline, the implications of Colla's research are not yet clear, and she plans to continue her research at the PhD level by looking specifically at the potential threats to native bumblebees such as habitat loss and pesticide use.

As for the effects of bumblebee decline on plants, particularly in terms of pollination, this, too, remains a field of study full of question marks. "For the majority of the flora of Canada, we don't yet know what species are required for pollination," says Cory Sheffield. Adds Sheila Colla, "A lot of studies don't differentiate between plant visitors and plant pollinators." However, Sheffield points out that as far as general pollinators go, "bumblebees are the best it gets."

"Many of our spring flowers are visited by bumblebees," says Colla. "Most other bee species come out later in summer. Bumblebees come out early and forage until first frost. In early April and late October, bumblebees are some of the only bee species around."

While much research remains to be done on specific relationships between pollinators, particularly bees, and plants, recently released general studies paint a disturbing picture. According to an October 2006 report by the **National Academy of Sciences**, "Status of Pollinators in North America," "Long-term population trends for several wild bee species (notably bumblebees), and some butterflies, bats and hummingbirds are demonstrably downward." NAS's status report followed closely on the heels of a study published in the April 2006 issue of *BioScience*, which estimated the economic value of the pollination services provided by native wild insects—almost exclusively

bees—in the U.S. to be \$3.07 billion annually.

Says Laurence Packer, "It's about time that people woke up and smelled the honey."

For information on the **North American Pollinator Protection Campaign**, visit [www.nappc.org](http://www.nappc.org).

### Student Award Leads to Win, Win, Win

When Patti Leather of **rare** interviewed Lauren she knew she had found her candidate, and Lauren liked what she heard about the job. The Carolinian Canada Coalition had received several applications from employers with excellent projects, but **rare** was the best fit with the criteria for the student award. Lauren's acceptance of the job sealed the deal.

Founded in 2001, **rare Charitable Research Reserve** is a non-profit organization that owns and stewards 913 acres of land along the Grand River in the heart of Waterloo Region. Home to an exceptional diversity of species and ecosystems, this environmentally invaluable landscape is also the site of a unique mix of scientific research and community involvement.

Lauren has been crisscrossing the **rare** grounds this summer, tracking down invasive species on the property and reporting on their location, abundance, and impact. Previous brief surveys of the reserve have indicated the presence of a number of alien species including Common and Glossy Buckthorn, Garlic Mustard, Japanese Barberry, and Scot's Pine. Of particular interest are Himalayan Balsam and Flowering Rush, both of which have established small colonies on the property. Lauren will also be developing recommendations on how these species should be managed in the context of a protected area.



# Fighting Back: Windsor's Urban Forest

## Emerald Ash Borer Raises Awareness

by Lorraine Johnson, Editor, Carolinian Canada newsletter

Life is tough for urban forests everywhere, but the challenges in Windsor are particularly acute. The city is expected to lose more than 6,000 ash trees, or 10 percent of the street tree population, to Emerald Ash Borer. (Approximately 4,500 ash trees have died in Windsor to date.)

"Emerald Ash Borer has really sparked people's awareness about trees," says Bill Roesel, manager of forestry and horticulture for **Windsor's Parks and Recreation Department**. Added to this is the fact that forest cover is so low in Essex County: "We have more forest cover in the city of Windsor than in the surrounding region," notes Roesel.

In response, Windsor has embarked on a number of proactive tree projects in the last few years. "We used to plant approximately 1,000 street trees a year," says Roesel, "but this year we probably planted about 2,500 to 3,000 as part of our efforts to replace the ash trees lost to Emerald Ash Borer."

Many competing factors are taken into account to determine the best replacement trees for Windsor's streetscape, according to Roesel. "Trees that grow quickly and are very brittle, like Manitoba Maple and poplars, just don't stand up to the storms we have down here in Tornado Alley, so we have a policy not to plant them." What the city *does* plant is native trees: "We try to plant as many Carolinian species as we can," says Roesel, "and we've had good success with Kentucky Coffee-tree, Hackberry, and Tulip-tree." However, Roesel notes some constraints. The native Honey Locust, covered in thorns, is not used, due to liability concerns. And Redbud, with its low-branching structure, is also out, as it affects street sightlines.

The city has started its own tree nursery to repopulate the urban forest. "We're growing about 6,000 trees in our nursery—Pin Oak, Bur Oak, Red Oak, and other Carolinian species," says Roesel. While he hasn't yet calculated the economic value of the tree nursery, Roesel expects that the project

*"We enlist homeowners  
so they take ownership"*

will save the city money. "We're hoping that it will be cheaper, but that's not the only reason we're doing this. Another big reason is that we'll get all the environmental benefits [of carbon sequestration] while the trees are growing in our nursery." As well, the city is able to grow the species it wants, rather than depending on nursery availability, and the city has control over

the genetic source of the seed: "At least half of the seedlings we're growing are from seeds collected from local trees," notes Roesel.

A federal government skills development program covers the cost of most of the labour for the nursery, offsetting the city's costs. "The nursery has worked out well for us," says Roesel.

Just as important is the role that Windsor citizens are playing in the city's reforestation efforts. When a street tree is planted, the city leaves a notice on adjacent homeowners' doors, asking them to do follow-up irrigation. "We enlist homeowners so they take ownership," says Roesel, noting one unexpected silver lining in the Emerald Ash Borer cloud: "There's an increased understanding of the importance of trees in our urban environment."

## BROWN'S ROAD ALVAR

### Pelee Island Gem

The **Nature Conservancy of Canada** (NCC) has launched a campaign to raise funds needed to secure 417 acres of rare alvar and savanna on Pelee Island. The Brown's Road Alvar property, which contains one of only two known occurrences of Chinquapin Oak Nodding Wild Onion Alvar in the world and one of the last populations of the endangered Blue Racer snake, is on the northeast portion of Pelee Island, near Lighthouse Point Provincial Nature Reserve. Of the total project budget of \$4.7 million, NCC still needs to raise just over \$600,000 by February 2008. To make a donation or to find out more about Brown's Road Alvar, visit [www.natureconservancy.ca](http://www.natureconservancy.ca) or call 1-866-281-5331.



Blue Racer by Allen Woodliffe



Nodding Onion by John Ambrose



Blue Ash leaves by John Ambrose



# Thames Talbot Land Trust

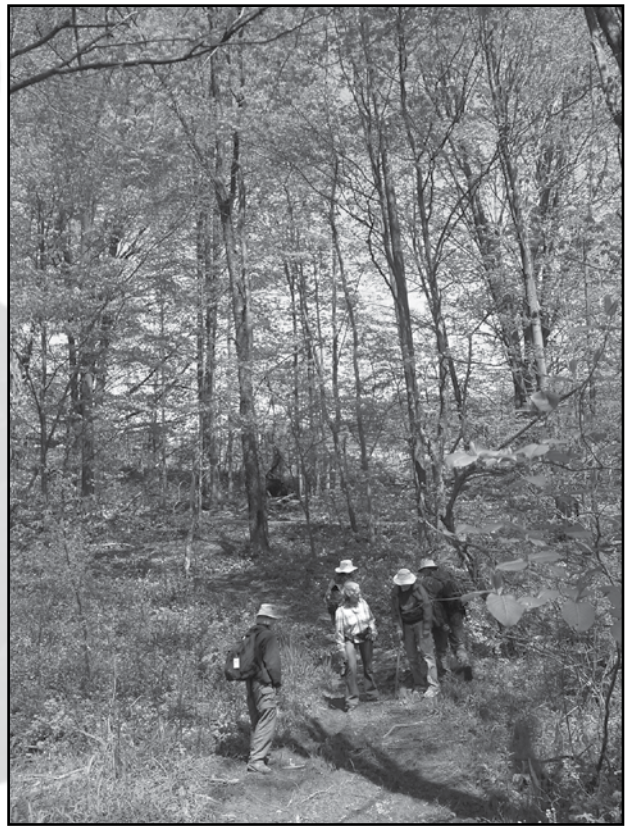
## SAVING JOANY'S WOODS

Joany's Woods is one of the remaining natural gems in Middlesex County. The 367-acre site on the Ausable River near Sylvan has been a favourite spot for hikers and nature lovers for many years. Following the recent death of its owner, the property went up for sale. There was great concern within the conservation community that the property might be sold for development or logging, but the **Thames Talbot Land Trust (TTLT)** came forward and, with great cooperation from the Estate, was able to negotiate an agreement to purchase the property.

"This is one of the largest forests remaining in Middlesex and we couldn't let it slip away," says Don Gordon, the Trust's Executive Director. "Now we need to call upon the community to help us raise the purchase price so that this precious asset can be saved for future generations."

Since the Campaign to Save Joany's Woods was announced in January by the TTLT, several major funding commitments have been received. Leading the way is the **Ivey Natural Lands Legacy**, which will match every dollar raised through the campaign towards the goal of \$660,000. The **HIVA Foundation of Toronto** has contributed \$10,000, and the **Ausable Bayfield Conservation Foundation** has contributed \$15,000. The **Mcllwraith Field Naturalists** of London are providing \$94,000 from the Helen and Spencer Inch Bequest, and the **EJLB Foundation** has added \$25,000. Most recently the TTLT was approved for \$237,500 from the **Ontario Greenlands Program**, a joint initiative between the province and **Nature Conservancy of Canada**. Perhaps the best news, though, is that TTLT has received scores of individual and private gifts as the community has rallied to this campaign.

To learn more about Joany's Woods or to contribute to the campaign, visit the TTLT's website at [www.ttl.ca](http://www.ttl.ca) or call (519) 858-3442.



*Joany's Woods is part of the Ausable River Valley, which scientists have identified as one of the most important natural sites in the Thames Talbot region.*

## Newport Forest Gift

Future generations of Canadians have received a precious gift—the Newport Forest, a 110-acre property on the Thames River near Wardsville. This is the newest preserve of the **Thames Talbot Land Trust (TTLT)**, thanks to the generosity and foresight of Kee and Pat Dewdney of London, who donated their treasured Newport Forest to the TTLT. The Trust will hold the land in perpetuity and manage it according to a conservation plan developed with the Dewdneys. Kee and Pat see their gift to the TTLT as a seed that will blossom over time. Explains Kee, "The TTLT has more resources to protect the land than I

*"You can sit on the sidewalk and complain, or you can do something to make a difference"*

have. I hope people see the long-term value in having an organization like the Thames Talbot Land Trust to conserve the land."

TTLT's executive director, Don Gordon, adds that, "The Land Trust movement is the 'can-do' element of the conservation crowd. Independent of government, these committed individuals are taking steps to protect what is best in their communities. You can sit on the sidewalk and complain, or you can do something to make a difference—we choose to make a difference and you can, too." For further information visit the Thames Talbot Land Trust's website at [www.ttl.ca](http://www.ttl.ca).



*Newport Forest, on the south side of the Thames River near Big Bend, consists mainly of lowland forest with some upland forest, meadow, ravine slopes and bluff forests, and floodplain. This aerial view is looking north towards Skunk's Misery.*





*The Naturalized Habitat Network's backyard certification sign includes a Cedar Waxwing, a bird that responds to birdfeeders but also requires a landscape complete with native trees and shrubs.*

## **Certifiable Success**

### **Backyard Naturalization and Empowerment in Essex**

by Dan Bissonnette, Program Coordinator, Naturalized Habitat Network

In 2001, the **Naturalized Habitat Network of Essex County & Windsor** was launched as a pilot program by **Point Pelee National Park**. Our organization was created to assist area residents with information on landscaping with native plants, attracting wildlife, and other aspects of naturalization. In the past six years, this organization has attracted significant interest from small-scale property owners.

The unique types of projects undertaken on these relatively small properties are referred to as naturalized landscapes. Compared to ecological restoration projects, they typically differ in their scale and often

developed a certification program. Although we had researched a variety of certification programs, we were determined to develop one that best reflected our own principles and our region's unique flora and fauna.

Besides measuring our project's effectiveness, certification allows us to acknowledge the efforts of our members who have made a significant contribution to the environment. To signify this accomplishment, we award a certificate, as well as a durable yard sign. Overall, our certification criteria offer an attainable goal for our participants while presenting a friendly challenge to strive for even more in their landscape efforts, as



*"We have invited everyday homeowners to roll up their sleeves and take an active role in the restoration of our natural heritage"*

include elements of traditional landscape design. Despite these obvious differences, naturalization shares some common principles with ecological restoration, with an emphasis on regionally native plants, attracting wildlife, and a strong sense of environmental stewardship.

Assisting individuals with properties that are typically less than one hectare in size has brought its own challenges. For example, after providing instruction to our participants through courses and seminars, we needed to find a way to gauge the effectiveness of our training. To begin with, there was often a reluctance, or perhaps modesty on behalf of homeowners to publicly showcase their results. Secondly, we soon found that no two naturalization projects are alike, reflecting a wide range of size, habitat types, and personal taste.

In spite of these challenges, we needed some means to measure our organization's effectiveness as a tool for change. To address this, we



*Vic Bernyk's Amherstburg property consisted of lawn a few years ago, but is now a diverse landscape with a pond and a wildflower meadow.*

well as in their perceptions. Since introducing this program, we have certified more than forty home landscapes.

In addition to its obvious benefits, our certification program has allowed us a unique perspective into the complexities and benefits of naturalization. For example, because these smaller scale projects often receive more attention and planning, we have observed that they typically have more proportionate species biodiversity than their larger restoration counterparts. These smaller projects also receive more personal care and, as a result, have very high species survival rates.

Our certification program and our related educational resources have invited everyday homeowners to roll up their sleeves and take an active role in the restoration of our natural heritage. In doing so, we have helped empower people from all walks of life to make a positive contribution to our Carolinian heritage.

## **How are you Greening Carolinian Canada?**

### **Send Us Your Stories!**

*Thousands of people across Carolinian Canada are facing similar conservation challenges. Your experience can inform and inspire others and sharing our stories makes our conservation community stronger. Send us notes and photos about your interesting project, conservation success, innovative idea, dedicated volunteers or favourite natural area to [newsletter@carolinian.org](mailto:newsletter@carolinian.org).*

# Species @ Risk

By Heather Webb,  
Biodiversity Partnership Coordinator,  
Bedfordshire & Luton Biodiversity Partnership (UK)

## Bird's Foot Violet *A Showy and Explosive Plant*

*"I consider that you are bound to class him as nice, Miss Alan, after that business of the violets."*

*"Violets? Oh dear! Who told you about the violets? How do things get round? A pension is a sad place for gossips."*

E.M. Forster,  
*A Room With a View*

*Viola pedata* is no shrinking violet. Every feature of this little flower is on display. It is considered by many to be one of the showiest violets. Surprisingly, though, Bird's Foot Violet was actually named for the shape of its leaves, which usually have three lobes. The flowers themselves are large and come in a range of colours, from pale blue to dark lilac. The stamens within the flowers are also large, and are bright orange. Each spring the plant holds up its gorgeous blossoms, presenting them for all to admire.

In Ontario at the northern edge of its range, Bird's Foot Violet lives in oak savanna habitats. Very little oak savanna is left, however, and there are only five Canadian Bird's Foot Violet populations left. Its American range includes most of the eastern States, where it thrives in sandy, rocky or even clay soils. It can be found on hillsides, roadsides and open woods. One thing it cannot stand is too much shade (perhaps it wilts

*...with so few populations remaining,  
cross-pollination may be a tall order*

from lack of attention). Oak savannas are maintained by ground fires, which destroy taller plants that would block out the sun.

In Canada, Bird's Foot Violet has suffered decidedly from habitat loss. But its own lifestyle has dealt it a second blow. *Viola pedata* cannot be transplanted successfully. That's not all: it's also the only North American violet species that cannot self-pollinate. With so few populations remaining, cross-pollination may be a tall order for the bumblebee and butterfly pollinators on which the plant relies.

When it does manage to set seed, though, the results are explosive. When mature, small copper-coloured seeds burst from a seed capsule. They can be hurled up to 50 centimetres away – not bad for a plant only a few inches tall! Some of the seeds are picked up by ants and brought to their nest. This helps protect the seeds from predators. It also increases their chances of sprouting. Without ants, the Bird's Foot Violet would be in dire straits indeed.



P. Allen Woodliffe

Bird's Foot Violet  
*Viola pedata* ("violet" + "footed")  
Status: Endangered (COSEWIC), Endangered-Regulated (COSSARO)\*

## Violet lore:

- The colour of Elizabeth Taylor's famed violet eyes results from folds and inclusions in the iris, and is caused by the rarest of the human eye colour genes.
- Rhinebeck, New York, is considered to be the violet capital of the world.
- A necklace of violets is said to protect the wearer from "deception and inebriation."
- In an ancient Near Eastern myth, Cybele – the great mother goddess – loved Attis. Attis was killed while hunting, and violets grew where his blood fell.
- Violets have had different meanings to different cultures. They have stood for humility and modesty, death and mourning, faithfulness, chastity, and fertility.

To learn more about Bird's Foot Violet, check out the following links:

Ontario's Biodiversity: Species at Risk [http://www.rom.on.ca/ontario/risk.php?doc\\_type=fact&lang=&id=54](http://www.rom.on.ca/ontario/risk.php?doc_type=fact&lang=&id=54)

Environment Canada: Species at Risk [http://www.speciesatrisk.gc.ca/search/speciesDetails\\_e.cfm?SpeciesID=209](http://www.speciesatrisk.gc.ca/search/speciesDetails_e.cfm?SpeciesID=209)

\* COSEWIC: Committee on the Status of Endangered Wildlife in Canada

COSSARO: Committee on the Status of Species at Risk in Ontario



# MOSS AND MYSTERIES

## *Researchers and Landowners Look For Elusive Plant in Niagara*

by Kerry McCauley, Species at Risk/Land Stewardship Technician, Ministry of Natural Resources/Niagara Peninsula Conservation Authority

It's tiny, hard to identify, and belongs to a group of species not generally well known, so, not surprisingly, the rare Spoon-leaved Moss (*Bryoandersonia illecebra*) remains a bit of a mystery. But a recent research project is attempting to unravel some of the secrets of this species and, at the same time, encourage stewardship of land adjacent to existing Spoon-leaved Moss populations.

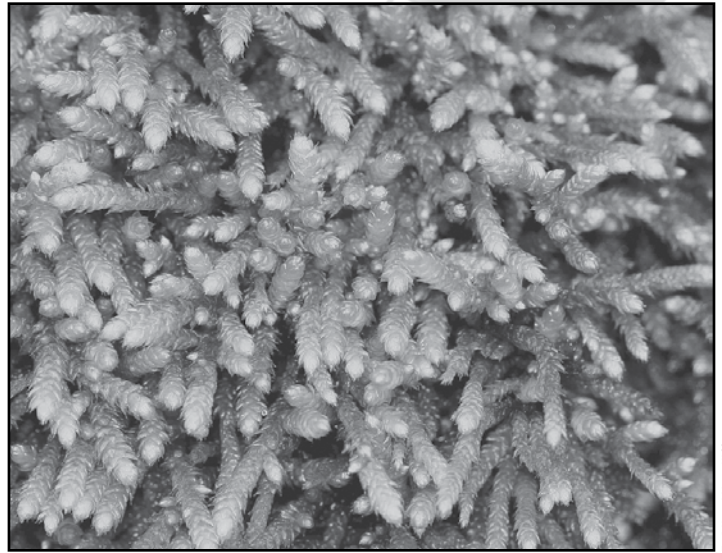
Spoon-leaved moss is endemic to eastern North America, and it occurs mostly in the south. There are currently only three known occurrences of this very rare species in Canada, and they are all in the Carolinian zone. Two of the three known Canadian populations are on public land; one, in Elgin County, is managed by the **Ontario Ministry of Natural Resources**, and the other, in the Niagara Region, by the **Niagara Peninsula Conservation Authority**. The third site, in Essex County, was privately owned, but recently was acquired by the **Nature Conservancy of Canada**, Ministry of Natural Resources, and **Essex Region Conservation Authority** to be managed as a Nature Reserve.

A recent Spoon-leaved Moss research project, funded by the Government of Canada **Habitat Stewardship Program for Species at Risk**, was initiated and led by Kara Vlasman (a Ministry of Natural Resources Species at Risk Biologist currently on assignment with Parks Canada) in partnership with the Niagara Peninsula Conservation Authority (project co-lead, Kim Frohlich, Ecologist). A goal of the project was to conduct intensive field surveys (led by Kerry McCauley) in proximity to the only known occurrence in the Niagara Region in an attempt to find additional populations and shed light on the habitat requirements and vegetation associations of Spoon-leaved Moss.

*“Even though the moss is not a large or charismatic species, it contributes to biodiversity and if it starts disappearing, it indicates a problem”*

According to Kara Vlasman, “Even though this moss is not a large or charismatic species, it's important to do research on it because it contributes to biodiversity.” As Vlasman points out, “Mosses are indicators of certain systems—Spoon-leaved Moss, for example, is reliant on a specific hydrological regime—so if the moss starts disappearing, we need to be aware of that because it indicates a problem.”

An additional component of the project involves landowner outreach and education, aimed at increasing local awareness of the species and improving habitat stewardship and conservation on adjacent lands.



P. Allen Woodliffe

*Spoon-leaved Moss is an attractive yellow-green or yellow-brown moss characterized by robust, shiny, and cylindrical branches (gametophytes).*

*The leaves, as the name suggests, are distinctively concave. It grows in lush mats of freely branching, blunt-tipped gametophytes that resemble the tail of a rat. When the moss is dry, the leaves are closely appressed and overlapping, and when it is wet, the leaves spread away from the branch.*

“Our main intent,” says Vlasman, “was to advise people that there’s an endangered species in their area, and to let them know of the issues and threats. This is important to the recovery strategy for Spoon-leaved Moss.” When the researchers sent out information packages, some nearby landowners responded with interest in future field surveys, offering to help look for populations of the moss.

Currently, little is known about the habitat requirements and specific substrate preferences of Spoon-leaved Moss. However, it is thought that this species prefers soil substrates and, in particular, stream banks, although it is known to grow on rocks or tree bases. All of the known populations in Canada grow in flat, low areas that are seasonally exposed to standing water.

To date, despite ongoing surveying efforts, no new populations of Spoon-leaved Moss have been located in Niagara; however, micro-habitat characterization and Ecological Land Classification have been done for the area surrounding the existing population. “Because the Niagara colony of Spoon-leaved Moss is so small, it’s difficult for us to determine with any certainty if the population there is struggling. If we could find other patches, this would give us some insights,” says Vlasman. Thus, it is hoped that continuing search efforts will be successful in locating new occurrences of this very rare moss and that the outreach/education component of the project will help to protect what is left of *B. illecebra* through habitat stewardship initiatives.



# A Scholar and Supporter *In Memoriam*


On March 10, the Carolinian community lost a friend, colleague, and scholar, Dr. Michael Troughton, to cancer at the age of 67. A founding member and most recent Chair of the **Thames Canadian Heritage River Committee**, Michael's knowledge of the Thames, including its geography, agricultural history, and settlement, made him an essential member of the Heritage River Project. His work was crucial to the successful designation of the Thames as a Canadian Heritage River in 2000.

As a geography professor at the **University of Western Ontario** for almost 40 years, Michael amassed an incredible knowledge of the region, which he shared freely. His research and writing on rural built heritage, the rise and fall of agriculture in southwestern Ontario, and on the historical progression of georegions in Ontario has been an inspiration to many.

During the past year, Michael worked with passion to write "A Heritage Landscape Guide to the Thames River," transforming his scholarly research into a tool for social good to help citizens value and protect our natural and cultural heritage. This work-in-progress has been entrusted to friends to complete, and will be a testimony to Michael's commitment and dedication.

## Answering the Call of the Wild Nature Supporters make a Big Difference

**Carolinian Canada Coalition** became incorporated in October of last year and a new strategic plan will be launched at our AGM this year. The plan is ambitious--to inform, inspire, and guide thousands of allies for nature conservation and healthy landscapes. CCC's programs will help to make nature conservation a top priority in many communities and sectors to make real gains in biodiversity protection and restoration. In order to build a sustainable organization to support this work, CCC launched its first formal call for funds from members in January. Many thanks to the donors listed here:

<p><b>Nikki May</b>  <b>Gordon Nelson</b>  <b>Peter Banks</b>  <b>Doris Kanter</b>  <b>North-South Environmental Inc.</b>  <b>George Francis</b>  <b>Anne Redish</b>  <b>Gordon Catterson</b></p>		<p><b>Brenda Lorenz</b>  <b>Mary-Jean Page</b>  <b>Andrew Stewart</b>  <b>Alice Casselman</b>  <b>Jim Oliver</b>  <b>Angus McLeod</b>  <b>Scott Teasell</b>  <b>11 Anonymous Donors</b></p>
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## BECOME A MEMBER

Name: \_\_\_\_\_ Group: \_\_\_\_\_

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**Membership:**  \$10 Student     \$20 Individual/Family     \$50 Organization    \$ \_\_\_\_\_

**Charitable Donation:** Double your Membership & show that Conservation Matters!    \$ \_\_\_\_\_

**CCC Forum Registration** (October 26, 2007 - London, Ontario):  \$50 Member  
 \$60 Non-Member     \$40 Student/Non-Profit Volunteer     \$70 After October 1    \$ \_\_\_\_\_

**RSVP:** Reception, AGM, Book Launch, Conservation Awards (4 pm) # \_\_\_\_\_    *No Fee*

**Book Order:** *Natural Treasures of Carolinian Canada* (\$34.95) # \_\_\_\_\_    \$ \_\_\_\_\_

**Total** \$ \_\_\_\_\_

Make cheques payable to: **Carolinian Canada Coalition**  
 1017 Western Rd., London, ON N6G 1G5  
*(Credit Card donations are accepted on-line)*

**Spread the conservation message. Provide Carolinian Canada News to your office, group or community. Request bulk copies from [office@carolinian.org](mailto:office@carolinian.org).**



# The Back 40

## ELGIN LANDOWNERS PROFILED

The **Carolinian Canada Coalition** recently launched the third in a series of factsheets to profile local landowners working to conserve nature and species at risk. *Caring for Nature in Elgin* is a colourful and informative guide for landowners and communities. The publication features local landowners who are leaders in managing the valuable and unique natural heritage of Elgin. It explains how land managers, including farmers, are protecting the health of local communities by conserving habitat.

“The publication of this factsheet is one step in a Big Picture Outreach project,” explains Nikki May, project coordinator for the Coalition. The Carolinian Canada Big Picture is a vision for a healthy, balanced, and sustainable landscape in harmony with current land uses. May worked with

*“Factsheet provides hot links to on-ground conservation partners”*

reforested extensive tracts of their 120-ha farm, as well as putting in prairie and wetland habitat, while the Twinems have planted 28,000 trees on their property. John Johnson and his family are restoring woodland and Northern Bobwhite habitat to the marginal land on their farm. “Landowners who take care of habitat in Elgin and the rest of Carolinian Canada are protecting air, water, and soil quality for everyone,” says Michelle Kanter, Executive Director of the Coalition. “They are leading the way in conserving resources for human and wildlife communities.”

### The Elgin Stewardship

**Council**, Bernie Solymar and many local stakeholder groups to develop the publication. “The factsheet will be useful for landowners who have been thinking about a habitat project but could use some good ideas about how to start.”

Thanks to funding from **Environment Canada’s EcoAction Community Funding Program**, the factsheet tells the stories of landowners who are making a positive difference. The Roberts, for example, have managed their extensive woodlots sustainably for decades. The Millers have reforested extensive tracts of their 120-ha farm, as well as putting in prairie and wetland habitat, while the Twinems have planted 28,000 trees on their property. John Johnson and his family are restoring woodland and Northern Bobwhite habitat to the marginal land on their farm. “Landowners who take care of habitat in Elgin and the rest of Carolinian Canada are protecting air, water, and soil quality for everyone,” says Michelle Kanter, Executive Director of the Coalition. “They are leading the way in conserving resources for human and wildlife communities.”



Forests for Life by Mark Emery

*The Carolinian Canada Coalition thanks the following funders for their generous support of this project: Environment Canada’s EcoAction Community Funding Program; TD Friends of the Environment; Elgin Stewardship Network; Ontario Trillium Foundation.*



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Environment  
Foundation**

# Caring For Nature in Carolinian Canada

## Linking Landowners to Stewardship Resources

**Carolinian Canada Coalition’s new factsheet series is an important tool to link landowners and stewardship groups. Together with local stakeholders in each area, we are promoting a strong and unified message for conservation that will increase habitat and species protection across the Big Picture landscape in core natural areas, linkages and supporting landscapes. This series:**

- Is for landowners who want good ideas about how to start a habitat project
- Offers a wealth of inspiring stories about how people are helping wildlife
- Takes some of the mystery out of protected Species at Risk
- Highlights Big Picture guidelines and best practices for owners
- Focuses on managing habitat for enjoyment and a sustainable income
- Was developed with input from dozens of local stakeholders
- Provides hot links to on-ground conservation partners
- Profiles leading landowners
- Will be distributed to all rural households and through local distribution networks
- Brings together information from many sources, so it can save time for landowners

*Caring for Nature* factsheets are provided free for stewardship outreach projects (as available). To get involved in your area, contact the **Carolinian Canada Coalition**.





# Exploring the Nature of Climate Change

*Implications for the Unique Nature of Southwestern Ontario*

**Friday, October 26<sup>th</sup>, 2007  
London, Ontario**



**CAROLINIAN CANADA COALITION FORUM 2007**

Register at: [www.carolinian.org](http://www.carolinian.org) or call: 519-433-7077

Ellen Schwartzel, Senior Policy Advisor, Office of the Environmental Commissioner of Ontario  
Dr. Gordon McBean, Don Maclver, Chris Lemieux, Linda Mortsch, Dawn Bazely, Barb Boysen,  
Patricia Rhoads, Dr. Paul Gray, Scott Peck, Ron Casier & many more...

## Research

**Climate Change Effects in Carolinian Canada**  
Great Lakes; Species at Risk; Parks; Rural Communities

## Stewardship

**Best Practices for an Uncertain Future**  
Forests; Invasive Species; Tree Planting

## Planning & Policy

**Adaptations & Benefits of Green Infrastructure**  
Municipal; Provincial; Federal

## Community Action

**Innovative Local Leaders facing Global Issues**  
First Nations; Youth; Landowners; Urban

## Participants

Community Leaders, Planners, Landowners, Decision-makers, Rural & Urban Residents, Researchers,  
Activists, Teachers, Gardeners, Scientists, Tree planters, Foresters, Ecologists, Outdoor Recreation & ...

**Expand Your Knowledge    Grow Your Network of Support    Build Your Capacity to Sustain Healthy Landscapes**

**Register Early  
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**DISCOUNTS FOR STUDENTS,  
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### CALL FOR POSTERS

Involved in a **nature & climate change** project? Be part of Carolinian Canada Forum 2007! Email your project description to [conference@carolinian.org](mailto:conference@carolinian.org).

**After the Forum (4 pm)  
ALL WELCOME**

Carolinian Canada Coalition AGM  
First Elections

*Natural Treasures* Book Launch

Carolinian Canada Conservation Awards  
CCC Happy Hour Reception & Cash Bar

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