



the **Bluestem Banner**

Summer 2003

Tallgrass Ontario

Volume 4, No. 3

*To achieve the
identification,
conservation,
management and
restoration of tallgrass
prairie, savanna and
related ecological
communities in Ontario*

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Foundation
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Our members
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For helping with the
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**Tallgrass Ontario
Charitable Registration #
88787 7819 RR0001**

Important News

New Dates!!!

**The 3rd Tallgrass Prairie and Savanna Forum
Now September 5th – 6th, 2003**

See enclosed registration or www.tallgrassontario.org
for more information



Amelia Salgado Jonette Eng Martina Furrer Christine Harrover

The SOS III Team pictured above. Please turn to page 2 to learn more about Tallgrass Ontario's Save Ontario Savannas Project

Save Ontario Savannas – Phase III

by Will Wilson (continued from page 1)

The current yearlong phase of Save Ontario Savannas (SOS) III is off to a flying start this summer with a group of students from Sir Sanford Fleming working with Chris Daniel and Will Wilson. After some acclimatization visits to the wonderful sites at Windsor, Point Pelee, and Pelee Island, our focus right now is repairing and expanding the initial SOS database of tallgrass prairie and savanna sites. We are adding new sites to the database as we discover them, acquiring and analyzing airphotos for each site, and conducting site visits this summer with landowners in the Rice Lake Plains and Middlesex areas.

Site visits are focusing on producing up-to-date ecological data on each tallgrass fragment and adjoining land features, measuring the boundaries of the site, and providing landowners with information that they can use to help maintain their piece of Ontario's natural heritage. As a "Thank You" for their time and effort, every cooperating landowner will receive a membership to Tallgrass Ontario, a professional map of their site produced using our geographic information system (GIS), and an ecological description of their site with

maintenance guidelines and a list of further readings and contacts. Other portions of the province will be visited next year or even sooner, if time and money permit.

The production of a full database of tallgrass sites will help us protect tallgrass prairie and savanna sites for the future. Using the geographical information system (GIS) will help us to analyse sites to insure a more effective level of management. In the future, this work will enable us to implement well-planned restoration programs.

Many of you in Middlesex and on the Rice Lake Plains will be getting letters in the mail fairly soon asking you for up-dated information on your site. If you don't hear from us please contact Chris and/or Will at tallgrass2003@hotmail.com or at (705) 872-8719 for more information or just to get involved. And you don't really need to live only in Middlesex or on the Rice Lake Plains! We welcome all types of information related to tallgrass savannas and prairies: site locations, descriptions, species' accounts and sightings, historical accounts, stories of economic uses, etc. We also just like to talk about tallgrass. Let's all get involved in Saving Ontario Savannas! We look forward to hearing from you.

Tallgrass Ontario – A Primer



The Ontario Tallgrass Prairie and Savanna Association (Tallgrass Ontario) was formed in 1999 to implement the Recovery Plan for Tallgrass Communities of Southern Ontario. The Recovery Plan was jointly developed by World Wildlife Fund Canada and the Ontario Ministry of Natural Resources. Tallgrass Ontario was incorporated as a charitable organization on January 1st, 2002, and had its first Annual General Meeting at the Royal Ontario Museum on April 5, 2002, to mark the opening of the Tallgrass Prairie and Savanna Exhibit in the Biodiversity Gallery.

Tallgrass and Savanna in Ontario

Tallgrass prairies and savannas are natural grassland habitats that contain a great diversity of grasses, wildflowers and animal life. **Tallgrass is one of the most endangered plant communities on earth and identified as a globally imperiled ecosystem.** It provides habitat for a large number of wildlife species, including many that are officially designated as rare at the global, national or provincial level.

(please turn to page 7)

Reintroducing butterflies - Habitat restoration efforts underway *by Gary Lee*

Reprinted from *Recovery Newsletter*, February 2003, with the kind permission of the Canadian Wildlife Service, Environment Canada

The extirpated **Karner blue butterfly** (*Lycaeides melissa samuelis*) is a flagship species for black oak savanna restoration. The destruction of black oak savanna habitat has been so severe that only an estimated 0.02% of the original habitat remains, a significant portion of it in southern Ontario. Today, habitat restoration efforts are underway to ensure the future sustainability of black oak savanna.

As one of the many inhabitants of this rare and unique habitat, the Karner blue butterfly is a key species in education, conservation, and restoration of the black oak savanna. The remaining historical range of the Karner blue in southern Ontario includes High Park (Toronto), Pinery Provincial Park and Karner Blue Sanctuary (Grand Bend), St. Williams Forestry Station (St. Williams), and the Alderville First Nations Reserve (Peterborough).

Many factors have contributed to the species' gradual population decline over the past couple of decades, including habitat destruction, pesticide use, excessive deer browsing, fire suppression, inappropriate habitat management practices, and inclement weather.



Karner Blue Sanctuary
Allen Woodliffe

Since 1992, when the Ontario Karner Blue Recovery Team was established, a number of recovery initiatives have been implemented. From 1994-1997, the Toronto Zoo was successful in conducting a series of captive breeding experiments with a closely related sister species, the eastern-tailed blue (*Everes comyntas*). These experiments formed the basis for devising a bona fide captive breeding protocol that will be applied to rearing Karner blue butterflies.

First, however, the recovery team must gain permission from the U.S. Fish and Wildlife Service to translocate a founding population from the United States.



Karner blue butterfly (Lycaeides melissa samuelis) --
Donald Kirk

Currently, the Toronto Zoo is helping the recovery team revise existing guidelines for habitat restoration and reintroduction. The zoo is also actively involved in securing funding for future restoration and monitoring efforts. Since the late 1990s, the recovery team has undertaken several other habitat restoration initiatives, including selective burning, tree girdling, and microhabitat analysis at Pinery Provincial Park and the Karner Blue Sanctuary. In 1997, the park began annual deer culls, which in the future will coincide with their on-going monitoring efforts.

A microhabitat analysis has been planned for the St. Williams Forestry Station in 2002, and in the near future at the Alderville First Nations Reserve. This data will help identify the nature and extent of habitat restoration efforts required. Restoration efforts at the Alderville First Nations Reserve have begun, and those at High Park have been well underway,

If all goes well, reintroduction of captive-bred Karner blue butterflies may begin at the Pinery Provincial Park and Karner Blue Sanctuary as early as 2005. The recovery team's primary objective is to restore and reintroduce as many Karner blue sub-populations and meta-populations (a collective group of sub-populations interconnected by corridors) to these four habitats as deemed feasible.

Photograph of Karner blue butterfly can be found in the Photo Gallery at www.tallgrassontario.org

Growing Prairie Plants in Local Schools text and photo by Dan Schaefer

In June of 2003, the 'friends of Sharon Creek' were given a flat of False Sunflower (*Heliopsis helianthoides*) for planting at the Sharon Creek Conservation Area. As part of the local Trees for Tomorrow initiative these plugs had been seeded by a grade 3 class from London in February and grown and nurtured at the green house at the University of Western Ontario. The focus of the Trees for Tomorrow project is to provide both a hand-on educational experience for local students as well as providing native trees and shrubs for restoration projects. This winter a few flats of tall grass prairie seeds were sown to provide a



more diverse experience for the students and to produce some additional tallgrass prairie plugs for local restoration projects. Trees for Tomorrow is a collaborative project between local stewardship councils, conservation authorities, municipalities, school boards and other private greenhouses. Long Point Region Conservation Authority has a similar program going on in their watershed. The local TGP seeds for

this project had been provided by the Rural Lambton Stewardship Network.

Dan Schaefer is coordinator, Middlesex Stewardship Committee

The "Demo Garden" at the Sharon Creek Tallgrass Prairie text and photo by Ted Bartholomew

Planted in June of 1999, the Sharon Creek Tallgrass Prairie near Delaware, Ontario, has slowly established itself. Several prescribed burns helped the prairie along and destroyed invading weed species. Even the Common Mullein, which threatened to take over, is almost a memory, as brute strength, fire, and time took their toll on this most noticeable opportunist. Last year was a dry year, as we all remember, but the prairie didn't die, it simply didn't grow as high and lush.

When the prairie was established in 1999, a demonstration garden was planted by the students of Our Lady of Lourdes School in Delaware, and the 'friends of Sharon Creek'. Just a short walk inside the gates of the Sharon Creek Conservation Area, the demonstration garden is located at the north east corner of the main prairie site.



Students from Our Lady of Lourdes at the Sharon Creek Tallgrass Prairie Demonstration Garden – June, 1999.

Arranged to be an orderly example of some of the plants to be found on the main site, it too has obeyed the laws of nature and has become a little less 'orderly' as plants self-seed or send out runners, while other plants have lived out their life span. Still, with appropriate signage, it fulfills its role as a guide to what various plants look like at the current time of the year.

From the Tall Coreopsis (*Coreopsis tripteris*) which has grown to five feet, to the even higher Tall Sunflower (*Heliantus giganteus*) towering over visitors at nine feet, the demonstration garden illustrates the "tall" part of our prairie. And the lush growth of Switchgrass (*Panicum virgatum*), Indian Grass (*Sorghastrum nutans*), Little Bluestem (*Schizachyrium scoparium*), Big Bluestem (*Andropogon gerardii*), and Canada Wild Rye (*Elymus canadensis*) show what the prairie is all about.

Included, too, in the demonstration garden, are various forbs such as Hairy Beardtongue (*Penstemon hirsute*), Canada Tick-trefoil (*Desmodium canadense*), Wild Bergamot (*Monarda fistulosa*), Gray-headed Coneflower (*Ratibida pinnata*), Dense Blazingstar (*Liatris spicata*), Sneezeweed (*Helenium autumnale*), Green Milkweed (*Asclepias viridiflora*), and various asters. And in June of 2003, we added many new plants, including over fifty plugs of False Sunflower (*Heliopsis helianthoides*) grown from seed by Grade 3 students of Middlesex County (see article above). From early spring to late fall, visitors to Sharon Creek Tallgrass Prairie should make the "Demo Garden" their first stop. *Ted Bartholomew is a good friend of Sharon Creek and lives near Delaware, Ontario.*

Greencover Canada – financial assistance to convert land to native grassland species

The Greencover Canada program is a five-year, \$110-million Government of Canada initiative to help improve grassland-management practices, protect water quality, reduce greenhouse-gas emissions, and enhance biodiversity and wildlife habitat. A national program, Greencover Canada focuses on four components:

- land conversion – converting environmentally sensitive land to perennial cover;
- critical areas – managing agricultural land near water;
- technical assistance – helping producers adopt beneficial management practices; and
- shelterbelts – planting trees on agricultural land.

The land-conversion component provides producers with advice and financial incentives to convert environmentally sensitive land to perennial cover. In order to qualify, an individual must be the registered landowner and agree to seed the land with approved perennial plants, and to enter into a 10-year land-use agreement. The land must also meet program criteria based on land quality, land use, and an assessment of environmental sensitivity, as well as other criteria.



The minimum amount of land that Greencover Canada will consider for conversion is 40 adjacent acres on the same quarter section or parcel of land, with a maximum of up to 640 acres. Long-lived perennial species, such as forage, shrubs, and trees, should make up at least 75% of the seed mix. These perennial species can include certain tame forage and native seeds. The Greencover Canada Program does support the use of native species including Indian grass, Big bluestem, Switchgrass and Little bluestem for this program, and provides additional incentives.

If Greencover Canada approves the application, the landowner will receive \$20 per acre for seeding or planting tame forage or trees, or \$75 per acre for seeding or planting native species; and \$25 per acre after establishment of the perennial cover, after Greencover Canada inspects it, and after you sign the 10-year land-use agreement. The deadline for submitting applications in 2003 only is August 1. For each year after to 2006, the deadline is January 31. For more information, go on-line at www.agr.gc.ca/greencover-verdir or by telephone at **1-866-844-5620**.

Prairie burn at Pterophylla, near Walsingham, Ontario (Peter Carson/Mary Gartshore)

The Agro-economic Applications of Tallgrass Species in Ontario

One of Tallgrass Ontario's objectives is to encourage the restoration of marginal lands using tallgrass prairie species. In January 2001, TGO commissioned a research report and literature review of existing and potential uses for tallgrass species on agricultural land in southern Ontario.

The report focuses on applications that would be pragmatic for farmers/landowners and highlights the economic as well as the ecological opportunities and/or limitations of various applications. Information gaps and areas of future research are also identified.

A comprehensive bibliography and guide to websites are included. The report concludes that there are a number of potentially profitable applications of tallgrass species

that could include a complement of indigenous tallgrass species (rather than monoculture applications such as biomass). Low intensity forage grazing, tallgrass seed production and honey production using tallgrass species are all applications that can provide both economic and ecological "returns".

Applications with high ecological value include buffer strips of tallgrass forbs and grasses, which provide opportunities for expansion of tallgrass habitat and connectivity between tallgrass remnants, especially along riparian corridors.

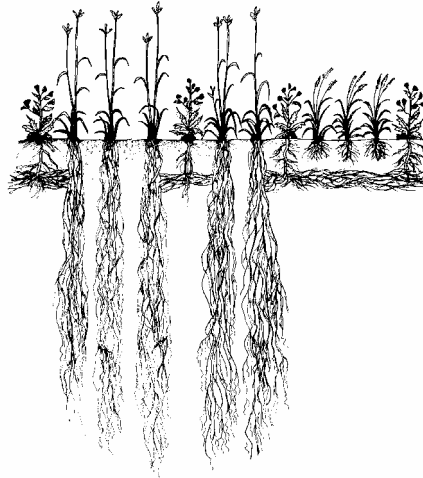
You can download a copy of The Agro-Economic Applications of Tallgrass Species from the Tallgrass Ontario website www.tallgrassontario.org

Create a legacy and receive a tax break today – *Environment Canada's Ecogift Program*

Many Canadians who own ecologically sensitive land have no guarantee that the piece of nature they have cherished for years will be cared for in the future. Through the Ecological Gifts Program, landowners can protect their land, create a legacy and at the same time, may receive a substantial income tax benefit. The estimated value of Ontario ecogifts to date is over \$10 million and represents a wide range of imperiled and rare habitats, such as prairies, alvars, and dunes.

How does this work? Basically a landowner who donates land, a conservation easement or a covenant through the Ecological Gifts Program receives a tax receipt for the value of the donation, which can be used against 100% of their annual income. And the unused portion can be carried forward up to five subsequent years. While a taxable capital gain can be realized in some cases, only 25% is subject to income tax.

Sound good? The process is simple. In Ontario, Environment Canada certifies the ecological sensitivity of the land donation, the fair market value of the donation and that the recipient of the land



donation is qualified. Qualified recipients include land trusts, conservation authorities, the Ontario Heritage Foundation, a municipality or Crown agencies such as Parks Canada. There are plenty of donation options, ranging from an outright gift of the property to a life tenancy agreement to a conservation easement. And

generally the best way to initiate the process is to contact potential recipients and discuss your ideas and interests. These organizations can help with the certification process and help answer any questions. Of course, it is important to seek independent financial advice when you embark on such a transaction.

Private landowners have an important part to play in conserving Ontario's rare habitats. Tallgrass Ontario's Save Ontario Savannas Program, and the Pocket Prairie Project GIS component focus on individual landowners who are interested in learning about, and preserving their rare tallgrass and savanna habitat.

For more information about the Ecological Gifts Program, see www.on.ec.gc.ca/wildlife/ecogifts or contact your local land trust or conservation authority.

*With thanks to Graham Bryan,
Canadian Wildlife Service,
Environment Canada, Ontario Region*

The Nature Legacy Foundation and the Pocket Prairie Project

The Nature Legacy Foundation protects natural environments and wildlife at risk through private sector driven programs that foster positive partnerships with communities, governments and individuals. The Foundation is currently leading a project that focuses on the conservation of a network of key, privately held prairie sites in southern Ontario.

William "Sarge" Sargent, Cathexis Associates, is working with the Nature Legacy Foundation on a contact program throughout Southern Ontario, targeting remnant

prairie and savanna sites in private ownership. The objective is to help landowners protect their own "pocket prairie" with a wide range of land securement options, using the Foundation (and Sarge's) considerable expertise and resources.

Line drawings used throughout
the Bluestem Banner were
created for Tallgrass Ontario by
Judie Shore

The Nature Legacy Foundation is working with the Habitat Stewardship Program and other groups. Tallgrass Ontario is supporting the project, with the help of the George Cedric Metcalf Foundation, by developing a GIS mapping system (see article on page 2 and in the Bluestem Banner, Spring 2003) in conjunction with Save Ontario Savannas Phase III.

*You can contact Sarge at 905-331-5203
or email the Nature Legacy Foundation
at nature.legacy@shaw.ca.*

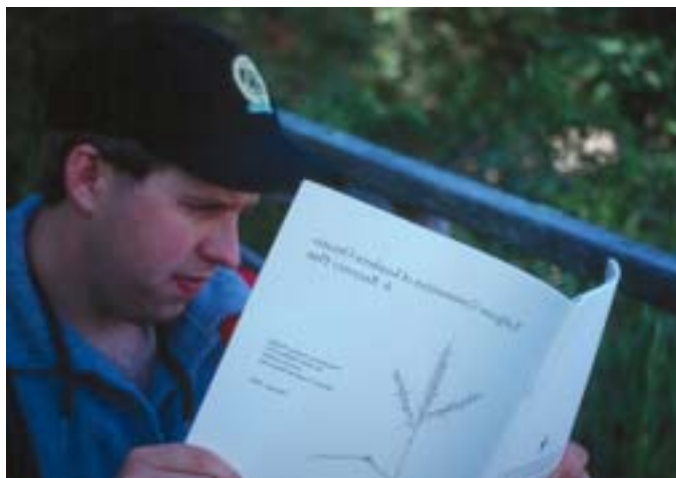
Tallgrass Ontario – continued from page 2

Over the past 200 years, most of this grassland has been converted to farmland or covered by urban development. Some of the finest remnants can be found on First Nations lands, where management by fire and retention of the natural state of the land has been more common. Savanna is even more difficult to find – some of the most accessible sites are now in Pinery Provincial Park (Lake Huron) and Toronto's High Park.

All tallgrass prairie and savannas are not alike - there exists an enormous diversity in both environmental conditions and species composition from site to site. Compared with tallgrass communities in the mid-western U.S., Ontario's communities often have a much higher component of forbs (flowers) versus grasses.

The Natural Heritage Information Centre recognizes six different tallgrass types in southern Ontario, based on substantial differences in site moisture, species associations and landscape. Owing to such diversity, conserving southern Ontario's tallgrass communities as a whole requires the protection of a range of sites representing these differences.

Incredibly diverse assemblages of plants are found in tallgrass communities in southern Ontario. Several grasses form the basis of the plant community, such as Big bluestem and Indian grass, which may grow to greater than two meters in height. These are joined by numbers of forbs - from the tiny yellow star grass to the three-meter high giant sunflower, which bloom at different times of the year, providing continuous bloom from May to November.



Todd Farrell, engrossed in The Recovery Plan

Tallgrass Ontario's Goals

- Improve communication, coordination and information-sharing among those involved in tallgrass community conservation;
- Amass complete information regarding all tallgrass community remnants;
- Establish and expand a network of protected tallgrass community remnants;
- Encourage protection of tallgrass remnants through sound management;
- Encourage restoration and habitat creation initiatives where appropriate to enlarge existing remnants, make linkages and create new habitat;
- Raise public awareness and appreciation of tallgrass communities;
- Reduce significantly the number of tallgrass community species at risk;
- Encourage basic and applied research relevant to tallgrass community conservation.

The key coordinating and policy group of Tallgrass Ontario is the TRAC or Tallgrass Recovery Advisory Committee. This group meets regularly to review our progress and develop new projects and programs to implement the Recovery Plan. Members come from a broad range interests and disciplines and jobs range from leading research projects to landowner visits to proof reading!! Please contact us if you are interested in working with TRAC.

The Board of Directors meets in conjunction with the TRAC. The Board is elected at the Annual General Meeting, and is responsible for carrying out the corporate duties of Tallgrass Ontario, including fiscal and personnel issues related to decisions made by the TRAC. At present there are ten members (listed on the front page) on the Board.

Tallgrass Ontario has been active in implementing programs to achieve these goals over the last three years. Over the next two-year period, we will be revisiting the Recovery Plan. We will be assessing our progress to date, our goals and objectives as well as working to integrate our "community at risk" approach with "species at risk" programs.

You can download a copy of the Recovery Plan from www.tallgrassontario.org

In Print

Thanks to the efforts of John Fischer and Liz Saur at Environment Canada, Planting the Seed – A Guide to Establishing Prairie and Meadow Communities in Southern Ontario, has been reprinted. You can get your copy by ordering through Tallgrass Ontario at www.tallgrassontario.org.

Ted Bartholomew, and 'the friends of Sharon Creek' have produced an identification guide to the tallgrass prairie at Sharon Creek C. A. (see article on page 4). You can request a copy from tallgrassontario@hotmail.com. A small donation would be welcome by the 'friends' to help their efforts at Sharon Creek.

***Conferences & Events***

The 8th Annual Meeting of the Canadian Amphibian and Reptile Conservation Network. The meeting is taking place in conjunction with the Pelee Island Winery Endangered Species Festival, September 11 – 14, 2003. For more information check out www.carcnet.ca

Canada's Outdoor Farm Show, September 9–11, 2003 at Woodstock, Ontario. Part of the program includes an Eco Expo. See www.outdoorfarmshow.com

The 3rd Tallgrass Prairie and Savanna Forum, September 5-6th, Peterborough, Ontario. See the enclosed flyer or check out www.tallgrassontario.org

Contact Tallgrass Ontario:

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London, ON N6E 1L3
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info@tallgrassontario.org
www.tallgrassontario.org

Noted

Go for Green has a series of Fact Sheets on gardening available at www.goforgreen.ca, including Gardening with Native Plants: Meadow and Prairie Gardens.

You can find information and a fact sheet about West Nile Virus at www.region.durham.on.ca.

Lambton Wildlife Inc. is planning a Walpole Island Rare Prairie Plants trip a part of its outdoor program, on August 10th, 2003. Check out all of the activities at LWI on their website www.lambtonwildlife.com.

Deadline for Bluestem Banner Fall issue is September 30, 2003.

**Tallgrass Prairie and Savanna Prescribed Fire Decision Support System**

The Ministry of Natural Resources has designed a system, available on CD, to assist with assessment of candidate sites for tallgrass prairie and savanna prescribed fire restoration and maintenance.

The system can be used for training, teaching and improving communication between prescribed fire practitioners and land managers. The system can also be used to identify areas where information is lacking and future work is required.

And most importantly, it is designed to help determine whether a site is suitable for the use of prescribed fire to meet sustainable ecosystem management goals. Detailed outputs, based on responses to a series of questions about the site, are generated. For more information please contact:

Dave Heaman,
Ministry of Natural Resources
300 Water Street
Peterborough, ON K9J 8M5
dave.heaman@mnr.gov.on.ca

And for more help using prescribed fire to meet your land management goals...

See Planting the Seed – A Guide to Establishing Prairie & Meadow Communities, pages 27 to 29

Download a sample burn and communications plan from www.tallgrassontario.org.

A pamphlet by Wayne R. Pauly, entitled How to Manage Small Prairie Fires can be ordered from www.prairiehabitats.com (\$10)