



the Bluestem Banner



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Tallgrass Ontario

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

Tallgrass Ontario thanks:

The Ontario Trillium Foundation
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Photo Kyle Breault

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Go to www.tallgrassontario.org to download the Bluestem Banner in colour.

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Our website is currently under construction. Watch for the "new and improved" version coming soon!

Prescribed Burn Training Opportunities

Tallgrass Ontario is providing an **email network** to communicate with interested qualified Low Complexity Prescribed Burn Workers (RX100). Information will be **shared** about **upcoming P.B.s** and additional training opportunities.

If you are an L.C.P.B Worker, or know of someone who is, **email Tom Purdy** at tom.purdy@rogers.com with a valid email address.



Look for Tallgrass Ontario prairie plugs at local plant sales events near you this spring.

For more information see article on page 12 of this edition of the Banner.



Tallgrass Ontario now has a presence on [Facebook](#).

The page is called [Tallgrass Ontario Supporters](#) and is open for all those interested in tallgrass prairies to join. We will post upcoming events, links to interesting articles and provide a forum for asking questions and sharing ideas about all things "prairie".

Join up today!

Tallgrass Habitat Feature

The Monarch Butterfly and Tallgrass Prairie –Steve Rankin

“Tallgrass Communities” – also known as tallgrass prairies and savannas are natural grasslands with a great diversity of native plants and animal life including a fascinating diversity of butterflies. All butterfly and moth species, insects collectively known as Lepidoptera, incorporate ‘host plants’ in their lifecycle. Without a host plant the butterfly could not exist. The host plant provides nourishment and resources to the developing larva as it progresses through a fascinating life cycle ending in the formation of a chrysalis from which emerges the adult butterfly.

Tall grass communities contain many species of native plants which provide host plant services to moths and butterflies as well as nectar (food) sources to many different species of insects. Prairie plants such as Rough Blazing Star (*Liatris aspera*) are nectar magnets for many kinds of butterflies. Another native plant found in prairies is the milkweeds (*Asclepias L.*). Milkweeds are the host plant for the mysterious and beautiful Monarch butterfly.



(Male) Monarch Butterfly -*Danaus plexippus*

Milkweeds are an important component of the native and naturalized vegetation communities of Ontario. There are nine species of milkweed found in Ontario. Five species of milkweed are considered rare in Ontario. They are an important nectaring plant for many species of insects. They are found in natural prairie settings, roadsides, old fields, fence rows and agricultural fields. Butterfly Weed (*Asclepias tuberosa*), a native prairie plant has become a popular garden plant. These plants make great additions to back-yard gardens because they provide a window on the Monarch lifecycle and an opportunity for the homeowner to engage in vital conservation work for this insect. Gardeners like them because of their beautiful brilliant orange bloom clusters in June and July.

Every autumn the Monarch undertakes a remarkable migration. Consider an insect weighing a half a gram beginning a journey in the Canadian summer that will take it 3,000 kilometers to a small remote mountainous region in central Mexico by November. When Monarchs migrate south in the fall from Southern Ontario they converge upon a place they have never before visited, an area known as the Monarch Butterfly Biosphere Reserve.



Monarch caterpillar on host plant milk weed

The Monarch breeding range is the vast expanse of the American mid-west, eastern seaboard and southern Canada. Although Monarchs live in temperate regions during the summer, they are essentially a tropical insect. Unlike temperate insects, no life stage of the Monarch Butterfly can survive temperate-zone winters such as we experience in Southern Ontario.

Monarchs have up to four generations each summer; the first generation in Texas in late March and early April. Each successive generation travels a little further north than the

last. Each generation lives about 1 month and seeks out milkweed to lay eggs. It is the fourth and last generation of the summer season that migrates south from Canada. This last cohort known as the Methuselah generation survives for 9 months. Butterflies that overwinter in Mexico re-colonize their breeding range by flying back to Texas in the spring. The Monarch is the only butterfly in the world to make such a long and arduous two-way migration.

The Monarch's unique multigenerational migration spanning the North American continent is considered an *endangered biological phenomenon* which could in the future collapse if present trends are not stabilized and reversed. The primary threat to the Monarch Butterfly is illegal logging in the Mexican wintering grounds which opens the forest

canopy and increases butterfly mortality when bad weather occurs. Removal of the oyamel tree canopy in these forests destroys the delicate microenvironment required by Monarchs in order to survive harsh weather.



(Female) Monarch Butterfly nectaring on milkweed flower

The World Wildlife Fund (Mexico) and the Mexican government are making positive but tentative progress in reducing illegal logging and providing protections in the over-wintering sites. This conservation work has required parallel development of an ecotourism industry which brings in money for the local population providing a financial incentive for them to protect the butterflies and the forest.

These efforts met a major setback in early February 2010 when a once in a millennium flooding event caused severe butterfly mortality in the reserves and extensive damage and fatalities in the towns closest to

the overwintering sites. Efforts to kick start a thriving ecotourism economy that seeks to benefit the butterflies by preserving their wintering sites had been dealt a serious setback.

Monarchs are also threatened by urban sprawl across their breeding range in the United States and Canada and the use of herbicide resistant crops which destroy their host plant - the milkweed. Good records of the numbers and size of the overwintering colonies go back to 1992; there is less complete data for most years going back to the late 1970s.

The overwintering population at the start of 2010 appeared to be lower than observed for any year since the winter colonies became known to science in 1975. While a fluctuating population size appear to be the norm for the Monarch, the eastern population is now suffering consistently higher levels of mortality. There is a small western population what overwinters along the California coast. The western population is also suffering because of habitat loss. These trends of reduced overwintering population size and habitat loss, if it continues could reach a level from which the migration as we have come to know it cannot recover itself.

Despite these setbacks the warm summer experienced in eastern North America in 2010 has enabled the butterfly to rebuild its numbers and produce one of the best September migrations observed in recent years in Southern Ontario. In March 2011, WWF (Mexico) has reported that overwintering numbers have recovered from the 2010 low. The numbers have doubled in size from 2010 but are still well below the long term average for the period from 1994.

Homeowners and school children can play a vital role in Monarch Butterfly conservation by planting butterfly gardens and Butterfly Weed plants in their backyards and school yards. The Monarch Butterfly lifecycle is an [excellent learning tool for biology and science classes](#). Such hands-on study helps develop at an early age an appreciation for our natural world.

Back-yard gardeners in urban settings and farm families can also be important contributors to Monarch conservation efforts by planting butterfly friendly flowers and tending their own small patch of Butterfly Weed and prairie wild flowers.

Steve Rankin is a board member of Tallgrass Ontario. He is retired from the Ontario Public Service and is a land steward in Chatham-Kent.



Monarch Migration Roost at Clearcreek Forest in Chatham-Kent

News from the Field

Tallgrass Prairie: an Ontario perspective and beyond - P. Allen Woodliffe



Dickcissel (Spiza americana)- a sparrow like bird of the prairie grasslands

In Ontario, we celebrate the wonderful prairies that are left at places such as Walpole Island and Ojibway Prairie and rightfully so. Even somewhat smaller remnants such as those at Alderville First Nations and High Park as well as the very tiny remnants including Dutton Railway Prairie and Brantford Golf Course Prairie are to be appreciated.

Tallgrass prairie communities are certainly important, albeit a small part of the Ontario landscape, even historically. There are few places where it was a dominant feature. There are exceptions, perhaps as many as forty thousand of hectares of wet-mesic, black-soil prairie that covered the former Dover Township and the north part of Raleigh Township between Chatham and Lake St. Clair. Today, less than 2 hectares of that remains, and even that was unknown until about 15 years ago on a piece of private property. Very little remains of the thousands of hectares of 'plains' described by Col. Edward Talbot in the Brantford area.

In order to appreciate what remains in Ontario and, even more importantly, to appreciate what the tallgrass prairie biome might have had to offer across the middle part of this continent, it is important to explore far beyond Ontario's borders. I have made it a point to do just that over the last 25 years or so. Often this was in concert with the biennial North American Prairie Conferences (NAPC), occurring as far away as North Dakota, Nebraska and Kansas and of course various states in between.

There is nothing quite like seeing firsthand the diversity and quality in the 100 hectares of the Hayden black soil prairie in northern Iowa that has never been plowed, or the sprawling almost 10000 hectares of The Nature Conservancy's Tallgrass Prairie Preserve in northeastern Oklahoma where several hundred bison

roam; or driving through the tens of thousands of hectares of the Flint Hills of eastern Kansas.



Buffalo in the Wah'Kon-Tah Prairie- Missouri

Most of the NAPC are held more or less in mid-summer, with field trips highlighted by one of the iconic genera of showy prairie wildflower species, *Liatris*, and numerous yellow sunflower species complementing them. They are impressive, to say the least. Prairies in spring are much different, however, and I had only very rarely seen a prairie in spring outside of Ontario. It was for that reason that I have ventured into the heart of the southwestern prairies in either May or June these last three years.

The tallgrass prairies of southwestern Missouri are a 'must' for anyone serious about exploring North America's tallgrass prairies. The booklet "*Public Prairies of Missouri*" lists 76 sites owned or managed by the state Conservation Department, by The Nature Conservancy or by the Missouri Prairie Foundation, and that list is growing every year.



"Treaty Line Prairie"- Missouri

Overall I have been to 114 prairie sites in the U.S., and 52 of those have been in Missouri, appropriately called the 'Show Me' state. In any given year, depending on

the burning regime, some are quite showy while others may be a little shrubbier. Nonetheless, there is always a good variety of spectacular sites, either for their size or for their species diversity. . Needless to say, I have accumulated many photos of these botanical treasures!

Shelton L Cook Memorial Meadow is almost 90 hectares and always showy as it is one of the most botanically diverse sites in the whole state. Diamond Grove is almost 250 hectares and has some spectacular vistas of Indian Paintbrush. Some, such as Golden Prairie, are a National Natural Landmark. In itself, the original Golden Prairie is more than 130 hectares, and with the agreements on adjacent properties, this complex totals approximately 450 hectares. Here, one can stand in parts of it and see prairie for 360 degrees, with little evidence of human intrusion visible in any direction. Wandering through a huge stand of *Echinacea pallida* with Regal Fritillary butterflies flitting about those pale pink flowers is delightful experience.



Echinacea pallida (Pale Purple Coneflower) at the Golden Prairie

Some, such as Friendly Prairie, are comparatively small at 'only' 16 hectares, but well managed with great diversity. Helton Prairie, another small site, is only 12 hectares but is well known for its spectacular colour in June. At the other extreme are Wah-Kon-Tah prairie occupying more than 400 hectares and harbouring Greater Prairie Chickens amongst its expanse and Prairie State Park with almost 1200 hectares of rolling prairie in various stages of quality or restoration. Here there are at least 150 bison roaming about the park, and one shares the trails with them. I have been up close and personal with those behemoths on three occasions, at a more or less safe distance, but that is another story.

The three main agencies working towards preserving the tallgrass prairies of Missouri are the Missouri Prairie Foundation (MPF), The Nature Conservancy (TNC) and the state's Department of Conservation (MDC). Together they own and manage more than 12000 hectares of publicly accessible land in the prairie region. In my experience, the sites owned by MPF are

typically in better shape, due to the staff and volunteers dedicated solely for tallgrass prairie preservation. So next time you are looking for a special vacation, consider some of the majestic prairies of the mid-west! It will ignite, or re-ignite, a passion for prairie!



Regal Fritillary Butterfly- a tallgrass Prairie species nectaring on *Echinacea pallida*



Oenothera speciosa (Evening Primrose) at the Golden Prairie

A bit of History

It may come as a surprise to many, but there is a definite link between the Missouri Prairie Foundation (MPF) and Tallgrass Ontario. The MPF began its legacy in 1966. I first came across the MPF at a display table at a North American Prairie Conference (NAPC) at Moorhead State University in Moorhead, Minnesota, in 1984. The staff, display materials and publications were an inspiration to see what could be done by a group of dedicated volunteers. The seed had been planted! I knew there was a handful of individuals and agencies in Ontario with a serious interest in tallgrass prairie and believed that a more coordinated approach would be beneficial. I saw MPF staff at future conferences and continued to be impressed with that organization.

In 1992, the City of Windsor, Ministry of Natural Resources and Walpole Island First Nation hosted the 13th NAPC at the University of Windsor. In the following year, MNR convened the annual meeting of

the Canadian Council on Ecological Areas in Windsor, also with a prairie theme. I did not want to see all of the momentum gained to carry out these successful conferences lost and so at their conclusion, in giving my supervisors a summary of those events and their benefits we had seen, approached them to secure support to organize a prairie association in Ontario. I was given 'two thumbs up' and so proceeded to discuss the concept with various practitioners, managers and stewardship councils to see what level of interest there was, and virtually all realized the value of a more coordinated effort.

At about the same time, there were a number of species recovery plans underway in Ontario for many species at risk (SAR). Some of my ecologist colleagues and I realized the importance of creating ecosystem recovery plans so that many more SAR would be included. The provincial and regional coordinators at the time were thinking about a coastal sand spit recovery plan and asked for my opinion. I was emphatic that a tallgrass prairie and savanna recovery plan should be top priority, and convinced them to go along with that. They did and this eventually led to the production of the Tallgrass Communities Recovery Plan in 1998 by Lindsay Rodger. The first objective of that initial Plan was to "Set up a Tallgrass Prairie and Savanna Association."

So there is a bit of history! And if you want to know more about the Missouri Prairie Foundation, check out their web site at: www.moprairie.org.

Other plants found in the Missouri Prairies:



Baptisa australis (Blue Wild Indigo)



Callirhoe digitata (Fringed Poppy Mallow)



Opuntia humifusa (Eastern Prickly Pear)



Physotegia virginiana
(Obedient Plant or False Dragonhead)

Tallgrass Habitat Feature

Bumblebees in Prairie Ecosystems –Steve Rankin

No prairie ecosystem would be complete without the bumblebee. Bumblebees are important pollinators and are essential to the reproduction of many prairie plants. A decline in the population of bumblebees means less opportunity for plants to exchange genetic information resulting in reduced reproductive success. Bumblebees are members of the bee genus *Bombus*, in the family **Apidae**. **Apidae** are specialists for feeding on flowers and gathering nectar and pollen. There are over 250 known species existing primarily in the Northern Hemisphere. More than a dozen species are found in Southern Ontario.



Bombus on False Sunflower

There are many myths about bumblebee. They do not live in hives. They live in small nesting colonies of up to 50 individuals and for this reason they do not swarm as honey bees are apt to. They only produce a small amount of honey, just enough for their young.

Bumblebees are not aggressive like honey bees. They will not attack a human unless they are threatened. When a honey bee comes close don't wave your arms widely but stand still. Under the right lighting conditions bumblebees are attracted by brightly coloured clothing. Once the bee confirms that you are not a flower it will move away from you. If a

bumblebee is forced to use its stinger for self preservation they do not die like the honey bee. One of the biggest threats to the bumblebee is a human armed with a spray can of insecticide. Bumblebees are excellent pollinators of gardens and vegetable crops so they should always be encouraged in the garden and on the farm. They are major pollinators of cash crop tomatoes.

Bumblebees prefer scented yellow or blue flowers. The plant provides nectar and pollen to the bee in varying amounts as a reward for pollination services. Some plants can only be pollinated by bumblebees because the plant anthers release pollen internally. The pollen must be shaken loose by buzz pollination or "sonication". Bumble bees are the only animals that perform this behavior. Bumblebees sonicate but honeybees do not.

Foraging

Bumblebees generally visit patches of flowers up to 2 kilometres from their nesting colony. They will also visit the same flower patches every day, as long as nectar and pollen continues to be provided at that location. This habit of the bee is known as pollinator or flower constancy. While foraging for nectar flowers bumblebees can reach speeds of up to 15 metres per second.

Bumblebees are able to use a combination of colour and spatial relationships in learning which flowers to visit. When a bumble bee visits a flower it uses its long tongue or "glossa" to extract nectar. Some species of bumblebee also engage in "nectar robbing"; instead of inserting the mouthparts into the flower normally, these bees bite directly through the base of the flower to extract nectar avoiding pollen transfer. Scientists suspect that nectar robbers act as agents of selection on plant characteristics.

Some bumblebees leave a scent mark on the flower after its first visit. This scent mark deters other bumblebees from visiting the flower until the scent goes away. Once they have collected nectar and pollen, the bumblebee returns to the nest and deposits the harvested nectar and pollen into brood cells for storage. Bumblebees only store a few days' worth of food and are vulnerable to food shortages if flowers are scarce.

Nesting Colony

Bumblebees are considered to be true social insects because they nest communally and they share division of labour. For bumblebees this is known as a "eusocial" colony. Eusociality is an extreme form of "kin selection" which is an evolutionary strategy which favours the reproductive success of an organism's

relatives, even at a cost to their individual survival and/or reproduction.

Bumblebee nests are constructed in the spring after the over wintering queen emerges from hibernation. Her first task is to collect pollen and nectar from flowers and she then searches for a suitable nest site. The types of nest location vary among bumblebee species. Some species prefer to construct nests in holes which lead underground while other species prefer tussock bunch grass or directly on the ground.

Bumblebee nesting colonies are not as large as honey bee hives. This is because of the small physical size of the nest cavity and a single female being responsible for the initial construction and reproduction that happens within the nest. Also in many species the colony is limited to a single season. Often, mature bumblebee nests will hold less than 50 bees. Some bumblebees will build a wax canopy or "involucrum" on top of their nest for insulation and protection. Bumblebees rarely preserve their nests over the winter.

Population Status

Over the past 2 decades there has been a general decline of pollinating insects in many ecosystems around the world. Bumblebee experts at York University have been tracking formerly common species of bumblebees in eastern North America. Field surveys in Southern Ontario which were completed between 2004 and 2006 were compared with surveys completed in the early 1970s from the same areas.

Only 11 species were found, down from 14, and of those 11, four were in decline. What is most alarming to entomologists is that the rusty-patched bumblebee *Bombus affinis* which was one of the most common bumblebees in fields, farms and gardens in Ontario is among the missing. *Bombus affinis* was a common visitor to many different kinds of plants. Some of these plants play important economic or ecological roles. Surveys completed where *Bombus affinis* had been found previously found nothing except for one location. A single bee was found on a woodland sunflower at Pinery Provincial Park in 2005.

A survey of wild bees around Guelph finds that other species of bumblebees have disappeared also. Two other *Bombus* species (*B. pensylvanicus* and *B. ashtoni*) that had been collected in the early 1970s were also absent from the survey. The Guelph region is a rich area for bees with 14 *Bombus* species identified in earlier surveys

European honeybees are not native to North America. They are important to agriculture and bee farmers who make their livelihood from honey collection and by renting hives to vegetable crop farmers. Media attention recently has focused on the loss of colonies of **European honey bees** in the United States and Canada because of Colony Collapse Disorder.

As with Colony Collapse Disorder in the honey bee, the cause of decline in the native bumblebee population appears to be a combination of factors. Most cited reasons include loss of habitat, imported disease, widespread use of insecticide in forestry and agriculture and climate change in which bees emerge from hibernation out of sync with the flowers that they rely on.

Bumblebees are responsible for plant pollination in the wild and are used commercially by farmers in greenhouse crops such as tomatoes, cucumbers and sweet peppers. Bumblebees are big business. One out of every three bites of food owes its existence to pollination services provided by bees. Honeybees provide services worth billions of dollars each year. If Colony Collapse Disorder wipes out the European honey bee our native bumblebees could be next in line.

Because many small mammals and birds rely on the vegetation that the bumblebee pollinates, the loss of bees could result in a negative cascade for many species including economic losses for agriculture.

The homeowner can help bumblebees by going pesticide-free in the garden and planting native flowering plants that bumblebees prefer. Bumblebees have a preference for native flowers and plants, more so than garden flowers that have been imported from other regions or continents. **Look for Tallgrass Ontario prairie plugs at local plant sales events near you this spring.**

Biofuel Conference:

Tallgrass prairie has numerous ecological benefits and is classified an endangered vegetation community at the global, federal and provincial levels. The last few years has seen the emergence of biomass as a source for fuel and chemicals which has heightened interest in tallgrass. Technical studies have shown tallgrass to be a viable and potentially superior source of biomass, in comparison to various monoculture crops.

On May 25th, 2010, stewardship councils, conservation authorities, other conservation organizations, academics and professional alike gathered at the University of Guelph, Ridgetown Campus in Ridgetown, Ontario for an informative conference regarding the use of tallgrass prairie for biofuel. Over 100 people were in attendance to listen to key experts from Canada and the U.S. discussing state of the art technology, scientific advancements and development strategies to promote and foster the future of tallgrass prairie for Biofuel in Ontario. The conference was hosted by Tallgrass Ontario and the Rural Lambton Stewardship Network.

The Keynote speaker was Dr. Clarence Lehman of the University of Minnesota. Dr. Lehman collaborated with Dr. David Tillman on the groundbreaking research published in 2006 that demonstrates polyculture prairies out yield monoculture grass stands for biomass. This work stands to have huge impacts on the amount of potential prairies-for-biomass acres in Ontario.

Other speakers included Lisa Matlovich and a presentation on the Auxiliary Medicinal Uses of Tallgrass Prairie Plants Utilized in Biofuel Production. The last speaker of the day was Phil Reinsert, Alternatives Fuels Manager from Nanticoke Generating Station; he explained the important role tallgrass grass prairie may have in meeting OPG's biofuel goal by the year 2014 when Ontario's coal plants are scheduled for closure.

Attendees also had the opportunity to learn about the state of the bioenergy industry and how native tallgrass prairie vegetation can be used to create sustainable, renewable biofuel. There was discussion of the benefits of tallgrass prairie to the biofuel industry in Ontario which includes increased agricultural production from beneficial insects, improved biodiversity along with water and air quality. Tallgrass prairie also increases and promotes Ontario's natural heritage values, native wildlife habitat and helps to improve aquatic habitat benefiting environmental and human health was also discussed.



Fire Workshop

Tallgrass Ontario along with the Ontario Ministry of Natural Resources East Fire Region partnered together to host a two day workshop exploring ecological and ecosystem benefits through the use of fire. The Ecosystem Management through Fire: Case studies of fire use in Tallgrass Prairie, Savanna and forested areas of Southern Ontario workshop was held on October 7th and 8th 2010 at the Delta Kitchener-Waterloo following the Wildland Fire Canada 2010 conference.

The workshop looked at how private business, non-government and government bodies (Provincial, federal and crown agency) are all working towards a common goal of ecological benefits through fire. Through case studies, this workshop looked at practical applications of fire for ecological purposes in the diverse, populated landscape of southern Ontario. The case study presentations followed a field tour of public and private lands previously treated with prescribed burns in the Waterloo and Brant Counties. Presentations focused on the role of fire in tallgrass prairie, oak savannah and woodland areas of Southern Ontario. Research partnerships and how fire is being used to assist in the maintenance, restoration and long term availability of habitat for species at risk in Ontario was also examined.

Thursday afternoon (Oct. 7th) a field tour of public and private lands looked at the history of burning for species and ecosystem purposes. Six tallgrass and savanna sites were selected for the field tour and included the Brantford Golf and Country Club, Brant Park; a conservation area owned by the Grand River Conservation Authority, 2 private properties located in Paris, Tim Horton's Onondaga Farms and Waynco Ltd, a sand and gravel aggregate site.

Friday (Oct. 8th) in-class presentations explored the history of fire use in southern Ontario for habitat maintenance, restoration and species at risk. We heard from public (federal, provincial and crown agency), academic (research interests, partnerships) and private business/land owners on experiences working together to achieve common purposes on the landscape.

Both days of the workshop were well attended and an overall success!



TGO Greenhouse

Spring 2010 marks the first year that Tallgrass Ontario has grown their own prairie plugs!

Partnering with former greenhouse owner, Gord Willcox, TGO has sown approximately 80 000 plugs comprised of 25 wildflower species and 4 grass species. Gord Wilcox is the former owner of Bloomfield Gardens in Chatham, ON and has numerous years of experience in the greenhouse business, his knowledge and expertise has been very useful for a successful trial run.

The seed used to produce these plugs was gathered from the Tallgrass Ontario seed collection program where staff and volunteers spent numerous hours out in the surrounding prairie sites in Chatham-Kent collecting seed and some seed was also purchased from the Rural Lambton Stewardship Network; therefore all plugs come from local and ecologically appropriate seed sources.

1000 plugs have already been purchased by the Waterloo Stewardship Network for a spring tallgrass prairie project on Oak Park Road in Brantford, ON and Tallgrass Ontario attended the Monarch Festival at Rondeau Provincial Park in September selling 4" potted forbs and grass plugs.

Look for Tallgrass Ontario prairie plants at local plant sales events near you this spring!!

TGO Greenhouse - Species grown in 2010			
Prairie Grasses		Prairie Forbs	
Big Bluestem	<i>Andropogon gerardii</i>	Great Blue Lobelia	<i>Lobelia siphilitica</i>
Little Bluestem	<i>Schizachyrium scoparium</i>	Tall Sunflower	<i>Helianthus giganteus</i>
Canada Wild Rye	<i>Elymus canadensis</i>	False Sunflower	<i>Heliopsis helianthoides</i>
Indian Grass	<i>Sorghastrum nutans</i>	Tall Coreopsis	<i>Coreopsis tripteris</i>
		Lance Leaved Coreopsis	<i>Coreopsis lanceolata</i>
		Pale Purple Coneflower	<i>Echinacea pallida</i>
		Grey Headed Coneflower	<i>Ratibida pinnata</i>
		Green Headed Coneflower	<i>Rudbeckia laciniata</i>
		Black-Eyed Susan	<i>Rudbeckia hirta</i>
		Ohio Spiderwort	<i>Tradescantia ohioensis</i>
		Butterfly Milkweed	<i>Asclepias tuberosa</i>
		Sullivant's Milkweed	<i>Asclepias sullivantii</i>
		Smooth Beardtongue	<i>Penstemon digitalis</i>
		Hairy Beardtongue	<i>Penstemon hirsutus</i>
		Cardinal Flower	<i>Lobelia cardinalis</i>
		Round-Headed Bush Clover	<i>Lespedeza capitata</i>
		Virginia Mountain Mint	<i>Pycnanthemum virginianum</i>
		Hairy Mountain Mint	<i>Pycnanthemum verticillatus</i> <i>var. pilosum</i>
		Prairie Cinquefoil	<i>Potentilla arguta</i>
		Ironweed	<i>Vernonia missurica</i>
		Nodding Wild Onion	<i>Allium cernuum</i>
		Hoary Vervain	<i>Verbena stricta</i>
		Cup Plant	<i>Silphium perfoliatum</i>
		Prarie Dock	<i>Silphium terebinthinaceum</i>

Tall Grass Ontario 5 year Business Plan approved by TGO Board

Kyle Breault, program coordinator for TGO was hard at work writing a 5 year Business Plan and Strategic Vision that will carry Tallgrass Ontario forward into the year 2014. Our main funder, The Ontario Trillium Foundation advised Tallgrass Ontario to create a business plan that would address the short and long term financial needs and outline specific methods that would transition the organization into one that is self sustaining.

The business plan has three main areas of focus: Outreach, Management and Funding. Outreach includes the continuation of providing organizations with educational support, communications, training, and research. Carrying out the objectives of the Conservation Strategy (2009) also falls under this area of focus. The management aspect will provide support associated with on-the-ground restoration work for our partner organizations and last but not least is the Revenue Generation and Organizational Operation which includes the development of revenue stream that will generate income to be used by Tallgrass Ontario and its partners for specific tallgrass work.

The overall goal of the Business Plan is:

“To build a financially sustainable organization, that will be able to support its own efforts as well as those of other organizations that undertake tallgrass prairie and savanna conservation across Ontario in perpetuity”.

In order to fulfill this goal, TGO is creating alternate sources of revenue by offering products and services, and charitable gift programs that will be used to meet the goals and objectives of the organization.

Tallgrass Ontario is in the process of developing multiple revenue streams to generate funds. One method of revenue generation includes creating a Development Program (fundraising) that will continue to access the familiar funding sources from over the past 10 years as well as undertake a direct mail and major gifts campaign. The direct mail campaign will happen twice a year, once in the spring and again in the fall and will consist of a letter asking for support from an established list of supporters or individuals who have expressed an interest in the organization and tallgrass conservation. The major gifts campaign targets individuals, businesses and organizations willing to make a larger contribution towards more specific programs and/or projects.

Other sources of revenue generation include the sale of prairie plugs and seeds. Tallgrass Ontario is planning on marketing its name, logo, ecological message and scientific clout by establishing a marketing agreement with partners already in production. There is a need for local, ecologically correct seed and native perennial garden stock of prairie species, therefore TGO will partner with an agency to clean, prepare, package and distribute a line of wholesale packaged tallgrass prairie seed and will market a line of potted prairie plants that are TGO certified. TGO will also venture into the production of wholesale prairie plugs and seed for our restoration partners. TGO will undertake the production of prairie plugs using local seed and will be available on a per order basis. Wholesale seeds will be cleaned to TGO standards and will be available to our partners with a base price per pound of cleaned seed established by species. TGO plans to partner with groups and organizations such as horticultural societies in various communities across southern Ontario to host plants sales with certified TGO prairie plants.

Eventually the surplus generated by these alternate methods will be granted to partnering agencies that are undertaking work in conjunction with the Conservation Strategy (2009). In the face of dwindling government support and increasing competition for funding from private sources, several agencies that wish to undertake restoration works involving prairies and savannas throughout the province lack the resources to do so. It is the goal of this business plan to turn Tallgrass Ontario into a “Grantor” organization so that at the end of the five year plan, Tallgrass Ontario will have the ability to fund a large portion of these projects and other organizations will be able to utilize TGO to leverage more funds for prairie and savanna projects.

To quote from the business plan and strategic vision “Tallgrass Ontario is stepping up to and reaffirming its role as a support-leader in the restoration and conservation of Tallgrass throughout Ontario. TGO is refocusing its role and actions to deliver key imperatives for its community of interest and Membership which is comprised of tallgrass stewards. A Tallgrass Steward is any Individual, Corporation, Government and non government Organizations who owns or has custody over viable land which has or could have a Tallgrass habitat on it”.

Tallgrass Ontario has also undertaken initiatives to develop a structured organization with an experienced management team. As part of this activity the board has sought and continues to seek board members with diverse sets of skills and is planning to fill all available board positions. The Board has recruited people with extensive business and strategic

management expertise to round out the scientific and ecological restoration expertise already present on the Board. There have been a number of newly created subcommittees comprised of both current board members and volunteers. If you wish to volunteer for one of the subcommittees please contact Tallgrass Ontario by e-mail at info@tallgrassontario.org or 519-674-9980.

This organization will become a leading force among environmental not-profit governmental organizations (ENGO) in the province and will lead by example for others to follow!

2010 Tallgrass Ontario A Year in Review

Benishek Prairie

Tallgrass Ontario has been fortunate to join forces with Steve and Sharon Benishek of Duart Ontario to help manage this amazing 18 acre prairie reconstruction project on their property in Orford Township, Kent County. Steve and his family planted this prairie 5 years ago with a goal of adding biodiversity to their 100 acre property and were looking for some help in the more difficult aspects of management such as prescribed burning and enlarging the prairie.

Tallgrass Ontario agreed to help and found partners to undertake a prescribed burn as well as planting an additional 6.5 acres into a high diversity prairie. TGO was successful in obtaining funds from EcoAction to enlarge the prairie with a goal of increasing the overall amount of prairie to around 30 acres. Another partner that was instrumental to this project was the Rural Lambton Stewardship Network that undertook the burn and planted the additional acreage in the spring of 2010.

In exchange for TGO's work, the Benisheks allow the organization to collect seed from the property to help with other local restoration projects. This win-win partnership will be a cornerstone in TGO's efforts to increase prairie in south-western Ontario.

Kenesserie Prairie Reconstruction

Early in 2010, Tallgrass Ontario was approached by Steve Rankin of Chatham Ontario to help with a potential project in Orford Township, Kent County on Kenesserie Road. He had just recently purchased a 12 acre site located between two abandoned railways that were known to contain at one time high quality prairie remnants. Steve was interested in just one thing, returning the area back into natural habitat and because of the railway lands, prairie fit the bill perfectly.

Tallgrass Ontario began working with Steve and created a plan to turn the agricultural part of the property into high diversity prairie. Tallgrass Ontario staff also reached out to friends at Ducks Unlimited to look at a low lying area on the property in order to restore a small wetland that was destroyed due to some past drainage attempts.

TGO was successful in acquiring funds from Environment Canada's EcoAction Fund and from OMNR's Community Fisheries and Wildlife Improvement Program to enable Tallgrass Ontario to plant 8 acres of high diversity prairie. Mr. Rankin has been generous enough to allow TGO to use the site for future education programs, seed collection and research. This site is in close proximity to the TGO office and to other sites in the area such as the Benishek Prairie.

Stewardship Council Partnership

The seven Stewardship Councils in south-western Ontario were fortunate to obtain a considerable grant from Environment Canada Habitat Stewardship Fund and from OMNR's Species at Risk Fund to undertake multiple prairie reconstruction projects and volunteer training for prescribed burns.

Tallgrass Ontario entered into the project as a partner to help administer the project and provide additional staffing support. Together, TGO and this consortium of Stewardship Councils pooled their available resources and were able to hire a Prairie Project Coordinator for south-western Ontario. This new staffing position will enable TGO to have greater capacity to work with all groups in south-western Ontario that want to undertake prairie projects on their own.

These Stewardship Councils include Essex Stewardship Council, Stewardship Kent, Rural Lambton Stewardship Network, Middlesex Stewardship Network, Elgin Stewardship Network and the Oxford Stewardship Council.

Environment Canada Habitat Stewardship Fund and OMNR Species at Risk Fund

Tallgrass Ontario was fortunate to receive a grant from these two funding agencies for the creation of regional seed prairies. Over the past two years, TGO has heard from multiple partners that one of the limiting factors to prairie reconstruction or restoration is the lack of appropriate seed.

Tallgrass Ontario is working with multiple partners to establish several small (5 acre) seed prairies that will be managed by TGO and local partners primarily for the production of regionally appropriate seed sources. Each year TGO will mobilize volunteers and paid contractors to collect seed from these sites that can then be used in prairie projects that hopefully will increase the overall amount of prairies in Ontario.

Environment Canada Eco Action Grants

Tallgrass Ontario was very fortunate to secure 2 grants from Environment Canada's EcoAction program. These two grants helped fund work at the Benishek and Kenneserie Road projects in Kent County as well as the Murray Pearson project in Brant County.

All of these projects focused on the reconstruction or restoration of critical prairie areas in parts of the province identified as being of high priority for prairie projects. These sites are all on private land with a high degree of security for the long term due to the commitment of the very dedicated landowners.

Low Complexity Prescribed Burn Worker Training

Tallgrass Ontario organized 4 LCPBW training workshops in 2010. In total 80 individuals were certified to work on Low Complexity Prescribed Burns. This significantly increases the capacity of local agencies to undertake prescribed burns within their own areas.

In addition, TGO has taken on the task of compiling a database of all provincially qualified burn workers and bosses. This new information will be maintained by TGO and will help when partner agencies are looking for qualified workers and volunteers when the time comes to perform a prescribed burn on one of their prairie areas.

Bloomfield Gardens Donate Greenhouse Space

Tallgrass Ontario was very fortunate this year to work with Gord Wilcox of Bloomfield Gardens in Chatham Ontario. Gord has a high quality greenhouse that he no longer uses and offered the space to Tallgrass Ontario. Seeing an opportunity to learn, staff from TGO worked with Gord to plant 90, 000 prairie plant plugs in the greenhouse.

TGO gained some incredible experience and knowledge and in the end had very good success with approximately 70 000 plugs produced. Most of the plugs are being overwintered and will be used in restoration projects or as fundraisers in plant sales in the spring of 2011. Approximately 30 different species were grown and will be available to partner groups in the spring on a cost recovery basis for use in prairie projects. Plans are underway to repeat the program in 2011.

Tallgrass Ontario moves into Permanent Office

Tallgrass Ontario took a large leap of faith and opened its own permanent office in Ridgetown Ontario. The office, located at 37 Main St. East, is located in a former art gallery and has sufficient space for current and proposed staff as well as storage area for seed and equipment.

Although modest as it currently stands, this new office has tremendous potential to be used as office space, education area and housing of increased numbers of staff as the organization grows. Tallgrass Ontario has already begun to offer our space to other organizations to accommodate staff and create meaningful partnerships.

Tallgrass Ontario and Biomass

Tallgrass Ontario is active in the field of using tallgrass prairie as a biomass source. TGO partnered with Rural Lambton Stewardship Network in hosting a Prairie for Biomass Conference at the University of Guelph, Ridgetown Campus in May. This was a tremendous opportunity for explaining the use of tallgrass prairie as biomass and we were fortunate to have Dr. Clarence Lehman from the Univ. of Minnesota as the keynote speaker.

Tallgrass Ontario recently entered into a partnership with the Ontario Soil and Crop Improvement Association and the Lower Thames Valley Conservation Authority to examine planting 50 acres of tallgrass prairie as a biomass research crop on the Devereaux Conservation Area near Ridgetown.

If funding for this project is approved this 50 acres will be planted in 2011 with harvest as a biomass crop starting in 2012 or 2013. TGO has enlisted the help of researchers from the University of Guelph, Ridgetown Campus to use the site as a long term research property. The two groups will jointly examine such things as use of the biomass tallgrass prairie by fauna especially birds and insects.

The close proximity of the site to TGO's new office and the Univ. of Guelph make this an excellent demonstration farm, research facility and as additional seed source.

Tallgrass Ontario welcomes a host of New Board Members

Tallgrass Ontario spent a great deal of time revamping and revitalizing its internal structure and enlisting the help of several new board members. TGO augmented its board with the addition of 4 new motivated board members. These new members bring some additional enthusiasm and skill sets to the TGO board which is required due to the increased amount of work now being taken on by the organization.

TGO also launched its 5 year business plan which was approved by the board in early 2010. This new strategic business document outlines how TGO will survive and prosper over the next 5 years. For anyone wishing information on this very aggressive plan, please contact Kyle Breault at info@tallgrassontario.org.

Tallgrass Prairie as Buffer Strips

Tallgrass Ontario is working with the Lake Simcoe Clean-Up Fund to establish 14 acres of tallgrass prairie vegetation as buffer strips along watercourses entering Lake Simcoe. TGO received a grant to examine the use of tallgrass prairie as buffer strips and to engage a number of landowners to establish buffers along watercourses near Cooks Bay.

These sites will be used as demonstration sites to show local landowners how tallgrass prairie can be used to prevent sediments and nutrients from entering Lake Simcoe without taking up wide swaths of land normally associated with cool season grass buffer strips.

Interest in the project is very high in the region and demand for the buffer strips will likely exceed funds and available resources. It is hoped the project will continue with more funding from the Lake Simcoe Cleanup Fund in 2011.