

CORRIDORS FOR POLLINATORS

AN INTRODUCTION TO THE BENEFITS OF INCORPORATING POLLINATOR HABITAT
ON ROADSIDES, UTILITY CORRIDORS AND IN PARKS



Roadsides, utility corridors and public parks can provide an opportunity for native tallgrass prairie establishment. Instead of seeding non-native grass mixes, these areas can be planted with native tallgrass prairie providing quality habitat for pollinators and other wildlife. These practices not only benefit wildlife and water quality, but are cost effective for managers, reducing maintenance costs.



Photo credit: Cathy Quinlan

WHAT IS TALLGRASS PRAIRIE?

Tallgrass prairies, also known as native grasslands, are unique habitats comprised of roughly a dozen species of native grasses and up to 200 forbs (wildflowers). As a habitat, it meets the needs for a large diversity of wildlife including grassland songbirds, mammals and key pollinating insects such as bees, butterflies, and ants. In particular, the wildflowers of tallgrass prairie provide an extended timeframe as a nectar source for pollinators, blooming from April to October. Once covering a significant part of southern Ontario's landscape, ease of conversion into other land uses has resulted in less than 3% of the original land cover remaining, making tallgrass prairies some of the most endangered ecological communities in Canada.

Photo Credit: Ontario NativeScape



ALTERNATIVE MANAGEMENT PRACTICES

ROADSIDES Instead of seeding non-native grass mixes, roadsides can be planted with native tallgrass prairie providing quality habitat for pollinators and other wildlife. It is a cost effective tool for road managers, and once established it can outcompete non-native and noxious weeds, reducing mowing and spraying costs. Furthermore, it can act like a living snow fence trapping blowing snow, improving road safety and reducing winter maintenance costs. A minimum of 5 metres (16 ft.) will create a suitable buffer from adjacent land activities.



Photo Credit: Ontario NativeScape



Photo Credit: Ontario NativeScape



Photo Credit: Ontario NativeScape

PARKS OR ANY OPEN SPACES any open space can be complemented with tallgrass prairie establishment to benefit wildlife as well as improve aesthetics. Previously mowed grass areas can be converted to tallgrass prairie habitat, reducing maintenance costs. From an aesthetic point of view, native landscapes produce a constantly changing pattern of striking colours and textures throughout the seasons.

UTILITY CORRIDORS Tallgrass prairie can be established along utility corridors to promote environmental stewardship while ensuring safe and reliable power service. With plants growing to a maximum 2.5 metres, native grasses and wildflowers create habitat without interfering with power lines. Maintenance costs are reduced, as once established, noxious or unwanted weeds are reduced minimizing spraying, and mowing only required for long-term maintenance (every 5-7 years).



Photo Credit: Ontario NativeScape

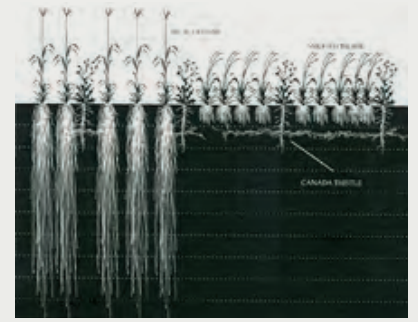


Photo Credit: Ontario NativeScape

BENEFITS OF PLANTING NATIVE TALLGRASS PRAIRIE

Native plants are often better adapted to local soil, rainfall, and temperature conditions than non-native (introduced) plants. Once established, native tallgrass prairie can reduce maintenance costs along roadsides, utility corridors and in public park spaces while improving water quality, soil health and aesthetics, and creating valuable wildlife habitat.

LESS MOWING AND SPRAYING The grasses of tallgrass prairie have an extensive and deep root system allowing them to out-compete undesirable species. Big Bluestem and other native grasses out-compete noxious weeds such as Canada thistle for nutrients and water in the soil. Once established and managed properly, the native grasses can effectively keep weeds from ever getting becoming established, reducing the need for costly maintenance from mowing and herbicide applications.



Source: Minnesota Department of Natural Resource



Photo Credit: Ontario NativeScape

SOIL STABILIZATION Native warm season grasses found within tallgrass prairies provide a long-term solution to soil erosion problems, especially along streambanks. Individual plants have life spans of over 30 years and extensive root systems, unlike non-native grasses, ensuring soil is stabilized and held in place preventing costly drain maintenance.

IMPROVED WATER QUALITY Native warm season grasses have strong, stiff, multiple stems with deep root systems. This structure slows runoff and aids in water filtration, promoting the uptake of nutrients before they make their way into groundwater and surface water sources.

LESS WINTER ROAD MAINTENANCE The structure of native grasses used in conjunction with trees and/or shrubs located along roads, properly designed and placed, can effectively act as living barriers trapping snow. These living snow fences adjacent to roads effectively prevent snowdrifts, improve visibility, and reduce slush and ice accumulations, snow removal costs, road closures, and pavement maintenance costs.



Photo Credit: Ontario NativeScape



IMPROVED AESTHETICS Tallgrass prairie is a mixture of grasses and wildflowers. The wildflowers display in a variety of colours from April to October. This extended blooming period can produce a constantly changing pattern of striking colours and textures throughout the seasons.

PLANNING YOUR PROJECT

An established tallgrass prairie requires little maintenance, but special attention is important during site preparation and in the first three to five years of establishment.

Year 1 Site Preparation	<i>Site Preparation</i> - Remove all existing vegetation, eliminate seed bank if possible and prepare a smooth planting surface. The method and length of time required to prepare the site will depend on the type of existing vegetation. Consult a restoration specialist for recommendations.
Year 2 Planting	<i>Planting</i> - Seed using local, native tallgrass prairie seed or in smaller areas, directly plant with native plugs. **Please note** Use native, properly sourced seed that has been properly cleaned and de-awned through the use of specialized seed cleaning machinery to ensure a quality seed source, free of non-native unwanted plant seed and/or materials and ready for planting.
Year 3 Initial Maintenance	Prairie seedlings will concentrate their energy into root growth at this time and annual weeds most likely will be present. Mowing throughout the early summer season to control annuals will likely be needed. Set mower height to 20 cm (8 inches) to ensure weed cover is removed and prairie plants are not harmed. Should be done frequently and consistently (2-3 times).
Year 4 Establishment	Prairie plants will begin to exert more energy to growth above ground and may bloom. Mowing throughout the growing season may be needed to control any persistent, unwanted annuals. Spot spraying may also be required to control infestations of perennial weeds, such as Canada Thistle, if applicable.
Year 5 and beyond Long-Term Maintenance	Prairie will be well established and require very little maintenance. Control of woody species may be required at this stage and beyond. Mowing, spot spraying, or burning are suitable management options for control of woody and other invasive species for long-term maintenance (as required).

CORRIDORS FOR POLLINATORS INITIATIVE

The Corridors for Pollinators initiative is working with municipalities, townships, and other public and private landowners to develop practices that support and create good quality wildlife habitat, in particular for the Monarch butterfly. Stakeholder consultation focuses on education about the benefits of native grasslands along roadsides, utility corridors and within parks to create critical breeding and nectaring habitat for pollinators. In addition, demonstration roadside plantings have been established to showcase the benefits of native grasslands along roadsides.

If you are interested in pursuing a partnership towards changing land management practices to support pollinators and other wildlife, please contact us.

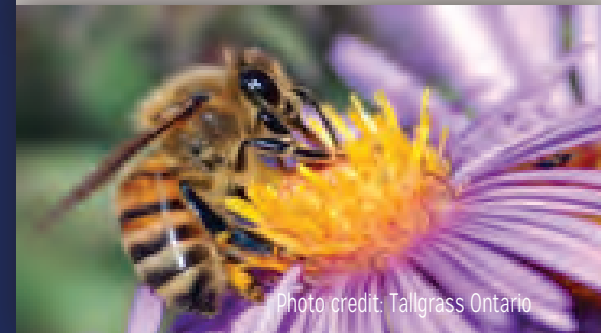


Photo credit: Tallgrass Ontario

WHO TO CONTACT



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WITH GENEROUS SUPPORT FROM



FOR MORE INFORMATION WEBSITES:

Minnesota Department of Natural Resource Roadside Program www.mndnr.gov/roadsidesforwildlife

Tallgrass Prairie Centre <http://www.tallgrassprairiecenter.org/irvm>

The Xerces Society for Invertebrate Conservation <http://www.xerces.org/pollinator-conservation-roadsides/>

PUBLICATIONS:

Monarch Habitat Development on Utility Rights of Way. 2013. Pollinator Partnership

Planting the Seed: A Guide to Establishing Prairie and Meadow Communities in Southern Ontario. 2000. Environment Canada

Roadsides for Wildlife brochure. 2008. State of Minnesota, Department of Natural Resources.

Roadside and Utility Corridor Vegetation Habitat Management Plan for the Monarch Butterfly and other Pollinators. 2016. Ontario NativeScape.

Tallgrass Communities of Southern Ontario: A Recovery Plan. 1998. World Wildlife Fund and Ontario Ministry of Natural Resources

Tallgrass Prairie Guide. 2015. ALUS Canada

Tallgrass Ontario Factsheet 4: An Owner's Guide to Managing Tallgrass Prairie and Savanna. 2001. Ontario Tallgrass Prairie and Savanna Association.