

Tallgrass Prairie on the Farm

There is growing interest in planting native tallgrass prairies on farms to provide opportunities to enhance the land. Prairies can help with:

- restoring poorly producing soils,
- holding soil in erosion-prone areas,
- providing late summer feed and grazing for livestock,
- providing habitat for pollinators and grassland birds, and
- storing and sequestering carbon.

The unique characteristics of the deep-rooted, drought tolerant, and long-lived prairie plants enable them to be used for a variety of projects, including:

- marginal and highly erodible land retirement,
- streamside buffers, and
- warm season pasture or feed.

Tallgrass prairie planting is a great option where tree planting is not practical.



Big Bluestem

What is a Tallgrass Prairie?

Tallgrass prairie takes its name from the tall grasses that grow up to two metres high or more. These open grasslands support a great diversity of native grasses, wildflowers, and animals. It is believed that the use

of fire by Indigenous people to clear land for hunting and settlement, and encouraging new growth allowed this rich open habitat to spread across the continent. Today, tallgrass prairie is an endangered ecosystem in Canada and only 1% of the original habitat remains.

Most native prairie grasses and flowers are warm season species. They mature later in the summer than the introduced cool season grasses that make up the majority of grasslands and pastures in southern Ontario. Prairies are a drought tolerant plant community. Like trees, prairie plants can live for decades.

Why are Prairies Good for the Soil?

The extensive root system of a prairie, developed over many years, is the key to its role in soil improvement. Many prairie grasses and flowers have a dense web of fibrous roots that can extend down two metres. Most of the grasses spread by offshoots and are sod- or mat-forming, so they are better able to hold soil together and soak up water.

The roots, and chemicals associated with the roots, can improve soil health. A large amount of fixed carbon is stored in the roots. When the plant dies, some of the root remains in the soil for hundreds of years as organic carbon humus.



Tallgrass Prairie

Warm Season Pasture and Animal Feed

Tallgrass prairies can be used as cattle pastures later in the season. These pastures are made up of warm season grasses such as little bluestem, switchgrass, and big bluestem and a range of flowers (including nitrogen fixing native legumes) that mature in August or later. Due to their drought resistance and ability to grow in poor or low fertile soils, warm season pastures can offer opportunities for challenging sites.

Alternatively, prairie plants can be harvested for livestock feed. Maintaining the prairie by harvesting or mowing every few years in August, after any grassland birds have fledged, keeps woody plants from invading. Prairie grasses have their growing points below the ground surface so they can regrow following grazing and cutting.

Pollinators and Grassland Birds

Tallgrass prairies are known to support a large number of pollinators, especially bees, flies, moths, butterflies, and birds. Pollinators play a key role in maintaining healthy ecosystems and enable flowering plants to reproduce. More than a third of the food we eat is reliant on pollinators to some extent.

Whether you grow crops pollinated by insects or not, providing habitat on your farm contributes to a thriving agricultural economy.

Many grassland birds such as Eastern Meadowlark and Bobolink are in decline due to habitat loss, thus establishing more prairies will be beneficial to maintain their populations. They live in open grasslands such as prairies and pastures, playing a role in pest management by feeding on insects.



Bee on a Black-eyed Susan

Prairie Creation

Prairies consist of long-lived perennial grasses and flowers. When creating a new prairie, a seed mix typically includes 25% wildflowers and 75% warm season grasses. The mix often includes 10 or more species of flowers and six to eight species of grasses. Some common species are black-eyed Susan, wild bergamot, bush-clovers, big bluestem, yellow Indian grass, and old switch panicgrass.

There are seed mixes available for all moisture and soil conditions. Be patient, as prairies can take three to five years before being well established.



"I planted eight acres to prairie grasses in 2011 on sloping and partly wet ground. I was worried the first few years, but the prairie got better and better over time. I now get about 700 small square bales per year when I cut it in mid-August, and have never fertilized it. The cattle and donkeys just love it. The Bobolinks love it too." - Alan Dale, Oxford County Farmer

Helpful Links

- Tallgrass Ontario: tallgrassontario.org
- Ontario Nativescape: ontarionativescape.ca
- ALUS (Alternative Land use Service): alus.ca
- Ontario Soil and Crop Improvement Association: ontariosoilcrop.org (grants sometimes available)
- Y U Ranch: yuranch.com/sustainability/yu_sustainability

For More Information, Contact:

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