



the Bluestem Banner



Summer 2020

Tallgrass Ontario

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Tallgrass Ontario will identify and facilitate the conservation of tallgrass communities by coordinating programs and services to aid individuals, groups and agencies.

Tallgrass Ontario thanks:

Habitat Stewardship Program, Endangered Species Recovery Fund, Land Stewardship and Habitat Restoration Program, Ministry of Natural Resources and Forestry, Environment Canada, & Our members for their generous support.

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Giant swallowtail butterfly on Ironweed (Vernonia fasciculata)

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

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ARE YOU PASSIONATE ABOUT PRAIRIES?



Photo credit - Said Mohamed, Wood Environment and Infrastructure Solutions

TALLGRASS ONTARIO (TGO) IS LOOKING FOR DEDICATED INDIVIDUALS TO JOIN OUR BOARD OF DIRECTORS

Tallgrass communities, including prairies and savannas, are some of the most endangered ecosystems in Canada. For the past 20 years, TGO has worked diligently to build relationships between conservation groups and individuals engaged in tallgrass recovery efforts. Through our successful, scientific-based grant efforts and community partnerships, we have facilitated tallgrass restoration and maintenance projects across hundreds of hectares in southern Ontario, raising public awareness about the rarity of these ecosystems and their importance to Canadian natural heritage.

If you would like to share in our mission and shape the strategic direction of TGO, please contact us with your resume and/or short biography at (info@tallgrassontario.org).

We look forward to discussing the many exciting opportunities on our Board of Directors.

Sincerely,
Season Snyder, TGO President

TALLGRASS ONTARIO

Invites all members to attend our

2020 Virtual Annual General Meeting

Thursday, June 25, 2020

Zoom Meeting

10:00 am – 11:30 pm

Agenda Includes:

Business Meeting

President's Remarks/TGO's Accomplishments

Board Member Elections

Guest speaker from Credit Valley Conservation

Tallgrass Ontario is excited to host a presentation by Rod Krick, the manager of terrestrial restoration and management at Credit Valley Conservation (CVC). The Credit River watershed is one of the most ecologically diverse in the province, where Carolinian communities meet the Niagara Escarpment and Oak Ridges Moraine. Native grasslands play a significant role in the watershed's natural heritage system. CVC is focused on opportunities to protect, conserve and restore these communities through their successful Native Grassland Restoration Program. Rod will discuss the details of this program and the important progress CVC has made so far!

REGISTRATION NOW OPEN!

The Tallgrass Ontario Annual General Meeting is **free** to Tallgrass Ontario **current** and **new members only**. If you are not yet a member but want to join us, please visit <https://tallgrassontario.org/wp-site/memberships/>.

To register for this virtual event, please send an email to info@tallgrassontario.org with the name of the person/people attending. Tallgrass Ontario will send you a Zoom invitation via email with the event link and instructions.

The Curiosities of Prairie Plants.

By Jennifer Neill

Every day I am grateful for what nature provides us: shelter, heat, food, medicine, clean air, water and energy. Within this spectrum, plants, are most often the main contributors. Plants are my passion and some of my favorite individuals exist in Prairies. As scientists and prairie enthusiasts we habitually observe these plants through a sober scientific lens and tend to overlook the many curiosities they possess.

This article highlights fun facts for a handful of prairie species. The facts include, but are not limited to, species name, alternate names, fun facts, wildlife associations, human connections and where they are found. The species include: Wild Bergamot, Oxeye Sunflower, Virginia Mountain Mint, Big Bluestem and Switchgrass. Choosing the plants was difficult and so many had to be left out. Subsequently, what I present is one tiny piece of a broad picture of knowledge that is out there to be gathered, preserved and shared. It is my hope that the information in this article will act as a portal for you to discover, become inspired and to connect deeper to the prairie plants among us!

WILD BERGAMOT (*MONARDA FISTULOSA*)



Name: Wild Bergamot was named in honor of the Spanish botanist Nicolas Monardes. Mr. Monardes wrote extensively in the 16th century about medicinal uses of plants. The species name, *fistulosa*, is Latin and means 'like a reed or pipe' referring to the shape of the individual flowers.

Alternate Names: Horse Mint, Bee Balm.

Fun Facts: Wild Bergamot has a large unique flower that looks like a ragged lavender pom-pom. It has been used for personal and home fragrance and is highly

valued as flavoring for food and drink, and as a preservative for meats. This species is called Wild Bergamot due to the similarity of its fragrance to the fruit of the Bergamot Orange (*Citrus bergamia*) that is used to make Earl Grey Tea. It can be used as an impromptu insect repellent by rubbing the leaves on the skin!

Wildlife Associations: Wild Bergamot flowers attract many insects and are essential components of pollinator gardens. The nectar attracts long-tongued bees, bee flies, butterflies, and hummingbird moths. Among the long-tongued bees, are bumblebees, miner bees, cuckoo bees and large leaf-cutting bees. Halictid Bees collect pollen, while some wasps steal nectar by perforating the nectar tube. Seed bugs are often found in the flowerheads. The Ruby-Throated Hummingbird (*Archilochus colubris*), also visits the flowers for nectar. Insects mostly avoid feeding on the foliage however, the caterpillars of some moth species will, if no other food source is available.

Mammalian herbivores usually avoid this plant as a food source, because of the oregano-mint flavor of the leaves and their capacity to cause indigestion.

Human Connections: There is a long history of Wild Bergamot's use as a medicinal plant and is still used in modern herbalism. Bergamot contains the essential oil, Bergamot Oil, which can be inhaled to treat bronchial complaints. The leaves also contain Thymol, an essential oil that can be used as a gas reducer. Historically, First Nations groups used Wild Bergamot

to treat a wide range of medical issues. Some uses included, personal fragrance, leaf tea for colic, colds, bronchial problems, headaches, stomach problems, gas, fevers, to induce sweating and for analgesic effects. A poultice made of the leaves was also used to treat skin eruptions and pimples.

Where You Find it: Habitats include, black soil prairies, gravelly prairies, tallgrass prairies, sandy black oak woodlands, oak savannas, old fields, landfills, and waist areas. The rhizomes will survive earth-moving and will send up plants in unexpected places.

OXEYE SUNFLOWER (*HELIOPSIS HELIANTHOIDES*)



Name: The genus name, *Heliopsis* is from the Greek word *helios* for ‘sun’ and *opsis* for ‘appearance’. The species name, *Helianthoides* is also Greek and means ‘like a sunflower’.

Alternate Names: False Sunflower, Smooth Oxeye, Sweet Oxeye, Oxeye Daisy and Heliopsis Sunflower.

Fun Facts: Oxeye Sunflower is a very hardy plant and is considered one of the best for wildflower pollinator habitats. It is relatively maintenance free and performs well in xeric locations. Blooming occurs in summer beginning in July to August and extends for up to two months, making it one of the earliest blooming sunflowers and long-lived nectar sources. Easy access leads to many insect visits and pollen can be depleted by mid-day. The strong stalks can be

processed like hemp to produce silky fibres. Oxeye Sunflower produces deeply saturated, strong natural dye colours ranging from clear yellow and soft gold to yellow-green and grey-green.

Wildlife Associations: Many insect species visit the flowers in summer looking for both nectar and pollen. These include, honeybees, bumblebees, little carpenter bees, digger bees, cuckoo bees, leaf-cutting bees, Halictid bees, Andrenid bees, thread-waisted wasps and other beneficial wasps, Syrphid flies, bee flies, the Goldenrod Soldier Beetle (*Chauliognathus pennsylvanicus*) and other beetles, butterflies, and skippers. These floral visitors cross-pollinate the flowerheads. Other insects feed on the leaves, stems, seeds. These species include leaf beetles, moths, flies and seed bugs. One species of miner bee, the *Holcopasites heliopsis* is a specialist pollinator of Oxeye Sunflower. The Silvery Checkerspot (*Chlosyne nycteis*) Butterfly uses Oxeye Sunflower as one of its larval host plants.

Mammalian herbivores such as livestock and White-tailed Deer (*Odocoileus virginianus*) will occasionally graze on this plant. The seed is relished by several species of upland gamebirds, granivorous songbirds, small rodents and is an excellent winter food source. The stems and dead foliage provide winter cover for beneficial insects.

Human Connections: There are no reported medicinal uses in modern herbalism. First Nations groups used Oxeye Sunflower occasionally as part of an herb tobacco that was smoked for lung ailments.

Where You Find it: Habitats include black soil prairies, tallgrass prairies, upland prairies, river-

bottom prairies, grassy meadows, open woodlands, woodland borders, oak savannas, thickets, limestone glades, banks of streams and areas along railroads

where prairie remnants occur. Oxeye Sunflower is often used in prairie restorations.

VIRGINIA MOUNTAIN MINT (*PYCNANTHEMUM VIRGINIANUM*)



Name: The genus name *Pycnanthemum*, is derived from two Greek words - *pyknos* meaning 'dense' and *anthos*, meaning 'a flower' - together referring to its dense flower clusters. The species *virginianum*, would be 'of Virginia' where first described.

Alternate Names: Common Mountain Mint, Mountain Mint.

Fun Facts: The name *Mountain Mint* is something of a misnomer because this plant and other similar species in this genus do not usually occur in mountainous habitats!

All parts of the plant emit a strong, minty aroma when crushed. The numerous flowers are fragrant, tiny, very accessible and have a long blooming period. This means they attract a huge diversity of insects making them a dream plant for entomologists.

Wildlife Associations: Many insects are strongly attracted to the flowers and are seeking the nectar. These include various bees, wasps, flies, small butterflies, and beetles. Typical visitors from these groups include honeybees, cuckoo bees, Halictid bees, Sphecid wasps, Eumenine wasps, bee flies, Tachinid flies and wedge-shaped beetles. This plant is important food for short-tongued bees and wasps and should be planted more often in gardens. Because the flowers are tiny, these insects can reach into them to drink the nectar easily. Mammalian herbivores and many leaf-chewing insects find the minty fragrance of the leaves and stems repugnant, and rarely bother using this plant as forage.

Human Connections: Mountain Mint is used to this day in wild forage teas as it has an exceptional minty fragrance and taste.

Where You Find it: Virginia Mountain Mint is occasional to locally common in moist to mesic black soil prairies, moist sand prairies, tallgrass prairies, moist meadows, thickets, fens, swamps, and rocky bluffs.

BIG BLUESTEM (*ANDROPOGON GERARDII*)

Name: Big Bluestem (*Andropogon gerardii*).

Alternate Names: Bluejoint Grass, Beard Grass, Poptillo Gigante and Turkey Foot.

Fun Facts: Big Bluestem can be easily identified by its flowering top. The seed head is usually branched into three parts and resembles a turkey's foot, hence one of the common names. The root system can reach 10-12 feet below ground! As the root is extensive and reaches very deep Bluestem is often used for soil stabilization. The height of the plant (3ft - 8ft) helps for above ground wind erosion as well. Big Bluestem grass is a solid stemmed grass, which sets it apart from most grass species that have hollow stems. The tall strong stems are excellent for woven projects and have been used historically to fasten the support poles of dwellings. Cattle love it so much some ranchers refer

to it as "ice cream for cows". Big Bluestem is gaining popularity with ranchers as a high quality, low cost forage for their herds. It can also be harvested for hay. Big Bluestem is pollinated by the wind and is hypnotizing to watch sway. It is the tallest of the North American prairie grasses.

Wildlife Associations: Several insects feed on the foliage of Big Bluestem grass. It is a larval host plant to the caterpillars of the Delaware Skipper (*Anatrytone logan*), Common Ringlet (*Coenonympha tullia*), Common Wood-Nymph (*Cercyonis pegala*) and Little Wood-Satyr (*Megisto cymela*). Other insects that feed on the foliage include thrips, billbugs, leafhoppers and is an important food source for many grasshopper species. The high number of insect visitors encourage high numbers of insectivorous bird species as well.

The seeds are eaten by many granivorous songbirds. The foliage is readily eaten by hoofed mammalian herbivores (but can be toxic to horses), as well as Meadow Vole (*Microtus pennsylvanicus*). Big Bluestem also provides cover for several ground nesting birds and many other insects not listed above.

Human Connections: Some First Nations groups used the roots as a diuretic and to alleviate stomach pains. Extracts of the leaf were also used as wash for fever or as an analgesic. Moist grass was laid on hot stones to prevent steam from escaping during cooking. It was also used to cover fruit during ripening and under fruit while drying.

Where You Find it: This grass is tolerant of several soil types. Bluestem is easy to grow but can become aggressive because of its large size. A dominant species in tallgrass prairies, Big Bluestem is often used in prairie rehab and as an ornamental grass.

SWITCH GRASS (*PANICUM VIRGATUM*)

Name: The genus name *Panicum* is derived from 'pānus', meaning 'ear of millet'. The species name *virgatum* is from 'virga' meaning 'twig or switch or wand-like'.

Alternate Names: Old Switch Panic Grass, Tall Panic Grass, Wobsqua Grass, Blackbent, Tall Prairie Grass, Thatchgrass, and Virginia Switchgrass.

Fun Facts: Switchgrass is a valuable soil stabilization plant on strip-mine spoils, sand dunes, dikes, and other critical areas. It is also suitable for low windbreak plantings in crop fields. With increases in the price of gasoline, Switchgrass is being investigated as a potential source of alcohol that could be used as a renewable biofuel resource. It can produce more alcohol per acre than corn and doesn't require replanting in the spring because of its perennial nature and its ability to self seed. Switchgrass is an excellent grass for forage and is often cut for winter hay in agricultural areas. Its fall/winter color changes to yellow-orange, providing year-round interest. This is the tallest and most robust of the *Panicum* grasses (*Panicum sp.*). It is more tolerant of disturbance and habitat degradation than most prairie grasses.

Wildlife Associations: Many insects feed on Switchgrass. These include the caterpillars of such skippers as Delaware Skipper (*Atrytone logan*), Leonard's Skipper (*Hesperia leonardus*), Indian Skipper (*Hesperia sassacus*), Hobomok Skipper (*Poanes hobomok*), Tawny-edged Skipper (*Polites themistocles*), and Northern Broken-Dash (*Wallengrenia egremer*). Butterfly caterpillars that feed on Switchgrass include, Common Ringlet (*Coenonympha tullia*), Common Wood-Nymph (*Cercyonis pegala*) and Little Wood-Satyr (*Megisto cymela*). Other insect feeders include the larvae of grass leaf-miner moths, gall flies, stink bugs, aphids, leafhoppers, mealybugs, leaf beetles, thrips and many grasshopper species.

The seeds are eaten by a variety of birds, including wetland birds, upland gamebirds, and granivorous songbirds. The seeds are also eaten by the Deer Mouse (*Peromyscus maniculatus*) and Meadow Vole (*Microtus pennsylvanicum*). The very young foliage of this grass is edible to cattle and other hoofed mammalian herbivores. Because Switch Grass remains upright during the winter and often forms large clumps, it provides excellent cover for various birds and mammals for this season.

Human Connections: Switchgrass has been traditionally used to treat inflammatory disorders, diabetes, insect bites, and skin problems. It was also consumed as a vegetable, mixed with fresh juices, in concoctions, and as a whole plant. It was also used for basketry and many other traditional crafts.

Where You find it: Habitats include black soil prairies, sand prairies, clay prairies, savannas, sandy savannas, oak savannas, open woodlands, rocky bluffs, sand dunes, edges of marshes, banks of rivers and ponds, prairie restorations, areas along railroads, roadsides, ditches, and abandoned fields. This species has an above-average tolerance of salt and can become the dominant grass along roadsides where salt is applied during the winter.

***Warning:** Just because a plant was known in the past to be used for food or medicine does not guarantee its safety for consumption or other uses. Identification and use of wild plants require care and attention. Never eat any plant unless you are certain that it is edible. The information in this article is for educational purposes only and is not intended as a substitute for medical advice, diagnosis, or treatment. Harvest wild edibles or medicinal at your own risk, and only from chemical-free locations and landowners from whom you have obtained permission.

Jennifer Neill is a Consulting Ecologist with Sage Earth Environmental & Restoration during the day and a practicing Artist and Textile Designer by night. Jennifer is a Director at Tallgrass Ontario.

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**Page one photo - *Giant swallowtail butterfly on Ironweed (Vernonia fasciculata)*, all rights reserved.
Photo taken at Kenesserie Tallgrass Prairie, Chatham-Kent.**