Brightwater Eco-center Reclamation: Native Plants

Earthkeepers Project Based Learning

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Brightwater Reclamation Project- Native Plant Species Introduction

This written guide contains information on 39 plants that are native to the Saskatchewan prairie and Brightwater area. This information includes the plant's habitat, physical characteristics and ethnobotanical uses. Our goal for this guide was to provide accurate and thorough information on these plants. The plants are listed in alphabetical order.

This guide has been created by the Earthkeepers program based out of Aden Bowman Collegiate. Earthkeepers is a program that focuses on sustainability, hands on learning and making our community and world a better place. This guide has been made for the purpose of the Brightwater Land Reclamation project.

ALUMROOT

Physical Description: Grows from 30 centimetres to 60 centimetres tall. Its leaves are clustered at the base, having an average size of 6 centimetres per leaf. These leaves are heart-shaped. The upper part of the plant is covered with a narrow flower cluster. These flowers have a greenish-yellow cup covering them.

Habitat: Alumroot can be found in dry locations in the prairie, woodlands, banks, along railroads, rocky flats, and in meadows. It is a plant native to North America that can be found in British Columbia south to California.



Ethnobotany: The plant seems to have many different uses in treating diseases, one of its uses, being, treating nappy rash and mouth sores. The main use of this plant its roots. The roots of alumroot are used in treating diarrhea, stomach cramps, rashes, sores, cuts, and other things.

AWNED WHEATGRASS (SLENDER WHEATGRASS)

Physical Description: Around 50-90 cm tall, with rough flat leaves.

Habitat: Moist to dry wetlands. Good for erosion control.

Ethnobotany: Can be used as hay, and is good as grazing for livestock, although sensitive to it.



BEARBERRY

Physical Description: The leaves on the bearberry shrub are thick, leathery and in an oval shape with the widest part at the tip. The bark on the shrub is a brownish reddish colour that grows low and spreads along the ground. The bearberry produces flowers 1-3 centimetres wide that grow at the end of the branches. The flowers are pinkish white and appear in May-June. This plant also has small red berries that are 6-10mm across and look like a smaller version of an apple.



Habitat: You can find the common bearberry plant in dry sandy prairies on high ground away from where water can pool. They are also sometimes in a forest of tall trees on the ground surrounding them. They are commonly found at the Brightwater site where there is Trembling aspen trees or in the sandy prairie. You will find them along the sandy prairie floor crawling along it.

Ethnobotany: The fruit can be fried is sugar to eat or is also a good remedy for diarrhea. Sometimes people boil the leaves for tea even though it has a very plain taste to it. You can also just eat the berries although they do not have a very appealing taste but they are edible.

BLUE GRAMA GRASS

Physical Description: Blue grama is 6 to 12 (15-30 cm) inches high. It has flat leaves that come to a point at the end. The leaves can grow from 1 to 10 inches (2.5-25 cm) long and 1/8 inch (3 mm) wide. The flower stems grow 7 to 18 inches (17-46 cm) tall. The flowers look like crescent moons perched on the end of the flower stem.

Habitat: Blue grama likes to grow in full sun with well-drained good soil, and can stand drought, heat, cold, and mowing although it doesn't like shade.



Ethnobotany: People use it instead of regular grass where there are dry areas, for grazing animals, and to control erosion. Some people use the flowers in dried flower arrangements and the plant is also used in rock gardens.

BROOMWEED

Physical Description: Broomweed is a small, erect herb that can grow up to 30 centimetres tall. It contains long narrow, grey-green leaves that will only grow up to 4 centimetres long. The plant also has numerous branches with small yellow flowers clustered on top. These flowers are flat clustered and are very tiny.

Habitat: This plant has a broad habitat, ranging from native land to disturbed sites. It is typically found in western North America, in heavy clay soils.



Ethnobotany: There are no known edible uses for broomweed, since the plant is poisonous when digested.

DOTTED BLAZING STAR

Physical Description: The Dotted Blazing Star belongs in the sunflower family. It commonly grows 1-2.5 feet tall and the roots can extend up to 16 feet into the soil. The plant has a woody stem and its leaves are closely spaced and are 6 inches long and ¼ inch wide. The leaves are a dark green colour. The plant produces flowers which are a light purple and blooms from august to October. This plant also gives off black fruits which are a ¼ inch long with numerous feathery bristles.



Habitat: The Dotted blazing star is very common in the Saskatchewan prairies. They can be found in dry, course soil and also in prairie sand. They are most likely found on high ground. The dry sand is really good for the plant because it does not like too much water so this allows it to dry out fast and it does not hold the water like soil does.

Ethnobotany: The native people had many uses for the dotted blazing star. The most common one would be that they would eat the flowers and leaves to improve their appetite. They powdered it as well and used it for tea; it was also commonly boiled and pressed on external swelling because it would reduce it quite well. Some people ate the raw root to relieve diarrhea or a sore throat. The leaves would also relieve a rattle snake bite as well, because it would extract the venom.

FLAT-TOPPED GOLDEN ROD

Physical Description: The common golden rod is generally 30- 70 cm tall and has leafy stems with fine lines lengthways. The leaves on this plant are 2-15cm long and about 10 times as long as wide. The lower leaves fall off first and then the top ones last. The stems and leaves are both hairless. The golden rod has small yellow flat top clusters of flowers. There are 12-20 flowers in each cluster and 8-12 clusters per plant. The flowers are quite sticky. The fruits that grow on this plant are hairy and black coloured.



Habitat: The flat-topped golden rod is commonly found near river banks, lake shores or wet meadows. It likes wet environments with lots of water.

Ethnobotany: Livestock mostly avoided eating too much of the Golden rod because it would poison them, Even though humans are able to dry the flowers and leaves to make tea. People also used it cooked and ate it as a vegetable or the seeds were boiled to thicken soup. The plants are also dried and shipped to China where they sold it as an expensive tea.

FLEABANE

Physical Description: Fleabane is a winter or summer annual. It produces one or more flowering stems, 10-180 cm tall, with numerous, narrow leaves crowded together on the stem. The daisy-like flower heads are very small and there are numerous on short branches near the top of the main stem. The seeds are 1-2 mm long, almost transparent, and have an attached parachute, which carries the seed for long distances on the wind much like a dandelion seed.



Habitat: Fleabane grows mostly around Railway and roadsides, loading areas, banks, sand pits, wasteland, gardens, yards, ballast soil deposits. While this plant species favors disturbed areas, it is more likely to occur in higher quality habitats.

Ethnobotany: Fleabane is used to repel fleas and gnats by sprinkling on beds. Indians pound the root and apply it to cold tumors to dissolve them.

GAILLARDIA

Physical Description: Branched stems about 30-60 cm tall and 30-45 cm across, it has bright daisy like buff red and brown flowers that bloom in the summer and the plant its self grows quite fast.

Habitat: The plant likes very dry conditions (very drought tolerate) and needs full sun light. Gaillardia grows in normal or sandy types of soil.



Ethnobotany: Gaillardia had many uses. Tea of root for gastroenteritis, chewed powdered root applied to skin disorders. Sore nipples of nursing mothers bathed in tea made from the plant, also used for sore eyes. Kiowa considered it good luck.

GUMWEED

Physical Description: The gumweed plant is in the sunflower family. It has a green stem and 1 inch yellow flowers. The plant is usually about a foot tall and found in clusters of other gumweed plants. The bright green leaves are serrated and face the sun, which is why some people call it the compass plant.

Habitat: The gumweed plant can be found in dry places such as roadsides or prairies from late June to September. This plant likes dry soil or sand that gets lots of sun.



Ethnobotany: The plant can be used as a remedy for poison oak rashes or burns. The flower is also commonly used as yellow or green dye. The leaves are covered in sap which can be used as gum to chew, and the whole plant is used to help relieved bronchitis or asthma.

HAIRY GOLDEN ASTER

Physical Description: Belonging to the sunflower family, the Hairy Golden Aster is around 15 centimetres tall with small yellow flowers. The flowers have anywhere around 10-15 petals.

Habitat: The Hairy Golden Aster commonly resides in dry prairie across Saskatchewan.

Ethnobotany: Due to the sour tasting leaves, the Hairy Golden Aster is not eaten by many animals. There are a small amount of animals that do, however. Chickadees, porcupines and bees with often eat this.



HELIANTHUS

Physical Description: It has bright yellow ray-like flowers and a rough and hairy green stem. It is also called the sunflower. Sunflower oil and sunflower seeds are often used for cooking and the leaves can be used as cattle feed. The stems can be used in paper production.

Habitat: Helianthus is a native plant which is found in both North and South America. It is mainly located on grasslands.

Ethnobotany: Europeans would use the plant for coughs and colds and to treat malaria. Native Indians would use the plant for everything from fevers to snakebites to rheumatism.



JUNE GRASS

Physical Description: Has stiff bluish-green blades 1-4 mm wide and 5-12 cm long. Also with a dense spike like panicle 0.5-2 cm wide that opens during flowering and closes at maturity. Has bunchgrass with fibrous roots near bottom.

Habitat: Common in dry upland prairies and it is becoming a dominant grass in some northern prairies.

Ethnobotany: This plant has been used in the treatment of cuts.



LITTLE BLUESTEM

Physical Description: Has light to bluish green blades that turn red when mature, 5-8 mm wide and 5-15 cm long. There are several racemes on the long stems. Also has flat wiry purple culms. Little Bluestem has fibrous roots that can reach 5-6 feet in depth.

Habitat: Grows well dry, well drained in often exposed sites with course low fertility soil. Little Bluestem is good for controlling erosion.

Ethnobotany: The Kiowa Apaches believed that switching of arms neck and shoulders would cure aches and drive away evil spirits, by using bundles of Little Bluestem in their sweat lodges.



LOW GOLDENROD

Physical Description: Has reddish stems, with straight leaves 2-10 cm long and 15 mm wide. Flower heads are yellow with a 3-5 mm in diameter. Low Goldenrod flowers in summer.

Habitat: Roadsides, open woods, hillsides and dry prairies.

Ethnobotany: Unknown.



NARROW LEAVED MEADOWSWEET

Physical Description: The narrow leaved meadowsweet is a shrub 100 to 150cm. The white, sometimes pink fragrant flowers, bloom June to August. These plants attract wildlife such as birds and butterflies.

Habitat: Grassland areas with decent moisture.



Ethnobotany: This flower has many purposes. It can be used to treat arthritis, as a laxative, and infused for tea! This flower was known as 'Dead Man's Flower', as a Newfoundland legend claimed if the flower was picked, the child who picked its father would die.

NORTHERN BEDSTRAW

Physical Description: Northern bedstraw, a common herb, stands 20 cm to 60 cm tall, has square stems, and grows in clumps. The leaves are bright green, 2.5 cm to 5 cm long, and are arranged groups of 4 with a stem coming out the top. Fragrant flowers are white, 3 mm wide, have 4 petals and are shaped like a cross.

Habitat: Northern bedstraw grows in forests, along roadsides, and in moist prairies.

Ethnobotany: Historically, this plant was boiled and used as a wash to remove freckles.



NORTHERN WHEAT GRASS

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Physical Description: It is lightly tufted grass which grows to around 30 to 80 cm tall. It has a greenish blue tinge, and its seeds can be up to 20 cm long with overlapping spikelets. It makes good foraging for livestock.

Habitat: Northern wheat grass is a native species that is found on the Canadian prairies. It likes to be in moist to wet grasslands.

Ethnobotany: Wheatgrass is primarily used as a concentrated source of nutrients, like vitamins A, C and E, iron calcium, magnesium and amino acids.



PASTURE SAGE

Physical Description: The pasture sage is silvery-grey, with hairy leaves and a distinct sage smell. The stems can reach30 - 40 cm tall and will produce small yellowish flowers towards the top. This plant produces over 9 million seeds per kilogram so it spreads easily and fast.

Habitat: The pasture sage is drought tolerant and likes dry places. Too much water is not good for it as it will drown.



Ethnobotany: The Blackfoot people used to use the leaves as a preservative for storing meat, as well as put it on wounds to slow the bleeding. You can burn a pasture sage plant to keep mosquitos away, or you could also chew it for indigestion. One of the most common uses is using it as an infusion of the whole plant as a cold remedy.

PRAIRIE CINQUEFOIL

Physical Description: 20-70 cm, with white or yellow flowers.

Habitat: Lives in various different prairie conditions, dry black soil prairie, clay prairies, sand prairies, gravel prairies and hilly prairies as well.

Ethnobotany: The Prairie Cinquefoil contains astringent tannins that help to heal wounds as well as stop bleeding in forests.



PRAIRIE SAGE

Physical Description: Has a branched stem with white woolly hairs. Can have white woolly leaves 1-7 cm long. Near the top of the plant are brownish clusters 3-4 mm tall from the stem. Prairie Sage can grow 15-60 cm tall.

Habitat: Prairie sage enjoys rocky soil. They will flourish along roadways, railways and paths.



Ethnobotany: Tea from leaves are used for stomach troubles. Tea of roots for laxative, inability to urinate and difficulty in childbirth. Crushed leaf can be used as snuff for sinus attacks, nosebleed and headaches. Strong tea can also be used to wash for eczema, deodorant and antiperspirant for underarms and feet.

PRICKLY PEAR CACTUS

Physical Description: It has flat, round cladodes with large, smooth, fixed spines and hair like prickles. It produces red, green or yellow-orange oval shaped fruit which is used as food. It is also used as alcohol and in dye production.

Habitat: Prickly pear cacti are native plants found throughout most of the Americas but it is invasive in South Africa. Its habitat is a semi-desert area.



Ethnobotany: The gel-like sap of the plant was used as skin conditioner for things like minor rashes, sunburn and windburn. The pulp was used to treat wounds and inflammations of the digestive and urinary tract.

PURPLE MILK VETCH

Physical Description: The purple milk vetch stands anywhere from 5 to 30 centimetres tall. Small purple flowers bloom late spring to early summer, and although pretty, this plant is poisonous to livestock.

Habitat: Anywhere from grasslands, prairie, and roadsides to alpine forests.

Ethnobotany: Unknown.



PUSSYTOES (EVERLASTINGS)

Physical Description: This is a low gliding plant that grows up to 2.5 centimetres tall. Its base leaves resemble those of a rose base. The leaves are bluishgreen and are fairly large-sized. Rising out of these bottom leaves are stems. At the top of these stems, there are flower heads, each flower head is around 0.8 centimetres long, and is white and hairy.

Habitat: Pussytoes can be found in many different environments. Some of these environments are dry prairies, open woodlands, roadsides, dry meadows, pastures, abandoned fields, and in many other dry soil places.



Ethnobotany: The leaves of an everlasting, or pussytoes, are the main part used in medicinal treatment. The leaves can be used in herbal smoke formulas to help clean the lungs, or even in the healing of sunburns, general redness, and swelling of the skin.

SILVERY GROUNDSEL

Physical Description: Has bright yellow flower heads, 3 cm in diameter. Has woolly white foliage, with 8 cm long leaves. Can grow up to 32 cm tall.

Habitat: Common in dry prairie hills.

Ethnobotany: Unknown.



SKELETONWEED

Physical Description: They are anywhere around 10 to 40 centimetres in height. The leaves are 3.5cm long and 2mm wide. Pink flowers with around 4-5 toothed petals, and a 2cm diameter.

Habitat: Dry, mostly sandy prairie around southern Saskatchewan.

Ethnobotany: Skeletonweed has many useful purposes. Crushed up and heated, it can be applied to swellings. It can also be taken for heartburn, especially during pregnancy.



SLENDER BLUE BEARDTONGUE

Physical Description: Slender blue beardtongue stems grow to a height of about 30 cm and the leaves are about 3-5 cm long. The flowers are bout 1.5-2 cm long and appear in clusters around May

Habitat: The slender blue beardtongue grows in dry open areas and prairie grass lands. It prefers less water and dry ground to live in.



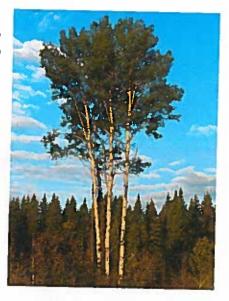
Ethnobotany: Some natives used the roots to sooth snake bites.

TREMBLING ASPEN

Physical Description: It is tall and fast growing, reaching 25 metres tall, with smooth, greenish white to grey bark. It is used for log cabins, dugouts, books, news print, fire, printing paper, furniture, boxes and crates. It has leaves that are almost round.

Habitat: The trembling aspen is a native tree found in North America, the United States and central Mexico.

Ethnobotany: Aspens contain salicylates (related to aspirin). The leaves and leaf buds were used to treat burns, irritations, aches and swollen joints.



TUFTED FLEABANE

Physical Description: The species may be annuals, biennials or perennials. They are well-branched with erect stems, characterized by their numerous white, lavender or pink ray flowers and yellow disc flowers. Some members of this group have no ray flowers.

Habitat: Found in prairies and parklands, especially open and dry areas. Tufted fleabane loves dry areas that's where is thrives the best. Growing conditions include Full sun, dry well-drained soil.



Ethnobotany: Tufted fleabane had a few uses. The flowers used in tobacco, it contains many natural drugs useful in treating childbirth hemorrhage and chronic diarrhea.

WESTERN PORCUPINE GRASS

Physical Description: Western Porcupine Grass is tall and sharp like quills on the porcupine. It is a perennial bunch grass that is shallow rooted and about .4-.6m tall. In 1 pound of seeds there would be 203,000 of them so they are very small.

Habitat: You can find the Western Porcupine grass in foothills, grassy mountains, prairies, Northern grasslands or anywhere where it doesn't commonly flood. This plant is drought tolerable, so it can handle very dry conditions.

Ethnobotany: The native people used to use the sharp points on the grass as needles to sew with.



WHITE PRAIRIE CLOVER

Physical Description: Plants usually have several stems, decumbent to erect. Leaves alternate with 7 to 7 leaflets. Leaflets elongated on lower leaves, linear at top of stem. 15 mm long and 4 mm wide. Flowers are white with gold stamens, spikes to 5 cm long, individual flower measured is 4 mm diameter. Flowers open first at bottom of spike. Flowers are fragrant.



Habitat: Dry Prairie hillsides and open woods. Prefers well drained soil.

Ethnobotany: White Prairie Clover was used by the Blackfoot. The leaves were bruised, steeped in water and applied to wounds, and were made into tea and potions to prevent disease.

WILD ONION

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Physical Description: A plant grown from an aromatic bulb that can reach a total height of 60 centimetres. It has many long, narrow, grass-like leaves that are topped with a dome cluster of star-shaped flowers. Varying from species, these flowers can be either white or pink. The wild onion is easily recognized by its distinctive odour, which resembles the odour of a cultivated onion.

Habitat: This plant grows in open, sunny areas, commonly in meadows and woodlands. It is native to south and eastern North America.



Ethnobotany: There are no specific mentions of medical use for wild onions, but it is for certain that they can be a healthy addition to your diet. When eaten daily, they help reduce blood cholesterol levels, tonify the circulatory system, and act as a tonic for the digestive system.

YARROW

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Physical Description: Yarrow is an aromatic plant that can grow up to 100 centimetres tall. It contains fern-like leaves that are divided into fine segments; these leaves are normally 5 centimetres long. The top of the plant contains a cluster of small white flowers. Each head of the plant has 3 to 5 heads, and 10 to 30 flowers, growing up to only 4 millimetres long.



Habitat: These plants are mainly located in disturbed grounds, but can be found in almost any type of environment. It is native to many parts of North America and around the world.

Ethnobotany: The medicinal value of this plant was discovered many years ago. During the Middle Ages, it was used to reduce inflammations and stop bleeding. The Cree used yarrow tea to cool burns and soothe earaches, but this yarrow tea is also said to purify blood, relieve colds, diarrhea and fevers when consumed.

YELLOW EVENING-PRIMROSE

Physical Description: The leaves have either smooth or wavy edges. The leaves can grow from 10 to 20 centimetres long, but the plant itself can grow up to 150 centimetres tall. The yellow evening-primrose branches have light green to reddish colour, and as years go on, branches start to become hairy. The plant's flowers have a bright yellow colour and contain four petals.

Habitat: This plant is normally found in distorted areas, such as, roadsides, dunes, waste areas, railway banks, lake shores, and many other places. Yellow evening-primroses are native across southern Canada and in many places around the United States.



Ethnobotany: The plant is used in many medicinal ways. Its leaves, roots, and branches are all used to treat various diseases. The syrup made out of the plant can help treat whooping cough; the consumption of its oil can reduce high blood pressure and blood cholesterol levels. The plant can also help treat asthma, headaches, inflammation, arthritis, and many other diseases.

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