

NATIVE PRAIRIE PLANTS



Pasture Sage (*Artemisia frigid*)

Group: Forbs

Identification: It is smaller than the Silver Sage Brush and tends to grow in single, double or triple clumps. Key identification features include the light blue/green plant colour and round heads at the end of the stem. When pasture sage flowers the heads of each stem turn yellow.

Location: This drought resistant perennial forb is common throughout the dry grasslands, open slopes and disturbed sites. Where this plant is abundant is an indicator of animal overgrazing.

Fun Fact: Blackfoot Native American Tribes burned the aromatic oily branches so that the fragrant smoke would repel bugs. It is still used as a smudge for spiritual cleansing today.



Silver Sage Brush (*Artemisia cana*)

Group: Shrubs

Identification: It is a many branched shrub with dark coloured gnarled and twisted stems that shred like bark. The leaves are a blue grey or silver in colour and are in the shape of small long ovals. Each sage brush plant has a deep, extensive taproot that allows it to reach water even in seasons of drought. This plant is known to be the smell of the prairies due to its sweet fragrant leaves.

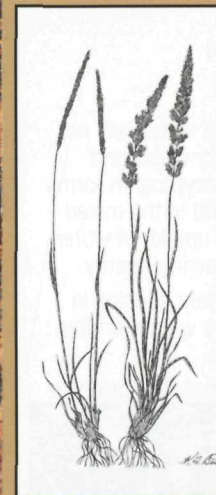
Location: It commonly grows on lighter eroded soils, valley flats or in the uplands.

Fun Fact: For medicinal purposes Aboriginals often used this plant to rid the body of headaches and stomach pains. It is an important food source and habitat for both the Pronghorn Antelope and the Greater Sage-grouse.



Grasslands National Park is a part of a larger vegetation zone known as the mixed grass prairie ecosystem that extends throughout the Great Plains of Canada and the United States. The term 'mixed grass' refers to the fact that no single plant species dominates the prairie and that there is a mixture of medium sized and short grasses. Out on this landscape you see today there is at least 70 plant species below your feet. Among these are the seven core grass species as well as other equally important prairie plants that are outlined in this brochure. We encourage you to take some time to find and identify these resilient species out on the prairie. They have adapted to the harsh climate by being wind pollinators and having the majority of their plant biomass under ground so they are able to reach water sources during drought. Prairie grasses can be split into a cool season or warm season group. Cool season species can only grow when their surface pores are open as they need sunlight to make sugar for energy. Warm season plants can more efficiently store and make sugar allowing their pores to be closed and conserve more water during the day.

June Grass (*Koeleria gracilis*):



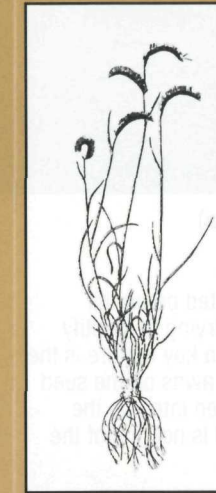
Group: Cool Season

Identification: It is one of the shorter prairie grasses with spikelets that are supported on short stalks which are usually pressed close together. It will turn reddish in colour when cured and the seed head opens when they are ready to wind scatter.

Location: This grass is common throughout the prairies where it is usually found as single plants in mixed grass communities. It grows in upland prairie and valley slope areas.

Fun Fact: In moist conditions the seed heads have a purplish tinge.

Blue Grama Grass (*Bouteloua gracilis*)



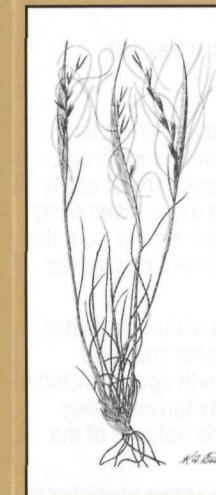
Group: Warm Season

Identification: Blue Grama will increase in abundance in dry years and thrives under prolonged heavy grazing pressure. This short grass forms dense mats of short curly leaves with a characteristic "eyelash" looking seed head. This is due to all the spikelets being inserted on one side of the head stem and as it ages it curls over. This grass turns reddish in colour in the fall as it is cured.

Location: Blue Grama has adapted to drier prairie sites such as the uplands and in areas where the soil is poor and there is low moisture. It is often found associated with Needle-and-thread Grass.

Fun Fact: Aboriginal peoples used this plant to forecast the upcoming weather. If stalks produced only one seed head the winter would be mild but if there were two or more heads it would be severe. It is a favourite food of the Plains Bison.

Needle-and-thread Grass (*Stipa comata*)



Group: Cool Season

Identification: Identification can be achieved by spotting the long soft curled awns attached to the seeds, making it look like a threaded sewing needle. It does not come to seed often but when it does around late July, the seed tip sticks into and anchors to any woolly material. This helps the plant achieve seed dispersion.

Location: This very nutritious bunch grass dominates the drier prairie regions especially flat upland grasslands. It is competitive with other plants in dry poor soils.

Fun Fact: It is known locally as spear grass and is one of the most palatable grasses on the prairies as it grows in early spring and withstands intense grazing.



Green Needle Grass (*Stipa viridula*)



Group: Cool Season

Identification: A tufted perennial bunch grass. When trying to identify Green Needle grass a key feature is the common twice bent awns on the seed head. It remains green late into the summer season and is not one of the core seven grasses.

Location: It grows best in deeper, more fertile soils such as heavy clay and in areas where there is plenty of moisture.

Fun Fact: This species is also known as green feather grass due to the form of its seed head. It is the most palatable member of the needle grasses.

Northern Wheatgrass (*Agropyron dasystachym*)



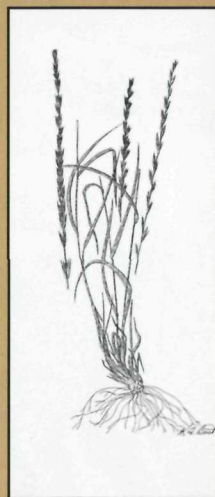
Group: Cool Season

Identification: For easy identification look for layers or accumulation of dead plant materials around the stem base. The leaf blades will be light green to blue in colour with a tapered off end. Course stem and harsh leaves set it apart from others.

Location: This grass is commonly associated with western wheat grass on clay and loam soils but is generally found in the upland prairies of the park.

Fun Fact: Northern Wheat Grass is the most common of the wheat grass family to be found on the prairies.

Slender Wheatgrass (*Agropyron trachycaulum*)



Group: Cool Season

Identification: This bunch grass can reach heights of 2-4 feet tall depending on the amount of moisture received. It has a flowering head with glumes that are almost as long as each spikelet. The leaf blades which are often tinted purple, are usually flat and taper off near the tip.

Location: Slender Wheatgrass tends to grow in the more moist regions of the prairies such as around sloughs, saline soils or wooded river areas.

Fun Fact: It is less common than the other wheat grasses found on the prairies but is an important early-establishment species.

Western Wheatgrass (*Agropyron smithii*)



Group: Cool Season

Identification: This highly adaptable, perennial grass can be identified by the stiff blue or green blade leaves which attach to the stem at a 45° angle. These leaves rarely grow above the seed head and each plant grows as a single unit.

Location: It is commonly found in low lying areas on heavy alkaline or clay soils. It dominates seasonally flooded moist areas and in the grassland valleys.

Fun Fact: This grass will choke out other grasses in competition for water while its high water tolerance enables it to escape drowning circumstances.

Western Porcupine Grass (*Stipa curtisetia*)



Group: Cool Season

Identification: Porcupine grass is closely related to Needle-and-thread grass. This clump grass is most easily identified by the long awns resembling porcupine quills, which extend from the seeds and the broad, bent flag leaves on the stems.

Location: This grass occurs on better soils and requires higher moisture conditions. Such growth spaces include drainage areas in hilly terrain, valley slopes or in the prairie uplands of the park.

Fun Fact: The seeds of this plant are readily used for food by various prairie grassland birds.

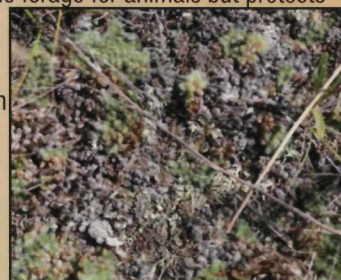
Little Club Moss (*Selaginella densa*)

Group: Forbs

Identification: Although its named a moss, it is actually not a moss at all as it has vascular tissue to carry water and nutrients within the plant. This low growing cryptogam forms carpet like mats that cover 80% of the ground in the mixed prairie. Their shallow roots allow immediate uptake of water which can cause competition with plants growing nearby.

Location: This plant is the most abundant plant species in the park. It is about 40% of the vegetation by weight on the upland prairie sites.

Fun Fact: It does not provide forage for animals but protects the soil from erosion by wind, water and tramping by animals such as the Plains Bison. It is the reason why there is soil for other plants to grow in.



Creeping Juniper (*Juniperus horizontalis*)

Group: Shrubs

Identification: This plant is considered a prairie shrub as it usually only reaches 15-20 cm in height. Its features include a woody base with short green leaves erecting from dark stems to give the plant a dark green colour. The root system is very intricate as they grow out of the ground or out of the sides of embankments. This is to aid the plant in acquiring every little bit of water that may be on the surface of the prairies.

Location: It typically grows on the sides of hills in the barren shale soil or in eroded areas.

Fun Fact: The berries are used to flavour gin and are typically light green to blue in colour. This plant provides important habitat for Greater Short-horned Lizards.



Greasewood (*Sarcobatus vermiculatus*)

Group: Shrubs

Identification: Greasewood is a member of the Goosefoot family and has spiny, dense branches and succulent leaves. The lower branches often transform into thorns. The leaves are pale yellowish to green and are hairless or only slightly hairy. The wood is yellow and very hard and tough. Flowers appear from June to August.

Location: This shrub grows in alkaline or saline soils in semiarid or arid plains. Usually found in sunny, flat areas, exposed hillsides, salt flats, and around sloughs.

Fun Fact: It was used as firewood and as shafts for arrows by Indigenous people.

