

# MINNESOTA'S PRAIRIE GRASSLAND BIOME

On a prairie the lines of the landscape are clean. No trees clutter the horizon. Nothing blocks the view extending forever. Ripples run through the grasses so they seem to advance in front of the wind. These are the waves that early settlers saw as an ocean, a sea of grass and unbroken soil stretching as far as the eye could see. Minnesota once had 18 million acres of prairie that stretched across the state from southeast to northwest. Fertile prairie soil grew good agricultural crops, however, and most of the prairie was plowed. The patches of prairie remaining are mostly the remnants that could not be plowed.

## WHAT IS A PRAIRIE?

Prairies are defined as extensive areas of flat or rolling grasslands. In Minnesota these grasslands range from sparsely vegetated sand dunes to vast fields of big bluestem up to 8 feet tall, from wet meadows to shortgrass prairies high on the bluffs of the Minnesota River.

## FOUNDATIONS OF TODAY'S PRAIRIE GRASSLAND

The last glacial episodes in Minnesota advanced across the state leaving behind the soils that the prairie formed upon. The northern parts of the prairie biome were primarily influenced by Glacial Lake Agassiz. The south and southwestern parts feature a high plateau of quartz bedrock topped with glacial debris.

## CLIMATE IS KEY

Rainfall and temperature play a major role in where prairies form. Prairies develop where rainfall is generally lower and summer temperatures are higher compared to Minnesota's other biomes.

## FIRE, BISON, DROUGHT



Three major factors have influenced the prairie grasslands. Fire eliminates trees and shrubs while improving the growth of prairie wildflowers and grasses. Prairie plants have adapted to grazing by bison and other large herbivores (plant eaters) by having underground

growing points that quickly sprout after being eaten. Many prairie plants can go dormant during a drought then begin growing again after the drought ends.

## FUN FACT



*Much of a prairie is found underground! Prairie plants have deep, massive roots that absorb nearly all available water. Some roots can be three times longer than the plant above them!*