



Tallgrass Prairie
CENTER

UNI / University of Northern Iowa

Irvine Prairie Grass Guide



Big bluestem



Little bluestem



Sideoats grama



Switchgrass



Indiangrass



Composite dropseed



Canada wildrye



Virginia wildrye



Kalm's brome



Marsh muhly



Prairie cordgrass



Prairie dropseed



Big bluestem

Scientific Name:
Andropogon gerardii

Life cycle: Long-lived perennial

Bloom: August - October

Growth form: Intermediate

Height: 4 - 8 feet

Fun Fact:

Sometimes referred to as the ice cream for cattle by ranchers. Cattle love eating it, but it must be consumed in moderation as it cannot withstand concentrated grazing.



Little bluestem

Scientific Name:
Schizachyrium scoparium

Life cycle: Perennial

Bloom: August - October

Growth form: Bunchgrass

Height: 1.5 - 3 feet

Fun Fact:

Little bluestem's name translates to "small red grass" in Lakota. Dried leaves and stems were rubbed into soft fiber to line and insulate moccasins.



Sideoats grama

Scientific Name:
Bouteloua curtipendula

Life cycle: Perennial

Bloom: July - September

Growth form: Intermediate

Height: 2 - 3 feet

Fun Fact:

The state grass of Texas is a favorite bird food when the seeds ripen in late summer.





Switchgrass

Scientific Name:
Panicum virgatum

Life cycle: Long-lived perennial

Bloom: July - September

Growth form: Sod-forming or
bunchgrass depending on ecotype

Height: 3 - 6 feet

Fun Fact:

The genus *Panicum* are essential food plants for caterpillars of banded skippers and satyrs.



Indiangrass

Scientific Name:
Sorghastrum nutans

Life cycle: Short-lived perennial

Bloom: September - October

Growth form: Intermediate

Height: 3 - 8 feet

Fun Fact:

Indiangrass, like Big bluestem and many other prairie grasses, uses a special form of photosynthesis called C₄ that helps it conserve water in dry summer weather.



Composite dropseed

Scientific Name:
Sporobolus compositus

Life cycle: Long-lived perennial

Bloom: August - October

Growth form: Bunchgrass

Height: 2 - 4 feet

Fun Fact:

Animals may help Composite dropseed spread its seeds. Viable seeds have been found in rabbit droppings and bison hair samples.



Canada wildrye

Scientific Name:
Elymus canadensis

Life cycle: Short-lived perennial
Bloom: June - September
Growth form: Bunchgrass
Height: 2 - 6 feet

Fun Fact:

As a good source of early spring livestock forage, Canada wildrye is one of the most palatable and nutritious grasses of the tallgrass prairie ecosystem.



Virginia wildrye

Scientific Name:
Elymus virginicus

Life cycle: Short-lived perennial
Bloom: June - September
Growth form: Bunchgrass
Height: 1 - 3 feet

Fun Fact:

Often used in erosion control and streambank stabilization projects since it is one of the fastest growing prairie grasses.



Kalm's brome

Scientific Name:
Bromus kalmii

Life cycle: Perennial
Bloom: June - July
Growth form: Bunchgrass
Height: 1.5 - 3 feet

Fun Fact:

This short tallgrass prairie understory native has silky hairs on its seed heads, distinguishing it from the introduced and invasive Smooth brome.





Marsh muhly

Scientific Name:
Muhlenbergia racemosa

Life cycle: Perennial
Bloom: August - October
Growth form: Sod-forming
Height: 1 - 3 feet

Fun Fact:
Though the name suggests that this native lives in wetlands, it also grows in drier upland soils with full or partial shade.



Prairie cordgrass

Scientific Name:
Spartina pectinata

Life cycle: Perennial
Bloom: July - September
Growth form: Sod-forming
Height: 5 - 6 feet

Fun Fact:
The species name derives from the Greek word “pecten,” or “comb,” in reference to the appearance of the plant’s flowering branches.



Prairie dropseed

Scientific Name:
Sporobolus heterolepis

Life cycle: Perennial
Bloom: July - October
Growth form: Bunchgrass
Height: 1 - 3 feet

Fun Fact:
The fountain of fine leaves smells like coriander in the fall and seeds can be ground into flour.



Growth Form Definitions

- *Bunchgrass* - New grass stems arise close to existing stems forming a tight clump.
- *Sod-forming* - New grass stems emerge from underground stems (rhizomes) forming a patch that spreads.
- *Intermediate* - New grass stems arise from short rhizomes, forming a loose bunch that gradually spreads. In early restoration stages, these species will often form tight bunches similar to bunchgrass.



Grasses

Grasses are dominant plants of prairies and an **essential** component of any prairie reconstruction project. A seed mix with a **balance** of diverse grass and wildflower species helps create **multifunctional** plantings that compete better against weeds. Grasses are important members of the plant community due to their deep, fibrous **root systems** that hold and enrich prairie soils, filter water, and capture nutrients. Their foliage **feeds** herbivores from the smallest caterpillar to the largest bison, and their seeds **support** many birds and small mammals through the fall and winter.

About Irvine Prairie

Irvine Prairie is a 292 acre prairie-in-progress on the farm of Cathy Irvine in memory of her husband David. In partnership with Cathy and the farm operator, we are restoring an ecologically diverse tallgrass prairie that engages current and future generations of students and community members in learning about Iowa's prairie heritage and appreciating the benefits provided by prairie.

The Iowa Natural Heritage Foundation holds the conservation easement on the property, and the University of Northern Iowa Foundation Properties Corporation is the owner. The original 77 acres was dedicated on May 18, 2018. In January 2023, Cathy Irvine donated an additional 215 acres to complete the gift.

Since 2018, we have introduced over 100 species of native prairie plants, using the most genetically diverse and regionally appropriate seed sources available, and closely matching species with soil moisture conditions. Some hard-to-establish species are started in our greenhouse and introduced as plugs. The Tallgrass Prairie Center uses the best known approaches to controlling weeds and encouraging diverse, native wildlife. We are committed to documenting the work, and carefully monitoring the results, to guide future management decisions.

Find more information about Irvine Prairie at: www.tallgrassprairiecenter.org/irvine-prairie/

Additional Resources

Iowa Department of Natural Resources: <https://www.iowadnr.gov/conservation/prairie-resource-center>
U.S. Fish and Wildlife Service - Neal Smith Wildlife Refuge: https://www.fws.gov/refuge/neal_smith/
United States Department of Agriculture - Fire Effects Information System: <https://www.feis-crs.org/feis/>
U.S. Department of Agriculture - NRCS Plant Guide: plants.usda.gov

Iowa Prairie Network: <https://www.iowaprairienetwork.org/>
Illinois Wildflowers: <https://www.illinoiswildflowers.info/>
Minnesota Wildflowers: <https://www.minnesotawildflowers.info/>
Missouri Prairie Foundation: <http://grownative.org/>