



# CRITTER CONNECTIONS



**Blackland  
Prairie Ecoregion**





# Little Bluestem



Little Bluestem

Little bluestem, scientific name *Schizachyrium scoparium*, is a native Texas grass that can be found across the state and is one of the most common plants in Texas prairies. This grass grows up to 6 feet tall and gets its name from the blue-gray color along its leaves. Like other grasses in the bluestem family, little bluestem is a bunchgrass. Bunchgrasses are grasses that grow in clumps. This growth pattern creates important habitat for many wildlife species.

Little bluestem is considered one of the Big Four grasses of the tallgrass prairies, meaning that it's one of the four native tallgrasses that can be found in Texas. The Texas Big Four includes little bluestem, big bluestem, indiangrass, and switchgrass. These plants are very important for Texas ecosystems like the blackland prairie. Native tallgrasses like the little bluestem have very deep, well developed root systems that can reach over 8 feet in length! The deep roots of native Texas grasses reduce erosion

and add important nutrients into the soil. These plant's roots even help reduce flooding - their long roots pull water deep into the soil, which increases how much water can be absorbed and retained! These roots make the soil healthier, which in turn helps grow stronger plants and wildlife habitat!

Still, little bluestem does more than create healthy soil. This grass can serve as wildlife habitat by providing cover from the weather or predators, and is a great food source for wildlife like grassland birds, insects, and deer. Little bluestem also serves as an important nesting site for some native birds like quail, meadowlarks, and other ground nesting birds who rely on the safety and cover that this plant provides. Some mammals, like deer, even use this grass to help hide their young. What a neat native Texas grass!



Blackland Prairie

Photos by Ty Higginbotham, Tim Siegmund TPWD

Cover photo by Chad Brantley

Article Source:

Tober, D. and N. Jensen. 2013. Plant guide for little bluestem (*Schizachyrium scoparium*). USDA Natural Resources Conservation Service, Plant Materials Center, Bismarck, North Dakota 58501

## Shoebox Blackland Prairie

For this activity you will need green and brown pipe cleaners, scissors, a shoe box, green and brown construction paper (or paint) and glue (or tape).

1. Begin by removing the lid of your shoebox. Cover the inside of the box with brown construction paper. This will be the 'underground' view of your prairie model. Cover one side of the box with green construction paper. This will be the 'above ground' view of the model.
2. Cut green pipe cleaners into 2-4 inch pieces. Be careful! The ends can be sharp. Combine 5-10 pieces with glue or tape. These will be the leaves of your prairie grass. Glue the grass to the top, or above ground, part of your box.
3. Cut brown pipe cleaners into 3-7 inch pieces. Be careful! The ends can be sharp. Combine 8-12 pieces with glue or tape. This will be your grass' roots. Glue the roots below the grass within the box, in the 'underground' view. Be sure to bend the roots to mimic how they look in nature!



What kind of native prairie grasses and critters can you find in this *Critter Connections* issue to add to your blackland prairie model? How do these plants and animals help our native Texas prairies?

Activity Source: Ty Higginbotham  
Photo by Amber Brown

# Did you know...



Photo by Steve Renich

...that Texas has 10 different ecoregions?

...that little bluestem is one of the most common plants in Texas prairies?

...that the Blackland Prairie ecoregion is named after its soil?

...that less than 1% of the blackland prairie ecosystem type remains?

...that the Eastern Meadowlark nests on the ground?

...that thirteen-lined ground squirrels hibernate?

...that monarch butterflies fly through the Blackland Prairie ecoregion?

...that two species of wolves used to live in the Blackland Prairie ecoregion?

...that some native prairie grass roots can stretch up to 12 feet below ground?

...that snakes are the most diverse group of reptiles found in the Blackland Prairie ecoregion?



Switchgrass roots

## Color Me



## Eastern Meadowlark

(*Sturnella Magna*)



Activity source: Sheri Amsel - [www.exploringnature.org](http://www.exploringnature.org)  
Photo by Andy Morffew



# Blackland Prairie Ecoregion



By Amber Brown

Texas is home to 10 different Gould's ecoregions as seen on the map below. Ecoregions are areas of land that share similar climate, **topography** and soils. In this series, we will dive into each of Texas' 10 ecoregions one *Critter Connections* issue at a time. First up – the Blackland Prairie!

The Blackland Prairie ecoregion of Texas covers two distinct areas, sometimes called belts. The core belt of this ecoregion begins north of Dallas and stretches over 300 miles south to San Antonio. The smaller part of this ecoregion, nicknamed the Fayette Prairie, can be found to the southeast. The Fayette Prairie is still a part of the Blackland Prairie ecoregion even though it's disconnected from the core area. Overtime, the small rural agricultural communities that once occupied this ecoregion have transformed into some of Texas' biggest cities - Dallas, Fort Worth and San Antonio.

The most unique characteristic of this ecoregion is the soil; it's actually where the Blackland Prairie ecoregion gets its name! The soil found here is very dark, almost black, and full of important nutrients that plants need to grow. This ecoregion's soil and average yearly rainfall of makes it great for growing plants. In fact, before humans occupied the area, the Blackland Prairie ecoregion was a vast tallgrass prairie stretching from the Red River close to the Texas-Oklahoma state line to central Texas. This historical **tallgrass prairie** was home to plants like little bluestem, big bluestem, indiagrass, and switchgrass – most of which can grow up to 8 feet tall and have root systems that can stretch up to 12 feet below ground. Animals like the bison, grey wolf, red wolf and the Greater Prairie-Chicken lived in these historic prairies. These animals are now considered extirpated from this ecoregion. Extirpated means that these animals can no longer be found here. Still, the Blackland Prairie ecoregion is home to a whole host of neat plants and wildlife, most of which can be found across the state of Texas. Let's learn more about this ecoregion through the critters that call it home!

Many different species of reptiles can be found in this ecoregion like the ornate box turtle, spiny softshell turtle and the prairie skink, but snakes are the most diverse group of reptiles found here. Some snake species you can find in this ecoregion include the eastern hog-nosed snake and the prairie kingsnake. This area is home to more than just reptiles, though! You can find different species of amphibians in the Blackland Prairie ecoregion like the Woodlouse's toad, green treefrog, small-mouthed salamander and the central newt. Within the rivers, lakes and streams in this area you can find fish like the spotted bass, blue catfish and longear sunfish.

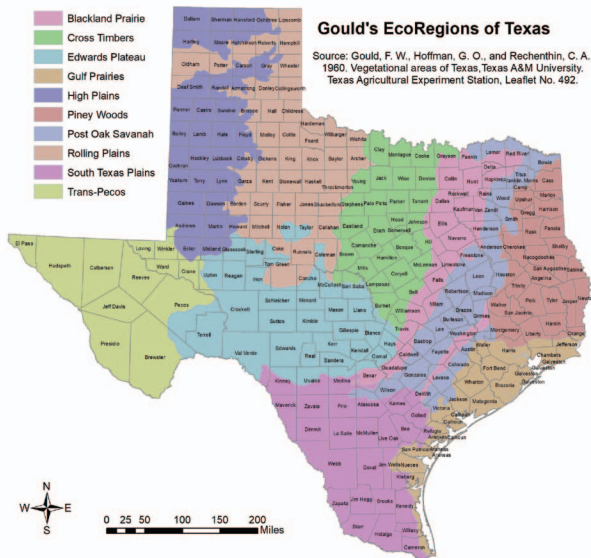


Eastern hog-nosed snake

Many species of mammals that call the Blackland Prairie ecoregion home can be found in other ecoregions across the state like the striped skunk, coyote, plains pocket gopher and the hispid cotton rat. Another common mammal you can find in this ecoregion is the thirteen-lined ground squirrel. The thirteen-lined ground squirrel looks a lot like the gray squirrels found in most urban areas but instead of trees, this critter lives in underground burrows! These small, ground dwelling mammals have a brown body with tan lines and dots down their back. They are **omnivores** and eat grass, seeds, flower heads, insects and even mice! These native Texas mammals are awake during the



Thirteen-lined ground squirrel!





day, or diurnal, and hibernate for long periods of time in the winter. Thirteen-lined ground squirrels have adaptations that help them survive up to six months with little food or water while hibernating in their underground burrows. How neat!

There are many different types of birds that call the Blackland Prairie ecoregion home from **raptors** like the Red-shouldered hawk, to **grassland birds** like Loggerhead Shrikes, and even ground dwelling birds like Bobwhite quail. One neat bird that you can find in many different Texas ecoregions, including the Blackland Prairie, is the Eastern Meadowlark. Meadowlarks can be identified by their sharp pointy bill, round body and yellow chest with black chevron stripe. These birds have a unique call, often described as light, airy and even flute-like. Eastern Meadowlarks eat mostly insects and seeds. They search for food by walking on the ground and probing with their beak. Meadowlarks even nest on the ground. If you stumble across this native Texas bird, you are in for a surprise! Meadowlarks will burst into a sudden flight when disturbed. Like other grassland birds, these critters rely on prairie ecosystems like those found in the Blackland Prairie ecoregion for survival and are in steep decline due to the loss of their **grassland** habitat.

Another native critter you can find in the Blackland Prairie ecoregion of Texas is the monarch butterfly. Monarch butterflies pass through this ecoregion as they fly through Texas in the fall and spring when they migrate between their breeding grounds further north and their overwintering grounds in Mexico. The native prairie ecosystems within this ecoregion are very important habitats for these insects because they provide the food and shelter these butterflies need to survive and lay their eggs. In turn, these insects - named Texas' state insect in 1995 - contribute to the health of our ecosystems by pollinating the plants they encounter.

The Blackland Prairie ecoregion has seen a significant loss of its historic prairie ecosystems to other land uses like farming and ranching or human activities like **urban sprawl**. It is estimated that less than 1% of the untouched blackland prairie ecosystem remains, making it one of the most endangered ecosystems in North America. This loss of important habitat has impacted wildlife like the Eastern Meadowlark, Loggerhead Shrike and even monarch butterflies. Practices like restoring

the native prairies through replanting native grasses, creating **pocket prairies**, grazing cattle on native grasses instead on non-native grasses, and using sustainable agricultural practices have helped regain some of what we have lost. Through the continued work and collaboration of **conservationists**, farmers, ranchers, citizens and research scientists, we can continue to see these native prairies and the animals that call them home make a comeback!

There is no doubt that the Blackland Prairie ecoregion of Texas is special, with the native wildlife, prairie plants, unique soil and rare prairie ecosystem type within its boundaries. By providing a home for native tallgrass plants, grassland birds and migratory insects, this area remains an important piece of the puzzle for natural resource conservation in Texas.



TWA HQ prairie restoration

*Learn more about the Blackland Prairie ecoregion and enhance your students' Critter Connections experience! Go to the Critter Connections webpage at [www.texas-wildlife.org/critter-connections-magazine](http://www.texas-wildlife.org/critter-connections-magazine) for enrichment activities and resources to take your learning to the next level.*

### WORD BANK

- Topography** – an area's physical shape; for example rivers, hills and valleys
- Tallgrass prairie** - prairie ecosystems that are made up of mostly tall grass species, but are also home to flowers, trees and shrubs
- Omnivores** – an animal that eats both plants and animals
- Raptors** – predatory birds
- Grassland birds** – birds that depend on grasslands for some or all of their habitat needs
- Grassland** – large open area covered by mostly grass
- Urban sprawl** – spreading of cities often as a result of increasing population
- Pocket prairie** – a small area of native prairie plants and wildlife
- Conservationists** – a person who works to protect natural resources like water, plants and wildlife

Article sources:

- <https://texasprairie.org/education/>
- [https://www.depts.ttu.edu/nsrl/mammals-of-texas-online-edition/Accounts\\_Rodentia/Ictidomys\\_tridecemlineatus.php#:~:text=Common,the%20degradation%20of%20grassland%20habitat](https://www.depts.ttu.edu/nsrl/mammals-of-texas-online-edition/Accounts_Rodentia/Ictidomys_tridecemlineatus.php#:~:text=Common,the%20degradation%20of%20grassland%20habitat)
- [https://tpwd.texas.gov/huntwild/wild/wildlife\\_diversity/texas\\_nature\\_trackers/monarch/](https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/texas_nature_trackers/monarch/)

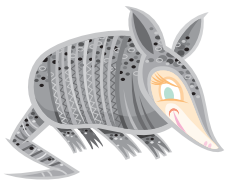
Photo by Tim Siegmund TPWD, Jon Fife, Phil Myers-Museum of Zoology University of Michigan, Iwolfartist, Clinton & Charles Robertson, Kim Hodges

# Ecoregion Match

Draw a line to the correct answer.

- |   |                                   |
|---|-----------------------------------|
| 1) Less than 1% of this ecosystem type remains                  | A) Omnivore                       |
| 2) Bird that has a yellow chest and black stripe                | B) Little bluestem                |
| 3) A native Texas bunchgrass                                    | C) Thirteen-lined ground squirrel |
| 4) A ground dwelling mammal that hibernates                     | D) Monarch butterfly              |
| 5) A person who works to protect natural resources              | E) Tallgrass prairie              |
| 6) A migratory insect found in the Blackland Prairie ecoregion  | F) Blackland prairie              |
| 7) Prairie ecosystems made up of mostly tall grass species      | G) Eastern Meadowlark             |
| 8) An animal that eats both plants and animals                  | H) Bunchgrass                     |
| 9) The Blackland Prairie ecoregion's most unique characteristic | I) Soil                           |
| 10) Grass that grows in a clump and is important for wildlife   | J) Conservationist                |

ANSWERS: 1. F, 2. G, 3. B, 4. C, 5. J, 6. D, 7. E, 8. A, 9. I, 10. H



## Nancy's Corner



One way Texans are helping prairie ecosystems like those found in the Blackland Prairie ecoregion is by creating pocket prairies! Pocket prairies are small areas of native prairie grasses and flowers that support the wildlife who need these ecosystems to survive. Pocket prairies are typically less than one acre in size and can be any shape. These small-scale prairies can be planted anywhere – from the corners of agricultural fields to lawns within the city. This approach to conservation has helped Texans convert many acres of land into vital wildlife habitat!

You can create your own pocket prairie by planting native grasses and flowers in a small area, like a part of your yard or garden. Remember – an important part of prairies, even pocket-sized ones, is not just the plant diversity but wildlife diversity as well. Make sure your pocket prairie has plants to support a variety of wildlife like pollinators, insects and birds. If you don't have room for a pocket prairie, don't fret! You can plant a pollinator garden to support wildlife. Pollinator gardens are gardens that have native flowering plants that important pollinators like butterflies, bees and hummingbirds use for food and shelter. Be sure to research what native plants grow best within your area.



# Formal Education Programs

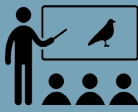
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## Critter Connections

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## Educator Workshops

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[www.texas-wildlife.org](http://www.texas-wildlife.org)

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TWA is a membership-based, non-profit organization whose goal is to educate all people, especially the youth of Texas about conservation, management and stewardship of wildlife and habitat on private land.

All education programs are made possible through memberships, grants and donations. Learn more about the levels of membership as well as the educational programs TWA offers on our website.

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