



CRITTER CONNECTIONS



***Gulf Prairies
Ecoregion***





Gulf Cordgrass



Gulf Cordgrass Flowers

One plant you can find in the Gulf Prairies ecoregion of Texas is the gulf cordgrass, scientific name *Spartina spartinae*. Gulf cordgrass is one of six different species of cordgrass in Texas, and can be found in the marshes and prairies along the gulf coast.

Gulf cordgrass grows in clumps and has sharp points on the tips of their green leaves that will poke you when touched. The stems are hollow and are usually about three feet tall, although they can grow up to six feet tall! Gulf cordgrass will flower from early spring to summer, and occasionally into fall. This grass can tolerate saline, or salty, environments which makes it a great fit for the Texas coast.

This grass is an important cover for nesting birds like the Mottled duck and other wildlife, protecting them from the weather and predators. Livestock like cattle will graze on cordgrass before it gets too tough. For this reason, many land managers along the Texas coast will conduct prescribed burns. This recycles nutrients and removes the old plant material so new growth can occur. Some wildlife, like geese, will eat the tender new growth as well. Even more, this plant is great at reducing erosion due to the thick clumps, or bunches, it grows in. What a neat native Texas plant!



Gulf Cordgrass

Article Source:

Riche', C. 2020. Plant Guide for Gulf cordgrass [*Spartina spartiae* (Trin.) Merr. ex A.S. Hitchc.]. USDA-Natural Resources Conservation Service, Golden Meadow Plant Materials Center. Galliano, Louisiana.

Photos by Cleveland Powell and Jon McIntyre

Cover photo by Shiva Shenoy

Underwater Model

For this craft you will need a shoe box, green pipe cleaners, construction paper (brown, blue and white), crayons or colored pencils, glue, and scissors.

1. Begin by removing the lid to your shoe box. Cover the inside of the box with construction paper – brown on one side and blue on the remaining sides.
2. Glue one end of the green pipe cleaners to the brown paper. Bend the pipe cleaners to look like seagrass swaying in the waves. This will be the seagrass meadow.
3. On a piece of paper, draw a red drum. Remember to add its tail spot(s)!
4. Carefully cut the red drum and glue it to a pipe cleaner.

Now you have your very own underwater model of a red drum in a seagrass meadow! Check out the feature article to find out what these native Texas fish eat, and to learn about other neat critters found in the Gulf Prairies ecoregion.



Did you know...



- ... that the Gulf Prairies ecoregion stretches over 360 miles?
- ... that the Gulf Prairies ecoregion is an important area for migrating birds?
- ... that the Kemp's ridley sea turtle is the most endangered sea turtle in the world?
- ... that the Texas coast is home to five sea turtle species?
- ... that the red drum is also called the redfish?
- ... that the largest red drum caught in Texas was 59.5 pounds?
- ... that Texas is home to the endangered Whooping Crane?
- ... that the Whooping Crane is the largest bird in North America?
- ... that the ghost wolf of Galveston Island is a coyote and red wolf hybrid?
- ... that countries can work together to conserve wildlife?



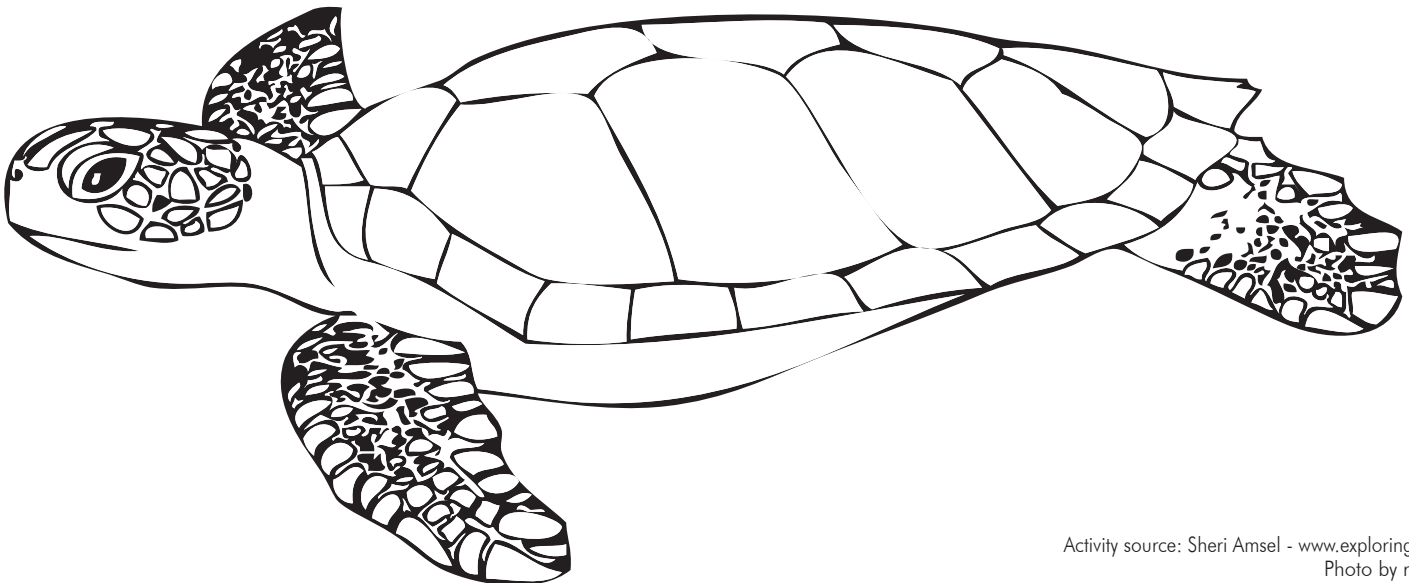
Whooping Crane Flying

Photo by hmcook

Color Me

Kemp's Ridley Sea Turtle

(Lepidochelys kempii)



Activity source: Sheri Amsel - www.exploringnature.org
Photo by randy6410



Gulf Prairies 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. Next up – the Gulf Prairies!

The Gulf Prairies ecoregion, also called the Gulf Prairies and Marshes, runs over 360 miles along the Texas coast from the Louisiana-Texas state line to the Texas-Mexico border, stretching as far as 80 miles inland in some areas. Within this ecoregion, you will find large cities like Corpus Christi, Galveston and parts of Houston. This ecoregion includes the prairies, **barrier islands**, marshes, bays and **estuaries** along the Texas coast, as well as the iconic wind driven sand dunes of south Texas. These diverse habitats help support a wide variety of our state's plants and wildlife by providing the resources they need to survive.

Due to the blend of land and aquatic ecosystems in this ecoregion, you can find a wide range of wildlife species like the

Aplomado Falcon, Attwater's Prairie-Chicken, Piping Plover, alligator, ocelot, monarch butterflies, dolphins and more! This area is an important stop-over and wintering ground for migrating birds. Some birds, like migrating **waterfowl**, visit the rice fields and wetlands found in this area each winter. Meanwhile, birds migrating long distances over the gulf will stop in this ecoregion to rest before continuing. You can also find Texas' seagrass meadows in this ecoregion. These underwater plants help improve water quality, reduce erosion and provide important habitat for fish, birds and other marine life. Some of our state's most severe weather occurs here during hurricane season, but the barrier islands, prairies and sea grasses help stabilize and protect our coastal areas during the storms.



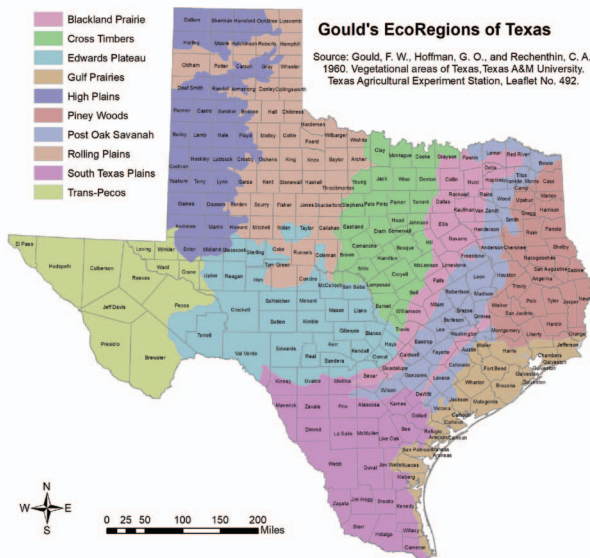
Gulf Marsh

The Texas coast is home to five species of sea turtles including the world's most endangered sea turtle, the Kemp's ridley. This critter is the smallest of all sea turtles, weighing 75-100 pounds and measuring just over two feet long. They have a green-gray upper shell and tan lower shell. Kemp's ridley sea turtles are the only sea turtles that nest during the day and will nest in large groups called arribadas. To nest, the female will emerge from the water, dig a hole, lay about 100 eggs, cover the nest and return to the water - all within 45 minutes and up to four times per year! Because they return to the water, volunteers will patrol beaches each year to help protect the nests from predators. After 45-60 days, the hatchlings will emerge and quickly make their way to the water, trying to avoid predators like birds, crabs and fish. About 1 in 800 hatchlings will survive and make it to adulthood. The hatchlings will reach maturity after about 12 years. Once mature, they will return to the same beach they hatched from to build their nests and will continue to nest at the same beach year after year. These critters are listed as critically endangered, meaning they face a very high risk of extinction, due to threats like **bycatch**, consuming trash, loss of nesting habitat, boat strikes, predation, pollution and climate change.



Kemp's Ridley Sea Turtle Hatchling

Another critter you can find in the waters of the Gulf Prairies and Marshes ecoregion is the red drum, also known as the





redfish. Red drum get their name from the reddish color along their back that contrasts their lighter colored belly. They have a black spot on their tail, and while it is common for these native Texas fish to have more than one spot, it is rare to find one missing its spots. While red drum prefer shallow water, they can be found in deeper areas as well. These critters commonly feed in the seagrass meadows and soft mud of our coastal bays, searching for their next meal of crab, fish and even marine worms! While feeding, red drum will keep their head down in the grass or mud and lift their tail up where it can be seen above water, an act known as tailing. These adaptable critters can survive in freshwater, saltwater and **brackish** waters. Red drum are considered a sport fish, and many people travel to the Texas coast to catch one. The current record for the largest red drum caught in Texas is 59.5 pounds. If you want to fish for red drum, be sure to check out Texas Parks and Wildlife Department's website for licensing requirements and bag limits.



Red Drum

In the wetlands, marshes and prairies of this ecoregion you will find a conservation superstar, the Whooping Crane. These critters nest in Canada and migrate south each fall, some flying over 2,400 miles to the Texas coast. They are omnivores, meaning they eat both plants and animals like grains, acorns, insects, small fish and crabs. Adults have a white body, red markings on their head, yellow eyes and black wing tips that are visible in flight. When fully grown, these critters have a wingspan of over seven feet and stand almost five feet tall, making them the tallest bird in North America! Size is not the only thing that makes this bird so special – the Whooping Crane was once nearly extinct, meaning there were almost none left in the wild. Thanks to coordinated international conservation efforts, this critter has made quite the comeback! While this bird is still listed as endangered, their population has increased from around 20 individuals in the 1940s to over 800 in 2020, cementing them as a legendary conservation success story.



Whooping Crane

Long ago a native wolf, the red wolf, roamed the eastern United States including parts of Texas. By 1980, the US Fish and Wildlife Service declared them extinct in the wild. On the Texas and Louisiana coast though, if you look closely, you can find hints of this mammal living on in what we now call ghost wolves. These rare critters are not exactly wolves, but instead are coyotes that have been **hybridized** with red wolves. As

such, they look like a coyote, except for larger bodies, longer legs and a red color to their fur. The ghost wolf was discovered in the Texas Gulf Prairies and Marshes ecoregion thanks to the help of a citizen who noticed differences in the appearance of some coyotes on Galveston Island. Further research found that some coyotes in the area carried up to 70 percent of red wolf DNA. This discovery renewed hope for the future of the red wolf. Like other wildlife, the ghost wolves of Galveston Island are facing challenges due to habitat loss caused by growing urban areas.



Ghost Wolf

While most people think of beaches, seagulls and fishing when they picture the gulf coast, the Texas Gulf Prairies ecoregion has proven to be so much more to the wildlife and humans that inhabit it. This ecoregion serves as an important reminder of the power in working together. The cooperation between countries – from Canada to the United States to Mexico and beyond – have helped to conserve wildlife species that cross our borders. While there is still work to be done to reverse the effects of human impacts, the efforts of research scientists, conservationists and citizens are an outstanding example of how we can ensure a successful future for our shared wildlife, plants and landscapes when we unite behind a shared goal.

Learn more about the Gulf Prairies ecoregion and enhance your students' Critter Connections experience! Go to the Critter Connections webpage at 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

Barrier islands - long thin strips of land separated from the mainland by water

Estuaries - bodies of water on the coast between rivers and the gulf

Waterfowl - ducks and geese that frequent water

Bycatch - fish and other marine life accidentally caught by fishing gear while fishing for other species

Brackish - mixture of freshwater and saltwater; occurs where the rivers meet the gulf

Hybridized - a hybrid; a mixture of two different species

Article sources: The Natural History of Texas by Brian R. Chapman and Eric G. Bolen

Photos by Calan Coleman, Dan Thibodeaux, Jessica Bunting, Donna Pomeroy, Marc Henrion, leaf_me_be

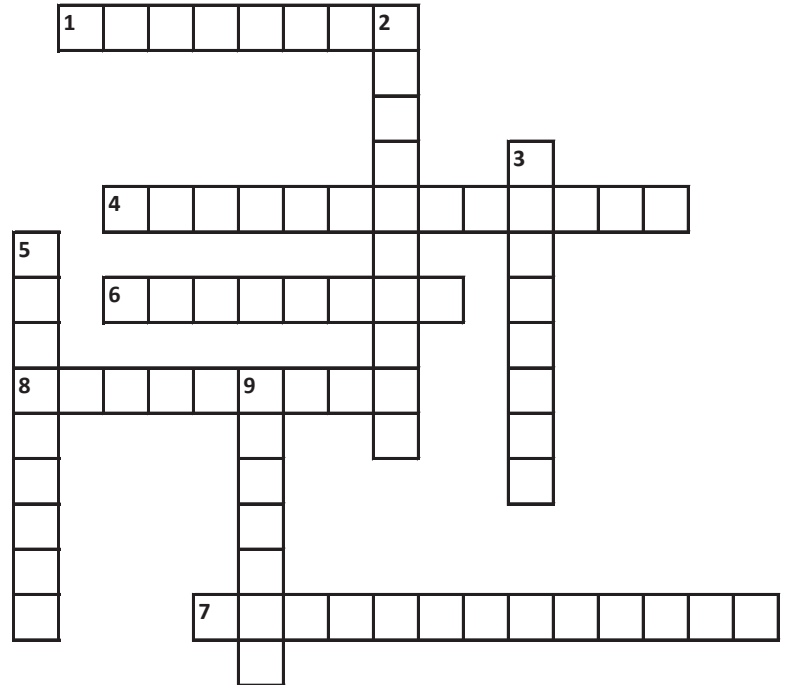
Gulf Coast Crossword

ACROSS

1. Eat both plants and animals
4. North America's tallest bird (two words)
6. The Gulf _____ ecoregion
7. A grass that is important nesting cover for wildlife like the Mottled duck (two words)
8. An animal that nests on the beach (two words)

DOWN

2. At risk of becoming extinct
3. A mixture of fresh and salt water; _____ water
5. Another name for a coyote that has up to 70% red wolf DNA (two words)
9. A sport fish found on the Texas coast (two words)



Activity source: <https://puzzlemaker.discoveryeducation.com>

Answers: 1. Omnivore, 2. Endangered, 3. Brackish, 4. Whooping Crane, 5. Ghost wolf, 6. Prairies, 7. Gulf cordgrass, 8. Sea turtle, 9. Red drum.



Nancy's Corner



As we learned in the feature article, the Gulf Prairies ecoregion is a key area for migrating birds. In fact, our state is home to some of the most famous birding sites in the United States, with many in this ecoregion. While people travel from other states or countries to go birding in this area, we are lucky to have it in our back yard.



One fantastic way to get into birding is to visit the Great Texas Coastal Birding Trail. This trail is made up of over forty hiking and driving trails, bird sanctuaries, and nature preserves that include over 300 birding sites along the Texas gulf coast. This trail, managed by the Texas Parks and Wildlife Department, was the first in the country and to this day is the largest. If you can't make it to the Great Texas Coastal Birding Trail, don't worry. You can go birding anywhere – from parks to back yards to parking lots and beyond!

While birding this summer, bring a journal to take notes and draw what you see. What does the plant or animal look like? Where did you find it? Do they make a sound? Can you identify it? What role does it play in its environment? Head to the *Critter Connections* enrichment page and bring along the Texas Bird Bingo card for even more fun! Have a parent or guardian send in pictures of your great birding adventure for a chance to be featured on social media.



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