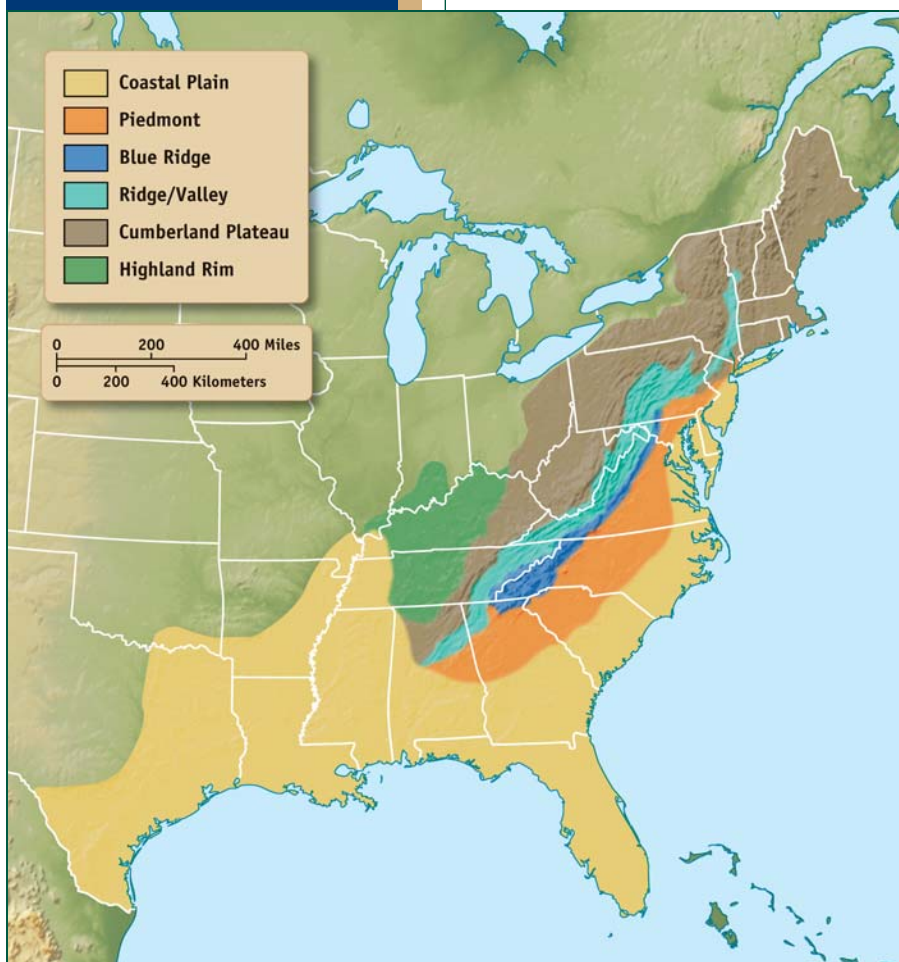


Map 6 Land Regions of the Eastern United States

Map Skill: What other states, in total or in part, are in the Gulf Coastal Plain region?



Louisiana's Natural Regions

As you read, look for:

- the five major natural regions, and
- vocabulary terms **elevation**, **relief**, **alluvial**, **swamp**, **estuary**, **topography**, **marsh**, **salt dome**, and **geologist**.

The variety in Louisiana's natural environment often surprises travelers. Depending on where you are, you can listen to a rushing waterfall, photograph a flowering prairie, wade in a sandy creek, climb to a rocky hilltop, or hike a trail worn between straight-sided bluffs. You can also explore the marsh in an airboat or pole your pirogue through a swamp.

Observing these differences in the natural world is the basis of physical geography. Studying the physical geography of a place includes identifying, classifying, and analyzing regions. Dividing an area into regions makes it easier to understand. Natural regions are defined and classified according to the relief, soil, vegetation, and climate.

Geographers divide the United States into eight natural regions. Louisiana is in the Gulf Coastal Plain, an area on the coastal edge of the continent, with a generally low elevation. **Elevation** refers to the height of a place above sea level, and **relief** is the difference between the highest and the lowest elevation in a given area. Louisiana's elevation ranges from about 4 feet below sea level in New Orleans to 535 feet above sea level at Driskill Mountain near Arcadia in Bienville Parish.



Samuel Lockett, an engineer, mapped Louisiana's elevation and relief. This professor from the Louisiana State Seminary and Military Academy (now Louisiana State University) traveled around the state off and on from 1869 to 1874. His organization of the state's natural regions is still used today. Lockett's early survey of Louisiana identified five major natural regions. These are the Mississippi Floodplain, the Terraces, the Marshes, the Red River Valley, and the Hills.

Map 7
Louisiana's Land Regions

Map Skill: Why are there several "parts" to some regions?



Above: The soil in the Mississippi Floodplain region is very fertile and produces valuable agricultural crops. Cotton is one of the crops grown in the alluvial soil of Madison Parish. **Opposite page:** Mississippi Floodplain swamps, like this one in Terrebonne Parish, may be the home of alligators and other aquatic life.

The word *delta* is sometimes used to describe the entire lower Mississippi River Valley.



Mississippi Floodplain Region

A *floodplain* is the level land along a river that is likely to flood. The Mississippi Floodplain region parallels the Mississippi River in the eastern part of the state. The soil in this region is **alluvial**, meaning it was deposited by a river. This fertile soil produces abundant natural vegetation and valuable agricultural crops. The Mississippi Floodplain region is divided into three parts: the Natural Levee, the Swamp, and the Passes.

The Natural Levee

Natural levees are the natural riverbanks built up over time by the silt deposited by flooding. The levees lie within 100 feet of the river and cover an area about 5 miles wide. Only about 10-15 feet high, the natural levees do not keep the river from flooding. Manmade levees were built to try to keep the river inside its banks.

Trees that can survive flooding grow on the batture (the slope between the top of the levee and the river). These are usually willows, cottonwoods, and sycamores. Hardwood forests of oak, magnolia, hickory, pecan, and sweet gum grow out of the reach of the floodwaters. In earlier times, the Natural Levee region often had a canebrake of switch cane, but most of this vegetation is now gone.

The Swamp

Beyond the Natural Levee is the lowest part of the river basin, the Swamp. One of the definitions for **swamp** is “a seasonally flooded forest.” Much of the city of New Orleans was built in the drained swamp of the Mississippi floodplain.

The swampy image of cypress trees sharing their muddy home with lurking alligators is what tourists expect to see everywhere in Louisiana. They may not be disappointed because small swamps can be seen in some of our cities, since even small bodies of water can have a swamp. Cypress and tupelo gum trees thrive in the water-soaked swamp and are frequently adorned with Spanish moss. Many people assume that Spanish moss is an unwelcome, tree-killing parasite. Actually, the plant lives on air and does not harm the tree. This plant gets its nourishment from the air, not the tree.

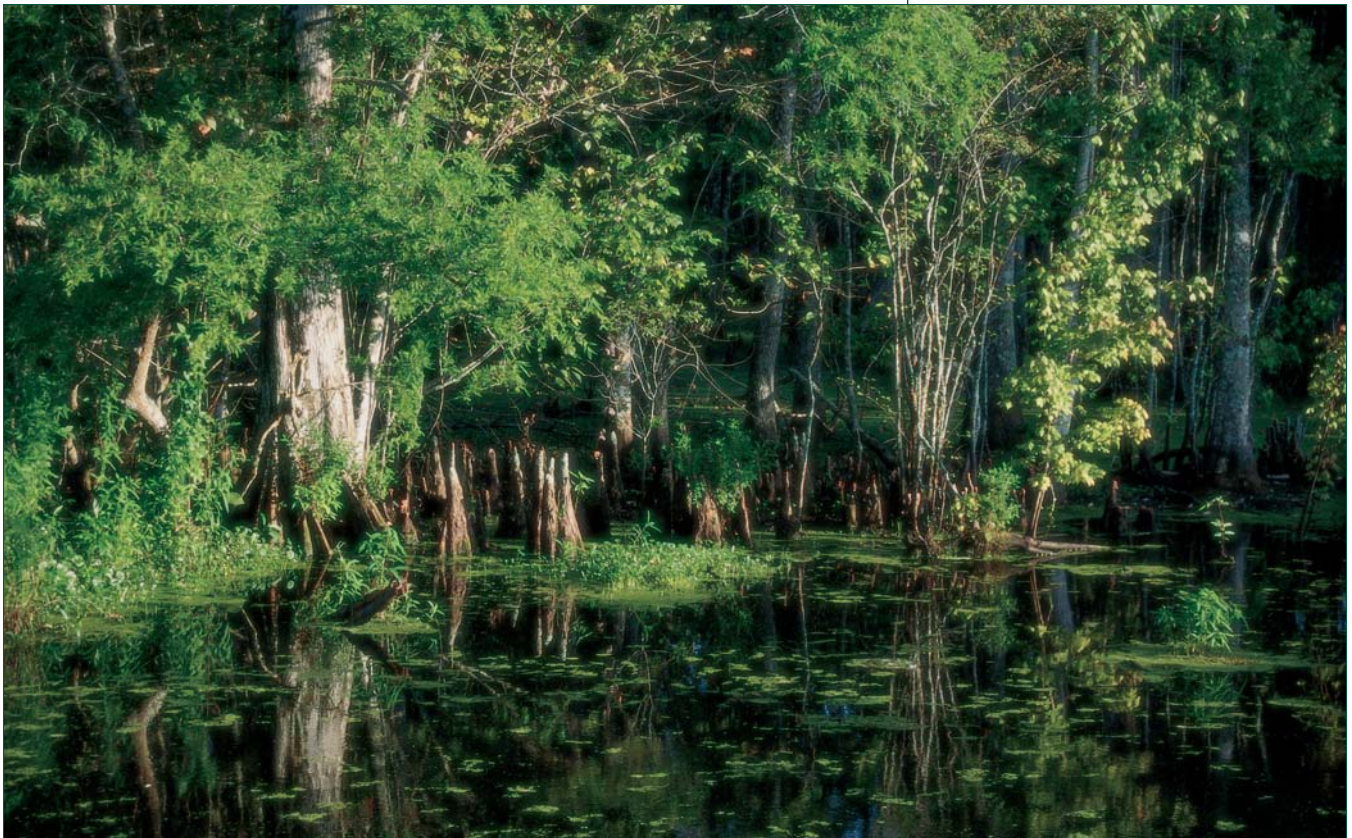
The Passes

The Passes are the routes the Mississippi River takes to merge with the Gulf of Mexico. The area is also called a *delta* because the mouth of the river is triangle-shaped, like the Greek letter *delta*. The region’s appearance has given it yet another name. Because it looks like the foot of a monster-sized bird from the air, it is sometimes called the “birdsfoot delta” of the Mississippi River.

At the **estuary** (the place where the river meets the sea), the water changes from freshwater to saltwater, and the land shifts as the Passes change. The vegetation here is mostly marsh grasses, which can survive the unstable ecosystem.

Lagniappe

Near the mouth of the river, strange little islands called *mudlumps* come and go. These temporary landforms are built by escaping marsh gas and sediment. These islands often develop rapidly, sometimes as much as four feet a day, but they rarely last more than about fifteen years.



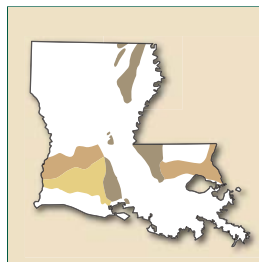


Above: Blufflands pastures, like this one, can be found in West Feliciana Parish near St. Francisville.

Opposite page, above: This cow pasture in the Prairies area looks a lot like the midwestern United States.

Opposite page, below: The soil of the Flatwoods area encourages the growth of pine forests like this one near Hammond.

Loess is pronounced “lows” or “luss.”



Terraces Region

The Terraces region contains the old Mississippi floodplains. The river changed its course after every ice age and left the old channels of the river. If you know this part of the land was once natural levees and low swamps, you can picture its physical features—the **topography**. The three divisions of the Terraces

region are the Blufflands, the Prairies, and the Flatwoods.

The Blufflands

The Blufflands, the old natural levees, are the highest part of the Terraces region. A wind-deposited soil called *loess* built up the old levees even higher. This fine silt erodes easily, leaving almost vertical slopes on the high bluffs. A good place to see these eroded bluffs is in West Feliciana Parish.

In the Blufflands, beautiful forests showcase the state flower—the magnolia—when it blooms in the summer. Along with the glossy-leaved magnolia trees, these woods are filled with dogwood, holly, ash, and oak. The lush green of the forest floor includes ferns, green mosses, and wildflowers.

The Prairies

Old river channels also formed the Prairies, another part of the Terraces region. But unlike the Blufflands, the Prairies are as flat as a giant table top. This



part of Louisiana looks more like the midwestern United States. When farmers from that part of the country moved to Louisiana, they thought of home. In Calcasieu Parish, they named a town “Iowa” to honor that prairie state.

Two million acres of the Louisiana Prairies were once covered with grasses and wildflowers. Some of the most common plants were broom sedge and bluestem sedge, water grass and switch grass—all growing as far as the eye could see. A nineteenth-century traveler said that the lush grasses were so tall they brushed the stirrups on his horse’s saddle.

Because this tall grass looked like rippling water, the early settlers described the area in terms that usually refer to places near the sea. Narrow extensions of forests in the Prairies were called “points,” a grove of trees around a group of houses was called an “island,” and small prairies were called “coves.” Settlements in the Prairies region were given names like Robert’s Cove.

The Flatwoods

If you can imagine that same prairie covered with a forest, you can picture the Flatwoods area. Trees rarely grow in the prairies because of the hard clay just below the topsoil. The soil of the Flatwoods region drains better and allows trees to grow. This area was covered with a mixed pine and hardwood forest and with wire grass and palmetto. Early settlers called the Flatwoods region the “piney woods.” There are still many pine forests in this area, along with many small towns.



Below: The marsh in Sabine National Wildlife Refuge in Calcasieu Parish is a winter home to many migratory waterfowl. **Opposite page:** The peppers from Avery Island are turned into a hot, savory sauce.



Marsh Region

The Marsh region lies along Louisiana's Gulf Coast. A **marsh** is a wet, treeless prairie covered with water and grasses. People sometimes confuse the terms *marsh* and *swamp*. A marsh is found only along the coast. Trees grow in a swamp but not in a marsh. Louisiana has more than 2.5 million acres of marsh.

The only part of the Marsh region where people live is along the chenier ridges. *Chenier* means "places of the oak" in French. The ridges are called cheniers because trees grow on this slightly elevated land.

Chenier ridges were once part of the beach along the Gulf of Mexico, and the soil is composed of shells and sand. That sandy soil and a slight elevation allow just enough drainage for the trees to grow. The live oak trees battle the fierce windstorms and lean—twisted and gnarled—above the marsh grass.

This marsh grass grows in the fertile muck and peat soil. The Marsh region also gets abundant rainfall during a very long growing season. This richness provides a banquet for the state's largest group of tourists—the migratory birds who return annually to feed on the bounty of the marsh. Naturalists who count the birds in the spring and fall have identified more than 180 species, ranging from Canadian geese to tiny hummingbirds.

The Marsh region is also the transition zone between the land and the ocean. The part of the region closest to the Gulf of Mexico is the salt marsh, whose waters are brackish. The salt marsh vegetation includes such plants as salt grass, cord grass, black rush, and the mangrove.

Further away from the saltwaters of the Gulf, the freshwater marsh has different plants. Cattail, iris, and three corner grass appear. Freshwater marsh





vegetation cannot grow in saltwater. If saltwater enters a freshwater marsh, the freshwater vegetation dies. Wildlife that survives on freshwater vegetation would then lose this habitat.

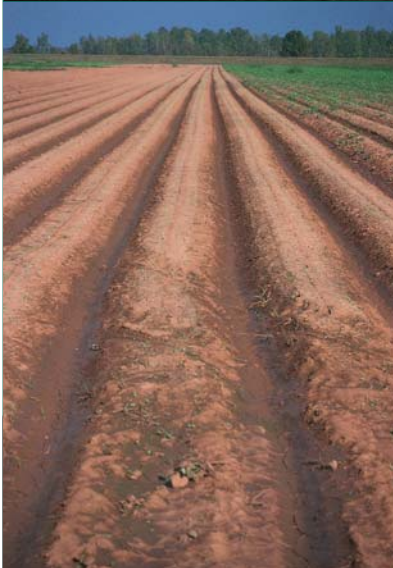
Salt Domes

Louisiana's **salt domes** are found in the salt marsh. These formations are layers of rock that have folded upward, rising above the surface. They hold mineral treasures: sulphur, petroleum, and salt. The main domes are called the Five Islands because they rise above the marsh. The islands, found between New Iberia and Morgan City, are Avery Island, Weeks Island, Jefferson Island, Cote Blanche, and Belle Isle.

The 2,500 acres of Avery Island rise 150 feet above the marsh. The island is famous for its Tabasco factory, located there because of the available salt. Weeks Island is used to store petroleum, part of the emergency reserve supply maintained by the U.S. Department of Energy. Jefferson Island was the site of a major accident in 1980. An offshore oil rig accidentally drilled into the salt mine. Lake Peigneur flowed into the dome, which partially collapsed. Amazingly, no one was killed. The salt dome Belle Isle is 25 miles from Cote Blanche and cannot be reached by road.

Lagniappe

Live oak trees in Louisiana have their own club—the Live Oak Society. Member trees must be at least one hundred years old. The president of the Society each year is actually a tree.



Top: The French were early settlers along the Red River, shown here near Natchitoches. **Above:** The soil of the Red River Valley is very fertile.



Red River Valley Region

The Red River Valley region borders the Red River as it flows from the northwestern corner of the state to central Louisiana. The region is like a smaller version of the Mississippi Floodplain; it has a single stream with natural levees and low-lying areas. The elevation and relief are low, compared to the hills surrounding the region.

The fertile red soil comes from Oklahoma and Texas and spread over the valley when the Red River flooded. The natural vegetation in the Red River Valley includes trees that can survive flooding. These forests include such trees as willow, cottonwood, sweet gum, and sycamore. The region also contains some swamp forest with cypress, tupelo gum, and swamp oak.



Hills Region

The Hills region covers much of North Louisiana, as well as the toe of the boot in the southeast. It is the highest region with the roughest terrain. **Geologists** (scientists who study the origin, history, and structure of Earth) explain the Hills by referring to rock formations.

A major part of the Hills is the Sabine Uplift, also called the Dolet Hills. An *uplift* is a raised area of rock folded upward. Ridges formed in the uplift as erosion wore down the surrounding rocks. These ridges are called *wolds*.

Spotlight

Kisatchie National Forest



In 1917, a young teacher traveled twenty miles in a mule-drawn wagon to reach her school in Natchitoches Parish. She passed through forests of longleaf pine, accented in the spring by wild magnolia, azalea, and dogwood. Along the way, she glimpsed quail, wild turkey, coyote, cottontail rabbit, and white-tailed deer. She later described her trip, “. . . over rolling hills, through mile after mile of majestic longleaf pine. I was in heaven.”

Caroline Dormon’s passionate description of this beautiful wilderness persuaded Congress to create

Above: The Kisatchie Hills contains sandstone hills covered with longleaf pine.

the Kisatchie National Forest in 1930. Kisatchie is the only national forest in Louisiana.

The Kisatchie Hills Wilderness area covers 8,700 acres of some of the steepest and most rugged terrain in Louisiana. The area includes flat-topped mesas and sandstone bluffs and outcroppings. If you follow Caroline Dormon’s footsteps today, you can see the natural beauty that her efforts preserved.



Above: Lake Claiborne, near Homer, has been called the “best kept secret in Louisiana.”

Lagniappe

Hiking to the top of Driskill Mountain would be like walking from one end of a football field to the other, turning around, and going back 78 yards. The scientific classification for a mountain requires an elevation of 1,000 feet, but apparently an early Louisiana pioneer decided that the highest place he could find deserved to be called a mountain.

Two of the wolds in the Hills region are the Nacogdoches Wold and the Kisatchie Wold. These wolds are named for the places where they begin—Nacogdoches (NAH kah do ches) in east Texas and the Kisatchie area of northwest Louisiana. Louisiana’s highest point is part of the Kisatchie Wold. Although it is called Driskill Mountain, the elevation of this Bienville Parish hill is only 535 feet.

The soil of the Hills region is old, not fertile, and usually a reddish color because of its iron content. The region is a poor place for farming, but pine trees grow well in this soil. Much of the region is now planted in tree farms.

Pine forests are also part of the vegetation of the Hills. The pines usually grow alongside such hardwoods as oak, hickory, ash, sweet gum, and pecan.

In some parts of the Hills, the trees are longleaf pine. These forests have no other trees and no underbrush, just the tall pines that whisper in the wind.

Check for Understanding ✓

1. What are two categories used to classify regions?
2. What region includes the Passes?
3. Which region includes the Prairies?
4. What region includes salt domes?
5. Which region is like a smaller version of the Mississippi Floodplain?
6. Which region has the highest point in the state?