



THIS IS OUR HOME

PEOPLE: Mary Beaty, Pat Conroy, Robert Mills, Tom Yawkey

PLACES: Blue Ridge region, Blue Ridge Mountains, Sassafras Mountain, Palmetto Trail, Piedmont region, Sandhills region, Upcountry, Lowcountry, Coastal Plain region, Inner Coastal Plain, Outer Coastal Plain, Congaree National Park, Coastal Zone region, Grand Strand, Santee Delta, Sea Islands, Intra-coastal Waterway

TERMS: geography, latitude, longitude, absolute location, relative location, environment, flora, fauna, elevation, precipitation, monadnock, kudzu, tributary, Fall Line, Carolina bays, fault, delta, sound, barrier island, black river, weather, climate, tornado, Bermuda high, hurricane, storm surge

Mary Beaty, a resident of Conway, South Carolina, understood the meaning of home and protecting her hometown for herself and future generations. In 1887, a railroad was to be built through the town, and two magnificent live oak trees were in its pathway. When workers came to cut down the trees, they were confronted by Mary, who was one tough lady. The rails were laid on a different route and the trees were saved. Why do you think Mary was so protective of the trees? Probably it was because live oaks, with their huge trunks and wide-flung branches draped with Spanish moss, represented home to this Lowcountry woman. Many species of birds found shelter in them, and, very likely, her children spent happy hours climbing on the limbs that swooped so low they often touched the ground. Mary Beaty was protecting the trees because they were a part of her neighborhood, and they made it seem like home to her.

Home is where we live; but home has several meanings. Home is the house or apartment we live in. It is also the nation and the state in which we live. America is our home. South Carolina is our home. It is small as a state, but very large as a home. There are parts of it we have not yet explored. There is much we do not yet know about it. Because it is our home, it is good for us to know about every room and corner of it. And it is good that we get acquainted with at least some of the people who have inhabited this home before us. Learning the story of those people is the main topic of this book. Getting acquainted with the home in which they lived, and which so influenced their daily lives, is our purpose in this chapter.





Above: The Angel Oak in Charleston is one of the largest and oldest live oaks in the South. It has a branch that is 105 feet long. **Opposite page, above:** Many of the oldest homes in South Carolina are in Charleston. **Opposite page, below:** A wild mink has found a home among the boulders around Fort Sumter.



SIGNS of the TIMES

VITAL STATISTICS

TOTAL AREA
31,113 square miles

WATER SURFACE
1,896 square miles

COASTLINE
185 miles

SHORELINE
(including islands, inlets, and bays)
2,876 miles

GREATEST DISTANCE EAST TO WEST
285 miles

GREATEST DISTANCE NORTH TO SOUTH
225 miles

NUMBER OF COUNTIES
46

HIGHEST POINT
Sassafras Mountain
3,554 feet above sea level

LOWEST POINT
Atlantic coastline, sea level

MEAN ELEVATION
350 feet above sea level

LOCATION

LATITUDE
Between 32° N and 35° 15' N

LONGITUDE
Between 78° 30' W and 83° 30' W

LOCATION WITHIN UNITED STATES
Southeast

BORDERING STATES
North Carolina, Georgia

GEOGRAPHIC CENTER OF THE STATE
Richland County
13 miles southeast of Columbia

The Saluda is a slow-moving river of the Piedmont. It is part of the Santee river system.

What Is Geography?

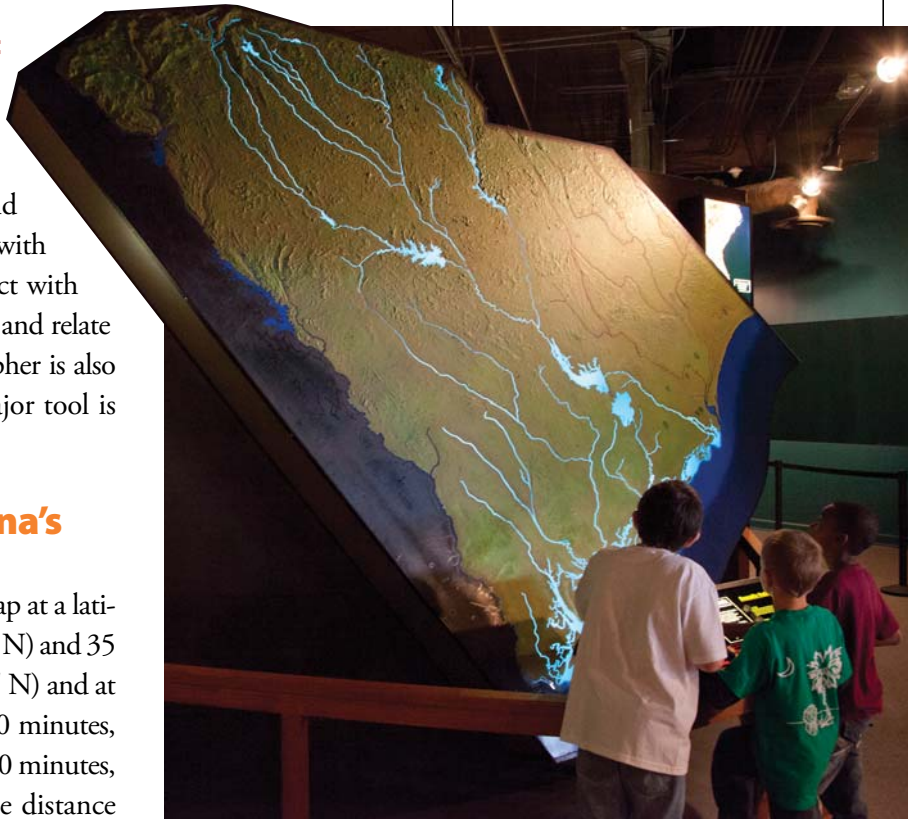
AS YOU READ, LOOK FOR

- the role of maps in determining absolute and relative location;
- the size and shape of South Carolina;
- how geography helps us understand our environment;
- **terms: geography, latitude, longitude, absolute location, relative location, environment.**

Geography is a Greek word that literally means “earth description” (*geo-graphy*). It includes many topics such as landforms, soil, bodies of water, descriptions of places, and climate. Geography is concerned with how these physical features interact with one another and how humans live and relate to their surroundings. The geographer is also concerned with location, so a major tool is the map.

Mapping South Carolina's Location

South Carolina is found on a map at a latitude between 32 degrees north (32° N) and 35 degrees, 15 minutes, north (35° 15' N) and at a longitude between 78 degrees, 30 minutes, west (78° 30' W) and 83 degrees, 30 minutes, west (83° 30' W). **Latitude** is the distance north or south of the equator, measured in degrees. **Longitude** is the distance east or west of the *prime meridian* (0° longitude), measured in degrees. These numbers define South Carolina's **absolute location** (precise position by longitude and latitude). They make it possible for anyone to find South Carolina on a globe or a map of the world.



Above: Three students study the geography of South Carolina with the help of an interactive map at the South Carolina State Museum.



MAP 1

South Carolina in the United States

Map Skill: Which of our state's borders are nearest your home?

The **relative location** of South Carolina is where the state is located in relation to other places. Our state touches the Atlantic Ocean, which is an enormously important fact for its climate, history, and economy. It is nestled between the states of North Carolina and Georgia. It is in the southeastern section of the United States and is on the eastern coast of North America. All these relationships are important to the state.

South Carolina's Size and Shape

Our state is shaped like a triangle, with its base the Atlantic Ocean and its *apex* (uppermost point) the Blue Ridge Mountains in the very northwest corner. This triangle is one of the smaller states, ranked 40th out of the 50. It contains about 31,113 square miles, or over 19 million acres of land, the majority of which is covered with forests. The greatest distance from north to south is 225 miles; from east to west is 285 miles. The coastline along the Atlantic is about 185 miles long. But if you consider the circumference of all the islands and the shores of all the inlets and bays, the coastline would measure 2,876 miles!

Understanding Our Environment

Geography helps us to understand our **environment** (surroundings) and our relation to it. It teaches us how to properly use the environment and not



abuse it. The environment, after all, helps to shape us as human beings and as a society. Pat Conroy, a South Carolinian and a major American writer, said about his teen years in the state: “I had no idea that geography itself could play such a large role in the shaping of a man’s fate and character.” In the past, a few historians have suggested that geography is *the* factor that determines our fate as individuals and as a society. We do not have to go that far, but we need to recognize the importance of the physical world in shaping our lives and attitudes. The studies of history and geography work in cooperation. They help us understand our social and physical environments, and how they affect us.

Above: Swamps and wetlands are an important part of South Carolina’s physical environment, as well as its history and identity. Places like Cheraw State Park offer many opportunities for waterborne recreation.

DO YOU REMEMBER?

1. Define in sentence form: geography, absolute location, environment.
2. Describe the absolute location and the relative location of South Carolina.
3. How does South Carolina rank in size among the 50 states?

The Geographic Regions of South Carolina

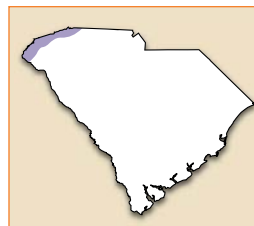
Below: The Middle Saluda River is a fast-flowing mountain stream where it rises in Jones Gap State Park in Greenville County. The Middle Saluda joins the North and South Saluda Rivers to form the Saluda River in the Piedmont.



AS YOU READ, LOOK FOR

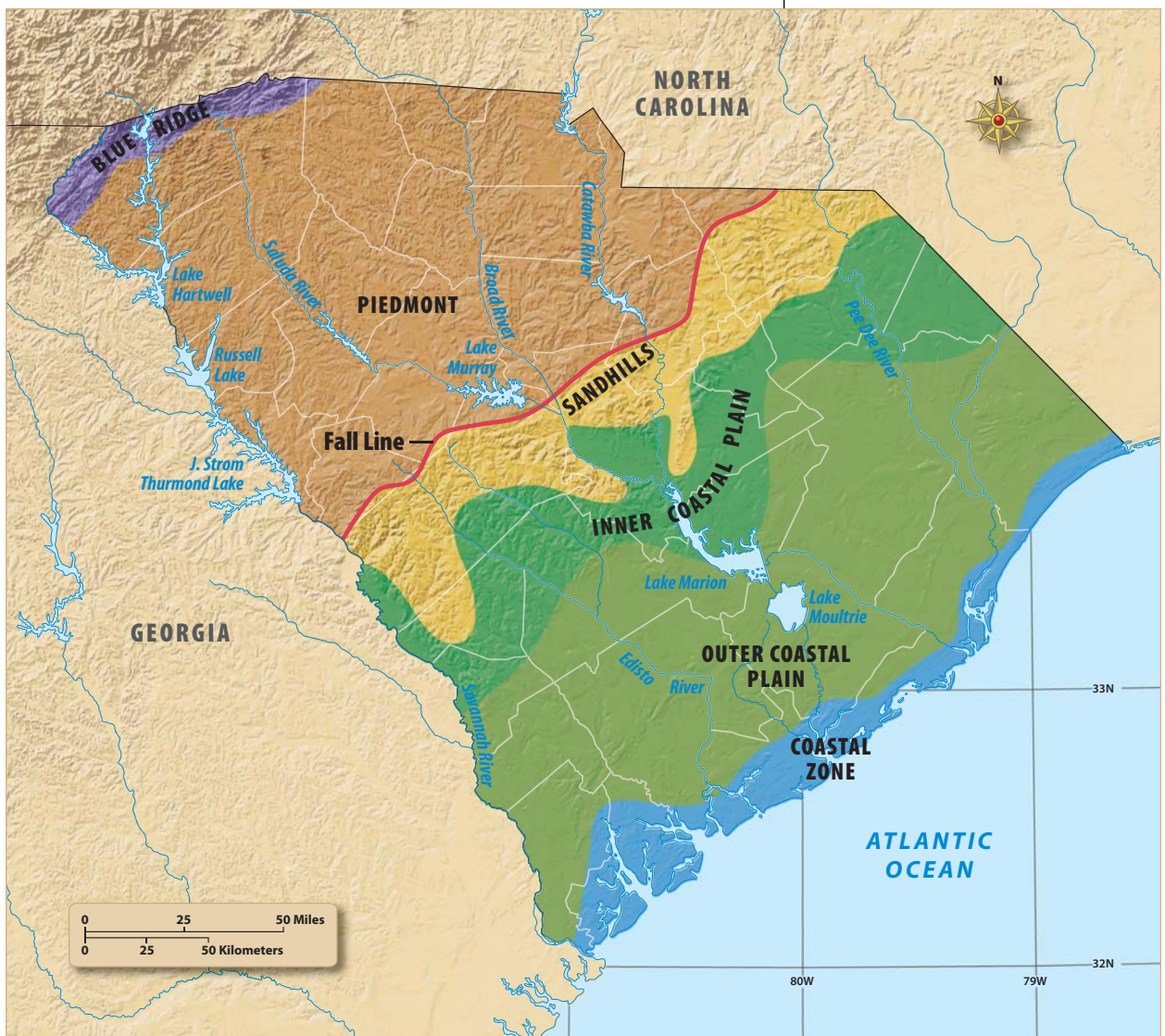
- the varying terrain, flora, fauna, weather, and waterways of the five geographic regions of South Carolina;
- the significance of the Fall Line in the history of our state;
- terms: **flora, fauna, elevation, precipitation, monadnock, kudzu, tributary, Fall Line, Carolina bays, fault, delta, sound, barrier island.**

Although South Carolina is a small state, it is rich in diversity. Its land varies from mountainous to hilly to flat, from rocky to clay-filled to sandy. Its rivers range from gushing mountain streams to lazy, slow-moving black rivers near the coast. If you live in the mountains, you might never have swum in the Atlantic Ocean. If you live on the coast, you might be unaware of the cool heights of the mountains. One of the attractions of the state to visitors and newcomers is the variety of environments available in a rather small area.



The Blue Ridge Region

Let us begin our study of South Carolina's landscape in the northwestern section of the state. We can ride along Cherokee Foothills National Scenic Highway, SC Route 11, from Walhalla eastward until it crosses I-26, and see most of the Blue Ridge Mountains of South Carolina. The spectacular scenery will probably thrill you unless you live there and perhaps think you are bored with it. Maybe then you would be more



thrilled by the ocean. But there is something about the might and majesty of a range of mountains that has awed and inspired humans since the beginning of history.

Terrain

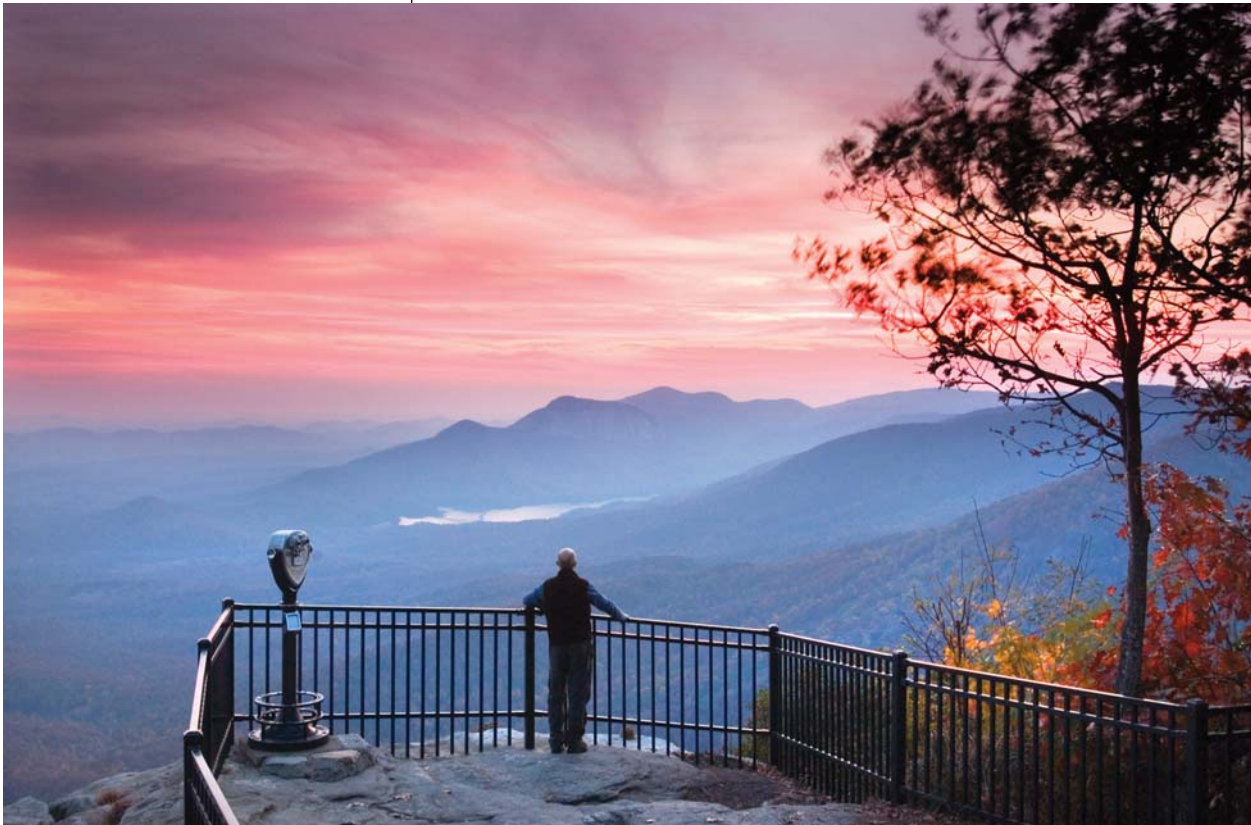
This narrow strip of rather low mountains we see from Route 11 comprises only 2 percent of the state’s land area. That strip, though, is the southeastern edge of the oldest land formation in North America—the Appalachian chain of mountains that extends from northern Alabama northeastward into Canada. The age of the mountains contributes to their appearance today.

Some 350 million years of rain and wind, freezing and heating have eroded those peaks—made them more rounded and lower than the Rockies in the West. The highest peak in the South Carolina Blue Ridge range is Sassafras Mountain (about 3,554 feet above sea level), on the border with

MAP 2

South Carolina's Five Geographic Regions

Map Skill: How many of our landform regions have you visited?



Top: Caesars Head State Park offers an unparalleled view of the Blue Ridge Mountains. **Above:** Whitetail deer are a common sight in the Blue Ridge region. **Opposite page:** Fly-fishing for trout (above) and kayaking the Chattooga River are popular Blue Ridge pursuits.

North Carolina. These older mountains appear soft, with their lush vegetation. Perhaps you will be enticed to hike a few miles on the Palmetto Trail, which is being completed between the Blue Ridge and the Atlantic coast. It has plenty of challenging terrain and strenuous climbs.

Flora and Fauna

The terrain and soils of the Blue Ridge are not very well suited to crops. Most of the land is utilized for forests and pastures. The **flora** (natural vegetation) is similar to that farther north because of the altitude. The forests are primarily oak and tulip poplar, interspersed with hemlock, birch, beech, and white pine. Along the streams, we might observe cottonwood, sycamore, and alder trees. Under the tree canopy grow very colorful stands of azaleas and rhododendrons. It's no wonder that Route 11 and the several state parks of the Blue Ridge are crowded with visitors enjoying the blossoming shrubs during spring and summer and the flaming foliage in the fall.

The abundance of **fauna** (animal life) in the Blue Ridge region includes numerous songbirds, hawks, occasional peregrine falcons, and even bald eagles. Birds closer to the ground, such as turkeys and grouse, delight the hunters. They will likely see whitetail deer, rabbits, squirrels, and maybe wild boars. They might not see the reclusive black bears—but they are there. So are beavers and otters, competing in the streams with rainbow and brown trout. The Blue Ridge also has its fair share of snakes and other reptiles.



Weather

The Blue Ridge region, because of its **elevation** (height above sea level), is the coldest and wettest region of the state. Its average **precipitation** (rain, snow, sleet, and hail) per year ranges from 60 to 81 inches, compared to a statewide average of 49 inches. As warm air bounces up the sides of the mountains and mixes with the colder air above, moisture condenses and falls in the form of rain, snow, or sleet. Temperatures in the Blue Ridge average at least 10 degrees cooler than most of the rest of the state.

DID YOU KNOW?

The Jocassee Gorges are a series of river valleys and waterfalls that cut into the steep mountainsides that drop from the Blue Ridge range to the Piedmont in northern Greenville and Pickens Counties. Fifty thousand acres are preserved from development.





Above: Originally covered in forest, much of the Piedmont has been cleared for agriculture. Though not the richest soil, it has been productive. **Opposite page, below:** Forty Acre Rock is an example of a monadnock. Despite its granite surface, plants can still find a place to grow.

DID YOU KNOW?

Pied is the French word for “foot,” and *mont* is the French word for “mountain.”



The Piedmont Region

If we ride on Route 11 east to I-26, we have already left the mountains and entered the Piedmont, a vast hilly region to the south and east of the Blue Ridge. This region, whose name means “foot of the mountains,” borders the Appalachian chain from Pennsylvania south to Alabama.

Terrain

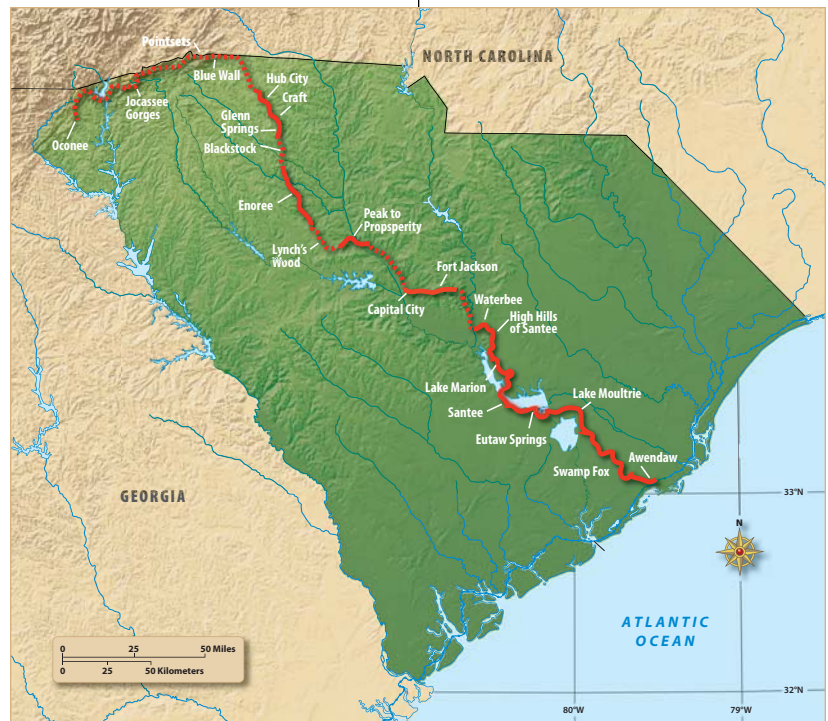
The Piedmont makes up approximately one-third of South Carolina. Its elevation varies from about 1,200 feet near the mountains to about 300 feet near the middle of the state. The very hilly northwestern Piedmont gradually gives way to more gently rolling hills as we travel southward on I-26 or perhaps on the more scenic US 321 or US 76. If you are hiking on the Palmetto Trail, you will certainly notice the trail getting easier.

In a few places, there are breaks in the rolling hills. Granite outcroppings appear here and there. Examples are Kings Mountain in York County, Forty Acre Rock in Lancaster County, and Paris Mountain in Greenville County. Geologists call these formations **monadnocks**. Granite quarries have been important factors in the local economies of several communities of the Piedmont. Especially prized is the blue granite from Fairfield County, which the South Carolina legislature designated as the state stone.

Flora

Long ago, the Piedmont was one large continuous forest. In the nineteenth century, much of the land was cleared of oak and pine for the growing of cotton and a few other agricultural products. Soils here were not the richest, but they produced good crops of cotton or corn for many years.

Gradually, in the twentieth century, much of the worn-out land was returned to forest, either naturally or by planting for timber and paper pulp. Much land has also been sown in grasses for pasture and for holding the soil in place. In the 1930s and 1940s, **kudzu**



MAP 3

The Palmetto Trail

Map Skill: The Palmetto Trail runs beside which two major South Carolina lakes?

DID YOU KNOW?

Conceived in 1994, South Carolina's Palmetto Trail is the state's largest bicycle and pedestrian project. It is one of only 16 cross-state trails in the United States. The Palmetto Trail is two-thirds complete with nearly 290 miles open to the public.



DID YOU KNOW?

The Landsford Canal State Park in Lancaster County has the world's largest colony of rocky shoals spider lilies (below). This endangered species thrives only in the rapids of shallow, rocky rivers. The thousands that bloom in the Catawba River (above) in late May and June are truly a sight to behold.



was widely planted to control erosion and restore soil. That was before this Japanese import came to be considered a nuisance that grew over and choked tall trees and covered abandoned houses. No kudzu has been planted in decades, but it continues to thrive in the Piedmont.

Rivers

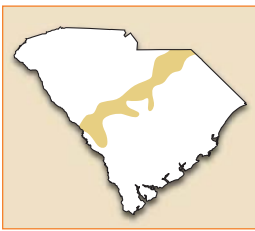
Besides the forests and pastures, the most noticeable feature of the Piedmont is its rivers—which are quite different from those of the Blue Ridge. Piedmont rivers are usually broad, with gently sloping banks rather than the V-shaped valleys of the mountainous region. The rivers have many **tributaries** (smaller creeks and streams that feed into the main rivers). As the waters wash off the land, they carry silt into the rivers, giving most rivers a muddy appearance. For many centuries, these waterways have been important for humans' use: for water and food supply, for transportation, and as a source of power to do work.

Fauna

Wildlife roaming the woodlands of the Piedmont include deer, turkeys, bobcats, foxes, many varieties of snakes and reptiles, and even flying squirrels. Quails, wood thrushes, warblers, wrens, and sparrows inhabit the forests and pastures. At Landsford Canal State Park, while observing the very rare and wondrous rocky shoals spider lilies in early June, you will probably spy on the eagle's nest in the park and see ospreys, hawks, and herons, which are common in the Piedmont.



The Sandhills' origins as ancient sand dunes can be clearly seen in this cross section next to a railroad track.



The Sandhills Region

Columbia is approximately the geographic center of the state. It sits like a buckle on the belt of the Sandhills region, which stretches northeast and southwest across the state and into neighboring states. These are low, rolling hills composed of sands and clays washed down from the mountains and Piedmont during millions of years of erosion. These soils collected along this belt in sand dunes, because this is where the ocean shore was 50 or 60 million years ago. The ocean's churning action shaped these hills, and other forces of nature have continued to shape them.

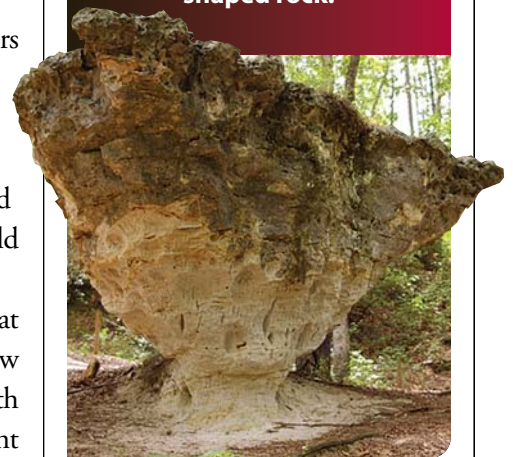
The Fall Line

Also along this belt is the **Fall Line** or Fall Zone, the places on the rivers where rocks and rapids make navigation impossible for a mile or two. To continue boat travel up or down the river, boatmen had to *portage* (carry between two navigable waters) their boats around the rapids. In the nineteenth century, governments dug canals that channeled water around the rapids so boats could continue their journeys. The canal water could also be used to power mill machinery.

Because of the activities associated with the rapids, towns grew up at those points along rivers. North Augusta, Columbia, Camden, and Cheraw are important examples. The Columbia Canal, designed by famous South Carolina architect Robert Mills, opened in 1824. A walk along Waterfront

DID YOU KNOW?

The Peachtree Rock Heritage Preserve in Lexington County, maintained by the Nature Conservancy, was in the ocean millions of years ago. You can see fossilized seashells in the sand and lodged in the tree-shaped rock.



DID YOU KNOW?

Bird-watchers have documented sightings of 390 species of birds in South Carolina. Some of these species are not permanent residents but are among the millions of birds that pass through the state each spring and fall in their north-south migration.



Top right: Bobcats live in the Sandhills region, but are not easily seen as they usually hunt at night.

Above: The red-cockaded woodpecker is unique among woodpeckers because it lives in groups with only a single breeding pair. Male offspring from the previous year help to incubate the eggs and raise the young.



Park in Columbia between the Broad River and the canal is a healthy way to gather a sense of what has happened there over many centuries.

Sandy Soils, Flora, and Fauna

The soils of the Sandhills are generally not very productive. The sandy soils are so porous that water drains through quickly, leaching out even the small amount of organic matter that might have accumulated. The surface dries rapidly, leaving some areas barren, but most are covered by pine trees or scrub oaks, sparkleberries, sand myrtle, and even cactus plants. The pines were originally longleaf pines, but more recently loblolly and slash pines, grown for the paper mills, predominate.

The red-cockaded woodpecker became endangered because of the decline of longleaf pine forests. The Sand Hills State Forest and the Carolina Sandhills National Wildlife Refuge are providing longleaf pine habitats, and the red-cockaded woodpecker is beginning to make a comeback. Other birds in the Sandhills include warblers, nuthatches, bluebirds, owls, hawks, and the beautifully colored wood duck. Mammals in the area include bobcats, foxes, an occasional coyote, and many smaller animals on their menu, such as rabbits, squirrels, rats, and mice. Mention must also be made of the cockroach or palmetto bug. The insect is everywhere in South Carolina and unstoppable—the kudzu of the animal kingdom.

Upcountry and Lowcountry

The Sandhills belt marks the Midlands, about a halfway point in the state. For convenience, South Carolinians usually refer to the section of the state containing the Piedmont and Blue Ridge regions as the Upcountry or Upstate. From the Sandhills to the coast is referred to as the Lowcountry. These terms are to have great political and emotional power at certain critical points in South Carolina history.



Lake Marion, South Carolina's largest lake, extends from the Inner to the Outer Coastal Plain.



The Coastal Plain Region

If you travel from North Augusta, Columbia, Camden, or Cheraw to the Atlantic Ocean, you will experience the hundred-mile-broad Coastal Plain—the largest landform region in South Carolina. Geologists divide the Plain into the

Inner and Outer Coastal Plains.

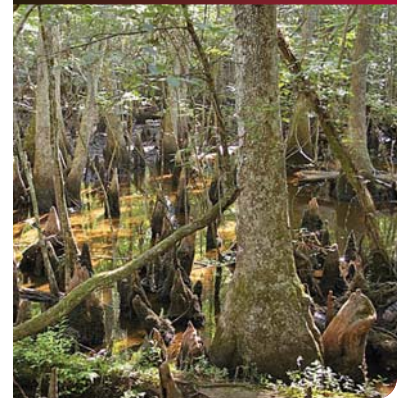
The Inner Coastal Plain, with its gently rolling hills, appears somewhat similar to the nearby Sandhills. The difference is that the soil is much better. The Inner Coastal Plain is only a narrow band across the state, but it is the most productive agricultural area of South Carolina. The Outer Coastal Plain, nearer to the ocean, is nearly flat. There the land is still fertile, but drainage is not good and, therefore, row crops are spotty. Traveling through the Coastal Plain, we are struck by the sight of huge pine forests. There are also some hardwoods, including several varieties of oak, hickory, and sweet gum. Cypress and tupelo dominate the numerous river bottoms and swamps.

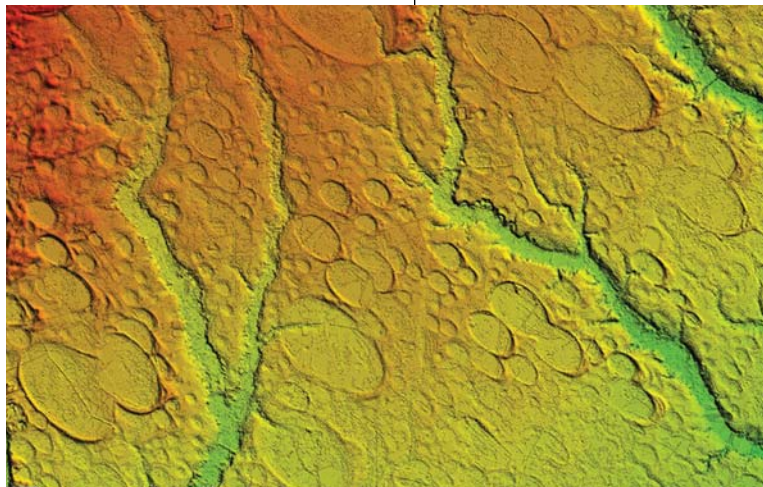
Carolina Bays

There are many mysteries in nature, despite all our scientific knowledge. One of these mysteries is the existence of Carolina bays on the Coastal Plain. These are not bays as in inlets or ports. The name “bay” comes from the bay trees that typically grow there. **Carolina bays** are oval-shaped depressions

DID YOU KNOW?

The Francis Beidler Forest in Dorchester County is home to the largest forest of old-growth tupelo gum and bald cypress trees in the world. It is conserved under the management of the National Audubon Society.





Top: Woods Bay State Park preserves a large Carolina bay.

Above: This satellite image shows a large group of Carolina bays in their characteristic northwest to southeast orientation. The origin of the bays remains a mystery.

in the land, with the axis of each running northwest to southeast. They vary in size from three acres to thousands of acres. Some of them are now lakes, some swamps, some dry grasslands. Many have been drained and cultivated to take advantage of their rich organic soil. Once, there were thousands of them, located mainly in South and North Carolina.

Only a few hundred have been preserved in their natural state. Their distinctive shape and uniform orientation gave rise to the theory that Carolina bays

were caused by a large meteor breaking up in the atmosphere and peppering the earth with meteorites, leaving these distinctive scars on the landscape. Thorough investigations have failed to support this speculation, but no satisfactory answer has been found for this mystery.

Rivers

The rivers that we noticed gushing in the mountains and flowing strongly in the Piedmont slow to a sluggish pace in the flat Coastal Plain. They meander, forming many curves and often creating broad floodplains and

swamps, especially in the Outer Coastal Plain. You can closely observe the floodplains and swamps if you hike the Swamp Fox Passage of the Palmetto Trail below Lake Moultrie. I-26 from Columbia to Charleston or US 521 from Sumter to Georgetown will offer good views of the numerous rivers and swamps of the Coastal Plain.

Flora and Fauna

The wildlife population in the Coastal Plain, and especially in the swampy areas, is enormous and varied. Many of our state's familiar species—such as deer, turkeys, Canada geese, mallard and wood ducks, songbirds, and foxes—appear in much greater abundance in the Coastal Plain.

The gray foxes in this area can climb trees, in contrast to red foxes, which cannot. Congaree National Park, the only national park in South Carolina, is in the Inner Coastal Plain only a few miles south of Columbia. It is preserved as one of the few remaining old-growth river bottom hardwood forests. A hike along the Boardwalk Loop or a canoe ride through the swamp will reveal some of the park's *champion trees* (the largest of their species in the world). All across the Coastal Plain you might find beavers, musk-

rats, minks, coyotes, turtles, snakes, bald eagles, golden eagles, and ospreys. Lakes Marion and Moultrie are famous for their bass, bream, and catfish.

A Geological Fault

The Coastal Plain lies on a geological **fault** (a fracture in Earth's crust) that has caused serious earthquakes, notably the Charleston Earthquake of 1886, whose *epi-center* (the part of Earth's surface directly above the earthquake's focus) was actually a bit inland near Summerville. The most damage was in the city, where eighty-three people died and nearly one-fourth of the value of buildings was lost. The tremors were felt for hundreds of miles, with reports of chimneys falling in Kentucky and Ohio and lighthouses swaying in New York.

DID YOU KNOW?

South Carolina has the second-most wetlands acreage in the United States. Only Georgia has more.



DID YOU KNOW?

In Charleston, you can even today see steel plates (below) on buildings securing "earthquake rods" through the structures to help protect them against future quakes.



Top: The handsome gray fox has hooked claws that enable it to climb trees, both to hunt and to escape predators. **Above:** The 1886 Charleston Earthquake is estimated to have been between 6.6 and 7.3 on the Richter scale, which is used to measure the strength of earthquakes.



Above: Salt marshes protect our coastlines from erosion and provide nutrients for marine life.

Below: The golden beaches of the Grand Strand are a vital tourist attraction. This is Myrtle Beach.



The Coastal Zone Region

The final landform region is the Coastal Zone region, the thin strip of land and water from the ocean's edge to a few miles inland. This is only a small percentage of South Carolina territory, but the coast has been a dominant factor in the state's history since the coming of European settlers. It is still the fastest-growing part of the state in terms of population and tourism. The chief attractions are its beauty, its beaches, and the pleasant weather. The coastline of approximately 185 miles is divided into 3 very distinctive sections, each providing its own characteristics, charm, and challenges.

Grand Strand

From the North Carolina border for about sixty miles south is the Grand Strand, a gentle arc of coastline that is one beach, unbroken by rivers. Few places in the world offer such a phenomenal stretch of wide sandy beaches. The lure of the beach has led to intensive develop-



ment, with the highest concentration in Myrtle Beach. Many large hotels and condominiums built very close to the beach, and over a hundred golf courses built within a few miles of the beach, have added both recreational attractions and environmental challenges.

Santee Delta

The second section is the Santee Delta, which runs from Winyah Bay and Georgetown for about twenty miles to the south. It is the largest river **delta** (a place where rivers flow into the sea leaving soil deposits behind) on the Atlantic coast, but it has experienced serious erosion since 1942. That is when much of the Santee's water and sediment was diverted into the Cooper River. This diversion meant less of the soil that eroded from the Piedmont and Coastal Plain was deposited on the Santee Delta. Without large new deposits, the sea washed away several hundred feet of land at some points. The coast along the delta is largely marsh and mud rather than sand beaches.

Sea Islands

The third section of the Coastal Zone, stretching over one hundred miles to the border of Georgia, is largely composed of the Sea Islands. This section has many inlets, river mouths, and waterways weaving in and among dozens of islands. The islands and their surroundings are very diverse. Some are separated from the mainland by sizable **sounds** (arms of the sea reaching around an island). Some are separated by a narrow portion of the Intracoastal Waterway that provides a protected passageway for boats to navigate along the coast.

Other islands are separated from the mainland by marshlands. All these habitats are extremely important for thousands of species of plants and animals that depend upon the marshes, waterways, and beaches for their food, protection, and incubation.

The outermost of these islands are called **barrier islands**. They form a sand and vegetation barrier that protects inward islands and the mainland from the sea and winds. Some of these islands have fine, wide beaches similar to the Grand Strand but on a smaller scale. The attractive beaches have led to intensive development of many of these islands, including Isle of Palms, Folly, Sullivan's, Kiawah, Hunting, and Fripp.

Hotels, condominiums, restaurants, private houses, and roads have been crowded onto these platforms of sand. Most of the time the islands are beautiful, but beach erosion and storms cause major problems. The natural action of ocean waves, tides, and winds for thousands of years has shaped and



Above: The Santee Delta has suffered serious erosion since the construction of the Santee Cooper Project.

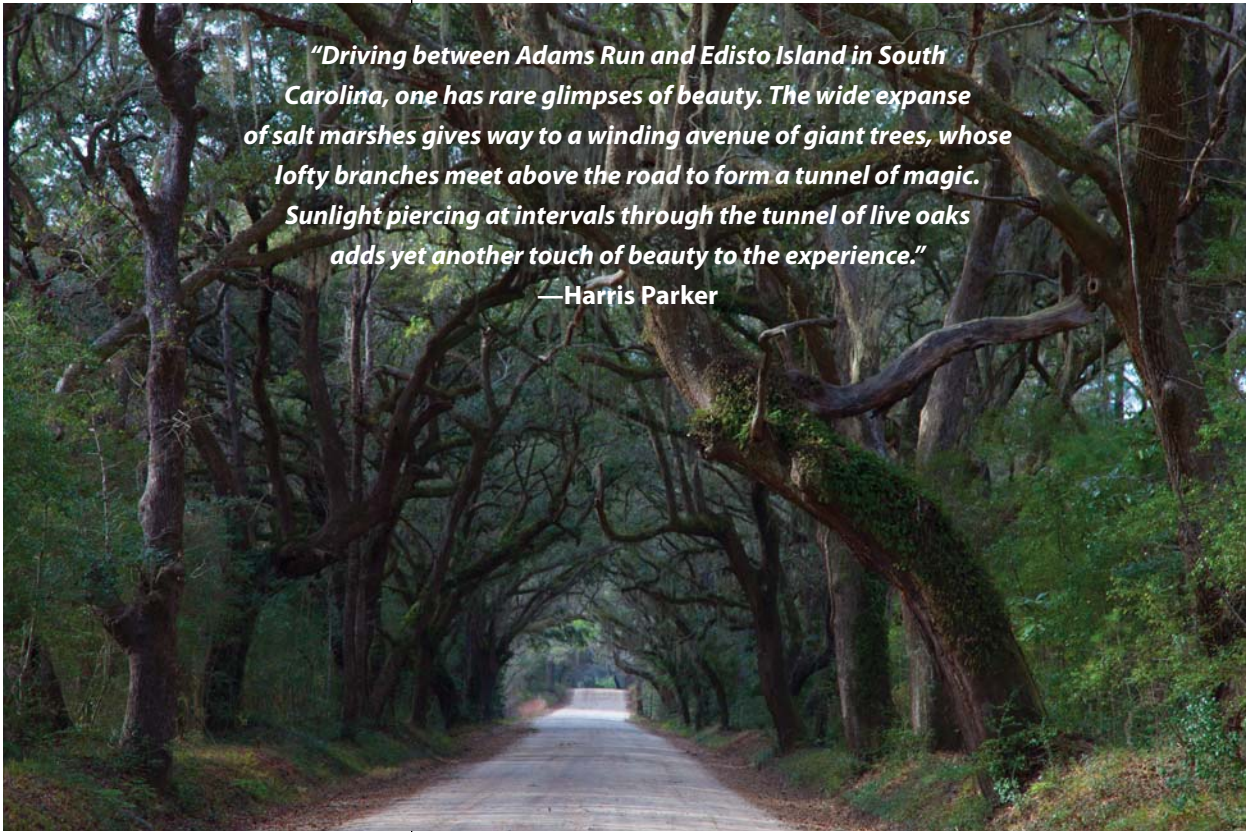
DID YOU KNOW?

Folly Island (below) gets its name from an Old English word referring to the dense foliage of the island, not to any act of foolishness.



“Driving between Adams Run and Edisto Island in South Carolina, one has rare glimpses of beauty. The wide expanse of salt marshes gives way to a winding avenue of giant trees, whose lofty branches meet above the road to form a tunnel of magic. Sunlight piercing at intervals through the tunnel of live oaks adds yet another touch of beauty to the experience.”

—Harris Parker



reshaped these islands and will continue to do so, regardless of human intervention. Some residents accept such danger as the price for living in such scenic places.

A few of the barrier islands have been preserved from development and are maintained by the state government as havens for beach vegetation and wildlife. To walk on either Bulls or Capers Island, a few miles north of Charleston, is to experience what visitors must have seen centuries ago. The living vegetation is thick and untamed. Along the islands’ outer coasts lie dead trees that were felled by natural beach erosion. The wildlife is rich in varieties and numbers.

Two other examples of conserved barrier islands are North and South Islands near Georgetown. These islands were willed to the state by Tom Yawkey, owner of the Boston Red Sox, who was an avid outdoorsman and conservationist. His gift is one of the greatest contributions to conservation in American history. The marshes, forests, and beaches provide an undisturbed habitat for hundreds of wildlife species, several of which are endangered.

Fauna

The wildlife in the Coastal Zone is almost the same as in the Coastal Plain, except the numbers of alligators, turkeys, raccoons, eagles, and ospreys increase dramatically, and we note several other species. Gulls, terns, pelicans,

MAP 4

South Carolina's Barrier Islands

Map Skill: Which of the barrier islands is closest to Georgia?



plovers, and sandpipers live on the beach. In the marshes and along the beaches, you can find oysters, catch crabs, and observe bottlenose dolphins playing in the surf. At Little River, McClellanville, and other fishing villages, you can watch the fishing boats bringing in their catches of sea bass, red snapper, croaker, triggerfish, sea trout, grouper, and shrimp.

One sea creature of particular interest is the loggerhead turtle. This sea turtle is huge. An adult may weigh 300 pounds or more. It is also an endangered species because so many of its nesting places on the beaches of the southeastern United States have been disrupted by human development. South Carolina law protects the turtle and its nesting places from human intervention. The South Carolina Department of Natural Resources flags its nesting places, and residents are asked to turn out lights on the beach because the turtles always lay their eggs at night. Even with these precautions, the chances of a baby loggerhead surviving until it can begin reproducing are estimated to be 1 in 10,000. Undeveloped beaches, like North and South Islands in the Tom Yawkey Wildlife Center, are our best hope for the survival of the loggerhead turtle.

DO YOU REMEMBER?

1. Define in sentence form: precipitation, Carolina bays, delta.
2. What are the five geographic regions of South Carolina?
3. What is the importance of the barrier islands?

Above: The Coastal Zone of South Carolina is rich in birdlife. Here, a flock of royal terns takes to the air at Cape Romain National Wildlife Refuge near Awendaw.

Opposite page: A country road runs through an avenue of live oaks on Edisto Island, one of the less developed of South Carolina's sea islands, with a population of less than 2,500.

DID YOU KNOW?

The loggerhead turtle is the official state reptile of South Carolina.






Of SPECIAL INTEREST

How the Ivory-billed Woodpecker Saved the Swamp

When Alex Sanders and some fellow environmentalists made an expedition into the Santee Swamp in 1971, the results were heard around the world. This is his story.

“When word went out that timber companies had acquired the right to clear-cut the Santee Swamp in South Carolina, a few of us became alarmed. The swamp contained the largest tract of old-growth bottomland hardwood forest in the country and some of the tallest trees in the eastern United States. The environmental damage would be enormous. But the contracts had been signed. Lawyers said nothing could be done. Nevertheless, our small band of environmentalists were determined not to give up. In the early morning hours of an overcast spring day, almost forty years ago, this motley crew shoved off in flat-bottomed boats into the bowels of the Santee Swamp. Our announced purpose: a search to find the ivory-billed woodpecker.



There have been no confirmed sightings of the ivory-billed woodpecker since the 1930s. To this day, there are those who think that Alex Sanders staged an elaborate ruse in order to save the forest.



“Included was a biologist, a representative from the Audubon Society, duck hunters, catfish fishermen, and most important of all, a crew from a local television station. Nobody had any idea of actually finding the ivory-billed woodpecker. None had been seen for decades and most people assumed they were extinct. The real purpose of the expedition was to stir up publicity to save the forest and the swamp. We protestors thought that public opinion—the strongest force in any democracy—could somehow stop the cutting of the trees. Thus, the presence of the television crew was critical.

“The overcast day was not good for bird-watching. The swamp was covered by a thick fog, making the tops of the cypress trees barely visible. Except for paddles scraping the sides of the boats, not a sound was heard—not a chirp, not a rustle in the woods. The swamp was silent, absolutely silent. The setting was as spooky as a haunted house at midnight.

“The Audubon Society representative produced a battery-powered amplifier and the last-known recording of the call of the ivory-billed woodpecker. The recording was a copy from an antique wax cylinder by Thomas Edison. The call, shrieking with a sound like a child’s Halloween horn, pierced the fog. The swamp returned to silence.

Above: The fight to save the Santee Swamp started a movement that led to the creation of the Congaree Swamp National Monument near Columbia in 1976. In 2003, it was enlarged by almost 5,000 acres and renamed Congaree National Park.

“But the silence did not last. Back came exactly the same shriek, even louder. The call was played again. Again the call was answered, over and over, at least a dozen times, circling us in the fog just outside of view. Then it stopped. Nobody said a word. The Audubon Society representative burst into tears. All of us did.

“Later, in an on-camera interview with the television crew, the Audubon Society representative, still weeping, characterized what we had experienced as comparable to finding a dinosaur. Others said the discovery was more like finding an angel.

“The story of the ivory-billed woodpecker was publicized around the world, from Paris, France, to Cairo, Egypt. The state and the timber companies sheepishly canceled the contracts. The trees were saved, and the environmental movement in South Carolina—a movement that later resulted in the establishment of the Congaree National Park—was off and running.”

South Carolina's Waterways and Climate

DID YOU KNOW?

More than 30,000 miles of rivers and streams drain the land of South Carolina, emptying into the Atlantic Ocean.

AS YOU READ, LOOK FOR

- the significance of the different river systems in our state;
- unintended consequences of changing the rivers' flow;
- ways in which the climate affects life in different regions of our state;
- terms: **black river, weather, climate, tornado, Bermuda high, hurricane, storm surge.**



Above: The Savannah River forms most of South Carolina's southwest border with Georgia. The bottom part of the photograph is Georgia, near Augusta, and the top shows part of Aiken County, South Carolina.

If you enjoy swimming or water-skiing, you are probably already aware of some of the waterways within the state—rivers and lakes that are great for recreation but have so many other purposes as well. If you enjoy going to the beach on warm summer days, flying kites on breezy days, or playing in mountain snow, you are already tuned in to the varieties in weather and climate in South Carolina.

The landforms we examined in Section 2 are fundamental to making South Carolina what it is today.

Equally important are the waterways that drain these lands and the climatic conditions over the land and water. These factors help to determine what work and what recreation we can engage in within the state.

Waterways

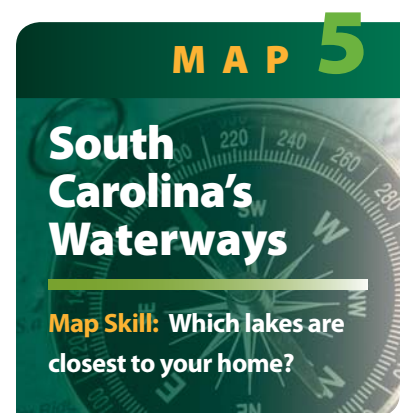
South Carolina's magnificent system of rivers and lakes provides the state with adequate water supplies for its people and industries. The waterway system also powers electrical generating plants and provides very attractive recreational opportunities. Three main river systems drain the state, all running generally from northwest to southeast, following the tilt of the land.



The Savannah and Santee Systems

The Savannah River and its tributaries, the Tugaloo and Chattooga, form South Carolina's border with the state of Georgia. The Savannah is wide and deep, and even large ships can navigate up the river for several miles. This system drains only about 15 percent of South Carolina's surface.

The most extensive system of rivers and lakes is the Santee system, which flows through the heart of the state and drains about 40 percent of South Carolina's land. The streams in the upper Santee system mostly arise in the mountains of North Carolina and enter our state as the Broad and Saluda Rivers. Farther south, the Broad is joined by the Pacolet, Tyger, and Enoree Rivers, which originated in the Blue Ridge Mountains of South Carolina. The Saluda is joined by the Reedy River before merging with the Broad River at Columbia to form the Congaree River. Farther east, the Catawba River flows out of North Carolina (where its name changes to "Wataeree"), then merges with the Congaree to form the Santee.





DID YOU KNOW?

The Congaree River Blue Trail (above) is a fifty-mile designated recreational paddling trail that extends from Columbia downstream through Congaree National Park to Bates Bridge Landing at Highway 601. In 2008, it was designated a National Recreation Trail by the U.S. Department of the Interior.

People began tampering with the water flow of the Santee and Savannah Rivers as early as the eighteenth and nineteenth centuries, diverting water into millponds and using it to power mills with waterwheels. Until the beginning of the twentieth century, though, the Santee and the Savannah flowed largely unhindered to the sea. Since then, more dramatic steps have been taken to harness the power of the rivers for the production of electrical power. Power companies have dammed the rivers in several places to make huge lakes—reservoirs of water that can be released at a regular pace to spin turbines that produce electrical power. These lakes also provide drinking water and recreation—swimming, boating, hunting, and fishing.

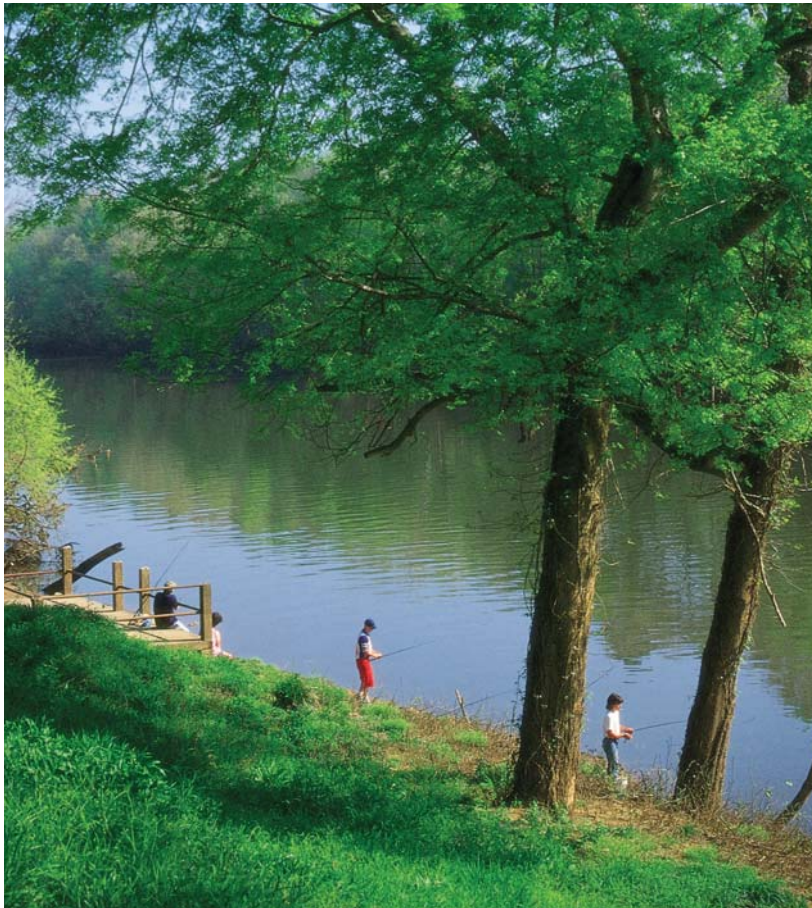
The most serious change in the flow of rivers began in 1934 in the Santee Cooper Project, a state-owned effort to generate electricity and distribute it to farms all over the state through electric cooperatives. The federal government helped with the project because it would put thousands of unemployed persons to work in the Great Depression. The workers built a dam on the Santee in Clarendon County, forming Lake Marion, and another on the Cooper River in Berkeley County, forming Lake Moultrie. Then they dug a canal between the two lakes, diverting most of the flow from the Santee into the Cooper River. The project went into operation in 1942.

The production and distribution of affordable electricity was very successful, but the Santee Cooper Project had two very bad environmental effects. First, with the flow of the Santee River to the sea greatly reduced, the Santee carried less silt, thus less sand and soil were pushed out to renourish the

coastline. Second, most of the silt now ended up in Charleston harbor. Periodically, the silt would have to be *dredged* (dug) out of the harbor so large ships could come into port. Several decades later, a new channel had to be dug to connect Lake Moultrie with the Santee River and redivert water and silt back into the Santee. The lesson learned was that all of nature is connected in one way or another. When using or trying to improve one aspect, one has to plan very carefully so as not to cause havoc on another aspect. It's called the "law of unintended consequences."

The Pee Dee System

The third major river system in South Carolina, the Pee Dee, is the least engineered by humans. Most of its rivers arise in eastern North Carolina and drain the northeastern quarter of our state. The Little Pee Dee, Great Pee Dee, Black, and Lynches Rivers all pour their considerable flow into the Waccamaw just before the Waccamaw flows into Winyah Bay



Above: Lake Moultrie was created when the Santee Cooper Project was built in the 1930s. **Left:** The Great Pee Dee is the longest river in the Pee Dee system, originating in North Carolina. Because it is navigable up to the Fall Line at Cheraw, it has been an important transportation route since South Carolina was a colony.

DID YOU KNOW?

Proud Charlestonians reportedly believe the Ashley and the Cooper (below) come together at their city to create the Atlantic Ocean!



Right: The Edisto is the longest black river in the world, arising in the Sandhills and arriving at the ocean between Charleston and Beaufort. The dark brown color of the water is caused by tannin from decaying plants. Tannin also gives tea its brown color.

DID YOU KNOW?

The ACE Basin Project has over 200,000 acres of land protected by conservationists. Most of the land was privately held by such conservation-minded owners as Hugh Lane Sr., Ted Turner, and Gaylord Donnelley.

at Georgetown. These rivers do not flow rapidly through the Piedmont, picking up silt; therefore, they are relatively clear rather than muddy. They are called **black rivers**, or blackwater rivers, because the tannic acid released by decaying organic matter gives them a dark color. The tidal effects of the Waccamaw and the Great Pee Dee made possible the great rice culture that flourished in the area in the eighteenth and nineteenth centuries.

Other Rivers

Several other important rivers arise in the Sandhills or the Coastal Plain. They are usually black rivers and often run through wide, swampy floodplains. The Ashley and Cooper Rivers that flow into Charleston harbor are among these.

Other important blackwater rivers are the Ashepoo, Combahee, and Edisto (known as the ACE Rivers), which flow into St. Helena Sound between Charleston and Beaufort. This area was once dominated by rice plantations, but now is primarily used for timber production and hunting preserves. The ACE Basin Project is a combined private, state, and federal effort to conserve the floodplains of these rivers from intensive development. The ACE Rivers, along with the Salkehatchie and Coosawhatchie Rivers, with their hardwood forests, wetlands, and marshes, provide crucial habitats for many species of plant and animal life. The natural beauty of the area is also worth preserving.



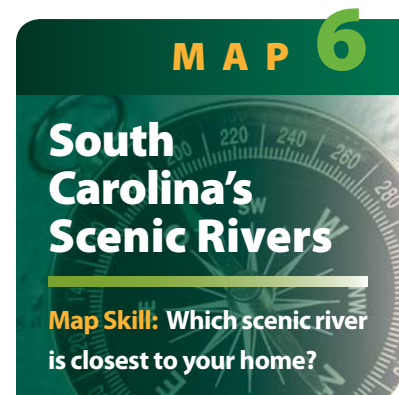
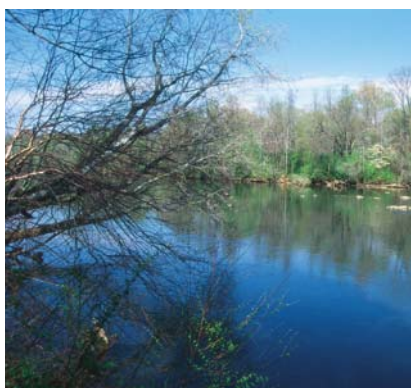


South Carolina's Scenic Rivers

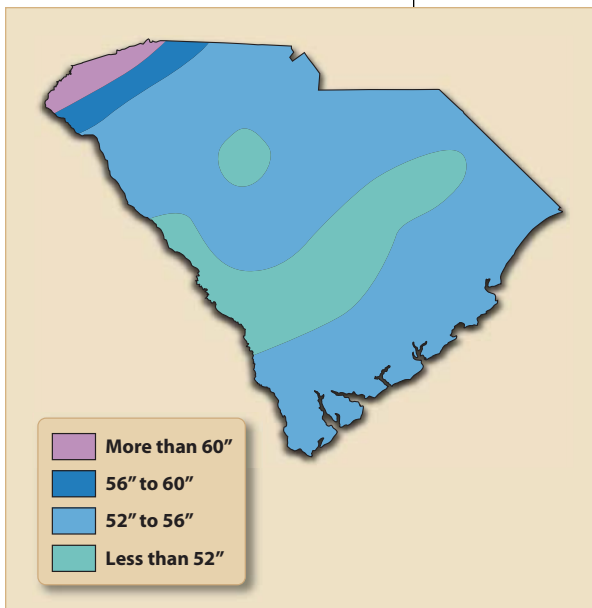
There are about thirty thousand miles of rivers and smaller streams in South Carolina. Most of them are pleasing to look at, but some segments of those rivers are particularly beautiful and significant. The state government is making a special effort to preserve those valuable assets to our state. The Scenic Rivers Act of 1989 is designed to protect the "unique or outstanding scenic, recreational, geologic, botanical, fish, wildlife, historic or cultural values" of selected rivers or river segments in the state.

The Act authorizes the Department of Natural Resources to work with voluntary community groups and local governments to preserve the character and scenic beauty of those stretches of rivers that have been selected. These groups develop a plan for the proper management of the scenic rivers.

The rivers and segments of rivers designated for special preservation are as follows: the whole length of



Lynchies River and segments of the Ashley, Black, Broad, Catawba (pictured above), Great Pee Dee, Little Pee Dee, Middle Saluda, and Saluda Rivers. Are you able to locate each of these scenic areas marked in red on the map? Have you visited any of them?



Climate

“Everybody talks about the weather, but nobody ever does anything about it,” is a famous quotation often attributed to Mark Twain. It is likely that no one will ever do anything about it because **weather** refers to short-term atmospheric conditions that determine whether it is hot or cold, wet or dry, calm or stormy. **Climate** is a long-term view of atmospheric conditions—the sum of many days or years of weather.

Temperature and Precipitation

The climate of South Carolina is subtropical; that is, not quite tropical, but quite hot and humid in summer and mild in winter. This is true over most of the state, but there are some variations. The ocean moderates the temperatures along the coast. In summer, the land heats

up more quickly than the water, so cool breezes from the ocean keep the coast a bit cooler. In winter, the warm Gulf Stream, which sweeps up from the Caribbean Sea and Gulf of Mexico, keeps the islands and Coastal Zone a bit warmer. Away from the ocean, the weather and climate are influenced by altitude. If you travel from the Lowcountry to the mountains, you will likely feel the air get cooler in any season of the year.

Precipitation, usually in the form of rain but occasionally in frozen form especially in the higher elevations, averages about 49 inches per year. Rain is fairly evenly distributed across the state, except the mountains are much wetter. Precipitation is also fairly well distributed throughout the year. Summer is usually a bit rainier than the remainder of the year, but not by very much.

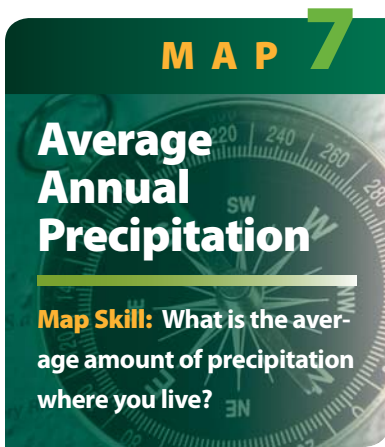


FIGURE 1

Enhanced Fujita Scale for Tornadoes

Category	Wind Speeds (mph)	Potential Damage
EF0	65–85	Minor damage
EF1	86–110	Moderate damage
EF2	111–135	Considerable damage
EF3	136–165	Severe damage
EF4	166–200	Devastating damage
EF5	Over 200	Incredible damage

South Carolina's Four Seasons

South Carolina has four definite seasons, resulting from temperature changes. The average July temperatures across the state, except in the mountains, are around 80 degrees Fahrenheit (80° F). January temperatures are in the range of 40 to 50 degrees Fahrenheit (40° to 50° F).

Winter, though mild, can have a few below-freezing days and an occasional snow—mostly in the mountains. The mild winters attract many tourists and new residents to the state. Visitors are often surprised to see flowers blooming in the wintertime. Especially beautiful are the camellias and sasanquas.

Spring is usually a season of warming, pleasant temperatures, gentle rains, and vivid colors of blooming azaleas, dogwoods, fruit trees, and, in the mountains, rhododendron and mountain laurel bushes. Spring is also the season with the most tornado activity. A **tornado** is a severe windstorm characterized by a funnel-shaped cloud, with winds that can reach speeds of over 200 miles per hour. About 10 tornadoes visit South Carolina annually, and they can be very destructive. In March 1984, several tornadoes tore through the middle of the state from McCormick County to Marlboro County, killing 21 people and injuring 448. Weather forecasters are becoming more skilled at predicting tornado conditions and bringing warnings in time for people to protect themselves.

In summer, South Carolina's weather is influenced by the **Bermuda high**, a huge high-pressure air mass that often forms over the Atlantic. Its clockwise rotation sends warm, moist southerly winds into the state causing thunderstorms and wet summer seasons. The Bermuda high can, though, become stalled and stagnant and actually produce drought.

In fall, the summer heat gradually lets up and the humidity declines. The annual growing season ends with the first freeze, which usually comes, in Walhalla near the mountains, in late October, and in Charleston, in early December. The brilliant red, yellow, and orange hues of the changing autumn leaves are visual delights not available in all areas of the world.

Summer and fall is hurricane season, with September being the most active month, on average. **Hurricanes** are large low-pressure air masses that generate high winds whipping counterclockwise around a calm "eye." The storms roar out of the warm Atlantic Ocean or Caribbean Sea, and sometimes come ashore in South Carolina. The winds of 74 miles per hour and higher can do great damage, but the greater damage to coastal areas is caused by

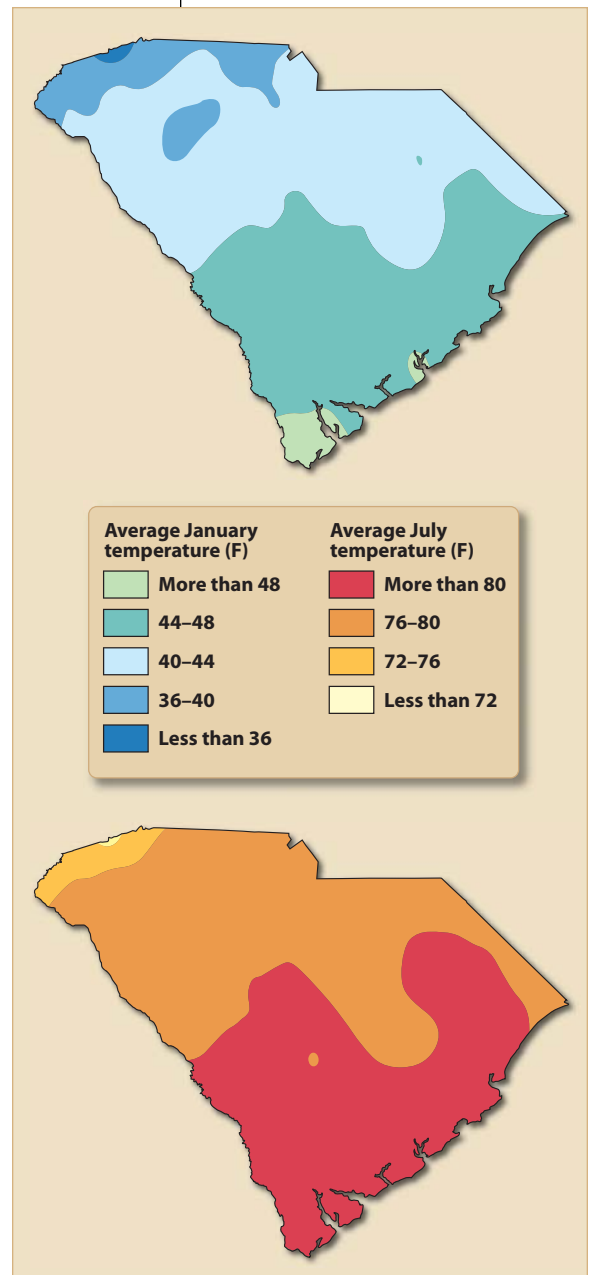


FIGURE 2

Saffir-Simpson Hurricane Scale

Category	1	2	3	4	5
Sustained Winds (mph)	74–95	96–110	111–130	131–155	Over 155
Storm Surge (in Feet)	4.0–4.9	5.0–7.9	8.0–11.9	12.0–18.0	Over 18.0
Expected Damage	Minimal	Moderate	Extensive	Extreme	Catastrophic



Above: Hurricane Hugo, seen here crossing the South Carolina coast on September 22, 1989, was the most destructive storm to hit the state in recorded history.

the tidal wave or **storm surge** that accompanies the winds. In a major hurricane, the storm surge might consist of a 15-foot-high wave flowing over the islands and beaches at 50 to 60 miles per hour. These winds and waves are terrifying forces of nature.

In September 1989, Hurricane Hugo struck the South Carolina coast just north of Charleston and devastated the coast northward. Hardest hit were the coastal villages of Awendaw and McClellanville, where winds reached 135 miles per hour and a wave 20 feet high swept across the town. Eighteen people died in South Carolina, 64,000 were homeless, and 270,000 were left without jobs. Beach erosion was severe, and boats were crushed into one another. The storm continued in a broad swath

across the state. It uprooted much of Francis Marion National Forest, then damaged Sumter and Columbia before moving into North Carolina. The governor officially declared nearly half the counties in a condition of disaster. The destruction to the forests and other plant life and wildlife took many years to recover. Ask any South Carolinian over thirty years of age about Hugo, and they likely will have frightening and perhaps heroic stories to tell.

As Pat Conroy said, the geography and climate we live in are powerful influences on our individual lives. They also help shape the society and culture we live in. As you continue to read about South Carolina, watch for evidence of how the physical environment influences our development as a state.

DO YOU REMEMBER?

1. Define in sentence form: tornado, Bermuda high, storm surge.
2. What are the three main river systems in South Carolina?
3. What is the difference between weather and climate?



Of SPECIAL INTEREST

Remembering Hurricane Hugo in McClellanville

Rutledge and Katherine Leland and their two children, like so many citizens of South Carolina, remember vividly the day Hurricane Hugo struck our state. Rutledge Leland tells their story.

“The day of September 21, 1989, was spent with the shrimp boat captains preparing for the approaching storm. Most of the boats were unloaded and their shrimp shipped out. Some of the captains took their boats north to Georgetown; others stayed in McClellanville.

“School was suspended, and Kathy shopped for the supplies that are needed during and following a storm: nonperishable food, water, and batteries. Yard equipment and outside furniture was stored away. As the storm was predicted to come ashore south of McClellanville, we did not leave our home.

“By evening, the wind was very high and there were warnings that Hugo was a very serious storm. By nightfall, it was impossible to leave McClellanville due to driving wind and falling trees.

“Around nine o’clock, water began to spout up through the floor vents as a huge tidal surge hit. Water rose very quickly in the house. Our family, including our two dogs, quickly ran upstairs, grabbing what we could carry as we went. By this time, the water downstairs was chest high. Even though the water was rising rapidly, we felt our house was secure.

“The water rose to about the third step from the top. It was extremely dark and the wind was very loud. It sounded like train engines. We watched as the down-

stairs filled with water. A favorite teapot floated by and Kathy was able to retrieve it. From the back windows facing the creek, we watched as a large boat with all of its lights on sailed by. It looked like a low-flying plane. We spent the night feeling that we were safe, but not knowing what was happening outside.

“Only a few miles away from our house, Lincoln High School had been designated by Charleston County as a hurricane shelter. Around seventy-five people, many of them elderly and one in a wheelchair, had taken refuge in this one-story building. At the peak of the storm, they had to climb onto cafeteria tables to stay above the rising water. They were in total darkness. Thankfully, all of these people survived the ordeal.

“After the water went down and the sun came up, mud was everywhere. There were several inches in our house, and all of the furniture was muddy and turned over. Outside, there was mud everywhere as well. Fallen trees, limbs, and debris of all kinds covered the ground. A one-hundred-foot steel barge had nearly hit our house. Shrimp boats were flung into people’s yards. All the homes were badly damaged by wind and water. Several buildings were destroyed. The village was now very quiet and there was no communication with the outside world. This was a lonely feeling.

“Help came quickly. Church groups, school groups, people from many places came to assist with the clean-up and repair. The months following Hugo involved many meetings with county, state, and federal officials as all worked to restore the areas that had been so badly damaged.

“Everyone was very thankful for the assistance they received. Most people were back in their homes in about six months. Although some things were changed forever, no one was seriously injured and McClellanville is once again a beautiful, peaceful coastal village.”



Chapter Summary

South Carolina is a beautiful state with a wide range of geographic features. The five regions of South Carolina are the Blue Ridge, Piedmont, Sandhills, Coastal Plain, and Coastal Zone.

Driving from the Blue Ridge Mountains in the north-west corner of the state through the rolling hills of the Piedmont to the beautiful Coastal Zone on the eastern boundary, people will see varying terrain, flora, fauna, waterways, and weather. Geographically, South Carolina is a small state where one could drive from the north-western corner to the coast in less than six hours. Upon reaching the barrier islands along the state's southeastern coast, visitors can enjoy a rich experience of what life was like several centuries ago.

South Carolina has three major river systems: the Santee, the Savannah, and the Pee Dee. With its great system of rivers and lakes, there is an adequate supply of water for the people as well as the industries in the state. These rivers and lakes also provide South Carolinians leisure activities such as fishing, boating, and swimming.

South Carolina has a subtropical climate with four distinct seasons. We sometimes suffer from severe weather, like tornadoes and hurricanes. Hurricane Hugo, which struck in September 1989, was one of the most devastating weather events in our state's history.

Considering the number of new residents the state gets every year, it is not just South Carolinians who realize what a great state South Carolina is.

Activities for Learning

Reviewing People, Places, and Things

Define each of the following in a complete sentence.

1. geography

2. relative location
3. flora
4. fauna
5. fault
6. barrier islands
7. storm surge
8. Hurricane Hugo

Understanding the Facts

1. What is South Carolina's absolute location?
2. Describe the relative location in the state of each of South Carolina's geographic regions. (Relative location may vary slightly.)
3. How does its elevation affect the Blue Ridge region of South Carolina?
4. What plant was introduced into the Piedmont to help with soil erosion?
5. Which South Carolina city is the approximate geographic center of the state, and in which region is it located?
6. Why is the soil in the Sandhills not very productive?
7. Which region of South Carolina is the largest?
8. Which major river, with its tributaries, forms the boundary between South Carolina and Georgia?

Developing Critical Thinking Skills

1. How do the five geographic regions of South Carolina make the state more interesting than it would be if it had the same topography throughout the whole state?
2. In which of the geographic regions would you most prefer to live? Why?

3. Which major river is close to where you live?
How would the area you live in be different if that river were not there?

Writing across the Curriculum

1. Write a letter to someone you know who lives in a state other than South Carolina. Convince that person that South Carolina is a wonderful place to live by describing the diversity of the geography and giving a taste of the culture to be found here.
2. An eighth grade student from Sydney, Australia, has emailed you to find out what you think is the best time of the year to visit South Carolina and what fun activities he or she should do during the visit. Write the response you would send to encourage that student to visit the state.

Exploring Technology

1. Go to these three links and compare the average annual temperatures of Charleston, Columbia, and Greenville.
www.average-temperature.com/temps/SC/charleston
www.average-temperature.com/temps/SC/columbia
www.average-temperature.com/temps/SC/greenville
2. If you wanted to learn more about South Carolina wildlife, what are two Internet sites where you would look?

Applying Your Skills

Using a map that shows South Carolina's river systems and cities, trace the route you would take from Daufuskie Island to Caesars Head State Park. Be sure to list all the bodies of water you would cross and the cities and towns you would pass.

Building Skills: Using Your Textbook

Knowing how to use your textbook properly is important since it is quite different from the kind of book you read for pleasure. Textbooks have plenty of written information, but they also have many visual types of information through illustrations, cartoons, graphs, tables, charts, and maps. There are usually captions that go along with these that give the reader a different way of looking at the same material. Some people remember history better when they have pictures, maps, and other visual information to illustrate what they are learning.

This textbook is composed of chapters that are divided into sections. Each chapter begins with a short preview telling you what people, places, and terms are important. This preview is followed by the chapter sections and their subsections. They are like an outline to help you keep the chapter information organized. You should scan the headings for each section so you will get an idea of what the chapter is about. The highlights in colored boxes titled "Did You Know?" should pique your interest in the subject matter.

When your teacher assigns you one or more sections of a chapter to read, you should read through that material and then answer the questions in the "Do You Remember?" box at the end of each section. After you answer the questions, go back and look at all the visuals such as maps, charts, and graphs and really study them. They are there to help you better understand the chapter material.

Do the following activities with this chapter. You may find it beneficial to do this with all the chapters as you get to them in your history class. Your outlines should become more detailed as you practice using them as study guides for each chapter.

1. Outline Chapter 1 using the section headings and subheadings.
2. Select one of the maps in Chapter 1 and explain how that map helps with your understanding of the information in its section or subsection.
3. Select one of the "Did You Know?" boxes and explain how that short highlight can help you remember the information on that page.