

The Lay of the Land

Millions of years of dramatic and unending geologic and climate change shaped Missouri. The land has been shrouded by exploding magma, inundated by ancient seas, and scoured by glaciers a mile thick. The climate has also changed dramatically. What was once a tropical climate has known the effect of glaciers. After these mountains of ice receded, plants and animals proliferated in this new, warmer environment. Today, the face of Missouri continues to change. Abundant waterways continuously carve and mold the terrain; and the current climate, which has only remained constant for the last 4,000 years, will surely change again.

This place is called Elephant Rocks and these are the elephants. Well, they really aren't elephants. Here at Elephant Rock State Park, these huge granite boulders were cooled and split. Later on, erosion and weathering helped carve out these interesting shapes. The early settlers thought they were elephants. I guess that could be an elephant. Every story has a setting, and the State of Missouri is ours. Let's take a look at the lay of the land.

It never ceases to amaze me just how beautiful and diverse our state is. We're right in the middle of the North American continent, right at the meeting grounds of multiple biomes, or different, large biogeographic areas of the United States. For instance, we're right where the great plains grasslands meets the eastern broadleaf forests. We also have elements of the gulf coastal plain—they come right up the Mississippi River and border in our boot heel area; and we even have elements of the desert southwest, down in Southwest Missouri. So, we're kind of at this meeting grounds, in the middle of the continent, where species from broadly divergent areas come together.

These are the natural divisions of the state. How do you think these different areas affected the people that lived here? Did the geography affect where they lived, or how they lived? Which of these regions do you live in?

A lot of the experience in being a Missourian is linked to our two great rivers: the Missouri and the Mississippi. Lewis and Clark, Huckleberry Finn, even the great flood of 1993; these rivers are central to many of the places and events that define this State. The big rivers were a magnet for settlement. A large percentage of our state's population lived within a few miles of the river. Agriculture and transportation were the draw. Even from early prehistoric times, the fertile river bottomland supported large communities. And the rivers were highways. Before the railroad, nearly all the development in the state was on the banks of a navigable stream. Of course, as we learned in 1993 and in 1995, living in the river bottom has its downside—flooding. Most people took advantage of the high ground over looking the rivers. This area is often called the Ozark border.

To many early settlers, the Ozark border was an ideal place to call home. The rolling hills above the rivers were covered with dense hardwood forests—lots of wood for building new towns and cities. And the rivers were close, an easy way to transport goods to the market. Perhaps there was an aesthetic aspect as well. The views from these river hills are stunning. How could you not settle here?

J.L. Jenkins. I wonder what his life was like. He probably worked in the granite quarry over the hill. Granite from this area provided some of the stone for the Eads Bridge in St. Louis, and for columns of the Governor's Mansion in Jefferson City, Missouri. J.L. Jenkins lived right here in this region called the Ozarks, located in the southern part of our state.

The Ozarks are the remains of an ancient plateau. At one time, this area was flat. Geologic forces pushed the land up, and streams cut down. And we ended up with these steep, rocky hills we call the Ozarks. This country was a rough place to live. Archeological evidence indicates that few really large settlements were here in prehistoric times, and that didn't change much with the coming of the Europeans.

However, there were people here. Workers like JL Jenkins came for the granite building stone. Others came for the lead found here. Later the area was inhabited by loggers. The extensive pine forests that covered the region become ties for the nations' railroads.

The Ozarks are certainly one of the most scenic areas in the state. Its crystal clear springs and rivers are national treasures. Check them out if you have the chance! Places like Big Springs and Johnson Shut-ins are unbelievable. And don't forget to stop by here and check out the elephant rocks.

The region north of the Missouri River, roughly the northern third of the state is called the glaciated plains. Back in the ice ages the glaciers moved down this far. And after they melted the land came to be covered with wind-blown soil known as loess. This deep rich soil originally supported tall grass prairies and bison roamed across northern Missouri in huge herds. Today this same soil supports extensive agriculture. Settlers spread out from the river valleys. Eventually almost all of the prairie lands in northern Missouri were turned by the plow. The corn, wheat, soybeans and other crops grown in this region continued to make Missouri a leader in the nation's food production.

South and west of the glaciated plains are the Osage plains. Again, a prairie region, but with short grass prairies more common to the southwest. The Osage plains gets its name from the Osage Tribe, the people who figured so prominently in Missouri's early history called this area home. It's easy to figure out why. The buffalo, the great herds of the plains were close. And so was the shelter of the Ozark woodlands. The soil is not as deep here as the plains to the north, crops were not as important as livestock pasture and grazing in the development of the region.

Look at this—cool! These are called solution pants. They kind of look like a big bathtub or Jacuzzi to me. What happens is water fills in a little depression, freezing and thawing and chemical decomposition of the rock occurs, and over a period of time, you get what you have here. A big, huge bathtub. Water is an essential element in our final natural division—the Mississippi lowlands.

This area is the northern limit of plants and animals found on the gulf coast. Located along the Mississippi in the area called the boot heel, the Mississippi lowlands were once an area of magnificent hardwood forests, swamps and wetlands. Water from the annual floods on the river created unique aquatic habitats similar to areas much further south. Today almost all the big timber is down and the swamps are drained, providing another rich, agricultural area for the state.

Those are the natural divisions in the state. As you can see, we are lucky to have so many different types of landforms; so many different environments come together right here in Missouri. From a biological stand point; this creates a lot of biodiversity in our state. Lots of different types of animals and plants; what do you think this meant for early settlers? And what does it mean for us today?

So now you have a better idea as to where you are. That's going to help you understand who you are, why you are and where you might be going. If you get a chance, check out the elephant rocks. It's part of our Missouri heritage.