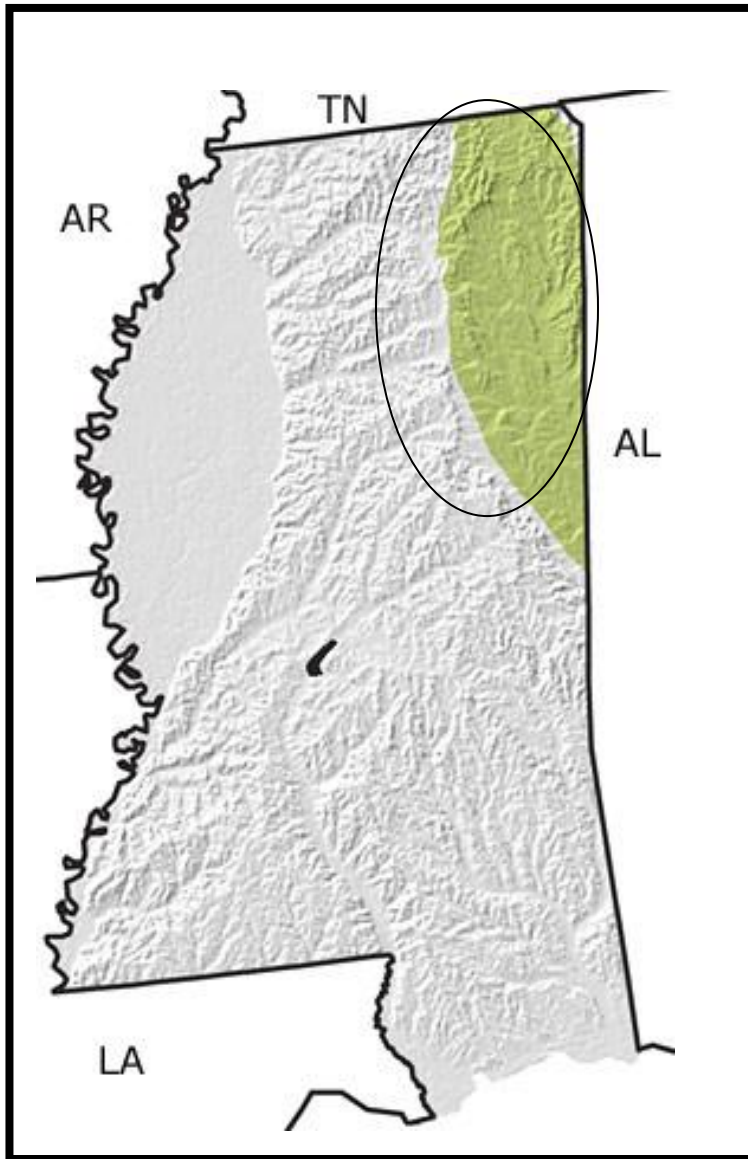


Mississippi – Mesozoic, Paleozoic and Precambrian Eras



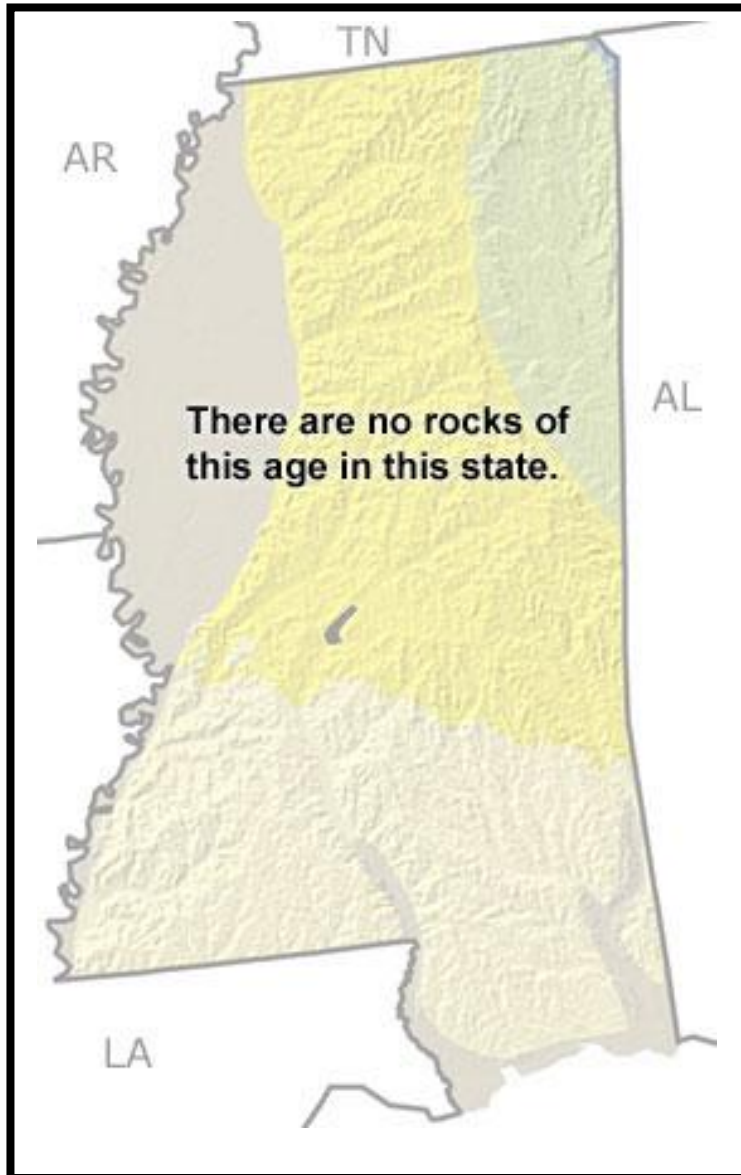
Cretaceous Period

Cretaceous outcrops occur in the northeastern part of the state, in an area known as the Mississippi Embayment. This area was covered by a shallow sea that flooded the region as North and South America moved farther apart during the breakup of the supercontinent of Pangea.

Rocks from the early part of the Cretaceous Period are all deeply buried in Mississippi, but the last half of the Cretaceous is well preserved at the surface.

These rocks contain abundant fossils of marine life. Invertebrates include clams, oysters, snails, and crinoids. Vertebrate material includes bones of turtles and mosasaurs, as well as teeth from extinct sharks and fish, crocodiles, and occasionally hadrosaurs and theropods.

Pieces of petrified wood are also common. Many of these fossils can be seen in W.M. Browning Cretaceous Fossil Park near Frankstown in northeastern Mississippi.



Jurassic Period

There are no surface rocks of Jurassic age in Mississippi.



Triassic Period

There are no surface rocks of Triassic age in Mississippi.



Permian Period

There are no Permian rocks preserved in Mississippi. This is probably due to the fact that the Mississippi landscape was uplifted above sea level and exposed to erosion.



Carboniferous Period

Rocks of this time interval are poorly exposed at the surface in Mississippi, although drill cores indicate that some Carboniferous rocks lie buried beneath much younger sediments in the northern part of the state.

A small exposed area does exist in the extreme northeastern corner of the state, and Carboniferous rocks across the border in Alabama suggest that during the Early Carboniferous (Mississippian), shallow seas also covered northern Mississippi. These seas were home to molluscs, crinoids, brachiopods, and trilobites.

In the Late Carboniferous (Pennsylvanian) tectonic activity resulted in a mountain-building event (Alleghenian Orogeny) and the formation of the Southern Appalachian Mountains.

Subsequent erosion of these mountains produced vast amounts of sediments that were swept into the sea, creating broad coastal plains where forests of primitive trees and fern-like plants thrived.



Devonian Period

Although not shown on this map, Devonian-aged rocks are part of the Black Warrior Basin in the extreme northeast corner of the state. Dark-colored marine rocks in this area indicate that a sea, with regions of deep, oxygen-poor water, covered this part of Mississippi in the Late Devonian. Few organisms could have tolerated these conditions. As a result, fossils from these rocks are limited primarily to plant fragments and the remains of animals that swam above the deeper, oxygen-starved waters.

Silurian Period

There are no Silurian rocks in Mississippi. The state, as such, did not exist during this time.

Ordovician Period

There are no Ordovician rocks in Mississippi. The state, as such, did not exist during this time.

Cambrian Period

There are no Cambrian rocks in Mississippi. The state, as such, did not exist during this time.

Precambrian Period

There are no Precambrian rocks in Mississippi. The state, as such, did not exist during this time.