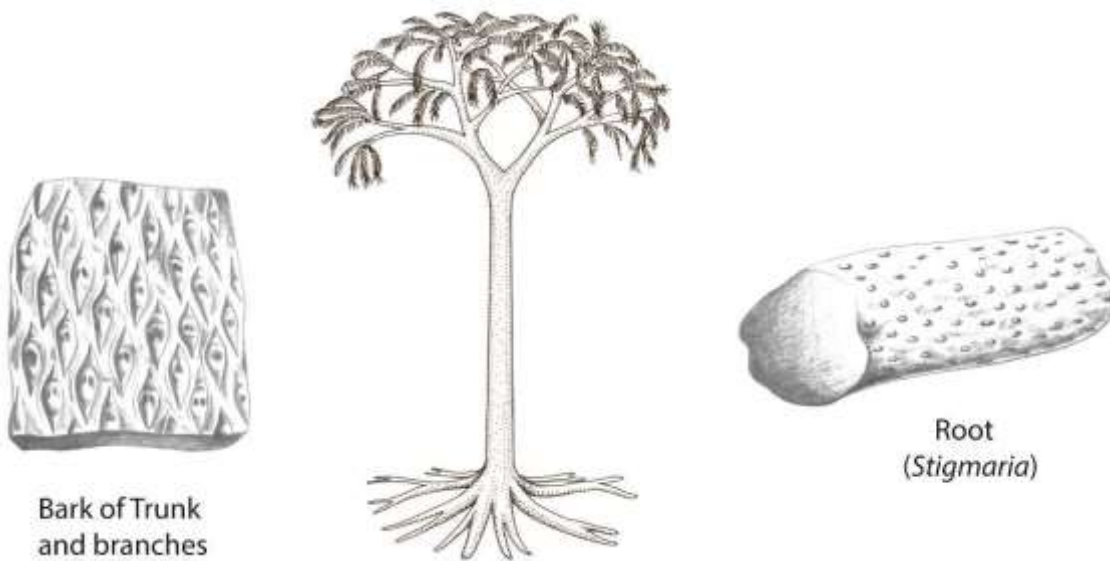
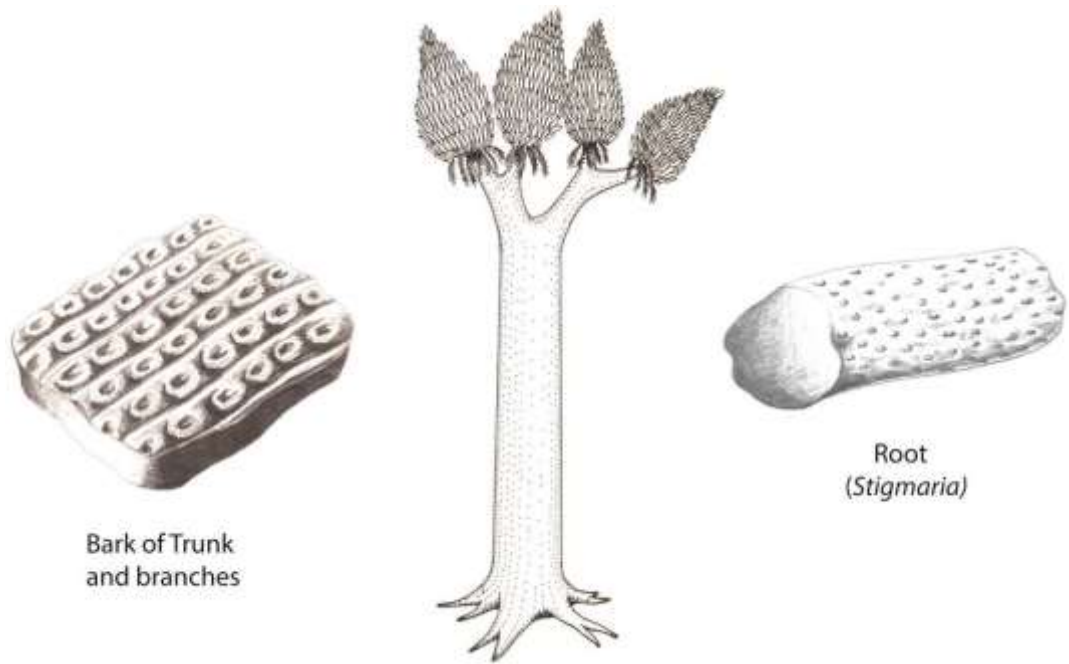


Lycopods

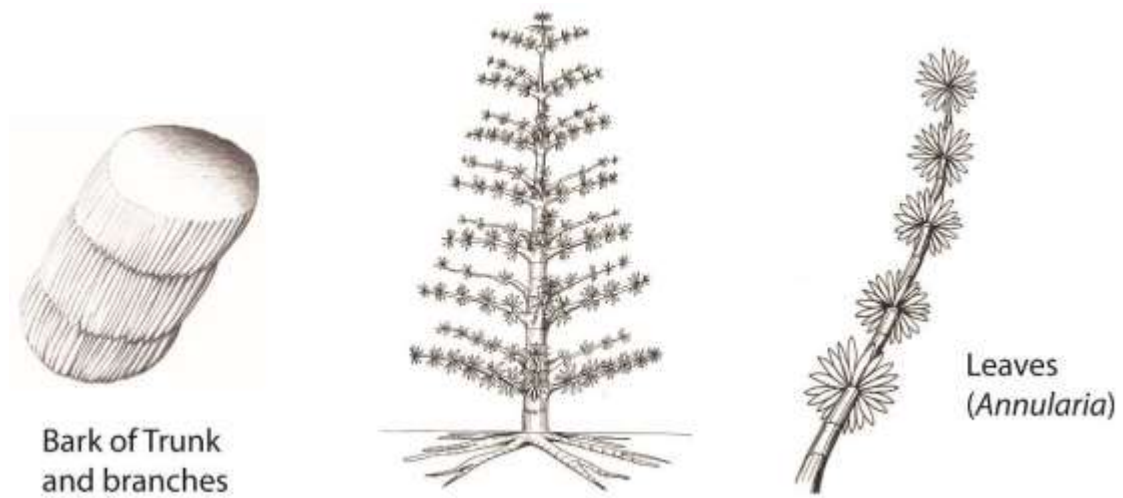
Throughout geologic time the seas have undergone transgressions (high sea level) and regressions (low sea level). During times of regression land is exposed, and in the Mississippian and Pennsylvanian there was abundant plant life thriving in subtropical conditions throughout the world. Most of the plants that grew in swampy areas eventually fell and accumulated in large numbers to ultimately form coal, lending the name Carboniferous Period or coal measures. The dominant trees of this period were the lycopods *Lepidodendron* and *Sigillaria*. Other plants that were more common on higher ground and along floodplains are the fossil horsetails called *Calamites* which were tree-sized plants reaching a height of approximately 20 m. In Arkansas the best preserved of these fossils are found in Pennsylvanian age rocks from the Arkansas River Valley. Small fragments of plant fossils can be found in Mississippian and Pennsylvanian age rocks in the Ozark Plateaus Region.



Lepidodendron, an extinct coal-age tree. Illustrations by Sherrie Shepherd.



Sigillaria, an extinct coal-age tree. Illustrations by Sherrie Shepherd.



Calamites, an extinct horsetail. Illustrations by Sherrie Shepherd.

Calamites fossils

Plant fossils with parallel lines running the length of the segment are usually referred to as *Calamites*. *Calamites* fossils have been found in the Mississippian Imo interval in the Ozarks and in the Pennsylvanian McAlester Formation in the Arkansas River Valley.



Calamites fossil from the McAlester Formation, Bates, Arkansas.



Calamites fossil from the Imo interval, north-central Arkansas. (centimeter scale)