

# Botany of Robbers Cave State Park

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## Introduction

Your visit to Robbers Cave State Park brings you into one of Oklahoma's scenic forests, a forest that lies at the northwestern edge of the Ouachita Mountains and the southern edge of the Sans Bois Mountains. The towering trees, together with the shrubs, vines, and herbaceous plants on the forest floor, blend harmoniously, creating a natural setting for your enjoyment and a sanctuary for the abundant wildlife. The amount of rainfall, the soil type, and other environmental factors are well suited for the development of a forest. If the amount of rainfall were less and the soil different, as they are in central and western Oklahoma, a grassland or prairie would be expected. Even so, in the park there are variations in the makeup of the forest, which is dominated by oaks (*Quercus*) mixed with many hickories (*Carya*) and pines (*Pinus*). On some of the drier slopes and on poor soil, especially where erosion has occurred, the forest is limited to pines. On better soil, mixed with the pines, oaks, and hickories, are several other deciduous species. The most abundant oaks by far on these slopes are post oak (*Q. stellata*) and blackjack (*Q. marilandica*), with the hickories being primarily black (*C. texana*) and mockernut (*C. tomentosa*).

The plants you will find in the park will depend primarily on two factors: the season of your visit and your location in the park. The plants most varied by the season will, of course, be the herbaceous ones. For example, in the spring of the year the forest floor and forest openings may be covered with spring bloomers such as camass (*Camassia scilloides*), crow poison (*Nothoscordum bivalve*), yellow-eyed grass (*Hypoxis hirsuta*), spring beauty (*Claytonia virginica*), buttercups (*Ranunculus*), violet woodsorrel (*Oxalis violacea*), and blue-eyed grass (*Sisyrinchium campestre*), some of which flower before the leafy canopy of the trees develops

and screens out the light. As the season progresses to late summer and fall, very different herbaceous plants will appear. Fewer plants will be seen on the forest floor; however, many will be quite conspicuous with their colors of yellow, blue, and white in the forest openings and along the roadsides. Likely finds are members of the sunflower family (Compositae), such as hairy sunflower (*Helianthus hirsutus*), aster (*Aster ericoides* and *A. sagittifolius*), ironweed (*Vernonia baldwinii*), gayfeather (*Liatris squarrosa*), broomweed (*Gutierrezia dracunculoides*), plains coreopsis (*Coreopsis tinctoria*), goldenrod (*Solidago*), and fragrant cudweed (*Gnaphalium obtusifolium*).

It is true, too, that certain trees and shrubs will be more conspicuous than others at certain times of the year. For example, flowering dogwood (*Cornus florida*) with its beautiful flower-like bracts and redbud (*Cercis canadensis*), our state tree, with its abundant pinkish-red flowers can be viewed easily in the early spring through what remains a predominantly dormant forest. In many parts of the park, French mulberry (*Callicarpa americana*) adds a splash of fall color with its wand-like stems covered in clusters of purple berries. This is one of Oklahoma's truly lovely shrubs.

Slopes, particularly north-facing ones, and protected ravines are more moist areas and better support the growth of plants requiring more moisture. The trees you may find in this area include chinquapin oak (*Q. muhlenbergii*), redbud (*Cercis*), flowering dogwood (*C. florida*), spotted oak (*Q. shumardii*), red maple (*Acer rubrum*), and winged elm (*Ulmus alata*). Occasional are hackberry (*Celtis*), willow oak (*Q. phellos*), black cherry (*Prunus serotina*), and chittamwood (*Bumelia lanuginosa*).

Likely shrubs to be found in these more moist areas are witch hazel (*Hamamelis vernalis*), black-

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