

Kentucky Big Tree Program

Mammoth's Own Giant

by Diana Olszowy

Mammoth Cave National Park is already known to have the longest cave system in the world, some 365 explored miles long, to be exact. The park now controls the bragging rights to the new state champion eastern white pine. Though only native to the Appalachian region of the state, eastern white pine has made itself at home and has become naturalized throughout the forests of central and southern Kentucky as well.

This newest state champion is hidden within the 52,830 acres of Mammoth Cave's biologically diverse forest. The pine was planted by Edmonson/Hart County's local legend, Edley "Red Buck" Esters, who once owned and eventually sold his acreage to the park in the mid 1930s. This living memorial now measures nearly 12 feet in circumference and stands 13 stories high.

Eastern white pine was historically referred to as "the monarch of the forest." The first settlers to New England were greeted with specimens 250 feet in height and 18 feet in circumference. They were a bonanza for England in Colonial times, as they met a vital military and commercial need for sailing ship masts. Since the colonists were rapidly using up the existing supply of trees close to the ocean that were large enough for masts, the Royal Navy appealed to Parliament. As a result, in 1691 Great Britain imposed the first of the so-called "broad arrow" acts, so named because of the axe mark placed on the reserved trees by the king's men that reserved these trees for the English government. Growing resentment to the crown's appropriation of the choicest white pines helped precipitate the Revolutionary War, and the first flag of the Revolutionary forces even had a white pine as its emblem.

The wood of white pine is light and strong, resists warping and is easily cut in any direction. It is currently used for flooring, paneling and dimension lumber and is a popular choice for log cabin construction. The species provides excellent cover and food for many forms of wildlife, including songbirds, turkey, elk and deer.

Eastern white pine's graceful habit and long, bluish-green needles give this tree a soft look. It is considered one of the most attractive evergreens and is often planted in the landscape as a living screen and windbreak. It is also a popular Christmas tree because of its fragrant foliage and its needle retention. It is a fast-growing tree, averaging 50 to 80 feet in height, with a spread of 30 to 50 feet. The very straight trunk of white pine is punctuated by a whorl of lateral branches every one to two feet. From this sequential arrangement, a close approximation of the age of the tree can be determined by simply counting the number of whorls from bottom to top. It grows best in fertile, moist, slightly acidic, well-drained soil in full sun. It can tolerate some shade but suffers in saturated, dry, compacted or heavy clay soils. These conditions cause a physiological problem in young and recently transplanted trees known as white pine decline, which will eventually cause death.



Though "Red Buck" Esters planted his own living legacy; it is Mammoth Cave National Park that is benefiting from the introduction of this beautiful evergreen and the perpetuation of its superior genetic traits into the park's ecologically-diverse forest.

Eastern white pine cone. Photo courtesy: Keith Kanoti, Maine Forest Service, Bugwood.org

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