

# Kentucky Champion Tree Program

## The Mighty White Oak — Granddaddy of the Oaks

by Diana Olszowy

Many folks could easily recognize a mature white oak tree from as far as ½ to 1 mile away. In the open, mature white oaks feature large, spreading horizontal branches, with some of the lower branches having diameters as large as two feet and crown spreads as wide as the tree is tall. The state champion white oak, pride of Hancock County, mimics these characteristics by having a circumference of over 19 feet, towering to nearly 100 feet and having a crown spread of 108 feet. White oaks can grow to exceptional sizes of 150 feet with trunks as wide as 8 feet (average is 80 to 100 feet in height and 3 to 4 feet in diameter) and their lifespan can surpass 500+ years. (This majestic white oak in Hancock County is estimated to be approximately 350 years old, which, if we converted to human years, would be the equivalent of only 65 to 70 years; however, this champ is nowhere near retirement and will likely outlive us all.)

In a forested site, white oak takes on a completely different growth habit, growing tall with a straight trunk and a small crown. It is a relatively slow-growing species, which enables it to reach to 500+ years of age, and it produces copious amounts of acorn crops every couple of years. The acorns are favored by turkeys, bears, squirrels, and chipmunks, and if you're an avid deer hunter, chances are you already have your stand set up near a white oak. If you want to encourage more white oak on your property, help out the squirrels by planting the acorns immediately after collecting them in the fall.

To give the acorns a fighting chance, make sure you have healthy and viable acorns, remove the cap, and place the acorns in a five-gallon bucket of water. Use only those

*Above: The Kentucky champion white oak is located in Hancock County and has a circumference of nearly 20 feet. Right: White oak leaves start out pinkish in the spring and typically expand to four to eight inches in length and have seven to ten rounded lobes; they turn brown or reddish in the fall.*

*Above photo courtesy: Diana Olszowy, Kentucky Division of Forestry  
Right photo courtesy: Chris Evans, River to River CWMA, Bugwood.org*

acorns that sink to the bottom. Acorns that float usually have insects or some other defect inside and are not viable. Select a planting site with plenty of room for the acorns to grow, preferably in full sun. Make sure that wherever you plant them you leave them, because white oak seedlings do not like to be transplanted because of their long taproot.

White oak has the largest growing range of all oaks in the eastern United States, extending from southeast Maine and down the Atlantic Coast to Georgia and from the Florida Panhandle to as far west as Texas. States such as Arkansas, Missouri, and Iowa form the western border of the white oak's range. It is also one of the most valuable timber species, used for flooring, cabinets, furniture, and in Kentucky, barrels. Because of its tight cooperage, which keeps liquids from seeping out, it is the preferred wood used in the manufacture of whiskey (also bourbon and wine) barrels.

#### About the Author:

*Diana Olszowy is Stewardship and Education Branch Manager with the Kentucky Division of Forestry. She is also an editor of the Kentucky Woodlands Magazine. Kentucky Division of Forestry, 627 Comanche Trail, Frankfort, KY 40601; Phone: 502.564.4496; Fax: 502.564.6553; E-mail: diana.olszowy@ky.gov*



*White oak acorns are a very important food for wildlife species in Kentucky. White oak trees will often have a large crop of acorns every few years.*

*Photo courtesy: Paul Wray, Iowa State University, Bugwood.org*