

White oak (Quercus alba)

White oak is a large, long-lived tree species that occurs naturally over most of the eastern United States. It is found in every county of North Carolina.

White oak grows on a wide range of soils and sites. However, it does not do well on extremely dirty, shallow-soil ridges, poorly drained flats, and wet bottomland. It grows best on north-and-east-facing lower slopes and coves.

The west slopes of the Appalachian Mountains and the Ohio and central Mississippi River Valleys have optimum conditions for white oak, but the largest trees have been found in Delaware and Maryland on the eastern shore.

This outstanding tree is the most important lumber-producing species of the white oak group. Its high-grade wood is useful for many things, including staves for barrels; hence it has been called "staves oak". Its acorns are a valuable, but inconsistent, source of food for birds and mammals; more than 180 species use these acorns for food. It is sometimes planted as an ornamental because of its broad round crown, dense foliage, and purplish-red to violet purple full coloration.