

Eastern White Oak

Quercus alba

Common name:

White Oak, Stave Oak, Forkleaf Oak, Ridge White Oak

Pronunciation:

kwer-KUS AL-ba

Family:

Fagaceae

Genus:

Quercus

"If Oak is the king of trees, as tradition has it, then the White Oak, throughout its range, is the king of kings.... The mighty branches, themselves often fifty feet long or more, leave the trunk nearly at right angles and extend their arms benignantly above the generation of men who pass beneath them."

"Our White Oak...met with serious opposition from the British shipbuilders and the inspection boards of the Royal Navy. Scornfully, they maintained that it was weaker than their own [English Oak] as a structural timber, and that it was far more subject to decay. The truth of this lay simply in the haste of the cutting and carelessness of seasoning.... For all of this, the British loftily shook their heads at American White Oak as far inferior to their own. Well, if the mother country would not take our White Oak, we would build our own ships of it. The immortal frigate *Constitution* has a gun deck of solid White Oak of Massachusetts, her keel was the same wood from New Jersey, while the knees of the Maryland White Oak framed her keelsons."

(excerpts from Donald Culross Peattie, *A Natural History of Trees of Eastern and Central North America*)

Quick ID Tips

- Short-stalked leaves with 7-9 rounded moderate to deep lobes; underside is paler than the upper surface
- Acorns are 3/4-1" long, elongated with a shallow cup
- Pale, ashy gray bark in strips or blocks

Details

- Broadleaf deciduous tree that grows to 80 ft. tall and is widespread and common in rich, moist or dry soils, often found on ridges and slopes. In the open, large branches extend out at wide angles. White oaks are very long-lived, often over 200 years old.
- Bark is pale gray to brown, exfoliating plates or strips, ridged.
- Leaves are alternate, simple, 4-8" long, and are half as wide as long. Leaves have 3-4 rounded lobes per side, margin entire, blade tapers to the petiole. Foliage is dull mid-green, changing to red brown in the fall (sometimes orange or burgundy).
- Acorn is solitary or paired, 3/4-1" long, ovoid-oblong, with 1/4 to 1/3 covered by the cap. The acorn ripens and germinates rapidly in the fall once it hits the ground.
- Acorns do not develop until the 50th year on the White Oak. Heavy crops of acorns (known as masting) occur thereafter every 4-7 years. The acorn is less bitter tasting acorn than other oaks and is consumed by wildlife as soon as the acorns fall -- before the acorn can germinate and lose its nutritional value. The acorns are valuable wildlife food, notably for turkeys, wood ducks, pheasants, grackles, jays, nuthatches, thrushes, woodpeckers, rabbits, squirrels, and deer. Because of the rapid germination, overwintering white acorns are relatively rare unlike the red oak group acorns that germinate in the following spring and retain their nutritional value throughout the winter.
- Winter buds are small and rounded or blunt.
- Prefers sunny locations but is partly shade tolerant. Found on many soil types and does best on deep, moist, well-drained, acid soils.
- Hardy in USDA Zones 3b-9. Native range extends from Maine to Florida, west to Minnesota and Texas.
- *alba*: white. The name comes from the light color of the finished wood. Historically, white oak wood was used for barrel staves, construction, shipbuilding, furniture, and musical instruments (the banjo)



large White Oak in summer



leaves



developing acorns



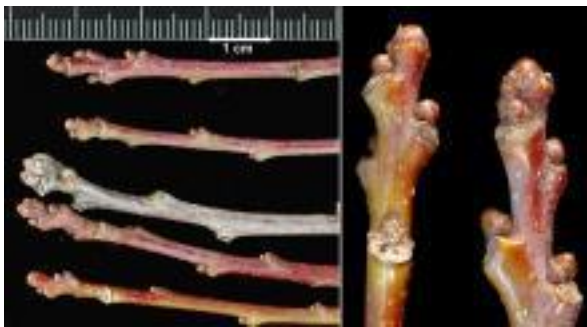
ripening acorns



foliage, fall



trunk, bark



winter twigs, buds

Sources:

- Oregon State University Landscape Plants, <https://landscapeplants.oregonstate.edu/plants/quercus-alba>
- David Sibley, *The Sibley Guide to Trees* (Knopf 2009)