Plant Care Sheet QueAlb\_001

## **White Oak Tree**

## Quercus alba

Plant Type: Native Mast Tree Sun Exposure: Full Sun, Part Sun Season of Interest: Summer, Fall

**Height:** 50 to 135 ft. **Width:** 50 to 80 ft.

Spacing: 55 ft.

Flower Color: Gold Water Needs: Average

Maintenance: Prune for shape Soil Type: Clay, Loam, Sandy

Soil pH: Acidic, Neutral
Soil Drainage: Well Drained
Pests: Leaf miners, Galls

**Diseases:** Oak wilt, Leaf spot **Wildlife:** Birds, Small mammals



**Description:** Globally there are roughly 500 species of oak trees, with about 58 being native to North America. Quercus alba, the white oak, is one of the continent's predominant tree species appearing throughout Eastern North America's forests. While it will not disappoint as a design feature, it is essential to remember that oaks are among the most valuable native trees we can plant. The white oak provides a habitat and food for countless species of wildlife. The white oak is the best tree to



plant to attract butterflies. It supports a ridiculous 934 caterpillar species! If you want to support pollinators and attract birds, planting white oaks is the way to ensure that will happen. As a symbol of strength and endurance, and its longevity and size make it apparent why. The white oak is much more resistant to disease than most other oaks. For more information see: <a href="mailto:plants.ces.ncsu.edu/plants/quercus-alba">plants.ces.ncsu.edu/plants/quercus-alba</a>.

**Care and Growing Tips**: When the white oak is planted in the open, its spread can be as wide as its height. If space is limited, a different species is a better choice for your landscape design. The white oak is a tree that thrives in full sun. Younger trees will tolerate some partial shade, but as the trees age, their ability to tolerate shade will become an issue. White oak prefers acidic to neutral soil that is deep moist, and well-draining. It does not tolerate alkaline or shallow soils. Newly planted white oaks should be watered regularly for the first season until established. When planting the tree, mulching beneath the canopy will help it establish itself and prosper in its new location by keeping the area moist and reducing competition with grass and other plants.

The white oak can exist in a wide range of temperatures, from a very frigid winter in Minnesota to a relatively mild Florida winter. White oaks do not need supplemental fertilization, but testing the soil and amending the soil can rule out soil deficiencies if the tree is not thriving. Waiting on the test results is important, but generally using a fertilizer with a low nitrogen content is best for oaks to avoid creating weak branch growth.