

White oak (*Quercus alba*)

Family: Beech
(Fagaceae)

DESCRIPTION: An important tree for wildlife and people, white oaks, which are native to central and southeastern Minnesota, can live for more than 500 years and can support more than 600 wildlife species. They tolerate some shade but prefer full sun, growing in upland areas that are moist to dry with well-drained soils.

USES: Foliage and other parts of the trees feed moths, butterflies and other insects, which in turn become food for birds and other wildlife. Animals make their homes in the branches, cavities and crevices. Acorns are eaten by bears, raccoons, squirrels, deer, turkeys and other animals. Fallen leaves become habitat for beneficial insects, soil organisms and fungi. The wood is valued for construction and fuel.

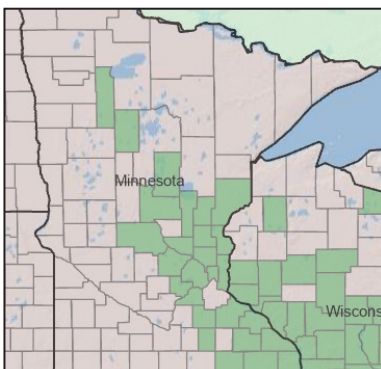
REFERENCES:

[Minnesota Wildflowers](#)

[Minnesota DNR](#)

[Illinois Wildflowers](#)

Trees and Shrubs of Minnesota;
Welby R. Smith



Range Map Credit: NRCS Plants Database



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STATEWIDE WETLAND INDICATOR STATUS: FACU

ID: Leaves are simple and alternate, with three to five rounded, finger-like lobes evenly distributed on each side. The upper surface is a darker green than the underside. Leaves turn dark red in the fall. The bark is gray and coarse on the trunk but becomes plate-like in the upper branches. Acorns are smooth, round to egg-shaped, longer than wide, with a dome-like cap that is rough, without hair-like fringes. The nut is generally three times longer than the cap.

SIMILAR SPECIES: The leaves of bur oak are more shallowly lobed, irregular and club-shaped; acorns' caps have thick, coarse hairs and cover at least half the nut. Bur oak has thicker, cork-like bark and lacks the scales in the upper branches.

Planting Recommendations

Acorns mature in one growing season, drop in the late summer and early fall and germinate immediately. Acorn production varies from year to year. One year's mast — an abundant acorn crop — is usually followed by two to four years with very little acorn production. Mature acorns can be collected and then planted directly in the ground; sprouted in moist,

cool conditions (such as a refrigerator), or started in small pots for later transplanting. Give them plenty of space; white oaks can reach 100 feet tall with a crown more than 80 feet wide. Protect seedlings from browsing with wire cages, tree tubes or something similar. To prevent oak wilt, do not prune or cut oaks from April through July.

Developed by Paul Erdmann, an ecological science conservationist with the Minnesota Board of Water and Soil Resources.

