

Common Name: OGLETHORPE OAK

Scientific Name: Quercus oglethorpensis Duncan

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Fagaceae (oak)

Rarity Ranks: G3/S2

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: none

Description: Tree up to 80 feet (24.4 m) tall with reddish-gray bark in loose plates (similar to the bark of white oak, post oak, and overcup oak); occasionally with scattered shoots along the

trunk. Young **twigs** reddish-brown and hairless. **Leaves** 2 - 5 inches (5 - 13 cm) long and $\frac{1}{2}$ - 2 inches (1.5 - 5 cm) wide, oval, oblong, or lance-shaped; margins slightly wavy or with a few small lobes, but never toothed or bristle-tipped; deciduous, alternate, leathery; upper surface dark green and hairless; lower surface covered with velvety, yellowish hairs (with 10x magnification, hairs are stalked and branched). **Acorns** about $\frac{1}{2}$ inch (1 - 2 cm) long, oval, finely hairy, with the cap covering $\frac{1}{3}$ - $\frac{1}{2}$ of the acorn; acorn matures in one growing season.

Similar Species: Willow oak (*Quercus phellos*) occurs in similar habitats but its leaves are narrow with pointed tips and its bark is dark gray and furrowed. Water oak (*Q. nigra*) leaves are highly variable in shape and maybe resemble Oglethorpe oak leaves but usually have a tooth or bristled lobe along the margin; water oak bark is relatively smooth and gray, becoming furrowed with age.

Related Rare Species: Shingle oak (*Quercus imbricaria*, Special Concern) occurs on moist, streamside flats in Floyd County; the leaves are usually bristle-tipped and have a dense covering of greenish-white hairs on the lower surface; the faintly striped, round acorn matures in two growing seasons. Durand's oak (*Q. sinuata*, Special Concern) occurs in Early and Wheeler Counties on slopes and bluffs with calcium-rich soils; the pale lower surfaces of its leaves are covered with grayish-green hairs; the acorn cap covers less than ¼ of the acorn, which matures in one growing season.

Habitat: Wet clay soils of Piedmont seepage swamps, stream terraces, and moist hardwood forests upslope from these habitats; roadsides and pasture edges near these habitats. Often with cherrybark oak or chalk maple.

Life History: Oglethorpe oak is a "white oak" and its acorns mature in one year (instead of two, as with "red oaks"). Oaks are wind-pollinated and must be cross-pollinated in order to produce fruit (acorns). The isolation of Oglethorpe oak trees from one another caused by fragmentation of habitat can decrease pollination and acorn production.

Survey Recommendations: Surveys are best conducted during summer when leaves are mature.

Range: Georgia, Alabama, Mississippi, Louisiana, and South Carolina.

Threats: Conversion of habitat to pine plantations, pastures, and development. Damming and flooding streams and floodplains. Invasion by exotic pest plants, such as Japanese honeysuckle, autumn olive, and Chinese privet, that compete with seedlings.

Georgia Conservation Status: More than 50 populations have been discovered but several have been destroyed by damming of streams and clearcutting. Three populations occur on National Forest and Army Corps of Engineers land, the rest on private land.

Conservation and Management Recommendations: Preserve natural hydrology in streams and swamps. Protect populations from clearcutting. Eradicate exotic pest plants.

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