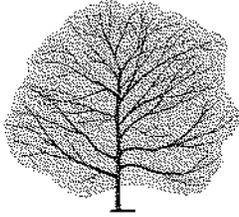


# *Quercus bicolor* - Swamp White Oak (*Fagaceae*)

*Quercus bicolor* is a large, rounded shade tree noted for its bicolored foliage in the breeze, ornamental bark and bold texture in winter, and adaptability to wet or dry sites.

## FEATURES

### Form



- large shade tree
- maturing at about 60' tall x 60' wide under urban conditions, but larger in the wild
- upright oval growth habit in youth, becoming very rounded to slightly spreading with age
- medium growth rate

### Culture

- full sun to partial sun (partial shade tolerance in youth)
- performs best in full sun in moist to wet, deep, acidic soils, but is very adaptable to dry soils, and is somewhat adaptable to soils of alkaline pH
- propagated by seeds
- no serious diseases or pests, although cosmetic blemishes (such as galls) can be caused by insects
- moderately available in B&B form
- member of the White Oak group; some of these members may hybridize freely in the wild, resulting in a blending of traits such as leaf shape and autumn color
- Swamp White Oak may show chlorosis of the foliage in highly alkaline soils, although it is more adaptable to these conditions than the Pin Oak (*Quercus palustris*)

### Foliage

- alternate, dark green, slightly obovate, with variable leaf margins that range from shallowly sinuate with either small rounded lobes or large crenate teeth, to moderately deep sinuses with prominent rounded lobes
- leaves are whitish-green underneath, resulting in a bicolor effect in the breeze (and hence the specific epithet name)
- leaves have a fairly short petiole
- autumn color is often a poor yellowish green to yellowish-brown, but occasionally reddish-purple, golden, or golden-brown in excellent years



### Flowers

- yellow-brown pendulous male catkins are obvious and prominent in late Apr., but are ornamentally insignificant, as are the very small pistillate flowers

### Fruits

- a moderate-sized acorn (1" long), maturing in a single season, with a cap covering the upper one-third of the oval nut, on a very long but thin peduncle (1-4" long), either single with an aborted miniature acorn on the peduncle, or in pairs



### Twigs

- yellowish-brown in youth, turning to brown-gray with maturity, usually stout



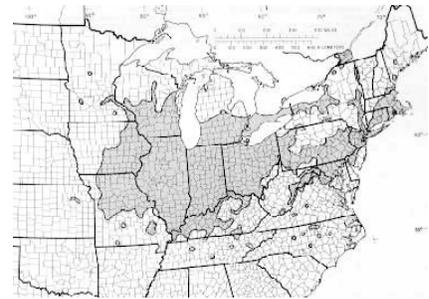
### Trunk

- young trunks and branches are gray-brown and shredding to lightly exfoliating, but quickly mature to overlapping long vertical scales that flare outward along one exposed side, on the upper trunk and the undersides of large limbs
- mature lower trunks are either scaly, or heavily ridged and furrowed
- the prominently flared bark of this species (and many other members of the White Oak group) contribute greatly to its overall bold texture in winter

## USAGE

### Function

- shade tree for large lawns, golf courses, parks, or naturalized areas, including areas that are dry, wet, or normally dry areas that are occasionally flooded
- valuable timber tree, with its wood prized for beams, boards, railroad ties, furniture, and especially floors



### Texture

- medium texture in foliage and bold texture when bare
- thick density in foliage and when bare

### Assets

- wet site or dry site adaptable
- bold texture in winter
- nuts attract wildlife (large birds, deer, and especially squirrels)

### Liabilities

- autumn color is often poor
- fruit litter with maturity

### Habitat

- Zones 3 to 8
- Native to the Northeastern quadrant of the U.S.

## SELECTIONS

### Alternates

- large rounded shade trees (*Acer platanoides*, *Fraxinus americana*, *Gleditsia triacanthos*, *Styphnolobium japonicum*, etc.)
- trees adaptable to both dry sites and wet sites (*Celtis laevigata*, *Gleditsia triacanthos*, *Fraxinus pennsylvanica*, *Taxodium distichum*, etc.)
- wildlife attraction hardwood trees (members of the genera *Fagus*, *Carpinus*, *Carya*, *Juglans*, *Nyssa*, *Quercus*, etc.)

### Cultivars – Variants – Related species

- straight species is the available choice

