

**White Oak  
Quercus alba  
3 Gallon (1-2 ft tall) and 10 Gallon (4.5-6 ft tall, 1" caliper)**

*Exposure*: Part sun-sun  
*Soil*: Medium-dry  
*Mature Height*: 50-80 feet  
*Mature Width:* 50-80 feet

***Notable Features:***White Oak is the state tree of Illinois. It is the only oak of the white oak group that has russet red fall color. In youth, the leaves tend to persist over the winter. As the tree ages, the leaves fall off in autumn. Grows in sand and clay but never in very wet sites. Most of our oaks are intolerant of shade, but White Oak is mildly shade-tolerant, needing only 3-4 hours of sun daily. Somewhat slower growing than others in the White Oak family. High ecological value!

***Attracts*:** Caterpillars of the butterflies *Calycopis cecrops* (Red-Banded Hairstreak), *Fixsenia favonius ontario* (Northern Hairstreak), *Parrhasius m-album* (White-M Hairstreak), *Satyrium calanus falacer* (Banded Hairstreak), and *Satyrium liparops strigosum* (Striped Hairstreak) feed on the foliage, as do caterpillars of the skippers *Erynnis brizo*(Sleepy Duskywing) and *Erynnis juvenalis* (Juvenal's Duskywing). Probably several hundred species of moth caterpillars feed on the foliage and other parts of oaks. Moth caterpillars that feed on White Oak include *Acronicta haesitata* (Hesitant Dagger Moth), *Catocala ilia* (Ilia Underwing), *Lambdina fervidaria* (Curve-Lined Looper), *Lymantria dispar* (Gypsy Moth), *Valentina glandulella* (Acorn Moth), several *Cameraria spp.* (Blotch Leaf-Miners) and *Phyllonorycter spp.* (Tentiform Leaf-Miners). Other insects that feed on White Oak include the larvae of *Acraspis erinacei* (Hedge-Hog Gall Wasp) and other gall wasps, the larvae of *Arrhenodes minutus* (Oak Timberworm), the leaf beetles *Cryptocephalus guttulatus* and *Lupraea picta*, *Stegophylla quercicola* and other aphids, many species of treehoppers, many species of leafhoppers, *Asterolecanium variolosum* (Golden Oak Scale), *Corythucha arcuata* (Oak Lace Bug), *Lygocoris quercalbae* (Oak Plant Bug) and other plant bugs, and *Diapheromera femorata* (Northern Walkingstick). Because the acorns of White Oak are produced annually and they are less bitter than those of the majority of oaks, they are an important source of food for many birds and mammals. Such birds as the Wild Turkey, Crow and Blue Jay eat the acorns, as do such mammals as the raccoon, Fox Squirrel, Gray Squirrel, Red Squirrel, Southern Flying Squirrel, Eastern Chipmunk, White-Footed Mouse, and White-Tailed Deer. White-Tailed Deer also browse on the twigs and foliage of White Oak, while the Cottontail Rabbit gnaws on the bark and twigs of saplings and seedlings during the winter. Some birds construct nests on the branches of White Oak and other oaks, while other birds nest in the cavities of older trees. Tree squirrels, bats, and raccoons also use the cavities of older trees as dens.



**Burr Oak**

***Quercus macrocarpa   
3 gallon (1-2 ft tall) and 10 gallon sizes (5.5-6.5 ft tall, 1" caliper)***

*Exposure:* Full-Partial Sun  
*Soil:* Medium-Wet  
*Mature Height:* 50-80 feet  
*Mature Width:* 50-80 feet

Full Sun, clay soil, occasional drought or water, prefers well drained soil

*Notable Features*: High ecological value; tolerates wide range of soils

***Attracts*:**Like other oaks, the value of Bur Oak to wildlife is quite high. The stately bur oak, native to the Midwest, is a great choice as a shade tree and for specimen plantings in parks, spacious yards, and other large areas. Its massive trunk has gray to brown furrowed bark and its branches bear lustrous dark green leaves that turn yellow-brown in fall. Large acorns with fringed caps attract birds and small mammals. This species is native to the Chicago region according to Swink and Wilhelm’s *Plants of the Chicago Region*, with updates made according to current research.

The leaves are eaten by the caterpillars of several butterflies, specifically *Calycopis cecrops* (Red-Banded Hairstreak), *Fixsenia favonius ontario* (Northern Hairstreak), *Parrhasius m-album* (White-M Hairstreak), *Satyrium calanus falacer* (Banded Hairstreak), and *Satyrium liparops strigosum* (Striped Hairstreak); the caterpillars of the skippers *Erynnis brizo* (Sleepy Duskywing) and *Erynnis juvenalis* (Juvenal's Duskywing) also feed on the leaves. In addition, the caterpillars of probably several hundred moths feed on the foliage and other parts of oaks. Another major group of insect feeders consists of Long-Horned beetles (*Cerambycidae*) and closely related beetles, whose larvae bore through the wood or bark of oaks. Bur Oak and other oaks are among the major hosts of treehoppers (Membracidae). Other insect feeders include plant bugs (*Miridae*), leaf beetles (*Chrysomelidae*), the Oak Lace Bug (*Corythucha arcuata*), the Northern Walkingstick (*Diapheromera femoratum*), the larvae of weevils (*Curculionidae*), and insects from other families. Many of these insects are eaten by insectivorous songbirds. The acorns of oaks are an important food source of several birds; these species include the Wood Duck, Mallard, Wild Turkey, Blue Jay, White-Breasted Nuthatch, Tufted Titmouse, Pileated Woodpecker, Red-Bellied Woodpecker, Red-Headed Woodpecker, and others. Oak trees provide nesting habitat for such birds as the Northern Parula, Blue-Gray Gnatcatcher, Yellow-Throated Vireo, Summer Tanager, and Red-Tailed Hawk; the cavities of older trees provide dens for tree squirrels and Screech Owls.



**Red Oak**

***Quercus rubra   
3 Gallon (1-2 ft tall) and 10 Gallon (5.5-6.5 ft tall, 1" caliper)***

*Exposure:* Partial sun  
*Soil:* Medium-dry  
*Mature Height:* 60-80 feet  
*Mature Width:* 60-80 feet

***Notable Features:***Red Oak is one of the most shade tolerant of the oaks, making it a good choice to grow under existing trees. A few hours of sun per day is all it needs to grow. Fall color is an outstanding red. Northern red oak is a Midwest native and is one of the faster growing oaks for the home landscape. The leaves are handsome throughout the year, emerging pinkish-red, turning lustrous dark green in summer, and changing to russet-red to bright red in autumn. Its tolerance of salt and air pollution makes it a good tree for more exposed areas. Sun is partial to full.

This species is native to the Chicago region according to Swink and Wilhelm’s Plants of the Chicago Region, with updates made according to current research.

***Attracts:***The foliage of Northern Red Oak and other oaks is eaten by the caterpillars of several Hairstreak butterflies (*Satyrium spp.* & others), caterpillars of the skippers *Erynnis juvenalis* (Juvenal's Duskywing) and *Erynnis brizo* (Sleepy Duskywing), and the caterpillars of many moths. Moth species that feed on Northern Red Oak include *Anisota senatoria* (Orange-Striped Oakworm), *Catocala ilia* (Ilia Underwing), and *Ulolonche culea* (Sheathed Quaker). Galls are formed by the larvae of *Amphibolips confluenta* (Large Oak Apple Gall Wasp) and *Dryocosmus quercuspalustris* (Succulent Oak Gall Wasp). The larvae of some beetles bore through the wood of these trees; this includes *Arrhenodes minutus* (Oak Timberworm), *Enaphalodes rufulus* (Red Oak Borer), *Goes debilis* (Oak Branch Pruner), and many others. The leaf beetles *Metachroma laevicolle* and *Xanthonia striata* feed on the foliage, while larvae of the acorn weevils *Curculio nasicus* and *Curculio sulcatulus*eat the meat of acorns. A variety of small insects have been observed to feed on Northern Red Oak: they include various aphids, especially *Myzocallis spp.*; the leafhoppers *Eratoneura abjecta*, *Eratoneura acantha*, *Eratoneura lenta*, *Eratoneura manus*, *Eratoneura marilandicae*, *Eratoneura protuma*,*Eratoneura stannardi*, and *Erythridula cornipes*; and a large number of treehoppers, especially *Cyrtolobus spp*. The plant bugs *Lygocoris omnivagus*, *Phytocoris depictus*, and *Pseudoxenetus regalis* also feed on this tree. Notwithstanding the bitter meat, the large acorns of Northern Red Oak are an attractive source of food to many birds such as the Wood Duck, Wild Turkey, Red-Headed Woodpecker, Red-Bellied Woodpecker, and others. Many birds construct nests in the branches of this tree, while tree squirrels, bats, woodpeckers, and other birds have dens or nests in its cavities.



**Chickapin Oak**

Chinkapin oak is native to the Midwest, where it is often found as a specimen planting or as part of a grouping of trees in parks and large areas. Chinkapin oaks are found on dry, limestone outcrops in the wild and perform well in alkaline soils. Its glossy, coarsely-toothed leaves are yellow-green and small compared to most oaks. Young trees retain a pyramidal to oval habit with a pale gray, scaly ridged central trunk. As trees age, the crown becomes more rounded. Height up to 50 feet at maturity, likes full sun, prefers well drained but moist soil and has a round shape.

This species is native to the Chicago region according to Swink and Wilhelm’s *Plants of the Chicago Region*, with updates made according to current research.