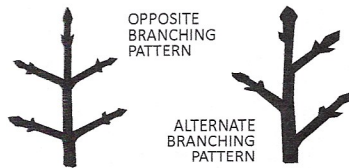


# TREE OF THE MONTH

Black Oak • *Quercus velutina*

YELLOW BARK OAK

Black oak is a large, deciduous tree native to eastern North America that can reach up to 80 feet in height. Like its cousin the pin oak, black oak can be identified by the descending lower branches and ascending upper branches. Unlike pin oak, however, dead lower branches are usually not persistent. Most often found in dry-mesic upland habitats that are well drained, black oak associates with white pine (*Pinus strobus*), scarlet oak (*Quercus coccinea*), shagbark hickory (*Carya ovata*), and red maple (*Acer rubrum*).



**LEAVES** Like other oaks, black oak has alternate leaves that are lobed (typically 5-7) with bristly tips. Black oak leaf shape can vary on a single tree, with sun leaves (that get lots of sunlight on the tips of branches and at the top of the crown) having deep sinuses (indentations along the leaf) while shade leaves (that get little sunlight close to the trunk and nearer the ground) have shallow sinuses.

**FLOWERS** Black oak is monoecious (both male and female flowers on one tree) and blooms in April-May. Male flowers appear on small, yellow-green catkins while the red-green female flowers are borne on short spikes at the leaf axils (where leaf stems attach to twigs).

## FRUITS

Black oak acorns require two growing seasons to mature. Crops drop in cyclical, two to three year cycles in late summer and early autumn. Acorns are especially notable for their shaggy caps that dominate the fruit.

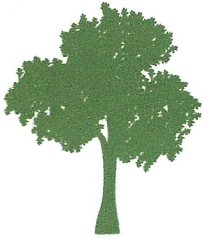
**BARK** Bark matures from a smooth, light grey to a deeply-ridged dark grey. The interior bark is bright yellow-orange and has a high tannin content. Native American tribes used black oak's inner bark for centuries to create a textile, tannery, and basketry dye. Depending on the mordant (substance which fixes color to textile or leather such as alum, tin, or iron) used, black oak bark can produce a wide range of yellows and oranges. Typically, the outermost layer of inner bark makes a bright yellow color and the innermost layer creates darker oranges and tans. In 1785 Westfield, MA native son Edward Bancroft secured an act of parliament for special privileges to import what he called 'quercitron' to England for commercial use. This became a popular substitute for weld, a yellow dye extracted from dyer's rocket plant, *Reseda luteola*. Quercitron was widely used for textile and tannery dyeing for the next two centuries in both England and the expanding United States until it was surpassed in popularity by synthetic dyes in the early twentieth century.



Tree of the Month is a collaboration between BEAT, the City of Pittsfield and Pittsfield Tree Watch. The Berkshire Environmental Action Team (BEAT) works to protect the environment for wildlife and in support of the natural systems that sustain us all. Find out more at [thebeatnews.org](http://thebeatnews.org).







# TREE OF THE MONTH

Black Oak • *Quercus velutina*

YELLOW BARK OAK



female flowers



male flowers

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New England Wild Flower Society

## FOR THE BIRDS AND THE BUTTERFLIES

Fox squirrels have been observed eating the black oak catkins. It is a larval host plant for the Banded Hairstreak, Edward's Hairstreak, Gray Hairstreak, White-M Hairstreak, Horace's Duskywing, and Juvenal's Duskywing butterflies. The acorns are eaten by woodpeckers, blue jays, small mammals, wild turkeys, white-tailed deer, and black bears.

Black oak is sometimes confused with scarlet oak (*Quercus coccinea*) but most commonly with red oak (*Quercus rubra*), with which it can hybridize.

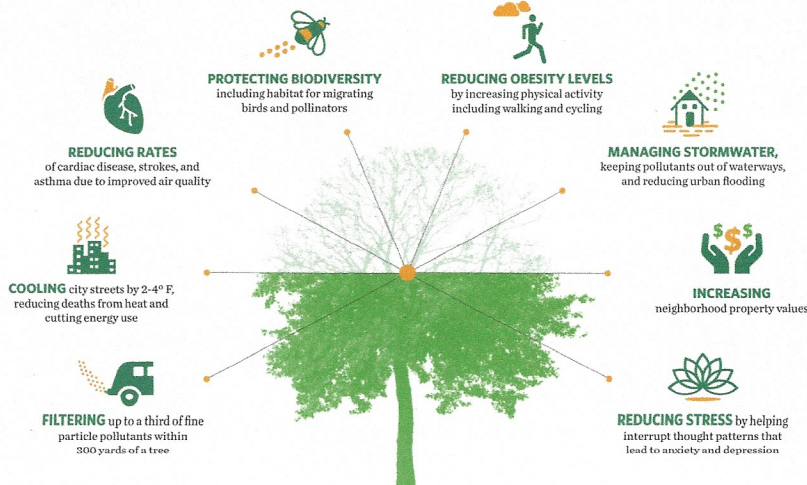
## POWERFUL MEDICINE

The inner bark, with its potent tannins, is also a powerful herbal medicine. It has been used in Native American herbalist traditions to treat dysentery, chills, fevers, and as an antiseptic among other things.

The species epithet, *velutina*, comes from the Latin *velutum* meaning velvety, in reference to the buds.

### Benefits of Urban Trees

Research has linked the presence of urban trees to...



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