



TREE OF THE MONTH

Bitternut Hickory • *Carya cordiformis*

ALSO KNOWN AS: SWAMP HICKORY

Bitternut hickories are large, deciduous trees with an alternate branching pattern and can reach over 100 feet tall. Forest-grown trees mature to be tall, sometimes slim, and straight-trunked with relatively narrow crowns. Open-grown trees can develop forked trunks with spreading crowns.



OPPOSITE BRANCHING PATTERN



ALTERNATE BRANCHING PATTERN



WHORLED BRANCHING PATTERN

Native to eastern and central North America, bitternut hickories prefer to grow in rich uplands and moist lowlands, and require rich, deep soil. For ornamental purposes, these trees can be difficult to transplant because of their long taproot.

Closely related to pecans, bitternut hickories are part of the subgenus *Apocarya*, the pecan-hickories. These trees are distinguished from 'true hickories' because they do not sprout when cut.

Bark on young bitternut hickories is green-grey with angled, irregular lines running up and down. Mature trees have light brown-grey bark with shallow, angled, vertical ridges. Mature bark can look a bit like an American elm but with ridges that stick much closer to the trunk.

The Latin genus epithet (name), *Carya* comes from the Greek for walnut (*karua*). Other hickories native to eastern and central North America are shagbark hickory (*Carya ovata*), pignut hickory (*Carya glabra*), and mockernut hickory (*Carya alba*).

Leaves are yellow-green and compound (many smaller leaflets along a stem) with 7-11 leaflets. Leaflets have serrated margins (edges) with lighter undersides. In autumn they turn bright yellow.

In winter, bitternut hickory buds are easily recognizable by their angled shape with a granular, sulfur-yellow appearance.

Characteristic of rich, lowland woods, bitternut hickory likes to associate with red oak, sugar maple, basswood, white ash, black ash, silver maple, and shagbark hickory.

Bitternut hickories are monoecious, meaning that they have male and female flowers on the same plant. Male flowers are born on pendulous catkins that are 3-4 inches long. Female flowers sprout from short stalks in spring.

Part of the walnut family, bitternut hickories produce fruits (nuts) in the autumn. Each fruit is encased in a hard, four-sectioned husk that splits open when ripe. While inedible for humans, hence the tree's common name, small mammals, such as squirrels, and birds, such as turkeys, use the nuts for food.



Tree of the Month is part of the collaboration between BEAT, the City of Pittsfield, Pittsfield Tree Watch, and the MA Department of Conservation & Recreation's Greening the Gateway Cities Program. Find out more at thebeatnews.org.



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