

NATIVES TO KNOW

Pignut Hickory, *Carya glabra*

By Joyce Tuharsky

This past October, I was walking along Reeds Lake Blvd. on the north end of Reeds Lake (East Grand Rapids) enjoying the glorious swirl of autumn colors, when I noticed a tall slender tree with bright golden leaves and unusual nuts that I did not recognize. A few of the nuts had fallen on the ground which I collected. What is this tree? Is it native to Michigan?



Turns out, the tree was a Pignut Hickory—and it is native to Michigan—although Kent County is at its northern most range. Pignut Hickory is a common, but not abundant, species in oak-hickory forests in the eastern US and Canada. It is more plentiful in Appalachian forests and the hill country of the Ohio Valley. It grows on hillsides and ridges (like the one I saw!) in somewhat dry soils, but may also be found in some moist soils. It adapts to many kinds of soils: loam, clay-loam, sandy loam, or rocky material.

Pignut Hickory is a majestic tree that can reach 100 feet in height, although more commonly grows to 60–80 feet. It is slow growing with a long tapering trunk, ascending spreading branches, and an open oval crown of 25–35 feet. The trunk bark is gray-brown, somewhat rough, with elongated ridges. Smaller younger branches are smoother, and the twigs are often crooked. The leaves are alternate, compound, about 8–12" long with 5–7 leaflets. The terminal leaflets are considerably larger than the lower pair. The leaflets are finely serrated and mostly smooth underneath (glabrous—hence its Latin name: "glabra"). The dark yellowish-green foliage turns golden-yellow in fall.

Pignut Hickories are monoecious, meaning it has both male and female florets on the same tree. The female florets are very small (1/8" long) and inconspicuous. The male florets are 2–4" long catkins arranged in bunches of three. The tree blooms in mid to late spring for about two weeks, and is pollinated by wind. During the summer, the female florets develop into smooth pear-shaped nuts with thin husks. At maturity, each husk turns a tan color and splits away in 4 segments, but only to the middle, clinging to the nut.



Pignut hickory trees tend to produce a bumper crop about once every three years. The nuts are mostly bitter, deemed by early settlers as "fit only for pigs and other animals." But this is fine as far as local wildlife is concerned—because these "pignuts" are jam packed with nutrients and high amounts of crude fat, especially useful for stocking up for winter hibernation. They are devoured by squirrels, chipmunks, black bear, fox, raccoon, mice, wood ducks, blue jays, woodpeckers, nuthatches, and turkeys.

A host of insects also feed on various parts of Pignut Hickory, including the caterpillars of several butterflies and moths, and the larvae of long-horned beetles, leaf beetles, aphids, treehoppers and leafhoppers—all these insects, in turn, attract numerous songbirds.

Like many hickories, the wood of the Pignut Hickory is famously heavy, tough, yet flexible and shock-resistant. These characteristics make it a wood of choice for tool handles, ladders, sporting goods (such as skis), furniture, and flooring. In the past, Hickory wood was prized for carriage wheels, yokes, and harnesses. Because this wood has low conductivity of heat, it was especially useful for wagon parts, like the hub, where heat friction is a concern. Pignut Hickory makes excellent firewood, often used in wood stoves and for smoking meats.

Despite all the insects that "infest" Pignut Hickory trees, few cause death or severe damage. In fact, Pignut Hickories are very long-lived, surviving 200–300 years. These trees develop a long taproot early as a seedling, so are difficult to transplant. Pignut Hickories strongly resist wind and ice damage, and are the most shade tolerant of our native hickories.

Pignuts photo by Joyce Tuharsky

Pignut Hickory leaves photo Chris Evans, University of Illinois, Bugwood.org

For more information and photos visit:

https://www.srs.fs.usda.gov/pubs/misc/ag_654/volume_2/carya/glabra.htm

http://illinoiswildflowers.info/trees/plants/pignut_hickory.htm