

Black Tupelo (Black Gum)

Nyssa sylvatica

(updated 1.12.2023)

Location

Riverbend Trail at Indian River (5 trees)

Physical Characteristics

Height (ft.)	70-75 ft.
Circumference (in.)	48, 65, 66, 94, and 97
Spread (ft.)	estimated 30-40
Points	largest tree = 182

Estimated Age

250 yrs. (1772) for largest tree

Addenda 12/21/2022 and 1/12/2023: Based on correspondence from Paul Staiger on 11/14/2022, NH data set on Black Gum, and further calculations, the estimated age for the largest tupelo is between approximately 200-275 years and most likely around 250 years. A maximum age of well over 300 years is also possible.

Commentary

Nominator:

On the eastern side of the Indian River where it meets the Merrimack River, there is a remarkable stand of 5 very large Black Tupelo (aka Black Gum, *Nyssa sylvatica*), one of our outstanding native trees. These Tupelos command the canopy along the eastern side of the Indian River. Their circumferences at DBH range from 46.5 inches to a whopping 97 inches. The Black Tupelo is the water-loving relative of the smaller, upland Sourwood (*Nyssa sylvatica* Marshall) and, as might be expected, these 5 Black Tupelos are right on the bank of the Indian River. The leaves are glossy green above and lighter below, and the bark is deeply furrowed and broken into chunks. Tupelo fruits come in clusters of 3-7 dark blue berries and are the favorite of many bird and mammal species. Honeybees favor the Black Tupelo flowers. One outstanding quality to observe comes in the early fall when the tree becomes a brilliant yellow, orange, red, or crimson while other trees are still green. The significance of these five trees are the large sizes of each in the grove, probable age of over 100 years, their trail and waterside location, and great wildlife value.

Committee:

This grove of five, large Black Tupelos catch the trail hiker's eye at ground level because of the unusual gray, furrowed bark. However, the canopy is so high that the features of the leaves, flowers, and fruits are hard to see when the leaves of surrounding trees are present. Peattie (*Natural History of Trees of Eastern and Central North America*) states that Black Tupelos rarely exceed 60 feet, which all of these nominated trees do. Dirr (*Manual of Woody Landscape Plants*) indicates 30-50 ft. is typical but indicates that Tupelos can occasionally grow to 100 ft. The national champion Black Tupelo reportedly is in New Jersey and is just 67 feet tall. Tupelos are well known as excellent wildlife habitat with many bird and mammal species eating the berries, including black bears who are known to climb tupelo trees to reach the berries. Honeybees are strongly attracted to flowers (hence, the famous tupelo honey).

It is also likely that at least two of these five trees are among the largest Tupelos in Massachusetts, which qualifies this Black Tupelo grove as significant and remarkable. However, no information is available on any champion tree of this species in Massachusetts. All five Black Tupelos probably exceed the age of most of our WN trees (100-125 years) due to the river-side location of these trees where agriculture would not have been possible historically.

The scientific name of the tree derives from its preference for watery sites. *Nyssa* was the mythological Greek water nymph, and *sylvatica* means "of the woods." The species also has two common names, Black

Gum and Black Tupelo. According to the University of Kentucky botanical website, "black gum refers to the dark leaves, while tupelo is derived from the Creek Indian name for the tree (ito opilwa), which means swamp tree."

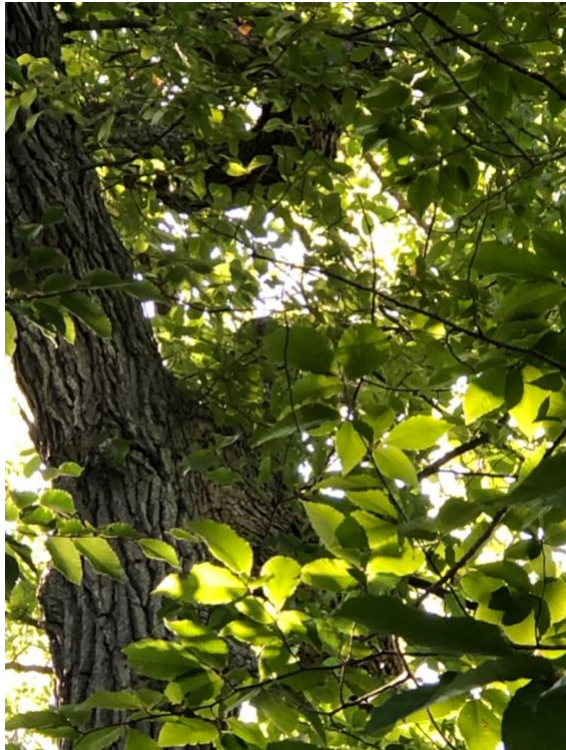
As noted, the leaves of the Black Tupelo are an outstanding botanical feature. The leaves are dark green and glossy on top, and the fall colors of the Black Tupelo are brilliant, ranging from yellow to crimson red. These colors stand out at the Riverbend location in autumn among the less striking and later-arriving colors of many oaks at the same location. The early onset and bright coloration of the Black Tupelo is particularly significant from a wildlife perspective. While most other tree species are still green, Tupelos with their early and bright coloration attract many migratory bird species who fatten up on the berries during migration. The 14g. fat content of the berries is among the highest energy source of all trees (Fergus, *Trees of New England*).

The bark of the Black Tupelo is another significant feature, especially for tree identification in the winter. The bark on a mature tree is deeply furrowed and broken into six-sided chunks or plates, which are referred to as "alligator bark." In addition, because the surface of the bark extends out so far from the furrows, the top layers often break off due to freeze-thaw in winter. This results in patches of smoother bark, typically just on one side of the tree (see photo).

While overall the shape is rounded, the larger branches of the Black Tupelo have a crooked aspect. This is because ice damage causes branches routinely to break off. Owls are known to nest in the resulting cavities in the trunk (Fergus, *Trees of New England*). Aged Black Tupelos begin decaying from the top so, oddly enough, trees often become shorter as they grow older. Because decay begins in the heartwood, there are many hollow black gum trees in the forest. The hollow trees are cut down and then cut into short sections and used for beehives. Black gum is one of the best honey-producing trees in the world (Univ. of Kentucky website).

Historically, while the twisted wood grain made this tree disfavored by settlers for many common uses, the grain gives the wood great strength when kept dry. It was routinely used for maul heads, plow shares, cable rollers, tool handles, pallets, ironing boards, rolling pins, and flooring.

Photo(s)





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