THE BIG TREES OF MICHIGAN

32. *Platanus occidentalis* L.
Sycamore; American Plane-Tree; Platane

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The largest known sycamore in Michigan is located south of Berrien Springs, Berrien Township, Berrien County.

*Description of the Species:* The sycamore or American plane-tree is our only native representative of the genus *Platanus*, which is in turn the sole genus of the Platanaceae. Worldwide, there are eight species, three of which are native to North America. *Platanus occidentalis* is the most wide ranging American species and the only species native in Michigan. The trees can be large, to over 150′ (50 m) tall, and over 250″ (625 cm) in girth. The trunk can be single or there may be several, with a smooth bark at first peeling off in thin plates, giving a mosaic appearance of white to buff to greenish new bark, changing to dark fissures with age (Fig. 1). The leaves are alternate and simple, with prominent green stipules that sometimes persist; the blades are broadly ovate, generally 3–5 lobed, with broad, shallow sinuses; the lobes have smaller teeth along the edge. The petioles are stout and hollow at the base and completely cover the 2–5 cm bud. The twigs are smooth, slender, pale green, and somewhat zigzag in nature.

The wood is not strong, but hard, tough, and difficult to work. Its resistance to splitting has made it useful for butchers’ blocks, button, and for boxes, furniture, and finish trim. The flowers are unisexual, with both staminate and pistillate flowers on the same tree, and the trees are wind pollinated. The pistillate flowers are in dense round heads, and form fruit balls at maturity in the autumn; these “balls” hang on the branches through the winter. The fruit is a beaked, club-shaped achene surrounded by many hairs almost as long as the achene itself.

*Location of Michigan’s Big Tree:* The State Champion sycamore is located 4.8 miles south of the center of Berrien Springs, and 2.8 miles west of Old Highway 31, along Lake Chapin Road at the overpass across U.S. 31 (also called the St. Joseph Valley Parkway), on state property in Berrien Township, section 25, T6S, R18W. The tree is out in the open on the north side of the overpass at the end of the service road.

*Description of Michigan’s Big Tree:* The tree has a very healthy single trunk with four large branches arising at ca. 12′ (4 m) above the ground and with very little dead wood. The circumference of the tree at breast height was measured on 26 November 2001 at 258″ (655 cm); in diameter, it is 81″ (202 cm). The crown spread was 96′ (29.3 m). The height was measured at 120′ (35 m). This is a newly found champion and replaces the previous one (225″ in diameter in 1983).
FIGURE 1. Documented distribution in Michigan and characteristics of the sycamore. Map from Voss (1985). The shaded county in the extreme SW corner of the state indicates the location of Michigan’s Big Tree. Illustrations 1 and 2 are by Lynn E. Steil; 3, 4, 5, 7, 8, and 9 are from Barnes & Wagner (1981); and 6 is from Woodland (2000). 1. Habit of mature tree during winter, showing hanging multiple fruits; 2. mottled bark showing plate-like scales; 3. twig with winter buds and leaf scars; 4. lateral bud; 5. lateral bud encased in enlarged base of petiole; 6. palmately veined and lobed leaf with mature, ball-like multiple fruit; 7. female flower with multiple carpels, each carpel with a curved style; 8. male flower with four stamens; 9. achene with hairs attached at the base.
found in Kalamazoo County. The severe storm of 25 October 2001 did little damage to the tree. A photograph of the tree is on the cover of a local history publication (Foster 1999).

LITERATURE CITED