Blue beech (*Carpinus caroliniana*)

**Family:** Birch *(Betulaceae)*

**DESCRIPTION:** Blue beech, AKA musclewood or American hornbeam, typically grows 12 to 15 feet tall, but can reach 35 feet tall. Its bluish-gray bark is often marked with dark, bandlike ridges that resemble the muscles of a flexed arm. The alternate, double-toothed oval leaves grow 2 to 4 inches long, with pronounced veins. The tree blooms in April and May, producing hoplike, dangling fruit that releases its seeds in the fall.

**USES:** Shade-tolerant blue beech is a common understory species in hardwood forests. It’s planted as an ornamental tree in parks and backyards. The catkins feed and shelter a wide variety of creatures including birds, fox and gray squirrels. The incredibly strong wood is used to make golf clubs, tool handles and levers. Beavers frequently build their lodges with blue beech.

**Planting Recommendations**

An ideal shade tree for small gardens, blue beech grows well in full sun or full shade, preferring moist areas with slightly acidic and well-drained soils. Although tolerant of drier environments, it will thrive along streambanks. It can be grown as a single- or multi-stemmed tree or a large shrub. Common companion plants are ironwood and elderberry. Containerized plants from nurseries can be installed from early spring through fall; bare-root plants are planted in the spring.

**STATEWIDE WETLAND INDICATOR STATUS:** FAC

**ID:** The seeds of blue beech are dangling red and green catkins. On male trees, they grow 0.75 inch to 2 inches long, remaining on the branches throughout the winter and until the tree blooms. On female trees, catkins grow 0.33 inch to 1.25 inches long, and only appear in the spring to be pollinated. The resulting hoplike fruit gives the tree one of its common names.

**SIMILAR SPECIES:** Blue beech leaves can be easily confused with those of the similarly shaped ironwood (*Ostrya virginiana*). The muscle-like bark of blue beech and the tiny brown dots on the undersides of its leaves are distinguishing features.

**REFERENCES:**

- University of Minnesota Extension
- Minnesota Wildflowers
- Minnesota Department of Natural Resources

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Increasing Diversity in Environmental Careers (IDEC) summer 2021 intern

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Range Map Credit: NRCS Plants Database

Photo Credit: UMN Urban Forestry Outreach and Research Lab

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