

American Hornbeam, *Carpinus caroliniana*

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Summary

Foliage: About 3 inches long; alternate; deciduous

Height: About 25 feet

Spread: About 25 feet

Shape: Rounded to oval

Main Features

American hornbeam, also called blue beech, musclewood, water beech, and ironwood, is a small to medium tree. In its youth, and even sometimes at maturity, this species tends to be multi-trunked and densely branched. It also tends to develop major branches near ground level which can be a desirable or undesirable characteristic depending on how this species is intended to be used in the landscape. Unpruned trees have a more “natural” appearance (less symmetrical, more dense, less kempt). In contrast, pruned trees have a more symmetrical, less dense, and kempt appearance. In native haunts, American hornbeam is found near streams or other wet areas, thus it can tolerate moist soils; it is moderately drought tolerant. One of its common names, musclewood, is derived from the fact that the trunk is often fluted (rippled appearance) giving the appearance of sinewy musculature. The common names that relate to “beech,” water beech and blue beech, are due to the American hornbeam’s smooth gray bark being similar to the American beech (*Fagus grandifolia*). Fall foliage colors vary from tree to tree but are generally an attractive orange-red or orange-yellow. American hornbeam, like its European relative the European hornbeam (*C. betulus*), is very tolerant to pruning and can be managed as a deciduous hedge.

Plant Needs

Zone: 3 to 9

Light: Full sun to nearly full shade

Moisture: Average to moist

Soil type: Average

pH range: Acid

Functions

American hornbeam functions as a small to medium landscape tree; it can be used as a specimen plant (used alone as a focal point) or in mass. Trees with a multi-trunk structure (unpruned in youth) offer a “natural” look. Due to its shade tolerance, this species can be used under the canopy of large trees.

Care

American hornbeam often requires pruning to thin out the canopy when young unless a more natural look is desired. This species has very few pest problems.

Additional Information

American hornbeam often occurs as an understory tree in the eastern U.S.