

## Adopt an American Hornbeam Tree



*Photo of American hornbeam trees are being given away in this year's Leon County Adopt-a-Tree Program.*

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<http://leon.ifas.ufl.edu>

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This year the Leon County Adopt-a-Tree Program is giving away American hornbeam trees. The American hornbeam is also called musclewood, blue-beech, ironwood, water-beech, or lechillo (Spanish). Regardless of which common name it is called it's one and only scientific name is (*Carpinus caroliniana*). To pronounce the scientific name say kar-PYE-nus kair-oh-lin-ee-AY-nuh. How did it get so many common names? The word "hornbeam," originally given to the European Hornbeam (*Carpinus betulus* L.), is from the words "horn" (for toughness) and "beam" (for tree) and refers to the very hard tough wood. The name beech has been misapplied to this member of the birch family, because of the similar bark. Ironwood refers to its hard wood.

American hornbeam is native to the eastern U.S. and is found throughout most of North Florida . Interestingly it is found in central and southern Mexico , Guatemala , and western Honduras .

You will find American hornbeam growing naturally in shady, rich, moist sites in the understory of eastern mixed hardwood forests. Once established, it is tolerant of moderate droughts and does fine in well-drained soils. It can even tolerate occasional flooding. The American hornbeam's tolerance of a moist environment makes it more tolerant of urban soils. This is because the American hornbeam's roots can tolerate low oxygen conditions. Urban soils often are very compacted and thus have less oxygen available for roots to carry on respiration. You can simulate this by trying to breathe through a pillow as opposed to open air. This ability to tolerate low oxygen soils helps the blue beech survive better in compacted urban soils.

American hornbeam is an elegant little deciduous tree that can get as large as 50' tall with a spread of 40'.

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However, this small-to medium-sized tree rarely exceed 20-30' in height. The crown is wide-spreading, flat-topped or rounded, and can be symmetrical or irregular. Usually the trunk is crooked and branches out fairly low. The long slender zigzag branches make an attractive silhouette in winter. American hornbeam bark is tight, thin, smooth, bluish gray and often twisted. It often looks like ripply muscles of a flexed arm which is why it has yet another common name of musclewood.

While this versatile tree does well in shade, it also thrives in sun, and requires no attention from its caregiver. It's landscape uses include shade tree, lawn tree, park tree, naturalized area, deck or patio tree, specimen tree run-on sentence and while it needs little pruning it takes pruning well if you wish to have it grow in a particular shape. For a tree, American hornbeam responds surprisingly well to heavy pruning and can be shaped as a hedge for a screen or used as a formal element in the landscape. Its tolerance to pruning makes it popular as a Bonsai tree.

The fruit is a small nut (1/3" long) attached to the base of a 3-lobed leaf-like bract. Several bracts are arranged one above another on a hanging stalk 4-6" long. This unusual fruiting structure often stimulates interest. The whole affair looks a little like a dangling Japanese pagoda, first green, then becoming yellowish-brown as it matures.

The seeds, buds, or catkins are eaten by a number of songbirds, bobwhite, turkey, and fox and gray squirrels. Leaves, twigs, and larger stems are consumed by cottontails, beaver, and white-tailed deer.

The yellow, orange and scarlet coloration in the fall make this an attractive ornamental tree. Use the leaves in your mulch bed as they are high concentrations of potassium, nitrogen, calcium, and phosphorus.

American hornbeam has few insect and disease problems and is good to plant on smaller lots where it won't outgrow its space. The tree is very windfirm and resistant to breakage. It is an excellent substitute for the more commonly planted disease and damage prone Drake elm.

The extremely hard wood of this tree will, as one of its common names suggests, take a horn-like polish and was once used by early Americans to make bowls, tool handles and ox yokes. Today the wood of American hornbeam is not important in commerce because the tree is too small, but it's tough, close-grained, very hard, and heavy wood is used locally for tool handles, levers, wedges, mallets and firewood.

If you decide you want an American hornbeam the county will plant one tree per household, between your house and the road outside the city limits. To let the county know you want a tree, Leon County Right-of-Way Management Superintendent, Tom Jackson says to follow the instructions from one of the ads that will appear in the Tallahassee Democrat on December 5, 7, 9, 11, 12 and 14, 2003. If you let them know you want a tree, they will instruct you to put a wooden stake where you want the tree. If there is no stake, the county will pick a good spot. Remember, these trees need to be planted so they won't grow up into power lines and they should be watered regularly for the first year.

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