



Smart tree selections

for communities and landowners



American Hornbeam

Carpinus caroliniana

Height: 20' - 30'

Spread: 20' - 30'

Shape: Round, spreading

Site preference: Rich, moist soils

Zone: 3b - 9a

Wet/dry: Prefers moist soil, but will tolerate some intermittent drought.

pH: 4.0 - 7.4

Native range: Eastern United States

Other: Prefers shaded, moist soils.



Ornamental characteristics: "Muscled" bark, good orange-red fall color, clumps or single stem. Transplant in spring, somewhat slower to establish. Native to Michigan and eastern United States.

Pests: Prone to ice damage. Two-line chestnut borers can be a problem when plants are stressed.



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U.S. Geological Survey

Map indicates species' native range.



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A smart urban or community landscape has a diverse combination of trees. The devastation caused by exotic pests such as Dutch elm disease, chestnut blight and emerald ash borer has taught us the importance of species diversity in our landscapes. Exotic invasive pests can devastate existing trees because many of these species may not have evolved resistance mechanisms in their native environments. In the recent case of emerald ash borer, white ash and green ash were not resistant to the pest and some communities in Michigan lost up to 20 percent of their tree cover. To promote diverse use of trees by homeowners, landscapers and urban foresters, Michigan State University Extension offers a series of tip sheets for smart urban and community tree selection.

In these tip sheets, we suggest trees that should be considered in situations where an ash tree may have been planted in the past. We have limited the tip sheets to medium to large trees that fulfill similar design intent as ashes. We include information on general characteristics, hardiness, mature form, size and other noteworthy qualities. For species native to eastern North America, we provide a map of the species' native range. We tried to present a representative number of "tried and true" trees and some lesser-known or underused selections suitable for Michigan. Smart tree selection is guided by Right Plant/Right Place and Responsible Use: selecting trees based on a tree's functional use, aesthetics, adaptability and environmental contributions to the immediate site and surrounding areas. Our tip sheets focus on the species level, although we do mention cultivars of several species. The following trees are recommended and featured in a tip sheet:

- American hornbeam, *Carpinus caroliniana*
- American hophornbeam, *Ostrya virginiana*
- Amur corktree, *Phellodendron amurense*
- Amur maackia, *Maackia amurensis*
- Baldcypress, *Taxodium distichum*
- Basswood, *Tilia americana*
- Bur oak, *Quercus macrocarpa*
- Callery pear*, *Pyrus calleryana*
- Chinkapin oak, *Quercus muehlenbergii*
- Dawn redwood, *Metasequoia glyptostroboides*
- Elm hybrids, *Ulmus spp.*
- European hornbeam, *Carpinus betulus*
- Freeman maple, *Acer ×freemanii*
- Ginkgo, *Ginkgo biloba*
- Hackberry, *Celtis occidentalis*
- Hardy rubber tree, *Eucommia ulmoides*
- Hedge maple, *Acer campestre*
- Honeylocust, *Gleditsia triacanthos*
- Japanese pagodatree, *Sophora japonica*
- Katsura tree, *Cercidiphyllum japonicum*
- Kentucky coffeetree, *Gymnocladus dioicus*
- Little-leaf linden, *Tilia cordata*
- London planetree, *Platanus ×acerifolia*
- Miyabe maple, *Acer miyabei*
- Northern pin oak, *Quercus ellipsoidalis*
- Norway maple*, *Acer platanoides*
- Red maple, *Acer rubrum*
- Sawtooth oak*, *Quercus acutissima*
- Scarlet oak, *Quercus coccinea*
- Shantung maple, *Acer truncatum*
- Shingle oak, *Quercus imbricaria*
- Shumard oak, *Quercus shumardii*
- Silver linden, *Tilia tomentosa*
- Swamp white oak, *Quercus bicolor*
- Sweetgum, *Liquidambar styraciflua*
- Sycamore maple, *Acer pseudoplatanus*
- Trident maple, *Acer buergerianum*
- Tulip tree, *Liriodendron tulipifera*
- Tupelo, *Nyssa sylvatica*
- Turkish hazel, *Corylus colurna*
- Yellowwood, *Cladrastis kentukea*

*See on tip sheet regarding responsible use of this species.

Visit www.migarden.msu.edu for smart gardening advice for your lawn, plants and soil.

Or call the **MSU Extension toll-free hotline number: 888-678-3464.**