

# Native Trees For All Of Georgia

Native trees represent great ecological bounty and rich cultural history in Georgia. Native trees live from the mountains to the sea in many diverse habitats and under many environmental constraints. Native trees add value, comfort, and beauty to life in Georgia. Native trees are wonderfully adapted to a local area's climate, soils, pests and other plants. There is a native tree well-suited for every planting site or landscape position.

A "tree" is defined as a perennial, woody, single-stemmed plant capable of attaining a size greater than 15 feet in total height and greater than 4 inches in stem diameter. A "native" tree is generally defined as being found within the last three centuries growing wild and reproducing naturally, and not introduced to an area by human activities. A tree is considered "native in Georgia" if it was not originally brought to Georgia by people, it is found growing and reproducing naturally in the Georgia landscape, and its gene sets developed and succeeded under Georgia's environmental conditions before human dominance of the land.

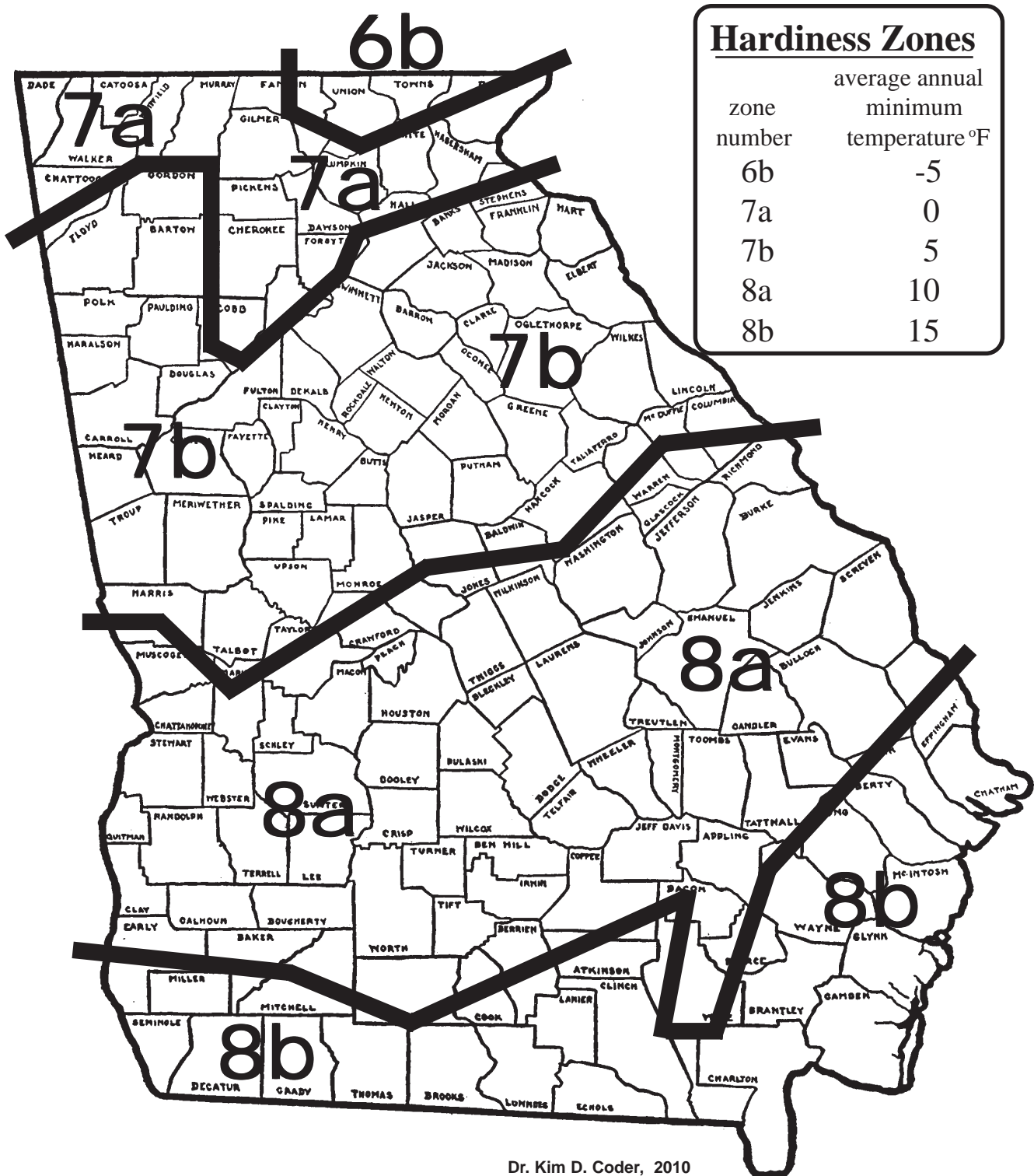
Some native trees can grow successfully in every Georgia county, in any part of the State. Key in proper selection of a native tree for planting is assuring it can handle various climatic and micro-site characteristics. Critical values for native trees is surviving and thriving statewide as shown under one of three environmental resources constraint rating systems. These three rating systems include the cold hardiness zone (Figure 1), heat tolerance zone (Figure 2), and the Coder tree planting zone (Figure 3).

All three rating systems examine tree growth success from a different point of view. Many trees can survive for many years beyond their native range, especially in high quality or protected areas. Young trees are much more tolerant of environmental constraints than are older trees. Beginning tree planting close to a tree's native range, as well as a species falling within the statewide boundaries of one, two, or all three of these environmental resources constraint rating systems will help provide many pliable, plantable, and sturdy trees capable of surviving and thriving under many conditions.

Table 1 lists, in alphabetical order by scientific name, the tree species listed as having the greatest potential of all native species in surviving and thriving anywhere within the State. The zone codes listed help identify which rating system led to species inclusion on this statewide list. Table 2 provides the same list as Table 1 but sorted by zone codes. Note how 27 tree species (zone code = chp) are listed as having potential for statewide planting success as shown in all three rating systems.

# Figure 1: Tree Cold Hardiness Zones of Georgia.

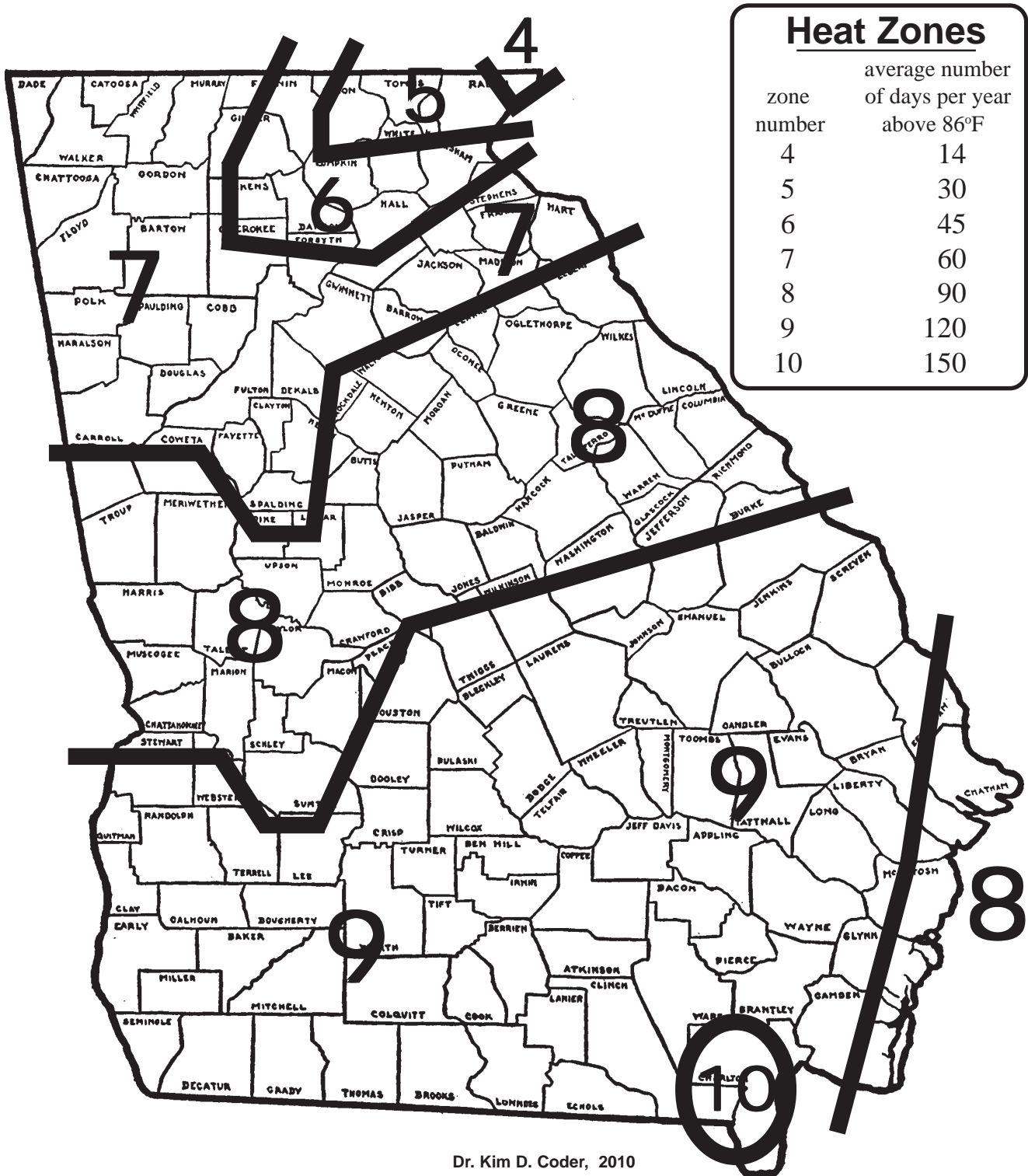
(derived from Cathey, H.M. 2001. *USDA Plant Hardiness Zone Map*. Misc. Pub. #1475, USDA-ARS-National Arboretum, Washington D.C.)



Dr. Kim D. Coder, 2010

# Figure 2: Tree Heat Tolerance Zones of Georgia.

(derived from the **Plant Heat-Zone Map of the United States** produced by the American Horticultural Society, Alexandria, VA. 1997)



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Table 1: List of native Georgia trees found potentially statewide based upon any of three rating systems: heat tolerance (h), cold hardiness (c), and/or Coder tree planting (p) zones.

zone codes	scientific name	common name
chp	<u>Acer rubrum</u>	red maple
chp	<u>Alnus serrulata</u>	hazel alder
chp	<u>Aralia spinosa</u>	devil's walkingstick
cp	<u>Betula nigra</u>	river birch
chp	<u>Carpinus caroliniana</u>	American hornbeam
chp	<u>Carya glabra</u>	pignut hickory
c	<u>Carya ovalis</u>	red hickory
chp	<u>Carya tomentosa</u>	mockernut hickory
chp	<u>Castanea pumila</u>	chinquapin
chp	<u>Cephalanthus occidentalis</u>	buttonbush
chp	<u>Chionanthus virginicus</u>	fringetree
chp	<u>Cornus florida</u>	flowering dogwood
chp	<u>Diospyros virginiana</u>	persimmon
cp	<u>Fraxinus pennsylvanica</u>	green ash
c	<u>Halesia carolina</u>	little silverbell
chp	<u>Hamamelis virginiana</u>	American witch-hazel
chp	<u>Ilex opaca</u>	American holly
chp	<u>Juniperus virginiana</u>	Eastern redcedar
p	<u>Liquidambar styraciflua</u>	sweetgum
chp	<u>Liriodendron tulipifera</u>	yellow-poplar
chp	<u>Morus rubra</u>	red mulberry

Table 1: List of native Georgia trees found potentially statewide based upon any of three rating systems: heat tolerance (h), cold hardiness (c), and/or Coder tree planting (p) zones. (continued)

zone codes	scientific name	common name
chp	<u>Nyssa sylvatica</u>	blackgum
c	<u>Pinus echinata</u>	shortleaf pine
chp	<u>Pinus taeda</u>	loblolly pine
cp	<u>Platanus occidentalis</u>	American sycamore
c	<u>Prunus angustifolia</u>	Chickasaw plum
chp	<u>Prunus serotina</u>	black cherry
cp	<u>Quercus alba</u>	white oak
chp	<u>Quercus falcata</u>	Southern red oak
cp	<u>Quercus marilandica</u>	blackjack oak
p	<u>Quercus michauxii</u>	swamp chestnut oak
chp	<u>Quercus nigra</u>	water oak
chp	<u>Quercus stellata</u>	post oak
chp	<u>Rhus copallinum</u>	winged sumac
c	<u>Salix nigra</u>	black willow
chp	<u>Sambucus canadensis</u>	American elder
chp	<u>Sassafras albidum</u>	sassafras
ch	<u>Symplocos tinctoria</u>	sweetleaf
cp	<u>Tilia heterophylla</u>	white basswood
c	<u>Toxicodendron vernix</u>	poison sumac
chp	<u>Ulmus americana</u>	American elm
chp	<u>Vaccinium arboreum</u>	farkleberry
c	<u>Viburnum rufidulum</u>	rusty blackhaw

Table 2: List of native Georgia trees potentially growing statewide based upon one of three individual rating systems: cold hardiness zones (c) -- 41 species, heat tolerance zones (h) -- 28 species, and/or Coder tree planting zones (p) -- 35 species.

zone codes	scientific name	common name	zone codes	scientific name	common name
c	<u>Carya ovalis</u>	red hickory	chp	<u>Carpinus caroliniana</u>	American hornbeam
c	<u>Halesia carolina</u>	little silverbell	chp	<u>Carya glabra</u>	pignut hickory
c	<u>Pinus echinata</u>	shortleaf pine	chp	<u>Carya tomentosa</u>	mockernut hickory
c	<u>Prunus angustifolia</u>	Chickasaw plum	chp	<u>Castanea pumila</u>	chinquapin
c	<u>Salix nigra</u>	black willow	chp	<u>Cephalanthus occidentalis</u>	buttonbush
c	<u>Toxicodendron vernix</u>	poison sumac	chp	<u>Chionanthus virginicus</u>	fringetree
c	<u>Viburnum rufidulum</u>	rusty blackhaw	chp	<u>Cornus florida</u>	flowering dogwood
ch	<u>Symplocos tinctoria</u>	sweetleaf	chp	<u>Diospyros virginiana</u>	persimmon
cp	<u>Betula nigra</u>	river birch	chp	<u>Hamamelis virginiana</u>	American witch-hazel
cp	<u>Fraxinus pennsylvanica</u>	green ash	chp	<u>Ilex opaca</u>	American holly
cp	<u>Platanus occidentalis</u>	American sycamore	chp	<u>Juniperus virginiana</u>	Eastern redcedar
cp	<u>Quercus alba</u>	white oak	chp	<u>Liriodendron tulipifera</u>	yellow-poplar
cp	<u>Quercus marilandica</u>	blackjack oak	chp	<u>Morus rubra</u>	red mulberry
cp	<u>Tilia heterophylla</u>	white basswood	chp	<u>Nyssa sylvatica</u>	blackgum
p	<u>Liquidambar styraciflua</u>	sweetgum	chp	<u>Pinus taeda</u>	loblolly pine
p	<u>Quercus michauxii</u>	swamp chestnut oak	chp	<u>Prunus serotina</u>	black cherry
chp	<u>Acer rubrum</u>	red maple	chp	<u>Quercus falcata</u>	Southern red oak
chp	<u>Alnus serrulata</u>	hazel alder	chp	<u>Quercus nigra</u>	water oak
chp	<u>Aralia spinosa</u>	devil's walkingstick	chp	<u>Quercus stellata</u>	post oak
			chp	<u>Rhus copallinum</u>	winged sumac
			chp	<u>Sambucus canadensis</u>	American elder
			chp	<u>Sassafras albidum</u>	sassafras
			chp	<u>Ulmus americana</u>	American elm
			chp	<u>Vaccinium arboreum</u>	farkleberry