

**A Short List of Trees to Consider in 2014/2015
NC Urban Forestry Conference, Raleigh, 8/14/14**

**native to our state or region*

****Acer barbatum* (southern sugar maple)** According to a 1993 US Forest Service fact sheet (Gilman and Watson), *Acer barbatum* should actually be designated *A. saccharum* var. *floridum*, making it a variety of the sugar maple rather than a separate species. Widespread in Piedmont and Coastal Plains NC. Specimens planted at the Craven County Agricultural Building in 1992 and 1993 have done quite well.

***Acer buergerianum* (trident maple)** - Small mature size (20'-30' high or larger with time and good site conditions) ideal for so many of our limited-space landscape and streetscape sites. Has shown excellent performance over time in the southeastern US. Cultivars of interest include 'Naruto' (curled leaves), 'Angyo Weeping', and Aeryn®.

***Acer truncatum* (purpleblow maple or Shantung maple 'Main Street'™)** The species should have good heat and drought tolerance over most of NC. 'Main Street'™ provides outstanding fall color. Small size – perhaps 20'-25' in height – makes this a useful tree where rooting space or overhead space is limited. Attracting a lot of interest in NC.

****Carpinus caroliniana* (American Hornbeam, blue Beech, ironwood, musclewood, water beech)** Small to medium size tree with attractive beech-like foliage and distinctive bark that is thin, light in color, and usually smooth. Trunks and branches develop a muscled or (as Dirr describes it) an "irregularly fluted appearance". One of the most common tree species encountered in our wetlands and the margins of wetlands. Good choice for shady and/or wet sites.

***Chionanthus retusus* (Chinese fringetree)** Tough, drought tolerant, handles full sun, fits smaller landscape spaces. Cultivars such as 'Ivory Tower' and 'Tokyo Towers' present a more narrow, upright growth habit than the species.

***Cornus 'NCCH1'* (Little Ruby™ Dogwood)** Developed at NCSU. Excellent heat and disease tolerance. Small stature, with reddish new growth and red winter foliage color (semi-evergreen). Pink/red brcts (single to double).

***Cornus wilsoniana* (Wilson's dogwood; ghost dogwood)** Upright tree to 40 feet with elongated, deep green leaves. Foliage may be evergreen in warmer parts of NC, or in the right microclimate. Exfoliating "ghost white" bark is an outstanding aesthetic feature. Should be heat and cold tolerant across NC.

****Ilex vomitoria* (Yaupon Holly)** Available in the nursery trade in various dwarf forms, as well as its more natural size and growth habit (large shrub). Evergreen, quite adaptable to a wide range of landscape conditions. Found in a variety of locations in nature, including wet areas and sandy maritime forest soils. Female plants produce exceptionally attractive fruit, especially on wild plants in locations such as Cedar Point (National Forest site in Carteret County). Weeping forms can reach 20 feet or more in height and can function as "trees" in limited space sites.

***Juniperus chinensis* 'Kaizuka' or 'Torulosa' (Hollywood Juniper)** An "old standard" that seems to have been around forever, but doesn't generally get a lot of respect. Unique appearance makes it somewhat of a niche plant; however, adaptability to heat, drought, salt, high pH and other landscape stresses should be given more consideration. Up to potentially 20-30 feet in height.

****Juniperus virginiana* (eastern redcedar)** Excellent drought tolerance, excellent tolerance of high pH soils, and interesting foliage and bark characteristics make this a tremendously important tree for landscapes and street plantings. Obviously a conflict in commercial apple-producing areas (cedar-apple rust). Numerous cultivars are available; 'Taylor' is a very tough and fastigate selection resembling Italian cypress.

****Magnolia grandiflora* (southern magnolia)** Unique and fragrant flowers; beautiful foliage; tolerant of a wide range of landscape soils; tolerant of wetness; and let's concede that even if the fruit can be a bit messy, the bright red seeds are highly ornamental up close. Surprisingly, southern magnolia has excellent tolerance of storm winds, as noted anecdotally and in scientific studies/surveys. Numerous cultivars are worth considering, including smaller & slower-growing forms such as 'Little Gem' and 'Kay Parris'.

****Ostrya virginiana* (hornbeam)** Foliage is similar to *Carpinus caroliniana* (cited above), but the bark is completely different. Look for a shaggy bark, with relatively long, narrow shreds, as compared with the smooth, muscled appearance of *Carpinus* bark. Up to 40-50 tall feet in the forest, generally growing underneath the canopies of taller broadleaf trees such as beeches and oaks. Both *Carpinus* and *Ostrya* are in the Betulaceae (birch) family.

***Parrotia persica* (Persian parrotia)** Beautiful large shrub/small tree in the Hamamelidaceae or witchhazel family, making it a relative of fothergilla, sweetgum and witchhazel. Aesthetic attributes include exceptional fall color. Tolerant of landscape stresses (drought, wind, heat, cold), but probably not a good match for the hotter eastern regions of NC.

***Pistacia chinensis* (Chinese pistache)** A great tree for the home landscape, along streets and in parks. Limited size (30-35 feet in height) makes it a perfect choice near houses or patios. Don't look for showy flowers or fruit – just a nice, dependable, reasonable-sized shade tree. Vivid fall color ranges from red to yellow to purple; one of the best fall-color selections for hotter climates in Eastern NC.

***Prunus 'NCPH1'* (Pink Cascade™ Cherry)** Developed at NCSU. Weeping habit with bright pink flowers. Hybrid of *Prunus* 'First Lady' and *Prunus* 'Snofozam' Snow Fountains. Needs staking or becomes a groundcover; can be draped over walls or trained for espalier.

Pyrus 'NCPX1' (Javelin® Pear) Extremely fastigiate pear hybrid (*P. calleryana* x *P. pyrifolia*). Pink flowers opening to white. Excellent choice for tight places. Resistant to fireblight. Another NC State introduction.

Quercus germana (Mexican royal oak) Evergreen oak becoming deciduous at around 5° F. One of the larger Mexican oaks, reaching 80 feet in the wild but probably smaller under cultivation. Threatened due to habitat loss. Showed heat and drought tolerance in Texas trials. New growth is pink, eventually darkening to deep green to blue-green.

***Quercus lyrata (overcup oak)** Less well known than Shumard or nutall oaks, but similar in what it can bring to a landscape. Up to 40-60 feet high and wide. Upswept lower branches allow for easier maintenance and mowing (but keep the mowers off those surface roots!). Appears to be tolerant of flooding. Excellent performance in a 13-year evaluation of shade trees at Auburn.

***Quercus michauxii (swamp chestnut oak)** Widespread in bottomlands of Eastern NC; in the Eastern U.S. can be found from New Jersey down to Florida, and west to Texas, Missouri and Indiana. There are reports of successful landscape/streetscape use in Goldsboro, Clinton, Warsaw and elsewhere. An underutilized opportunity among our large native species?

***Quercus shumardii (Shumard oak)** Up to 40-60 feet high and wide. Attractive foliage. Other important attributes include good tolerance to drought and high soil pH. Shumard oak specimens can be found in local woods and downtown parks, landscapes and street plantings where good performance has been noted. Highly recommended. Don't forget *Q. nutallii* (nutall oak), playing much the same role as Shumard oak.

***Quercus virginiana (live oak)** Adapted only to a relatively limited range along the coast, but still important to mention. Evergreen, compartmentalizes wounds extremely well, tolerant of a wide range of landscape conditions, one of the best for withstanding hurricane winds, interesting branch structure ... and the list of attributes goes on. Will develop prominent surface roots as the years go by, so consider mulched, natural areas all the way out to the ends of the branches and keep the mowing equipment away from the trunk and roots. Adjacent tall shade from trees such as tulip poplar and sweetgum can shade out and kill portions of live oak canopy.

***Rhus copallina (shining sumac)** Usually forms thickets or colonies, and is notable for bright red fall color and the winged structure along the central axis (rachis) of the compound leaves. Individual plants can reach over 20 feet in height, and can function as durable and highly attractive small trees – although a spreading, massing colony is more likely. Use carefully, where space is not an issue.

***Sabal palmetto (cabbage palm)** The South Carolina state tree. A taller growing trunked palm with foliage similar to NC's native blue palmetto (*Sabal minor*). Over the past 15-20 years, cabbage palm has been widely planted in areas north and east of its historical native and landscape range in coastal SC and southwards, with surprisingly good results. Even so, it would probably be wise to situate cabbage palm in somewhat protected landscape sites, in group plantings, or nearby other landscape plants so as to moderate winter winds and temperatures. Exceptional tolerance of hurricane winds, and doesn't require the surface trunk/rooting space of hardwoods such as oaks, sweetgums, etc.

Tilia cordata (littleleaf linden) A nice medium-sized shade tree with a neat, symmetrical and rounded head. Highly fragrant flowers in late spring. Good tolerance of air pollution and urban stresses generally; also pH adaptable. Considered to be an excellent city and street tree – is it getting the attention it deserves in NC? 'June Bride' is an exceptional cultivar to consider. Better adapted to Piedmont and Mountain regions of NC.

***Ulmus americana (American elm) 'Princeton'** has demonstrated a high degree of resistance to Dutch elm disease. In addition, this selection is fast growing and has good resistance to the elm leaf beetle. There will always be interest in maintaining at least some American elm presence in landscapes and streetscapes. It should be remembered that American elm is susceptible to a number of pests and pathogens in addition to DED and elm leaf beetle.

Tom Glasgow
Craven County Cooperative Extension
252 633-1477
tom_glasgow@ncsu.edu