75 Trees
August 6, 13 & 20, 2009
Craven County Agricultural Building

Large Species

*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. Not uncommon in the higher ground forest understory in Craven County. Specimens at the Ag. Building in 1992 and 1993 have done quite well.

*Acer rubrum* – Red Maple  Wetland species in our part of the state. Should be located very carefully in landscape conditions (avoid all-day full sun, drouthy areas, compacted soils in all-day sun, etc.). The parking lots of Eastern NC are full of declining and dying red maples. Best reserved for less disturbed, natural sites.

*Catalpa bignonioides* – Southern Catalpa  Big, messy, and frequently semi-defoliated by the “catalpa worm” caterpillar. Reseeds readily in the landscape so if you plant one, 8-10 years later you’ll have several. Overall, certainly not a top choice as a landscape tree. Does provide quick growth for any site that needs it, and produces some of the loveliest flowers of any tree species in the Eastern US.

*Chamaecyparis thyoides* – Atlantic Whitecedar  Considered to be tolerant of wet soils, but in our local native stands, the pocosin soil has a very acidic pH and is capable of drying out somewhat in between wet periods. Based on the loss of some Atlantic whitecedar at the Agricultural Building to phytophthora root rot a number of years ago, this species may not tolerate heavy clay & constantly wet landscape sites with high pH (the low or acidic pH may help in reducing disease pressure). Impressive local stands can be found at Catfish Lake, among other places. Increased interest in recent years in reintroducing this species to natural sites.

*Cunninghamia lanceolata* – Chinafir  Seems relatively trouble free and very well-adapted to our climate, but ungainly in appearance as it matures. Perhaps best suited for semi-shaded situations. Ours is a blue-foliage form.

*Fagus grandifolia* – American Beech  One of the most beautiful and distinctive of all our native hardwoods. Not easy to find in the nursery/garden center trade, but certainly available through nurseries that specialize in native trees. Should be protected during development of new properties; provide at least 1 foot per inch of trunk diameter measured 4 feet above the ground. For example, an American beech with a 24-inch diameter measured 4 feet above the ground should have a “do not disturb” circle with a radius of at least 24 feet. 1.5 feet per inch of trunk diameter would be even better.

*Liquidambar styraciflua* – Sweetgum  Don’t be put off too badly by the “gumballs”. This tree has a lot going for it: excellent fall color; tolerance of wet sites or dry sites; and better than average tolerance of storm winds, just for starters. ‘Slender Silhouette’ is a narrow, upright-growing cultivar which should allow easier incorporation into tight landscape sites. ‘Rotundiloba’ is the cultivar with the funny-looking leaves and no “gumballs”. Give it room to grow, with plenty of distance from the house in case it does break up in a storm, and sweetgum might make a great addition to your landscape.
**Liriodendron tulipifera** – Tulip Poplar  Fast growing, attractive, native tree – but don’t use it as a street tree or plant it 10 feet away from your house. Not particularly strong-wooded, and known to be a poor survivor of hurricane winds. Large, tulip-like flowers are among the prettiest of all tree flowers. Not very tolerant of construction damage, and large beat-up tulip poplars left standing next to a new home should be regarded as hazards, not assets.

**Magnolia grandiflora** – Southern Magnolia  Superb broadleaf evergreen for Craven County landscapes. Think positive, and don’t be influenced by the arguments about messy fruit and leaves; this tree is so superior in all other categories that we really need to overlook the minor nuisances. Unique and fragrant flowers; beautiful foliage; tolerance of a wide range of landscape soils; tolerance 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. Not a tree you tend to see laying sideways after a storm.

**Magnolia x ‘Maryland’**  Looks just like a southern magnolia, but is actually a hybrid between *M. grandifolia* and *M. virginiana*. Flowers are smaller than those of *M. grandifolia*, but ‘Maryland’ will tend to flower at an earlier age.

**Metasequoia glyptostroboides** – Dawn Redwood  One of only three deciduous conifer genera in our collection (along with *Taxodium* and *Pseudolarix*), thought to be extinct and known only by the fossil record until a tree was discovered in China in the 1940s. Similar in foliage and form to baldcypress, but without the “knees”. A beautiful tree which should be given more priority in Craven County landscapes.

**Pinus taeda** – Loblolly Pine  Most of the tall pines we see growing along roadsides and in the forests of eastern NC are loblolly pines. Unfortunately, this is not the best choice for leaving in place or planting into the home landscape, for two primary reasons. First, the species is very susceptible to fusiform rust, which can create cankers on the main trunk or on branches and therefore compromise structural integrity; second, it becomes a very large tree and is also subject to breaking or blowing over in storms. Culling to space individual loblollies at least 25 feet apart can improve the health and vigor of the remaining individuals. A great many home landscape pine stands in Craven County are far too overstocked, creating a greater likelihood of southern pine beetle attack and other problems.

**Pterocarya stenoptera** – Chinese Wingnut  Attractive and fast growing. Aggressive, prominent surface roots appear to be a significant limitation for this tree in landscape sites. Probably should be used in areas which are not routinely mowed or otherwise maintained. Pendulous spikes of winged fruit are a unique and interesting feature of this tree. Our trees have been in place since 1989 and have withstood a number of storms with no damage, but that may be largely due to their somewhat protected location.

**Quercus acutissima** – Sawtooth Oak  Fast growing, generally problem-free oak. Up to 40-60 feet in height under landscape conditions. Adaptable and heat tolerant for our area, but references state that chlorosis can be a problem in high pH soils.

**Quercus phellos** – Willow Oak  Popular and widely planted landscape and streetscape oak over the past 20-25 years. Unfortunately has not proven to be particularly adaptable to the tougher streetscape and parking lot sites, especially when limited root space and high pH soils are in the picture. Considered to have only medium-low wind resistance in a study of SE United States hurricane damage published in 2007. Certainly a worthwhile tree but should be reserved for sites with decent soils and plenty of room for root development.
**Quercus robur** ‘Crimson Spire’ – ‘Crimson Spire’ English Oak  This columnar cultivar of English oak came to us by way of our participation in the NC Urban Tree Evaluation Program in the 1990s. Our specimen has persisted and done OK for well over 10 years, but the species is pushing its heat tolerance in Craven County. English oak would not be a top recommendation here.

**Quercus virginiana** – Live Oak  Perhaps our best large tree for this part of the state, native or otherwise. 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. The best approach with live oak is to mulch 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.

**Taxodium distichum** – Baldcypress  Obviously very tolerant of wet conditions, but can also grow just fine in normal sites. Very sturdy against hurricane winds. High pH soils can induce chlorosis (yellowing) of foliage. Cypress knees may develop even in sites that aren’t wet or under water, and they may develop on younger trees, within only a few years after planting. Locate accordingly; if turf is going to be maintained near the trunk or canopy, you may end up with a real mower-tree conflict. All that said, baldcypress is a majestic, beautiful tree in the proper landscape site.

**Ulmus parvifolia** – Lacebark or Chinese Elm  Fast growing and attractive elm which has made a big splash in the nursery/landscape trade over the past 15 years or so. Tolerant of dry soils and high pH soils. A number of named cultivars on the market. Some cultivars exhibit very showy and ornamental exfoliating bark; also, cultivars may have broad, rounded canopies or grow in a more upright and vase-shaped manner. Prone to damage in hurricanes and other wind events. Tends to proliferate by seed once established in the landscape.

**Medium Species**

**Abies firma** – Momi Fir  In the 1990s, Momi fir was promoted as an exceptionally heat-tolerant fir for southeastern landscapes. The so-called “Dixie Fir” is probably *Abies firma*. While Momi fir certainly is capable of surviving hot southeastern climates such as Craven County’s, results have not been impressive overall, especially considering that this species can grow to 120-150 feet in Japan. Momi fir has failed to make much of a splash in southeastern landscapes thus far. Our specimen was planted in 1995. Growth has been slow to moderate but the color is good and if anything it’s picking up steam over the past 2-3 years.

**Acer leucoderme** – Chalkbark Maple  Smaller and slower growing than the southern sugar maple; probably distributed more heavily towards the Piedmont region of our state. Good drought tolerance, attractive bark in winter. Fall color can vary from yellow to orange to red. Should be more frequently planted!

**Acer miyabei** ‘Morton’ – ‘Morton’ Miyabe Maple  A real surprise over the past 10+ years. Foliage quality is excellent, and growth rate has been impressive year to year. The species is expected to grow to 30 to 40 feet in height, with a rounded outline. Our tree came to us from Schmidt Nursery in Oregon. Miyabe maple deserves a closer look in Eastern NC landscapes. So far, a lovely tree.

**Alnus japonica** – Japanese Alder  One of the alder species donated to us by the NCSU Arboretum (later on the J.C. Raulston Arboretum) in 1989. Notable for attractive foliage and
apparently very little disease or insect pressure. The unusual multi-stemmed growth habit of our one remaining specimen was brought about by a herbicide misapplication which killed the original terminal bud when the tree was just getting started. Multiple new leaders emerged and the tree carried on. Not a recommended method for developing unique branching structure.

**Betula nigra – River Birch**  Not as common or widespread as some other native tree species (such as sweetgum or red maple), but certainly part of Craven County's native tree mix. The above comments on locating red maple can be applied to river birch. Also a very poor choice for parking lot or similar situations. 'Summer Cascade' is a weeping cultivar that may be of interest to some gardeners.

**Calocedrus decurrens – Incensecedar** Beautiful columnar conifer at maturity, and there are reports of a number of specimens performing very well in hot areas of North Carolina. We have two specimens dating from 1995 which are growing very slowly and so far fail to impress. There is probably a need for more of these to be planted out and evaluated in Eastern N.C.

**Cupressus arizonica – Arizona Cypress** Superfast, but as the years go by these plants become increasingly prone to bagworm infestation or simply falling apart. Best used as a specimen plant which you don't mind taking down after 10-12 years - or maybe a longer period of time with a little luck (our 'Carolina Sapphire has been in place since 1994). 'Silver Smoke' may be a more durable choice than 'Carolina Sapphire'. Excellent blue color on both, and very fragrant foliage.

**Dalbergia hupehana - Rosewood** One of the first trees we planted after moving into the Craven County Agricultural Building back in 1988. Our specimen is noteworthy for its exfoliating bark and attractive compound leaves, resembling black locust (*Robinia pseudoacacia*). It has also demonstrated a considerable degree of toughness by adapting to a site with brick-hard soil. It would certainly be interesting to see more of these planted around Craven County. A fairly rare species in North American landscapes.

**Fraxinus mandshurica – Manchurian Ash** A curiosity left over from our participation in the NC Urban Tree Evaluation Program. Could make for an attractive landscape tree in cooler climates; in our collection, it's managed to hang on for quite a number of years but hasn't really distinguished itself. Ashes in general are under significant threat from the Emerald Ash Borer, which has destroyed tens of millions of ash trees in Michigan and surrounding states (a new infestation was discovered in Missouri in 2008).

**Gymnocladus dioicus – Kentucky Coffeetree** Large, double-compound leaves and a very open texture help to make Kentucky coffeetree one of the most striking and attractive shade trees in the nursery trade. Also noted for drought tolerance, wind tolerance and good resistance to pest problems. Unfortunately, it is probably lacks the heat tolerance of many of our better adapted Craven County choices. If you plant this one, site carefully: Provide excellent soil conditions, partial shade or afternoon shade, and availability of irrigation in prolonged dry spells.

**Ilex x attenuata – ‘Fosteri’ and ‘Savannah’** Group of hybrids between *Ilex cassine* and *Ilex opaca*. The Foster hollies are designated as Foster #1 through #5, with #2 and #3 most often sold as Foster Holly. The various *Ilex x attenuata* selections have performed very well in southeastern landscapes, with spittlebug damage to the foliage being about the only problem usually observed. These hollies generally develop tree-form habits and grow anywhere from 20-40 feet or more in height. Foster hollies have shinier green and narrower leaves as compared with 'Savannah'. Which is "best" is a matter of preference.
**Ilex latifolia – Lusterleaf Holly** Infrequently used, but a great holly for southeastern landscapes nonetheless. Large leaves with good color throughout the year (have been described as resembling magnolia). Mature landscape size will be around 20-25 feet. Male pollinator needed for good fruit set. We really should be planting more of these.

**Ilex opaca – American Holly** The holly foliage and berries we associate with the Christmas season. In our local woods, generally found growing underneath American beech along the higher ridges. Reasonably well adapted to landscape conditions, but probably should not be located in the tougher sites (such as compacted soil + all-day full sun).

**Juniperus virginiana – Eastern Redcedar** A native conifer which is (in one person’s opinion anyway) without peer in Eastern NC landscapes. Spruces and firs are for the foothills westward into the mountains. And we can also forget about most of the showy, ornamental pine species that residents of cooler climates can enjoy. In our part of the state, tree-form conifer choices narrow down in a hurry to the redcedar and a handful of other options. But the redcedar should be a treasured tree just about anywhere (at least, anywhere outside commercial apple producing regions). Excellent drought tolerance, excellent tolerance of high pH soils, and interesting foliage and bark characteristics make this a tremendously important tree for landscapes and along streets in Craven County. Avoid wet sites. Also be aware that all plant species are susceptible to various disease and insect problems. Annosus root and butt rot is one of the most common problems seen on redcedar, and would be a likely explanation for a single cedar or a group of closely planted cedars dying rapidly.

**Keteleeria davidiana – Keteleeria** Rarely seen in landscapes, but an interesting tree for collectors and evaluators. Climatic adaptability of the various keteleeria is still being sorted out, but thus far *K. davidiana* seems to have the most reliable cold hardiness. From Taiwan and China. Conifer collector’s item thus far.

**Lagerstroemia fauriei ‘Fantasy’ – ‘Fantasy’ Crapemyrtle** Tallest-growing crapemyrtle cultivar available, easily reaching 40-45 feet in height and doing so relatively quickly. White flowers are not particularly showy as compared with the more familiar *L. indica* selections or hybrids such as ‘Natchez’. Regardless, ‘Fantasy’ is an exceptional selection which should be planted more frequently, for its size, upright growth habit, and striking light cinnamon-colored exfoliating bark.

**Lithocarpus henryi – Henry Tanbark Oak** Tanbarks are related to oaks (*Quercus*). The evergreen Henry tanbark oak features smooth light-colored bark and elongated, light green foliage which is somewhat reminiscent of sweetbay magnolia. The bizarre flowers attract a range of interesting pollinators, including flies (maybe not the best specimen plant for the front entryway garden). Tanbark oaks have not caught on in the landscape/nursery trade but are in fact attractive trees which should be considered.

**Maackia amurensis – Amur Maackia** Better adapted to cooler regions, but ours has done quite well and is developing into a very attractive landscape tree. Attributes include limited size (maybe 20-30 feet tall under landscape conditions), good disease and insect resistance, attractive dark green foliage and exfoliating bark on mature trees. Worth trying in the landscape, but keep it out of all-day sun or full afternoon sun.

**Maclura pomifera – Osage-orange** Known for extremely hard and durable wood (useful for fenceposts in earlier times); large 4”-6” diameter and very hard fruit; and tremendous thorniness along stems and branches. Horticulturists are interested in selecting and promoting male fruitless selections, also thornless selections. Very tough and widespread species, and seems to be something that deserves a closer look, in particular for tough low-maintenance sites.
**Magnolia virginiana – Sweetbay Magnolia** Will be far more particular about location than the southern magnolia. Tends to be a wetlands/understory tree in the Craven County area. Light green & evergreen foliage with easily recognized silvery leaf undersides. Attractive smooth bark. Flowers are not particularly noticeable or showy. But in the right location this is a highly attractive landscape tree. Frequently misused by placement in parking lots or adjacent to buildings with a full southern/western exposure. Needs to be carefully located!

**Nyssa ogeche – Ogeeche Tupelo** Noted for superior performance in tree trials conducted at Auburn University. Native to the Eastern US, and adaptable to normal, dry or wet situations. Probably in the 30-40 foot range. Nice soft yellow fall color. Leafspot is present, as with black gum, but not really noticeable unless you’re very close up. Should be given more consideration.

**Nyssa sylvatica – Black Gum** Picturesque branching habit, interesting dark blue fruit and brilliant red fall color under the right weather conditions. Mid-sized tree that is not commonly found in the trade but which shows up frequently in the mix of trees left behind after development of a new property. Leafspot is common on this species but doesn't seem to be a major problem. Worth preserving if you have one.

**Persea palustris – Swamp Bay** Widely distributed broadleaf evergreen tree, found in a wide range of sites from the margins of wetlands to drier upland. Leaves are easily recognized by the insect galls on the leaf margins, formed by a type of psyllid. Unfortunately, Persea species in the SE United States are under serious threat from an introduced Laurel Wilt Disease.

**Picea pungens – Colorado Spruce** This species is definitely not recommended for the Coastal Plain of NC, and is not even a very good choice for the somewhat cooler Piedmont. However, we have one left over from a batch given to us by the late J.C. Raulston back in 1995.

**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. Numerous successful plantings in the New Bern area. Don’t look for showy flowers or fruit – just a nice, dependable, reasonable-sized shade tree. Outstanding fall color (ranging from red to yellow to purple) if the weather is right.

**Pseudolarix kaempferi – Golden Larch** Although our climate is hotter than ideal for golden larch, we do have one specimen of this beautiful deciduous conifer and it has done quite well since it was planted here in 1996. Attractive and unique medium-green foliage in the summer, followed by a soft yellow or golden fall color.

**Pyrus calleryana ‘Bradford’ – Bradford Pear** Much maligned in recent years for its tendency to break up in storms, or fall apart on its own after 10-12 years in the landscape. The problem through the years has been extreme overplanting; this cultivar is still an excellent choice as a sort of “short run” tree in new landscapes, or as a component in more extensive maturing landscapes. The message should be to avoid using in large numbers (i.e. street trees, entrances to new subdivisions, mall parking lots etc.) rather than “don’t plant ever”. Aside from its structural problems, this is actually a very tough and adaptable tree. The related cultivar ‘Chanticleer’ (apparently the same thing as ‘Select’, Cleveland Select’ and ‘Stone Hill’) is considered to be the better of the P. calleryana cultivars for structural and other reasons.

**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 nutallii – Nutall Oak** Great alternative, along with Shumard oak and overcup oak, to the old standard pin oak (*Quercus palustris*). Native to central/south-central states. Seems to be a tough plant. With adequate rooting space, has good potential for parking lots. Impressive results thus far in the New Bern area.

**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.

**Sabal palmetto – Cabbage Palmetto** The South Carolina state tree. Has historically been considered best adapted to coastal areas from Wilmington on south, but has done surprisingly well in a wide variety of landscape situations in the New Bern area following a planting spree that began in the late 1990s (a few individuals had already been in place here and there for decades). Perhaps a repeat of the Christmas 1989 -5° F event would shake things up a bit for the large number of cabbage palmettos growing in unprotected sites … Regardless, this palm certainly has a place in Craven County landscapes, especially in more protected sites with vegetation or buildings nearby, or the moderating influence of a loblolly pine canopy overhead.

**Sapindus drummondii – Western Soapberry** Excellent heat tolerance, few insect or disease pests, good drought tolerance, and attractive foliage with the potential for excellent yellow-gold fall color, depending on the weather. Medium-size tree, probably up to 25-30 feet tall and wide in the landscape. Native to Southern Missouri, Kansas, New Mexico, and Arizona over to Louisiana. The fruit has been used as a soap substitute.

**Thuja x ‘Green Giant’ – ‘Green Giant’ Arborvitae** Fast growing and very attractive. Green color fades a bit in winter. Generally problem-free, but bagworms have been observed (not on ours) and could become a problem over time. Recommended, but should not be planted to extremes as with 'Leyland', Bradford pear, red-tips, etc. Could make an interesting specimen or accent plant.

**Zelkova serrata – Japanese Zelkova** Has become somewhat well known in SE landscapes in recent years, both as a landscape and a street tree. Probably not the best choice in high traffic areas as it is known to have relatively poor tolerance to ozone pollution. Has been used to good effect on Middle Street in downtown New Bern. Specimens planted in exposed parking lot sites around town have done less well. Vase-shaped habit, with narrow crotch angles that raise concerns about wind-sturdiness; still, seems to hold together fairly well. Probably up to 50-60 feet tall in landscapes.

**Small Species**

**Acer buergerianum – Trident Maple** Small mature size (20’-30’ high or larger with time and good site conditions) just what the doctor ordered for so many of our limited-space landscape and streetscape sites. Has shown good performance over time in New Bern and elsewhere. Try it!

**Acer oliverianum – Oliver Maple** A small maple, approximately 15-25 feet tall, with growth habit similar to Japanese maple. Excellent heat tolerance, and foliage should hold up better than Japanese maple's during the summer months.
**Aesculus pavia – Red Buckeye**  Vivid and beautiful red flowers in the spring, followed later in the year by the unique buckeye fruit. This is not a specimen tree for a high visibility portion of the landscape, as it has a tendency towards partial defoliation in hot weather. A bit ragged by August. By comparison, Chinese fringetree would be a good example of a species which looks great all season long (the leaves look about as good in late September as in May).

**Asimina triloba – Pawpaw**  Very attractive foliage; the flowers are a matter of opinion. Useful in natural areas of the landscape. Generally not bothered by serious insect or disease problems. Pawpaw fruit has been of significant interest among horticulturists and landowners looking for alternative crops, and named cultivars are available.

**Cercidiphyllum japonicum – Katsuratree**  Beautiful tree in a more favorable (cooler) climate but essentially a hanger-on in Eastern NC. Notable for redbud-like foliage and exceptional soft-yellow fall color. Would be a top choice in, for example, the foothills of Western NC.

**Cercis canadensis – Eastern Redbud**  While the native range of the eastern redbud does extend more or less into our region, status as a “native tree” frequently does not translate into superior landscape performance. *Cercis canadensis* is not a very stress-tolerant tree, and has not shown vigorous performance under tough landscape conditions in our region. Perhaps an option in less-disturbed organic soils with a good amount of shade during the afternoon hours or partial shade all day. The redbud leaffolder is a small caterpillar which folds and webs portions of leaves together, creating a real aesthetic mess. If anything, this problem is becoming more widespread over the past 10 years or so, and is another reason to limit the use of eastern redbud in Craven County landscapes.

**Chionanthus retusus – Chinese Fringetree**  Excellent flowers, foliage, form. Top Ten performer in NCSU’s NC Urban Tree Evaluation Program. ‘Ivory Tower’ will fit into narrower spaces than the species; this cultivar is expected to grow to around 15’ high and 3’ wide. Difficult to name a better all-around small flowering tree for Craven County.

**Chionanthus virginicus – White Fringetree**  Our native relative of Chinese fringetree. Quite common along two-lane highways in rural areas of Eastern NC, and in home landscapes in town as well. Probably not quite as stress or drought tolerant as Chinese fringetree. Flower petals are longer and not quite the “pure white” of Chinese fringetree, but for home gardeners it’s just a matter of personal preference as to which is the better fringetree.

**Cornus florida – Flowering Dogwood**  Beautiful native tree with four-season landscape impact. Possibly our most misused and abused native tree. Best reserved for the more natural, least-disturbed areas of the landscape: margins of wooded areas, well-drained organic soil, shade during part of the day. Avoid all-day full sun, wet sites, brick-hard compacted landscape soils etc.

**Euscaphis japonicus – Sweetheart Tree**  Dark green foliage; fascinating red fruit in mid to late summer, effective for weeks; reddish-purple bark striated with lighter coloring; purplish fall foliage. A broad-spreading, deciduous small tree with apparent toughness and adaptability to our region. Really ought to be trialed more often in home landscapes. Perhaps an alternative to planting one more crapemyrtle in the yard?

**Ilex cassine – Dahoon Holly**  Small holly tree with unusual foliage (for a holly) and nice fruit set. One of the parents, along with American holly, of ‘Fosteri’ and ‘Savannah’ hollies.
Lagerstroemia fauriei ‘Townhouse’ – ‘Townhouse’ Crapemyrtle  Darkest brick-red bark of any currently available crapemyrtle cultivars. Broad, spreading canopy with exceptional bark characteristics. Neither ‘Townhouse’ nor its sibling cultivar ‘Fantasy’ are showy in flower (both have white flowers), but their other aesthetic characteristics as well as their pest resistance and overall toughness make them top choices for Craven County landscapes.

Lagerstroemia x ‘Natchez’ – ‘Natchez Crapemyrtle’ Considered one of the very best for southeastern landscapes, both for aesthetics and pest resistance. White flowers, attractive dark cinnamon-colored bark, developing a broad spreading canopy. Not as vertical-growing as ‘Fantasy’, but it may still attain a height of 25 feet or more depending on location (may tend to be more broad spreading in full sun). From a group of hybrids between Lagerstroemia indica and Lagerstroemia fauriei.

Magnolia x loebneri ‘Leonard Messel’ – ‘Leonard Messel’ Loebner Magnolia Flowering may occur anywhere from mid to late February into mid March. A mid-March cold snap in 1998 killed our two plants to the ground, but they regrew from the base and quickly formed multi-stemmed shrubs. But in general ‘Leonard Messel’ has been one of our two most reliable early spring flowering magnolias (the other being ‘Spring Snow’). Flowers are white on the inside, fuschia-pink on the outside. Highly recommended.

Magnolia x loebneri ‘Spring Snow’ – ‘Spring Snow’ Magnolia One of the best two deciduous magnolias in our small collection. Snow white flowers produced in abundance by late February or early March; our single specimen has managed to sneak through the fluctuating temperatures with a good to outstanding flower display most years. Planted in 1996.

Malus ‘Cardinal’ – ‘Cardinal’ Crabapple Crabapples should be used carefully in our part of the state, as disease problems can be a serious limitation. A good one to consider is the cultivar ‘Cardinal’, which has been an outstanding problem-free flowering tree since it was planted into our collection in 1998. New foliage is a maroon-dark red, with vivid pink flowers in early spring.

Morus australis ‘Unryu’ – ‘Unryu’ Chinese Mulberry Perhaps it’s only a novelty plant, but it’s a pretty good alternative to Harry Lauder’s Walkingstick (a Corylus avellana cultivar which is really out of its heat-tolerance range in Eastern NC). The large, glossy, light-green leaves are almost as interesting as the contorted, twisted stems. Our specimen has been on site since 1989. It’s held up well, with occasional winter kill or other damage, and occasional problems with white peach scale. Really sprawls and spreads, so provide plenty of room.

Prunus mume – Japanese Flowering Apricot A small tree capable of providing some shade in the landscape. Nice form, and beautiful flowers ranging from white to pink to rose in February. Flowers are very dependable year to year regardless of weather conditions, and at the Agricultural Building have even appeared on a tree coated with ice. Worth the landscape space, even if it’s potentially not as long lived as some other species. Generally not a lot of pest issues.

Prunus subhirtella ‘Autumnalis’ – ‘Autumnalis’ Higan Cherry Inconspicuous most of the year, but has the nice habit of producing pink flowers both in the spring and in the fall. Two specimens on the grounds have performed nicely for 13 & 15 years as of 2009.

Sophora affinis – Eve’s Necklace Interesting small tree (15-30 feet?) which deserves more trial in southern landscapes. Excellent deep green, fine-textured foliage, no signs of insect
or disease problems so far on ours (planted in 1994). Native to south-central Oklahoma into central Texas. Considered to be an adaptable tree with tolerance of drought and high soil pH.

**Styrax japonicus – Japanese Snowbell** Japanese snowbell is notable for its dark glossy green leaves, interesting winter bark and lovely white flowers in late spring. The cultivar ‘Emerald Pagoda’ (same as ‘Sohuksan’) provides greater heat tolerance, larger leaves and larger flowers than the species. ‘Emerald Pagoda’ certainly deserves closer consideration in the Craven County area, especially if given appropriate site conditions (partial shade, organic soils with decent drainage, avoid high-pH soils).

**Syringa reticulata ‘Ivory Silk’ – ‘Ivory Silk’ Japanese Tree Lilac** Horticulture Professor Michael Dirr has written of lilacs, “Tremendous interest in heat tolerant lilacs. To my knowledge there is no such thing for Zone 8 and 9… I am not sure every plant has to grow everywhere!” This continues to be good advice, on all the evidence thus far. Once in a while you'll find an individual exception, and ‘Ivory Silk’ in the right location probably has as good a chance as any lilac selection in Craven County. Our plant has been in place since 1996, and has in fact done quite well. It is a taller-growing, narrow, upright tree-form lilac, so it really doesn’t look like a typical lilac shrub. It also lacks the pastel, fragrant flowers. As a curiosity, not a bad investment of space, at least in our collection. Interestingly, Dirr rates *Syringa reticulata* as heat tolerant down to only 7; we’re in Zone 8 and our landscape plants probably need Zone 9 heat tolerance to really thrive long term.

Tom Glasgow, County Extension Director, Craven County
633-1477
tom.glasgow@ncsu.edu