

Key to groups/species found in the Wilmington area and discussed during the January 22, 2011, workshop

(J. Taggart; derived partly from Radford et al. [1968] and Weakley [2011])

FERNS AND FERN ALLIES (non-flowering herb with vascular tissues)

Plant similar to a coarse moss (small leaves) in appearance, stems elongate and branching

Plant slender and low, rarely more than 5cm tall (**spikemosses**)

Plant pale green; found in moist habitats.....meadow spikemoss



Plant leathery, gray-green; found in dry, sandy habitats.....sand spikemoss



Plant relatively robust, usually 2-50cm tall (**club mosses**)

Horizontal shoots flattened dorsiventrally.....slender clubmoss



Horizontal shoots only slightly flattened

Upright branches 0.5 cm or less thick.....southern bog clubmoss



Upright branches 1cm or more thick.....foxtail clubmoss



Plant with large leaves (fronds) of various subdivisions (ferns)

Fronds lobed with no secondary or more divisions.....netted chainfern



Fronds pinnate

Fern typically found in dry habitats (sand ridge, flatwoods)

Fronds 2 to 3-pinnate.....bracken fern



Fern found in moist to wet habitats; fronds not 2 to 3-pinnate

Fronds pinnate, subdivided into separate pinnulesroyal fern



Fronds pinnate and lobed or cut (not subdivided into separate pinnules)

Midrib of frond dark in color.....Virginia chainfern



Midrib light (greenish/fleshy) in color with tufts of cinnamon-colored hairs.....cinnamon fern



GYMNOSPERMS (tree with needles, linear leaves, or scale-like leaves plus seeds borne in cones)

Tree with needles mostly 5cm or longer (**pin**es)

Cone about as broad as long, top-shaped, often closed.....pond pine



Cone distinctly longer than broad when open or closed

Needles in bundles of three, 7-16 cm long.....loblolly pine



Needles in bundles of two to four, 20-50 cm long.....longleaf pine



Tree with linear or scale-like leaves less than 5cm long

Tree with evergreen scale-like needles and small (<2.5cm in diameter)

female cones (**cedars**)

berry-like, blueish cones; dry habitat.....red cedar



brown cones when mature; wet habitat.....Atlantic white cedar



Tree with deciduous linear leaves and cones generally >2.5cm (cypresses)
leaves appressed along the stem.....pond cypress



leaves spreading along the stem.....bald cypress



ANGIOSPERMS (tree, shrub, vine, or herb that produces flowers and fruit)
Plant with net-veined leaves and flower parts generally in fours or fives (dicots)

Tree

opposite leaves

fruit a winged samara

compound leaves.....white ash



simple leaves

leaves finely to coarsely toothed.....red maple



leaves not toothed or with rounded teeth.....sugar maple



fruit a red drupe.....flowering dogwood



alternate leaves

simple leaves

flowers with large (>2cm) white petals

leaf underside glaucous.....sweet bay



leaf margin serrate.....loblolly bay



flowers reduced, either small or no visible petals

fruit an acorn (oaks)

leaf margin lobed.....white oak



leaf margin toothed.....turkey oak



leaf margin entire

evergreen, glossy leaf.....live oak



Deciduous to semi-evergreen leaf; not glossy.....laurel oak



fruit a spiky capsule; palmately-lobed leaves with sharp points.....sweetgum



fruit a black drupe, entire leaves small to large tree growing in an upland habitat.....black gum



shrub to large tree typically growing in a wetland habitat crushed leaf not aromatic; deciduous.....swamp black gum



crushed leaf aromatic; evergreen.....red bay



fruit a red drupe; evergreen leaves.....American holly



fruit a samara

leaves often triangular with rounded to coarse teeth;

trunk shaggy.....river birch



leaves with fine teeth; trunk smooth.....coastal American hornbeam (musclewood)



compound leaves

more than 10 leaflets

mature fruit spherical, often aromatic.....black walnut



mature fruit breaking into four valves.....pecan



less than 10 leaflets, densely pubescent.....mockernut hickory



Shrub

Shrub with white, elongated bilaterally symmetrical flowers.....dwarf azalea



Shrub with radially symmetrical flowers

Leaves (usually elliptic) with distinct, pointed teeth.....sweet gallberry



Leaves either entire, with rounded teeth, or crenate margins

Leaf underside with golden, dot-like glands

Leaves usually oblanceolate (1.5-4cm long); berry black

.....dwarf huckleberry



Leaves elliptic (2.5-7cm long); berry glaucous-blue.....dangleberry



Leaves without glands

Leaves evergreen, elliptic, glabrous and entire.....fetterbush



Leaves deciduous, elliptic, glabrous and entire.....staggerbush



Leaves deciduous, pubescent, elliptic, and entire.....highbush blueberry



Leaf margins crenate (scalloped)

Leaves crenate along entire margin; female with red drupes

.....yaupon



Leaves crenate near tip or apex.....inkberry



Vine (or trailing growth habit)

Leaves compound

Leaflets palmate, usually in fives.....Virginia creeper



Leaflets in pairs (bi-geminate).....cross vine



Dignonia corymbosa Crossvine
LEAF ARRANGEMENT: opposite
LEAF SHAPE: elliptical
LEAF MARGINS: undulate
OTHER ID FEATURES: compound leaves with five leaflets, branched tendrils emerge between leaflets.

Leaflets bi- or tri-pinnate

Flowers red to orange and bilaterally symmetrical.....trumpet creeper



Flowers small and in clusters (cymes); not colorful.....peppervine



Leaves simple

Leaves crenate toward apex, less than 2.5cm long.....creeping blueberry



Leaves greater than 2.5cm long
Flowers yellow and aromatic.....yellow Jessamine



Flowers not yellow, fruit a berry (grape)
Leaves shallowly to deeply lobed.....summer grape



Leaves mostly round.....muscadine



Herb

Flowers modified into heads composed of both disk and/or ray flowers
Both disk and ray flowers present

Rays yellow.....goldenrod



Rays white to blue.....aster



Rays purple
Heads in spikes (sessile flowers along a main axis).....blazing star



Head in panicles.....chaffhead/vanillaweed



Only ray flowers present; milky sap in leaves.....dandelion



Flowers not in heads of disk and/or ray flowers

Flowers in clusters known as umbels (flowers stalks of same length from a common point -- like ribs of an umbrella) ; leaves simple

Plant leaves and stem with milky sap.....milkweed/dogbane



Plant leaves and stem without milky sap.....umbellifers (e.g., Queen Anne's lace)



Flowers not in umbels

Leaves compound and in threes (trifoliate)

Flowers large, yellow; fruit a papery legume.....wild indigo



Flowers pink to purple; fruit a loment that sticks to your clothes.....tick trefoil



Leaves simple and linear; flowers purple; fruit a capsule.....foxglove



Plant with parallel-veined leaves and flower parts in threes (monocots)

Tree

Terminal clusters of palmately-divided leaves.....cabbage palmetto



Shrub

Plant a woody grass.....cane



Plant not a grass

Plant with a short stem and palmately-divided leaves.....dwarf palmetto



Plant with long narrow, undivided leaves

Plant basal with filamentous threads along leaf margins.....bear grass



Plant erect (up to 3m in height) with sharp-pointed leaves.....Spanish bayonet



Vine

Leaves round in shape.....common greenbrier



Leaves not round in shape; leaves glaucous beneath.....whiteleaf greenbrier



Herb

Plant narrow, grass-like without colored flowers

Plant with round, hollow stem.....grass



Plant with round, solid stem.....rush



Plant with triangular stem (“sedges have edges”).....sedge



Plant with colored flowers
Flower bilaterally symmetrical
Leaves folded (equitant); flower blue to purple.....blue flag



Leaves not folded
Flowers yellow to orange along an axis (peduncle).....yellow fringed orchid



Flower rose to white, one to three in number.....rose pogonia



Flower radially symmetrical
Plant with whorled leaves and showy red flower(s).....pine lily



Plant with basal leaves only

Leaves folded (equitant).....blue-eyed grass



Leaves not folded

White to purple flower(s).....onion



Yellow flower(s).....yellow star grass

