

A GUIDE TO THE NATURAL HISTORY OF THE CITY OF MONTEVALLO'S SHOAL CREEK PARK, WITH PARTICULAR FOCUS ON ITS FLORA



Compiled by
T. M. Hardig, Ph.D.
2017

(First Edition)

All images © 2017 T. M. Hardig

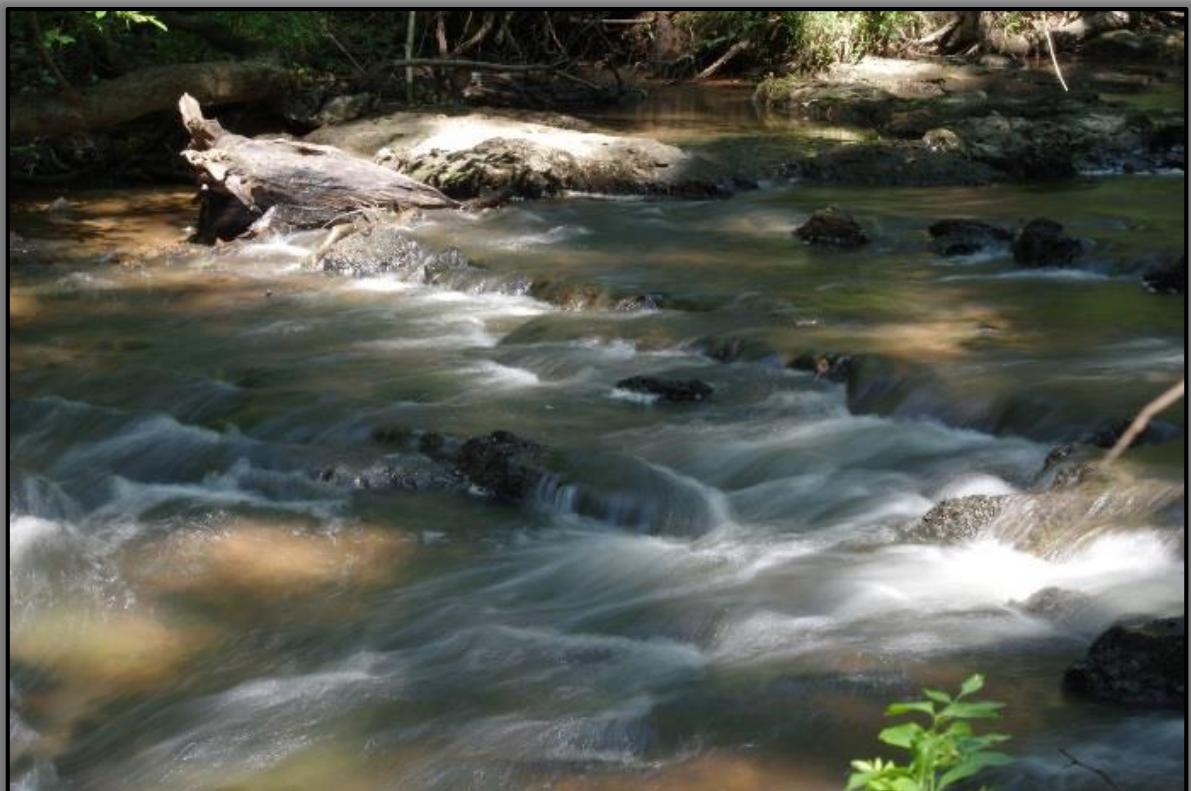
PREFACE

The City of Montevallo's Shoal Creek Park is a wondrous place that will provide many beneficial outdoor experiences to those that visit it for years to come. This guide is the product of many hours of exploration and study of the park, all to much good effect on the mind and mood of the author! The guide gives particular attention to the plant life of the park because botany is the author's area of expertise; and though the guide is thorough, it is by no means comprehensive. It is hoped that this guide can aid park visitors and enhance their experiences by providing some background information and identifications, it is intended solely for educational purposes. The author greatly appreciates the contributions of Linda Sherk, Marty Schulman, Howard Babin, Brie Little, Nash Osborne, Kaila Elrod, Brian Keener, and Kevin English to this study. All photographs were taken by the author within the park.



TABLE OF CONTENTS

INTRODUCTION	1
PHOTOS	
NATIVE HERBS	4
NATIVE VINES, SHRUBS & TREES	19
NATIVE GRASSES & SEDGES	28
FERNS	31
NON-NATIVES	32
MISCELLANEOUS	40
FLORA	44



INTRODUCTION

The City of Montevallo's Shoal Creek Park covers an area of approximately 167 acres, divided into two unequally-sized tracts ("Northwest" and "Southeast") by Hwy 119. The Northwest tract consists of approximately 136 acres and the Southeast tract consists of the remaining 31 acres. Shoal Creek, a tributary of the Little Cahaba and Cahaba Rivers, cuts across the eastern part of the Northwest tract and flows along the southwestern margin of the Southeast tract, over a combined distance of approximately 1,550 yards. The highest elevation in the park (ca. 525') occurs in the upland region that is located at the northern edge of the Northwest tract and the lowest elevation in the park (ca. 410') occurs at stream level in the southeast corner of the Southeast tract (Figure 1.)

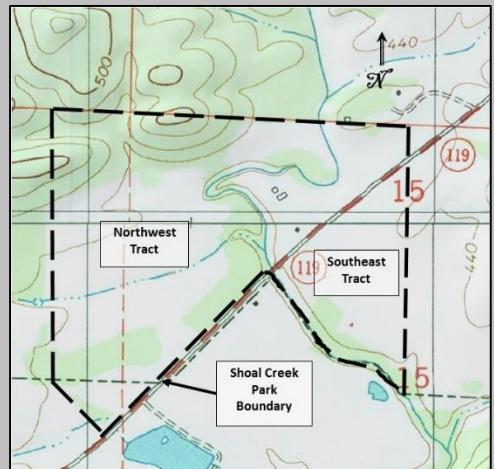


Figure 1. Topography of Shoal Creek Park.

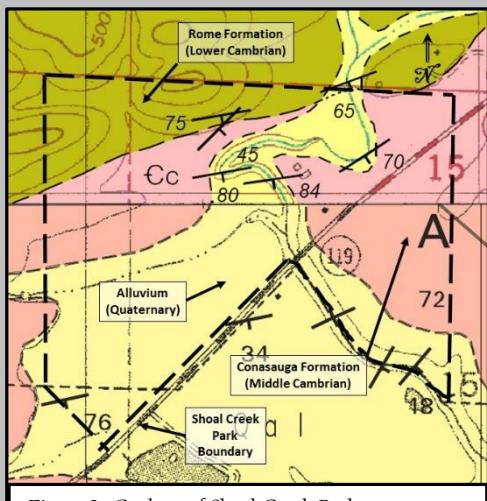


Figure 2. Geology of Shoal Creek Park.

A handy example can be observed along the southern edge of Shoal Creek, just north of the gravel parking area currently located in the Northeast Tract, where there are several exposed low ridges running parallel to each (Fig. 3.) The upland portion of the park is underlain by a second type of bedrock that is composed of interbedded layers of mudstone (primary component) and shale, siltstone, sandstone, dolomite, and limestone (minor components) and is referred to as the "Rome Formation." This bedrock was formed during the lower part of the Cambrian Period, ca. 540 million YBP (Figure 2.)³

Beneath the soils of the park are two different bedrocks. Underlying the lowlands is a bedrock composed of interbedded layers of limestone (primary component,) shale and chert (secondary components.) The bedrock is a part of a geological unit called the "Conasauga Formation" that was created during the middle part of the Cambrian Period (ca. 530 million YBP.)¹ In lower elevations of the park the Conasauga bedrock is covered by alluvium that is composed of sands, gravels, clays, and various-sized fragments of the underlying bedrock. The alluvium layer here has been forming during the most recent geological period (i.e. the Quaternary,) beginning ca. 1.6 million YBP (Figure 2.)² The Canasagua Formation is visible at various locations within the park.



Figure 3. Exposed Conasauga Formation bedrock along Shoal Creek.

INTRODUCTION

The best location for observing the Rome Formation is in the forested northwest corner of the Northwest Tract where it has been exposed by erosion and forms a small waterfall in the ephemeral stream that flows southerly into Shoal Creek. (Figure 4.) The boundary between the Conasauga and Rome Formations in the Northwest Tract is nearly coincident with the edge of the tree line in that area. Having been derived from the limestone-containing bedrocks, the soils in the park generally have a slightly basic (alkaline) pH due to high levels of calcium carbonate.⁴



Figure 4. Rome Formation exposure in Northwest Tract upland drainage.

The Shoal Creek Park ecosystem is variously composed of grassland, oak-hickory forest, successional pine, and wetland habitats. Much of the land within the park boundary has been used for agricultural purposes for the last 193 years. The 167 acres that comprise today's Shoal Creek Park are a remnant of an original 800-acre settlement that began in 1824.⁵ During settlement, parts of the land were cleared and developed for growing cotton, orchards, vineyards, and cane. In more recent times, much of the land that now comprises Shoal Creek Park had been used to grow fodder (grasses and clovers) and for the grazing of cattle. Approximately 105 acres (63%) of park grounds are grasslands, some (ca. 59 acres of the Northwest tract) of which is still being used for cattle feeding operations. The grassland flora is rich in species of grasses, sedges, and clovers, many of which are non-natives. The largest piece of oak-hickory forest is an 18 acre parcel located in the northwest corner (i.e. uplands) of the Northwest tract. This habitat is populated by several species of oaks (e.g. White, Southern Red, Rock, Chestnut, and Bluff,) hickories (e.g. Shagbark, Pignut, and Mockernut) and assorted other tree species (e.g. Red Mulberry, Sweetgum, and Ironwood.) The wetlands are largely restricted to the banks of Shoal Creek and its ephemeral tributaries and is the



habitat of various trees (e.g. Water Elm, River Birch), shrubs (e.g. Brookside Alder), and herbs (e.g. River Cane, Water Willow, Watercress, River Oats.) Numerous basic/alkaline soil-loving plants are found in the park including Eastern Red Cedar, Chinquapin Oak, Green Comet and Green Milkweeds, Pink Stonecrop, Carolina Buckthorn, Twist Spine Prickly Pear, and Prairie Tea.

INTRODUCTION

To date, 243 species of plants have been identified within the park boundaries. Seven species of ferns and three species of gymnosperms have been noted. Flowering Plant species (i.e. Angiosperms) comprise the majority (233) of the plant species observed in the park. Amongst the angiosperms, 41 species of monocots and 192 species of dicots have been observed (Table 1.) By far, the largest group of monocots present are the members of the grass family (Poaceae) with nineteen species. The largest group of dicots present are the members of the sunflower family (Asteraceae) with twenty-eight species identified.

Sixty-five of the plant species observed in the park (ca. 27%) are non-natives. Of the 85 plant families represented in the park flora, 31 of them were composed, in part or in total, of non-native species. Three of the twenty-eight plant families account for approximately one-third of all the non-native species: forty-seven percent of the grass family species observed (9) were non-natives and non-native grasses comprised 14% of all non-native species observed; fifty-eight percent of the legume family (Fabaceae) species observed (7) were non-native species and non-native species legumes comprised 11% of all non-native species observed; and twenty percent of the sunflower family species observed (5) were non-natives and non-native sunflower family species comprised 8% of all non-native species observed. Many of the non-native species present within the park boundaries can be attributed to the history of land use practices, e.g. homesteading, pasturing, etc.

Table 1. Number of taxa (families, genera, and species) in Shoal Creek flora, by plant group.

GROUP	FAMILIES	GENERA	SPECIES
Ferns	6	7	7
Gymnosperms	2	2	3
Angiosperms			
Monocots	10	31	41
Dicots	67	147	192

1= USGS Mineral Resources On-Line Spatial Data. <https://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=A1CAc%3B3>

2 = Geological Survey of Alabama, Quadrangle Series Map 21 Plate 1, Geologic Map of the Montevallo 7.5-Minute Quadrangle, Chilton and Shelby Counties, Alabama, 2002

3= USGS Mineral Resources On-Line Spatial Data. <https://mrdata.usgs.gov/geology/state/fips-unit.php?state=AL>

4 = Hardig, et al., unpublished data.

5 = History of Sion Jacob Perry Family in Shelby County, Alabama.
<http://www.rootsweb.ancestry.com/~alshelby/PerryFamily1.pdf>

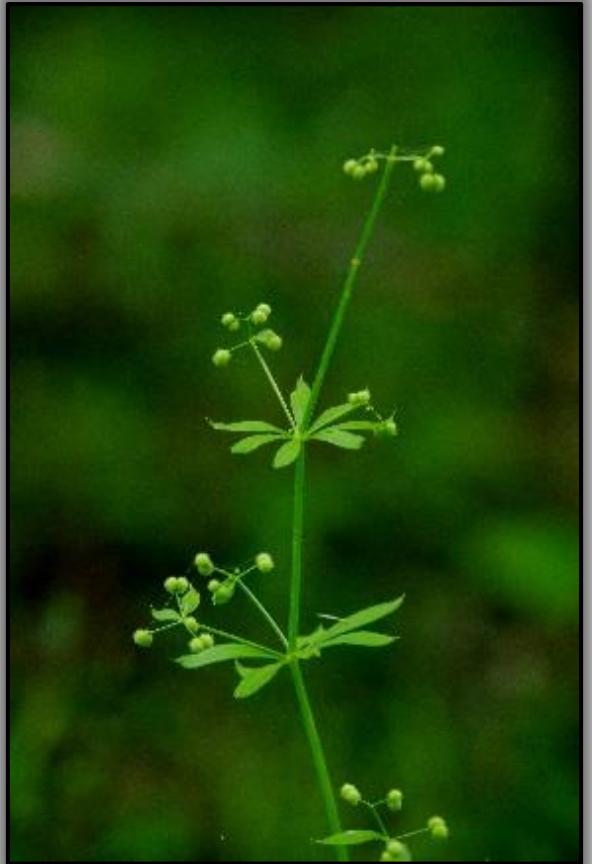
NATIVE HERBS



Green Milkweed; Green Antelope Horn
Asclepias viridis Walter
(Meadows/Pastures on basic soils)



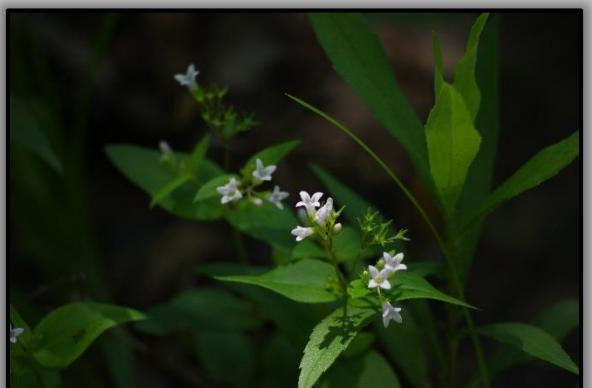
Mistflower
Conoclinium coelestinum (L.) A.P. de Candolle
(Low woods, Wet meadows, Ditches)



Bedstraw; Sticky Willy; Cleavers
Galium aparine L.
(Meadows, Woodlands)



White Avens
Geum canadense Jacquin
(Alluvial woods)



Summer Bluet; Venus' Pride
Houstonia purpurea L.
(Deciduous forests, Slopes, Clearings)

NATIVE HERBS



Green Comet Milkweed
Asclepias viridiflora Rafinesque
(Meadows/Fields over basic soils)



Walter's Violet
Viola walteri House
(Rich woodlands)



Mountain Golden Alexanders
Zizia trifoliata (Michaux) Fernald
(Open woodlands; Stream margins)

NATIVE HERBS



Lyre Leaf Sage
Salvia lyrata L.
(Meadows, Open woodlands)



American Pokeweed
Phytolacca americana L.
(Disturbed habitats)



Butterweed
Packera glabella (Poiret) C. Jeffrey
(Alluvial woods, Wet pastures)

NATIVE HERBS



Virginia Spring Beauty
Claytonia virginica L.
(Rich, low woods)



Carolina Bristle Mallow; Cheeses
Modiola caroliniana (L.) G. Don
(Meadows/Pastures, Seepage slopes)



Marsh Frogfruit; Northern Frogfruit
Phyla lanceolata (Michaux) Greene
(Low woods)

NATIVE HERBS



Side Beak Pencil Flower
Stylosanthes biflora (L.) BSP
(Open woods and borders)



Tennessee Glade Cress
Leavenworthia exigua Rollins var. *exigua*
(Meadows/Pastures)



Eastern Blue Phlox; Wild Blue Phlox
Phlox divaricata L. ssp. *divaricata*
(Deciduous woods)

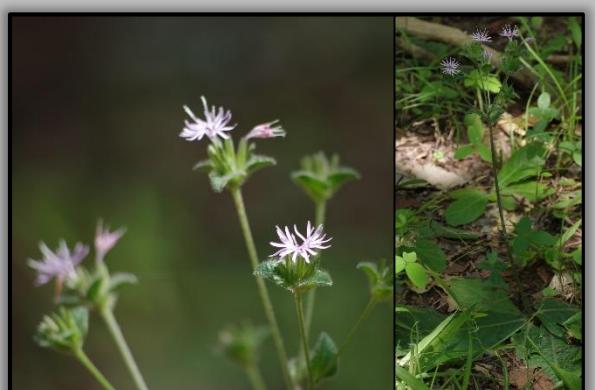
NATIVE HERBS



American Water Willow
Justicia americana (L.) Vahl
(Rocky and sandy stream beds)



Threadleaf Mock Bishipweed
Ptilimnium capillaceum (Michaux) Rafinesque
(Open bottom land, Low meadows/pastures)



Wooly Elephant's Foot
Elephantopus tomentosus L.
(Woodlands)

NATIVE HERBS



Limestone Wild Petunia
Ruellia strepens L.
(Dry woods)



Carolina Wild Petunia
Ruellia caroliniensis (J.F. Gmelin) Steudel
(Dry woods, Sandy fields, Rock crevices)



White Crownbeard
Verbesina virginica L.
(Wooded slopes, Meadows/Pastures)



Carolina Horse Nettle
Solanum carolinense L.
(Old fields, Farm lots)



Drummond's Aster
Sympphyotrichum drummondii (Lind.) G.L. Nes.
(Rich woods)

NATIVE HERBS



Tall Meadow Rue; King of the Meadow
Thalictrum pubescens Pursh
(Rich woods, Low woods, Meadows)



Rue Anemone
Thalictrum thalictroides (L.) Boivin
(Rich woods)



Beaked Cornsalad
Valerianella radiata (L.) Dufresne
(Fields, Woodland margins)



Atamasco Lily; Rain Lily
Zephyranthes atamasco (L.) Herbert
(Low woods, Wet meadows)



Gray Green Wood Sorrel
Oxalis dillenii Jacquin
(Disturbed areas)

NATIVE HERBS



Bear's Foot
Smallanthus uvedalia (L.) Mac. Ex Sm.
(Meadows/Pastures, Woodlands, Low areas)



Thick Root Buttercup
Ranunculus fascicularis Muhl. ex Big.
(Dry Meadows/Pastures)



Yellow False Garlic
Nothoscordum bivalve (L.) Britton
(Meadows/Pastures)

NATIVE HERBS



Philadelphia Fleabane
Erigeron philadelphicus L.
(Meadows/Pastures)



Southern Crownbeard
Verbesina occidentalis (L.) Walter
(Woodlands, Meadows/Pastures)



Widow's Cross; Pink Stonecrop
Sedum pulchellum Michaux
(Limestone outcroppings)

Hornbeam Copperleaf
Acalypha ostryifolia Riddell
(Disturbed areas)

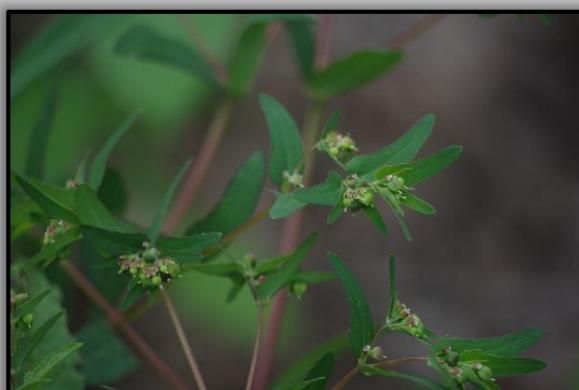
NATIVE HERBS



Maryland Black Snakeroot

Sanicula marilandica L.

(Mixed deciduous forests, Woodland margins, Stream banks)



Eyebane

Euphorbia nutans Lag.

(Disturbed areas)



Spotted St. John's Wort

Hypericum punctatum Lamarck

(Meadows/Pastures, Woodlands)

NATIVE HERBS



Poorman's Pepperwort
Lepidium virginicum L.
(Disturbed sites)



Maryland Wild Senna
Senna marilandica (L.) Link
(Woodland borders)



Indian Pale Plantain
Arnoglossum atriplicifolium (L.) H.E. Rob.
(Meadows/Pastures, Woodlands)



Pointed Leaf Tick Trefoil
Hylodesmum glutinosum (M. ex. W.) HO & RRM
(Woodlands)



Downy Agrimony
Agrimonia pubescens Wallroth
(Upland woodlands)

NATIVE HERBS



Virginia Dayflower
Commelina virginica L.
(Low woods)



Woolly Croton
Croton capitatus Michaux
(Sandy fields)



Cuban Jute
Sida rhombifolia L.
(Disturbed areas)

NATIVE HERBS



Prairie Tea

Croton monathogynus Michaux
(Limestone or basic soils)



Bitterweed

Helenium amarum (Rafinesque) H. Rock
(Disturbed areas)



Giant ironweed

Vernonia gigantea ssp. *gigantea*
(Swamp forests, Marshes)



Dotted Smartweed

Persicaria punctata (Elliott) Small
(Alluvial woods)



Spanish Needles

Bidens bipinnata L.
(Disturbed areas)



Nettle Leaf Noseburn

Tragia urticifolia Michaux
(Old fields, Upland wood borders)

NATIVE HERBS



Blue Wood Aster

Sympphyotrichum cordifolium (L.) G. L. Nesom
(Rich woodlands)



Allegheny Monkey Flower

Mimulus ringens L.

(Stream banks, Wet meadows)



Northern Winged Loosestrife

Lythrum alatum Pursh
(Low woods, Marshes)



Naked Flower Tick Trefoil

Hylodesmum nudiflorum (L.) H.O. & R.R.M.
(Woodlands)



Eastern Oxeye

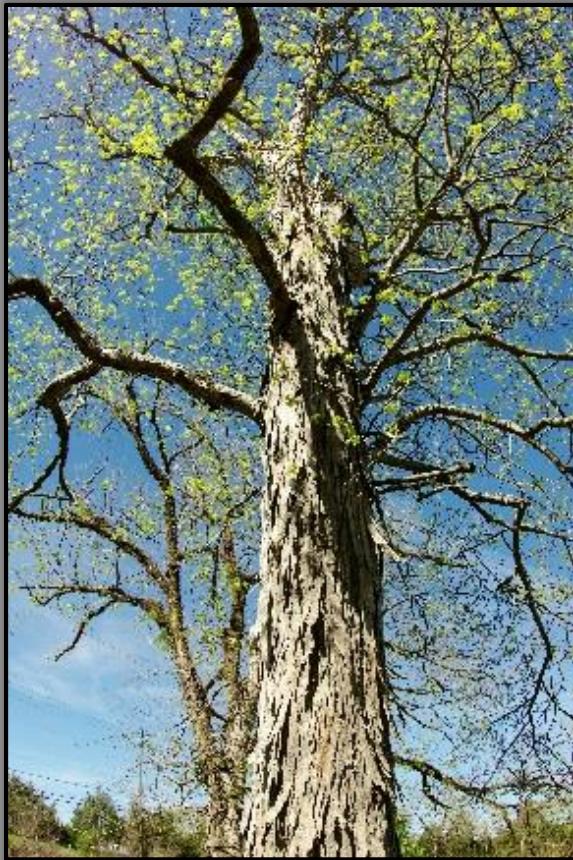
Helianthopsis helianthoides (L.) Sweet
(Woodlands, Meadows)



Hoary Tick Trefoil

Desmodium canescens (L.) A.P. de C.
(Woodland borders, Open woods)

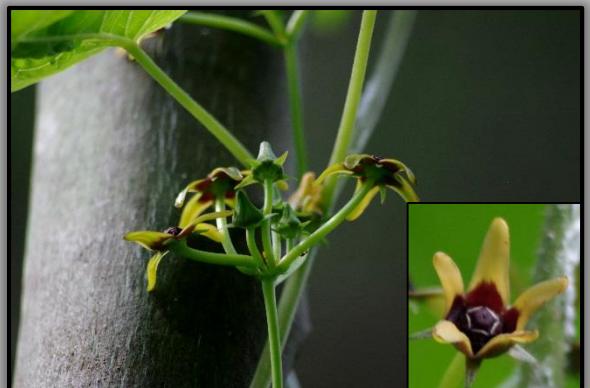
NATIVE VINES, SHRUBS, & TREES



Shagbark Hickory
Carya ovata (P. Miller) K. Koch
(Low woods)



Tag Alder; Hazel Alder; Brookside Alder
Alnus serrulata (Aiton) Willdenow
(Stream banks)



Angular Fruit Milkvine; Climbing Milkweed
Gonolobus suberosus (L.) R. Brown
(Alluvial woods)



Black Walnut
Juglans nigra L.
(Rich woods)

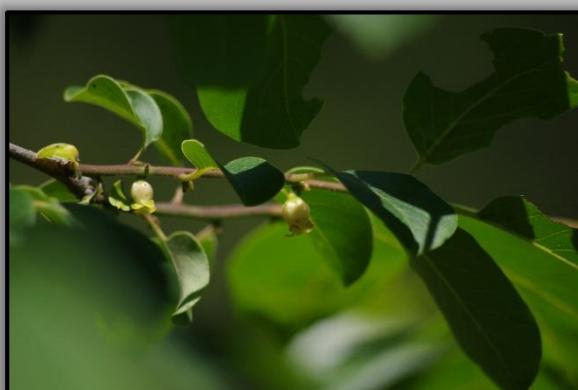


Eastern Red Cedar
Juniperus virginiana L. var. *virginiana*
(Old Fields, Woodlands)

NATIVE VINES, SHRUBS, & TREES



Twist Spine Prickly Pear
Opuntia macrorhiza Engelm
(Limestone outcroppings, Sandy soils)



American Persimmon
Diospyros virginiana L.
(Deciduous forests, Pinelands, Old fields) Red Buckeye
Aesculus pavia L.
(Moist deciduous forests, Low woodlands)

NATIVE VINES, SHRUBS, & TREES



Red Maple
Acer rubrum L. var. *rubrum*
(Low and rich woodlands)



Planer Tree; Water Elm
Planera aquatica (Walter) J.F. Gmelin
(Wet forests)



Trumpet Creeper
Campsis radicans (L.) Seemann
(Woodlands)

NATIVE VINES, SHRUBS, & TREES



Chinquapin Oak
Quercus muehlenbergii Engelmann
(Woodlands on basic soils)



Swamp Red Oak
Quercus shumardii Buckley
(Rich woods, Bottom lands)



Northren White Oak
Quercus alba L.
(Woodlands)



Post Oak
Quercus stellata Wagenheim
(Dry woodlands)



Southern Red Oak
Quercus falcata Michaux
(Dry woodlands)



Bluff Oak
Quercus austrina Small
(Rich soils and bluffs)

NATIVE VINES, SHRUBS, & TREES



Coralbeads
Cocculus carolinus (L.) DC.
(Sandy woods and fields)



Muscadine; Scuppernong
Muscadinia rotundifolia (Mich.) Small
(Woodlands)



Carolina Buckthorn
Frangula caroliniana (Walter) A. Gray
(Moist deciduous forests over basic rocks)



Red Mulberry
Morus rubra L.
(Alluvial woods)



Southern Dewberry
Rubus trivialis Michaux
(Disturbed areas)



Black Gum
Nyssa sylvatica Marshall
(Woodlands)

NATIVE VINES, SHRUBS, & TREES



Chalk Maple
Acer leucoderme Small
(Rocky woods)



Scarlet Oak
Quercus coccinea Muench.
(Woodlands)



Honey Locust
Gleditsia triacanthos L.
(Woodlands)



Eastern Hop Hornbeam
Ostrya virginiana (P. Miller) K. Koch
(Rich and low woods)

NATIVE VINES, SHRUBS, & TREES



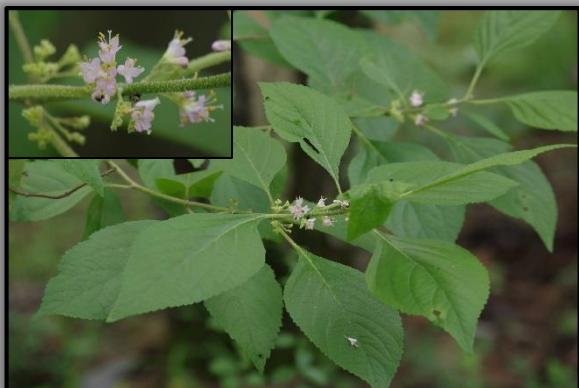
Pink Morning Glory
Ipomoea cordatotriloba Dennstaedt
(Disturbed areas)



Wild Potato Vine
Ipomoea pandurata (L.) G.F.W. Meyer
(Disturbed areas)



Eastern Poison Ivy
Toxicodendron radicans (L.) Kuntze
(Meadows/Pastures, Woodlands)



American Beauty Berry
Callicarpa americana L.
(Moist sandy/rocky woodlands)



Virginia Creeper
Parthenocissus quinquefolia (L.) Plan.
(Dry, rocky or rich woods)

NATIVE VINES, SHRUBS, & TREES



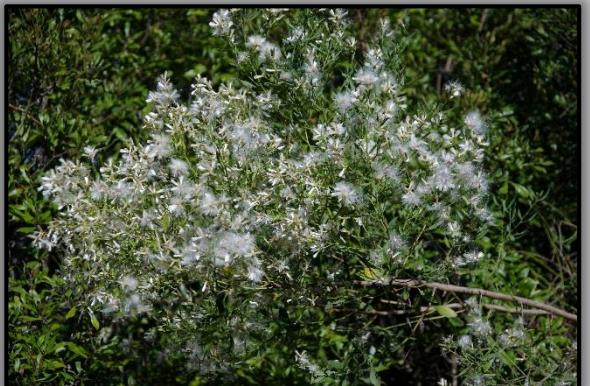
Scrub Pine
Pinus virginiana P. Miller
(Poor, dry or rocky soil)



Winged Elm
Ulmus alata Michaux
(Uplands, Along rivers and streams)



Possum Grape
Vitis cinerea Engelm. Ex Mill. var. *Baileyana*
(Low woods)



Groundsel Tree
Baccharis halimifolia L.
(Alluvial woods)



Box Elder
Acer negundo L.
(Low woods, Streambanks)



Mockernut Hickory
Carya tomentosa (Poirier) Nuttall
(Dry woodlands)

NATIVE VINES, SHRUBS, & TREES



American Sycamore
Platanus occidentalis L.
(Low woods)



Water Oak
Quercus nigra L.
(Low grounds, Along streams)



Sweet Gum
Liquidambar styraciflua L.
(Low and rich woods)



American Elderberry
Sambucus Canadensis L.
(Alluvial woods, Pastures)



Loblolly Pine
Pinus taeda L.
(Low woods, Old fields)

NATIVE GRASSES & SEDGES



Globe Flatsedge
Cyperus echinatus (L.) Alph.
(Sandy woods and fields)



Poverty Oatgrass
Danthonia spicata (L.) Beauvois ex R. & S.
(Open woods)



River Oats
Chasmanthium latifolium (Michaux) Yates
(Low woods)



Awned Flatsedge
Cyperus squarrosus L.
(Disturbed wet soils, Stream banks)



Cherokee Sedge
Carex cherokeensis Schweinitz
(Low woods)

NATIVE GRASSES & SEDGES



Longleaf Spikegrass

Chasmanthium sessiliflorum (Poiret) Yates
(Hardwood forests)



Round Fruit Witch Grass

Dichanthelium sphaerocarpon (Elliott) Gould
(Meadows/Pastures, Woods)



Leather Rush

Juncus coriaceus Mackenzie
(Ponds, Stream margins)



Straw Color Flatsedge

Cyperus strigosus L.
(Ditches)

NATIVE GRASSES & SEDGES



Redtop Panic Grass

Coleataenia rigidula (Bosc ex Nees) LeBond
(Meadows/Pastures, Low woods)



River Cane
Arundinaria gigantean (Walter) Muhl.
(Low woods)



Baldwin's Flatsedge
Cyperus croceus Vahl
(Meadows/Pastures, Disturbed areas)

FERNS



Christmas Fern

Polystichum acrostichoides (Mich.) Schott
(Shaded rocky slopes and woods)



Rattlesnake Fern

Botrychium virginianum (L.) Swartz
(Rich woods)



Resurrection Fern

Pleopeltis michauxiana (Weath.) H. & S.
(Rocks, limbs, crotches of large trees)



Southern Shield Fern

Thelypteris kunthii (Desvaux) C.V. Morton
(Damp calcareous soils)

NON-NATIVES



Hardy Orange; Trifoliate Orange
Citrus trifoliata L.
(Pastures, Fence rows, Streamside)



Small Flower Hawk's Beard
Crepis pulchra L.
(Disturbed areas)



Henbit
Lamium amplexicaule L.
(Disturbed areas)



Red Henbit
Lamium purpureum L.
(Disturbed areas)



Garden Four O'Clock
Mirabilis jalapa L.
(Home sites)



Parrot's Feather
Myriophyllum aquaticum (Vell.) Verd.
(Ditches, Sluggish streams)

NON-NATIVES



Annual Blue Eyed Grass
Sisyrinchium rosulatum E.P. Bicknell
(Meadows/Pastures)



Beefsteak Plant
Perilla frutescens (L.) Britton
(Pastures, Home sites)



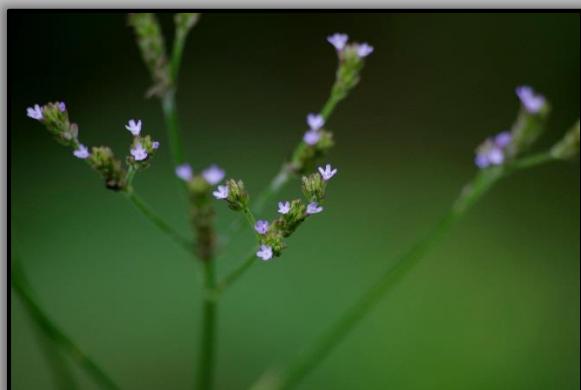
Field Hedge Parsley
Torilis arvensis (Hudson) Link
(Meadows/Pastures)

Curly Dock; Yellow Dock
Rumex crispus L.
(Disturbed areas)

NON-NATIVES



Crimson Clover
Trifolium incarnatum L.
(Meadows/Pastures)



Brazilian Vervain
Verbena brasiliensis Vellozo
(Disturbed area)



Elegant Cudweed
Gamochaeta coarctata (Willd.) Kerguelen
(Meadows/Pastures, Open woodlands)

NON-NATIVES



Musk Thistle
Carduus nutans L.
(Meadows/Pastures, Disturbed areas)



Hairy Buttercup
Ranunculus sardous Crantz
(Low fields, Disturbed areas)



Common Purslane
Portulaca oleracea L.
(Disturbed areas)

NON-NATIVES



Indian Strawberry
Potentilla indica (Andrews) T. Wolf
(Disturbed areas)



Indian Heliotrope
Heliotropium indicum L.
(Wooded pastures, Stream banks)



Awnless Barn Grass
Echinochloa colonum (L.) Link
(Low fields, Disturbed areas)



Nutgrass
Cyperus rotundus L.
(Disturbed areas)

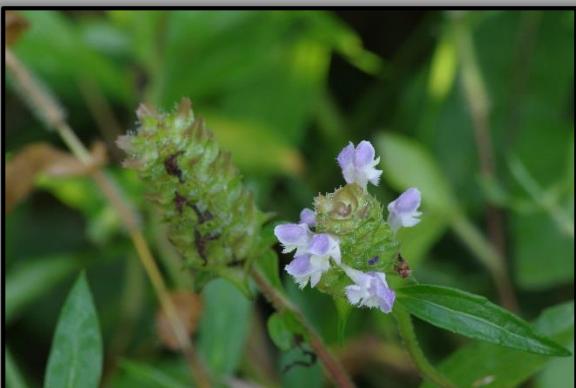


Johnson Grass
Sorghum halepense (L.) Persoon
(Disturbed areas)

NON-NATIVES



Japanese Climbing Fern
Lygodium japonicum (T. ex M.) Swartz
(Moist woods, Edges of streams)



Common Self Heal
Prunella vulgaris L. ssp. *vulgaris*
(Disturbed areas)



Leather Leaf Mahonia
Berberis bealei Fortune
(Woodlands)



Yellow Bristlegrass
Setaria pumila (Poiret) R. & J. A. S.
(Meadows/Pastures, Disturbed areas)



Bahia Grass
Paspalum notatum Flügge
(Disturbed areas)

NON-NATIVES



Reversed Clover; Persian Clover
Trifolium resupinatum L.
(Meadows/Pastures)



Common Daffodil
Narcissus pseudonarcissus L.
(Home sites)



English Plantain; Rib Grass
Plantago lanceolata L.
(Disturbed areas)



Common Dandelion
Taraxacum officinale Wiggers
(Disturbed areas)



Mimosa
Albizia julibrissin Durazzini
(Disturbed areas)

NON-NATIVES



Italian Ryegrass; Annual Ryegrass
Lolium perenne L. var. *aristatum*
(Disturbed areas)



Spiny Amaranth
Amaranthus spinosus L.
(Disturbed areas)



Lesser Calamint
Clinopodium calamintha (L.) Stace
(Meadows/Pastures, Disturbed areas)



Hairy Crabweed
Fatoua villosa (Thunberg) Nakai
(Disturbed areas)



White Clover
Trifolium incarnatum L.
(Meadows/Pastures)

MISCELLANEOUS



Eastern Swallowtail Butterfly
(*Papilio glauca*) visiting Bear's Foot



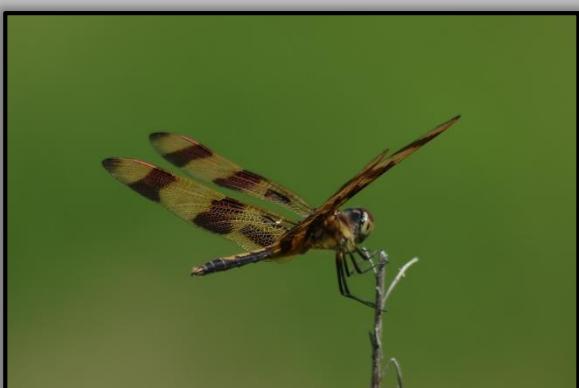
University of Montevallo Students
Bio 310 – Plant Systematics, 2015



Pearl Crescent
Phyciodes tharos



Widow Skimmer
Libellula luctuosa



Halloween Pennant
Celithemis eponina

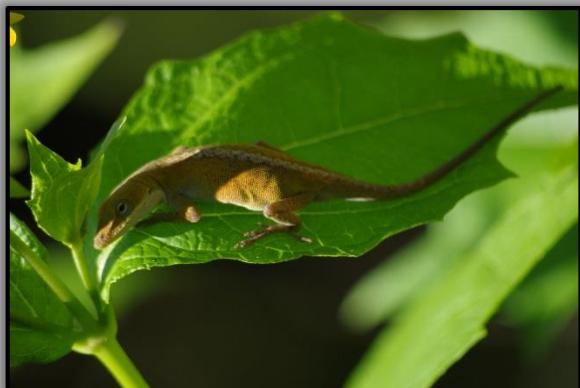


Polyphemus moth (*Antheraea polyphemus*)
larva (5th instar) feeding on White Oak

MISCELLANEOUS



Easter Swallowtail caterpillar
feeding on White Nymph



Green Anole
Anolis carolinensis



Eastern Carpenter Bee
Xylocopa virginica

MISCELLANEOUS



Crown Tipped Coral
Clavicorona phyxidata



Orchard Orbweaver (♂)
Leucauge venusta



Gulf Fritillary
Agraulis vanillae

MISCELLANEOUS



Cottonmouth
Agkistrodon piscivorus



Common Box Turtle
Terrapene carolina



Rough Green Snake
Opheodrys aestivus

FLORA

Ferns and Fern Allies

Aspleniaceae

Asplenium platyneuron (L.) Britton, Sterns & Poggenburg (Ebony Spleenwort)

Dryopteridaceae

Polystichum acrostichoides (Michaux) Schott (Christmas Fern; Dagger Fern)

Lygodiaceae

Lygodium japonicum (Thunberg ex Murray) Swartz (Japanese Climbing Fern. ALIEN)

Ophioglossaceae

Botrychium virginianum (L.) Swartz (Rattlesnake Fern; Virginia Grape Fern)

Ophioglossum engelmannii Prantl (Limestone Adder's Tongue; Engelmann's Adder's Tongue)

Polypodiaceae

Pleopeltis michauxiana (Weath.) Hickey & Sprunt (Resurrection Fern)

Thelypteridaceae

Thelypteris kunthii (Desvaux) C. V. Morton (Southern Shield Fern; Kunth's Maiden Fern; Widespread M. F.)

Gymnosperms

Cupressaceae

Juniperus virginiana L. var. *virginiana* (Eastern Red Cedar)

Pinaceae

Pinus taeda L. (Loblolly Pine)

Pinus virginiana P. Miller (Scrub Pine)

Angiosperms

Monocots

Agavaceae

Yucca filamentosa L. (Adam's Needle, Eastern Yucca)

Alliaceae

Nothoscordum bivalve (L.) Britton (Yellow False Garlic, Crowpoison)

Amaryllidaceae

Narcissus pseudonarcissus L. (Common Daffodil. ALIEN)

Zephyranthes atamasca (L.) Herbert (Atamasco Lily; Rain Lily)

Commelinaceae

Commelina communis L. (Asiatic Dayflower; Common Dayflower. ALIEN)

Commelina virginica L. (Virginia Dayflower)

Cyperaceae

Carex annectens (E.P. Bicknell) E.P. Bicknell (Yellow Fox Sedge)

Carex cherokeensis Schweinitz (Cherokee Sedge)

Carex lurida Wahlenberg (Sallow Sedge)

Carex seorsa Howe (Weak Stellate Sedge)

Cyperus croceus Vahl (Baldwin's Flatsedge)

Cyperus echinatus (L.) Alph. Wood (Globe Flatsedge)

Cyperus strigosus L. (Straw Color Flatsedge; False Nutsedge; Galingale)

Cyperus rotundus L. (Purple Nutsedge; Cocograss; Nutgrass. ALIEN)

Cyperus squarrosus L. (Awned Flatsedge)

Eleocharis compressa Sullivant var. *compressa* (Flat-Stemmed Spike-Rush)

Scirpus atrovirens Willdenow (Dark Green Bulrush; Dusky Bulrush; Black Bulrush)

Iridaceae

Sisyrinchium rosulatum E.P. Bicknell (Annual Blue Eyed Grass; Lawn B. E. G. ALIEN)

Juncaceae

Juncus coriaceus Mackenzie (Leather Rush)

FLORA

Orchidaceae

- Listera australis* Lindley (Southern Twayblade)
Tipularia discolor (Pursh) Nuttall (Cranefly Orchid)

Poaceae

- Aira elegans* Willdenow ex Roemer & Schultes (Annual Silver Hairgrass. ALIEN)
Arundinaria gigantea (Walter) Muhlenberg (Giant Cane, River Cane)
Briza minor L. (Lesser Quaking Grass; Little Q.G. ALIEN)
Bromus catharticus Vahl (Rescue Grass. ALIEN)
Chasmanthium latifolium (Michaux) Yates (River Oats; Indian Wood Oats; Fish on a Pole)
Chasmanthium sessiliflorum (Poiret) Yates (Longleaf Spikegrass; Longleaf Wood Oats)
Coleataenia rigidula (Bosc ex Nees) LeBlond ssp. *rigidula* (Redtop Panic Grass; Bent Panic Grass)
Danthonia spicata (L.) Beauvois ex Roemer & Schultes (Poverty Oatgrass)
Dichanthelium sphaerocarpon (Elliott) Gould (Round Fruit Witch Grass)
Echinochloa colonum (L.) Link (Jungle Rice; Shama Millet; Awnless Barnyard Grass. ALIEN)
Elymus virginicus L. var. *virginicus* (Virginia Wild Rye; Eastern Wild Rye; Terrell Grass)
Glyceria striata (Lamark) Hitchcock (Fowl Manna Grass, Nerved M. G.)
Hordeum pusillum Nuttall (Little Barley; Mouse B.)
Lolium perenne L. var. *aristatum* Willdenow (Italian Ryegrass; Annual R. ALIEN)
Paspalum notatum Flügge (Bahia Grass. ALIEN)
Poa annua L. (Annual Bluegrass. ALIEN)
Poa cuspidata Nuttall (Early Bluegrass; Toothed B.)
Setaria pumila (Poiret) Roemer & J. A. Schultes (Yellow Bristlegrass. ALIEN)
Sorghum halepense (L.) Persoon (Johnson Grass. ALIEN)

Ruscaceae

- Ophiopogon japonicas* (Thunb.) Ker-Gawl (Mondo Grass. ALIEN)

Dicots

Acanthaceae

- Justicia americana* (L.) Vahl (American Water Willow)
Ruellia caroliniensis (J. F. Gmelin) Steudel (Carolina Wild Petunia; Common W. P.; Hairy W. P.)
Ruellia streptophylla L. (Limestone Wild Petunia)

Adoxaceae

- Sambucus canadensis* L. (Common Elderberry; American E.; Black E.)

Altingiaceae

- Liquidambar styraciflua* L. (Sweet Gum)

Amaranthaceae

- Amaranthus spinosus* L. (Spiny Amaranth; Thorny Amaranth. ALIEN)

Anacardiaceae

- Rhus aromatica* Aiton (Fragrant Sumac; Sweet Scented Sumac)

- Toxicodendron radicans* (L.) Kuntze (Eastern Poison Ivy)

Apiaceae

- Chaerophyllum tainturieri* Hooker (Smooth Fruit Chervil)
Cicuta maculata L. (Spotted Water Hemlock; Spotted Cowbane)
Cyclospermum leptophyllum (Persoon) Sprague ex Britton & Wilson (Marsh Parsley. ALIEN)
Ptilimnium capillaceum (Michaux) Rafinesque (Treadleaf Mock Bishopweed; Atlantic B.; Herb William)
Sanicula marilandica L. (Maryland Black Snakeroot; Maryland Sanicle)
Torilis arvensis (Hudson) Link (Field Hedge Parsley; Spreading Hedge P.; Spreading Bur P. ALIEN)
Trepocarpus aethusae Nuttall ex A.P. de Candolle (White Nymph)
Zizia trifoliata (Michaux) Fernald (Mountain Golden Alexanders)

FLORA

Apocynaceae

Asclepias viridiflora Rafinesque (Green Flower Milkweed; Green Comet Milkweed)

Asclepias viridis Walter (Green Milkweed; Green Antelope Horn)

Gonolobus suberosus (L.) R. Brown (Angle Pod; Angular Fruit Milkvine; Climbing Milkweed)

Araliaceae

Hydrocotyle verticillata Thunberg (Whorled Pennywort; Whorled Water P.; Whorled Marsh P.)

Asteraceae

Ambrosia trifida L. (Giant Ragweed, Great Ragweed.)

Arnoglossum atriplicifolium (L.) H. E. Robinson (Pale Indian Plantain)

Baccharis halimifolia L. (Groundsel Tree; Consumption Weed; Sea Myrtle)

Bidens bipinnata L. (Spanish Needles)

Carduus nutans L. (Nodding Thistle; Musk Thistle. ALIEN)

Cirsium horridulum Michaux var. *horridulum* (Horrid Thistle; Yellow Thistle)

Conoclinium coelestinum (L.) A.P. de Candolle (Mistflower)

Coreopsis auriculata L. (Eared Tickseed; Running T.; Lobed T.)

Crepis pulchra L. (Small Flower Hawk's Beard. ALIEN)

Elephantopus tomentosus L. (Wooly Elephant's Foot; Devils Grandmother)

Erigeron annuus (L.) Persoon (Eastern Daisy Fleabane)

Erigeron philadelphicus L. (Philadelphia Fleabane)

Erigeron stigosus Muhlenberg ex Willd. (Common Eastern Fleabane; Lesser Daisy F.; Prairie F.)

Gamochaeta coarctata (Willdenow) Kerguelen (Elegant Cudweed. ALIEN)

Helenium amarum (Rafinesque) H. Rock (Bitterweed; Yellodicks; Five Leaf Sneezeweed; Spanish Daisy)

Helianthopsis helianthoides (L.) Sweet (Eastern Oxeye; Eastern Sunflower Everlasting; False Sunflower)

Krigia virginica (L.) Willdenow (Virginia Dwarf Dandelion)

Packera glabella (Poiret) C. Jeffrey (Butterweed)

Packera anonyma (Alph. Wood) W.A. Weber & A. Love (Appalachian Ragwort; Southern R.)

Smallanthus uvedalia (L.) Mackenzie ex Small (Bear's Foot; Yellow Flower Leafcup)

Symphyotrichum cordifolium (L.) G. L. Nesom (Heartleaf Aster; Blue Wood Aster)

Symphyotrichum drummondii (Lindley) G.L. Nesom (Drummond's Aster; Hairy Heartleaf Aster)

Symphyotrichum pilosum (Willdenow) G.L. Nesom (Frost Aster, White Old Field Aster)

Taraxacum officinale Wiggers (Common Dandelion. ALIEN)

Verbesina occidentalis (L.) Walter (Southern Crownbeard, Yellow Crownbeard)

Verbesina virginica L. (White Crownbeard, Frostweed)

Vernonia gigantea (Walter) T. ex B. and C. ssp. *gigantea* Giant Ironweed, Queen of the Meadow.)

Xanthium strumarium L. (Common Cocklebur, Rough Cocklebur. ALIEN)

Berberidaceae

Berberis bealei Fortune (Leather Leaf Mahonia. ALIEN)

Nandina domestica Thunberg (Heavenly Bamboo. ALIEN)

Betulaceae

Alnus serrulata (Aiton) Willdenow (Tag Alder; Hazel Alder; Brookside Alder)

Betula nigra L. (River Birch; Red Birch)

Ostrya virginiana (P. Miller) K. Koch (Eastern Hop Hornbeam; Ironwood)

Bignoniaceae

Bignonia capreolata L. (Crossvine; Quartermine)

Campsis radicans (L.) Seemann (Trumpet Creeper; Cow Itch Vine)

FLORA

Brassicaceae

- Capsella bursa-pastoris* (L.) Medicus (Shepherd's Purse. ALIEN)
Cardamine hirsute L. (Hairy Bittercress. ALIEN)
Leavenworthia exigua Rollins var. *lutea* Rollins (Tennessee Gladecress)
Lepidium virginicum L. (Poorman's Pepperwort; Virginia Pepperweed; Virginia Peppergrass)
Nasturtium officinale W.T. Aiton (Watercress. ALIEN)
Sisymbrium officinale (L.) Scopoli (Common Hedge Mustard. ALIEN)

Boraginaceae

- Myosotis discolor* Persoon (Yellow & Blue Forget Me Not. ALIEN)

Campanulaceae

- Triodanis perfoliata* (L.) Nieuwland (Clasping Leaf Venus' Looking Glass)

Cactaceae

- Opuntia macrorhiza* Engelm. (Twist Spine Prickly Pear)

Caryophyllaceae

- Mononeuria patula* (Michaux) Dillenberger & Kadereit (Lime Barren Sandwort)
Stellaria media (L.) Villars (Common Chickweed. ALIEN)

Cannabaceae

- Celtis laevigata* Willdenow (Sugarberry; Southern Hackberry; Mississippi H.)

Convolvulaceae

- Ipomoea cordatotriloba* Dennstaedt (Tie Vine; Pink Morning Glory; Coastal Morning Glory)
Ipomoea pandurata (L.) G.F.W. Meyer (Wild Potato Vine; Man of the Earth; Man Root)

Cornaceae

- Cornus florida* L. (Flowering Dogwood)

Crassulaceae

- Sedum pulchellum* Michaux (Widow's Cross; Pink Stonecrop; Lime Stonecrop)

Ebonaceae

- Diospyros virginiana* L. (Common Persimmon; American Persimmon)

Elaeagnaceae

- Elaeagnus pungens* Thunberg (Thorny Olive. ALIEN)

Euphorbiaceae

- Acalypha ostryifolia* Riddell (Hornbeam Copperleaf; Rough Pod C.; Hornbeam Three Seed Mercury)
Croton capitatus Michaux (Hogwort; Woolly Croton)
Croton monanthogynus Michaux (Prairie Tea; One Seed Croton)
Euphorbia nutans Lag. (Eyebane; Nodding Spurge)
Tragia urticifolia Michaux (Nettle Leaf Noseburn)

Fabaceae

- Albizia julibrissin* Durazzini (Silktree; Mimosa. ALIEN)

- Cercis canadensis* L. (Eastern Redbud)

- Desmodium canescens* (L.) A. P. de Candolle (Hoary Tick Trefoil)

- Gleditsia triacanthos* L. (Honey Locust, Sweet L.)

- Hylodesmum glutinosum* (Muhl. ex. Willd.) H. Oha. & R. R. Mill (Pointed Leaf Tick Trefoil)

- Hylodesmum nudiflorum* (L.) H. Oha. & R. R. Mill (Naked Flower Tick Trefoil)

- Senna marilandica* (L.) Link (Maryland Wild Senna; Maryland Wild Sensitive Plant)

- Stylosanthes biflora* (L.) Britton, Sterns & Poggenburg (Side Beak Pencil Flower)

- Trifolium dubium* Sibthorp (Least Hop Clover; Suckling Clover. ALIEN)

- Trifolium incarnatum* L. (Crimson Clover. ALIEN)

- Trifolium repens* L. (White Clover. ALIEN)

- Trifolium resupinatum* L. (Reversed Clover; Persian Clover. ALIEN)

- Vicia sativa* L. spp. *nigra* (L.) Ehrendorfer (Narrowleaf Vetch; Common V. ALIEN)

- Vicia tetrasperma* (L.) Moench (Lentil Vetch; Slender V.; Four Seed V. ALIEN)

FLORA

Fagaceae

- Fagus grandifolia* Ehrhart (American Beech)
- Quercus alba* L. (Northern White Oak)
- Quercus austrina* Small (Bluff Oak)
- Quercus coccinea* Muenchhausen (Scarlet Oak)
- Quercus falcata* Michaux (Southern Red Oak; Spanish Oak)
- Quercus marilandica* Muenchhausen (Black Jack Oak)
- Quercus montana* (Willdenow) (Chestnut Oak; Rock C. O.; Mountain C. O.; Rock O.; Tanbark O.)
- Quercus muehlenbergii* Engelmann (Chinquapin Oak; Yellow C. O.; Yellow O.; Rock C. O.)
- Quercus nigra* L. (Water Oak)
- Quercus shumardii* Buckley (Shumard's Oak; Swamp Red Oak)
- Quercus stellata* Wangenheim (Post Oak)

Gentianaceae

- Sabatia calycina* (Lamark) Heller (Coastal Rose Gentian; Coastal Rose Pink)

Geraniaceae

- Geranium carolinianum* L. (Carolina Geranium; C. Crane's Bill)
- Geranium dissectum* L. (Cutleaf Geranium; Cutleaf Crane's Bill. ALIEN)

Haloragaceae

- Myriophyllum aquaticum* (Vellozo) Verdcourt (Parrot's Feather. ALIEN)

Heliotropaceae

- Heliotropium indicum* L. (Turnsole; Indian Heliotrope. ALIEN)

Hydrangeaceae

- Decumaria barbara* L. (Climbing Hydrangea; Woodvamp)

Hypericaceae

- Hypericum punctatum* Lamarck (Spotted St. John's Wort)

Iteaceae

- Itea virginica* L. (Virginia Sweetspire; V. Willow; Tassel White)

Juglandaceae

- Carya glabra* (P. Miller) Sweet (Pignut Hickory)
- Carya ovata* (P. Miller) K. Koch (Shagbark Hickory)
- Carya tomentosa* (Poiret) Nuttall (Mockernut Hickory; White Hickory)
- Juglans nigra* L. (Black Walnut)

Lamiaceae

- Callicarpa americana* L. (American Beauty Berry, French Mulberry)
- Clinopodium calaminta* (L.) Stace (Lesser Calamint; Basil Thyme. ALIEN)
- Lamium amplexicaule* L. (Henbit. ALIEN)
- Lamium purpureum* L. (Red Henbit. ALIEN)
- Perilla frutescens* (L.) Britton (Beefsteak Plant; Wild Basil. ALIEN)
- Prunella vulgaris* L. ssp. *vulgaris* (Common Self Heal; Heal All; Eurasian Self Heal. ALIEN)
- Salvia lyrata* L. (Lyre Leaf Sage)

Lythraceae

- Lythrum alatum* Pursh (Northern Winged Loosestrife)

Magnoliaceae

- Liriodendron tulipifera* L. (Tulip Poplar)
- Magnolia grandiflora* L. (Southern Magnolia)

Malvaceae

- Modiola caroliniana* (L.) G. Don (Carolina Bristle Mallow; Cheeses; Bristly Mallow)
- Sida rhombifolia* L. (Cuban Jute; Arrowleaf Sida)

Menispermaceae

- Cocculus carolinus* (L.) A. P. de Candolle (Carolina Coralbeads; Carolina Snailseed; Carolina Moonseed)

FLORA

Montiaceae

Claytonia virginica L. (Virginia Spring Beauty)

Moraceae

Fatoua villosa (Thunberg) Nakai (Hairy Crabweed; Mulberry Weed; Foolish Weed. ALIEN)

Morus rubra L. (Red Mulberry)

Nyctaginaceae

Mirabilis jalapa L. (Garden Four O'clock; Marvel of Peru; Beauty of the Night. ALIEN)

Nyssaceae

Nyssa sylvatica Marshall (Black Gum; Black Tupelo; Sour Gum)

Olmaceae

Ligustrum japonicum Thurnber (Japanese Privet. ALIEN)

Ligustrum sinense Loureiro (Chinese Privet. ALIEN)

Oxalidaceae

Oxalis articulata Savigny (Windowbox Wood Sorrel; Red Oxalis. ALIEN)

Oxalis dillenii Jacquin (Gray Green Wood Sorrel; Dillen's W. S.; Sour Grass)

Phrymaceae

Mimulus ringens L. (Allegheny Monkey Flower; Square Stem M. F., Common M. F.)

Phryma leptostachys L. (American Lopseed)

Phytolaccaceae

Phytolacca americana L. (American Pokeweed, Common Pokeweed)

Plantaginaceae

Nuttallanthus canadensis (L.) D.A. Sutton (Oldfield Toadflax, Common T.)

Plantago lanceolata L. (English Plantain; Rib Grass; Buckhorn Plantain. ALIEN)

Plantago virginica L. (Virginia Plantain; Southern P.; Pale Seed P.)

Veronica hederifolia L. (Ivy Leaf Speedwell. ALIEN)

Veronica persica Poiret (Bird Eye Speedwell. ALIEN)

Platanaceae

Platanus occidentalis L. (American Sycamore)

Polemoniaceae

Phlox divaricata L. ssp. *divaricata* (Eastern Blue Phlox; Wild Blue Phlox; Timber Phlox)

Polygonaceae

Persicaria lapathifolia (L.) S.F. Gray (Pale Smartweed, Willow Weed)

Persicaria hydropiper (L.) Opiz (Marsh Pepper Smartweed; Water P.; Common S. ALIEN)

Persicaria punctata (Elliott) Small (Dotted Smartweed)

Rumex conglomeratus Murray (Clustered Dock; Sharp D. ALIEN)

Rumex crispus L. (Curly Dock; Yellow Dock; ALIEN)

Rumex pulcher L. (Fiddle Dock. ALIEN)

Portulacaceae

Portulaca oleracea L. (Common Purslane; Garden Purslane; Little Hogweed. ALIEN)

Ranunculaceae

Ranunculus fascicularis Muhlenberg ex Bigelow (Thick Root Buttercup)

Ranunculus hispida Michaux (Bristly Buttercup)

Ranunculus sardous Crantz (Hairy Buttercup, ALIEN)

Thalictrum pubescens Pursh (Tall Meadow Rue; Late Meadow R.; King of the Meadow)

Thalictrum thalictroides (L.) Boivin (Rue Anemone)

Rhamnaceae

Berchemia scandens (Hill) K. Koch (Rattan Vine; Alabama Supplejack; American Rattan)

Frangula caroliniana (Walter) A. Gray (Carolina Buckthorn; Indian Cherry; Caroline False Buckthorn)

FLORA

Rosaceae

- Agrimonia pubescens* Wallroth (Downy Agrimony; Soft Agrimony; Soft Groovebur)
Geum canadense Jacquin (White Avens)
Potentilla indica (Andrews) T. Wolf (Indian Strawberry; Mock Strawberry. ALIEN)
Rubus trivialis Michaux (Southern Dewberry)

Rubiaceae

- Galium aparine* L. (Cleavers; Sticky Willy; Catchweed Bedstraw)
Houstonia purpurea L. (Summer Bluet; Venus' Pride; Purple Bluet)
Houstonia pusilla Schoepf (Tiny Bluet)

Rutaceae

- Citrus trifoliata* L. (Hardy Orange; Trifoliate O., ALIEN)

Santalaceae

- Phoradendron leucarpum* (Rafinesque) Reveal & Johnson (American Mistletoe)

Sapindaceae

- Acer leucoderme* Small (Chalk Maple, Pale M.)
Acer rubrum L. var. *rubrum* (Red Maple)
Acer negundo L. (Box Elder; Ash Leaf Maple)
Aesculus pavia L. (Red buckeye)

Solanaceae

- Physalis cinerascens* (Dunal) Hitchcock var. *cinerascens* (Small Flower Ground Cherry. ALIEN)
Solanum carolinense L. (Caroline Horse Nettle, Carolina Nightshade)

Styracaceae

- Styrax americanus* Lamarck (American Snowbell; A. Storax)

Ulmaceae

- Planera aquatica* (Walter) J.F. Gmelin (Planer Tree; Water Elm)
Ulmus alata Michaux (Winged Elm)
Ulmus americana L. (American Elm)

Urticaceae

- Boehmeria cylindrica* (L.) Swartz (False Nettle)

Valerianaceae

- Valerianella radiata* (L.) Dufresne (Beaked Cornsalad)

Verbenaceae

- Phyla lanceolata* (Michaux) Greene (Marsh Frogfruit; Northern Frogfruit; Lance Leaf Frogfruit)
Verbena brasiliensis Vellozo (Brazilian Vervain. ALIEN)

Violaceae

- Viola affinis* LeConte (Related Violet, Sand Violet)
Viola bicolor Pursh (Field Pansy)
Viola cucullata Aiton (Blue Marsh Violet)
Viola walteri House (Walter's Violet; Prostrate Blue Violet)

Vitaceae

- Ampelopsis cordata* Michaux (Raccoon Grape; False Grape; Heartleaf Peppervine)
Muscadinia rotundifolia (Michaux) Small var. *rotundifolia* (Muscadine; Scuppernong)
Parthenocissus quinquefolia (L.) Planchon (Virginia Creeper; Woodbine)
Vitis cinerea Engelmann ex Millard var. *baileyana* (Munson) Comeaux (Possum Grape; Bailey's Grape)