

A FLORISTIC INVENTORY OF THE NATURE CONSERVANCY'S HOTTONIA BOTTOMS PRESERVE, ATOKA, BRYAN, AND CHOCTAW COUNTIES, OKLAHOMA

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ABSTRACT

This paper reports the results of a vascular plant inventory at The Nature Conservancy's Hottonia Bottoms Preserve in Atoka, Bryan, and Choctaw Counties, Oklahoma. A total of 386 taxa in 96 families were collected. Two-hundred and fifty-six genera, 369 species, and 17 infraspecific taxa were identified. The largest families found were the Poaceae with 53 taxa and the Asteraceae with 44 taxa. Twenty-four non-native or naturalized taxa, or 6.22% of the preserve's flora, were collected. Twenty taxa tracked by the Oklahoma Natural Heritage Inventory were found.

Keywords: vascular, exotic, tracked

INTRODUCTION AND STUDY AREA

Purchased in 2016, The Nature Conservancy's (TNC) Hottonia Bottoms Preserve was acquired with the goal of conserving a high-quality example of Oklahoma bottomland forest. Bottomland forests provide many ecosystem services, including the protection of water quality, flood control, and erosion control, but less than 15% of these habitats remain intact (Anderson and Masters 1992). TNC intends to manage the preserve for biodiversity and habitat through surveys, monitoring, invasive species management, and prescribed fire. Rare animals, including the western chicken turtle, the goldstripe darter,

and the Federally-listed American burying beetle are found at the preserve. The preserve also provides habitat for migratory birds in the central flyway. Hottonia Bottoms is named for the unique aquatic plant American featherfoil (*Hottonia inflata*).

The Hottonia Bottoms preserve occupies 397 ha in Atoka, Bryan, and Choctaw Counties in south-central Oklahoma approximately 16 km south of the town of Lane (Figure 1). The southern boundary of some parts of the preserve is the Clear Boggy Creek, a 212 km tributary of Muddy Boggy Creek. Crooked Creek runs through the western part of the preserve. Latitudinal extent ranges from 34.1222912 to 34.160174 and longitudinal extent from -95.929407 to -96.038570. The

site is located within the Dissected Coastal Plain geomorphic province, consisting of unlithified sands, gravels, and clays from the early Cretaceous period (Curtis et al. 2008; Johnson 2008). Soils are primarily of the Guyton-Kaufman type and clayey, silty, and very deep (Carter and Gregory 2008). Chigley-Durant-Clarita-Helden-Ferris-Burleson type soils are also present; these are humus-rich, clayey and deep (Carter and Gregory 2008). Climate is classified as humid subtropical (Cfa) – temperate with no discernible dry season, and with hot summers (Köppen 1884). Choctaw County, the county with the majority of the preserve’s land, has a mean annual

temperature of 16.9°C (Oklahoma Climatological Survey 2020). The lowest average temperature is in January (5.2°C) and the highest average temperature is in August (27.8°C) (Oklahoma Climatological Survey 2020). May is the wettest month, with average precipitation of 15.1 cm, and August is the driest, with 6.4 cm; mean annual precipitation is 123.1 cm (Oklahoma Climatological Survey 2020). The growing season averages 225 days (Oklahoma Climatological Survey 2020). The potential vegetation types are bottomland and crosstimbers forests (Duck and Fletcher 1943). The Antlers Sandstone aquifer underlies the preserve.

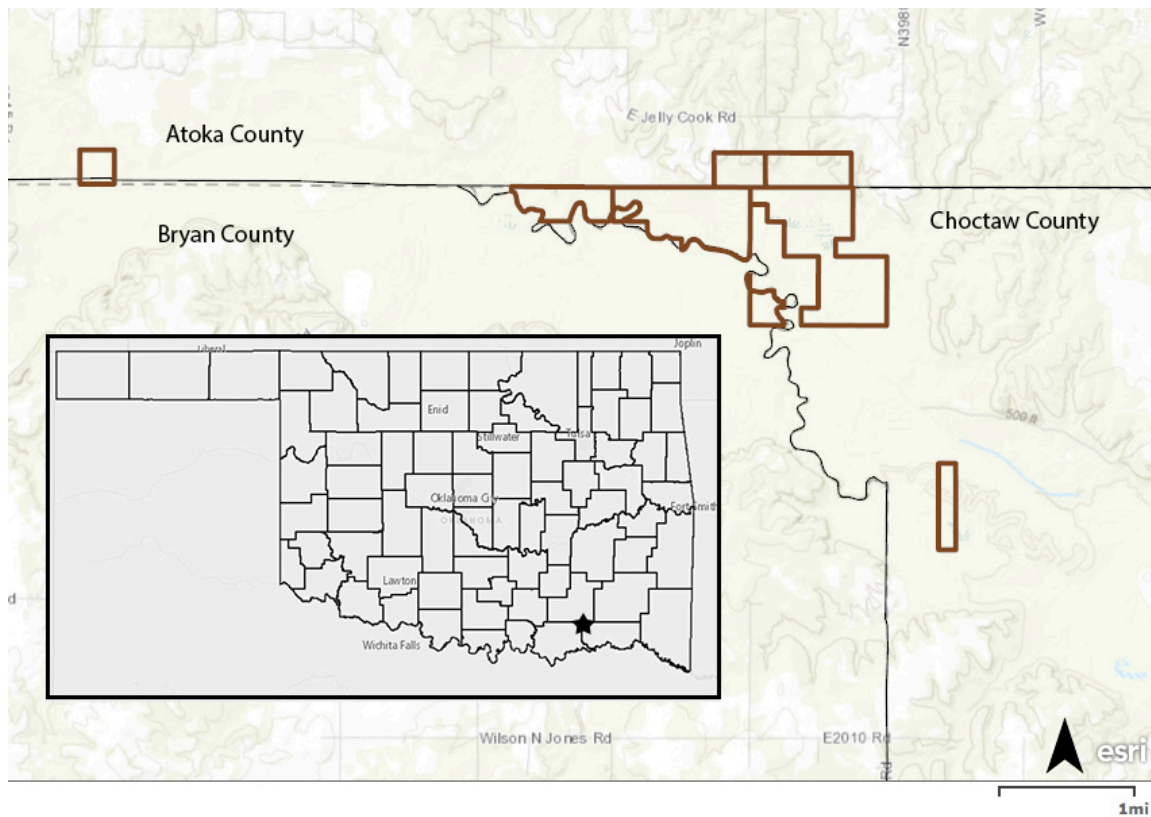


Figure 1 The Nature Conservancy’s Hottonia Bottoms Preserve

METHODS

Vouchers of vascular plant taxa encountered at the Hottonia Bottoms Preserve were made throughout the growing seasons (March through October) of 2016 and 2017. Specimens with flowers or fruit were preferred, but when they could not be found, sterile specimens were taken. Vouchers of planted taxa and taxa not native to the United States were collected only from naturalized populations. All specimens were pressed in a plant press, dried in a drying cabinet, and frozen at -20° before taken into the herbarium for identification and label generation. Manuals used for identification included Smith (1994) and Tyrl et al. (2015). Identifications were verified by comparison with specimens from the Robert Bebb Herbarium (OKL) at the University of Oklahoma. Duration, growth habit, wetland status, and nativity were determined using the PLANTS database (USDA-NRSC 2020) and Taylor and Taylor (1991). Vegetation classifications were based on Hoagland (2000). Classification and nomenclature follow the Angiosperm Phylogeny Group IV (Stevens 2001 onwards) and the Integrated Taxonomic Information System (2020). All specimens were deposited at OKL.

RESULTS AND DISCUSSION

A total of 386 taxa in 96 families were collected (Appendix). Eight of these families were ferns and allies, two were conifers, two

were magnoliids/primitive angiosperms, 10 were monocots, and 74 were eudicots (Table 1). Two hundred and fifty-six genera, 369 species, and 17 infraspecific taxa were identified. Two hundred and eighty taxa were perennials; there were 102 annuals and four biennials. Two hundred and twenty-seven of these taxa were forbs, 92 were graminoids, 39 were trees, 15 were shrubs, and 13 were woody vines. The largest families were the Poaceae and the Asteraceae, with 53 and 44 taxa respectively, and the genus with the most taxa was *Carex* in the Cyperaceae family (20 taxa). Only 24 taxa, or 6.22% of the flora, were planted and naturalized or non-native to the United States. This is a relatively small percentage; a survey of the less extensive (235 ha) Boehler Seeps and Sandhills Preserve found 37 exotic taxa, or 8.17% of its flora (Hoagland and Buthod, in preparation). Grassland sites in Oklahoma have been found to have 8.80-15.00% (Buthod and Hoagland, 2020) of their floras composed of exotic species. The families with the most exotic taxa were the Fabaceae with five and the Poaceae with four. Twenty species tracked by the Oklahoma Natural Heritage Inventory (2020) occurred at the preserve (Table 2). Obligate and facultative wetland taxa comprised 28.76% of the flora, with 40 obligate wetland and 71 facultative wetland taxa present. Ninety-two taxa were classified as facultative, 87 were facultative upland taxa, and nine were upland taxa. Eighty-seven taxa had no wetland status.

Table 1 Summary of the floristic survey performed at the Hottonia Bottoms Nature Preserve by divisions/groups and resulting number of taxa

Groups	Families	Genera	Total Taxa	Total Taxa Composition %	Native Taxa	Nonnative Taxa	Nonnative Taxa Composition %
Ferns and Allies	8	8	8	2.07	8	0	0.0
Gymnosperms	2	2	2	0.52	2	0	0.0
Magnoliids/Primitive Angiosperms	2	2	2	0.52	2	0	0.0
Monocots	10	45	104	26.94	99	5	1.30
Eudicots	74	199	260	67.36	253	19	4.92
TOTAL	96	256	386	100	352	24	6.22

Table 2 Taxa located during this study that are tracked by the Oklahoma Natural Heritage Inventory (NatureServe Explorer 2020; Oklahoma Natural Heritage Inventory 2020). Status ranks are on a 1-5 scale, with a 1 indicating the taxon is critically imperiled. G ranks are at the global level, and S ranks are at the subnational or state level. A question mark (?) denotes an inexact numeric rank.

Family	Taxon	Rank
Apiaceae	<i>Ptilimnium costatum</i> Raf.	S1G4
Aristolochiaceae	<i>Aristolochia reticulata</i> Nutt.	S2G4
Cyperaceae	<i>Carex gigantea</i> Rudge	S1G4
Cyperaceae	<i>Carex hyalina</i> Boott	S2G4
Cyperaceae	<i>Carex oxylepis</i> Torr. & Hook.	S2G5?
Cyperaceae	<i>Carex typhina</i> Michx.	S1G5
Cyperaceae	<i>Cyperus plukenetii</i> Fernald	S2G5
Fabaceae	<i>Phaseolus polystachios</i> (L.) Britton, Sterns & Poggenb.	S1G5
Fagaceae	<i>Quercus incana</i> W. Bartram	S2G5
Lamiaceae	<i>Physostegia intermedia</i> (Nutt.) Engelm. & A. Gray	S1G5
Oleaceae	<i>Forestiera acuminata</i> (Michx.) Poir.	S2G5
Orchidaceae	<i>Hexalectris spicata</i> (Walter) Barnhart	S1G5
Plantaginaceae	<i>Penstemon murrayanus</i> Hook	S1G4
Poaceae	<i>Aristida lanosa</i> Muhl. ex Elliott	S1G5
Poaceae	<i>Paspalum bifidum</i> (Bertol.) Nash	S1G5
Poaceae	<i>Sacciolepis striata</i> (L.) Nash	S2G5
Poaceae	<i>Sorghastrum elliottii</i> (C. Mohr) Nash	S1G5
Primulaceae	<i>Hottonia inflata</i> Elliott	S2G4
Ulmaceae	<i>Planera aquatica</i> J.F. Gmel.	S2G5
Urticaceae	<i>Urtica chamaedryoides</i> Pursh	S3G4G5

Six vegetation types were found at Hottonia Bottoms. Three forest associations, two herbaceous vegetation types, and a "disturbed area" type occur at the preserve. The types are not discrete, however; they intergrade, with many taxa found in multiple types.

Forest vegetation includes a dry hardwood **upland forest (UF)** type that is dominated by *Quercus stellata*, *Q. velutina*, *Q. falcata*, and *Carya texana*. This type is found in the northernmost parts of the preserve. Trees such as *Pinus echinata*, *Ulmus alata*, and *Juniperus virginiana* are associated with this type, as are understory shrubs such as *Viburnum rufidulum*, *Vaccinium arboreum*, and *Symphoricarpos orbiculatus*. Extensive stands of *Callicarpa americana* are also found in the upland forests of Hottonia Bottoms. Forbs and graminoids in this type include many taxa tracked by the Oklahoma Natural Heritage Inventory, including *Aristolochia reticulata*, *Hexalectris spicata*, and *Sorghastrum elliotii*, as well as more common taxa such as *Tridens flavus*, *Elymus virginicus*, and *Coleataenia anceps*. Within the upland forest are small areas with little canopy cover where taxa such as *Penstemon murrayanus*, *Asclepias amplexicaulis*, *Lithospermum carolinense*, and *Aristida lanosa* are found.

A ***Quercus phellos*-*Q. nigra* forest (QPQNF)** is found in a transitional zone between the drier upland forest and bottomland vegetation. In this forest type soils are moist to wet, the canopy is dense, and the diversity of the understory is low. Other tree species in this type include *Quercus lyrata*, *Nyssa sylvatica*, and *Acer negundo*. Shrubs such as *Sambucus nigra* ssp. *canadensis* and *Ilex decidua* are found in the understory. The forest floor is dominated by *Chasmanthium latifolium*, *C. laxum* ssp. *laxum*, *C. laxum* ssp. *sessiliflorum*, and many species of *Carex*.

The ***Fraxinus pennsylvanica* forest association (FPFA)** is found in the bottomlands of the preserve that are temporarily or seasonally flooded.

Associated woody species include *Celtis laevigata*, *Platanus occidentalis*, *Salix nigra*, and *Cephalanthus occidentalis*. Large stands of *Forestiera acuminata* are found throughout this forest type, as are three tracked *Carex* species (*C. gigantea*, *C. hyalina*, and *C. typhina*), and the preserve's namesake *Hottonia inflata*.

Herbaceous vegetation types at Hottonia Bottoms are limited in extent because of the dense forest canopy. One of these--the ***Dichanthelium scoparium* herbaceous association (DSHA)**--is a type associated with the sandy acidic seeps found at the preserve. Taxa associated with this vegetation type include *Andropogon glomeratus*, *Boehmeria cylindrica*, *Cirsium horridulum*, *Eupatorium perfoliatum*, and *Juncus effusus*. These small areas are often densely vegetated and overgrown with *Smilax* and *Rubus*. With the reintroduction of fire they could harbor populations of the globally and state rare *Eriocaulon kornickianum*, a species once found less than five kilometers away at The Nature Conservancy's Boehler Seeps and Sandhills Preserve (Watson et al. 1994; MacRoberts and MacRoberts 2002; Clark 2011).

The type given the general classification "**herbaceous wetland vegetation**" (HWV) is highly restricted in extent as well; it is found in a small, low, open spot on an old dirt road and areas in and around Crooked Creek. Taxa associated with this type include *Echinochloa muricata*, *Iva annua*, *Lobelia cardinalis*, *Mimulus alatus*, and *Paspalum repens*.

Only small areas of Hottonia Bottoms are **disturbed areas (DA)**; they are limited to a small parking area in the upland forest and an old road which runs from it to the south. Taxa associated with disturbed areas include *Bradburia pilosa*, *Digitaria ciliaris*, *Sida spinosa*, and *Galium aparine*. The majority (13 of 24) of the non-native taxa found at Hottonia Bottoms are found in these areas, including *Cerastium* spp., *Trifolium* spp., *Capsella bursa-pastoris*, and *Verbascum thapsus*.

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APPENDIX

List of vascular plant taxa from the Hottonia Bottoms Nature Preserve, Atoka, Bryan and Choctaw Counties, Oklahoma.

Taxa list with duration, growth habit, wetland status, vegetation type, collection number, nativity, and heritage status. A=annual, B=biennial, P=perennial; T=tree, S=shrub, V=woody vine, F=forb, G=graminoid; OBL=obligate wetland, FACW= facultative wetland, FAC=facultative, FACU=facultative upland, UPL=upland, none=no wetland status; DA=disturbed area, DSHA=*Dichanthelium scoparium* herbaceous association, FPFA=*Fraxinus pennsylvanica* forest association, HWV=herbaceous wetland vegetation, QPQNF=*Quercus phellos/Quercus nigra* forest, UF=upland forest.

Exotic taxa are denoted with an asterisk (*). Taxa tracked by the Oklahoma Natural Heritage Inventory are denoted with a dagger (†). Duration, growth habit, and nativity were determined using the PLANTS Database (USDA-NRCS 2020); if the information from PLANTS was ambiguous, Taylor and Taylor (1991) was consulted. Wetland status and common names were taken from PLANTS (USDA-NRCS 2020), and vegetation classifications were based on Hoagland (2000). Specimens were assigned collection numbers with the prefix HB. Voucher specimens were deposited at the Robert Bebb Herbarium of the University of Oklahoma (OKL).

Acanthaceae

Dicliptera brachiata (Pursh) Spreng. (branched foldwing); A; F; FACW; HWV; HB-164
Ruellia humilis Nutt. (fringeleaf wild petunia); P; F; FACU; UF; HB-172
Ruellia strepens L. (limestone wild petunia); P; F; FAC; UF; HB-324

Adoxaceae

Sambucus nigra L. ssp. *canadensis* (L.) R. Bolli (American elder); P; S; NONE; QPQNF; HB-014
Viburnum rufidulum Raf. (rusty blackhaw); P; S; UPL; UF; HB-304

Alismataceae

Echinodorus cordifolius (L.) Griseb. (burhead); P; F; OBL; FPFA; HB-422

Amaryllidaceae

**Allium vineale* L. (wild garlic); P; F; FACU; DA; HB-096
Nothoscordum bivalve (L.) Britton (crowpoison); P; F; FACU; DA; HB-103

Anacardiaceae

Rhus aromatica Aiton (fragrant sumac); P; S; UPL; UF; HB-275
Toxicodendron radicans (L.) Kuntze (poison ivy); P; V; FAC; UF, QPQNF; HB-382

Apiaceae

Chaerophyllum tainturieri Hook. (chervil); A; F; FAC; UF; QPQNF; HB-007
Cryptotaenia canadensis (L.) DC. (honestwort); P; F; FAC; UF; QPQNF; HB-075
Cynosciadium digitatum DC. (fringed dogshade); A; F; FACW; FPFA; HB-036
Eryngium prostratum Nutt. ex DC. (creeping eryngo); P; F; FACW; DSHA; HB-193
†*Ptilimnium costatum* Raf. (threadleaf mockbishopweed); A; F; FACW; DSHA; HB-043; S1G4
Sanicula canadensis L. (Canadian blacksnakeroot); B; F; FACU; UF; HB-118

Spermolepis divaricata (Benth. & Hook. f. ex S. Watson) Raf. ex Ser. (forked scaleseed); A; F; FAC; PFFA; HB-114

Tropocarpus aethusae Nutt. ex DC. (whitenymph); A; F; FACW; QPQNF; HB-029

Apocynaceae

Asclepias amplexicaulis Sm. (clasping milkweed); P; F; NONE; UF; HB-298

Gonolobus suberosus (L.) Br. var. *suberosus* (angularfruit milkvine); P; F; FACW; UF; HB-083

Aquifoliaceae

Ilex decidua Walter (possumhaw); P; S; FACW; QPQNF; HB-171

Araceae

Arisaema dracontium (L.) Schott (green dragon); P; F; FACW; QPQNF; HB-341

Araliaceae

Hydrocotyle ranunculoides L.f. (floating pennyroyal); P; F; OBL; DSHA, HWV; HB-373

Aristolochiaceae

†*Aristolochia reticulata* Nutt. (Texas dutchman's pipe); P; F; NONE; UF; HB-016; S2G4

Aspleniaceae

Asplenium platyneuron (L.) Britton, Sterns & Poggenb. (ebony spleenwort); P; F; FACU; UF; HB-065

Asteraceae

Achillea millefolium L. (common yarrow); P; F; FACU; DA; HB-269

Ageratina altissima (L.) King & H. Rob. var. *altissima* (white snakeroot); P; F; FACU; QPQNF; HB-236

Ambrosia artemisiifolia L. (annual ragweed); A; F; FACU; DA; HB-144

Ambrosia bidentata Michx. (lanceleaf ragweed); A; F; NONE; DA, UF; HB-245

Antennaria parlinii Fernald (Parlin's pussytoes); P; F; NONE; UF; HB-368

Bidens bipinnata L. (Spanish needles); A; F; FAC; HWV; HB-025

Bidens frondosa L. (devil's beggartick); A; F; FACW; HWV; HB-244

Bradburia pilosa (Nutt.) Semple (soft goldenaster); A; F; NONE; DA; HB-142

Brickellia eupatorioides (L.) Shinnery (false boneset); P; F; NONE; UF; HB-163

Cirsium altissimum (L.) Hill (tall thistle); B; F; NONE; DA; HB-202

Cirsium horridulum Michx. (yellow thistle); B; F; FAC; DSHA; HB-291

Conoclinium coelestinum (L.) DC (blue mistflower); P; F; FAC; HWV, QPQNF; HB-188

Conyza canadensis (L.) Cronquist (Canadian horseweed); A; F; NONE; DA; HB-139

Coreopsis tinctoria Nutt. (golden tickseed); A; F; FAC; DA, HWV; HB-388

Croptilon divaricatum (Nutt.) Raf. (slender scratchdaisy); A; F; UPL; UF; HB-243

Eclipta prostrata (L.) L. (false daisy); A; F; FACW; HWV; HB-206

Elephantopus carolinianus Raeusch. (Carolina elephantsfoot); P; F; FACU; QPQNF, UF; HB-184

Erechtites hieraciifolius (L.) Raf. ex DC. (American burnweed); A; F; NONE; DA, UF; HB-133

Erigeron strigosus Muhl. ex Willd. (prairie fleabane); A; F; FAC; DA; HB-319

Eupatorium perfoliatum L. (common boneset); P; F; FACW; DSHA; HB-186

Eupatorium serotinum Michx. (lateflowering thoroughwort); P; F; FAC; HB-404

Fleischmannia incarnata (Walter) King & H. Rob. (pink thoroughroot); P; F; FACU; DA; HB-237

Gamochaeta pensylvanica (Willd.) Cabrera (Pennsylvania everlasting); P; F; FACU; UF; HB-364

Helenium amarum (Raf.) H. Rock (yellowdicks); A; F; FACU; DA; HB-192
Heterotheca subaxillaris (Lam.) Britton & Rusby (camphorweed); A; F; NONE; DA; HB-173
Hieracium gronovii L. (queendevil); P; F; UPL; UF; HB-423
Iva annua L. (annual marsh elder); A; F; FAC; HWV; HB-138
Lactuca ludoviciana (Nutt.) Riddell (wild lettuce); A; F; FAC; QPQNF; HB-037
Mikania scandens (L.) Willd. (climbing hempvine); P; F; FACW; DSHA; HB-203
Packera glabella (Poir.) C. Jeffrey (butterweed); A; F; FACW; FPFA, QPQNF; HB-286
Packera obovata (Muhl. ex Willd.) W.A. Weber & A. Löve (roundleaf ragwort); P; F; FACU; QPQNF; HB-088
Pluchea odorata (L.) Cass. (sweetscent); A; F; FACW; DSHA, HWV; HB-242
Pseudognaphalium obtusifolium (L.) Hilliard & B.L. Burt (rabbit-tobacco); A; F; NONE; UF; HB-125
Pyrrhopappus carolinianus (Walter) DC. (Carolina desert-chicory); A; F; NONE; DA; HB-378
Rudbeckia hirta L. (blackeyed Susan); P; F; FACU; DA, UF; HB-066
Smallanthus uvedalia (L.) Mack. ex Small (hairy leafcup); P; F; NONE; UF; HB-227
Solidago nemoralis Aiton (gray goldenrod); P; F; NONE; UF; HB-432
Solidago ulmifolia Muhl. ex Willd. var. *palmeri* Cronquist (Palmer's goldenrod); P; F; NONE; UF; HB-195
Symphotrichum lanceolatum (Willd.) G.L. Nesom (white panicle aster); P; F; NONE; UF; HB-436
Symphotrichum lateriflorum (L.) Á. Löve & D. Löve (calico aster); P; F; FAC; QPQNF; HB-215
Symphotrichum oolentangiense (Riddell) G.L. Nesom (skyblue aster); P; F; NONE; UF; HB-434
Symphotrichum patens (Aiton) G.L. Nesom var. *patens* (late purple aster); P; F; NONE; UF; HB-143
Verbesina virginica L. (white crownbeard); P; F; FACU; QPQNF; HB-140
Xanthium strumarium L. (spiny cocklebur); A; F; FAC; HWV; HB-134

Balsaminaceae

Impatiens capensis Meerb. (jewelweed); A; F; FACW; FPFA; HB-025

Berberidaceae

Podophyllum peltatum L. (May apple); P; F; FACU; UF, QPQNF; HB-284

Betulaceae

Betula nigra L. (river birch); P; T; FACW; HWV; HB-395

Bignoniaceae

Campsis radicans (L.) Seem. ex Bureau (trumpet creeper); P; V; FAC; FPFA; HB-391

Blechnaceae

Woodwardia areolata (L.) T. Moore (netted chainfern); P; F; OBL; DSHA; HB-210

Boraginaceae

Hackelia virginiana (L.) I.M. Johnst. (Virginia stickseed); P; F; FAC; QPQNF; HB-336
Myosotis macrosperma Engelm. (southern forget-me-knot); A; F; FAC; QPQNF; HB-089
Lithospermum caroliniense (Walter ex J.F. Gmel.) MacMill. (Carolina puccoon); P; F; NONE; UF; HB-316

Brassicaceae

**Capsella bursa-pastoris* (L.) Medik. (shepherdspurse); A; F; FACU; DA; HB-278

**Cardamine hirsuta* L. (hairy bittercress); A; F; FACU; DA; HB-099
Cardamine pensylvanica Muhl. ex Willd. (Pennsylvania bittercress); P; F; FACW; FPFA; HB-305
Rorippa palustris (L.) Besser (bog marshcress); A; F; OBL; FPFA; HB-296

Cactaceae

Opuntia humifusa (Raf.) Raf. (devil's tongue); P; S; NONE; UF; HB-107

Campanulaceae

Lobelia cardinalis L. (cardinalflower); P; F; FACW; HWV; HB-161
Triodanis perfoliata (L.) Nieuwl. ssp. *perfoliata* (clasping Venus' looking-glass); A; F; FACU; QPQNF, UF; HB-322

Cannabaceae

Celtis laevigata Willd. (sugarberry); P; T; FACW; FPFA; HB-343

Caprifoliaceae

**Lonicera japonica* Thunb. (Japanese honeysuckle); P; V; FACU; QPQNF, UF; HB-266
Symphoricarpos orbiculatus Moench (coralberry); P; S; FACU; QPQNF, UF; HB-148

Caryophyllaceae

**Cerastium glomeratum* Thuill. (sticky chickweed); A; F; FACU; DA; HB-090
 **Cerastium pumilum* W. Curtis (European chickweed); A; F; NONE; DA; HB-254
 **Stellaria media* (L.) Vill. (chickweed); A; F; FACU; DA; HB-098

Cistaceae

Lechea mucronata Raf. (hairy pinweed); P; F; NONE; UF; HB-371

Commelinaceae

Commelina erecta L. (erect dayflower); P; F; FACU; UF; HB-117
Commelina virginica L. (Virginia dayflower); P; F; FACW; QPQNF; HB-077
Tradescantia ohiensis Raf. (Ohio spiderwort); P; F; FAC; UF; HB-325

Convolvulaceae

Cuscuta obtusiflora Kunth (Peruvian dodder); P; F; NONE; UF; HB-235
Dichondra carolinensis Michx. (Carolina ponysfoot); P; F; FAC; QPQNF; HB-257
Ipomoea lacunosa L. (white morningglory); A; F; FAC; HWV; HB-127

Cornaceae

Cornus drummondii C.A. Mey. (roughleaf dogwood); P; T; FAC; QPQNF; HB-272
Cornus florida L. (flowering dogwood); P; T; FACU; UF; HB-282

Cucurbitaceae

Melothria pendula L. (Guadeloupe cucumber); P; F; FAC; DA; HB-031

Cupressaceae

Juniperus virginiana L. (eastern red cedar); P; T; FACU; QPQNF, UF; HB-225

Cyperaceae

- Carex albicans* Willd. ex Spreng. (whitetinge sedge); P; G; FAC; QPQNF, UF; HB-095
Carex aureolensis Steud. (goldenfruit sedge); P; G; NONE; FPFA; HB-063
Carex blanda Dewey (bland sedge); P; G; FAC; QPQNF; HB-357
Carex cephalophora Muhl. ex Willd. (ovalleaf sedge); P; G; FAC; QPQNF; HB-365
Carex cherokeensis Schwein. (Cherokee sedge); P; G; FACW; FPFA, QPQNF; HB-091
Carex crus-corvi Shuttlew. ex Kunze (ravenfoot sedge); P; G; OBL; FPFA; HB-051
Carex flaccosperma Dewey (thinfuit sedge); P; G; FACW; FPFA, QPQNF; HB-329
†*Carex gigantea* Rudge (giant sedge); P; G; OBL; FPFA; HB-385; S1G4
†*Carex hyalina* Boott (tissue sedge); P; G; FACW; FPFA; HB-334; S2G4
Carex leavenworthii Dewey (Leavenworth's sedge); P; G; NONE; QPQNF; HB-332
Carex louisianica L.H. Bailey (Louisiana sedge); P; G; OBL; FPFA; HB-338
Carex lupuliformis Sartwell ex Dewey (false hop sedge); P; G; OBL; FPFA; HB-123
Carex lurida Wahlenb. (shallow sedge); P; G; OBL; FPFA; HB-340
Carex muehlenbergii Schkuhr ex Willd. (Muhlenberg's sedge); P; G; NONE; QPQNF; HB-121
†*Carex oxylepis* Torr. & Hook. (sharpscale sedge); P; G; FACW; QPQNF; HB-328; S2G5?
Carex planispicata Naczi (flat-spiked sedge); P; G; NONE; QPQNF; HB-366
Carex retroflexa Muhl. ex Willd. (reflexed sedge); P; G; FACU; UF; HB-360
Carex texensis (Torr.) L.H. Bailey (Texas sedge); P; G; NONE; UF; HB-333
Carex tribuloides Wahlenb. (blunt broom sedge); P; G; FACW; FPFA; HB-331
†*Carex typhina* Michx. (cattail sedge); P; G; OBL; FPFA, QPQNF; HB-280; S1G5
Cyperus croceus Vahl (Baldwin's flatsedge); P; G; FAC; QPQNF; HB-004
Cyperus echinatus (L.) Alph. Wood (globe flatsedge); P; G; FAC; QPQNF, UF; HB-026
Cyperus erythrorhizos Muhl. (red-root flatsedge); A; G; OBL; FPFA, HWV; HB-219
†*Cyperus plukenetii* Fernald (Plukenet's flatsedge); P; G; NONE; UF; HB-240; S2G5
Cyperus pseudovegetus Steud. (marsh flatsedge); P; G; FACW; FPFA, HWV; HB-064
Cyperus retroflexus Buckley (oneflower flatsedge); P; G; NONE; UF; HB-369
Eleocharis lanceolata Fernald (daggerleaf spikerush); A; G; FACW; HWV; B-040
Eleocharis obtusa (Willd.) Schult. (blunt spikesedge); A; G; OBL; DSHA, HWV; HB-372
Isolepis carinata Hook. & Arn. ex Torr. (keeled bulrush); A; G; FACW; DA; HB-264
Rhynchospora corniculata (Lam.) A. Gray (shortbristle horned beaksedge); P; G; OBL; HWV; HB-011
Rhynchospora glomerata (L.) Vahl (clustered beaksedge); P; G; OBL; HWV; HB-379

Dryopteridaceae

- Polystichum acrostichoides* (Michx.) Schott (Christmas fern); P; F; FACU; UF; HB-093

Ebenaceae

- Diospyros virginiana* L. (eastern persimmon); P; T; FAC; FPFA, QPQNF; HB-182

Ericaceae

- Vaccinium arboreum* Marsh (farkleberry); P; S; FACU; UF; HB-018

Euphorbiaceae

- Acalypha gracilens* A. Gray (slender copperleaf); A; F; FAC; QPQNF; HB-416
Acalypha virginica L. (Virginia copperleaf); A; F; FACU; QPQNF, UF; HB-007
Cnidocolus texanus (Müll. Arg.) Small (bullnettle); P; F; NONE; UF; HB-273
Croton capitatus Michx. (wooly croton); A; F; NONE; DA; HB-212

Croton glandulosus L. (vente conmigo); A; F; NONE; DA; HB-211
Croton monanthogynus Michx. (prairie-tea); A; F; NONE; DA, UF; HB-181
Euphorbia cyathophora Murray (fire on the mountain); A; F; FACU; UF; HB-136
Euphorbia dentata Michx. (toothed spurge); A; F; NONE; DA, UF; HB-246

Fabaceae

**Albizia julibrissin* Durazz. (silktree); P; T; NONE; QPQNF; HB-158
Amphicarpaea bracteata (L.) Fernald (American hogpeanut); A; F; FAC; QPQNF; HB-150
Apios americana Medik. (groundnut); P; F; FACW; HWV; HB-409
Baptisia bracteata Muhl. ex Elliott (longbract wild indigo); P; F; NONE; UF; HB-285
Centrosema virginianum (L.) Benth. (spurred butterfly pea); P; F; NONE; UF; HB-410
Cercis canadensis L. (eastern redbud); P; T; UPL; UF; HB-200
Chamaecrista nictitans (L.) Moench (sensitive partridge pea); A; F; FACU; DA; HB-189
Clitoria mariana L. (Atlantic pigeonwings); P; F; FACU; UF; HB-019
Crotalaria sagittalis L. (arrowhead rattlebox); P; F; NONE; UF; HB-177
Desmodium ciliare (Muhl. ex Willd.) DC. (littleleaf tickclover); P; F; NONE; UF; HB-124
Desmodium glabellum (Michx.) DC. (Dillenius' ticktrefoil); P; F; NONE; UF; HB-429
Desmodium paniculatum (L.) DC. var. *paniculatum* (narrowleaf ticktrefoil); P; F; FACU; UF; HB-166
Desmodium perplexum B.G. Schub. (perplexed ticktrefoil); P; F; NONE; UF; HB-167
Desmodium viridiflorum (L.) (velvetleaf ticktrefoil); P; F; NONE; UF; HB-424
Galactia regularis (L.) Britton, Sterns & Poggenb. (eastern milkpea); P; F; NONE; UF; HB-337
Gleditsia triacanthos L. (honeylocust); P; T; FAC; QPQNF; HB-288
*Kummerowia striata (Thunb.) Schindl (Japanese clover); A; F; FACU; DA, UF; HB-249
**Lespedeza cuneata* (Dum. Cours.) G. Don (sericea lespedeza); P; F; FACU; DA, UF; HB-414
Lespedeza hirta (L.) Hornem. ssp. *hirta* (hairy lespedeza); P; F; NONE; UF; HB-439
Lespedeza repens (L.) W.P.C. Barton (creeping lespedeza); P; F; NONE; UF; HB-313
Lespedeza stuevei Nutt. (tall lespedeza); P; F; NONE; UF; HB-162
Lespedeza virginica (L.) Britton (slender lespedeza); P; F; NONE; UF; HB-223
†*Phaseolus polystachios* (L.) Britton, Sterns & Poggenb. (thicket bean); P; F; NONE; QPQNF; HB-437;
S1G5
Rhynchosia latifolia Nutt. ex Torr. & A. Gray (prairie snoutbean); P; F; NONE; UF; HB-013
Strophostyles helvola (L.) Elliott (amberique-bean); A; F; FAC; QPQNF; HB-152
Strophostyles umbellata (Muhl. ex Willd.) Britton (pink fuzzybean); P; F; FAC; QPQNF; HB-169
Stylosanthes biflora (L.) Britton, Sterns & Poggenb. (sidebeak pencilflower); P; F; NONE; UF; HB-082
Tephrosia virginiana (L.) Pers. (Virginia tephrosia); P; F; NONE; UF; HB-396
**Trifolium campestre* Schreb. (field clover); A; F; NONE; DA; HB-311
**Trifolium repens* L. (white clover); P; F; FACU; DA; HB-290
Vicia minutiflora D. Dietr. (smallflower vetch); A; F; FAC; DA; HB-306

Fagaceae

Quercus falcata Michx. (southern red oak); P; T; FACU; UF; HB-201
†*Quercus incana* W. Bartram (bluejack oak); P; T; NONE; UF; HB-XXX; S2G5
Quercus lyrata Walter (overcup oak); P; T; OBL; FPFA, QPQNF; HB-229
Quercus macrocarpa Michx. (bur oak); P; T; FACU; QPQNF, UF; HB-053
Quercus nigra L. (water oak); P; T; FAC; QPQNF; HB-149
Quercus phellos L. (willow oak); P; T; FACW; QPQNF; HB-028
Quercus stellata Wangenh (post oak); P; T; UPL; UF; HB-196

Quercus velutina Lam. (black oak); P; T; NONE; UF; HB-370

Gentianaceae

Sabatia angularis (L.) Pursh (squarestem rosegentian); A; F; FACW; DA; HB-389

Geraniaceae

Geranium carolinianum L. (Carolina geranium); A; F; NONE; DA; HB-320

Geranium texanum (Trel.) A. Heller (Texas geranium); A; F; NONE; DA; HB-253

Heliotropiaceae

**Heliotropium indicum* L. (India heliotrope); A; F; FAC; HWV, FPFA; HB-204

Hypericaceae

Hypericum gymnanthum Engelm. & A. Gray (claspingleaf St. Johnswort); P; F; FACW; HWV, FPFA; HB-208

Hypericum hypericoides (L.) Crantz (St. Andrew's cross); P; F; FAC; QPQNF, UF; HB-073

Hypericum punctatum Lam. (spotted St. Johnswort); P; F; FAC; QPQNF; HB-346

Iridaceae

Sisyrinchium angustifolium Mill. (blue-eyed grass); P; F; FACW; FPFA; HB-321

Juglandaceae

Carya cordiformis (Wangenh.) K. Koch (bitternut hickory); P; T; FAC; QPQNF, UF; HB-339

Carya ovata (Mill.) K. Koch (shagbark hickory); P; T; FACU; UF; HB-010

Carya texana Buckle (black hickory); P; T; NONE; UF; HB-381

Juglans nigra L. (black walnut); P; T; UPL; UF; HB-154

Juncaceae

Juncus bufonius L. (toad rush); A; G; FACW; DA; HB-260

Juncus coriaceus Mack. (leathery rush); P; G; FACW; FPFA; HB-015

Juncus diffusissimus Buckley (slimpod rush); P; G; FACW; FPFA; HB-045

Juncus effusus L. (common rush); P; G; OBL; DSHA, FPFA; HB-050

Juncus marginatus Rostk. (grassleaf rush); P; G; FACW; DSHA, FPFA; HB-033

Juncus scirpoides Lam. (needlepod rush); P; G; FACW; FPFA; HB-041

Juncus tenuis Willd. (field rush); P; G; FAC; QNQP, UF; HB-006

Juncus validus Coville (roundhead rush); P; G; FACW; FPFA; HB-380

Lamiaceae

Callicarpa americana L. (American beautyberry); P; S; FACU; UF; HB-060

Lycopus virginicus L. (Virginia bugleweed); P; F; OBL; FPFA; HB-130

Monarda punctata L. (spotted beebalm); A; F; FACU; UF; HB-070

Monarda russeliana Nutt. ex Sims (redpurple beebalm); P; F; NONE; UF; HB-292

**Perilla frutescens* (L.) Britton (beefsteak plant); A; F; FACU; QPQNF, UF; HB-205

†*Physostegia intermedia* (Nutt.) Engelm. & A. Gray (slender false dragonhead); P; F; FACW; FPFA; HB-295; S1G5

Prunella vulgaris L. (heal all); P; F; FAC; QPQNF; HB-393

Pycnanthemum albescens Torr. & A. Gray (whiteleaf mountainmint); P; F; FAC; UF; HB-080

Pycnanthemum tenuifolium Schrad. (narrowleaf mountainmint); P; F; FACW; UF; HB-438
Salvia lyrata L. (lyreleaf sage); P; F; FACU; QPQNF, UF; HB-283
 †*Scutellaria cardiophylla* Engelm. & A. Gray (gulf skullcap); A; F; FAC; UF; HB-017; S1G4?
Scutellaria lateriflora L. (mad dog skullcap); P; F; OBL; FPFA; HB-411
Stachys hispida Pursh (smooth hedgenettle); P; F; FACW; FPFA; HB-383
Teucrium canadense L. (Canada germander); P; F; FACW; DSHA, HWV; HB-024
Trichostema dichotomum L. (forked bluecurls); A; F; UPL; UF; HB-137

Lauraceae

Sassafras albidum (Nutt.) Nees (sassafras); P; T; FACU; UF; HB-344

Linderniaceae

Lindernia dubia (L.) Pennell (yellowseed false pimpernel); A; F; OBL; FPFA, HWV; HB-032

Lythraceae

Rotala ramosior (L.) Koehne (lowland toothcup); A; F; OBL; HWV; HB-047

Malvaceae

Sida spinosa L. (prickly sida); A; F; FACU; DA; HB-417

Melastomataceae

Rhexia mariana L. var. *interior* (Pennell) Kral & Bostick (Maryland meadowbeauty); P; F; NONE; DA;
 HB-129

Menispermaceae

Cocculus carolinus (L.) DC. (redberry moonseed); P; F; FAC; QPQNF; HB-390

Molluginaceae

**Glinus lotoides* L. (damascisa); A; F; FACW; HWV; HB-441
Mollugo verticillata L. (green carpetweed); A; F; FAC; DA, HWV; HB-207

Montiaceae

Claytonia virginica L. (springbeauty); P; F; FACU; QPQNF, UF; HB-101

Moraceae

Maclura pomifera (Raf.) C.K. Schneid. (osage orange); P; T; FACU; QPQNF, UF; HB-046
Morus rubra L. (red mulberry); P; T; FACU; QPQNF, UF; HB-374

Nyssaceae

Nyssa sylvatica Marshall (black gum); P; T; FAC; QPQNF; HB-058

Oleaceae

†*Forestiera acuminata* (Michx.) Poir. (swamp privet); P; S; OBL; FPFA; HB-256; S2G5
Fraxinus pennsylvanica Marsh. (green ash); P; T; FAC; FPFA; HB-054

Onagraceae

Ludwigia alternifolia L. (bushy seedbox); P; F; OBL; HWV; HB-180
Ludwigia decurrens (DC.) Walter (wingleaf waterprimrose); P; F; OBL; DSHA, HWV; HB-213

Ludwigia palustris (L.) Elliott (marsh seedbox); P; F; OBL; HWV; HB-128

Oenothera laciniata Hill (cut-leaved evening primrose); P; F; FACU; DA; HB-271

Onocleaceae

Onoclea sensibilis L. (sensitive fern); P; F; FACW; HWV; HB-131

Ophioglossaceae

Botrychium dissectum Spreng (cutleaf grapefern); P; F; FAC; QPQNF, UF; HB-234

Orchidaceae

†*Hexalectris spicata* (Walter) Barnhart (crested coralroot); P; F; FACU; UF; HB-398; S1G5

Orobanchaceae

Pedicularis canadensis L. (Canadian lousewort); P; F; FACU; UF; HB-397

Osmundaceae

Osmunda regalis L. (royal fern); P; F; NONE; DSHA; HB-061

Oxalidaceae

Oxalis dillenii Jacq. (Dillen's oxalis); P; F; FACU; DA, UF; HB-002

Oxalis violacea L. (violet woodsorrel); P; F; NONE; UF; HB-094

Papaveraceae

Corydalis micrantha (Engelm. ex A. Gray) A. Gray ssp. *australis* (Chapm.) G.B. Ownbey (smallflower fumewort); A; F; NONE; QPQNF; HB-087

Corydalis micrantha (Engelm. ex A. Gray) A. Gray ssp. *micrantha* (smallflower fumewort); A; F; NONE; QPQNF; HB-251

Passifloraceae

Passiflora incarnata L. (purple passionflower); P; F; NONE; QPQNF; HB-226

Penthoraceae

Penthorum sedoides L. (ditch stonecrop); P; F; OBL; FPFA, HWV; HB-072

Phrymaceae

Mimulus alatus Aiton (sharpwing monkeyflower); P; F; OBL; HWV; HB-214

Phryma leptostachya L. (American lopseed); P; F; FACU; UF; HB-062

Phyllanthaceae

Phyllanthus caroliniensis Walter (Carolina leafflower); A; F; FAC; HWV; HB-176

Pinaceae

Pinus echinata Mill. (shortleaf pine); P; T; NONE; UF; HB-387

Plantaginaceae

Gratiola virginiana L. (roundfruit hedgehyssop); A; F; OBL; HWV; HB-160

Penstemon arkansanus Pennell (Arkansas beardtongue); P; F; NONE; UF; HB-267

†*Penstemon murrayanus* Hook (scarlet beardtongue); P; F; NONE; UF; HB-274; S1G4

Plantago aristata Michx. (largebracted plantain); A; F; NONE; DA; HB-354
Plantago pusilla Nutt. (wooly Indian wheat); A; F; FACU; DA; HB-265
Plantago rugelii Decne. (blackseed plantain); P; F; FACU; QPQNF; HB-113
Veronica peregrina L. (purslane speedwell); A; F; FAC; DA; HB-261

Platanaceae

Platanus occidentalis L. (American sycamore); P; T; FACW; FPFA; HB-147

Poaceae

Agrostis perennans (Walter) Tuck (upland bentgrass); P; G; FACU; QPQNF; HB-440
 **Aira caryophyllea* L. (silvery hairgrass); A; G; FAC; DA, QPQNF; HB-309
Alopecurus carolinianus Walter (Carolina foxtail); A; G; FACW; FPFA; HB-281
Andropogon gerardii Vitman (big bluestem); P; G; FAC; UF; HB-427
Andropogon glomeratus (Walter) Britton, Sterns & Poggemb. (bushy bluestem); P; G; FACW; DSHA, HWV; HB-425
Andropogon ternarius Michx. (splitbeard bluestem); P; G; FACU; UF; HB-232
Andropogon virginicus L. (broomsedge bluestem); P; G; FAC; FPFA; HB-224
 †*Aristida lanosa* Muhl. ex Elliott (woolysheath threeawn); P; G; NONE; UF; HB-421; S1G5
Arundinaria gigantea (Walter) Muhl. (giant cane); P; G; FACW; FPFA; HB-228
 **Bromus catharticus* Vahl (rescuegrass); P; G; NONE; DA; HB-279
Bromus pubescens Muhl. ex Willd. (hairy woodland brome); P; G; FACU; UF; HB-307
Chasmanthium latifolium (Michx.) H.O. Yates (Indian woodoats); P; G; FAC; QPQNF; HB-027
Chasmanthium laxum (L.) H.O. Yates ssp. *laxum* (slender woodoats); P; G; FACW; QPQNF; HB-399
Chasmanthium laxum (L.) H.O. Yates ssp. *sessiliflorum* (Poir.) L.G. Clark (slender woodoats); P; G; FACW; QPQNF; HB-119
Cinna arundinacea L. (sweet woodreed); P; G; FACW; QPQNF; HB-230
Coleataenia anceps (Michx.) Sorong (beaked panicgrass); P; G; FAC; QPQNF, UF; HB-146
Coleataenia longifolia (Torr.) Sorong ssp. *rigidula* (Bosc ex Nees) Sorong (redtop panicgrass); P; G; FACU; QPQNF; HB-199
Dichantherium acuminatum (Sw.) Gould & C.A. Clark (tapered rosette grass); P; G; FAC; UF; HB-318
Dichantherium dichotomum (L.) Gould (cypress panicgrass); P; G; FAC; QPQNF; HB-034
Dichantherium laxiflorum (Lam.) Gould (openflower rosette grass); P; G; FAC; QPQNF; HB-402
Dichantherium ovale (Elliott) Gould & C.A. Clark (eggleaf rosette grass); P; G; FACU; UF; HB-068
Dichantherium polyanthes (Schult.) Mohlenbr. (roundseed panicgrass); P; G; NONE; FPFA; HB-009
Dichantherium ravenelii (Scribn. & Merr.) Gould (Ravenel's rosette grass); P; G; FACU; UF; HB-317
Dichantherium scoparium (Lam.) Gould (velvet panicum); P; G; FACW; DSHA, HWV; HB-111
Digitaria ciliaris (Retz.) Koeler (southern crabgrass); A; G; FACU; DA; HB-039
Echinochloa muricata (P. Beauv.) Fernald var. *microstachya* Wiegand (rough barnyard grass); A; G; FACW; HWV; HB-001
Echinochloa muricata (P. Beauv.) Fernald var. *muricata* (rough barnyard grass); A; G; FACW; HWV; HB-238
Elymus virginicus L. (Virginia wildrye); P; G; FAC; QPQNF; UF; HB-069
Eragrostis hirsuta (Michx.) Nees (bigtop lovegrass); P; G; FAC; UF; HB-405
Eragrostis intermedia Hitchc. (plains lovegrass); P; G; NONE; UF; HB-247
Eragrostis spectabilis (Pursh) Steud. (purple lovegrass); P; G; FACU; UF; HB-241
Eragrostis trichodes (Nutt.) Alph. Wood (sand lovegrass); P; G; NONE; UF; HB-170
Festuca paradoxa Desv. (clustered fescue); P; G; FAC; QPQNF; HB-308

Glyceria striata (Lam.) Hitchc. (fowl mannagrass); P; G; OBL; FPFA, HWV; HB-057
Gymnopogon ambiguus (Michx.) Britton, Sterns & Poggenb. (bearded skeletongrass); P; G; NONE; UF; HB-178
Hordeum pusillum Nutt. (little barley); A; G; FACU; DA; HB-297
Leersia oryzoides (L.) Sw. (rice cutgrass); P; G; OBL; FPFA, HWV; HB-250
Leersia virginica Willd. (white grass); P; G; FACW; FPFA; HB-023
**Lolium perenne* L. (perennial ryegrass); P; G; FACU; UF; HB-268
Muhlenbergia sobolifera (Muhl. ex Willd.) Trin. (rocky muhly); P; G; NONE; UF; HB-408
Panicum dichotomiflorum Michx (western witchgrass); A; G; FACW; FPFA, QPQNF; HB-216
†*Paspalum bifidum* (Bertol.) Nash (pitchfork crowngrass); P; G; FACW; FPFA; HB-400; S1G5
Paspalum notatum Alain ex Flüggé (Bahia grass); P; G; FACU; DA; HB-248
Paspalum repens P.J. Bergius (horsetail paspalum); A; G; OBL; HWV; HB-418
Paspalum setaceum Michx. var. *setaceum* (thin paspalum); P; G; FAC; UF; HB-003
**Poa annua* L. (annual bluegrass); A; G; FACU; DA, UF; HB-106
Poa sylvestris A. Gray (woodland bluegrass); P; G; FACW; FPFA; HB-335
†*Sacciolepis striata* (L.) Nash (American cupscale); P; G; OBL; FPFA, HWV; HB-056; S2G5
†*Sorghastrum elliottii* (C. Mohr) Nash (slender Indiangrass); P; G; NONE; UF; HB-426; S1G5
Sphenopholis intermedia (Rydb.) Rydb. (slender wedgescale); P; G; FAC; QPQNF; HB-362
Sphenopholis obtusata (Michx.) Scribn. (prairie wedgescale); P; G; FAC; QPQNF; HB-312
Tridens flavus (L.) Hitchc. (purpletop); P; G; FACU; UF; HB-081
Vulpia octoflora (Walter) Rydb. (pullout grass); A; G; FACU; DA, UF; HB-299

Polygalaceae

Polygala verticillata L. (whorled milkwort); A; F; UPL; UF; HB-021

Polygonaceae

Fallopia scandens (L.) Holub (climbing false buckwheat); P; F; NONE; QPQNF; HB-419
Persicaria hydropiperoides (Michx.) Small (swamp smartweed); P; F; OBL; DSHA, FPFA; HB-220
Persicaria lapathifolia (L.) Gray (curlytop knotweed); A; F; FACW; FPFA; HB-428
Persicaria pensylvanica (L.) M. Gómez (Pennsylvania smartweed); A; F; FACW; FPFA; HB-403
Persicaria punctata (Elliott) Small (dotted smartweed); A; F; OBL; FPFA, HWV; HB-042
Persicaria sagittata (L.) H. Gross (arrowleaf tearthumb); A; F; OBL; DSHA; HB-345
Persicaria virginiana (L.) Gaertn. (jumpseed); P; F; FAC; QPQNF; HB-078
Polygonum ramosissimum Michx. (bushy knotweed); A; F; FACU; DA; HB-126
**Rumex conglomeratus* Murray (sharpwing dock); P; F; FACW; QPQNF; HB-110
**Rumex crispus* L. (curly dock); P; F; FAC; QPQNF; HB-323
Rumex hastatulus Baldwin (heartwing dock); P; F; FACU; DA; HB-263

Polypodiaceae

Pleopeltis polypodioides (L.) E.G. Andrews & Windham (resurrection fern); P; F; FAC; UF; HB-433

Primulaceae

†*Hottonia inflata* Elliott (American featherfoil); A; F; OBL; FPFA; HB-342; S2G4
Samolus valerandi L. (seaside brookweed); P; F; OBL; FPFA, HWV; HB-294

Ranunculaceae

Myosurus minimus L. (tiny mousetail); A; F; FACW; QPQNF; HB-289
Ranunculus abortivus L. (littleleaf buttercup); P; F; FACW; HWV, QPQNF; HB-038

Rhamnaceae

Berchemia scandens (Hill) K. Koch (Alabama supplejack); P; V; FAC; FPFA, QPQNF; HB-165
Rhamnus caroliniana Walter (Carolina buckthorn); P; T; FACU; UF; HB-155

Roaceae

Geum canadense Jacq. (white avens); P; F; FAC; QPQNF; HB-112
Agrimonia rostellata Wallr. (woodland groovebur); P; F; FAC; QPQNF; HB-420
Crataegus spathulata Michx (littlehip hawthorn); P; S; FAC; QPQNF; HB-356
Crataegus viridis L. (green hawthorn); P; S; FACW; UF; HB-326
 **Duchesnea indica* (Andrews) Focke (Indian strawberry); P; F; FACU; QPQNF; HB-156
Prunus mexicana S. Watson (Mexican plum); P; T; NONE; UF; HB-104
Rosa setigera Michx. (climbing rose); P; S; FACU; UF; HB-435
Rubus argutus Link (prickly Florida blackberry); P; S; FAC; FPFA, QPQNF; HB-293
Rubus trivialis Michx. (southern dewberry); P; S; FACU; QPQNF, UF; HB-363

Rubiaceae

Cephalanthus occidentalis L. (common buttonbush); P; S; OBL; FPFA, HWV; HB-413
Diodella teres (Walter) Small (poor joe); A; F; NONE; DA, UF; HB-141
Diodia virginiana L. (Virginia buttonweed); P; F; FACW; HWV; HB-071
Galium aparine L. (bedstraw); A; F; FACU; DA; HB-287
Galium circaezans Michx. (licorice bedstraw); P; F; FACU; QPQNF, UF; HB-116
Galium pilosum Aiton (hairy bedstraw); P; F; NONE; UF; HB-115
Houstonia pusilla Schoepf (tiny bluet); A; F; FACU; DA; HB-097

Rutaceae

Zanthoxylum clava-herculis L. (Hercules-club); P; T; FAC; UF, QPQNF; HB-067

Salicaceae

Salix nigra Marshall (black willow); P; T; OBL; FPFA; HB-239

Sapindaceae

Acer negundo L. (boxelder); P; T; FAC; FPFA, QPQNF; HB-351
Acer saccharinum L. (silver maple); P; T; FAC; FPFA, QPQNF; HB-349
 **Cardiospermum halicacabum* L. (balloonvine); A; F; FAC; HWV; HB-132

Sapotaceae

Sideroxylon lanuginosum Michx. (gum bully); P; T; FACU; UF; HB-187

Scrophulariaceae

Scrophularia marilandica L. (carpenter's square); P; F; FAC; QPQNF; HB-401
 **Verbascum thapsus* L. (wooly mullein); B; F; FACU; DA; HB-012

Smilacaceae

Smilax bona-nox L. (saw greenbrier); P; V; FAC; DA, QPQNF; HB-386
Smilax glauca Walter (sawbrier); P; V; FAC; QPQNF; HB-048
Smilax rotundifolia L. (roundleaf greenbrier); P; V; FAC; QPQNF; HB-151

Solanaceae

- Physalis heterophylla* Nees (clammy groundcherry); P; F; NONE; UF; HB-384
Physalis virginiana Mill. (Virginia groundcherry); P; F; NONE; UF; HB-005
Solanum carolinense L. (Carolina horsenettle); P; F; FACU; UF; HB-314
Solanum ptychanthum Dunal (West Indian nightshade); A; F; FACU; QPQNF; HB-055

Tetrachondraceae

- Polypremum procumbens* L. (juniper-leaf); A; F; FACU; DA; HB-030

Ulmaceae

- †*Planera aquatica* J.F. Gmel. (waterelm); P; T; OBL; FPFA; HB-350; S2G5
Ulmus alata Michx. (winged elm); P; T; FACU; UF; HB-175
Ulmus crassifolia Nutt. (cedar elm); P; T; FAC; QPQNF; HB-222
Ulmus rubra Muhl. (slippery elm); P; T; FAC; QPQNF; HB-185

Urticaceae

- Boehmeria cylindrica* (L.) Sw. (small-spike false nettle); P; F; FACW; DSHA, FPFA; HB-190
Parietaria pensylvanica Muhl. ex Willd. (Pennsylvania pellitory); A; F; FAC; QPQNF; HB-022
Pilea pumila (L.) A. Gray (Canada clearweed); A; F; FACW; FPFA; HB-412
†*Urtica chamaedryoides* Pursh (heartleaf nettle); A; F; FAC; FPFA; HB-085; S3G4G5

Valerianaceae

- Valerianella radiata* (L.) Dufr. (beaked cornsalad); A; F; FAC; DA; HB-277

Verbenaceae

- Glandularia canadensis* (L.) Nutt. (rose mock vervain); P; F; NONE; UF; HB-105
Phyla lanceolata (Michx.) Greene (lanceleaf frogfruit); P; F; OBL; HWV; HB-035
Verbena halei Small (slender verbena); P; F; NONE; DA; HB-310
Verbena urticifolia L. (white verbena); P; F; FAC; FPFA, QPQNF; HB-044

Violaceae

- Viola bicolor* Pursh (field pansy); A; F; FAC; DA; HB-100
Viola pubescens Aiton (downy yellow violet); P; F; FACU; QPQNF; HB-086
Viola sagittata Aiton (arrow-leaved violet); P; F; FACW; FPFA, QPQNF; HB-258
Viola sororia Willd. (common blue violet); P; F; FAC; QPQNF; HB-092

Vitaceae

- Ampelopsis arborea* (L.) Koehne (peppervine); P; V; FAC; QPQNF, UF; HB-074
Ampelopsis cordata Michx. (heartleaf peppervine); P; V; FAC; QPQNF; HB-197
Parthenocissus quinquefolia (L.) Planch. (Virginia creeper); P; V; FACU; QPQNF, UF; HB-347
Vitis palmata Vahl (catbird grape); P; V; FACW; FPFA; HB-376
Vitis riparia Michx. (riverbank grape); P; V; FACW; FPFA; HB-194
Vitis rotundifolia Michx. (muscadine); P; V; FAC; QPQNF; HB-348

Woodsiaceae

- Woodsia obtusa* (Spreng.) Torr. (bluntlobe cliff fern); P; F; NONE; UF; HB-059