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The Flora of Manassas National Battlefield Park, Prince William and Fairfax Counties, Virginia

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ABSTRACT

Manassas National Battlefield Park (MNBP) is a 1,179 ha National Park Service Unit located 42 km west of Washington, DC. A total of 706 plant species and subspecific taxa are reported from the park for the 1993-2000 period. These include 53 new Prince William County, Virginia, records and six state-rare taxa. Ten habitat types are described for MNBP, and the habitats where each taxon was observed are listed.

Key words: flora, Manassas National Battlefield Park, Prince William County.

INTRODUCTION

Manassas National Battlefield Park (MNBP) is a National Historical Park of 1,779 ha located on the site of two important Civil War conflicts. It has a long history of agricultural use that is reflected in the current vegetation cover. Presently, 839 ha are covered by forests that vary in character from early successional *Pinus virginiana* (Virginia pine) stands to relatively mature oak-hickory and bottomland hardwood forests. The remaining 940 ha, excluding roadways and buildings, are occupied by fields and disturbed areas covered by herbaceous and shrubland vegetation.

This flora is a product of work done by the Virginia Department of Conservation and Recreation's Division of Natural Heritage (DCR-DNH) at MNBP from 1993 to 2000. In 1993, the National Park Service (NPS) contracted DCR-DNH to conduct a rare species survey of two recently acquired properties (Stuarts Hill and Brawner Farm) at the western end of the Park (Fleming, 1993). In 1997, DCR-DNH conducted a similar inventory for rare species and significant natural communities within MNBP lands along a 0.4 km corridor adjacent to Bull Run and at all habitats underlain by diabase and metasiltstone within the Park (Belden et al., 1998). In 2000, the NPS contracted DCR-DNH to produce a vascular plant species list for the entire Park (Belden & Fleming, 2001). Concurrently, DCR-DNH ecologist Gary Fleming collected plot data from various vegetation types in the Park as part of an ongoing effort to classify natural communities throughout Virginia. During the period 2001-2003, DCR-DNH was contracted to map the Park's forested ecological communities (Fleming & Weber, 2003). These projects afforded the authors the opportunity to collect and/or record taxa observed within MNBP over an extended period.

STUDY AREA

MNBP is located in the Piedmont physiographic province (Fennemann, 1938), approximately 4 km northwest of Manassas City, Virginia, and 42 km west of Washington, DC. Most of the Park is in eastern Prince William County, Virginia, with a very small portion extending into Fairfax County. The study area is situated in the Culpeper Basin, a large Mesozoic trough that stretches across the central Piedmont from Culpeper County north through Fauquier, Prince William, and Loudoun counties into Maryland (Lee, 1979). The Culpeper Basin is a distinctive regional landscape with relatively low relief and gently rolling to nearly level topography. The study area is very representative of the region, with broad, low ridges, extensive upland "flats," and shallow, sluggish drainageways.

Streams within MNBP are part of the Occoquan River watershed. Bull Run, one of the largest secondary streams of the region, borders much of the eastern edge of the Park. The watershed of Youngs Branch, a major Bull Run tributary, drains most of the study area. Well-developed floodplain landforms, including depositional bars, levees, and backswamps, occur only along Bull Run. Floodplains along Youngs Branch and several of its larger tributaries are much smaller and lack the microtopographic diversity of large-stream and river floodplains. Headwater drainages throughout the study area are characterized by very small, sometimes braided channels with little alluvial deposition, and are flanked by flats with ephemeral or seasonal flooding controlled by fluctuating groundwater. Similar but isolated, groundwater-influenced depressions are also scattered through the Park.

MNBP is underlain by sedimentary, meta-sedimentary, and igneous rocks of Triassic and Jurassic age. Siltstone of the Ball's Bluff Formation is the most extensive bedrock type in the area. This material is a red to purplish-brown, iron-rich, micaceous siltstone with thin to medium bedding that tends to produce platy to slab-like fragments when weathered. Calcium is abundant in concretions, veins, and cement. Minor interbeds of red silty shale and arkosic sandstone are also present. This formation constitutes the parent material of almost all soils in the eastern half of the study area (Lee, 1977; Leavy et al., 1983).

The western half of the Park contains substantial areas underlain by intrusive diabase, which occurs in irregular dikes, stocks, and sills. This diabase is a dense, medium-grained, dark-gray to black, mafic igneous rock composed primarily of feldspar and pyroxene (Lee, 1979). This bedrock is well expressed in a narrow dike that originates near Wellington to the south of MNBP and extends northward through the Park, passing west of Groveton and ending just southeast of Sudley. Other diabase intrusions are located in the vicinity of Stuarts Hill, south of Battery Heights, and on the ridge east of Brawner Farm (Leavy et al., 1983). Elder (1989) indicates that soils derived from diabase are also located in the vicinity of Bald Hill. Thick, residual soils cover most diabase intrusions but often contain spheroidally weathered boulders at the surface.

Thermally metamorphosed sedimentary rocks surround the diabase intrusive bodies (Lee, 1979). Bands of these rocks are generally less than 0.5 km wide within the Park and often much narrower. They are composed of red-brown siltstone and shale hornfels that have been altered under intense heat and pressure. Metamorphic minerals such as epidote, cordierite, pyroxene, and garnet are common along joints or fractures (Leavy et al., 1983).

The two major geologic units of MNBP (siltstone and diabase) greatly influence soil development, texture, and chemistry. In general, soils weathered from diabase are loamy, rich in clay minerals, and tend to have well developed subsoil hardpans that limit permeability. They also have significantly higher pH, calcium, magnesium, and manganese concentrations, along with significantly lower iron concentrations, than soils weathered from siltstone. Although a few of the latter have moderately clayey subsoils, most have silty upper horizons and loamy subsoils with good drainage. Most (but not all) residual upland soils weathered from siltstone are strongly to extremely acidic, with relatively low base cation concentrations (except of iron). However, below the limit of surface leaching, calcareous soil material may be abundant and is frequently exposed on steep slopes and bluffs undercut by streams.

Elder (1989) indicates that approximately 79% of the soils in the Park are derived from siltstone or metasiltstone, with the remainder weathered from diabase (19%) or alluvium (2%). The most common soil types in the study area, covering more than 40% of the Park, belong to the Arcola and Nestoria series. Often occurring in mosaics that are too difficult to map as individual units, these soils are moderately deep to shallow, well-drained silt loams with gravelly silt loam subsoils.

The natural vegetation of the study area was broadly described by Braun (1950) as belonging to the Piedmont Section of the Oak-Chestnut Forest Region. Centered in the Appalachian Mountains, this vegetation unit was formerly characterized by various mixtures of *Quercus* spp. (oaks) and *Castanea dentata* (American chestnut), with small inclusions of *Pinus* spp. (pines) on xeric ridges and mixed mesophytic forest in coves, ravines, and stream bottoms. Following the removal of American chestnut as an overstory tree by an introduced fungal blight (*Cryphonectria parasitica*) during the early decades of the 20th century, this region is now broadly characterized as mixed oak forest (Stephenson et al., 1993) or oak-hickory-pine forest (Küchler, 1985).

It is worth noting that because of its low relief and distinctive soils, the original vegetation of the Culpeper Basin was probably dissimilar to most other parts of the Oak-Chestnut Forest Region. There is little evidence that chestnut was important in the Basin, and the general vegetation of the area may have been closer to Braun's (1950) more western Oak-Hickory Forest Region. In addition, the relatively flat, poorly drained soils of the Basin have always supported unique communities with an abundance of *Quercus palustris*

(pin oak), *Quercus bicolor* (swamp white oak), and other species that are decidedly less common in other physiographic subregions of the Piedmont. Braun (1950), in fact, notes that moist flats on the "Piedmont Lowland" of Virginia are "quite different, with pin oak, red maple, willow oak, swamp white oak, and sweet gum."

Many of the rare plant species found at MNBP have affinities with prairie vegetation west of the Appalachians. Accounts of early explorers and settlers indicate that the Culpeper Basin originally had extensive natural savannas and grasslands, which might explain the presence of these disjunct or peripheral species (Allard & Leonard, 1962; Brown, 2000). These prairie-like habitats probably remained open over the long term because of frequent fires, both natural and deliberately set by Native Americans, that traveled unobstructed across the gentle terrain of the Basin (Maxwell, 1910; Van Lear & Waldrop, 1989). Plastic hardpan soils, weathered from diabase and locally known as "Jackland" because of the abundance of *Quercus marilandica* (blackjack oak) on them, were probably the most favorable for development of these grassland openings.

The study area and most other parts of the Culpeper Basin have been settled for almost three centuries. In the post-settlement era, the original grasslands were destroyed by extensive clearing and agriculture, widespread fire suppression, and repeated cutting, which has resulted in dense secondary forests. Old fields undergoing secondary succession in this area are generally characterized by stands of *Pinus virginiana* (Virginia Pine), *Juniperus virginiana* (eastern red cedar), *Cornus florida* (flowering dogwood), and fast-growing hardwoods such as *Fraxinus americana* (white ash) and *Liriodendron tulipifera* (tulip-poplar).

The mosaic of agricultural fields and secondary forests at MNBP has shifted considerably since the Civil War. A number of sites that were cleared at the time of the Civil War battles are now reforested, and other historically forested sites have since been cleared (National Park Service, unpublished data). Other areas, including parts of Stuarts Hill, Bald Hill, the ridges east of Brawner Farm and south of Battery Heights, and the ridge north of Groveton, have been continuously forested (although cut) since the time of the Civil War.

In recent years, large portions of the Culpeper Basin in Fairfax, Loudoun, Prince William, and Fauquier counties have been subjected to intense development pressure as growth of the Washington, DC, area has expanded westward. As a result, many of the region's finest natural areas have been destroyed or threatened. Increasingly, MNBP is becoming a natural area oasis as development spreads from nearby Manassas.

METHODS

This flora was developed through informal plant collecting at MNBP in 1993 and 1997 and from systematic collecting and observations during the 2000 field season. In 1993 and 1997, plants were collected on an informal basis in conjunction with rare species surveys at the Park. The focus of these collections was on rare and unusual taxa and on taxa not previously documented for Prince William County as determined by Harvill et al. (1992).

In 2000, DCR-DNH was contracted to develop a flora for the Park. To initiate this project, field notes and specimen records were reviewed from DCR-DNH fieldwork at MNBP prior to 2000. From these records, a preliminary species list was developed. Fieldwork for this project was conducted by the authors between 17 April and 7 September 2000. Monthly visits were made to MNBP to ensure that species visible at different times during the growing season would be recorded. Areas visited were chosen to represent a wide variety of habitat types and geographic locations.

The flora was inventoried using two methods: (1) walking across environmental gradients and thoroughly exploring discrete, productive habitats; and (2) intensive sampling of 28 vegetation plots. In addition to aiding in the characterization of habitats, plot sampling requires a full inventory of flora within the plot area and therefore often captures taxa that may be overlooked during walking surveys. Plots were sampled using the relevé method (Peet et al., 1998), with 400 m^2 plots established in forest vegetation and 100 m^2 plots in grasslands. Within each plot, all vascular plants were recorded, and the total cover of each taxon was estimated as a vertical projection onto the plot area. In addition, the cover of woody species was estimated in six vertical height strata, and the diameters of all woody stems $\geq$2.5 cm in diameter at breast height were measured. A standard set of environmental data, including slope, slope shape, aspect, surface substrate cover, topographic position, drainage class, and soil moisture regime, were measured or estimated. In addition, a small soil sample was collected from the A horizon of each plot and analyzed for pH, phosphorus, exchangeable cations, and extractable micronutrients by Brookside Laboratories, New Knoxville, Ohio. A preliminary cluster analysis of the compositional data provided a basis for identifying the principal habitat types used in this study.

Species that could not be readily identified in the field were collected and identified later using standard floras for the area, including Fernald (1950), Radford et al. (1968), and Gleason & Cronquist (1991). A draft flora in progress (Weakley, 2000) was consulted for

more recent treatments. Plant specimens that represented new county records and other noteworthy specimens were pressed, labeled and deposited in the DCR-DNH plant reference collection or at one of the following herbaria: Virginia Polytechnic Institute and State University (VPI), George Mason University (GMUF), and The College of William and Mary (WILLI). T. F. Wieboldt (VPI) assisted in identifying several specimens.

Habitat data were collected in the field and compiled for each taxon collected or observed. Ten habitat types were designated for MNBP and the habitats where each taxon was observed were recorded. Habitat types are defined as follows:

1. Upland Acidic Forest. This habitat type includes relatively mature forests on very strongly to extremely acidic, infertile soils weathered from siltstone. It covers about 6% of the Park, mostly on low ridges and rolling to flat uplands. The dry forest vegetation is typically dominated by *Quercus alba* (white oak), with other *Quercus* spp. (oaks) and *Carya* spp. (hickories) as frequent overstory associates. *Acer rubrum* (red maple), *Nyssa sylvatica* (black gum), *Cornus florida* (flowering dogwood), and *Sassafras albidum* (sassafras) are common understory species, while the low ericaceous shrubs *Vaccinium pallidum* (early lowbush blueberry), *V. stamineum* (deerberry), and *Gaylussacia baccata* (black huckleberry) are patch-dominants of the shrub layer. A small area of the habitat type is dominated by a mixed forest of *Quercus* spp., *Pinus strobus* (eastern white pine), *Tsuga canadensis* (eastern hemlock), and ericaceous shrubs. Herbaceous diversity is relatively low in this habitat.

2. Upland Basic Forest. This habitat type includes relatively mature forests on more fertile soils weathered from diabase or calcareous phases of siltstone. It covers about 13% of the Park on low ridges, rolling or flat uplands, and steep bluffs along Bull Run. Vegetation is primarily a dry-mesic oak-hickory forest dominated by *Quercus alba*, *Q. rubra* (red oak), *Carya glabra* (pignut hickory), *C. ovalis* (red hickory), and *Fraxinus americana* (white ash). *Carya alba* (mockernut hickory), *Juglans nigra* (black walnut), and *Quercus velutina* (black oak) are frequent overstory associates. Dominant or characteristic understory species include *Cercis canadensis* (eastern redbud), *Ulmus rubra* (slippery elm), *Chionanthus virginicus* (fringetree), *Ostrya virginiana* (eastern hop-hornbeam), and *Juniperus virginiana* (eastern redcedar). The herb layer is open but very diverse and characterized by patch-dominance of the forest grasses *Dichanthelium boscii* (Bosc's panic grass), *Elymus hystrix* var. *hystrix* (bottlebrush grass), and *Muhlenbergia sobolifera* (cliff muhly). A small area of this habitat type occupies a steep, east-facing bluff along Bull Run and contains more mesophytic vegetation dominated by *Carya cordiformis* (bitternut hickory), *Quercus muehlenbergii* (chinkapin oak), *Fraxinus americana*, *Asimina triloba* (pawpaw), and *Staphylea trifolia* (bladdernut).

3. Swamp Forest. This unit covers < 1% of the Park and is restricted to seasonally flooded backswamps along Bull Run. Vegetation is a hydrophytic forest dominated by *Quercus palustris* (pin oak), *Quercus bicolor* (swamp white oak), and *Fraxinus pennsylvanica* (green ash). The habitat has a pronounced hummock-and-hollow microtopography, with water-tolerant herbs such as *Saururus cernuus* (lizard's tail) and *Boehmeria cylindrica* (false nettle) dominant in the seasonally flooded sloughs and hollows. A large variety of *Carex* spp. (sedges) occupies the slightly better drained hummocks.

4. Alluvial Forest. Forested alluvial floodplains cover about 5% of the Park, primarily along Bull Run, Youngs Branch, and a few of their largest tributaries. These forests are well developed on the high, fertile, sandy levees along Bull Run. *Acer negundo* (boxelder), *Platanus occidentalis* (sycamore), *Carya cordiformis*, *Celtis occidentalis* (sugarberry), and *Ulmus americana* (American elm) are typical trees of stands that have not been disturbed recently. The understory is dominated by *Asimina triloba* and *Lindera benzoin* (spicebush). The herb layer is lush with nutrient-demanding species such as *Mertensia virginica* (Virginia bluebells), *Asarum canadense* (wild ginger), *Floerkea proserpinacoides* (false mermaid-weed), and *Laportea canadensis* (wood nettle). Along Youngs Branch and other smaller streams, floodplains are smaller and more disturbed, supporting less diverse vegetation.

5. Upland Depression Swamp. This habitat type occupies <1% of the Park in isolated upland depressions and elongate areas along sluggish headwater drainages. Sites are shallowly flooded by perched groundwater during winter and spring months. Woody vegetation is similar to that of the Swamp Forest habitat type, with *Quercus palustris* and *Q. bicolor* prevalent. The lower woody layers are dominated by *Viburnum prunifolium* (smooth black-haw) and climbing or scrambling vines of *Toxicodendron radicans* (poison ivy), *Parthenocissus quinquefolia* (Virginia creeper), and *Smilax rotundifolia* (common greenbrier). The herbaceous flora is typically rather sparse and characterized by species tolerant of seasonal inundation and extended draw-down periods

during which soils may become quite dry.

6. Successional Scrub and Forest. Extensive areas of the Park are covered with early-successional forests. The most common of these, covering more than 19% of the Park, is a vegetation type dominated by *Pinus virginiana* (Virginia pine) and/or *Juniperus virginiana* that colonized fields abandoned during the past 70 years. Additional areas of this habitat type support young, weedy, basic forests dominated by *Fraxinus americana* and *Pinus virginiana*. A number of floodplains were once cleared and now support nearly monospecific stands of *Acer negundo* or *Platanus occidentalis*. The herbaceous flora of early-successional scrub and forest habitats varies widely with site conditions and land-use history, but generally contains large populations of invasive exotic weeds.

7. Upland Grassland. Periodically mowed fields occupy substantial areas of the Park. An irregular, long-term mowing regime has resulted in herbaceous vegetation dominated by the warm-season perennial grasses *Sorghastrum nutans* (Indian grass) and *Schizachyrium scoparium* (little bluestem). Characteristic forb associates in these prairie-like habitats include *Pycnanthemum tenuifolium* (narrow-leaved mountain-mint), *Solidago juncea* (early goldenrod), *S. nemoralis* (gray goldenrod), *Liatris squarrosa* (scaly blazing-star), *Lespedeza capitata* (round-head bushclover), *L. virginica* (slender bushclover), and *Desmodium* spp. (tick-trefoils).

8. Open Wetlands. This category includes an eclectic group of small-patch habitats, including several "marshes" resulting from drainages impounded by roads, artificial ponds and pond shores, stream-bottom swales in fields and powerlines, and irregularly exposed bars and shores along Bull Run. Although very limited in extent, these habitats contain a number of hydrophytic species that were not recorded elsewhere in the Park.

9. Open Ruderal Habitats. This unit includes weedy fields dominated by cool-season grasses, roadsides, lawns, parking lot cracks, and recently bulldozed areas. Vegetation of these areas is generally dominated by exotics and weedy natives.

10. Rock Outcrops. Outcrops are represented in the study area by siltstone cliffs and ledges along Bull Run and by a few small, metasiltstone "flatrocks" in fields. Siltstone outcrops are generally shaded and calcareous, with crevices and ledges supporting base-loving lithophytes such as *Hydrangea arborescens* (wild hydrangea), *Asplenium trichomanes* (maidenhair spleenwort), *Asplenium rhizophyllum* (walking fern), *Aquilegia canadensis* (wild columbine), and *Arabis lyrata* (lyre-leaf rockcress). Flatrocks generally support a sparse vegetation of xerophytic annuals such as *Diodia teres* (buttonweed), *Krigia virginica* (dwarf dandelion), and *Isanthus brachiatus* (false pennyroyal).

RESULTS

A total of 706 plant species and subspecific taxa was recorded for MNBP. These are listed in Table 1 and include 16 pteridophytes, 4 gymnosperms, 501 dicot angiosperms, and 185 monocot angiosperms. The taxa are contained within 111 plant families and 362 genera. Three families, the Asteraceae (90 taxa), the Poaceae (81 taxa), and the Cyperaceae (60 taxa) comprise 32.7 percent of the flora. *Carex* is by far the largest genus with 47 taxa. The 128 non-native taxa represent 18.1 percent of the flora. Fifty-three new Prince William County records were collected.

Six taxa documented for MNBP are considered rare in Virginia by DCR-DNH (Townsend, 2002). These are *Asclepias purpurascens* (purple milkweed), *Buchnera americana* (blue-hearts), *Isoetes appalachiana* (Appalachian quillwort), *Penstemon hirsutus* (hairy beardtongue), *Stachys pilosa* var. *arenicola* (marsh hedgenettle), and *Trifolium reflexum* (buffalo clover). None of these taxa is considered rare on a global basis. In addition, seven taxa considered by DCR-DNH to be uncommon in Virginia were recorded: *Carex bushii* (Bush's sedge), *Carex meadii* (Mead's sedge), *Erigenia bulbosa* (harbinger-of-spring), *Floerkea proserpinacoides* (false mermaid-weed), *Iris versicolor* (blueflag), *Juglans cinerea* (butternut), and *Zanthoxylum americanum* (northern prickly-ash).

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Table l. Flora of Manassas National Battlefield Park. The list is arranged by major plant groups: Pteridophyta (ferns and fern allies), Gymnospermae (non-flowering seed plants), and Angiospermae (flowering plants). The Angiospermae are further divided into the Dicotyledoneae and the Monocotyledoneae. Within each major group, families, genera, species, and subtaxa are arranged alphabetically. Scientific nomenclature follows Kartesz (1999) with the exception of *Setaria pumila* (Poir.) Roemer & J.A. Schultes ssp. *pumila*, where it appears that the Kartesz name, *Pennisetum glaucum* (L.) R. Br., is in error (A. Weakley, pers. comm.). Synonyms, shown following an equal sign (=), are provided for some taxa where Kartesz (1999) departs sharply from other familiar sources. Non-native taxa, as determined from a consensus of the standard regional floras, are preceded by an asterisk (*). Common names follow Kartesz (1999) or other standard floras. The habitat(s) where each taxon was observed are shown in a coded format as follows: 1 = Upland Acidic Forest, 2 = Upland Basic Forest, 3 = Swamp Forest, 4 = Alluvial Forest, 5 = Upland Depression Swamp, 6 = Successional Scrub and Forest, 7 = Upland Grassland, 8 = Open Wetlands, 9 = Open Ruderal Habitats, 10 = Rock Outcrops. The last column indicates those species for which a voucher specimen was collected (V) and which of those vouchers were Prince William County records (C).

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
PTERIDOPHYTA			
ASPENIACEAE			
Asplenium platyneuron (L.) B.S.P.	ebony spleenwort	1,2,5,6,10	
Asplenium rhizophyllum L.	walking fern	10	
Asplenium trichomanes L.	maidenhair spleenwort	10	
DENNSTAEDTIACEAE			
Pteridium aquilinum (L.) Kuhn var. *latiusculum* (Desv.) Underwood ex Heller	bracken fern	1	
DRYOPTERIDACEAE			
Cystopteris protrusa (Weatherby) Blasdell	lowland brittle fern	2,4	
Dryopteris intermedia (Muhl. ex Willd.) Gray	evergreen wood-fern	1	
Dryopteris marginalis (L.) Gray	marginal wood-fern	2,10	
Onoclea sensibilis L.	sensitive fern	3,4,5,6,8	
Polystichum acrostichoides (Michx.) Schott	Christmas fern	1,2	
ISOETACEAE			
Isoetes appalachiana D.F. Brunton & D.M. Britton = *Isoetes engelmannii* A. Braun var. *georgiana* Engelm.	Appalachian quillwort	5	V,C
LYCOPODIACEAE			
Lycopodium digitatum Dill. ex A. Braun	common running pine	6	
OPHIOGLOSSACEAE			
Botrychium dissectum Spreng.	cutleaf grape-fern	6	
Botrychium virginianum (L.) Sw.	rattlesnake fern	2	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
POLYPODIACEAE			
Polypodium virginianum L.	rock polypody	10	
PTERIDIACEAE			
Adiantum pedatum L.	northern maidenhair fern	1	
THELYPTERIDACEAE			
Thelypteris noveboracensis (L.) Nieuwl.	New York fern	6	
GYMNOSPERMAE			
CUPRESSACEAE			
Juniperus virginiana L.	eastern redcedar	1,2,3,5,6,7	
PINACEAE			
Pinus strobus L.	eastern white pine	1	V
Pinus virginiana P. Mill.	Virginia pine	1,2,6	
Tsuga canadensis (L.) Carr.	eastern hemlock	1	
ANGIOSPERMAE: DICOTYLEDONEAE			
ACANTHACEAE			
Justicia americana (L.) Vahl	common water-willow	4,8	
Ruellia caroliniensis (J.F. Gmel.) Steud.	Carolina wild-petunia	7	
ACERACEAE			
Acer negundo L.	boxelder	2,3,4,5	
**Acer platanoides* L.	Norway maple	5	V,C
Acer rubrum L.	red maple	1,2,3,5,6	
Acer saccharinum L.	silver maple	9	
ANACARDIACEAE			
Rhus aromatica Ait.	fragrant sumac	1,2	
Rhus copallinum L.	winged sumac	7	
Rhus glabra L.	smooth sumac	7	
Rhus typhina L.	staghorn sumac	7	
Toxicodendron radicans (L.) Kuntze	poison ivy	1,2,3,4,5,6,8,10	
ANNONACEAE			
Asimina triloba (L.) Dunal	pawpaw	1,2,3,4,6	
APIACEAE			
Angelica venenosa (Greenway) Fern.	hairy angelica	9	
Chaerophyllum procumbens (L.) Crantz	spreading chervil	4	
Cicuta maculata L.	water-hemlock	3	
Cryptotaenia canadensis (L.) DC.	honewort	3,4	
**Daucus carota* L.	Queen Anne's lace	7,9	
Erigenia bulbosa (Michx.) Nutt.	harbinger-of-spring	4	V,C
Osmorhiza longistylis (Torr.) DC.	aniseroot	4	
Sanicula canadensis L.	black snakeroot	2,3,4,5,6	
Sanicula odorata (Raf.) K.M. Pryer & L.R. Phillippe = *Sanicula gregaria* Bickn.	clustered snakeroot	5	V,C
Taenidia integerrima (L.) Drude	yellow pimpernel	1,2	V
Thaspium barbinode (Michx.) Nutt.	hairy-jointed meadow-parsnip	2	
Zizia aptera (Gray) Fern.	heartleaf golden alexanders	1	
Zizia aurea (L.) W.D.J. Koch	golden alexanders	2	
APOCYNACEAE			
Apocynum androsaemifolium L.	spreading dogbane	9	
Apocynum cannabinum L.	Indian hemp	7,9	
**Vinca major* L.	greater periwinkle	9	
**Vinca minor* L.	periwinkle	9	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
AQUIFOLIACEAE			
Ilex opaca Ait.	American holly	6,7	
Ilex verticillata (L.) Gray	winterberry	3	
ARISTOLOCHIACEAE			
Aristolochia serpentaria L.	Virginia snakeroot	2	
Asarum canadense L.	wild ginger	2,4	
ASCLEPIADACEAE			
Asclepias incarnata L.	swamp milkweed	7,8	
Asclepias purpurascens L.	purple milkweed	9	
Asclepias quadrifolia Jacq.	four-leaf milkweed	2	V
Asclepias syriaca L.	common milkweed	9	V
Asclepias verticillata L.	whorled milkweed	7	
Asclepias viridiflora Raf.	green milkweed	7	
ASTERACEAE			
Achillea millefolium L. var. *millefolium*	common yarrow	1,5,7	
Ageratina altissima (L.) King & H.E. Robins. = *Eupatorium rugosum* Houtt.	white snakeroot	1,2	
Ambrosia artemisiifolia L.	common ragweed	2,7,9	
Ambrosia trifida L.	great milkweed	4,9	
Antennaria neglecta Greene	field pussytoes	7	
Antennaria parlinii Fern. ssp. *fallax* (Greene) Bayer & Stebbins	Parlin's pussytoes	1	
Antennaria parlinii Fern. ssp. *parlinii*	Parlin's pussytoes	2,6,7	
Antennaria plantaginifolia (L.) Richards.	plantain-leaf pussytoes	1,2,6	
**Anthemis arvensis* L.	corn camomile	9	
**Arctium minus* Bernh.	lesser burdock	9	
**Artemisia annua* L.	annual wormwood	4	V
**Artemisia vulgaris* L.	common wormwood	7,9	
Bidens aristosa (Michx.) Britt. = *Bidens polylepis* Blake	tickseed beggar-ticks	7,9	
Bidens frondosa L.	devil's beggar-ticks	2,5	
Bidens tripartita L.	three-lobe beggar-ticks	4	
**Carduus nutans* L.	musk thistle	9	
**Centaurea biebersteinii* DC. = *Centaurea maculosa* auct. non Lam.	spotted knapweed	7,9	
**Cichorium intybus* L.	chickory	9	
Cirsium discolor (Muhl. ex Willd.) Spreng.	field thistle	2,7	
Cirsium muticum Michx.	swamp thistle	5	
Cirsium pumilum (Nutt.) Spreng.	pasture thistle	2,7	
**Cirsium vulgare* (Savi) Ten.	bull thistle	9	
Conoclinium coelestinum (L.) DC. = *Eupatorium coelestinum* L.	mistflower	7,8	
Conyza canadensis (L.) Cronq. = *Erigeron canadensis* L.	horseweed	7,9	
Coreopsis tripteris L.	tall tickseed	7	V
Coreopsis verticillata L.	whorled coreopsis	2	
Doellingeria infirma (Michx.) Greene = *Aster infirmus* Michx.	cornel-leaf aster	1,2	
Eclipta prostrata (L.) L. = *Eclipta alba* (L.) Hassk.	yerba-de-tajo	9	
Elephantopus carolinianus Raeusch.	Carolina elephant's-foot	6	
Erechtites hieraciifolia (L.) Raf. ex DC.	fireweed	2,5,7	
Erigeron annuus (L.) Pers.	annual fleabane	9	
Erigeron strigosus Muhl. ex Willd.	daisy fleabane	2,7	
Eupatorium fistulosum Barratt	hollow Joe-Pye-weed	4,8	
Eupatorium hyssopifolium L.	hyssop-leaved thoroughwort	7	
Eupatorium perfoliatum L.	common boneset	7,8	
Eupatorium serotinum Michx.	late thoroughwort	7,9	
Eurybia divaricata (L.) Nesom = *Aster divaricatus* L.	white wood aster	1,2	
Eurybia schreberi (Nees) Nees = *Aster schreberi* Nees	Schreber's aster	1,10	V,C

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
ASTERACEAE (continued)			
Euthamia graminifolia (L.) Greene = *Solidago graminifolia* (L.) Salisb.	grass-leaved goldenrod	5	
Gamochaeta purpurea (L.) Cabrera = *Gnaphalium purpureum* L.	purple cudweed	9	
Helenium autumnale L.	common sneezeweed	8	
Helenium flexuosum Raf.	Southern sneezeweed	7	
Helianthus decapetalus L.	thin-leaved sunflower	4	
Helianthus divaricatus L.	woodland sunflower	2	
Heliopsis helianthoides (L.) Sweet	oxeye	9	
**Hieracium caespitosum* Dumort.	meadow hawkweed	2,5,6	
Hieracium gronovii L.	hairy hawkweed	2	
Hieracium scabrum Michx.	rough hawkweed	1	
Hieracium venosum L.	rattlesnake-weed	1,2	
**Iva annua* L.	annual sumpweed	9	V,C
Krigia dandelion (L.) Nutt.	false dandelion	2	
Krigia virginica (L.) Willd.	dwarf dandelion	7,10	
Lactuca canadensis L.	wild lettuce	9	
Lactuca floridana (L.) Gaertn.	Florida blue lettuce	4,9	
**Leucanthemum vulgare* Lam. = *Chrysanthemum leucanthemum* L.	oxeye daisy	7,9	
Liatris squarrosa (L.) Michx.	scaly blazing-star	7	
Mikania scandens (L.) Willd.	climbing hempweed	5,8	
Packera anonyma (Wood) W.A. Weber & A. Löve = *Senecio anonymus* Wood	Small's ragwort	7	V
Packera aurea (L.) A.& D. Löve = *Senecio aureus* L.	golden ragwort	4	
Packera paupercula (Michx.) A.& D. Löve = *Senecio pauperculus* Michx.	balsam ragwort	2,3,5,6,7	V,C
Prenanthes serpentaria Pursh	lion's-foot	1,2,6	
Pseudognaphalium obtusifolium (L.) Hilliard & Burtt = *Gnaphalium obtusifolium* L.	blunt-leaf rabbit-tobacco	7,9	
Rudbeckia fulgida Ait.	orange coneflower	7	
Rudbeckia hirta L.	black-eyed Susan	7,9	
Rudbeckia laciniata L.	cutleaved coneflower	4	
Sericocarpus asteroides (L.) B.S.P. = *Aster paternus* Cronq.	toothed white-top aster	1	
Silphium trifoliatum L.	whorled rosinweed	6,7	
Solidago bicolor L.	white goldenrod	1	
Solidago caesia L.	bluestem goldenrod	1,2	
Solidago canadensis L.	Canadian goldenrod	7,9	
Solidago juncea Ait.	early goldenrod	3,5,7	
Solidago nemoralis Ait.	gray goldenrod	7	
Solidago ulmifolia Muhl. ex Willd.	elm-leaf goldenrod	2	
**Sonchus asper* (L.) Hill	spiny-leaf sowthistle	9	
**Sonchus oleraceus* L.	common sowthistle	9	
Symphyotrichum cordifolium (L.) Nesom = *Aster cordifolius* L.	heart-leaved aster	2	V,C
Symphyotrichum dumosum (L.) Nesom = *Aster dumosus* L.	bushy aster	7	
Symphyotrichum lanceolatum (Willd.) Nesom =*Aster lanceolatus* Willd. = *Aster simplex* Willd.	panicled aster	4,5	
Symphyotrichum lateriflorum (L.) A.& D. Löve = *Aster lateriflorus* (L.) Britt.	goblet aster	1,2,3,4,5,6	
Symphyotrichum pilosum (Willd.) Nesom = *Aster pilosus* Willd.	white heath aster	7	
Symphyotrichum prenanthoides (Muhl. ex Willd.) Nesom = *Aster prenanthoides* Muhl. ex Willd.	crooked-stem aster	4	
Symphyotrichum undulatum (L.) Nesom = *Aster undulatus* L.	wavy-leaved aster	1,2,4	
**Taraxacum officinale* G.H. Weber ex Wiggers	common dandelion	6,7,9	
**Tragopogon dubius* Scop.	meadow goat's-beard	9	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
ASTERACEAE (continued)			
Verbesina alternifolia (L.) Britt. ex Kearney	wingstem	2,3,4	
Verbesina occidentalis (L.) Walt.	yellow crownbeard	2,4	
Vernonia glauca (L.) Willd.	broad-leaf ironweed	2	
Vernonia noveboracensis (L.) Michx.	New York ironweed	8	
Xanthium strumarium L.	cocklebur	9	
BALSAMINACEAE			
Impatiens capensis Meerb.	spotted jewelweed	2,3,4,5,8	
Impatiens pallida Nutt.	pale jewelweed	4	
BERBERIDACEAE			
**Berberis thunbergii* DC.	Japanese barberry	1,2,4,6	
Caulophyllum thalictroides (L.) Michx.	blue cohosh	2	V,C
Podophyllum peltatum L.	may-apple	1,2,4	
BETULACEAE			
Betula lenta L.	sweet birch	1	
Betula nigra L.	river birch	4	
Carpinus caroliniana Walt.	American hornbeam	1,2,3,4,5,6	
Corylus americana Walt.	American hazelnut	1,2	
Ostrya virginiana (P. Mill.) K. Koch	eastern hop-hornbeam	1,2,10	
BORAGINACEAE			
**Buglossoides arvensis* (L.) I.M. Johnston = *Lithospermum arvense* L.	common borage	9	
Cynoglossum virginianum L.	wild comfrey	2	
**Echium vulgare* L.	common viper's-bugloss	9	
Hackelia virginiana (L.) I.M. Johnston	Virginia stickseed	2	
Lithospermum canescens (Michx.) Lehm.	hoary puccoon	7	V,C
Mertensia virginica (L.) Pers. ex Link	Virginia bluebells	4	
**Myosotis discolor* Pers.	yellow-and-blue forget-me-not	8	V,C
Myosotis macrosperma Engelm.	large-seeded forget-me-not	2	V
Myosotis verna Nutt.	spring forget-me-not	7	
BRASSICACEAE			
**Alliaria petiolata* (Bieb.) Cavara & Grande	garlic mustard	1,2,3,4	
Arabis lyrata L.	lyre-leaf rockcress	10	V
**Barbarea verna* (P. Mill.) Aschers.	early winter-cress	9	
**Barbarea vulgaris* Ait. f.	common winter-cress	7,9	
**Capsella bursa-pastoris* (L.) Medik.	common shepherd's-purse	9	
Cardamine concatenata (Michx.) Sw. = *Dentaria laciniata* Muhl. ex Willd.	cutleaf toothwort	2,4	
**Cardamine hirsuta* L.	hairy bittercress	4,9,10	
Cardamine pensylvanica Muhl. ex Willd.	Pennsylvania bittercress	3,5	
**Lepidium campestre* (L.) Ait. f.	field pepper-grass	9	
Lepidium virginicum L.	poor man's pepper-grass	9	
**Microthlaspi perfoliatum* (L.) F.K. Mey. = *Thlaspi perfoliatum* L.	perfoliate pennycress	9	
**Rorippa sylvestris* (L.) Bess.	creeping yellow-cress	4,8	
CALLITRICHACEAE			
Callitriche heterophylla Pursh	northern water-starwort	4,8	
CAMPANULACEAE			
Lobelia cardinalis L.	cardinal flower	4,8	
Lobelia inflata L.	Indian-tobacco	5,6	
Lobelia puberula Michx.	downy lobelia	2	
Lobelia siphilitica L.	great lobelia	4	
Lobelia spicata Lam.	spiked lobelia	2	
Triodanis perfoliata (L.) Nieuwl. = *Specularia perfoliata* (L.) A. DC.	Venus'-looking-glass	6	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
CAPRIFOLIACEAE			
**Lonicera japonica* Thunb.	Japanese honeysuckle	1,2,3,4,5,6	
**Lonicera maackii* (Rupr.) Herder	Amur honeysuckle	9	
**Lonicera morrowii* Gray	Morrow honeysuckle	2	
Sambucus nigra L. ssp. *canadensis* (L.) R. Bolli = *Sambucus canadensis* L.	common elderberry	3,4,5	
Symphoricarpos orbiculatus Moench	coral-berry	1,2,4,5,6	
Triosteum perfoliatum L.	perfoliate tinker's-weed	2	
Viburnum acerifolium L.	maple-leaf viburnum	1,2,6	
Viburnum prunifolium L.	smooth black-haw	1,2,3,4,5,6	
Viburnum recognitum Fern.	northern arrow-wood	1,2,3,5	
CARYOPHYLLACEAE			
**Dianthus armeria* L.	Deptford-pink	7	
Paronychia canadensis (L.) Wood	forked nailwort	2	
Paronychia fastigiata (Raf.) Fern.	cluster-stemmed nailwort	1	V,C
Silene caroliniana Walt. ssp. *pensylvanica* (Michx.) Clausen	wild pink	2,6	
**Silene latifolia* Poir. ssp. *alba* (P. Mill.) Greuter Burdet	wild campion	9	
Stellaria longifolia Muhl. ex Willd.	longleaf stitchwort	4	V,C
**Stellaria media* (L.) Vill.	common chickweed	4,7,9	
Stellaria pubera Michx.	giant chickweed	1,2,4	
CELASTRACEAE			
**Celastrus orbiculata* Thunb.	Oriental bittersweet	2	
Euonymus americana L.	American strawberry-bush	1,6	
Euonymus atropurpurea Jacq.	wahoo	4	
CHENOPODIACEAE			
**Chenopodium album* L.	white goosefoot	9	
CISTACEAE			
Lechea racemulosa Michx.	Illinois pinweed	9	
CLUSIACEAE			
Hypericum canadense L.	Canadian St. John's-wort	8	V,C
Hypericum gentianoides (L.) B.S.P.	orange-grass	9	
Hypericum gymnanthum Engelm. & Gray	clasping-leaved St. John's-wort	8	V,C
Hypericum hypericoides (L.) Crantz ssp. *multicaule* (Michx. ex Willd.) Robson = *Hypericum stragulum* P. Adams & Robson	St. Andrew's cross	1,2	
Hypericum mutilum L.	slender St. John's-wort	4,8	
**Hypericum perforatum* L.	common St. John's-wort	7	
Hypericum prolificum L.	shrubby St. John's-wort	1,2,7	
Hypericum punctatum Lam.	spotted St. John's-wort	4,9	
CONVOLVULACEAE			
Calystegia spithamaea (L.) Pursh	low bindweed	2	
**Ipomoea hederacea* Jacq.	ivy-leaved morning glory	9	
Ipomoea pandurata (L.) G.F.W. Mey.	big-root morning glory	1,2,7,9	
**Ipomoea purpurea* (L.) Roth	common morning glory	9	
CORNACEAE			
Cornus amomum P. Mill.	silky dogwood	4,8	
Cornus florida L.	flowering dogwood	1,2,3,6	
Nyssa sylvatica Marsh.	black gum	1,2,5	
CRASSULACEAE			
Sedum ternatum Michx.	wild stonecrop	1,2,10	
Penthorum sedoides L.	ditch-stonecrop	8	
DIPSACACEAE			
**Dipsacus fullonum* L.	common teasel	9	

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EBENACEAE			
Diospyros virginiana L.	persimmon	1,2,3,5,6,7	
ELAEAGNACEAE			
**Elaeagnus umbellata* Thumb. var. *parvifolia* (Royle) Schneid.	autumn-olive	2,6	V,C
ERICACEAE			
Gaylussacia baccata (Wangenh.) K. Koch	black huckleberry	1	
Kalmia latifolia L.	mountain-laurel	1	
Rhododendron periclymenoides (Michx.) Shinners	wild azalea	1	
Vaccinium pallidum Ait.	early lowbush blueberry	1,2,6	
Vaccinium stamineum L.	deerberry	1,2,6	
EUPHORBIACEAE			
Acalypha virginica L.	Virginia copperleaf	2,6	
Chamaesyce maculata (L.) Small = *Euphorbia maculata* L.	spotted spurge	9	
Chamaesyce nutans (Lag.) Small = *Euphorbia nutans* Lag.	eyebane	9	
Euphorbia corollata L.	flowering spurge	1,2,7	
FABACEAE			
**Albizia julibrissin* Durazz.	silk tree	9	
Amphicarpaea bracteata (L.) Fern.	American hog-peanut	2,4,6	
Baptisia tinctoria (L.) R. Br. ex Ait. f.	yellow wild-indigo	1	
Cercis canadensis L.	eastern redbud	1,2,6,7	
Chamaecrista fasciculata (Michx.) Greene = *Cassia fasciculata* Michx.	partridge-pea	6,7	
Chamaecrista nictitans (L.) Moench = *Cassia nictitans* L.	wild sensitive senna	6,7	
Clitoria mariana L.	Maryland butterfly-pea	1	
**Coronilla varia* L.	common crown-vetch	9	
Desmodium canescens (L.) DC.	hoary tick-trefoil	7	
Desmodium ciliare (Muhl. ex Willd.) DC.	hairy small-leaved tick-trefoil	7	
Desmodium glabellum (Michx.) DC.	Dillen tick-trefoil	7	
Desmodium laevigatum (Nutt.) DC.	smooth tick-trefoil	7,9	
Desmodium marilandicum (L.) DC.	Maryland tick-trefoil	7	
Desmodium nudiflorum (L.) DC.	naked-flowered tick-trefoil	1,2	
Desmodium paniculatum (L.) DC.	narrow-leaf tick-trefoil	2,7	
Desmodium perplexum Schub.	perplexing tick-trefoil	2	
Desmodium rotundifolium DC.	prostrate tick-trefoil	1,2,9	
Desmodium viridiflorum (L.) DC.	velvety tick-trefoil	7	
Gleditsia triacanthos L.	honey-locust	1,2	
**Kummerowia stipulacea* (Maxim.) Makino = *Lespedeza stipulacea* Maxim.	Korean bushclover	9	
**Kummerowia striata* (Thunb.) Schindl. = *Lespedeza striata* (Thunb.) Hook. & Arn.	Japanese bushclover	7,9	
Lespedeza capitata Michx.	round-head bushclover	7	V,C
**Lespedeza cuneata* (Dum.-Cours.) G. Don	sericea bushclover	7,9	
Lespedeza hirta (L.) Hornem.	hairy bushclover	1,7	
Lespedeza procumbens Michx.	trailing bushclover	2,7	
Lespedeza repens (L.) W. Bart.	creeping bushclover	1,2	
Lespedeza violacea (L.) Pers. = *Lespedeza intermedia* sensu Clewell, 1966	wand bushclover	1,2	
Lespedeza virginica (L.) Britt.	slender bushclover	7	
**Lotus corniculatus* L.	bird's foot trefoil	7	V,C
**Melilotus officinalis* (L.) Lam.	sweet clover	2	
Robinia pseudoacacia L.	black locust	9	
Senna hebecarpa (Fern.) Irwin & Barneby = *Cassia hebecarpa* Fern.	northern wild senna	8	
Strophostyles umbellata (Muhl. ex Willd.) Britt.	pink wild-bean	7	
Stylosanthes biflora (L.) B.S.P.	pencilflower	9	
Tephrosia virginiana (L.) Pers.	goat's-rue	9	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
FABACEAE (continued)			
**Trifolium arvense* L.	rabbit-foot clover	7	
**Trifolium campestre* Schreb.	low hop clover	7	
**Trifolium hybridum* L.	alsike clover	7	
**Trifolium pratense* L.	red clover	7,9	
Trifolium reflexum L.	buffalo clover	2	V
**Trifolium repens* L.	white clover	2,9	
Vicia caroliniana Walt.	Carolina wood vetch	1,2	
**Vicia cracca* L.	tufted vetch	9	
**Vicia sativa* L.	spring vetch	9	
**Vicia tetrasperma* (L.) Schreb.	lentil vetch	9	
FAGACEAE			
**Castanea mollissima* Blume	Chinese chestnut	9	
Fagus grandifolia Ehrh.	American beech	1	
Quercus alba L.	white oak	1,2,5,6	
Quercus bicolor Willd.	swamp white oak	3,5	V
Quercus coccinea Muenchh.	scarlet oak	1,2,6	
Quercus falcata Michx.	Southern red oak	1,2,6	
Quercus muehlenbergii Engelm.	chinkapin oak	2	V,C
Quercus palustris Muenchh.	pin oak	2,3,4,5	
Quercus prinus L. = *Quercus montana* Willd.	chestnut oak	1,2	
Quercus rubra L.	red oak	1,2,6	
Quercus shumardii Buckl.	Shumard's oak	4	
Quercus stellata Wangenh.	post oak	2	
Quercus velutina Lam.	black oak	1,2,6	
FUMARIACEAE			
Corydalis flavula (Raf.) DC.	yellow corydalis	2,4	
Dicentra cucullaria (L.) Bernh.	Dutchman's breeches	4	
GENTIANACEAE			
Gentiana clausa Raf.	closed gentian	8	
Sabatia angularis (L.) Pursh	square-stemmed rose-pink	7	
GERANIACEAE			
Geranium maculatum L.	wild geranium	2	
HALORAGACEAE			
Myriophyllum sibiricum Komarov = *Myriophyllum exalbescens* Fern.	common water-milfoil	8	V,C
Proserpinaca palustris L.	common mermaid-weed	8	V,C
HAMAMELIDACEAE			
Hamamelis virginiana L.	witch-hazel	1,2	
HYDRANGEACEAE			
Hydrangea arborescens L.	wild hydrangea	1,2,10	
HYDROPHYLLACEAE			
Hydrophyllum virginianum L.	Virginia waterleaf	2,4	
JUGLANDACEAE			
Carya alba (L.) Nutt. ex Ell. = *Carya tomentosa* (Lam. ex Poir.) Nutt.	mockernut hickory	1,2,3,5,6	
Carya cordiformis (Wangenh.) K. Koch	bitternut hickory	1,2,3,4,5,6	
Carya glabra (P. Mill.) Sweet	pignut hickory	1,2,5,6	
Carya ovalis (Wangenh.) Sarg.	red hickory	1,2	
Juglans cinerea L.	butternut	2	
Juglans nigra L.	black walnut	2,4	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
LAMIACEAE			
**Chaiturus marrubiastrum* (L.) Reichenb. = *Leonurus marrubiastrum* L.	lion's-tail	6	
**Clinopodium vulgare* L. = *Satureja vulgaris* (L.) Fritsch	wild basil	9	
Cunila origanoides (L.) Britt.	common dittany	1,2	
**Glechoma hederacea* L.	ground-ivy	4	
Hedeoma pulegioides (L.) Pers.	American pennyroyal	2	
Isanthus brachiatus (L.) B.S.P.	false pennyroyal	10	V,C
**Lamium purpureum* L.	purple deadnettle	9	
Lycopus americanus Muhl. ex W. Bart.	American bugleweed	8	
Lycopus uniflorus Michx.	northern bugleweed	3	
Lycopus virginicus L.	Virginia bugleweed	3,5,9	
Mentha arvensis L.	wild mint	9	
**Mentha × piperita* L. (pro sp.) [*aquatica* × *spicata*]	peppermint	4	
**Nepeta cataria* L.	catnip	9	
**Perilla frutescens* (L.) Britt.	beef-steak plant	4	
Prunella vulgaris L. ssp. *lanceolata* (W. Bart.) Hultén	American self-heal	3,7	
Pycnanthemum incanum (L.) Michx.	hoary mountain-mint	7	
Pycnanthemum tenuifolium Schrad.	narrow-leaved mountain-mint	2,3,5,7	
Salvia lyrata L.	lyre-leaf sage	2	
Scutellaria elliptica Muhl. ex Spreng.	hairy skullcap	1,2	
Scutellaria integrifolia L.	helmet-flower	1,2,5,7	
Scutellaria lateriflora L.	mad dog skullcap	3	
Scutellaria nervosa Pursh	veined skullcap	1,3,4	V,C
Scutellaria parvula Michx. var. *missouriensis* (Torr.) Goodman & Lawson = *Scutellaria leonardii* Epling	shale-barren skullcap	2,9	V
Stachys pilosa Nutt. var. *arenicola* (Britt.) G. Mulligan & D. Munro	marsh hedgenettle	5,7	V,C
Stachys tenuifolia Willd.	smooth hedgenettle	8	V
Teucrium canadense L.	American germander	4,8,9	
Trichostema dichotomum L.	blue-curls	7,9	
LAURACEAE			
Lindera benzoin (L.) Blume	spicebush	2,3,4,5,6	
Sassafras albidum (Nutt.) Nees	sassafras	1,2,6	
LIMNANTHACEAE			
Floerkea proserpinacoides Willd.	false mermaid-weed	2,4	
LINACEAE			
Linum medium (Planch.) Britt. var. *texanum* (Planch.) Fern.	wild flax	9	
LYTHRACEAE			
Cuphea viscosissima Jacq.	blue waxweed	9	
MAGNOLIACEAE			
Liriodendron tulipifera L.	tulip-tree	1,2,4,6	
MALVACEAE			
**Malva neglecta* Wallr.	dwarf cheeseweed	9	
**Sida spinosa* L.	prickly mallow	9	
MENISPERMACEAE			
Menispermum canadense L.	Canada moonseed	2	
MOLLUGINACEAE			
**Mollugo verticillata* L.	green carpetweed	9	
MONOTROPACEAE			
Monotropa uniflora L.	Indian-pipe	1,2	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
MORACEAE			
**Morus alba* L.	white mulberry	2,6	
Morus rubra L.	red mulberry	2,3	
OLEACEAE			
Chionanthus virginicus L.	fringetree	2	
Fraxinus americana L.	white ash	1,2,6,7	
Fraxinus pennsylvanica Marsh.	green ash	3,4,5	
ONAGRACEAE			
Circaea lutetiana L.	enchanter's nightshade	2,3,4,5	
Gaura biennis L.	biennial gaura	9	
Ludwigia alternifolia L	alternate-leaved seedbox	8	
Ludwigia palustris (L.) Ell.	marsh seedbox	3,6	
Oenothera fruticosa L.	narrow-leaved sundrops	5,7	
Oenothera perennis L.	small sundrops	2	
OROBANCHACEAE			
Conopholis americana (L.) Wallr. f.	squawroot	1	
Orobanche uniflora L.	one-flowered cancer-root	1	V
OXALIDACEAE			
Oxalis dillenii Jacq.	slender yellow woodsorrel	1,2,5,6	
Oxalis stricta L.	upright yellow woodsorrel	2,4	
Oxalis violacea L.	violet woodsorrel	2,6	
PAPAVERACEAE			
Sanguinaria canadensis L.	bloodroot	1,2	
PLANTAGINACEAE			
**Plantago aristata* Michx.	large-bracted plantain	7,9	
**Plantago lanceolata* L.	English plantain	7,9	
**Plantago rugelii* Dcne.	pale plantain	9	
Plantago virginica L.	Virginia plantain	7	
PLATANACEAE			
Platanus occidentalis L	sycamore	4	
POLYGALACEAE			
Polygala sanguinea L.	field milkwort	8	
Polygala verticillata L.	whorled milkwort	7,9	
POLYGONACEAE			
**Polygonum arenastrum* Jord. ex Boreau = *Polygonum aviculare* var. *arenastrum* (Jord. ex Boreau) Rouy	oval-leaf knotweed	9	
**Polygonum caespitosum* Blume var. *longisetum* (de Bruyn) A.N. Steward	long-bristled smartweed	2,3,4	
Polygonum hydropiperoides Michx.	mild water-pepper	3	V,C
Polygonum pensylvanicum L.	Pennsylvania smartweed	5	
**Polygonum persicaria* L.	lady's thumb	5	
Polygonum punctatum Ell.	dotted smartweed	3	
Polygonum sagittatum L.	arrow-leaved tearthumb	5,8	
Polygonum scandens var. *cristatum* (Engelm. & Gray) Gleason	crested false-buckwheat	2	
Polygonum tenue Michx.	slender knotweed	7,10	
Polygonum virginianum L.	Virginia knotweed	2,3,4	
**Rumex acetosella* L.	sheep sorrel	7,9	
**Rumex crispus* L.	curly dock	3,9	
**Rumex obtusifolius* L.	bitter dock	5,9	
Rumex verticillatus L.	swamp dock	3	
PORTULACACEAE			
Claytonia virginica L.	spring beauty	2,4	
**Portulaca oleracea* L.	common purslane	9	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
PRIMULACEAE			
Lysimachia ciliata L.	fringed loosestrife	3,4,5,6	
Lysimachia quadriflora Sims	whorled loosestrife	1,9	
Samolus valerandi L. ssp. *parviflorus* (Raf.) Hultén = *Samolus parviflorus* Raf.	water pimpernel	2	
PYROLACEAE			
Chimaphila maculata (L.) Pursh	spotted wintergreen	1,6	
Chimaphila umbellata (L.) W. Bart.	pipsissewa	1	
RANUNCULACEAE			
Actaea racemosa L. = *Cimicifuga racemosa* (L.) Nutt.	black bugbane	1,2	
Anemone quinquefolia L.	wood anemone	1	
Anemone virginiana L.	thimbleweed	6	
Aquilegia canadensis L.	wild columbine	10	
Clematis ochroleuca Ait.	curly-heads	2	
**Clematis terniflora* DC. = *Clematis dioscoreifolia* Levl. & Vaniot	Japanese virgin's-bower	6	V,C
Hepatica nobilis Schreber var. *obtusa* (Pursh) Steyermark = *Hepatica americana* (DC.) Ker-Gawl.	round-lobed hepatica	1,2	
Ranunculus abortivus L.	kidneyleaf crowfoot	2,3,4,5,6	
**Ranunculus bulbosus* L.	bulbous buttercup	7	
Ranunculus hispidus Michx. var. *caricetorum* (Greene) T. Duncan = *Ranunculus septentrionalis* Poiret	swamp buttercup	3,5	V,C
Ranunculus hispidus Michx. var. *hispidus*	bristly buttercup	2	
Ranunculus micranthus Nutt.	rock buttercup	2	
Ranunculus recurvatus Poir.	hooked crowfoot	2,4	
Thalictrum dioicum L.	early meadowrue	1,10	
Thalictrum revolutum DC.	skunk meadowrue	2	V,C
Thalictrum thalictroides (L.) Eames & Boivin = *Anemonella thalictroides* (L.) Spach	rue-anemone	1,2	
RHAMNACEAE			
Ceanothus americanus L.	New Jersey tea	9	
ROSACEAE			
Agrimonia parviflora Ait.	small-flowered agrimony	3,5,8	
Agrimonia pubescens Wallr.	downy agrimony	2	
Agrimonia rostellata Wallr.	woodland agrimony	2	
Amelanchier arborea (Michx. f.) Fern.	downy serviceberry	1,2,6	
Amelanchier laevis Wieg.	smooth serviceberry	1,2	
Amelanchier stolonifera Wieg.	low serviceberry	3	
Crataegus flabellata (Spach) Kirchn.	fan-leaf hawthorn	1	
Crataegus intricata Lange	Copenhagen hawthorn	2	
Crataegus punctata Jacq.	dotted hawthorn	6	
**Duchesnea indica* (Andr.) Focke	Indian strawberry	9	
Fragaria virginiana Duchesne	wild strawberry	7	
Geum canadense Jacq.	white avens	2,3,4,5,6	
Geum virginianum L.	cream avens	1,2	V,C
Malus angustifolia (Ait.) Michx.	southern crabapple	2	
**Malus pumila* P. Mill.	common apple	9	
Physocarpus opulifolius (L.) Maxim.	ninebark	7	V
Potentilla canadensis L.	Canada cinquefoil	1,2	
**Potentilla recta* L.	upright cinquefoil	7	
Potentilla simplex Michx.	common cinquefoil	7	
Prunus americana Marsh.	American wild plum	6	
Prunus angustifolia Marsh.	Chickasaw plum	6	
**Prunus avium* (L.) L.	sweet cherry	1,2,6	
**Prunus domestica* L.	European plum	9	V
Prunus serotina Ehrh.	wild black cherry	1,2,4,5,6	
**Pyrus communis* L.	common pear	9	
Rosa carolina L.	pasture rose	1,2,5,6,7,9	
**Rosa multiflora* Thunb. ex Murr.	multiflora rose	2,4,5,6,7	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
ROSACEAE (continued)			
Rubus allegheniensis Porter	Allegheny blackberry	2	
Rubus argutus Link	prickly blackberry	2,6	
Rubus cuneifolius Pursh	sand blackberry	7	
Rubus flagellaris Willd.	Northern dewberry	1,2,3,5,6,7	
Rubus occidentalis L.	black raspberry	2	
Spiraea alba Du Roi var. *latifolia* (Ait.) Dippel = *Spiraea latifolia* (Ait.) Borkh.	broad-leaved meadowsweet	8	V
**Spiraea* hybrid	a cultivated hybrid spiraea	8	V
RUBIACEAE			
Cephalanthus occidentalis L.	common buttonbush	3,8	
**Cruciata pedemontana* (Bellardi) Ehrend. = *Galium pedemontanum* (Bellardi) All.	Piedmont bedstraw	7	V
Diodia teres Walt.	buttonweed	7,9,10	
Galium aparine L.	cleavers	2,3,4,5	
Galium circaezans Michx.	forest bedstraw	1,2	
Galium concinnum Torr. & Gray	shining bedstraw	2,3	
Galium obtusum Bigelow ssp. *filifolium* (Wieg.) Puff	Carolina bedstraw	3	
Galium obtusum Bigelow ssp. *obtusum*	bluntleaf bedstraw	3,5	
Galium pilosum Ait.	hairy bedstraw	1,2,6,7	
Galium tinctorium (L.) Scop.	stiff marsh bedstraw	3	
Galium triflorum Michx.	sweet-scented bedstraw	1,2,4,5,6	
Houstonia caerulea L. = *Hedyotis caerulea* (L.) Hook.	bluets	2,4	
Houstonia purpurea L. = *Hedyotis purpurea* (L.) Torr. & Gray	large summer bluets	1,2,6	
Mitchella repens L.	partridge-berry	1,2,6	
RUTACEAE			
Zanthoxylum americanum P. Mill.	northern prickly-ash	2,3	V
SALICACEAE			
Salix nigra Marsh.	black willow	8	
SANTALACEAE			
Comandra umbellata (L.) Nutt.	bastard toadflax	1	
SAURURACEAE			
Saururus cernuus L.	lizard's tail	3	
SAXIFRAGACEAE			
Heuchera americana L.	American alumroot	1,2,10	
Saxifraga virginiensis Michx.	early saxifrage	1,10	
SCROPHULARIACEAE			
Agalinis purpurea (L.) Pennell	large purple false-foxglove	7	V
Agalinis tenuifolia (Vahl) Raf.	slender false-foxglove	7	
Aureolaria pedicularia (L.) Raf. var. *intercedens* Pennell	fern-leaved yellow foxglove	1	V
Aureolaria virginica (L.) Pennell	downy yellow foxglove	2	
Buchnera americana L.	blue-hearts	7	
Chelone glabra L.	white turtlehead	3	
Gratiola neglecta Torr.	clammy hedge-hyssop	5,6	
Lindernia dubia (L.) Pennell var. *anagallidea* (Michx.) Cooperrider	false-pimpernel	8	
Lindernia dubia (L.) Pennell var. *dubia*	long-stalked false-pimpernel	4,8	
Mimulus alatus Ait.	winged monkey-flower	3	
Mimulus ringens L.	monkey-flower	8	
Penstemon digitalis Nutt. ex Sims	foxglove beardtongue	9	
Penstemon hirsutus (L.) Willd.	hairy beardtongue	7	V
Penstemon laevigatus Ait.	smooth beardtongue	2,3	
**Verbascum blattaria* L.	moth mullein	9	
**Verbascum thapsus* L.	great mullein	9	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
SCROPHULARIACEAE (continued)			
**Veronica arvensis* L.	corn speedwell	9	
**Veronica hederifolia* L.	ivy-leaf speedwell	4	
Veronica officinalis L.	common speedwell	7	
Veronica peregrina L.	purslane speedwell	9	
**Veronica persica* Poir.	bird's-eye speedwell	9	
**Veronica serpyllifolia* L. ssp. *serpyllifolia*	thyme-leaved speedwell	9	
SIMAROUBACEAE			
**Ailanthus altissima* (P. Mill.) Swingle	tree-of-heaven	6	
SOLANACEAE			
**Datura stramonium* L.	Jimson-weed	9	
Physalis longifolia Nutt. var. *subglabrata* (Mackenzie & Bush) Cronq.	smooth ground-cherry	7	
Physalis virginiana P. Mill.	Virginia ground-cherry	2	
Solanum carolinense L.	Carolina horse-nettle	7,9	
**Solanum dulcamara* L.	climbing nightshade	8	
STAPHYLEACEAE			
Staphylea trifolia L.	bladdernut	2,4	
ULMACEAE			
Celtis laevigata Willd.	common hackberry	6	
Celtis occidentalis L.	sugarberry	1,2,3,4,5	
Celtis tenuifolia Nutt.	Georgia hackberry	3	V,C
Ulmus americana L.	American elm	1,2,3,4,5	
Ulmus rubra Muhl.	slippery elm	2,4,6	
URTICACEAE			
Boehmeria cylindrica (L.) Sw.	false nettle	3,4	
Laportea canadensis (L.) Weddell	wood nettle	4	
Parietaria pensylvanica Muhl. ex Willd.	Pennsylvania pellitory	2,10	
Pilea pumila (L.) Gray	greenfruit clearweed	2,3	
VALERIANACEAE			
Valerianella radiata (L.) Dufr.	beaked cornsalad	7	
VERBENACEAE			
Phryma leptostachya L.	lopseed	1,2	
Verbena hastata L.	blue vervain	8	
Verbena simplex Lehm.	narrow-leaved vervain	7	
Verbena urticifolia L.	white vervain	4	
VIOLACEAE			
Hybanthus concolor (T.F. Forst.) Spreng.	green violet	2	V,C
Viola cucullata Ait.	marsh blue violet	3	
Viola pubescens Ait. var. *pubescens*	downy yellow violet	4	
Viola pubescens Ait. var. *scabriuscula* Schwein. ex Torr. & Gray = *Viola eriocarpon* (Nutt.) Schwein. var. *leiocarpon* Fern. & Wieg. = *Viola pensylvanica* Michx.	smooth yellow violet	4	
Viola sagittata Ait.	arrow-leaved violet	1,7	
Viola sororia Willd.	common blue violet	1,2,4,6	
Viola striata Ait.	striped violet	2,4	
Viola triloba Schwein. var. *triloba*	cleft violet	1,2	
VITACEAE			
Parthenocissus quinquefolia (L.) Planch.	Virginia creeper	1,2,3,4,5,6,10	
Vitis aestivalis Michx. var. *aestivalis*	summer grape	1,2,5	
Vitis aestivalis Michx. var. *bicolor* Deam	silverleaf grape	1	
Vitis vulpina L.	winter grape	1,2,3,4,5,6	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
ANGIOSPERMAE: MONOCOTYLEDONEAE			
AGAVACEAE			
Yucca filamentosa L.	common yucca	9	
ALISMATACEAE			
Alisma subcordatum Raf.	broad-leaved water-plantain	3,5	
ARACEAE			
Arisaema dracontium (L.) Schott	green dragon	2,3	
Arisaema triphyllum (L.) Schott	Jack-in-the-pulpit	1,2,3,4,5	
COMMELINACEAE			
**Commelina communis* L.	Asiatic dayflower	9	
Commelina virginica L.	Virginia dayflower	3,4	
**Murdannia keisak* (Hassk.) Hand.-Maz.	marsh dewflower	4,8	V,C
CYPERACEAE			
Carex albicans Willd. ex Spreng. var. *australis* (Bailey) J. Rettig = *Carex physorhyncha* Liebm.	bellow-beaked sedge	1,2,4,6	
Carex amphibola Steud.	narrow-leaved sedge	1,2	V
Carex annectens (Bickn.) Bickn.	yellow-fruited sedge	5	
Carex blanda Dewey	woodland sedge	2,3,4,6	
Carex brevior (Dewey) Mackenzie	short-beak sedge	3	V,C
Carex bushii Mackenzie	Bush's sedge	7,8	V
Carex caroliniana Schwein.	Carolina sedge	3,4	
Carex cephalophora Muhl. ex Willd.	oval-leaved sedge	1,2,3,6	
Carex communis Bailey	fibrous-root sedge	1,10	
Carex digitalis Willd.	slender wood sedge	1,2	
Carex festucacea Schkuhr ex Willd.	fescue sedge	3,5,8	V,C
Carex frankii Kunth	Frank sedge	3,5,6	
Carex glaucodea Tuckerman ex Olney	flaccid sedge	2,5,6	
Carex gracilescens Steud.	slender sedge	3,5	
Carex granularis Muhl. ex Willd.	meadow sedge	3,5	
Carex grayi Carey	Asa Gray sedge	3,4	V
Carex grisea Wahlenb.	ambiguous sedge	3,4,5	
Carex hirsutella Mackenzie = *Carex complanata* Torr. & Hook. var *hirsuta*(Willd.) Gleason	hirsute sedge	1,2,5,6	
Carex intumescens Rudge	bladder sedge	3	V
Carex jamesii Schwein.	Nebraska sedge	2,4	V
Carex laevivaginata (Kukenth.) Mackenzie	smooth-sheath sedge	5,8	
Carex laxiflora Lam.	loose-flowered sedge	1,2	
Carex louisianica Bailey	Louisiana sedge	3	V,C
Carex lupulina Muhl. ex Willd.	hop sedge	3,8	V,C
Carex lurida Wahlenb.	sallow sedge	3,8	
Carex meadii Dewey	Mead's sedge	7	V
Carex muehlenbergii Schkuhr ex Willd.	Muehlenberg's sedge	5	
Carex nigromarginata Schwein.	black-edge sedge	1,2	
Carex normalis Mackenzie	greater straw sedge	4,8	V
Carex oligocarpa Schkuhr ex Willd.	eastern few-fruit sedge	2	V,C
Carex pellita Muhl ex Willd. = *Carex lanuginosa* auct. non Michx.	woolly sedge	5	V,C
Carex pensylvanica Lam.	Pennsylvania sedge	1	
Carex platyphylla Carey	broad-leaved sedge	1	V
Carex radiata (Wahlenb.) Small	stellate sedge	3,4,5	
Carex rosea Schkuhr ex Willd.	rosy sedge	2	
Carex scoparia Schkuhr ex Willd.	pointed broom sedge	8	
Carex squarrosa L.	squarrose sedge	3,5	
Carex stipata Muhl. ex Willd. var. *maxima* Chapman = *Carex uberior* (C. Mohr) Mackenzie	large stalk-grain sedge	3	V
Carex stipata Muhl. ex Willd. var. *stipata*	stalk-grain sedge	3,8	
Carex stricta Lam.	tussock sedge	5	
Carex styloflexa Buckl.	bend sedge	2	
Carex swanii (Fern.) Mackenzie	Swan sedge	1	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
CYPERACEAE (continued)			
Carex tonsa (Fern.) Bickn. = *Carex umbellata* var. *tonsa* Fern.	shaved sedge	1	
Carex tribuloides Wahlenb.	blunt broom sedge	3,5	
Carex typhina Michx.	cat-tail sedge	3	
Carex vulpinoidea Michx.	fox sedge	3,5	
Carex willdenowii Schkuhr ex Willd.	Willdenow's sedge	1,2,6	
Cyperus echinatus (L.) Wood	globe flatsedge	7	
Cyperus lancastriensis Porter ex Gray	many-flowered flatsedge	8	V,C
Cyperus odoratus L.	rusty flatsedge	8	V,C
Cyperus strigosus L.	straw-colored flatsedge	8	
Eleocharis obtusa (Willd.) J.A. Schultes	blunt spikerush	5	
Eleocharis tenuis (Willd.) J.A. Schultes	slender spikerush	3,7	
Kyllinga pumila Michx. = *Cyperus tenuifolius* (Steud.) Dandy	thinleaf flatsedge	9	
Schoenoplectus tabernaemontani (K.C. Gmel.) Palla = *Scirpus validus* Vahl	soft-stem bulrush	8	
Scirpus atrovirens Willd.	dark-green bulrush	3,5	
Scirpus cyperinus (L.) Kunth	woolgrass bulrush	8	
Scirpus georgianus Harper	Georgia bulrush	5	
Scirpus pendulus Muhl.	reddish bulrush	3,8	V
Scleria pauciflora Muhl. ex Willd.	fewflower nutrush	7	
DIOSCOREACEAE			
Dioscorea quaternata J.F. Gmel.	whorled wild yam	1,2,3,5	
HYDROCHARITACEAE			
Elodea nuttallii (Planch.) St. John	Nuttall waterweed	4	
IRIDACEAE			
Iris versicolor L.	blueflag	3	
Sisyrinchium mucronatum Michx.	Michaux blue-eyed grass	7	
JUNCACEAE			
Juncus acuminatus Michx.	sharp-fruited rush	5	
Juncus biflorus Ell.	grass-leaved rush	8	
Juncus brachycarpus Engelm.	short-fruited rush	8	V,C
Juncus dichotomus Ell.	forked rush	8	
Juncus dudleyi Wieg.	Dudley's rush	8	V,C
Juncus effusus L.	soft rush	3	
Juncus tenuis Willd.	slender rush	1,2,3,5	
Luzula bulbosa (Wood) Smyth & Smyth	southern woodrush	4	
Luzula echinata (Small) F.J. Herm.	spreading woodrush	6	
LEMNACEAE			
Lemna minor L.	lesser duckweed	8	
LILIACEAE			
Allium canadense L.	meadow onion	3,4	
**Allium vineale* L.	field garlic	7,9	
**Asparagus officinalis* L.	asparagus	7	
Erythronium americanum Ker-Gawl.	yellow trout-lily	4	
Hypoxis hirsuta (L.) Coville	eastern yellow stargrass	1,2	
Polygonatum biflorum (Walt.) Ell.	Solomon's-seal	1,2,4,10	
Maianthemum racemosum (L.) Link =*Smilacina racemosa* (L.) Desf.	false Solomon's-seal	1,2,6	
Uvularia perfoliata L.	perfoliate bellwort	2	
ORCHIDACEAE			
Corallorhiza odontorhiza (Willd.) Poir.	autumn coralroot	2	
Goodyera pubescens (Willd.) R. Br. ex Ait. f.	downy rattlesnake-plantain	1,6	
Liparis liliifolia (L.) L.C. Rich. ex Ker-Gawl.	large twayblade	2	
Platanthera lacera (Michx.) G. Don = *Habenaria lacera* (Michx.) R. Br.	ragged fringed orchid	7	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
ORCHIDACEAE (continued)			
Spiranthes lacera (Raf.) Raf. var. *gracilis* (Bigelow) Luer = *Spiranthes gracilis* (Bigelow) Beck	southern slender ladies'-tresses	7	
Spiranthes tuberosa Raf. = *Spiranthes grayi* Ames	little ladies'-tresses	1	
Tipularia discolor (Pursh) Nutt.	cranefly orchid	2	
POACEAE			
Agrostis elliottiana J.A. Schultes	Elliott bentgrass	6,9	V
Agrostis hyemalis (Walt.) B.S.P.	winter bentgrass	7	
Agrostis perennans (Walt.) Tuckerman	autumn bentgrass	1,2,5,6	
Andropogon virginicus L.	broom-sedge	7	
**Anthoxanthum odoratum* L.	sweet vernal grass	7,9	
Aristida longespica Poir.	slip-spike three-awn grass	7,9	V
Aristida oligantha Michx.	prairie three-awn grass	7	
**Arthraxon hispidus* (Thunb.) Makino	joint-head arthraxon	4,8	
**Bromus commutatus* Schrad.	hairy brome grass	9	
**Bromus japonicus* Thunb. ex Murr.	Japanese brome grass	9	
Bromus pubescens Muhl. ex Willd.	common Eastern brome grass	1,2	
**Bromus racemosus* L.	spiked brome grass	7,9	
**Bromus sterilis* L.	poverty brome	9	V,C
Cinna arundinacea L.	wood reed grass	3,4,5	
**Cynodon dactylon* (L.) Pers.	Bermuda grass	9	
**Dactylis glomerata* L.	orchard grass	7	
Danthonia spicata (L.) Beauv. ex Roemer & J.A. Schultes	poverty oat-grass	1,2,3,5,6,7	
Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. *acuminatum*	tapered panic grass	3,7	
Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. *lindheimeri* (Nash) Gould & C.A. Clark	tapered panic grass	5	V
Dichanthelium boscii (Poir.) Gould & C.A. Clark	Bosc's panic grass	1,2	
Dichanthelium clandestinum (L.) Gould	deer-tongue panic grass	4,8	
Dichanthelium commutatum (J.A. Schultes) Gould	variable panic grass	1,2	
Dichanthelium depauperatum (Muhl.) Gould	starved panic grass	1,7	
Dichanthelium dichotomum (L.) Gould	small-fruited panic grass	1,2,5,6	
Dichanthelium linearifolium (Scribn. ex Nash) Gould	narrow-leaf panic grass	2,5,7	
Dichanthelium scoparium (Lam.) Gould	velvet panic grass	8	V,C
Dichanthelium sphaerocarpon (Ell.) Gould var. *isophyllum* (Scribn.) Gould & C.A. Clark	roundfruit panic grass	4,9	
Dichanthelium sphaerocarpon (Ell.) Gould var. *sphaerocarpon*	roundfruit panic grass	3,7	
**Digitaria ischaemum* (Schreb.) Schreb. ex Muhl.	smooth crabgrass	9	
**Digitaria sanguinalis* (L.) Scop.	hairy crabgrass	9	
Echinochloa muricata (Beauv.) Fern.	rough barnyard grass	9	
**Eleusine indica* (L.) Gaertn.	Indian goosegrass	9	
Elymus hystrix L. var. *hystrix* = *Hystrix patula* Moench	bottlebrush grass	1,2,3,5	
Elymus riparius Wieg.	river-bank wild rye	3,4	V,C
Elymus virginicus L.	Virginia wild rye	2,4	
**Eragrostis cilianensis* (All.) Vign. ex Janchen	stinkgrass	9	
**Eragrostis curvula* (Schrad.) Nees	weeping lovegrass	9	
**Eragrostis pilosa* (L.) Beauv.	India lovegrass	9	
Eragrostis spectabilis (Pursh) Steud.	purple lovegrass	7	
Festuca rubra L.	red fescue	2,9	
Festuca subverticillata (Pers.) Alexeev	nodding fescue	1,2,3,4	
Glyceria septentrionalis A.S. Hitchc.	eastern mannagrass	3,8	V,C
Glyceria striata (Lam.) A.S. Hitchc.	fowl mannagrass	3,4,5	
**Holcus lanatus* L.	common velvet grass	6,7	
Hordeum pusillum Nutt.	little barley	9	
Leersia oryzoides (L.) Sw.	rice cutgrass	4	
Leersia virginica Willd.	Virginia cutgrass	3,5	
**Lolium pratense* (Huds.) S.J. Darbyshire = *Festuca elatior* L. p.p.	meadow fescue	2,3,5,7,9	
**Microstegium vimineum* (Trin.) A. Camus	eulalia	1,2,3,4,8	
Muhlenbergia frondosa (Poir.) Fern.	wirestem muhly	4	V,C
Muhlenbergia schreberi J.F. Gmel.	nimble-will	9	

GROUP/FAMILY SCIENTIFIC NAME	COMMON NAME	HABITATS	COUNTY RECORD
POACEAE (continued)			
Muhlenbergia sobolifera (Muhl. ex Willd.) Trin.	cliff muhly	2	
Panicum anceps Michx.	beaked panic grass	7	
Panicum capillare L.	witch grass	7	
Panicum dichotomiflorum Michx.	fall witch grass	7,9	
Panicum philadelphicum Bernh. ex Trin.	Philadelphia panic grass	7	V,C
Panicum rigidulum Bosc ex Nees var. *elongatum* (Pursh) Lelong	redtop panic grass	4,8	
Panicum rigidulum Bosc ex Nees var. *rigidulum*	tall flat panic grass	8	
Paspalum laeve Michx.	field paspalum	8	
Paspalum setaceum Michx.	slender paspalum	8	
Phalaris arundinacea L.	reed canary grass	8	V,C
**Phleum pratense* L.	meadow timothy	7	
**Poa annua* L.	annual bluegrass	7,9	
Poa autumnalis Muhl. ex Ell.	autumn bluegrass	3,4	V,C
**Poa compressa* L.	flat-stemmed bluegrass	1,2,3,5	
Poa cuspidata Nutt.	short-leaved bluegrass	1,2	
Poa pratensis L.	Kentucky bluegrass	3,7	
Poa sylvestris Gray	woodland bluegrass	4	
**Poa trivialis* L.	rough bluegrass	3,4,5	V,C
Schizachyrium scoparium (Michx.) Nash = *Andropogon scoparius* Michx.	little bluestem	7	
**Setaria faberi* Herrm.	nodding foxtail	9	
Setaria parviflora (Poir.) Kerguélen = *Setaria geniculata* auct. non (Wild.) Beauv.	bristly foxtail	7	
**Setaria pumila* (Poir.) Roemer & J.A. Schultes ssp. *pumila* = *Setaria glauca* (L.) Beauv. [under *Pennisetum glaucum* (L.) R. Br. in Kartesz (1999)]	yellow foxtail	9	
**Setaria viridis* (L.) Beauv.	green foxtail	7,9	
Sorghastrum nutans (L.) Nash	Indian grass	7	
Sphenopholis nitida (Biehler) Scribn.	shiny wedge grass	1,2	
Sphenopholis pensylvanica (L.) A.S. Hitchc.	swamp wedge grass	3	
Sporobolus vaginiflorus (Torr. ex Gray) Wood	sheathed dropseed	9	V,C
Tridens flavus (L.) A.S. Hitchc.	redtop	7,9	
Tripsacum dactyloides (L.) L.	northern gamagrass	9	
Vulpia octoflora (Walt.) Rydb.	slender fescue	6	
PONTEDERIACEAE			
Pontederia cordata L.	pickerel weed	4,8	
POTAMOGETONACEAE			
Potamogeton diversifolius Raf.	water-thread pondweed	8	
SMILACACEAE			
Smilax glauca Wlt.	whiteleaf greenbrier	1,2	
Smilax herbacea L.	common carrionflower	3,5	
Smilax pulverulenta Michx.	hairy carrionflower	2,4	
Smilax rotundifolia L.	common greenbrier	1,2,3,5,6	
S*milax tamnoides* L. =*Smilax hispida* Muhl. ex Torr.	bristly greenbrier	2,4,6	V,C
TYPHACEAE			
Typha latifolia L.	broad-head cattail	8	