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The Vascular Flora of the Little River National Wildlife Refuge, McCurtain County, Oklahoma

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ABSTRACT The Little River National Wildlife Refuge (6,070 ha) is located on the west Gulf Coastal Plain in southeastern Oklahoma, a region of high plant diversity for the state. An inventory of the refuge yielded 708 taxa of vascular plants in 688 species, 410 genera, and 128 families. The largest families were the Asteraceae (n = 88 taxa), Poaceae (n = 76), Cyperaceae (n = 49), and Fabaceae (n = 44). Sixty-seven nonnative taxa were collected, representing 9.5% of the flora. Sixty-two taxa were present that are tracked by the Oklahoma Natural Heritage Inventory, including the Oklahoma endemic, *Leavenworthia aurea* var. *aurea*. In addition, we report the first Oklahoma collection of *Polygonum glabrum*.

Key words: Endemic species, Oklahoma, rare species, Upper Gulf Coastal Plain, wetland vegetation.

INTRODUCTION The Gulf Coastal Plain has been characterized as a region of both high plant diversity (Martin and Boyce 1993) and endemism (Thorne 1993). The unique floristic elements of the Gulf Coastal Plain are a product of geologic history and heterogeneous natural environments. The focus of this article is the West Gulf Coastal Plain subdivision of McCurtain County, Oklahoma.

McCurtain County has been recognized as possessing the greatest diversity of vascular plants (2,305 taxa) of Oklahoma's 77 counties (Hoagland et al. 2012). In addition to the West Gulf Coastal Plain in the southern half of the county, the Ouachita Mountains occur in the northern half (Curtis et al. 2008). Regardless, vascular plant inventories from the West Gulf Coastal Plain of Oklahoma are few. Hoagland and Johnson (2004) published species lists for two West Gulf Coastal Plain locations in McCurtain County: Grassy Slough Wildlife Management Area (WMA) and Red Slough WMA. There were 315 taxa reported from Grassy Slough WMA, and 338 from Red Slough WMA. The objective of this study was to contribute to

the knowledge of the flora of the West Gulf Coastal Plain. Specifically, we inventoried the vascular plants of the Little River National Wildlife Refuge (LRNWR), which was established in 1987 to preserve wetland habitats valuable to migratory birds (USFWS 2012). To date, a comprehensive inventory of vascular plants at LRNWR had not been conducted.

STUDY AREA The LRNWR (Figure 1) consists of 6,070 ha on the dissected, coastal plain, physiographic province (Curtis et al. 2008), in McCurtain County, Oklahoma (33°58'19.2"–33°56'20.4"N, 94°48'28.8"–94°32'31.2"W; elevation, 92.3–119.2 m). Two geologic formations, both of Cretaceous age, flank the Little River floodplain: the Antlers Sand to the north and Goodland Limestone to the south. The floodplain is composed of deep Quaternary alluvial deposits with remnant, heavily eroded terrace deposits (Johnson 2008). Two soils associations predominate at the LRNWR: the Guyton-Ochlockonee and the Hollywood-Swink. The Guyton-Ochlockonee association is a deep, loamy soil that is poorly drained to well-drained and occurs on nearly level floodplains and terraces. The Hollywood-Swink association is a loamy-clay soil that occurs over

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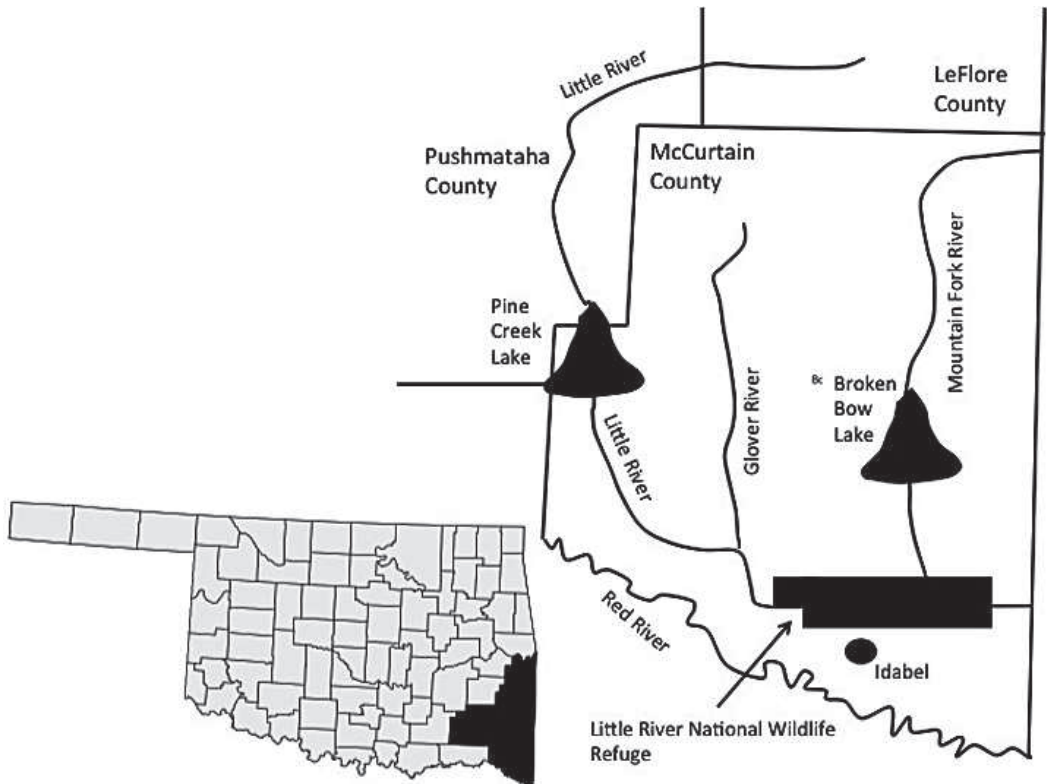


Figure 1. The Little River watershed and location of the Little River National Wildlife refuge, United States Fish and Wildlife Service, in McCurtain County, Oklahoma.

limestone on gently sloping to moderately steep uplands and ranges, from deep to very shallow, and moderately well drained to well drained. It is restricted to the south side of the Little River. Three additional soil associations occur at the LRNWR, but to a lesser extent: the Ruston-Tiak-Saffell (deep, very gently sloping to moderately steep, moderately well drained to well drained, upland soil), the Kinta-Wrightsville (deep, loamy, on nearly level to very gently sloping, somewhat poorly drained to poorly drained uplands and terraces), and Felker-Kullit (deep, upland, loamy, nearly level to very gently sloping, poorly drained to moderately well drained on uplands) (Reasoner 1974).

The climate of southeastern Oklahoma is subtropical humid (Trewartha 1968). Summers are warm and humid (mean July temperature, 26.9°C), and winters are relatively short and mild (mean January temperature, 2.7°C). Mean annual precipitation is 122 cm, with the highest monthly

precipitation occurring in May (15 cm) and April (13 cm) (Oklahoma Climatological Survey 2012).

METHODS

Collections were made during the growing season (March to October) of 2007 and 2008. For each plant specimen, the predominant vegetation association at the collection site was recorded using the classification of Hoagland (2000). Vouchers for exotic taxa were made from naturalized populations only, thus excluding cultivated and ornamental plants. All collections were made by Bruce Hoagland and Amy Buthod. Specimens were processed at the Robert Bebb Herbarium at the University of Oklahoma following standard procedures. Manuals used for specimen identification included Waterfall (1972), Smith (1994), Yatskievych (1999), and Diggs et al. (2006). Identifications were verified by comparison with collections from the Robert Bebb Herbarium. The resulting list is based solely on the collections made during this study. Origin, either native or

Table 1. Summary of floristic collections from the Little River National Wildlife Refuge, McCurtain County, Oklahoma; format follows Palmer et al. (1995)

Taxonomic Group	Taxa	Native	Exotic
Pteridophyta	19	19	0
Coniferophyta	3	3	0
Magnoliophyta			
Magnoliopsida	500	452	48
Liliopsida	186	167	19
Total	708	641	67

introduced to North America, was determined using the US Department of Agriculture (USDA), Natural Resources Conservation Service (NRSC) (2012) PLANTS database. Nomenclature also follows the USDA, NRCS (2012) PLANTS database. We also compared the LRNWR species list with the coastal plain endemics list, derived by Sorrie and Weakley (2001). Sets of voucher specimens were deposited at both the Robert Bebb Herbarium at the University of Oklahoma and at the LRNWR office in Broken Bow, Oklahoma.

RESULTS AND DISCUSSION There were 708 vascular plant taxa in 688 species, 410 genera, and 127 families collected at the LRNWR, including 19 ferns (2.7% of the flora), 3 gymnosperms (0.4%), 500 dicots (70.6%) and 186 monocots (26.3%) (Table 1, Appendix). Four families constituted 36.4% of the flora: Asteraceae, with 88 taxa (12.4% of the flora), Poaceae, with 76 taxa (10.7%), Cyperaceae, with 49 taxa (6.9%), and Fabaceae, with 44 taxa (6.2%). There were 26 taxa in the genus *Carex* (3.7% of the flora), 13 in *Quercus* (1.8%), and 11 in *Cyperus* (1.6%). Of the taxa collected, 179 were annuals (25.3% of the flora), 4 were biennials (0.6%), and 524 were perennials (74.1%) (Table 2, Appendix).

Fourteen taxa, previously unreported from McCurtain County, were collected. Of those, *Polygonum glabrum* Willd. (syn. = *P. densiflorum* Meisn.) was also documented for the first time in Oklahoma. *Polygonum glabrum* has been reported from the adjacent states of Arkansas, Kansas, Missouri, and Texas (USDA, NRCS 2012). At LRNWR, it was a common constituent species in *Taxodium distichum*-forested wetlands.

Sixty-seven taxa (9.5% of the flora) from 24 families were not native to North America. The greatest number of nonnative taxa were in the

Table 2. Summary of floristic collections from the Little River National Wildlife Refuge, McCurtain County, Oklahoma; format follows Palmer and Richardson (2012)

Classification	Number of Taxa
Families	127
Genera	410
Species	688
Subspecies and varieties	708
Tracked taxa	62
Exotic taxa	65
Perennials	524
Annuals	179
Biennials	4

families Poaceae (n = 17 nonnative taxa) and Fabaceae (n = 11) and from the genus *Trifolium* (n = 5).

Sixty-two (8.8% of the flora) taxa were encountered that are currently tracked by the Oklahoma Natural Heritage Inventory (ONHI) (ONHI 2012, Table 3). Taxa are ranked according to level of imperilment at the subnational (S) and global (G) levels on a scale of 1–5, where 1 represents a taxon that is critically imperiled and 5 is one that is secure (Groves et al. 1995). Of these, *Leavenworthia aurea* var. *aurea* was among the rare Gulf Coastal Plain endemics listed by Estill and Cruzan (2001).

There were 12 taxa (1.7% of the flora) at the LRNWR that are recognized as endemic to the Gulf Coastal Plains. Following the categories of Sorrie and Weakley (2001), these include nine taxa that are “widespread, including the Mississippi Embayment” (*Brunnichia ovata*, *Crataegus marshallii*, *Eupatorium semiserratum*, *Hydrolea ovata*, *Phanopyrum gymnocarpon*, *Planera aquatica*, *Taxodium distichum*, *Thalia dealbata*, and *Trepocarpus aethusae*), one that is “widespread, disjunct to central Tennessee and/or Kentucky” (*Chasmanthium laxum*), and two that are endemic to the “West Gulf Coastal Plain.” These two West Gulf Coastal Plain endemic species are *Amorpha paniculata* Torr. & A. Gray and *Gaura demareei* P. H. Raven & Gregory; both are tracked by the ONHI.

In comparing the species list for LRNWR with those of the Red Slough and Grassy Slough WMAs, 175 taxa were reported in common from all three of the sites. Fifty-three taxa were found both at Grassy Slough WMA and LRNWR, and 64 at both Red Slough WMA and LRNWR.

Table 3. Species tracked by the Oklahoma Natural Heritage Inventory that occurred at The Little River National Wildlife Refuge, US Fish and Wildlife Service. G rank = global conservation rank, S rank = state conservation rank. Species are ranked in this Table according to level of imperilment at the state (S) and global (G) levels on a scale of 1 to 5; 1 representing a species that is imperiled, and 5 representing a species that is secure (Groves et al. 1995). Two G ranks indicate that the rank cannot be resolved to a single one, often due to insufficient data. ? = rank uncertain

Taxon	Family	G Rank	S Rank
<i>Aesculus pavia</i>	Hippocastanaceae	G5	S2
<i>Amorpha nitens</i>	Fabaceae	G3?	S1
<i>Amorpha paniculata</i>	Fabaceae	G2G3	S1
<i>Aralia spinosa</i>	Araliaceae	G5	S2
<i>Aristolochia reticulata</i>	Aristolochiaceae	G4	S2
<i>Baptisia nuttalliana</i>	Fabaceae	G5	S2
<i>Bignonia capreolata</i>	Bignoniaceae	G5	S1
<i>Brachyelytrum erectum</i> var. <i>erectum</i>	Poaceae	G5	S3
<i>Callirhoe bushii</i>	Malvaceae	G3	S1
<i>Carex hyalina</i>	Cyperaceae	G4	S2
<i>Carex oxylepis</i>	Cyperaceae	G5?	S2
<i>Carya aquatica</i>	Juglandaceae	G5	S1
<i>Carya myristiciformis</i>	Juglandaceae	G4	S1
<i>Castanea pumila</i> var. <i>pumila</i>	Fagaceae	G5T5?	S2
<i>Cayaponia quinqueloba</i>	Cucurbitaceae	G4	S1
<i>Cornus foemina</i>	Cornaceae	G5	S2
<i>Clematis glaucophylla</i>	Ranunculaceae	G4?	S1
<i>Dalea compacta</i>	Fabaceae	G5	S1
<i>Desmodium nuttallii</i>	Fabaceae	G5	S1
<i>Desmodium pauciflorum</i>	Fabaceae	G5	S1
<i>Dulichium arundinaceum</i>	Cyperaceae	G5	S1
<i>Elymus hystrix</i> var. <i>hystrix</i>	Poaceae	G5T5	S2
<i>Eupatorium rotundifolium</i>	Asteraceae	G5	S1
<i>Euthamia leptcephala</i>	Asteraceae	G5	S1
<i>Gaura demareei</i>	Onagraceae	G4Q	S1
<i>Halesia carolina</i>	Styracaceae	G4G5	S2
<i>Hedeoma pulegioides</i>	Lamiaceae	G5	S2
<i>Hottonia inflata</i>	Primulaceae	G4	S2
<i>Hymenocallis caroliniana</i>	Liliaceae	G4	S1
<i>Itea virginica</i>	Grossulariaceae	G4	S1
<i>Juncus filipendulus</i>	Juncaceae	G5	S2
<i>Justicia ovata</i> var. <i>lanceolata</i>	Acanthaceae	G5T4T5	S1
<i>Leavenworthia aurea</i> var. <i>aurea</i>	Brassicaceae	G2T2	S1
<i>Lesquerella angustifolia</i>	Brassicaceae	G3	S2
<i>Limnobiium spongia</i>	Hydrocharitaceae	G4	S1
<i>Minuartia muscorum</i>	Caryophyllaceae	G4	S3
<i>Modiola caroliniana</i>	Malvaceae	G5	S2
<i>Neobeckia aquatica</i>	Brassicaceae	G4?	S1
<i>Optismenus hirtellus</i> ssp. <i>setarius</i>	Poaceae	G5T5	S1
<i>Panicum brachyanthum</i>	Poaceae	G5	S2
<i>Peltandra virginica</i>	Araceae	G5	S1
<i>Phaenopyrum gymnocarpium</i>	Poaceae	G5	S1
<i>Physostegia intermedia</i>	Lamiaceae	G5	S1
<i>Planera aquatica</i>	Ulmaceae	G5	S3
<i>Platanthera clavellata</i>	Orchidaceae	G5	S2
<i>Pontederia cordata</i>	Pontederiaceae	G5	S1
<i>Quercus nuttallii</i>	Fagaceae	G4G5	S1
<i>Sabal minor</i>	Arecaceae	G5	S2
<i>Sacciolepis striata</i>	Poaceae	G5	S2
<i>Smilax smallii</i>	Smilacaceae	G5?	S2
<i>Solidago auriculata</i>	Asteraceae	G4	S1
<i>Styrax americanus</i>	Styracaceae	G5	S1
<i>Symplocos tinctoria</i>	Symplocaceae	G5	S1
<i>Taxodium distichum</i>	Cupressaceae	G5	S2
<i>Thalia dealbata</i>	Marantaceae	G4	S3
<i>Thalictrum arkansanum</i>	Ranunculaceae	G2Q	S2

Table 3. Continued

Taxon	Family	G Rank	S Rank
<i>Tilia americana</i> var. <i>americana</i>	Tiliaceae	G5T5	S3
<i>Tipularia discolor</i>	Orchidaceae	G4G5	S2
<i>Triadenum walteri</i>	Clusiaceae	G5	S2
<i>Urtica chamaedryoides</i>	Urticaceae	G4G5	S3
<i>Vaccinium corymbosum</i>	Ericaceae	G5	S2
<i>Wolffiella gladiata</i>	Lemnaceae	G5	S1

Plant specimens were collected from eight vegetation associations at the LRNWR. The predominant vegetation type was forest, both upland and bottomland. Natural and constructed emergent wetlands were also common. These associations are described below.

1. *Acer negundo*–*Acer saccharinum*/*Planera aquatica* Forest Association (ANAS) was dominant on the banks of the Little River and other large streams at the LRNWR. Generally, diversity was low, and many of the associated taxa were common in the *Ulmus rubra*–*Acer saccharum*–*Celtis laevigata* Forest Association as well. Nevertheless, some state rare taxa were found exclusively in this forest association. Taxa tracked by the ONHI included *Aesculus pavia*, *Cayaponia quinqueloba*, and *Carex oxylepis*.
2. *Quercus falcata*–*Carya alba* Forest Association (QFCA) was the predominant upland forest association at the LRNWR. Common associated taxa included *Baptisia bracteata* var. *leucophaea*, *Cercis canadensis*, *Crataegus spathulata*, *Lespedeza repens*, *Quercus alba*, *Quercus stellata*, *Rhynchosia latifolia*, *Schizachyrium scoparium*, *Tridens flavus*, and *Viburnum rufidulum*. Plants tracked by the ONHI occurring in this association were *Aristolochia reticulata*, *Baptisia nuttalliana*, *Carya myristiciformis*, and *Desmodium pauciflorum*.
3. *Quercus nigra*–*Quercus phellos* Forest Association (QNP) was the dominant forest association at LRNWR (Hoagland et al. 1996). The forest understory was often open, with relatively few herbaceous taxa. Common associated taxa included *Acer rubrum*, *Arundinaria gigantea*, *Carex grayi*, *Carpinus caroliniana*, *Crataegus marshallii*, *Gleditsia triacanthos*, *Impatiens capensis*, *Liquidambar styraciflua*, *Pinus taeda*, and *Quercus lyrata*. Tracked plant species included *Aesculus pavia*, *Amorpha paniculata*, *Aralia spinosa*, *Bignonia capreolata*, *Carex hyalina*, *Quercus nuttallii*, and *Smilax smallii*.
4. *Taxodium distichum* Forest Association (TDF) was restricted to sloughs and oxbows, although *T. distichum* does grow along the banks of the Little River (Little 1980). In sloughs and oxbows, herbaceous taxa occur primarily in association with floating mats of vegetation. The area covered and density of floating mats depends on the degree of canopy closure; under high light/open canopy conditions, the water surface may be completely covered by a mat, whereas mats were smaller or absent in shaded sites. Floating mats are composed of interwoven stems of *Ceratophyllum echinatum*, *Myriophyllum heterophyllum*, *Polygonum caespitosum*, *Potamogeton pulcher*, and *Utricularia biflora*. Tracked plant species in the TDF were *Cornus foemina*, *Hottonia inflata*, *Itea virginica*, *Limnobium spongia*, *Neobeckia aquatica*, *Styrax americanus*, and *Wolffiella gladiata*.
5. *Ulmus rubra*–*Acer saccharum*–*Celtis laevigata* Forest Association (URAS) represents mesic forests that occur on terraces and benches. Unlike other forest associations, understory growth was dense. Associated taxa included *Acer rubrum*, *Bromus pubescens*, *Carya cordiformis*, *Cercis canadensis*, *Dichantheium boscii*, *Dichantheium linearifolium*, *Podophyllum peltatum*, *Silene stellata*, *Carex cherokeensis*, *Chasmanthium sessiliflorum*, *Desmodium nudiflorum*, *Nyssa sylvatica*, *Quercus alba*, *Quercus muehlenbergii*, and *Tilia americana* var. *americana*. There were more taxa rare to the state in this association than there were in the others, including *Aralia spinosa*, *Brachyelytrum erectum*, *Halesia carolina*,

Oplismenus hirtellus ssp. *setarius*, *Panicum brachyanthum*, *Sabal minor*, *Solidago auriculata*, *Thalictrum arkansanum*, *Tipularia discolor*, *Urtica chamaedryoides*, and *Vaccinium corymbosum*.

6. Limestone glades (LG) were small in extent but botanically significant to the flora of the LRNWR. Exposed limestone outcrops and ledges were restricted to the south side of the Little River and are part of the Goodland Limestone, a thin-bedded formation from the Lower Cretaceous (Davis 1960). Historically, the glade habitats were more extensive in McCurtain County; they are now restricted in extent because of fire suppression and the resulting encroachment of woody taxa, such as *Maclura pomifera*, *Ulmus crassifolia*, *Rhus aromatica*, and *Sideroxylon lanuginosum*. Associated taxa in the open glades were *Croton willdenowii*, *Euphorbia corollata*, *Heliotropium tenellum*, *Nassella leucotricha*, *Phyllanthus polygonoides*, and *Sporobolus compositus*. Plants tracked by the ONHI were *Dalea compacta*, *Hedeoma pulegioides*, and *Leavenworthia aurea* var. *aurea*.
7. Herbaceous emergent wetland (HEW) vegetation was extensively intergraded at the LRNWR, and, for convenience, all associations were subsumed into the category HEW, including the *Juncus effusus* herbaceous association, *Justicia americana* herbaceous association, and *Zizaniopsis miliacea* herbaceous association. Associated wetland plant taxa included *Alnus serrulata*, *Bidens aristosa*, *Cephalanthus occidentalis*, *Cirsium horridulum*, *Hydrocotyle ranunculoides*, *Hydrolea ovata*, *Limnoscadium pinnatum*, *Mimulus alatus*, *Polygonum lapathifolium*, *Rhexia mariana*, *Rhynchospora macrostachya*, *Sagittaria montevidensis*, *Scirpus cyperinus*, and *Xanthium strumarium*. Plants tracked by the ONHI that occurred in this association were *Dulichium arundinaceum*, *Hottonia inflata*, *Hymenocallis caroliniana*, *Juncus filipendulus*, *Planera aquatica*, *Platanthera clavellata*, and *Sacciolepis striata*.
8. Disturbed areas (DA) refer to locations that have been affected by anthropogenic activity only, and do not include disturbances caused by fire, insects, windthrow, or ice storms. Anthropogenic disturbance at LRNWR was limited in extent and consisted primarily of refuge access roads. Common plants in

disturbed areas included *Ambrosia artemisiifolia*, *Ambrosia trifida*, *Baccharis halimifolia*, *Conyza canadensis*, *Croton capitatus*, *Juniperus virginiana*, *Melilotus alba*, *Melothria pendula*, *Mollugo verticillata*, *Phytolacca americana*, and *Trifolium campestre*. Plants tracked by the ONHI that occurred in this association were *Callirhoe bushii*, *Clematis glaucophylla*, *Eupatorium rotundifolium*, *Euthamia leptoccephala*, *Gaura demareei*, and *Modiola caroliniana*.

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APPENDIX Annotated list of vascular plant taxa from the Little River National Wildlife Refuge, McCurtain County, Oklahoma. Each entry includes life history (A = annual, B = biennial, or P = perennial), collection number, and habitat information (ANAS = *Acer negundo*–*Acer saccharinum*/*Planera aquatica* Forest Association, DA = disturbed area, LG = limestone glade, HEW = herbaceous emergent wetland, QFCA = *Quercus falcata*–*Carya alba* Forest Association, QNQP = *Quercus nigra*–*Quercus phellos* Forest Association, TDF = *Taxodium distichum* Forest Association, URAS = *Ulmus rubra*–*Acer saccharum*–*Celtis laevigata*). Introduced taxa are denoted with an asterisk (*), and taxa tracked by the Oklahoma Natural Heritage Inventory are denoted with a double-dagger (‡).

PTERIDOPHYTA
ASPLENIACEAE

Asplenium platyneuron (L.) B.S.P.-P; QFCA; LR-204.
Asplenium rhizophyllum L.-P; QFCA; LR-140.
Asplenium resiliens Kunze-P; QFCA; LR-919.

AZOLLACEAE

Azolla mexicana Schlecht. & Cham. ex K. Presl-P; TDF;
LR-704.

DENNSTAEDTIACEAE

Pteridium aquilinum (L.) Kuhn-P; QFCA; LR-626.

DRYOPTERIDACEAE

Athyrium filix-femina (L.) Roth-P; QFCA, URAS; LR-826.
Cystopteris protrusa (Weatherby) Blasdell-P; QFCA; LR-037.
Cystopteris tenuis (Michx.) Desv.-P; URAS; LR-777.
Dryopteris marginalis (L.) Gray-P; QNQP; LR-910.
Onoclea sensibilis L.-P; HEW, QNQP; LR-733.
Polystichum acrostichoides (Michx.) Schott-P; URAS; LR-920.

EQUISETACEAE

Equisetum laevigatum A. Braun-P; HEW; LR-617.

OPHIOGLOSSACEAE

Botrychium dissectum Spreng.-P; QFCA; LR-773.
Botrychium virginianum (L.) Sw.-P; QFCA; LR-091.
Ophioglossum engelmannii Prantl-P; QNQP; LR-028.

OSMUNDACEAE

Osmunda cinnamomea L.-P; QNQP, HEW, TDF; LR-753.
Osmunda regalis L.-P; QNQP, HEW, TDF; LR-772.

POLYPODIACEAE

Pleopeltis polypodioides (L.) Andrews & Windham-P; QFCAF, QNQP; LR-018.

PTERIDACEAE

Adiantum pedatum L.-P; URAS; LR-887.

CONIFEROPHYTA

CUPRESSACEAE

Juniperus virginiana L.-P; DA, QFCA; LR-138.
‡*Taxodium distichum* (L.) L.C. Rich.-P; TDF; LR-248.

PINACEAE

Pinus taeda L.-P; QFCAF, QNQP; LR-739.

MAGNOLIOPHYTA

MAGNOLIOPSIDA

ACANTHACEAE

Dicliptera brachiata (Pursh) Spreng.-A; ANAS; LR-565.
Justicia americana (L.) Vahl-P; COB; LR-767.
‡*Justicia ovata* (Walt.) Lindau var. *lanceolata* (Chapm.) R.W. Long-P; COB; LR-268.
Ruellia pedunculata Torr. ex A. Gray ssp. *pedunculata*-P; DA; LR-254.
Ruellia strepens L.-P; QNQP; LR-611.

ACERACEAE

Acer leucoderme Small-P; QFCA; LR-884.
Acer negundo L.-P; ANAS; LR-035.
Acer rubrum L.-P; QFCA; LR-014.

Acer saccharinum L.-P; ANAS; LR-020.
Acer saccharum Marsh.-P; URAS; LR-284.

AMARANTHACEAE

Amaranthus spinosus L.-A; DA; LR-656.
Amaranthus tuberculatus (Moq.) Sauer-A; DA; LR-516.
Iresine rhizomatosa Standl.-P; DA; LR-556.

ANACARDIACEAE

Rhus aromatica Ait.-P; GL, QFCA; LR-871.
Rhus copallinum L.-P; DA, QFCA; LR-395.
Rhus glabra L.-P; QFCA; LR-456.

ANNONACEAE

Asimina triloba (L.) Dunal-P; URAS; LR-186.

APIACEAE

Chaerophyllum tainturieri Hook.-A; DA; LR-005.
Cicuta maculata L.-P; HEW; LR-293.
Eryngium prostratum Nutt. ex DC.-P; HEW; LR-383.
Eryngium yuccifolium Michx.-P; QFCA; LR-422.
Hydrocotyle ranunculooides L. f.-P; TDF; LR-168.
Limnoscium pinnatum (DC.) Mathias & Constance-A; HEW; LR-218.
Osmorhiza longistylis (Torr.) DC.-P; QFCA; LR-102.
Ptilimnium capillaceum (Michx.) Raf.-A; DA; LR-176.
Ptilimnium nuttallii (DC.) Britt.-A; HEW, QNQP; LR-487.
Sanicula canadensis L.-P; QFCA, URAS; LR-234.
Thaspium barbinode (Michx.) Nutt.-P; DA; LR-775.
**Torilis arvensis* (Huds.) Link-A; DA; LR-343.
Trepocarpus aethusae Nutt. ex DC.-A; DA; LR-400.

APOCYNACEAE

Amsonia tabernaemontana Walt.-P; QNQP, URAS; LR-198.
Trachelospermum difforme (Walt.) Gray-P; HEW, TDF; LR-288.

AQUIFOLIACEAE

Ilex decidua Walt.-P; QNQP, URAS; LR-178.
Ilex opaca Ait.-P; QNQP; LR-191.

ARALIACEAE

‡*Aralia spinosa* L.-P; QNQP; LR-671.

ARISTOLOCHIACEAE

‡*Aristolochia reticulata* Jacq.-P; QFCA; LR-145.
Aristolochia tomentosa Sims-P; ANAS; LR-071.
Asarum canadense L.-P; URAS; LR-002.

ASCLEPIADACEAE

Asclepias incarnata L.-P; HEW; LR-230.
Asclepias variegata L.-P; QFCA; LR-290.
Asclepias verticillata L.-P; GL, QFCA; LR-424.
Asclepias viridis Walt.-P; DA, QFCA; LR-358.

Matelea baldwyniana (Sweet) Woods.-P; QFCA; LR-144.

ASTERACEAE

Achillea millefolium L.-P; DA, QFCA; LR-271.

Ambrosia artemisiifolia L.-A; DA; LR-584.

Ambrosia bidentata Michx.-A; DA; LR-569.

Ambrosia trifida L.-A; DA; LR-583.

Antennaria plantaginifolia (L.) Richards.-P; QFCA; LR-093.

**Anthemis cotula* L.-A; DA; LR-272.

Arnoglossum plantagineum Raf.-P; QFCA; LR-436.

Astranthium integrifolium (Michx.) Nutt.-A; GL; LR-115.

Baccharis halimifolia L.-P; QNQP; LR-786.

Bidens aristosa (Michx.) Britt.-A; HEW; LR-794.

Bidens bipinnata L.-A; DA, TDF; LR-610.

Bidens discoidea (Torr. & Gray) Britt.-A; TDF; LR-376.

Boltonia diffusa Ell.-P; HEW; LR-525.

**Carduus nutans* L.-B; DA; LR-385.

Centaurea americana Nutt.-A; DA; LR-430.

Chaetopappa asteroides Nutt. ex DC.-A; DA; LR-472.

Chrysopsis pilosa Nutt.-A; DA; LR-404.

Cirsium altissimum (L.) Hill-P; DA, QFCA; LR-719.

Cirsium carolinianum (Walt.) Fern. & Schub.-P; QNQP; LR-277.

Cirsium horridulum Michx.-P; DA; LR-197.

Conoclinium coelestinum (L.) DC.-P; HEW; LR-551.

Conyza canadensis (L.) Cronq.-A; DA; LR-629.

Coreopsis grandiflora Hogg ex Sweet-P; DA, QFCA, QNQP; LR-258.

Coreopsis pubescens Ell.-P; QNQP; LR-751.

Coreopsis tinctoria Nutt.-A; DA, HEW; LR-405.

Dracopis amplexicaulis (Vahl) Cass.-A; HEW; LR-347.

Echinacea purpurea (L.) Moench-P; QFCA; LR-348.

Eclipta prostrata (L.) L.-A; LR-401; DA, HEW; LR-401.

Elephantopus carolinianus Raensch.-P; QNQP; LR-557.

Elephantopus tomentosus L.-P; QNQP; LR-571.

Erechtites hieraciifolia (L.) Raf. ex DC.-A; DA; LR-560.

Erigeron philadelphicus L.-P; QFCA; LR-089.

Erigeron strigosus Muhl. ex Willd.-A; QFCA; LR-151.

Eupatorium capillifolium (Lam.) Small-P; DA; LR-725.

Eupatorium perfoliatum L.-P; HEW, QNQP; LR-624.

‡*Eupatorium rotundifolium* L.-P; DA; LR-622.

Eupatorium semiserratum DC.-P; DA; LR-572.

Eurybia hemispherica (Alexander) Nesom-P; QFCA; LR-523.

‡*Euthamia leptoccephala* (Torr. & Gray) Greene-P; DA; LR-714.

Gamochaeta purpurea (L.) Cabrera-P; DA; LR-098.

Grindelia lanceolata Nutt.-P; DA; LR-518.

Helenium amarum (Raf.) H. Rock-A; DA; LR-257.

Helenium flexuosum Raf.-P; HEW; LR-259.

Helianthus angustifolius L.-P; HEW; LR-752.

Helianthus hirsutus Raf.-P; QNQP; LR-496.

Heliopsis helianthoides (L.) Sweet-P; QFCA; LR-132.

Heterotheca subaxillaris (Lam.) Britt. & Rusby-A; DA; LR-548.

Hieracium gronovii L.-P; QFCA; LR-591.

Iva annua L.-A; DA, HEW; LR-755.

Krigia biflora (Walt.) Blake-P; GL; LR-119.

Krigia caespitosa (Raf.) Chambers-A; DA; LR-004.

Krigia dandelion (L.) Nutt.-P; DA; LR-213.

Lactuca canadensis L.-A; DA, QNQP; LR-409.

Lactuca floridana (L.) Gaertn.-A; DA; LR-573.

Liatris aspera Michx.-P; QFCA; LR-517.

Liatris elegans (Walt.) Michx.-P; QFCA; LR-930.

Mikania scandens (L.) Willd.-P; HEW, TDF; LR-594.

Packera aurea (L.) A. & D. Löve-P; QFCA; LR-073.

Packera glabella (Poir.) C. Jeffrey-A; QFCA; LR-116.

Packera obovata (Muhl. ex Willd.) W.A. Weber & A. Löve-P; QFCA; LR-090.

Packera tomentosa (Michx.) C. Jeffrey-P; QNQP; LR-053.

Parthenium integrifolium L.-P; QFCA; LR-148.

Pluchea camphorata (L.) DC.-P; HEW; LR-549.

Pseudognaphalium obtusifolium (L.) Hilliard & Burt ssp. *obtusifolium*-A; DA; LR-261.

Pyrrhopappus grandiflorus (Nutt.) Nutt.-P; DA; LR-263.

Rudbeckia grandiflora (D. Don) J.F. Gmel. ex DC.-P; QFCA; LR-423.

Rudbeckia hirta L.-P; QFCA; LR-167.

Rudbeckia triloba L.-P; HEW, QNQP; LR-495.

Silphium integrifolium Michx.-P; QFCA; LR-491.

Silphium laciniatum L.-P; QFCA; LR-894.

Smilacanthus uvedalius (L.) Mackenzie ex Small-P; QNQP; LR-669.

‡*Solidago auriculata* Shuttlw. ex Blake-P; QFCA; LR-924.

Solidago canadensis L.-P; DA; LR-720.

Solidago nemoralis Ait.-P; QFCA; LR-760.

Solidago ulmifolia Muhl. ex Willd. var. *palmeri* Cronquist-P; QFCA; LR-722.

**Sonchus asper* (L.) Hill-A; DA; LR-287.

Symphotrichum drummondii (Lindl.) G. L. Nesom var. *texanum* (Burgess) G. L. Nesom-P; QNQP; LR-499.

Symphotrichum lanceolatum (Willd.) G. L. Nesom ssp. *lanceolatum* var. *lanceolatum*-P; QFCA; LR-716.

Symphotrichum patens (Ait.) G. L. Nesom var. *patens*-P; QFCA; LR-761.

Symphotrichum pilosum (Willd.) G. L. Nesom var. *pilosum*-P; QFCA; LR-544.

Symphotrichum racemosum (Ell.) G. L. Nesom-P; QFCA; LR-543.

**Taraxacum laevigatum* (Willd.) DC.-P; DA; LR-067.

Thelesperma filifolium (Hook.) Gray-P; GL; LR-895.

Verbesina helianthoides Michx.-P; QFCA; LR-289.

Verbesina virginica L.-P; ANAS; LR-506.

Vernonia baldwinii Torr.-P; QFCA; LR-554.

Vernonia gigantea (Walt.) Trel.-P; QFCA; LR-682.

Xanthium strumarium L.-A; DA, HEW; LR-575.

BALSAMINACEAE

Impatiens capensis Meerb.-P; HEW; LR-240.

BERBERIDACEAE

Podophyllum peltatum L.-P; URAS, QFCA; LR-027.

BETULACEAE

Alnus serrulata (Ait.) Willd.-P; HEW; LR-188.

Betula nigra L.-P; ANAS; LR-728.

Carpinus caroliniana Walt.-P; QNQP, URAS; LR-185.

Ostrya virginiana (P. Mill.) K. Koch-P; QFCA, QNQP, URAS; LR-386.

BIGNONIACEAE

- ‡*Bignonia capreolata* L.-P; QNQP; LR-177.
Campsis radicans (L.) Seem. ex Bureau-P; DA, QNQP;
 LR-399.

BORAGINACEAE

- Cynoglossum virginianum* L.-P; QFCA, URAS; LR-064.
 **Heliotropium indicum* L.-A; DA, HEW; LR-655.
Heliotropium tenellum (Nutt.) Torr.-A; DA, GL; LR-901.
Myosotis verna Nutt.-A; DA; LR-708.

BRASSICACEAE

- Arabis canadensis* L.-B; QFCA; LR-136.
Arabis laevigata (Muhl. ex Willd.) Poir. var. *laevigata*-B;
 QFCA; LR-004.
 **Capsella bursa-pastoris* (L.) Medik.-A; DA; LR-021.
Cardamine concatenata (Michx.) Sw.-P; QFCA; LR-024.
 **Cardamine hirsuta* L.-A; DA; LR-054.
Cardamine parviflora L. var. *arenicola* (Britton) O. E.
 Schulz-A; DA; LR-076.
Cardamine pennsylvanica Muhl. ex Willd.-P; DA; LR-074.
 ‡*Leavenworthia aurea* Torr. var. *aurea*-A; LG; LR-909.
Lepidium virginicum L. var. *virginicum*-A; DA; LR-318.
Lepidium virginicum L. var. *medium* (Greene) C. L.
 Hitchc.-A; DA; LR-174.
 ‡*Lesquerella angustifolia* (Nutt. ex Torr. & A. Gray) S.
 Watson-A; LG; LR-921.
Lesquerella gracilis (Hook.) S. Wats.-A; LG; LR-123.
 ‡*Neobeckia aquatica* (Eat.) Greene-P; TDF; LR-363.
Rorippa palustris (L.) Bess. ssp. *fernaldiana* (Butters &
 Abbe) Jonsell-A; HEW; LR-317.
Rorippa sessiliflora (Nutt.) A.S. Hitchc.-A; DA; LR-085.

BUDDLEJACEAE

- Polypremum procumbens* L.-A; DA; LR-585.

CACTACEAE

- Opuntia humifusa* (Raf.) Raf.-P; LG; LR-891.

CALLITRICHACEAE

- Callitriche heterophylla* Pursh-A; HEW; LR-202.

CAMPANULACEAE

- Campanulastrum americanum* (L.) Small-P; URAS; LR-
 420.
Lobelia appendiculata A. DC.-P; HEW, QNQP; LR-225.
Lobelia cardinalis L.-P; HEW, QNQP; LR-537.
Lobelia inflata L.-P; ANAS; LR-688.
Lobelia siphilitica L.-P; HEW, QNQP; LR-545.
Triodanis perfoliata (L.) Nieuwl.-A; DA; LR-304.

CAPRIFOLIACEAE

- **Lonicera japonica* Thunb.-P; DA; LR-205.
Lonicera sempervirens L.-P; DA, QNQP; LR-164.
Sambucus nigra L.-P; HEW, QNQP; LR-391.
Symphoricarpos orbiculatus Moench-P; QNQP, URAS.
Viburnum rufidulum Raf.-P; QFCA; LR-062.

CARYOPHYLLACEAE

- **Cerastium glomeratum* Thuill.-A; DA; LR-042a.
 ‡*Minuartia muscorum* (Fassett) Rabeler-A; LG; LR-146.
Silene stellata (L.) Ait. f.-P; QFCA; LR-381.
Silene virginica L.-P; QFCA; LR-033.
 **Stellaria media* (L.) Vill.-A; DA; LR-007.

CELASTRACEAE

- Euonymus americanus* L.-P; QNQPBF; LR-169.

CERATOPHYLLACEAE

- Ceratophyllum demersum* L.-P; HEW; LR-497.
Ceratophyllum echinatum Gray-P; TDF; LR-661.

CHENOPODIACEAE

- **Chenopodium ambrosioides* L.-A; DA; LR-530.

CISTACEAE

- Lechea mucronata* Raf.-P; QFCA; LR-411.
Lechea tenuifolia Michx.-P; A; R-260; LR-417.

CLUSIACEAE

- Hypericum drummondii* (Grev. & Hook.) Torr. & Gray-A;
 QFCA; LR-562.
Hypericum hypericoides (L.) Crantz-P; QFCA; LR-426.
Hypericum mutilum L.-P; HEW; LR-587.
Hypericum prolificum L.-P; QFCA; LR-410.
Hypericum punctatum Lam.-P; QFCA; LR-357.
 ‡*Triadenum walteri* (J.G. Gmel.) Gleason-P; HEW; LR-
 654.

CONVOLVULACEAE

- Dichondra carolinensis* Michx.-P; DA; LR-059.
Ipomoea lacunosa L.-A; QFCA; LR-542.
Ipomoea pandurata (L.) G.F.W. Mey.-P; QFCA; LR-389.

CORNACEAE

- Cornus florida* L.-P; QNQP; LR-026.
 ‡*Cornus foemina* P. Mill.-P; ANAS; LR-371.
Nyssa sylvatica Marsh.-P; URAS; LR-718.

CRASSULACEAE

- Penthorum sedoides* L.-P; HEW; LR-648.

CUCURBITACEAE

- ‡*Cayaponia quinqueloba* (Raf.) Shinners-P; QNQP; LR-
 638.
Melothria pendula L.-P; DA; LR-686.

CUSCUTACEAE

- Cuscuta cuspidata* Engelm.-A; QNQP; LR-481.
Cuscuta glomerata Choisy-A; HEW; LR-731.
Cuscuta gronovii Willd. ex J.A. Schultes-A; TDF; LR-662.

Cuscuta obtusiflora Kunth var. *glandulosa* Engelm.-A;
HEW; LR-746.

ERICACEAE

Vaccinium arboreum Marsh.-P; URAS, QFCA; LR-922.

‡*Vaccinium corymbosum* L.-P; QNQP; LR-052.

Vaccinium stamineum L.-P; URAS, QFCA; LR-175.

EUPHORBIACEAE

Acalypha virginica L.-A; DA; LR-416.

Chamaesyce maculata (L.) Small-A; DA; LR-561.

Chamaesyce nutans (Lag.) Small-A; DA; LR-509.

Chamaesyce prostrata (Ait.) Small-A; DA; LR-534.

Croton capitatus Michx.-A; DA; LR-647.

Croton glandulosus L.-A; DA; LR-398.

Croton monanthogynus Michx.-A; DA; LR-425.

Croton willdenowii G.L. Webster-A; DA, LG; LR-665.

Euphorbia corollata L.-P; QFCF; LR-680.

**Euphorbia davidii* Subils-A; DA; LR-663.

Euphorbia spathulata Lam.-A; LG; LR-18.

Phyllanthus caroliniensis Walt.-A; DA; LR-659.

Phyllanthus polygonoides Nutt. ex Spreng.-P; LG; LR-352.

Tragia betonicifolia Nutt.-P; LG; LR-355.

FABACEAE

**Albizia julibrissin* Durazz.-P; DA; LR-262.

‡*Amorpha nitens* Boynt.-P; QNQP; LR-171.

‡*Amorpha paniculata* Torr. & Gray-P; QNQP; LR-408.

Apios americana Medik.-P; HEW; LR-211.

Baptisia bracteata Muhl. ex Ell. var. *leucophaea* (Nutt.)
Kartesz & Gandhi-P; QFCA; LR-130.

‡*Baptisia nuttalliana* Small-P; QFCA; LR-229.

Centrosema virginianum (L.) Benth.-P; QFCA; LR-865.

Cercis canadensis L.-P; URAS; LR-189.

Chamaecrista fasciculata (Michx.) Greene-A; QNQP; LR-
384.

Chamaecrista nictitans (L.) Moench-A; DA; LR-677.

Clitoria mariana L.-P; QFCA; LR-447.

‡*Dalea compacta* Spreng.-P; LG; LR-898.

Dalea purpurea Vent.-P; QFCA; LR-353.

Desmanthus illinoensis (Michx.) MacM. ex B.L. Robins. &
Fern.-P; QFCA; LR-433.

Desmodium canescens (L.) DC.-P; QFCA; LR-490.

Desmodium nudiflorum (L.) DC.-P; QFCA; LR-421.

‡*Desmodium nuttallii* (Schindl.) Schub.-P; QFCA; LR-
750.

Desmodium paniculatum (L.) DC.-P; QNQP; LR-462.

‡*Desmodium pauciflorum* (Nutt.) DC.-P; QFCA; LR-457.

Galactia volubilis (L.) Britt.-P; DA; LR-393.

Gleditsia triacanthos L.-P; QNQP; LR-793.

**Kummerowia stipulacea* (Maxim.) Makino-A; DA; LR-
578.

**Kummerowia striata* (Thunb.) Schindl.-A; DA; LR-478.

Lathyrus venosus Muhl. ex Willd.-A; DA; LR-184.

**Lespedeza cuneata* (Dum.-Cours.) G. Don-P; DA; LR-579.

Lespedeza repens (L.) W. Bart.-P; QFCA; LR-283.

Lespedeza virginica (L.) Britt.-P; QFCA; LR-580.

**Melilotus officinalis* (L.) Lam.-A; DA; LR-449.

Mimosa nuttallii (DC.) B.L. Turner-P; QFCA; LR-228.

Orbexilum pedunculatum (P. Mill.) Rydb. var. *peduncu-
latum*-P; QFCA; LR-163.

Rhynchosia latifolia Nutt. ex Torr. & Gray-P; QFCA; LR-
482.

Senna marilandica (L.) Link-P; QNQP; LR-670.

Sesbania herbacea (P. Mill.) McVaugh-A; QNQP; LR-593.

Strophostyles helvola (L.) Ell.-P; DA, QNQP; LR-453.

Strophostyles umbellata (Muhl. ex Willd.) Britt.-P; DA,
QFCA; LR-597.

Stylosanthes biflora (L.) B.S.P.-P; DA; LR-370.

**Trifolium arvense* L.-A; DA; LR-269.

**Trifolium campestre* Schreb.-A; DA; LR-086.

**Trifolium incarnatum* L.-A; DA; LR-051.

**Trifolium repens* L.-P; DA; LR-077.

**Trifolium resupinatum* L.-A; DA; LR-327.

Vicia caroliniana Walt.-P; DA, QFCA; LR-084.

Vicia minutiflora F.G. Dietr.-A; DA; LR-079.

**Vicia sativa* L.-A; DA; LR-069.

FAGACEAE

‡*Castanea pumila* (L.) P. Mill. var. *pumila*-P; QFCA; LR-
926.

Quercus alba L.-P; QFCA; LR-734.

Quercus falcata Michx.-P; QFCA; LR-869.

Quercus lyrata Walt.-P; QNQP; LR-743.

Quercus macrocarpa Michx.-P; QFCA; LR-868.

Quercus marilandica Muench.-P; QFCA; LR-735.

Quercus muehlenbergii Engelm.-P; URAS; LR-765.

Quercus nigra L.-P; QNQP; LR-784.

‡*Quercus nuttallii* Palmer-P; QNQP; LR-377.

Quercus palustris Muench.-P; QNQP; LR-912.

Quercus phellos L.-P; QNQP; LR-547.

Quercus rubra L.-P; URAS; LR-757.

Quercus shumardii Buckl.-P; URAS; LR-757.

Quercus stellata Wangenh.-P; QFCA; LR-789.

FUMARIACEAE

Corydalis micrantha (Engelm. ex Gray) Gray ssp.
australis (Chapm.) Shimmers-A; QFCA; LR-048.

GENTIANACEAE

Sabatia angularis (L.) Pursh-A; QFCA; LR-427.

GERANIACEAE

Geranium carolinianum L.-A; DA; LR-307.

**Geranium dissectum* L.-A; DA; LR-081.

GROSSULARIACEAE

‡*Itea virginica* L.-P; TDF; LR-165.

HALORAGACEAE

Myriophyllum heterophyllum Michx.-P; TDF; LR-914.

HAMAMELIDACEAE

Liquidambar styraciflua L.-P; QFCA; LR-738.

HIPPOCASTANACEAE

‡*Aesculus pavia* L.-P; ANAS; LR-031.

HYDRANGEACEAE

Hydrangea arborescens L.-P; QFCA, URAS; LR-419.

HYDROPHYLLACEAE

Hydrolea ovata Nutt. ex Choisy-P; HEW; LR-635.

Hydrolea uniflora Raf.-A; HEW; LR-667.

Nemophila phacelioides Nutt.-A; LG; LR-120.

Phacelia hirsuta Nutt.-A; DLG; LR-121.

JUGLANDACEAE

Carya alba (L.) Nutt. ex Eill.-P; QFCA; LR-737.

‡*Carya aquatica* (Mich. f.) Nutt.-P; ANAS; LR-839.

Carya cordiformis (Wangenh.) K. Koch-P; QFCA; LR-840.

Carya glabra (Mill.) Sweet-P; QFCA; LR-762.

‡*Carya myristiciformis* (Michx. f.) Nutt.-P; QNQP; LR-838.

Carya ovata (P. Mill.) K. Koch-P; QFCA; LR-819.

Carya texana Buckley-P; QFCA; LR-489.

Juglans nigra L.-P; URAS; LR-814.

LAMIACEAE

Agastache nepetoides (L.) Kuntze-P; QFCA; LR-528.

Clinopodium arkansanum (Nutt.) House-P; GL; LR-351.

Hedeoma hispida Pursh-A; DA; LR-222.

‡*Hedeoma pulegioides* (L.) Pers.-A; GL; LR-117.

**Lamium amplexicaule* L.-A; DA; LR-835.

**Lamium purpureum* L.-A; DA; LR-010.

Lycopus rubellus Moench-P; HEW; LR-552.

Lycopus virginicus L.-P; HEW; LR-563.

Monarda citriodora Cerv. ex Lag.-A; GL; LR-359.

Monarda fistulosa L.-P; QFCA; LR-388.

Monarda russeliana Nutt. ex Sims-P; QFCA; LR-201.

**Perilla frutescens* (L.) Britt.-A; DA; LR-515.

‡*Physostegia intermedia* (Nutt.) Engelm. & Gray-P; CB; LR-896.

Prunella vulgaris L.-P; DA; LR-208.

Pycnanthemum albescens Torr. & Gray-P; QFCA; LR-673.

Pycnanthemum tenuifolium Schrad.-P; QFCA; LR-407.

Salvia lyrata L.-P; DA; LR-013.

Scutellaria ovata Hill-P; QNQP; LR-380.

Scutellaria parvula Michx. var. *parvula*-P; QFCA; LR-141.

Stachys tenuifolia Willd.-P; QNQP; LR-415.

Teucrium canadense L.-P; QNQP; LR-471.

Trichostema dichotomum L.-A; DA; LR-712.

LAURACEAE

Sassafras albidum (Nutt.) Nees-P; QNQP; LR-015.

Lindera benzoin (L.) Blume-P; QNQP; LR-923.

LENTIBULARIACEAE

Utricularia gibba L.-P; HEW; LR-924.

LINACEAE

Linum medium (Planch.) Britt. var. *texanum* (Planch.) Fernald-A; DA; LR-492.

LOGANIACEAE

Spigelia marilandica (L.) L.-P; QFCA; LR-241.

LYTHRACEAE

Ammannia coccinea Rottb.-A; HEW; LR-713.

Cuphea viscosissima Jacq.-A; GL; LR-925.

Rotala ramosior (L.) Koehne-A; HEW; LR-588.

MALVACEAE

‡*Callirhoe bushii* Fern.-P; GL; LR-893.

Callirhoe pedata (Nutt. ex Hook.) Gray-P; QFCA; LR-122.

Hibiscus lasiocarpus Cav.-P; HEW; LR-642.

‡*Modiola caroliniana* (L.) G. Don-A; DA; LR-095.

Sida rhombifolia L.-A; DA; LR-795.

MELASTOMATACEAE

Rhexia mariana L.-P; QNQP; LR-281.

MELIACEAE

**Melia azedarach* L.-P; QNQP; LR-799.

MENISPERMACEAE

Cocculus carolinus (L.) DC.-P; QFCA; LR-763.

MOLLUGINACEAE

Mollugo verticillata L.-A; DA; LR-657.

MORACEAE

**Broussonetia papyrifera* (L.) L'Hér. ex Vent.-P; DA; LR-274.

Maclura pomifera (Raf.) Schneid.-P; QFCA; LR-373.

**Morus alba* L.-P; DA; LR-238.

Morus rubra L.-P; QNQP; LR-158.

NELUMBONACEAE

Nelumbo lutea Willd.-P; HEW; LR-698.

NYMPHAEACEAE

Nuphar lutea (L.) Sm.-P; HEW; LR-666.

OLEACEAE

Fraxinus pennsylvanica Marsh L.-P; QNQP; LR-366.

**Ligustrum sinense* Lour.-P; QNQP; LR-155.

ONAGRACEAE

‡*Gaura demareei* Raven & Gregory-A; DA; LR-519.

Ludwigia alternifolia L.-P; QFCA; LR-448.

Ludwigia decurrens Walter-P; HEW; LR-435.

Ludwigia glandulosa Walt.-P; HEW; LR-636.

Ludwigia leptocarpa (Nutt.) Hara-P; HEW; LR-546.

Ludwigia palustris (L.) Eill.-P; TDF; LR-458.

Oenothera laciniata Hill-P; DA; LR-040.

Oenothera linifolia Nutt.-A; DA; LR-203.

Oenothera rhombipetala Nutt. ex Torr. & Gray-P; QNQP; LR-620.

Oenothera villosa Thunb.-P; DA; LR-701.

OXALIDACEAE

Oxalis dillenii Jacq.-P; DA; LR-097.

Oxalis violacea L.-P; QFCA; LR-029.

PAPAVERACEAE

Sanguinaria canadensis L.-P; DA; LR-011.

PASSIFLORACEAE

Passiflora incarnata L.-P; QNQP; LR-397.

Passiflora lutea L.-P; DA; LR-697.

PHYTOLACCACEAE

Phytolacca americana L.-P; DA; LR-236.

PLANTAGINACEAE

Plantago aristata Michx.-A; DA; LR-256.

Plantago rugelii Dcne.-P; DA; LR-483.

Plantago virginica L.-A; DA; LR-113.

PLATANACEAE

Platanus occidentalis L.-P; QFCA; LR-568.

POLEMONIACEAE

Phlox glaberrima L.-P; QNQP; LR-285.

Phlox pilosa L. ssp. *ozarkana* (Wherry) Wherry-P; QFCA; LR-100.

POLYGALACEAE

Polygala sanguinea L.-A; QFCA; LR-252.

Polygala verticillata L.-A; DA; LR-664.

POLYGONACEAE

Brunnichia ovata (Walt.) Shinnery-P; TDF; LR-485.

**Polygonum caespitosum* Blume var. *longisetum* (Brujin) A. N. Steward-A; DA; LR-226.

Polygonum glabrum Willd.-P; HEW; LR-724.

Polygonum lapathifolium L.-A; TDF; LR-365.

**Polygonum persicaria* L.-A; HEW; LR-292.

Polygonum sagittatum L.-A; HEW; LR-242.

Polygonum scandens L.-P; DA; LR-513.

Polygonum virginianum L.-P; QFCA; LR-387.

**Rumex crispus* L.-P; DA; LR-221.

Rumex hastatulus Baldw.-A; DA; LR-210.

**Rumex obtusifolius* L.-P; DA; LR-296.

PORTULACACEAE

Claytonia virginica L.-P; QFCA; LR-009.

Portulaca oleracea L.-A; DA; LR-658.

Portulaca pilosa L.-A; DA; LR-616.

PRIMULACEAE

Dodecatheon meadia L.-P; QFCA; LR-022.

‡*Hottonia inflata* Ell.-A; TDF; LR-003.

Lysimachia lanceolata Walter-P; QNQP; LR-255.

Samolus valerandi L. ssp. *parviflorus* (Raf.) Hultén-P; DA; LR-685.

RANUNCULACEAE

Aquilegia canadensis L.-P; QFCA; LR-041.

‡*Clematis glaucophylla* Small-P; QNQP; LR-266.

Clematis pitcheri Torr. & Gray-P; QNQP; LR-265.

**Clematis terniflora* DC.-P; QNQP; LR-508.

Delphinium carolinianum Walt. ssp. *carolinianum*-P; QFCA; LR-354.

Delphinium tricorne Michx.-P; QFCA; LR-192.

Enemion biternatum Raf.-P; QFCA; LR-705.

Ranunculus abortivus L.-P; QNQP; LR-061.

Ranunculus fascicularis Muhl. ex Bigelow-P; QNQP; LR-057.

Ranunculus hispidus Michx.-P; QFCA; LR-046.

Ranunculus longirostris Godr.-A; TDF; LR-364.

Ranunculus pusillus Poir.-A; QNQP; LR-065.

**Ranunculus sardous* Crantz-A; HEW; LR-300.

‡*Thalictrum arkansanum* Boivin-P; QFCA; LR-107.

Thalictrum thalictroides (L.) Eames & B. Boivin-P; ANAS; LR-047.

RHAMNACEAE

Berchemia scandens (Hill) K. Koch-P; QNQP; LR-200.

Frangula caroliniana (Walt.) Gray-P; QFCA; LR-147.

ROSACEAE

Crataegus crus-galli L.-P; QFCA; LR-083.

Crataegus marshallii Eggl.-P; QNQP; LR-017.

Crataegus mollis Scheele-P; QFCA; LR-082.

Crataegus spathulata Michx.-P; QFCA; LR-134.

Crataegus viridis L.-P; QFCA; LR-878.

**Duchesnea indica* (Andrews) Focke-P; QFCA; LR-072.

Geum canadense Jacq.-P; QFCA; LR-223.

Porteranthus stipulatus (Muhl. ex Willd.) Britt.-P; QNQP; LR-249.

Potentilla simplex Michx.-P; ANAS; LR-049.

Prunus gracilis Engelm. & Gray-P; QNQP; LR-066.

Prunus serotina Ehrh.-P; QNQP; LR-190.

Rosa carolina L.-P; QFCA; LR-818.

**Rosa multiflora* Thunb. ex Murr.-P; QNQP; LR-179.

Rosa setigera Michx.-P; QFCA; LR-879.

Rubus argutus Link.-P; QNQP; LR-781.

Rubus flagellaris Willd.-P; DA; LR-044.

RUBIACEAE

Cephalanthus occidentalis L.-P; QNQP; LR-396.

Cruciata pedemontana (Bellardi) Ehrend.-A; GL; LR-125.

Diodia teres Walt.-A; DA; LR-646.

Diodia virginiana L.-P; DA; LR-379.

Galium aparine L.-A; DA; LR-025.

Galium circaezans Michx.-P; QNQP; LR-367.

Galium obtusum Bigelow-P; QNQP; LR-110.

**Galium tinctorium* L.-P; QNQP; LR-227.

Houstonia purpurea L. var. *purpurea*-P; DA; LR-162.

Houstonia pusilla Schoepf-A; DA; LR-012.

Mitchella repens L.-P; QNQP; LR-279.

**Sherardia arvensis* L.-A; DA; LR-006.

Spermacoce glabra Michx.-P; ANAS; LR-522.

RUTACEAE

**Poncirus trifoliata* (L.) Raf.-P; QNQP; LR-631.

Zanthoxylum clava-herculis L.-P; QNQP; LR-159.

SALICACEAE

Populus deltoides Bartr. ex Marsh.-P; QNQP; LR-885.
Salix nigra Marsh.-P; HEW; LR-106.

SAPINDACEAE

**Cardiospermum halicacabum* L.-A; DA; LR-539.

SAPOTACEAE

Sideroxylon lanuginosum Michx.-P; QFCA; LR-137.

SAURURACEAE

Saururus cernuus L.-P; HEW; LR-245.

SCROPHULARIACEAE

Agalinis gattingeri (Small) Small-A; DA; LR-581.
Aureolaria grandiflora (Benth.) Pennell-A; QNQP; LR-653.
Collinsia violacea Nutt.-A; QFCA; LR-092.
Gratiola neglecta Torr.-A; HEW; LR-109.
Gratiola virginiana L.-A; HEW; LR-108.
Leucospora multifida (Michx.) Nutt.-A; DA; LR-418.
Mimulus alatus Ait.-A; QNQP; LR-608.
Nuttallanthus canadensis (L.) D.A. Sutton-A; DA; LR-094.
Pedicularis canadensis L.-P; QNQP; LR-019.
Penstemon digitalis Nutt. ex Sims-P; QFCA; LR-129.
Scrophularia marilandica L.-A; ANAS; LR-691.
 **Verbascum blattaria* L.-A; QFCA; LR-356.
 **Verbascum thapsus* L.-B; DA; LR-215.
 **Veronica arvensis* L.-A; DA; LR-112.
Veronica peregrina L.-A; DA; LR-111.

SOLANACEAE

Physalis angulata L.-A; DA; LR-536.
Physalis heterophylla Nees-P; DA; LR-375.
Physalis virginiana P. Mill.-P; QFCA; LR-142.
Solanum carolinense L.-P; DA; LR-180.
Solanum ptycanthum Dunal-A; DA; LR-696.

STAPHYLEACEAE

Staphylea trifolia L.-P; QFCA; LR-928.

STYRACACEAE

‡*Halesia carolina* L.-P; URAS.
 ‡*Styrax americanus* Lam.-P; TDF; LR-321.

SYMPLOCACEAE

‡*Symplocos tinctoria* (L.) L'Hér.-P, QNQP; LR-925.

TILIACEAE

‡*Tilia americana* L. var. *americana*-P; QFCA; LR-131.

ULMACEAE

Celtis laevigata Willd.-P; URAS; LR-350.
 ‡*Planera aquatica* J.F. Gmel.-P; ANAS; LR-030.
Ulmus alata Michx.-P; QFCA, QNQP; LR-156.
Ulmus crassifolia Nutt.-P; QFCA; LR-768.

Ulmus rubra Muhl.-P; QFCA, URAS; LR-239.

URTICACEAE

Boehmeria cylindrica (L.) Sw.-P; ANAS; LR-672.
Laportea canadensis (L.) Weddell-P; URAS; LR-870.
Parietaria pensylvanica Muhl. ex Willd.-A; DA; LR-443.
Pilea pumila (L.) Gray-A; DA; LR-730.
 ‡*Urtica chamaedryoides* Pursh-A; URAS; LR-150.

VALERIANACEAE

Valerianella radiata (L.) Dufr.-A; DA; LR-087.

VERBENACEAE

Callicarpa americana L.-P; QNQP; LR-403.
Glandularia canadensis (L.) Nutt.-P; DA; LR-042.
Phryma leptostachya L.-P; URAS; LR-346.
Phyla lanceolata (Michx.) Greene-P; ANAS; LR-689.
 **Verbena brasiliensis* Vell.-A; HEW; LR-224.
Verbena halei Small-P; QNQP; LR-237.
Verbena simplex Lehm.-P; DA; LR-505.
Verbena urticifolia L.-A; QFCA; LR-392.

VIOLACEAE

Viola bicolor Pursh-A; DA; LR-008.
Viola missouriensis Greene-P; QFCA; LR-058.
Viola pubescens Ait.-P; QFCA; LR-105.
Viola sagittata Ait.-P; DA; LR-043.
Viola sororia Willd.-P; QFCA; LR-833.
Viola × *primulifolia* (pro sp.)-P; HEW; LR-330.

VISCACEAE

Phoradendron leucarpum (Raf.) Reveal & M.C. Johnston-P; QFCA; LR-060.

VITACEAE

Ampelopsis arborea (L.) Koehne-P; QNQP; LR-792.
Cissus trifoliata (L.) L.-P; DA; LR-527.
Parthenocissus quinquefolia (L.) Planch.-P; URAS; LR-452.
Vitis aestivalis Michx.-P; QFCA; LR-345.
Vitis cinerea (Engelm.) Millard-P; QFCA; LR-362.
Vitis palmata Vahl-P; QNQP; LR-592.
Vitis rotundifolia Michx.-P; QFCA, QNQP, URAS; LR-247.
Vitis vulpina L.-P; QFCA; LR-361.

MAGNOLIOPHYTA

LILIOPSIDA

ALISMATACEAE

Alisma subcordatum Raf.-P; HEW; LR-493.
Echinodorus cordifolius (L.) Griseb.-A; HEW; LR-465.
Sagittaria graminea Michx.-P; ANAS; LR-693.
Sagittaria latifolia Willd.-P; Forked Lake; LR-651.
Sagittaria montevidensis Cham. & Schlecht.-P; HEW; LR-602.

ARACEAE

Arisaema dracontium (L.) Schott-P; QFCA; LR-160.
Arisaema triphyllum (L.) Schott-P; QNQP; LR-282.

‡*Peltandra virginica* (L.) Schott-P; HEW; LR-214.

ARECACEAE

‡*Sabal minor* (Jacq.) Pers.-P; QFCA; LR-892.

COMMELINACEAE

Commelina diffusa Burm. f.-P; QNQP; LR-541.

Commelina erecta L.-P; ANAS; LR-652.

Commelina virginica L.-P; ANAS; LR-639.

Tradescantia ohiensis Raf.-P; QFCA; LR-050.

CYPERACEAE

Carex blanda Dewey-P; QNQP; LR-780.

Carex brevior (Dewey) Mackenzie-P; HEW; LR-809.

Carex caroliniana Schwein.-P; HEW; LR-848.

Carex cherokeensis Schwein.-P; QFCA; LR-810.

Carex crinita Lam.-P; HEW; LR-446.

Carex crus-corvi Shuttlw. ex Kunze-P; HEW; LR-805.

Carex festucacea Schkuhr ex Willd.-P; QFCA; LR-846.

Carex flaccosperma Dewey-P; HEW; LR-853.

Carex gigantea Rudge-P; HEW; LR-374.

Carex gravida Bailey-P; QNQP; LR-858.

Carex grayi Carey-P; HEW; LR-320.

‡*Carex hyalina* Boott-P; QNQP; LR-808.

Carex hystericina Muhl. ex Willd.-P; HEW; LR-333.

Carex intumescens Rudge-P; HEW; LR-299.

Carex jorii Bailey-P; HEW; LR-555.

Carex leavenworthii Dewey-P; QNQP; LR-807.

Carex lupulina Muhl. ex Willd.-P; HEW; LR-34.

Carex lurida Wahlenb.-P; HEW; LR-219.

Carex microdonta Torr. & Hook.-P; QFCA; LR-854.

‡*Carex oxylepis* Torr. & Hook.-P; HEW; LR-847.

Carex ozarkana P. Rothr. & Reznicek-P; QFCA; LR-813.

Carex planispicata Naczi-P; QNQP; LR-845.

Carex retroflexa Muhl. ex Willd.-P; QNQP; LR-842.

Carex texensis (Torr.) Bailey-P; QNQP; LR-806.

Carex tribuloides Wahlenb.-P; HEW; LR-498.

Carex vulpinoidea Michx.-P; HEW; LR-850.

Cyperus acuminatus Torr. & Hook. ex Torr.-P; QFCA; LR-431.

Cyperus croceus Vahl-P; DA; LR-510.

Cyperus echinatus (L.) Wood-P; DA; LR-233.

Cyperus erythrorhizos Muhl.-A; DA; LR-559.

Cyperus hystericinus Fern.-P; QNQP; LR-650.

**Cyperus iria* L.-P; DA; LR-687.

Cyperus odoratus L.-A; HEW; LR-801.

Cyperus polystachyos Rottb.-P; QNQP; LR-802.

Cyperus pseudovegetus Steud.-P; HEW; LR-294.

Cyperus retroflexus Buckl.-P; DA; LR-908.

Cyperus strigosus L.-P; DA; LR-488.

‡*Dulichium arundinaceum* (L.) Britt.-P; HEW; LR-699.

Eleocharis lanceolata Fern.-A; HEW; LR-484.

Eleocharis montevidensis Kunth-P; HEW; LR-216.

Eleocharis tenuis (Willd.) J.A. Schultes var. *verrucosa* (Svens.) Svens.-P; HEW; LR-128.

Fimbristylis autumnalis (L.) Roemer & J.A. Schultes-A; HEW; LR-774.

Isolepis carinata Hook. & Arn. ex Torr.-A; QNQP; LR-316.

Kyllinga pumila Michx.-A; HEW; LR-598.

Rhynchospora corniculata (Lam.) Gray-P; HEW; LR-849.

Rhynchospora glomerata (L.) Vahl-P; HEW; LR-748.

Rhynchospora macrostachya Torr. ex Gray-P; HEW; LR-244.

Scirpus cyperinus (L.) Kunth-P; HEW; LR-641.

Scirpus pendulus Muhl.-P; HEW; LR-139.

DIOSCOREACEAE

Dioscorea quaternata J.F. Gmel.-P; QNQP; LR-782.

HYDROCHARITACEAE

‡*Limnobium spongia* (Bosc) L.C. Rich. ex Steud.-P; TDF; LR-182.

IRIDACEAE

Nemastylis geminiflora Nutt.-P; QFCA; LR-127.

Sisyrinchium angustifolium P. Mill.-P; QFCA; LR-309.

Sisyrinchium campestre Bickn.-P; QNQP; LR-463.

JUNCACEAE

Juncus acuminatus Michx.-P; QNQP; LR-880.

Juncus bufonius L.-A; DA; LR-529.

Juncus coriaceous Mackenzie-P; HEW; LR-390.

Juncus diffusissimus Buckl.-P; HEW; LR-817.

Juncus effusus L.-P; HEW; LR-276.

‡*Juncus filipendulus* Buckl.-P; QFCA; LR-878.

Juncus marginatus Rostk.-P; HEW; LR-827.

Juncus tenuis Willd.-P; QNQP; LR-882.

Juncus validus Coville-P; HEW; LR-460.

LEMNACEAE

Lemna minor L.-P; HEW, TDF; LR-932.

Spirodela polyrrhiza (L.) Schleid.-A; HEW, TDF; LR-540.

Wolffia brasiliensis Weddell-P; HEW, TDF; LR-933.

‡*Wolffiella gladiata* (Hegelm.) Hegelm.-P; TDF; LR-034.

LILIACEAE

Allium canadense L. var. *canadense*-P; QFCA; LR-7071.

Allium canadense L. var. *mobilense* (Regel) Ownbey-P; QFCA; LR-143.

Allium stellatum Nutt. ex Ker-Gawl.-P; QFCA; LR-533.

Camassia scilloides (Raf.) Cory-P; QFCA; LR-153.

Cooperia drummondii Herbert-P; GL; LR-888.

Erythronium rostratum W. Wolf-P; QFCA; LR-831.

‡*Hymenocallis caroliniana* (L.) Herbert-P; QNQP; LR-196.

Hypoxis hirsuta (L.) Coville-P; QFCA; LR-036.

Nothoscordum bivalve (L.) Britt.-P; QFCA; LR-016.

**Ornithogalum umbellatum* L.-P; DA; LR-039.

Polygonatum biflorum (Walt.) Ell.-P; QFCA; LR-212.

Trillium viridescens Nutt.-P; ANAS, URAS; LR-101.

Zigadenus nuttallii (Gray) S. Wats.-P; QFCA; LR-034.

MARANTACEAE

‡*Thalia dealbata* Fraser ex Roscoe-P; HEW; LR-634.

ORCHIDACEAE

‡*Platanthera clavellata* (Michx.) Luer-P; HEW; LR-474.

Spiranthes cernua (L.) L.C. Rich.-P; QFCA; LR-744.

Spiranthes tuberosa Raf.-P; QFCA; LR-764.

‡*Tipularia discolor* (Pursh) Nutt.-P; ANAS, QFCA; LR-683.

POACEAE

Agrostis hyemalis (Walt.) B.S.P.-P; HEW, QNQP; LR-253.
Agrostis perennans (Walt.) Tuckerman-P; DA; LR-836.
 **Aira caryophylla* L.-A; DA; LR-311.
Alopecurus carolinianus Walt.-A; DA, HEW; LR-183.
Andropogon gerardii Vitman-P; DA, GL; LR-526.
Andropogon virginicus L.-P; DA; LR-742.
Arundinaria gigantea (Walt.) Muhl.-P; QNQP, URAS; LR-023.
 ‡*Brachyelytrum erectum* (Schreb. ex Spreng.) Beauv. var. *erectum*-P; QFCA; LR-438.
 **Briza minor* L.-A; DA; LR-173.
 **Bromus catharticus* Vahl-A; DA; LR-080.
 **Bromus japonicus* Thunb. ex Murr.-A; DA; LR-267.
Chasmanthium latifolium (Michx.) Yates-P; QNQP; LR-382.
Chasmanthium laxum (L.) Yates-P; QNQP; LR-444.
Chasmanthium sessiliflorum (Poir.) Yates-P; QFCA, QNQP; LR-450.
Cinna arundinacea L.-P; HEW; LR-607.
 **Cynodon dactylon* (L.) Pers.-P; DA; LR-627.
Danthonia spicata (L.) Beauv. ex Roemer & J.A. Schultes-P; QFCA; LR-207.
Diarrhena obovata (Gleason) Brandenburg-P; QFCA; LR-886.
Dichantheium acuminatum (Sw.) Gould & C.A. Clark var. *lindheimeri* (Nash) Gould & C.A. Clark-P; QNQP; LR-454
Dichantheium boscii (Poir.) Gould & C.A. Clark-P; QNQP; LR-335.
Dichantheium commutatum (J.A. Schultes) Gould-P; QFCA; LR-815.
Dichantheium depauperatum (Muhl.) Gould-P; QFCA; LR-334.
Dichantheium dichotomum (L.) Gould var. *dichotomum*-P; QNQP; LR-476.
Dichantheium laxiflorum (Lam.) Gould-P; QFCA; LR-336.
Dichantheium scoparium (Lam.) Gould-P; HEW; LR-451.
Dichantheium sphaerocarpon (Ell.) Gould var. *isophyllum* (Scribn.) Gould & C. A. Clark-P; .QNQP; LR-468
 **Digitaria ischaemum* (Schreb.) Schreb. ex Muhl.-A; DA; LR-599.
Digitaria sanguinalis (L.) Scop.-A; DA; LR-467.
Echinochloa muricata (Beauv.) Fern.-A; HEW; LR-494.
Echinochloa walteri (Pursh) Heller-A; HEW; LR-804.
 **Eleusine indica* (L.) Gaertn.-A; DA; LR-660.
Elymus canadensis L.-P; QNQP; LR-480.
 ‡*Elymus hystrix* L. var. *hystrix*-P; QFCA; LR-890.
Eragrostis hirsuta (Michx.) Nees-P; DA; LR-550.
Eragrostis hypnoides (Lam.) B.S.P.-A; HEW; LR-558.
Eragrostis spectabilis (Pursh) Steud.-P; DA; LR-566.
Glyceria septentrionalis A.S. Hitchc.-P; HEW; LR-856.
Glyceria striata (Lam.) A.S. Hitchc.-P; HEW; LR-502.
Hordeum pusillum Nutt.-A; DA; LR-206.
Leersia oryzoides (L.) Sw.-P; HEW; LR-342.
Leersia virginica Willd.-P; QNQP; LR-368.
 **Lotium perenne* L.-P; DA; LR-038.
Melica mutica Walt.-P; QNQP; LR-056.

**Microstegium vimineum* (Trin.) A. Camus-A; QNQP; LR-796.

Muhlenbergia schreberi J.F. Gmel.-P; QNQP; LR-906.
Nassella leucotricha (Trin. & Rupr.) Pohl-P; GL; LR-133.
 ‡*Oplismenus hirtellus* (L.) Beauv. ssp. *setarius* (Lam.) Mez ex Ekman-P; QNQP; LR-729.
Panicum anceps Michx.-P; QFCA; LR-394.
 ‡*Panicum brachyanthum* Steud.-P; QFCA; LR-923.
Panicum dichotomiflorum Michx.-P; QFCA; LR-601.
Panicum flexile (Gattinger) Scribn.-A; QFCA; LR-759.
Panicum rigidulum Bosc ex Nees-P; HEW; LR-643.
 **Paspalum dilatatum* Poir.-P; QFCA; LR-349.
Paspalum fluitans (Ell.) Kunth-A; DA; LR-798.
Paspalum laeve Michx.-P; DA; LR-633.
 **Paspalum notatum* Flueggé-P; DA; LR-459.
Paspalum setaceum Michx.-P; DA; LR-640.
 **Paspalum urvillei* Steud.-P; QFCA; LR-567.
 ‡*Phanopyrum gymnocarpon* (Ell.) Nash-P; HEW; LR-913.
 **Poa annua* L.-A; DA; LR-032.
 **Poa pratensis* L.-P; QFCA; LR-918.
Poa sylvestris Gray-P; QFCA; LR-917.
Saccharum brevibarbe (Michx.) Pers. -P; HEW; LR-535.
 ‡*Sacciolepis striata* (L.) Nash-P; TDF; LR-609.
Schizachyrium scoparium (Michx.) Nash-P; QFCA; LR-520.
Setaria parviflora (Poir.) Kerguelen-P; DA; LR-470.
 **Sorghum halepense* (L.) Pers.-P; DA; LR-511.
Sporobolus compositus (Poir.) Merr.-P; QFCA; LR-521.
Steinichisma hians (Ell.) Nash-P; HEW; LR-217.
Tridens flavus (L.) A.S. Hitchc.-P; QFCA; LR-590.
Tridens strictus (Nutt.) Nash-P; DA; LR-532.
Tripsacum dactyloides (L.) L.-P; ANAS; LR-692.
 **Vulpia bromoides* (L.) S.F. Gray-A; GL; LR-152.
 **Vulpia myuros* (L.) K.C. Gmel.-A; DA; LR-250.
Vulpia octoflora (Walt.) Rydb.-A; DA; LR-326.
Zizaniopsis miliacea (Michx.) Doell & Aschers.-P; HEW, TDF; LR-220.

PONTEDERIACEAE

Heteranthera limosa (Sw.) Willd.-P; HEW; LR-603.
 ‡*Pontederia cordata* L.-P; HEW; LR-538.

POTAMOGETONACEAE

Potamogeton pulcher Tuckerman-P; TDF; LR-378.

SMILACACEAE

Smilax bona-nox L. -P; QFCA; LR-926.
Smilax glauca Walt.-P; QFCA; LR-273.
Smilax herbacea L.-P; QNQP; LR-674.
Smilax laurifolia L.-P; QNQP; LR-055.
Smilax rotundifolia L.-P; QNQP; LR-172.
 ‡*Smilax smallii* Morong-P; QNQP; LR-063.
Smilax tamnoides L.-P; QFCA; LR-360.

SPARGANIACEAE

Sparganium americanum Nutt.-P; HEW; LR-442.

TYPHACEAE

Typha angustifolia L.-P; HEW; LR-915.