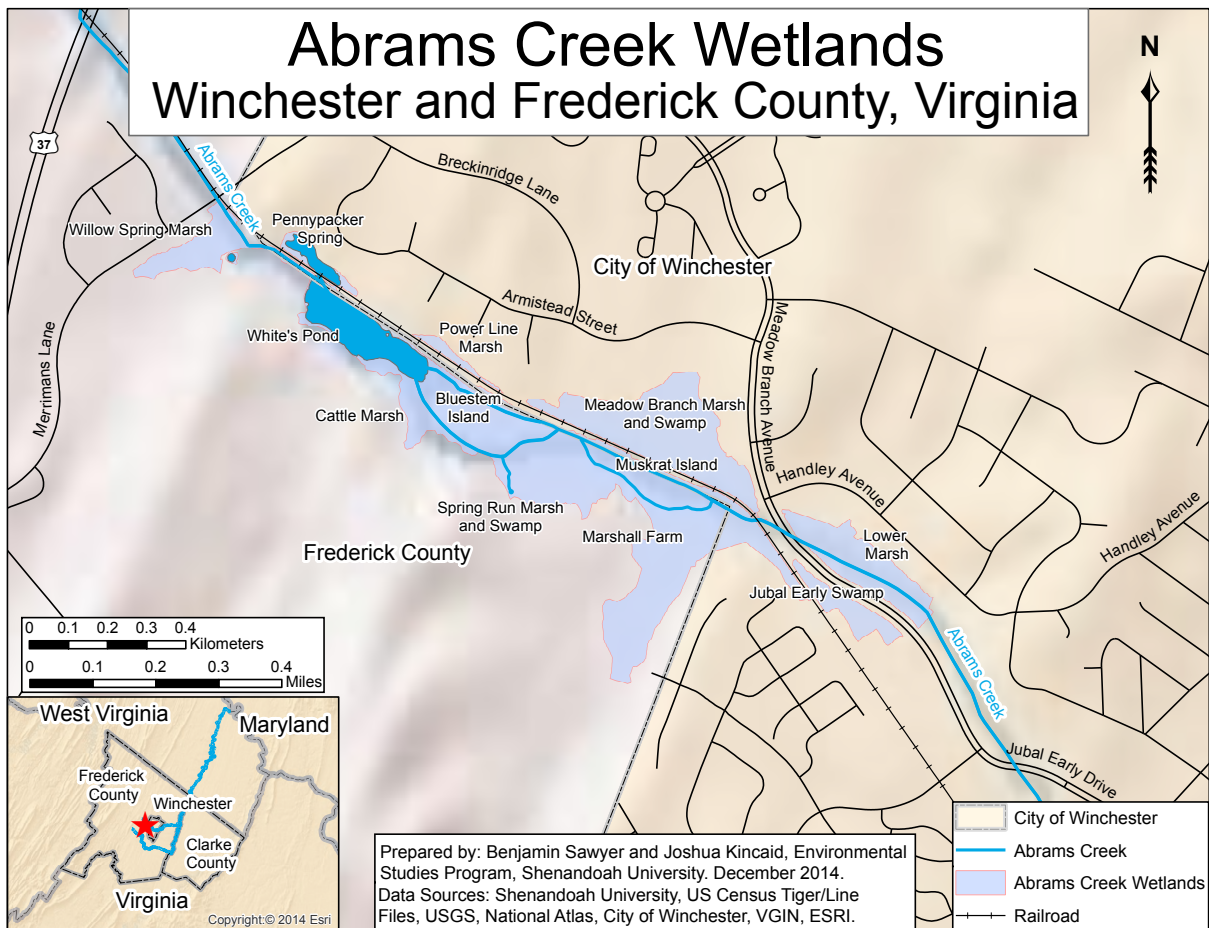


Environmental Studies Program
Shenandoah University, Winchester, Virginia

**Annotated List of
Vascular Plant Species of the Abrams Creek Wetlands
Winchester City and Frederick County, Virginia**

Based on Bousquet and Fleming (2017)
Formatted, and common names added, in 2019 by Madison Mackintosh



This list presents the 304 vascular plant species documented in the study of the Abrams Creek Wetlands that was conducted by Woodward Bousquet and Gary Fleming, who were assisted by undergraduates in Shenandoah University's Environmental Studies Program. Their research was published in 2017 in *Castanea, the Journal of the Southern Appalachian Botanical Society* vol. 82, no. 2, pp. 132-155. These species represent 206 genera in 78 families.

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Plants appear below alphabetically by family, genus, and species under the major plant groups: pteridophytes (ferns and relatives), gymnosperms (conifers and relatives), and angiosperms (flowering plants). Family definitions, common names, and scientific names follow the *Flora of Virginia* (Weakley et al., 2012) with additions from the Digital Atlas of the Virginia Flora (Virginia Botanical Associates, 2017).

Annotations after each common and scientific name provide further information about the plant's ecological status in the Abrams Creek Wetlands. A typical annotation looks like this:

n, BF, 1; FACU, CC7; 13-279cr

The annotation presents, in order, information about the plant's origin, habitat, abundance, indicator rating, coefficient of conservatism, collection number, and, if applicable, county record. This information is abbreviated as follows:

Origin status (**n** = native, **i** = introduced) follows the *Flora of Virginia* (Weakley et al., 2012).

Habitat types

AS = aquatic and semi-aquatic wetlands

BF = bottomland forests

CW = calcareous wet prairies, calcareous fens and calcareous wet meadows

DM = disturbed weedy marshes

DT = disturbed weedy wetland-to-upland transition zones

MF = calcareous muck fens

Relative abundance

4 = common (relatively large numbers in suitable habitats throughout, often dominant)

3 = frequent (moderate numbers in suitable habitats, sometimes dominant)

2 = infrequent (sporadic in suitable habitats, sometimes numerous)

1 = rare (few individuals or only one or two colonies)

h = historical record (abundance unrated, and taxon not documented at the site in the last 20 years or more)

Wetland indicator status ratings are from Lichvar et al. (2014).

Floristic Quality Assessment Index (FQAI) coefficients of conservatism (CC) are from Virginia Department of Environmental Quality (2014), supplemented by Mid-Atlantic Wetlands Working Group (2014), and Andreas et al. (2004):

0 (highest range of ecological tolerance, greatest variety of habitats) to

10 (highest fidelity to narrowest range of habitats)

* = introduced, therefore unrated.

Collection numbers are those of the Environmental Studies Program, Shenandoah University, Winchester, Virginia unless otherwise denoted (**F** = Gary P. Fleming, **W** =

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Thomas F. Wieboldt). Names of individuals present on collecting trips appear on the herbarium specimen labels. All taxa are vouchered. Specimens collected by Shenandoah University and Fleming are deposited in the Ted R. Bradley Herbarium (GMUF), George Mason University, Fairfax, Virginia. Specimens collected by Wieboldt are deposited in the Massey Herbarium (VPI), Virginia Polytechnic Institute, Blacksburg, Virginia.

Frederick County records at the time of collection are noted by **cr** following the collection number (Virginia Botanical Associates 2016).

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Persons interested in further information about the Abrams Creek Wetlands or the floristic study (Bousquet and Fleming, 2017) can view the full text of the report online at no charge:

<https://bioone.org/journals/Castanea/volume-82/issue-2/17-137/Floristics-of-the-Abrams-Creek-Wetlands-a-Calcareous-Fen-Complex/10.2179/17-137.full>

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

PTERIDOPHYTES (Ferns)

EQUISETACEAE (Horsetail Family)

Field Horsetail

Equisetum arvense L. – n, DM DT CW, 3; FAC, CC3; 14-019

Water Horsetail

Equisetum fluviatile L. – n, MF CW, 2; OBL, CC8; 13-057

ONOCLEACEAE (Sensitive Fern Family)

Sensitive Fern

Onoclea sensibilis L. var. *sensibilis* – n, BF CW, 1; FACW, CC4; 13-300

OPHIOGLOSSACEAE (Adder's-tongue Family)

Rattlesnake Fern

Botrypus virginianus (L.) Holub – n, BF, 2; FACU, CC5; 13-283

THELYPTERIDACEAE (Marsh Fern Family)

Marsh Fern

Thelypteris palustris Schott var. *pubescens* (Lawson) Fernald – n, CW, 3; FACW, CC7; 13-396

GYMNOSPERMS (Conifers, Cycads, and relatives)

CUPRESSACEAE (Cypress Family)

Eastern Redcedar

Juniperus virginiana L. var. *virginiana* – n, CW, 3; FACU, CC3; 13-202

PINACEAE (Pine Family)

Eastern White Pine

Pinus strobus L. – n, CW, 1; FACU, CC5; 14-001

ANGIOSPERMS (Flowering Plants)

ADOXACEAE (Moschatel Family)

Common Elderberry

Sambucus canadensis L. – n, BF, 1; UPL, CC4; 13-090

Guellder-rose Viburnum, Snowball

Viburnum opulus L. var. *opulus* – i, BF, 2; FACW, CC*; 13-065

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Black Haw

Viburnum prunifolium L. – n, BF, 2; FACU, CC5; 13-063

ALISMATACEAE (Water-plantain Family)

Southern Water-plantain

Alisma subcordata Raf. – n, MF AS, 3; OBL, CC6; 13-292

Broad-leaved Arrowhead, Duck Potato

Sagittaria latifolia Willd. – n, AS MF, 3; OBL, CC6; 13-318

AMARYLLIDACEAE (Amaryllis Family)

Field Garlic, Onion Grass

Allium vineale L. – i, DT, 1; FACU, CC*; 13-245

ANACARDIACEAE (Cashew Family)

Smooth Sumac

Rhus glabra L. – n, DT, 1; UPL, CC3; 13-350

Poison Ivy

Toxicodendron radicans (L.) Kuntze var. *radicans* – n, BF DM DT, 3; FAC, CC2; 14-122

APIACEAE (Carrot or Parsley Family)

Water-hemlock, Spotted Water-hemlock

Cicuta maculata L. var. *maculata* – n, CW, 2; OBL, CC6; 13-142

Queen-Anne's Lace, Wild Carrot

Daucus carota L. – i, DM DT, 2; UPL, CC*; 13-247

Wild Parsnip

Pastinaca sativa L. – i, DT, 1; UPL, CC*; 13-136

Clustered Snakeroot

Sanicula odorata (Raf.) K.M. Pryer & L.R. Phillippe – n, BF, 1; FACU, CC7; 13-279cr

Water Parsnip

Sium suave Walter – n, BF, 3; OBL, CC6; 14-118

Japanese Hedge Parsley

Torilis japonica (Houtt.) A.P. de Canolle – i, DT, 1; UPL, CC*; 13-234cr

APOCYNACEAE (Dogbane Family)

Indian Hemp, Hemp Dogbane

Apocynum cannabinum L. – n, CW, 2; FACU, CC2; 13-364

Swamp Milkweed

Asclepias incarnata L. var. *incarnata* – n, CW, 3; OBL, CC5; 13-334cr

Common Milkweed

Asclepias syriaca L. – n, DT, 1; FACU, CC3; 13-213

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Greater Periwinkle

Vinca major L. – i, DT, 1; UPL, CC*; 14-009cr

AQUIFOLIACEAE (Holly Family)

Winterberry

Ilex verticillata (L.) A. Gray – n, BF, 2; FACW, CC7; 13-370

ARACEAE (Arum Family)

Small Jack-in-the-pulpit

Arisaema triphyllum ssp. *triphyllum* (L.) Schott – n, BF, 1; FACW, CC6; 14-025

Common Duckweed

Lemna minor L. – n, AS, 2; OBL, CC6; 14-104

Star Duckweed

Lemna trisulca L. – n, AS, 2; OBL, CC8; 14-094

Greater Duckweed

Spirodela polyrrhiza (L.) Schleid. – n, AS, 2; OBL, CC5; 14-098

Columbian Watermeal

Wolffia columbiana H. Karst. – n, AS, 1; OBL, CC4; 14-100

ARALIACEAE (Ginseng Family)

Swamp Water-Pennywort, Floating Marsh-pennywort

Hydrocotyle ranunculoides L. f. – n, AS, h; OBL, CC6; F5940

ASPARAGACEAE (Asparagus Family)

Asparagus

Asparagus officinalis L. – i, DM, 1; FACU, CC*; 13-378

ASTERACEAE (Aster or Sunflower Family)

Common Yarrow

Achillea millefolium L. – n, DT, 2; FACU, CC0; 13-229

Common Ragweed

Ambrosia artemisiifolia L. – n, DT, 2; FACU, CC1; 13-455

Giant Ragweed

Ambrosia trifida L. – n, DT, 1; FAC, CC3; 13-483

Common Burdock, Lesser Burdock

Arctium minus Bernh. – i, DT, 2; FACU, CC*; 13-437

Tickseed Sunflower

Bidens aristosa Britton – n, MF, 2; FACW, CC2; 13-538

Devil's Beggar-ticks

Bidens frondosa L. – n, BF CW, 2; FACW, CC2; 13-494

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Smooth Bur-marigold, Showy Bur-marigold

Bidens laevis (L.) Britton, Sterns & Poggenb. – n, AS, 3; OBL, CC5; 13-478

Spiny Plumeless Thistle

Carduus acanthoides L. ssp. *acanthoides* – i, DM DT, 3; UPL, CC*; 13-196

Tyrol Knapweed

Centaurea nigrescens Willd. – i, DT DM, 1; UPL, CC*; 13-511

Spotted Knapweed

Centaurea stoebe L. ssp. *micranthos* (S.G. Gmel. ex Gugler) Hayek – i, DT DM, 1; UPL, CC*; 13-357

Chicory, Succory

Cichorium intybus L. – i, DM DT, 1; FACU, CC*; 14-116

Canada Thistle, Field Thistle

Cirsium arvense (L.) Scop. – i, DT, 1; FACU, CC*; 13-192

Swamp Thistle

Cirsium muticum Michx. – n, CW, 3; OBL, CC8; 13-156

Bull Thistle

Cirsium vulgare (Savi) Ten. – i, DT, 1; FACU, CC*; 13-400

Mistflower, Ageratum

Conoclinium coelestinum (L.) DC. – n, CW DM, 2; FAC, CC4; 13-464

Horseweed, Common Horseweed

Conyza canadensis (L.) Cronquist var. *canadensis* – n, DM DT, 2; UPL, CC1; 13-406

Fireweed, Pilewort, American Burnweed

Erechtites hieracifolius (L.) Raf. ex DC. – n, DM DT, 2; FACU, CC2; 14-124

Annual Fleabane

Erigeron annuus (L.) Pers. – n, DT, 2; FACU, CC2; 13-176

Philadelphia Fleabane

Erigeron philadelphicus L. var. *philadelphicus* – n, DM DT, 3; FACU, CC3; 14-062

Daisy Fleabane

Erigeron strigosus Muhl. ex Willd. var. *strigosus* – n, DT, 2; FACU, CC1; 13-092

Tall Thoroughwort

Eupatorium altissimum L. – n, DT, 1; UPL, CC1; 13-526

Common Boneset

Eupatorium perfoliatum L. – n, CW DM, 3; FACW, CC6; 13-441

Spotted Joe-pye-weed

Eutrochium maculatum (L.) E.E. Lamont var. *maculatum* – n, CW, 4; FACW, CC8; 13-361

Common Sneezeweed

Helenium autumnale L. – n, CW, 2; FACW, CC4; 13-492

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Tall Sunflower, Giant Sunflower

Helianthus giganteus L. – n, CW, 2; FACW, CC6; 13-522cr

Oxeye, Smooth Oxeye

Heliopsis helianthoides (L.) Sweet var. *helianthoides* – n, DT, 1; FACU, CC5; 13-215

Prickly Lettuce

Lactuca serriola L. – i, DT DM, 2; FAC, CC*; 13-239

Oxeye Daisy

Leucanthemum vulgare Lam. – i, DT, 1; UPL, CC*; 13-166

Golden Ragwort, Heartleaf Ragwort

Packera aurea (L.) A. & D. Love – n, CW, 3; FACW, CC6; 13-016

Pinnate-lobed Coneflower

Rudbeckia triloba L. var. *triloba* – n, DT, 2; FACU, CC5; 13-359

Rosin Weed

Silphium asteriscus L. var. *trifoliatum* (L.) Clevenger – n, DT, 1; UPL, CC5; 13-304

Tall goldenrod

Solidago altissima L. – n, CW DM, 3; FACU, CC3; 13-514

Canada Goldenrod

Solidago canadensis L. var. *canadensis* – n, CW DM, 4; FACU, CC3; 13-548cr

Late Goldenrod

Solidago gigantea Ait. – n, CW, 2; FACW, CC4; 14-126

Spiny-leaf Sow Thistle

Sonchus asper (L.) Hill – i, DT, 1; UPL, CC*; 12-205

Calico Aster, Starved Aster

Symphyotrichum lateriflorum (L.) A. & D. Love – n, DM DT, 3; FACW, CC6; 13-531

New England Aster

Symphyotrichum novae-angliae (L.) G.L. Nesom – n, CW, 3; FACW, CC5; 13-552

Frost Aster, White Old-field Aster

Symphyotrichum pilosum (Willd.) G.L. Nesom var. *pilosum* – n, DT DM, 2; FAC, CC1; 13-558

Willow-leaf Aster

Symphyotrichum praealtum (Poir.) G.L. Nesom var. *angustior* (Wieg.) G.L. Nesom – n, CW, 4; FACW, CC6; 13-554

Common Dandelion

Taraxacum officinale G.H. Weber ex F.H. Wigg. – i, DT, 2; FACU, CC*; 13-550

Coltsfoot

Tussilago farfara L. – i, DT, 1; FACU, CC*; 14-023

Wingstem

Verbesina alternifolia (L.) Britton ex Kearney – n, DM DT, 2; FAC, CC3; 13-482

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

New York Ironweed

Vernonia noveboracensis (L.) Michx. – n, CW DM, 4; FACW, CC6; 13-402

Common Cocklebur

Xanthium strumarium L. – n, DT DM, 2, FAC, CC1, 14-114

BALSAMINACEAE (Touch-me-not Family)

Orange Jewelweed, Spotted Jewelweed

Impatiens capensis Meerb. – n, DM CW, 4; FACW, CC4; 13-444

BERBERIDACEAE (Barberry Family)

Japanese Barberry

Berberis thunbergii DC. – i, DT, 2; FACU, CC*; 13-306

Mayapple

Podophyllum peltatum L. – n, BF, 2; FACU, CC6; 14-027

BORAGINACEAE (Borage Family)

Virginia Stickseed

Hackelia virginiana (L.) I.M. Johnst. – n, DT, 2; FACU, CC3; 13-261

Virginia Bluebell, Virginia Cowslip

Mertensia virginica (L.) Pers. ex Link – n, BF, 1; FACW, CC7; 14-030

BRASSICACEAE (Mustard Family)

Garlic Mustard, Hedge Garlic

Alliaria petiolata (M. Bieb.) Cavara & Grande – i, DM DT, 1; FACU, CC*; 13-150

Common Winter Cress, Yellow Rocket

Barbarea vulgaris R. Brown – i, DM, 2; FACU, CC*; 13-043

Spring Cress, Bulbous Bittercress

Cardamine bulbosa (Schreb. ex Muhl.) Britton, Sterns & Poggenb. – n, MF, 2; OBL, CC7; 14-013

Cut-leaf Toothwort

Cardamine concatenata (Michx.) O. Schwarz – n, BF, 1; FACU, CC6; 14-003

Hairy Bittercress

Cardamine hirsuta L. – i, DT, 2; FACU, CC*; 14-005

Pennsylvania Bittercress

Cardamine pennsylvanica Muhl. ex Willd. – n, BF, 1; OBL, CC5; 13-067

Dame's Rocket

Hesperis matronalis L. – i, DT, 1; FACU, CC*; 13-368

Watercress

Nasturtium officinale R. Brown – i, MF, 1; OBL, CC*; 13-116

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

CAMPANULACEAE (Bellflower Family)

Marsh Bellflower

Campanula aparinoides Pursh var. *aparinoides* – n, CW MF, 3; OBL, CC7; 13-237

Indian Tobacco

Lobelia inflata L. – n, DM, 2; FACU, CC2; 13-431

Great Blue Lobelia

Lobelia siphilitica L. var. *siphilitica* – n, CW DM, 3; FACW, CC4; 13-404

CANNABACEAE (Hops Family)

Common Hackberry, Northern Hackberry

Celtis occidentalis L. – n, BF, 2; FACU, CC3; 13-366

CAPRIFOLIACEAE (Honeysuckle Family)

Wild Teasel, Common Teasel

Dipsacus fullonum L. – i, DM DT, 2; FACU, CC*; 13-392

Japanese Honeysuckle

Lonicera japonica Thunb. – i, DT DM CW, 4; FAC, CC*; 13-061

Amur Honeysuckle

Lonicera maackii (Rupr.) Maxim. – i, BF DT, 3; UPL, CC*; 13-314cr

Morrow's Honeysuckle

Lonicera morrowii A. Gray – i, DM DT CW, 3; FACU, CC*; 13-132

CARYOPHYLLACEAE (Pink Family)

Common Chickweed

Stellaria media (L.) Vill. – i, DT, 1; UPL, CC*; 14-021

CELASTRACEAE (Bittersweet Family)

Oriental Bittersweet

Celastrus orbiculatus Thunb. – i, BF, 2; FACU, CC*; 13-286cr

Winged Euonymus, Burning Bush

Euonymus alatus (Thunb.) Siebold – i, BF, 1; UPL, CC*; 13-509cr

CONVOLVULACEAE (Morning Glory Family)

Hedge Bindweed

Calystegia sepium (L.) R. Brown – n, DM CW, 2; FAC, CC1; 14-080

Common Dodder

Cuscuta gronovii Willd. ex J.A. Schult. – n, CW DM, 2; UPL, CC3; 13-388

Ivy-leaf Morning Glory

Ipomoea hederacea Jacq. – n, DT, 1; FACU, CC0; 13-470

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

CORNACEAE (Dogwood Family)

Silky Dogwood

Cornus amomum Mill. – n, CW BF, 4; FACW, CC4; 13-094

CYPERACEAE (Sedge Family)

Glomerate Sedge

Carex aggregata Mack. – n, CW DM, 1; UPL, CC4; 13-082cr

Awned Sedge

Carex atherodes Spreng. – n, CW, 1; OBL, CC9; 13-073

Bottlebrush Sedge, Bristly Sedge

Carex comosa Boott – n, MF AS, 3; OBL, CC7; 13-243

Frank's Sedge

Carex frankii Kunth – n, CW DM, 3; OBL, CC4; 13-108

Limestone Meadow Sedge

Carex granularis Muhl. ex Willd. – n, CW DM, 3; FACW, CC6; 14-042

Porcupine Sedge

Carex hystericina Muhl. ex Willd. – n, CW MF, 2; OBL, CC7; 13-028

Inland Sedge

Carex interior Bailey – n, CW, h; OBL, CC8; W3665

Slender Sedge

Carex lasiocarpa Ehrh. var. *americana* Fernald – n, MF, 2; OBL, CC8; 05-101

Troublesome Sedge

Carex molesta Mack. ex Bright – n, DM, 1; FAC, CC5; 13-120

Woolly Sedge

Carex pellita Muhl. – n, MF, 2; OBL, CC8; 13-024

Prairie Sedge

Carex prairea Dewey ex Wood – n, MF, 1; FACW, CC10; 13-080

Stalk-grain Sedge

Carex stipata Muhl. ex Willd. var. *stipata* – n, CW, 2; OBL, CC4; 13-014

Tussock Sedge, Upright Sedge

Carex stricta Lam. – n, MF, 4; OBL, CC6; 13-018

Prairie Straw Sedge

Carex suberecta (Olney) Britton – n, CW, 2; OBL, CC9; 13-008

Rigid Sedge

Carex tetanica Schkuhr – n, CW, 2; FACW, CC7; 13-001

Beaked Sedge

Carex utriculata Boott – n, MF, h; OBL, CC7; F8002

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Fox Sedge

Carex vulpinoidea Michx. – n, CW DM, 3; OBL, CC3; 13-253

Slender Flatsedge, Shining Flatsedge

Cyperus bipartitus Torr. – n, MF, h; FACW, CC4; F5945

Yellow Nutsedge, Yellow Nutgrass

Cyperus esculentus L. var. *leptostachyus* Böckler – n, CW DM, 2; FACW, CC2; 13-249

Yellow Flatsedge

Cyperus flavescens L. – n, CW, h; OBL, CC3; F5954

Straw-colored Flatsedge

Cyperus strigosus L. – n, CW, 2; FACW, CC3; 13-251

Bald Spikerush

Eleocharis erythropoda Steudel – n, MF CW, 3; OBL, CC6; 13-114

Common Three-square, Chairmaker's Rush

Schoenoplectus pungens (Vahl) Palla var. *pungens* – n, CW MF, 4; OBL, CC5; 13-020

Soft-stem Bulrush

Schoenoplectus tabernaemontani (C.C. Gmelin) Palla – n, MF, 3; OBL, CC5; 13-030

Dark Green Bulrush

Scirpus atrovirens Willd. – n, CW MF, 3; OBL, CC5; 13-140

Reddish Bulrush

Scirpus pendulus Muhl. – n, CW MF, 2; OBL, CC6; 13-070

Whorled Nutrush

Scleria verticillata Muhl. Ex Willd. – n, CW, h; OBL, CC9; F5952

EBENACEAE (Ebony Family)

Common Persimmon

Diospyros virginiana L. – n, CW DT, 2; FAC, CC5; 13-217

ELEAGNACEAE (Silveryberry, Oleaster, Russian Olive Family)

Autumn Olive

Elaeagnus umbellata Thunb. – i, DM DT, 3; UPL, CC*; 13-332

EUPHORBIACEAE (Spurge Family)

Common Three-seeded Mercury, Common Copperleaf

Acalypha rhomboidea Raf. – n, DM, 2; FACU, CC2; 13-468

FABACEAE (Legume Family)

Hog-peanut

Amphicarpaea bracteata (L.) Fernald – n, CW, 2; FAC, CC4; 13-462

Eastern Redbud

Cercis canadensis L. var. *canadensis* – n, BF DT, 1; FACU, CC6; 14-032

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Perplexing Tick-trefoil

Desmodium perplexum B.G. Schub. – n, DT DM, 2; UPL, CC4; 13-460

Honey Locust

Gleditsia triacanthos L. – n, DM, 2; FAC, CC3; 13-435

Sericea Lespedeza, Chinese Lespedeza

Lespedeza cuneata (Dumont-Cours.) G. Don – i, DT, 1; FACU, CC*; 13-542

White Sweet-clover

Melilotus albus Medik. – i, DT, 1; UPL, CC*; 13-231

Black Locust

Robinia pseudoacacia L. – n, DT, 1; FACU, CC2; 13-275

Crown Vetch

Securigera varia (L.) Lassen – i, DT, 1; UPL, CC*; 13-174

Low Hop Clover

Trifolium campestre Schreb. – i, DT, 1; UPL, CC*; 14-060

Red Clover

Trifolium pratense L. – i, DT, 2; FACU, CC*; 13-138

White Clover, Dutch Clover

Trifolium repens L. – i, DT, 1; FACU, CC*; 14-067

FAGACEAE (Beech Family)

Pin Oak

Quercus palustris Muench. – n, BF DM, 2; FACW, CC7; 13-451cr

GERANIACEAE (Geranium Family)

Carolina Geranium, Carolina Cranesbill

Geranium carolinianum L. – n, DT, 1; UPL, CC1; 13-096

Wild Geranium

Geranium maculatum L. – n, BF, 1; FACU, CC7; 14-036

HALORAGACEAE (Water-milfoil Family)

Parrot Feather, Brazilian Water-milfoil

Myriophyllum aquaticum (Vell. Conc.) Verdc. – i, AS, 3; OBL, CC*; 14-082

HYPERICACEAE (St. John's-wort Family)

Common St. John's-wort

Hypericum perforatum L. – i, DM, 1; FAC, CC*; 13-340

Spotted St. John's-wort

Hypericum punctatum Lam. – n, CW, 1; FAC, CC3; 13-296

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

IRIDACEAE (Iris Family)

Yellow Iris, Yellow Flag

Iris pseudacorus L. – i, BF DM MF, 2; OBL, CC*; 13-035

Larger Blue Flag, Larger Blue Flag

Iris versicolor L. – n, CW, 1; OBL, CC8; 13-076cr

Narrow-leaved Blue-eyed-grass

Sisyrinchium angustifolium Mill. – n, CW, 2; FACW, CC4; 13-037

JUGLANDACEAE (Walnut Family)

Black Walnut

Juglans nigra L. – n, BF, 2; FACU, CC5; 14-046

JUNCACEAE (Rush Family)

Baltic Rush

Juncus balticus Willd. var. *littoralis* Englem. – n, CW, 1; OBL, CC6; 14-092

Smallheaded Rush

Juncus brachycephalus (Engelm.) Buch. – n, MF, 1; OBL, CC10; 13-490

Dudley's Rush

Juncus dudleyi Wieg. – n, CW, 4; FACW, CC7; 13-022

Common Rush, Soft Rush

Juncus effusus L. – n, CW MF, 1; FACW, CC3; 13-324

Knotted Rush

Juncus nodosus L. – n, CW, 3; OBL, CC4; 13-235

Lobe-headed Rush

Juncus scirpoides Lam. var. *compositus* Harper – n, CW, h; FACW, CC6; W3826

Torrey's Rush

Juncus torreyi Coville – n, CW, 2; FACW, CC1; 13-233

LAMIACEAE (Mint Family)

Wild Basil

Clinopodium vulgare L. – n, CW DM BF, 2; UPL, CC1; 13-382

Red Dead-nettle, Purple Dead-nettle

Lamium purpureum L. – i, DT, 1; UPL, CC*; 14-007

Motherwort, Lion's-tail

Leonurus cardiaca L. – i, DT, 1; UPL, CC*; 13-118

American Bugleweed

Lycopus americanus Muhl. ex W. Barton – n, CW, 2; OBL, CC4; 13-421

Northern Bugleweed

Lycopus uniflorus Michx. – n, CW, DM, 3; OBL, CC7; 13-419

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Canada Mint, Wild Mint

Mentha canadensis L. – n, CW, 1; UPL, CC4; 13-328

Peppermint

Mentha piperita L. – i, CW DM, 2; FACW, CC*; 12-203cr

Spearmint

Mentha spicata L. – i, DM, 3; FACW, CC*; 13-425

Smoke Hole Bergamot

Monarda fistulosa L. var. *fistulosa* – n, CW DM, 1; UPL, CC0; 13-372

Catnip, Catmint

Nepeta cataria L. – i, DM DT, 2; FACU, CC*; 13-130

Perilla, Beefsteak Plant

Perilla frutescens (L.) Britton – i, DT, 1; FACU, CC*; 14-088

Self-heal, Heal-all

Prunella vulgaris L. – n, DT DM, 2; FACU, CC2; 13-227

Narrow-leaf Mountain-mint

Pycnanthemum tenuifolium Schrader – n, CW, 2; FACW, CC5; 13-374

Virginia Mountain-mint

Pycnanthemum virginianum (L.) T. Durand & B.D. Jacks. ex B.L. Rob. & Fernald – n, CW, 3; FAC, CC8; 13-336

Hooded Skullcap, Marsh Skullcap

Scutellaria galericulata L. – n, CW, 3; OBL, CC9; 13-257

Mad-dog Skullcap, Blue Skullcap

Scutellaria lateriflora L. – n, DT DM, 2; FACW, CC6; 13-410

Hairy Hedge-nettle

Stachys arenicola Britton – n, CW, 1; FACW, CC6; 13-384

Canada Germander, American Germander

Teucrium canadense L. – n, CW, 2; FACW, CC4; 13-259

LAURACEAE (Laurel Family)

Spicebush

Lindera benzoin (L.) Blume – n, BF CW, 4; FAC, CC6; 13-158

MAGNOLIACEAE (Magnolia Family)

Tulip-tree, Tulip-poplar, Yellow Poplar

Liriodendron tulipifera L. – n, BF, 2; FACU, CC4; 14-052

MENISPERMACEAE (Moonseed Family)

Canada Moonseed, Common Moonseed

Menispermum canadense L. – n, BF, 2; FACU, CC5; 13-051

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

MORACEAE (Mulberry Family)

White Mulberry

Morus alba L. – i, DT, 2; UPL, CC*; 13-146

NYMPHAEACEAE (Water-lily Family)

Yellow Pond-lily, Common Spatterdock

Nuphar advena (Ait.) R. Brown ex Ait. f. – n, AS MF, 3; OBL, CC7; 13-255

OLEACEAE (Olive Family)

White Ash

Fraxinus americana L. – n, BF, 2; FACU, CC7; 13-453

Green Ash, Red Ash

Fraxinus pennsylvanica Marshall – n, BF CW, 3; FACW, CC6; 13-223

Amur Privet

Ligustrum obtusifolium Seabold ex Zucc. var. *suave* (Kitag.) H. Hara – i, DT BF, 2; UPL, CC*; 13-288cr

ONAGRACEAE (Evening-primrose Family)

Enchanter's Nightshade

Circaea canadensis (L.) Hill ssp. *canadensis* – n, BF DT, 1; FACU, CC3; 13-160

Purple-leaved Willow-herb

Epilobium coloratum Biehler – n, CW, 1; FACW, CC5; 13-408

Marsh Seedbox, Common Water-purslane

Ludwigia palustris (L.) Elliott – n, MF DM, 2; OBL, CC2; 13-540

Common Evening-Primrose

Oenothera biennis L. – n, DM, 2; FACU, CC2; 13-398

Biennial Gaura, Northeastern Gaura

Oenothera gaura W.L. Wagner & Hoch – n, CW DT, 1; FACU, CC1; 13-416

ORCHIDACEAE (Orchid Family)

Puttyroot, Adam-and-Eve

Aplectrum hyemale (Muhl. ex Willd.) Torr. – n, BF, 1; UPL, CC7; 14-048

Large Twayblade, Lily-leaved Twayblade

Liparis loeselii (L.) L.C. Rich. – n, BF, 1; FACW, CC7; 14-069

Nodding Ladies'-tresses

Spiranthes cernua (L.) L.C. Rich. – n, CW, 1; FACW, CC7; 13-507

Shinning Ladies'-tresses

Spiranthes lucida (H.H. Eaton) Ames – n, CW, 1; FACW, CC10; 13-069

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

OROBANCHACEAE (Broomrape Family)

Purple False Foxglove

Agalinis purpurea (L.) Pennell – n, CW, 2; FACW, CC5; 13-505

OXALIDACEAE (Wood-sorrel Family)

Common Yellow Wood-sorrel

Oxalis stricta L. – n, BF, 1; FACU, CC2; 13-429

PENTHORACEAE (Ditch Stonecrop Family)

Ditch Stonecrop

Penthorum sedoides L. – n, MF, 2; OBL, CC3; 13-267

PHRYMACEAE (Lopseed Family)

Square-stemmed Monkeyflower

Mimulus ringens L. var. *ringens* – n, CW, 2; OBL, CC5; 13-308

PHYTOLACCACEAE (Pokeweed Family)

Common Pokeweed

Phytolacca americana L. var. *americana* – n, DT, 2; FACU, CC1; 13-211

PLANTAGINACEAE (Plantain Family)

Pond Water-starwort

Callitriche stagnalis Scop. – i, AS, h; OBL, CC*; W3675

White Turtlehead

Chelone glabra L. – n, CW MF, 1; OBL, CC6; 13-476

Butter-and-eggs, Yellow Toadflax

Linaria vulgaris Mill. – i, DT, 1; UPL, CC*; 13-427

Foxglove Beard-tongue

Penstemon digitalis Nutt. ex Sims – n, CW, 2; FAC, CC5; 13-168cr

Hairy Beard-tongue

Penstemon hirsutus (L.) Willd. – n, DT, 1; UPL, CC6; 13-072

Smooth Beard-tongue

Penstemon laevigatus Ait. – n, CW, 2; FACU, CC4; 13-088

English Plantain, Rib-grass

Plantago lanceolata L. – i, DT, 1; UPL, CC*; 13-180

American Plantain, Broad-leaved Plantain

Plantago rugelii Decne. – n, DT DM, 2; FACU, CC1; 13-466

Water Speedwell, Brook Pimpernel

Veronica anagallis-aquatica L. – n CW MF, 2; OBL, CC6; 13-102

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Corn Speedwell, Wall Speedwell

Veronica arvensis L. – i, DT, 1; UPL, CC*; 14-011

Culver's Root

Veronicastrum virginicum (L.) Farw. – n, CW, 1; FACU, CC7; 13-326cr

PLATANACEAE (Planetree Family)

Sycamore, American Sycamore

Platanus occidentalis L. – n, BF CW, 4; FACW, CC5; 14-074

POACEAE (Grass Family)

Creeping Bentgrass

Agrostis stolonifera L. – i, AS, 3; FACW, CC*; 13-084

Big Bluestem, Turkeyfoot

Andropogon gerardii Vitman – n, CW, 2; FAC, CC7; 13-380

Joint-head Grass

Arthraxon hispidus (Thunb.) Makino var. *hispidus* – i, DT DM, 2; FAC, CC*; 13-520

Brome Grass, Brome, Chess

Bromus sterilis L. – i, DT, 1; UPL, CC*; 13-152

Orchard Grass

Dactylis glomerata L. – i, DT, 1; FACU, CC*; 13-059

Rough Panic Grass

Dichanthelium leucothrix (Nash) Freckmann – n, CW, 2; FACW, CC2; 13-501cr

Barnyard Grass

Echinochloa crus-galli (L.) Beauv. var. *crus-galli* – i, DT, 1; FAC, CC*; 13-390

Fowl Mannagrass

Glyceria striata (Lam.) A.S. Hitchc. var. *striata* – n, CW, 2; OBL, CC5; 13-010

Rice Cutgrass

Leersia oryzoides (L.) Sw. – n, CW MF, 2; OBL, CC4; 13-472

Japanese Stiltgrass, Napalese Brown-top, Japanese Grass

Microstegium vimineum (Trin.) A. Camus – i, DM DT, 2; FAC, CC*; 13-516cr

Spreading Panic Grass, Fall Panic Grass

Panicum dichotomiflorum Michx. var. *dichotomiflorum* – n, CW, 1; FACW, CC2; 13-496

Wiry Panic Grass

Panicum flexile (Gattinger) Scribn. – n, DT, 2; FACU, CC5; 13-534

Gattinger's Panic Grass

Panicum gattingeri Nash – n, DM, 2; FAC, CC1; 13-443cr

Reed Canary Grass, Ribbon Grass

Phalaris arundinacea L. – n, MF, 4; FACW, CC1; 13-041

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Kentucky Bluegrass

Poa pratensis L. ssp. *pratensis* – i, DM CW, 3; FACU, CC*; 13-026

Rough Bluegrass

Poa trivialis L. – i, CW, 2; FACW, CC*; 13-086

Tall Fescue, Alta Fescue

Schedonorus arundinaceus (Schreb.) Dumort. – i, DM DT CW, 4; FACU, CC*; 14-054

Yellow Bristlegrass, Yellow Foxtail

Setaria pumila (Poir.) Roemer & Schult. – i, DM, 2; FAC, CC*; 13-433

Indian Grass, Yellow Indian Grass

Sorghastrum nutans (L.) Nash – n, CW DT, 3; FACU, CC6; 13-503

Prairie Wedgegrass

Sphenopholis obtusata (Michx.) Scrib. – n, CW, 2; FAC, CC3; 13-078cr

Ravenna-grass

Tripsidium ravennae (L.) Scholz – i, DT, 1; UPL, CC*; 13-524cr

POLYGONACEAE (Smartweed Family)

Water Smartweed

Persicaria amphibia (L.) S.F. Gray – n, MF, 3; OBL, CC6; 13-188

East Asian Smartweed

Persicaria extremiorientalis (Vorosch.) Tzvelev. – i, DT, 1; nr, CC*; 13-485cr

Long-bristled Smartweed, Bristly Lady's Thumb

Persicaria longisetata (Bruijn) Kitag. – i, DM, 3; FAC, CC*; 13-200

Dotted Smartweed

Persicaria punctata (Elliott) Small – n, DM CW, 3; OBL, CC4; 13-394

Curly Dock

Rumex crispus L. ssp. *crispus* – i, DM CW, 2; FAC, CC*; 13-106

POTAMOGETONACEAE (Pondweed Family)

Leafy Pondweed

Potamogeton foliosus Raf. var. *foliosus* – n, AS, 3; OBL, CC5; 13-414

Illinois Pondweed

Potamogeton illinoensis Morong – n, AS, 2; OBL, CC6; 13-474

PRIMULACEAE (Primrose Family)

Fringed Loosestrife

Lysimachia ciliata L. – n, BF, 1; FACW, CC5; 13-273

Lowland Loosestrife

Lysimachia hybrida Michx. – n, BF, 1; OBL, CC8; 13-330

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Water-pimpernel, Brookweed

Samolus parviflorus Raf. – n, CW, 2; OBL, CC5; 13-047

RANUNCULACEAE (Buttercup Family)

Virgin's-bower

Clematis virginiana L. – n, CW DM, 1; FAC, CC4; 14-070

Tall Larkspur

Delphinium exaltatum Ait. – n, CW, 1; UPL, CC7; 13-376

Bulbous Buttercup

Ranunculus bulbosus L. – i, DT, 1; UPL, CC*; 14-044

Bristly Buttercup, Hispid Buttercup

Ranunculus hispidus Michx. – n, BF, 1; FAC, CC6; 14-078

Cursed Buttercup, Celery-leaved Crowfoot

Ranunculus scleratus L. var. *scleratus* – n, MF, 2; OBL, CC4; 13-045

Common Tall Meadow-rue

Thalictrum pubescens Pursh – n, CW, 2; FACW, CC7; 13-294

Rue-anemone

Thalictrum thalictroides (L.) A.J. Eames & B. Boivin – n, BF, 1; FACU, CC6; 14-034

RHAMNACEAE (Buckthorn Family)

Glossy Buckthorn, Alder Buckthorn

Frangula alnus Mill. – i, DM BF, 1; FAC, CC*; 13-198cr

Dahurian Buckthorn

Rhamnus davurica Pall. – i, BF DT, 2; nr, CC*; 14-065cr

Lance-leaf Buckthorn

Rhamnus lanceolata Pursh var. *lanceolata* – n, BF, 2; FAC, CC9; 14-064

ROSACEAE (Rose Family)

Small-flowered Agrimony, Harvest-lice

Agrimonia parviflora Ait. – n, CW DM, 2; FACW, CC4; 13-499

Washington Hawthorn

Crataegus phaenopyrum Borkh. – n, BF, 1; FAC, CC4; 14-120cr

White Avens

Geum canadense Jacq. – n, BF, 2; FACU, CC5; 13-134

Siberian Crabapple

Malus baccata (L.) Borkh. – i, BF, 1; UPL, CC*; 13-386

Indian-strawberry

Potentilla indica (Andrews) T. Wolf – i, DT, 2; FACU, CC*; 13-055

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Rough Cinquefoil

Potentilla norvegica L. – n, DT, 1; FACU, CC3; 13-126

Spring Cherry, Higan Cherry, Winter-flowering Cherry

Prunus subhirtella Miq. – i, DT, 1; nr, CC*; 14-090cr

Callery Pear, Bradford Pear

Pyrus calleryana Decne. – i, BF DT, 2; nr, CC*; 14-050cr

Carolina Rose, Pasture Rose

Rosa carolina L. – n, CW, 1; FACU, CC6; 13-225

Multiflora Rose

Rosa multiflora Thunb. ex Murray – i, DT BF, 3; FACU, CC*; 13-033

Himalayan Blackberry

Rubus discolor Weihe & Nees – i, DT, 1; UPL, CC*; 13-164cr

Black Raspberry

Rubus occidentalis L. – n, DT, 1; UPL, CC2; 14-084

Wineberry

Rubus phoenicolasius Maxim. – i, DT, 2; FACU, CC*; 13-207

RUBIACEAE (Madder Family)

Buttonbush

Cephalanthus occidentalis L. – n, BF MF, 1; OBL, CC6; 13-290

Cleavers

Galium aparine L. – n, DM, 2; FACU, CC2; 13-098

Bluntleaf Bedstraw

Galium obtusum Bigelow – n, BF, 2; FACW, CC5; 13-039

Sweet-scented Bedstraw

Galium triflorum Michx. – n, BF CW, 2; FACU, CC5; 13-298

Yellow Bedstraw

Galium verum L. – i, DM, 1; UPL, CC*; 13-178

RUSCACEAE (Ruscus Family)

Eastern Solomon's-plume, False Solomon's-seal

Maianthemum racemosum (L.) Link ssp. *racemosum* – n, BF, 1; FACU, CC6; 13-277

RUTACEAE (Citrus Family)

Amur Cork-tree, Japanese Cork-tree

Phellodendron amurense Rupr. – i, DT, 1; nr, CC*; 13-209cr

SALICACEAE (Willow Family)

Eastern Cottonwood

Populus deltoides W. Bartram ex Marshall var. *deltoides* – n, BF CW, 3; FAC, CC5; 13-345

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Weeping Willow

Salix babylonica L. – i, CW, 2; FACW, CC*; 13-190

Heart-leaved Willow

Salix eriocephala Michx. –n, CW, 2; FACW, CC5; 13-219cr

Black Willow

Salix nigra Marshall – n, CW BF, 3; OBL, CC3; 13-003

SAPINDACEAE (Soapberry Family)

Eastern Boxelder

Acer negundo L. var. *negundo* – n, BF, 3; FAC, CC4; 14-076

Red Maple

Acer rubrum L. – n, BF, 1; FAC, CC2; 13-355

Silver Maple

Acer saccharinum L. – n, BF, 2; FACW, CC5; 14-015

SCROPHULARIACEAE (Snapdragon Family)

Moth Mullein

Verbascum blattaria L. – i, DT, 2; UPL, CC*; 13-124

Great Mullein, Common Mullein

Verbascum thapsus L. – i, DT, 1; FACU, CC*; 13-347

SIMAROUBACEAE (Quassia Family)

Tree-of-heaven

Ailanthus altissima (Mill.) Swingle – i, DT, 2; FACU, CC*; 14-056

SOLANACEAE (Nightshade Family)

Longleaf Ground-cherry

Physalis longifolia Nutt. var. *subglabrata* (Mack. & Bush) Cronquist – n, DT, 1; UPL, CC1; 12-204

Horse-nettle, Carolina Horse-nettle

Solanum carolinense L. var. *carolinense* – n, DM DT, 2; FACU, CC2; 13-128

Bittersweet, Climbing Nightshade

Solanum dulcamara L. –i, CW DM DT, 2; FAC, CC*; 13-172

Hairy Nightshade

Solanum sarrachoides Sendtn. – i, DT, 1; UPL, CC*; 13-532

TYPHACEAE (Cattail Family)

American Bur-reed

Sparganium americanum Nutt. – n, AS, 2; OBL, CC6; 13-322

Narrow-leaf Bur-reed

Sparganium emersum Rehmann – n, AS, 1; OBL, CC8; 13-338

Annotations (see pp. 1-2): origin, habitat, abundance; indicator rating, coefficient of conservatism; collection number (county record)

Giant Bur-reed

Sparganium eurycarpum Engelm. ex A Gray – n, MF AS, 4; OBL, CC6; 13-204

Common Cattail, Broadleaf Cattail

Typha latifolia L. – n, MF CW, 3; OBL, CC2; 13-154

ULMACEAE (Elm Family)

American Elm

Ulmus americana L. – n, BF CW, 2; FACW, CC6; 13-458

URTICACEAE (Nettle Family)

False Nettle

Boehmeria cylindrica (L.) Sw. – n, CW MF, 4; FACW, CC4; 13-162

Lesser Clearweed, Blackfruit Clearweed

Pilea fontana (Lunnell) Rydb. – n, CW, 3; FACW, CC8; 13-446

VERBENACEAE (Verbena Family)

Blue Vervain, Common Vervain

Verbena hastata L. – n, CW, 3; FACW, CC4; 13-310

White Vervain

Verbena urticifolia L. – n, BF DT, 2; FAC, CC3; 13-263

VIOLACEAE (Violet Family)

Marsh Blue Violet

Viola cucullata Ait. – n, CW, 2; FACW, CC6; 13-032

VITACEAE (Grape Family)

Virginia-creeper

Parthenocissus quinquefolia (L.) Planch. – n, BF, 3; FACU, CC4; 14-072

Riverbank Grape

Vitis riparia Michx. – n, BF, 1; FACW, CC5; 14-058

Frost Grape, Winter Grape, Chicken Grape

Vitis vulpina L. – n, BF, 3; FAC, CC4; 13-342

XANTHORRHOEACEAE (Day-lily Family)

Orange Day-lily, Tiger-lily

Hemerocallis fulva (L.) L. – i, DT, 1; FACU, CC*; 13-184

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