Vegetation analysis and vascular floras of three Research Natural Areas (RNAs) Barker Bluff, Dennison Hollow, and Panther Hollow in southeastern Illinois

by

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APPENDIX E

ANNOTATED CHECKLISTS OF THE VASCULAR FLORA OF BARKER BLUFF, DENNISON HOLLOW, AND PANTHER HOLLOW RNAs

A complete set of voucher specimens of the 1465 vascular plant species identified from the three study areas are housed at the Natural History Herbarium in Champaign, Illinois.

The annotated plant lists for each RNA is arranged alphabetically by family and species. Nomenclature follows Mohlenbrock (1986). Plant identifications for species not in Mohlenbrock (1986), were made from Cronquist (1992) and Smith (1994).

The format for each species entry is as follows: the species and the authority are listed first, followed by the common name, then relative abundance of each taxon within the study areas. Frequency designations were determined on the basis of field observations made at the time of collection and quantitative frequency information from plot data collections. These observations are not intended to be an absolute measure of the abundance of each taxon. The frequency terms used are a modification of those used by Murrell (1987) and Voss (1972).

VERY RARE	: A single locale/less than 10 individuals.
RARE	: One or two localities/generally small populations.
LOCAL	: Occurring in a very restricted habitat but may be common when found.
INFREQUENT	: Scattered localities throughout the habitat(s) in which it grows.
OCCASIONAL	: Well distributed throughout the habitat(s) to which it grows but not any where abundant.
COMMON	: Widespread and characteristic throughout its range of habitats
ABUNDANT	: Very common occurring in dense stands
ABSENT	: Documented from a previous survey but not relocated

Habitat descriptions follow the abundance category and are based on the classification scheme of White and Madany (1978). Frequency distributions refer to the first habitat given; following habitats are listed in order of diminishing frequency of occurrence. Habitat determinations were based on field observations and group summaries from

COMPAH and TWINSPAN classifications on plot inventory information. Occasional notes on individual plants may follow the habitat information. Taxa collected by the author are designated by the collection numbers only. Entries based on collectios of others include the name of the collector and the collection number. If the specimen is housed in a herbarium other than the Natural History Survey, the acronym of the herbarium follows the collection number. Finally, an asterisk (*) before the species name indicates a nonindigenous taxon.

APPENDIX E

SECTION 3.

ANNOTATED CATALOGUE OF VASCULAR PLANTS OF PANTHER HOLLOW RESEARCH NATURAL AREA

ACANTHACEAE

Justicia americana (L.) Vahl. Water Willow. Local. Gravel wash of intermittent stream. 4517

Ruellia caroliniensis (J. F. Gmel.) Steud var. *dentata* (Nees.) Fern. Wild Petunia. Infrequent. Successional dry upland forest. 5479

Ruellia humilis Nutt. Wild Petunia. Occasional. Dry upland forest often on sandstone outcrops. 4641

ACERACEAE

Acer negundo L. Box Elder. Occasional. Stream terrace in mesic upland forest. 4680

Acer rubrum L. Red Maple. Occasional. Edge of *Pinus strobus* plantation in successional dry-mesic upland forest; mesic upland forest; dry upland forest. 5016

Acer saccharum Marsh. Sugar Maple. Abundant. Dry-mesic upland forest; mesic upland forest; dry upland forest. 4387

ADIANTACEAE

Adiantum pedatum [Tourn.] L. Maidenhair Fern. Occasional. Mesic upland forest; dry-mesic upland forest. 4160, 4306

Cheilanthes lanosa (Michx.) D. C. Eaton. Hairy Lip Fern. Rare. Outcrops along sandstone escarpments in dry upland forest. 4333

ANACARDIACEAE

Rhus copallina L. Dwarf Sumac. Occasional. Dry upland forest. 4689

Toxicodendron radicans (L.) Kuntze. Poison Ivy. Abundant. Dry-mesic upland forest; mesic upland forest; sandstone outcrops and cliffs. 4643

ANNONACEAE

Asimina triloba (L.) Dunal. Pawpaw. Common. Mesic upland forest. 4528, 4660

APIACEAE

Angelica venenosa (Greenway) Fern. Wood Angelica. Rare. Dry upland forest. 5179

Cryptotaenia canadensis (L.) DC. Honewort. Common. Stream terrace in mesic upland forest and dry-mesic upland forest. 4301, 4519

**Daucus carota* L. Queen Anne's Lace. Rare. Exposed sandstone of intermittent stream channel in dry upland forest. 4793

Eryngium yuccifolium Michx. Rattlesnake Master. Infreqent. Openings in dry upland forest; xeric upland forest. 4575

Osmorhiza longistylis (Torr.) DC. Anise-root. Common. Dry-mesic upland forest; mesic upland forest. 4168, 4796

Polytaenia nuttallii DC. Prairie Parsley. Rare. Opening in dry upland forest. 5237

Sanicula canadensis L. Canadian Black Snakeroot. Common. Dry-mesic upland forest; mesic upland forest. 4639

Sanicula gregaria Bickn. Common Snakeroot. Occasional. Stream terrace in mesic upland forest. 4296

Thaspium trifoliatum (L.) Gray *var. flavum* Blake. Yellow Meadow Parsnip. Occasional. Stream terrace in mesic upland forest; dry mesic upland forest; dry upland forest. 4299, 4939

APOCYNACEAE

Amsonia tabernaemontana Walt. Blue Star. Local. Stream terrace in mesic upland forest. 4223

ARACEAE

Arisaema dracontium (L.) Schott. Green Dragon. Occasional. Mesic upland forest. 4313

Arisaema triphyllum (L.) Schott. Jack-in-the-Pulpit. Common. Mesic upland forest, often associated with sandstone overhangs. 4018

ARALIACEAE

Aralia racemosa L. American Spikenard. Rare. Shaded sandstone cliff in mesic upland forest. 5035

Aralia spinosa L. Devil's Walking-stick. Occasional. Lower slopes in dry-mesic upland forest. 4780, 4851

Panax quinquefolius L. Ginseng. Occasional. Mesic upland forest, dry-mesic upland forest. 4782

ARISTOLOCHIACEAE

Aristolochia serpentaria L. Virginia Snakeroot. Occasional. Dry-mesic upland forest; dry upland forest. 4529

Asarum canadense L. var. *reflexum* (Bickn.) Robins. Wild Ginger. Common. Mesic upland forest. 4011

ASCLEPIADACEAE

Asclepias exaltata L. Poke Milkweed. Rare. Talus slope in mesic upland forest. 4893

Asclepias syriaca L. Common Milkweed. Rare. Sandstone outcrop along intermittent stream in dry upland forest. 4577

Asclepias variegata L. Variegated Milkweed. Occasional. Dry upland forest openings; xeric upland forest. 4413

Asclepias verticillata L. Horsetail Milkweed. Rare. Xeric upland forest. 5352

ASPLENIACEAE

Asplenium pinnatifidum Nutt. Pinnatifid Spleenwort. Occasional. Sandstone cliffs in dry-mesic and mesic upland forest. 4379

Asplenium platyneuron (L.) Oakes. Ebony Spleenwort. Common. Dry-mesic upland forest; successional dry mesic upland forest; sandstone cliffs. 5163

Asplenium rhizophyllum L. Walking Fern. Local. Sandstone slide blocks and boulders in mesic upland forest. 4038

Asplenium trichomanes L. Maidenhair Spleenwort. Local. Shaded sandstone ledges in dry-mesic upland forest. 4163

Athyrium angustum (Willd.) Presl. Lady Fern. Occasional. Mesic upland forest; dry-mesic upland forest. 4864, 4865

Athyrium pycnocarpon (Spreng.) Tidestrom. Narrow-leaved Spleenwort. Local. Talus slope in mesic upland forest. 4527

Athyrium thelypteroides (Michx.) Desv. Silvery Spleenwort. Local. Talus slope in mesic upland forest. 4524, 5182

Cystopteris bulbifera (L.) Bernh. Bladder Fern. Occasional. Shaded sandstone cliffs in mesic upland forest. 4318, 4419, 4549

Cystopteris protrusa (Weatherby) Blasd Fragile Fern. Common. Mesic upland forest; dry-mesic upland forest. 4295

Dryopteris marginalis (L.) Gray. Marginal Shield Fern. Common. Shaded sandstone cliffs and sandstone slide blocks in mesic upland forest. 4305

Onoclea sensibilis L. Sensitive Fern. Local. Along intermittent stream in mesic upland forest. 4402, 5355

Polystichum acrostichoides (Michx.) Schott. Christmas Fern. Common. Mesic upland forest; dry-mesic upland forest; sandstone cliffs. 4294

Woodsia obtusa (Spreng.) Torr. Common Woodsia. Occasional. Outcrops along sandstone escarpement; sandstone cliffs and ledges. 5487

Woodwardia areolata (L.) Moore. Netted Chain Fern. Rare. Sandstone ledge in mesic upland forest. 5057

ASTERACEAE

Ambrosia artemisiifolia L. Common Ragweed. Infrequent. Dry upland forest. 4867

Antennaria plantaginifolia (L.) Richards. Pussytoes. Common. Dry upland forest; xeric upland forest. 4035

Aster cordifolius L. Blue Aster. Infrequent. Thickets in mesic upland forest. 5481

Aster lateriflorus (L.) Britt. Side-flowered Aster. Infrequent. Sandstone cliff; stream terrace in mesic upland forest. 5485

Aster patens Ait. Spreading Aster. Common. Dry upland forest; dry-mesic upland forest. 5048

Aster pilosus Willd. Hairy Aster. Local. Exposed sandstone of intermittent stream channel in dry upland forest. 5059

Aster praealtus Poir. Willow Aster. Rare. Exposed sandstone of intermittent stream channel in dry upland forest. 5388, 5392

Aster shortii Lindl. Short's Aster. Ocassional. Mesic upland forest, often on sandstone slide blocks. 5082, 5108

Aster simplex Willd. Panicled Aster. Local. Exposed sandstone of intermittent stream channel in dry upland forest. 5102

Aster undulatus L. Aster. Common. Dry upland forest. 5083

Bidens aristosa (Michx.) Britt. var. *retrorsa* (Sherff) Wunderlin. Tickseed Sunflower. Common. Along intermittent streams in mesic, dry-mesic and dry upland forests. 4928, 5056

Bidens bipinnata L. Spanish Needles. Rare. Sandstone ledge in dry upland forest. 5486

Bidens frondosa L. Common Beggar's-ticks. Infrequent. Along intermittent streams in mesic and dry-mesic upland forests. 5055

Cacalia atriplicifolia L. Pale Indian Plantain. Infrequent. Dry-mesic upland forest; mesic upland forest. 4925

Cirsium carolinianum (Walt.) Fern. & Schub. Carolina Thistle. Occasional. Openings in dry upland forest. 4414

Cirsium discolor (Muhl.) Spreng. Field Thistle. Occasional. Dry-mesic upland forest; successional dry-mesic upland forest near *Pinus strobus* plantation. 5037

Conyza canadensis (L.) Cronq. Horseweed. Infrequent. Exposed sandstone of intermittent stream channel in dry upland forest. 5052

Elephantopus carolinianus Raeusch. Elephant's-foot. Occasional. Mèsic upland forest; successional dry-mesic upland forest near *Pinus strobus* plantation. 4934

Erechtites hieracifolia (L.) Raf. Fireweed. Occasional. Exposed sandstone of intermittent streams; dry upland forest. 5029

Erigeron annuus (L.) Pers. Daisy Fleabane. Infrequent. Exposed sandstone of intermittent stream channel in dry upland forest. Not collected.

Erigeron philadelphicus L. Marsh Fleabane. Occasional. Mesic upland forest. 4148, 4311, 4350

Erigeron pulchellus Michx. Robin's Plantain. Occasional. Stream terrace in dry-mesic and mesic upland forests. 4148

Erigeron strigosus Muhl. Daisy Fleabane. Occasional. Dry upland forest. 4433, 4650

Eupatorium coelestinum L. Mistflower. Infrequent. Exposed sandstone of intermittent stream channel in dry upland forest. 4849, 5389

Eupatorium purpureum L. Purple Joe Pye Weed. Local. Stream terrace in mesic upland forest. 4769

Eupatorium rugosum Houtt. White Snakeroot. Common. Dry-mesic upland forest; mesic upland forest. Note: Abundant in successional areas. 4840

Eupatorium perfoliatum L. Common Boneset. Local. Successional dry-mesic upland forest. 4924

Eupatorium serotinum Michx. Late Boneset. Infrequent. Exposed sandstone of intermittent stream channel in dry upland forest. 5032

Gnaphalium obtusifolium L. Sweet Everlasting. Rare. Opening in dry upland forest. 5085

Gnaphalium purpureum L. Early Cudweed. Occasional. Dry upland forest. 4346

Helianthus divaricatus L. Woodland Sunflower. Common. Dry upland forest; xeric upland forest; dry-mesic upland forest. 4771

Helianthus microcephalus Torr. & Gray. Small Woodland Sunflower. Infrequent. Dry-mesic upland forest. 4891

Hieracium gronovii L. Hairy Hawkweed. Common. Dry-mesic upland forest; dry upland forest. 4774, 4855

Krigia biflora (Walt.) Blake. False Dandelion. Common. Dry-mesic upland forest; dry upland forest; stream banks in mesic forest. 4220, 4224

Krigia dandelion (L.) Nutt. Potato Dandelion. Abundant. Dry upland forest; xeric upland forest; often on rock outcrops; dry-mesic upland forest. 4165

Lactuca canadensis L. Wild Lettuce. Occasional. Dry-mesic upland forest; outcrop along sandstone escarpment in dry upland forest. 4970, 5030

Lactuca floridana (L.) Gaertn. Woodland Lettuce. Infrequent. Dry-mesic upland forest; stream terrace in mesic upland forest. 5017

Lactuca hirsuta Muhl. var *sanguinea* (Bigel.) Fern. Hairy Lettuce. Occasional. Dry upland forest; xeric upland forest; edge of sandstone escarpment in dry-mesic upland forest. 4456

Liatris aspera Michx. Blazing Star. Occasional. Xeric upland forest. 4056

Liatris squarrosa (L.) Michx. Blazing-star. Infrequent. Opening in dry upland forest. 4691

Parthenium integrifolium L. American Feverfew. Occasional. Xeric upland forest. 4416, 4576

Polymnia canadensis L. Bear's Foot. Local. Mesic upland forest often associated with thin soils on the top of sandstone slide blocks. 4767

Prenanthes altissima L. Tall White Lettuce. Occasional. Mesic upland forest; dry-mesic upland forest. 5039, 5081, 5109

Rudbeckia hirta L. Black-eyed Susan. Common. Dry-mesic upland forest; mesic upland forest often associated with intermittent stream banks. 4532, 5051

Senecio aureus L. Golden Ragwort. Common. Sand and gravel wash of intermittent streams in mesic upland forest. 4403

Senecio glabellus Poir. Butterweed. Occasional. Sand and gravel wash of intermittent streams in mesic upland forest and dry-mesic upland forest. 4154

Solidago buckleyi Torr. & Gray. Buckley's Goldenrod. Occasional. Dry upland forest. 5078

Solidago caesia L. Blue-stem Goldenrod. Occasional. Mesic upland forest; dry-mesic upland forest, often associated with sandstone boulders, ledges, and cliffs. 5058

Solidago canadensis L. Tall Goldenrod. Rare. Exposed sandstone of intermittent stream in dry upland forest. 2060

Solidago flexicaulis L. Broadleaf Goldenrod. Local. Mesic upland forest. 5103, 5105

Solidago nemoralis Ait. Field Goldenrod. Common. Dry upland forest; xeric upland forest. 5025

Solidago petiolaris Ait. Goldenrod. Occasional. Dry upland forest. 5054

Solidago sphacelata Raf. Goldenrod. Rare. Sandstone ledge in dry upland forest. 4937

Solidago ulmifolia Muhl. Elm-leaved Goldenrod. Common. Dry-mesic upland forest; mesic upland forest; dry upland forest. 4936

**Taraxacum officinale* Weber. (Common Dandelion.) Rare. Sandy wash of intermittent stream. 5157 TAOF

Verbesina alternifolia (L.) Britt. Yellow Ironweed. Local. Stream terrace in mesic upland forest. 5038

Verbesina helianthoides Michx. Yellow Crownbeard. Occasional. Dry upland forest; dry-mesic upland forest. 4530

Verbesina virginica L. Tickweed. Local. Successional dry-mesic upland forest near *Pinus strobus* plantation. 4938

BALSAMINACEAE

Impatiens capensis Meerb. Spotted Touch-me-not. Common. Wet areas along intermittent streams in mesic upland forest. 4836

BERBERIDACEAE

Caulophyllum thalictroides (L.) Michx. Blue Cohosh. Local. Talus slopes in mesic upland forest. 4024

Podophyllum peltatum L. Mayapple. Common. Dry-mesic upland forest; mesic upland forest. 4169, 4759

BIGNONIACEAE

Bignonia capreolata L. Cross Vine. Common. Mesic upland forest; dry-mesic upland forest. 4281

Campsis radicans (L.) Seem. Trumpet Creeper. Common. Mesic upland forest; dry-mesic upland forest. 4635

BORAGINACEAE

Cynoglossum virginianum L. Wild Comfrey. Occasional. Dry-mesic upland forest. 4152, 4315

Hackelia virginiana (L.) I. M. Johnston. Stickseed. Local. Successional dry-mesic upland forest. 4861

Myosotis macrosperma Engelm. Scorpion Grass. Common. Dry-mesic upland forest; mesic upland forest; dry upland forest. 4146, 4308, 5164

BRASSICACEAE

Arabis laevigata (Muhl.) Poir. Smooth Rock Cress. Occasional. Mesic upland forest, often associated with sandstone boulders, ledges, and cliffs. 4017

(hairy bitter cress?)

**Cardamine hirsuta* L. Spring Cress. Occasional. Sandy wash of intermittent stream channels in mesic and dry-mesic upland forests. 4008

Cardamine parviflora L. var. arenicola (Britt.) O. E. Schultz. Small-flowered Bitter Cress. Rare. Outcrops along sandstone escarpment in dry upland forest. 4014, 4134

Cardamine pensylvanica Muhl. Bitter Cress. Occasional. Along intermittent streams in dry-mesic upland forest. 4026

Dentaria laciniata Muhl. Toothwort. Common. Mesic upland forest; dry-mesic upland forest. 4007, E. Shimp 4638

CAESALPINIACEAE

Cassia marilandica L. Maryland Senna. Rare. Successional dry-mesic upland forest near *Pinus strobus* Pine plantation. 5077

Cassia nictitans L. Wild Sensitive Plant. Occasional. Dry upland forest openings. 4888

Cercis canadensis L. Redbud. Common. Mesic upland forest; dry-mesic upland forest. 4013

Gleditsia triacanthos L. Honey Locust. Local. Stream terrace in mesic upland forest. Not collected.

CAMPANULACEAE

Campanula americana L. American Bellflower. Occasional. Mesic upland forest; dry-mesic upland forest. 4768

Lobelia inflata L. Indian Tobacco. Common. Wet areas along intermittant streams in mesic and dry-mesic upland forest; successional dry-mesic upland forest near *Pinus strobus* plantation. 4839

Lobelia puberula Michx. Downy Lobelia. Local. Successional dry-mesic upland forest near *Pinus strobus* plantation. 5014

Lobelia siphilitica L. Blue Cardinal-flower. Common. Along intermittent streams in dry-mesic upland forest. 5106

Lobelia spicata Lam. Spiked Lobelia. Occasional. Xeric upland forest; dry upland forest. 4552, 4692

Lobelia spicata Lam. var. *leptostachys* (A. DC.) Mack. & Bush. Spiked Lobelia. Rare. Dry upland forest. 4692

Triodanis perfoliata (L.) Nieuwl. Venus' Looking-glass. Common. Dry upland forest; sandstone outcrops in dry-mesic upland forest. Not collected.

CAPRIFOLIACEAE

**Lonicera japonica* Thunb. Japanese Honeysuckle. Abundant. Dry-mesic upland forest, mesic upland forest, dry upland forest; sandstone cliffs and outcrops. 4380

Sambucus canadensis L. Elderberry. Occasional. Stream terrace and gravel wash of intermittent stream channel in mesic upland forest. 4872

CARYOPHYLLACEAE

**Cerastium vulgatum* L. Common Mouse-eared Chickweed. Occasional. Sandy and gravel wash of intermittent stream channel in mesic upland forest. 4341, 5177

**Dianthus armeria* L. Deptford Pink. Rare. Sandstone outcrops along intermittent stream in dry upland forest. 4540

Silene stellata (L.) Ait. f. Starry Campion. Infrequent. Mesic upland forest; dry-mesic upland forest. Not collected.

Silene ovata Pursh. Ovate Catchfly. Very rare. Sandstone slide block in mesic upland forest. 5399

**Stellaria media* (L.) Vill. Common Chickweed. Infrequent. Sandy soil and gravel bars of intermittent streams in mesic upland forest. *4009*

CELASTRACEAE

Euonymus americanus L. Strawberry Bush. Abundant. Mesic upland forest; dry-mesic upland forest. 4237, 4331, E. Shimp 4994

Euonymus atropurpureus Jacq. Wahoo. Local. Along intermittent stream in mesic upland forest. 5100

CHENOPODIACEAE

Chenopodium gigantospermum Aellen. Maple-leaved Goosefoot. Local. Sandstone overhang in mesic upland forest. 5268

CISTACEAE

Lechea tenuifolia Michx. Narrow-leaved Pinweed. Occasional. Dry upland forest; sandstone outcrops in dry upland forest. 4623

COMMELINACEAE

**Commelina communis* L. Common Day Flower. Common. Exposed sandstone and sandy wash of intermittent stream channel in mesic and dry-mesic upland forests. *4537*

Tradescantia subaspera Ker. Spiderwort. Occasional. Mesic upland forest, often along intermittent streams and on top of sandstone slideblocks. 4516

Tradescantia virginiana L. Spiderwort. Occasional. Dry upland forest; dry-mesic upland forest. 4142

CORNACEAE

Cornus florida L. Flowering Dogwood. Common. Dry-mesic upland forest; dry upland forest. 5170

CORYLACEAE

Carpinus caroliniana Walt. Blue Beech. Occasional. Along intermittent stream in mesic upland forest. 4663

Ostrya virginiana (Mill.) K. Koch. Hop Hornbeam. Common. Dry-mesic upland forest; dry upland forest. 4385, 4795

CRASSULACEAE

Sedum ternatum Michx. Three-leaved Stonecrop. Common. Mesic upland forest often associated with moist sandstone outcrops, ledges, and boulders. 4020, 4356

Sedum pulchellum Michx. Widow's-cross. Common. Sandstone outcrops and boulders in dry-mesic and dry upland forest. 4221, 4331

CUPRESSACEAE

Juniperus virginiana L. Red Cedar. Common. Dry upland forest; dry-mesic upland forest. 4030

CYPERACEAE

Carex albursina Sheldon. Sedge. Occasional. Talus slopes in mesic upland forest. 4150

Carex amphibola Steud. Sedge. Local. Seepage areas along edge of sandstone escarpment in dry-mesic upland forest. 4556

Carex artitecta Mack. Sedge. Common. Dry-mesic upland forest, often on sandstone cliff ledges; dry upland forest. 4019, 4021

Carex blanda Dewey. Sedge. Common. Mesic upland forest and dry-mesic upland forest. 4136

Carex bushii Mack. Sedge. Local. Seepages in dry upland forest. 4357, 4682

Carex careyana Dewey. Sedge. Infrequent. Talus slopes in mesic upland forest. 4406

Carex cephalophora Willd. Sedge. Infrequent. Dry-mesic upland forest; mesic upland forest. 4390

Carex digitalis Willd. Sedge. Common. Dry-mesic upland forest often on sandstone ledges. 4566, 4569

Carex frankii Kunth. Sedge. Rare. Along intermittent streams in mesic upland forest. 4561, 4677

Carex glaucodea Tuckerm. Sedge. Infrequent. Dry-mesic upland forest often on sandstone rock outcrops; dry upland forest. 4332

Carex grayi Carey. Sedge. Rare. Stream terrace in mesic upland forest. 4678

Carex grisea Wahlenb. Sedge. Common. Mesic upland forest; dry-mesic upland forest. 4135, 4397, 4683

Carex hirsutella Mack. Sedge. Common. Dry upland forest; dry-mesic upland forest. 4384

Carex hirtifolia Mack. Sedge. Local. Stream terrace in mesic upland forest. 4394

Carex jamesii Schwein. Sedge. Common. Mesic upland forest. 4149

Carex laxiculmis Schwein. Sedge. Local. Stream terrace in mesic upland forest. 4670, 4671, 5273

Carex muhlenbergii Schk. Sedge. Occasional. Dry-mesic upland forest; dry upland forest. 4775

Carex nigromarginata Schwein. Sedge. Local. Dry upland forest. 5252, 5253

Carex oxylepis Torr. & Hook. var. *pubescens* J. K. Underwood. Hairy sharp-scale Sedge. Local. Successional dry-mesic upland forest. Note: This variety of *C. oxylepis* had not been previously recorded from Illinois. 4310, 5270, 5271, 5273

Carex projecta Mack. Sandstone outcrops along intermittent stream in dry-mesic upland forest. 4791

Carex retroflexa Willd. Sedge. Occasional. Dry-mesic upland forest. 4658

Carex rosea Willd. Sedge. Common. Mesic upland forest; dry-mesic upland forest. 4225, 4227, 4695, 4784

Carex shortiana Dewey. Sedge. Rare. Along intermittent stream in mesic upland forest. 4354

Carex striatula Michx. Infrequent. Talus slope in mesic upland forest. 4144, 4153

Carex sparganioides Willd. Rare. Stream terrace in mesic upland forest. 4518

Carex torta Boott. Sedge. Local. Gravel wash of intermittent stream in mesic upland forest. 4226

Carex tribuloides Wahlenb. Sedge. Infrequent. Along intermittent stream in mesic upland forest. 4395, 4668, 4674

Carex umbellata Schk. Common. Dry upland forest, xeric upland forest. 4320

Carex virescens Willd. Sedge. Rare. Dry-mesic upland forest. 5377

Carex vulpinoidea Michx. Sedge. Occasional. Edge of intermittent stream in dry-mesic and mesic upland forest. 4398, 4407, 4684, 4792

Cyperus ovularis (Michx.) Torr. Round-headed Sedge. Local. Along intermittent stream in dry upland forest. 5076

Cyperus strigosus L. Sedge. Rare. Sandstone outcrop along intermittent stream in dry upland forest. 4704

Eleocharis verrucosa (Svens.) Harms. Spike Rush. Occasional. Sandstone outcrops in dry upland forest. 4649, 5262

Scirpus atrovirens Willd. Bulrush. Occasional. Along intermittent stream in dry-mesic upland forest. 4338, 4560

Scirpus polyphyllus Vahl. Bulrush. Very rare. Seepage in dry-mesic upland forest. 4669

DIOSCOREACEAE

Dioscorea quaternata (Walt.) J. F. Geml. Wild Yam. Common. Dry-mesic upland forest; mesic upland forest. 5483

EBENACEAE

Diospyros virginiana L. Persimmon. Occasional. Dry upland forest; dry-mesic upland forest; mesic upland forest. 5175

ELAEAGNACEAE

**Elaeagnus umbellata* Thunb. Autumn Olive. Local. Dry-mesic forest. Note: All individuals seen were existing as seedlings. 4830, 4889

EQUISETACEAE

Equisetum arvense L. Common Horsetail. Local. Sandy wash of intermittent stream in mesic upland forest. 4786

ERICACEAE

Vaccinium arboreum Marsh. Farkleberry. Occasional. Xeric upland forest; dry upland forest. 4383

EUPHORBIACEAE

Acalypha deamii (Weatherby) Ahles. Large-seeded Mercury. Local. Sandy wash of intermittent streams in mesic upland forest. 5110, 5111

Acalypha gracilens Gray. Slender Three-seeded Mercury. Occasional. Dry upland forest; dry mesic upland forest. 5034

Acalypha rhomboidea Raf. Three-seeded Mercury. Occasional. Sandy wash of intermittent streams in mesic upland forest. 5477

Acalypha virginica L. Three-seeded Mercury. Occasional. Dry-mesic upland forest. 4837, 5047

Crotonopsis elliptica Willd. Rushfoil. Occasional. Outcrops along sandstone escarpment in dry upland forest. 4651

Euphorbia corollata L. Flowering Spurge. Common. Dry upland forest; xeric upland forest; dry-mesic upland forest. 4857

Poinsettia dentata (Michx.) Kl. & Garcke. Wild Poinsettia. Local. Successional dry upland forest. 5478

FABACEAE

Amphicarpa bracteata (L.) Fern. Hog Peanut. Occasional. Mesic upland forest; dry-mesic upland forest. Not collected.

Clitoria mariana L. Butterfly Pea. Occasional. Dry upland forest; xeric upland forest. 4943

Desmodium canescens (L.) DC. Hoary Tick Trefoil. Infrequent. Successional dry-mesic upland forest. 5490

Desmodium laevigatum (Nutt.) DC. Glaucus Tick Trefoil. Infrequent. Successional dry-mesic upland forest. 5480

Desmodium nudiflorum (L.) DC. Bare-stemmed Tick Trefoil. Occasional. Dry-mesic upland forest. 4781

Desmodium pauciflorum (Nutt.) DC. White-flowered Tick Trefoil. Local. Dry-mesic upland forest.

Desmodium rotundifolium DC. Round-leaved Tick Trefoil. Local. Dry-mesic upland forest. 4554

Galactia regularis (L.) BSP. Milk Pea. Occasional. Dry upland forest; thickets in successional upland forest. 5472

**Lespedeza cuneata* (Dum.-Cours.) G. Don. Sericea Lespedeza. Local. Sandstone outcrop along intermittent stream in dry-mesic upland forest. 4923

Lespedeza hirta (L.) Hornem. Hairy Bush Clover. Occasional. Xeric upland forest; dry upland forest. 4773, 4892

Lespedeza intermedia (S. Wats.) Britt. Bush Clover. Occasional. Dry upland forest; dry-mesic upland forest. 5043

Lespedeza repens (L.) Bart. Creeping Bush Clover. Common. Dry upland forest; dry-mesic upland forest. 4828

Lespedeza virginica (L.) Britt. Slender Bush Clover. Occasional. Dry upland forest; dry-mesic upland forest. 5042

Lespedeza violacea (L.) Pers. Violet Bush Clover. Occasional. Dry upland forest; xeric upland forest. 4652

Psoralea psoralioides (Walt.) Cory var. *eglandulosa* (Ell.) Freeman. Sampson's Snakeroot. Occasional. Xeric upland forest; dry upland forest. 4415

Robinia pseudoacacia L. Black Locust. Common. Stream terrace in mesic upland forest; dry-mesic upland forest. Not collected.

Stylosanthes biflora (L.) BSP. Pencil-flower. Occasional. Xeric upland forest; dry upland forest; sandstone outcrops in dry-mesic upland forest. 4535

Tephrosia virginiana (L.) Pers. Goat's-rue. Occasional. Xeric upland forest; dry upland forest. 4531

FAGACEAE

Fagus grandifolia Ehrh. Var. Caroliniana (Loud.) Fern. & Rehd. American Beech. Common. Mesic upland forest; dry-mesic upland forest. 4386, E. Shimp 4642

Quercus alba L. White Oak. Common. Dry-mesic upland forest; dry upland forest; mesic upland forest. 4636

Quercus coccinea Muenchh. Scarlet Oak. Occasional. Dry upland forest; xeric upland forest. 5492

Quercus imbricaria Michx. Shingle Oak. Infrequent. Dry upland forest; dry-mesic upland forest. Note: Most individuals seen were seedlings. 5491

Quercus marilandica Muenchh. Blackjack Oak. Common. Xeric upland forest; dry upland forest. Note; many of the older trees are dead. 4687

Quercus prinoides Willd. var. *acuminata* (Michx.) Gl. Yellow Chestnut Oak. Infrequent. Dry-mesic upland forest; stream terrace in mesic upland forest. 4634

Quercus rubra L. Red Oak. Common. Dry-mesic upland forest; mesic upland forest. 5171

Quercus shumardii Buckley. Shumard's Oak. Rare. Dry-mesic upland forest. 5354

Quercus stellata Wangh. Post Oak. Common. Dry upland forest; xeric upland forest. 4656

Quercus velutina Lam. Black Oak. Common. Dry-mesic upland forest; dry upland forest. 4687

GENTIANACEAE

Sabatia angularis (L.) Pursh. Marsh Pink. Local. Exposed sandstone of intermittent stream channel in dry upland forest. 4860

GERANIACEAE

Geranium carolinianum L. Wild Cranesbill. Rare. Sandstone outcrops along intermittent stream in dry upland forest. 4353

Geranium maculatum L. Wild Geranium. Occasional. Mesic upland forest; dry-mesic upland forest. 5161

HAMAMELIDACEAE

Liquidambar styraciflua L. Sweet Gum. Occasional. Stream terrace in mesic upland forest. 5180

HYDRANGEACEAE

Hydrangea arborescens L. Wild Hydrangea. Common. Mesic upland forest often on sandstone cliffs and sandstone slideblocks. 4659

HYDROPHYLLACEAE

Hydrophyllum appendiculatum Michx. Great Waterleaf. Occasional. Lower talus slope and banks of intermittent streams in mesic upland forest. 4167

Hydrophyllum canadense L. Broad-leaf Waterleaf. Local. Stream banks in mesic upland forest. 4392.

Phacelia bipinnatifida Michx. Occasional. Talus slopes and tops of slideblocks in mesic upland forest. 4139

HYPERICACEAE

Hypericum denticulatum Walt. St. John's-wort. Occasional. Dry upland forest; xeric upland forest. 4686.

Hypericum gentianoides (L.) BSP. Pineweed. Local. Outcrop along edge of sandstone escarpment in dry upland forest. 4843

Hypericum mutilum L. Dwarf St. John's-wort. Rare. Exposed sandstone intermittent stream in dry upland forest. 5390

Hypericum prolificum L. Shrubby St. John's-wort. Infrequent. Along intermittent stream in dry upland forest. 4339, 4854

Hypericum punctatum Lam. Spotted St. John's Wort. Rare. Mesic upland forest. 4788

Hypericum stragulum P. Adams & Robson. St. Andrew's Cross. Common. Dry upland forest; xeric upland forest. 4827, 4854

IRIDACEAE

Iris cristata Soland. Dwarf Crested Iris. Local. Seepage areas along edge of sandstone escarpment in dry-mesic upland forest; along intermittent stream in mesic upland forest. 4412

Sisyrinchium albidum Raf. Blue-eyed Grass. Occasional. Mesic upland forest; dry-mesic upland forest. 5168

Sisyrinchium angustifolium Mill. Blue-eyed Grass. Infrequent. Along intermittent stream in mesic upland forest. 4236, 4336

JUGLANDACEAE

Carya cordiformis (Wang.) K. Koch. Bitternut Hickory. Occasional. Mesic upland forest; dry-mesic upland forest. 4637

Carya glabra (Mill.) Sweet. Pignut Hickory. Common. Dry upland forest; dry-mesic upland forest. 4633

Carya illinoensis (Wang.) K. Koch. Pecan. Infrequent. Stream terrace in mesic upland forest; successional dry-mesic upland forest. 4862

Carya laciniosa (Michx.) Loud. Kingnut Hickory. Local. Stream terrace in mesic upland forest. 5080

Carya ovalis (Wang.) Sarg. Sweet Pignut Hickory. Occasional. Dry-mesic upland forest; dry upland forest. 5172

Carya ovata (Mill.) K. Koch. Shagbark Hickory. Common. Dry-mesic upland forest; mesic upland forest. 4632

Carya texana Buckl. Black Hickory. Local. Dry upland forest. 5353

Carya tomentosa (Poir.) Nutt. Mockernut Hickory. Occasional. Dry-mesic upland forest. 4690, 4871

Juglans nigra L. Black Walnut. Occasional. Stream terrace in mesic upland forest. Not collected.

JUNCACEAE

Juncus marginatus Rostk. Rush. Local. Exposed sandstone and sandy wash of intermittent stream in dry upland forest. 5240

Juncus secundus Beauv. Rush. Infrequent. Outcrops along sandstone escarpment in dry upland forest. 4642

Juncus tenuis Willd. Path Rush. Occasional. Exposed sandstone and sandy wash of intermittent stream channel in mesic and dry-mesic upland forest. 4777

Luzula multiflora (Retz.) Lej. Wood Rush. Common. Dry-mesic upland forest often on sandstone ledges; dry upland forest. 4016

LAMIACEAE

Blephilia ciliata (L.) Benth. Pagoda Plant. Occasional. Mesic upland forest; dry-mesic upland forest. 4525, 4787

Blephilia hirsuta (Pursh) Benth. Pagoda Plant. Occasional. Stream terrace in mesic upland forest. 4771, 485

Collinsonia canadensis L. Richweed. Local. Stream terrace in mesic upland forest. 4835

Cunila origanoides (L.) Britt. Dittany. Common. Dry-mesic upland forest; dry upland forest; sandstone cliffs. 4930

Lycopus virginicus L. Bugle Weed. Infrequent. Sandy wash of intermittent stream. 5015, 5391

Monarda bradburiana Beck. Monarda. Occasional. Dry-mesic upland forest; dry upland forest. 4326

Pycnanthemum incanum (L.) Michx. Gray Mountain Mint. Local. Successional dry-mesic upland forest. 4895

Pycnanthemum tenuifolium Schrad. Slender Mountain Mint. Common. Successional dry-mesic upland forest; dry upland forest. 4557

Salvia lyrata L. Cancer-weed. Occasional. Along intermittent stream in mesic upland forest. 4219

Scutellaria elliptica Muhl. Hairy Skullcap. Common. Mesic upland forest, dry mesic upland forest. 5101

Scutellaria incana Biehler. Downy Skullcap. Infrequent. Stream terrace in mesic upland forest. 4790

Scutellaria nervosa Pursh. Veiny Skullcap. Occasional. Stream terrace in mesic upland forest. 5101

Stachys tenuifolia Willd. Smooth Hedge Nettle. Infrequent. Along intermittent stream in mesic upland forest. 4696

LAURACEAE

Lindera benzoin (L.) Blume. Spicebush. Common. Mesic upland forest. 4388, E. Shimp 4640

Sassafras albidum (Nutt.) Nees. Sassafras. Common. Mesic upland forest; dry-mesic upland forest; dry upland forest. 5473

LILIACEAE

Allium canadense L. Wild Onion. Occasional. Mesic upland forest; dry-mesic upland forest. 4312

Erythronium americanum Ker. Yellow Dog-tooth Violet. Occasional. Mesic upland forest. 4006, E. Shimp 4641

Hypoxis hirsuta (L.) Coville. Yellow Star Grass. Common. Dry upland forest, xeric upland forest. 4133

Manfreda virginica (L.) Rose. American Agave. Infrequent. Xeric upland forest; dry upland forest. 4894

Polygonatum biflorum (Walt.) Ell. Small Solomon's Seal. Common. Dry upland forest; xeric upland forest; edge of sandstone escarpment in dry mesic upland forest. 4166, 4869

Polygonatum commutatum (Schult.) A. Dietr. Solomon's Seal. Rare. Sandstone slideblock in mesic upland forest. 5151

Smilacina racemosa (L.) Desf. False Solomon's Seal. Common. Mesic upland forest; dry-mesic upland forest. 4162

Trillium flexipes Raf. White Trillium. Local. Talus slope in mesic forest. 4028

Trillium recurvatum Beck. Red Trillium. Common. Mesic upland forest often on the tops of sandstone slide blocks; dry-mesic upland forest. 4037

Uvularia grandiflora Sm. Yellow Bellwort. Occasional. Mesic upland forest. 4036

LOGANIACEAE

Spigelia marilandica L. Indian Pink. Infrequent. Dry-mesic upland forest. 4405

LYCOPODIACEAE

Lycopodium digitatum A. Br. Ground Pine. Local. Successional dry-mesic upland forest adjacent to *Pinus strobus* plantation. 5040, E. Shimp 4995

LYTHRACEAE

Cuphea viscosissima Jacq. Clammy Cuphea. Rare. Sandstone outcrops along intermittent stream in mesic and dry-mesic upland forest. 5076

MAGNOLIACEAE

Liriodendron tulipifera L. Tulip Tree. Occasional. Mesic upland forest; dry-mesic upland forest. 4631, 5155

MENISPERMACEAE

Menispermum canadense L. Moonseed. Occasional. Mesic upland forest. 5181

MORACEAE

Morus rubra L. Red Mulberry. Occasional. Dry-mesic upland forest; mesic upland forest. 4693, 4694

NYSSACEAE

Nyssa sylvatica Marsh. Sour Gum. Occasional. Dry upland forest; xeric upland forest; successional areas in dry-mesic upland forest. 5474

OLEACEAE

Fraxinus americana L. White Ash. Common. Mesic upland forest; dry-mesic upland forest; dry upland forest. 4638, 4892

ONAGRACEAE

Circaea lutetiana Aschers. & Magnus ssp. *canadensis* (L.) Aschers. & Magnus. Enchanter's Nightshade. Occasional. Mesic upland forest. 4568

Ludwigia alternifolia L. Seedbox. Occasional. Wet areas along intermittent stream. 4779, 4859

Oenothera biennis L. Evening Primrose. Rare. Exposed sandstone and sandy wash of intermittent streams in mesic and dry-mesic upland forest. 5049

OPHIOGLOSSACEAE

Botrychium biternatum (Sav.) Underw. Grape Fern. Rare. Successional dry-mesic upland forest adjacent to *Pinus strobus* plantation. 5143

Botrychium dissectum Spreng. Cut-leaved Grape Fern. Infrequent. Successional dry-mesic upland forest adjacent to *Pinus strobus* plantation. 5145

Botrychium dissectum Spreng. var. *obliquum* (Muhl.) Clute. Grape Fern. Occasional. Successional dry-mesic upland forest adjacent to *Pinus strobus* plantation; stream terrace in dry-mesic upland forest. 5142, 5144, 5146

Botrychium virginianum (L.) Sw. Rattlesnake Fern. Common. Mesic upland forest; dry-mesic upland forest. 4140, 4302

ORCHIDACEAE

Aplectrum hyemale (Willd.) Nutt. Putty-root Orchid. Occasional. Mesic upland forest; dry-mesic upland forest. 4023, E. Shimp 4998

Goodyera pubescens (Willd.) R. Br. Rattlesnake Plantain Orchid. Rare. Dry-mesic upland forest. 4935, 5267

Liparis liliifolia (L.) Rich. Twayblade Orchid. Occasional. Dry upland forest; dry-mesic upland forest; mesic upland forest. 4359

Spiranthes cernua (L.) Rich. Nodding Ladies' Tresses. Infrequent. Dry upland forest. 5079, 5384

Spiranthes tuberosa Raf. Small Ladies' Tresses. Rare. Dry upland forest.

Tipularia discolor (Pursh) Nutt. Crane-fly Orchid. Occasional. Stream terrace in mesic upland forest. 4833, 4863

OXALIDACEAE

Oxalis stricta L. Yellow Wood Sorrel. Common. Sandy wash of intermittent streams; mesic upland forest; dry-mesic upland forest; dry upland forest. 4410

Oxalis violacea L. Purple Wood Sorrel. Common. Dry upland forest; xeric upland forest. 4164

PAPAVERACEAE

Corydalis flavula (Raf.) DC. Pale Corydalis. Common. Mesic upland forest; dry-mesic upland forest. 4005

Dicentra canadensis (Goldie) Walp. Squirrel-corn. Local. Mesic upland forest. 4013

Dicentra cucullaria (L.) Bernh. Dutchman's-breeches. Common. Mesic upland forest. 4146, E. Shimp 4639

Sanguinaria canadensis L. Bloodroot. Occasional. Mesic upland forest. E. Shimp 4646

PASSIFLORACEAE

Passiflora lutea L. var. *glabriflora* Fern. Small Passion-flower. Occasional. Mesic upland forest; dry-mesic upland forest. 4471

PHRYMACEAE

Phryma leptostachya L. Lopseed. Common. Dry-mesic upland forest; mesic upland forest. 4761

PHYTOLACCACEAE

Phytolacca americana L. Pokeweed. Infrequent. Sandstone slide blocks and gaps in mesic upland forest; along intermittent stream in dry upland forest. 4559

PINACEAE

Pinus echinata Mill. Shortleaf Pine. Occasional. Dry upland forest; xeric upland forest. Note: Seedlings from adjacent plantation. 4941

Pinus strobus L. White Pine. Very Rare. Dry-mesic upland forest. Note: Seedlings from adjacent plantation. 5488

PLANTAGINACEAE

Plantago aristida Michx. Bracted Plantain. Local. Exposed sandstone along intermittent stream in dry upland forest. 4798

Plantago rugelii Dcne. Rugel's Plantain. Occasional. Sandy wash of intermittent streams. 4347

Plantago virginica L. Dwarf Plantain. Occasional. Outcrops along sandstone escarpment in dry upland forest. 4646

PLATANACEAE

Platanus occidentalis L. Sycamore. Occasional. Stream terrace in mesic upland forest. 4778

POACEAE

Agrostis alba L. Red Top. Rare. Sandstone outcrop in dry-mesic upland forest. 5027

Agrostis hyemalis (Walt.) BSP. Tickle Grass. Infrequent. Mesic upland forest. E. Shimp 4997

Agrostis perennans (Walt.) Tuckerman. Upland Bent Grass. Common. Dry upland forest; dry-mesic upland forest; mesic upland forest, often on banks of intermittent streams and ledges of sandstone cliffs. 5018

Alopecurus carolinianus Walt. Common Foxtail. Local. Sandstone outcrops along intermittent stream in dry upland forest. 4358, 5183

Andropogon elliottii Chapm. Elliott's Broom Sedge. Rare. Openings in dry upland forest. 5387

Andropogon gerardii Vitman. Big Bluestem. Rare. Openings in dry upland forest. 5041

Andropogon virginicus L. Broom Sedge. Local. Outcrops along sandstone escarpment in dry upland forest. 5379

Aristida dichotoma Michx. Three Awn Grass. Occasional. Outcrops along sandstone escarpment and intermittent streams. 5023, 5381, 5380, 5378

Aristida purpurascens Poir. Arrowfeather. Local. Opening in dry upland forest. 5489

Arundinaria gigantea (Walt.) Chapm. Giant Cane. Occasional. Stream terrace in mesic upland forest. 4297, E. Shimp 4647

Brachyelytrum erectum (Schreb.) Beauv. Occasional. Mesic upland forest; dry-mesic upland forest. 4681

(bald brome) BRRA2

**Bromus racemosus* L. Chess. Infrequent. Sandstone outcrops along intermittent stream in dry upland forest. 4351

Bromus pubescens Muhl. Canada Brome Grass. Common. Mesic upland forest, often along intermittent streams; dry-mesic upland forest. 5493

Chasmanthium latifolium (Michx.) Yates. Sea Oats. Occasional. Mesic upland forest; dry-mesic upland forest. 4664

Cinna arundinacea L. Stout Wood Reed. Common. Stream terrace in mesic upland forest. 4789, 4874, 5020

Danthonia spicata (L.) Beauv. Curly Oat Grass. Common. Dry upland forest; xeric upland forest, dry-mesic upland forest. 4300

Diarrhena americana Beauv. var. *obovata* Gl. Abundant. Talus slopes and stream terrace in mesic upland forest. 4526

Dichanthelium boscii (Poir.) Gould & Clark. Large-fruited Panic Grass. Common. Dry-mesic upland forest. 5484

Dichanthelium clandestinum (L.) Gould. Broad-leaved Panic Grass. Common. Along intermittent stream in mesic and dry-mesic upland. 4401, 4521

Dichanthelium depauperatum (Muhl.) Gould. Panic Grass. Rare. Sandstone outcrops and ledges in dry-mesic upland forest. Not collected.

Dichanthelium dichotomum (L.) Gould. Panic Grass. Common. Dry upland forest; xeric upland forest; sandstone ledges in dry-mesic upland forest. 4303, 4328

Dichanthelium latifolium (L.) Gould & Clark. Broad-leaved Panic Grass. Infrequent. Dry upland forest. 4329

Dichanthelium laxiflorum (Lam.) Gould. Panic Grass. Common. Dry-mesic upland forest; dry upland forest; sandstone cliffs. 5476

Dichanthelium linearifolium (Scribn.) Gould. Panic Grass. Occasional. Dry upland forest, often on exposed sandstone. 4382

Dichanthelium microcarpon (Muhl.) Mohlenbr. Panic Grass. Occasional. Along intermittent stream in mesic upland forest. 4563

Dichanthelium polyanthes (Schult.) Mohlenbr. Panic Grass. Occasional. Mesic and dry-mesic upland forest, often near intermittent streams. 4657

Dichanthelium scoparium (Lam.) Gould. Panic Grass. Local. Sandstone outcrops along intermittent stream in dry upland forest. 4776

Dichanthelium sphaerocarpon (Ell.) Gould. Panic Grass. Occasional. Dry upland forest. Not collected.

Dichanthelium villosissimum (Nash) Freckm. var *praecocius* (Hitchc. & Chase) Freckm. Panic Grass. Occasional. Outcrops along sandstone escarpment.. 4762

Elymus hystrix L. Bottlebrush Grass. Occasional. Mesic upland forest; dry-mesic upland forest often in successional areas. 4389

Elymus villosus Muhl. Slender Wild Rye. Common. Mesic upland forest; dry-mesic upland forest. 4571

Elymus virginicus L. Virginia Wild Rye. Common. Stream terrace in mesic upland forest; dry-mesic upland forest often on successional areas; dry upland forest. 5238

Eragrostis spectabilis (Pursh) Steud. Tumble-grass. Occasional. Outcrops along sandstone escarpment in dry upland forest. 5024

Erianthus alopecuroides (L.) Ell. Plume Grass. Rare. Openings in dry upland forest. 5386

**Festuca aurundinacea* Schreb. Large Fescue. Infrequent. Exposed sandstone of intermittent stream channel in dry upland forest. 4343, 4396

Festuca obtusa Biehler. Nodding Fescue. Common. Mesic upland forest. 4147

Glyceria striata (Lam.) Hitchcock. Fowl Manna Grass. Common. Mesic upland forest, often along intermittent streams. 4304

Leersia virginica Willd. White Grass. Common. Intermittent streams in mesic upland forest. 5019

**Microstegium viminium* (Trin.) A. Camus. Eulalia. Common. Sandy wash of intermittent streams in mesic upland forest. 5107

Muhlenbergia capillaris (Lam.) Trin. Hair Grass. Very rare. Xeric upland forest. 5475

Muhlenbergia schreberi J. F. Geml. Nimble Will. Occasional. Sandstone ledges in mesic and dry-mesic upland forest. 5113

Muhlenbergia sobolifera (Muhl.) Trin. Muhly. Common. Dry upland forest; dry-mesic upland forest; dry upland forest. 4896

Muhlenbergia sylvatica (Torr.) Torr. Muhly. Occasional. Mesic upland forest. 5382.

Panicum anceps Michx. Panic Grass. Rare. Opening in dry upland forest. 4838

Panicum flexile (Gattinger) Scribn. Slender Panic Grass. Infrequent. Outcrops along sandstone escarpment in dry upland forest. 5349

**Poa pratensis* L. Kentucky Bluegrass. Rare. Exposed sandstone of intermittent stream channel in dry upland forest. 4325, 4565

Poa sylvestris Gray. Woodland Bluegrass. Occasional. Mesic upland forest often on sandstone cliffs and slideblocks. 4317

Schizachyrium scoparium (Michx.) Nash. Little Bluestem. Occasional. Dry upland forest. 5383

Sphenopholis nitida (Biehler) Scribn. Shining Wedge Grass. Frequency unknown. Dry-mesic upland forest. 4298

Sphenopholis obtusata (Michx.) Scribn. Wedge Grass. Occasional. Dry upland forest; dry-mesic upland forest. 4340, 4400

Tridens flavus (L.) Hitchcock. Purple Top. Occasional. Dry upland forest; successional dry-mesic upland forest. 4887, 5028

Vulpia octoflora (Walt.) Rydb. Six-weeks Fescue. Occasional. Eroded soil and sandstone outcrops in dry upland forest. 4335, 4647

POLEMONIACEAE

Phlox divaricata L. ssp. Laphamii (Wood) Wherry. Blue Phlox. Common. Mesic upland forest; dry-mesic upland forest. 4040

Polemonium reptans L. Jacob's-ladder. Common. Stream terrace and talus slopes in mesic upland forest. 4155

POLYGONACEAE

Polygonum cespitosum Blum var. *longisetum* (DeBruyn) Stewart. Creeping Smartweed. Common. Intermittent streams in mesic and dry-mesic upland forest. 4848, 5054

Polygonum cristatum Engelm. & Gray. Crested Bindweed. Occasional. Dry-mesic upland forest. 4763

Polygonum punctatum Ell. Smartweed. Common. Sandy wash of intermittent streams in dry-mesic and mesic upland forests. 4926, 5053

Polygonum tenue Michx. Slender Knotweed. Local. Outcrops along sandstone escarpment in dry upland forest. 5031

Polygonum virginianum L. Virginia Knotweed. Common. Mesic upland forest; dry-mesic upland forest. 4927

Rumex acetosella L. Sour Dock. Local. Exposed sandstone of intermittent streams; outcrops in dry upland forest. 5239

Rumex obtusifolius L. Bitter Dock. Rare. Along intermittent stream in dry-mesic upland forest. 4758

POLYPODIACEAE

Polypodium polypodioides (L.) Watt var. *michauxianum* Weatherby. Gray Polypody. Rare. Sandstone slideblock in mesic upland forest. 5168

Polypodium virginianum L. Common Polypody. Occasional. Sandstone cliffs and boulders in mesic upland forest. 5264

PORTULACACEAE

Claytonia virginica L. Spring Beauty. Common. Mesic upland forest; dry-mesic upland forest; dry upland forest. 5150, E. Shimp 4637

PRIMULACEAE

Dodecatheon meadia L. Shooting-star. Common. Dry-mesic upland forest; dry upland forest. 4158

Lysimachia lanceolata Walt. Loosestrife. Occasional. Mesic upland forest; dry-mesic upland forest. 4562

Samolus valerandii L. Brookweed. Occasional. Sandy wash of intermittent stream channel in mesic upland forest. 4834

PYROLACEAE

Monotropa hypopithys L. Pinesap. Occasional. Dry upland forest; xeric upland forest. 5254

Monotropa uniflora L. Indian Pipe. Local. Stream terrace in mesic upland forest. 4853

RANUNCULACEAE

Actaea pachypoda Ell. Doll's-eyes. Occasional. Mesic upland forest. 4234

Anemone virginiana L. Tall Anemone. Occasional. Mesic upland forest; successional areas in dry-mesic upland forest. 5269

Aquilegia canadensis L. Wild Columbine. Occasional. Sandstone cliffs and slideblocks in mesic upland forest. 4161

Cimicifuga rubifolia Kearney. Black Cohosh. Local. Talus slopes in mesic upland forest. E. Shimp 4999

Clematis virginiana L. Virgin's Bower. Local. Along intermittent stream in mesic upland forest. 5104

Delphinium tricorne Michx. Dwarf Larkspur. Local. Stream terrace in mesic upland forest. 5153

Hepatica nobilis Mill. var. *obtusa* (Pursh) Steyerm. Round-lobed Liverleaf. Occasional. Mesic upland forest, most often on sandstone slideblocks. 4010, E. Shimp 4654

Isopyrum biternatum (Raf.) Torr. & Gray. False Rue Anemone. Occasional. Mesic upland forest. 4029, E. Shimp 4643

Hydrastis canadensis L. Goldenseal. Local. Stream terrace in mesic upland forest. 4567

Ranunculus abortivus L. Small-flowered Crowfoot. Common. Dry-mesic upland forest. 4145, 4344

Ranunculus fascicularis Muhl. Early Buttercup. Occasional. Dry upland forest; xeric upland forest. 4033

Ranunculus hispidus Michx. Bristly Buttercup. Occasional. Mesic upland forest; dry-mesic upland forest. 5166

Ranunculus micranthus Nutt. Small-flowered Buttercup. Occasional. Mesic upland forest; dry-mesic upland forest, often on sandstone ledges. 5174

Ranunculus recurvatus Poir. Rough Crowfoot. Occasional. Mesic upland forest; dry-mesic upland forest. 4151, 5167

Thalictrum revolutum DC. Waxy Meadow Rue. Occasional. Successional dry-mesic upland forest. 4558

RHAMNACEAE

Ceanothus americanus L. New Jersey Tea. Rare. Dry upland forest. 4574

Rhamnus caroliniana Walt. Carolina Buckthorn. Local. Dry-mesic upland forest. 4831

ROSACEAE

Agrimonia parviflora Ait. Swamp Agrimony. Infrequent. Stream terrace in mesic upland forest; second growth, dry-mesic upland forest. 4852

Agrimonia pubescens Wallr. Soft Agrimony. Infrequent. Dry-mesic upland forest; mesic upland forest. 4852

Agrimonia rostellata Wallr. Woodland Agrimony. Common. Dry-mesic upland forest; mesic upland forest. 4765, 4797

Amelanchier arborea (Michx. f.) Fern. Shadbush. Occasional. Dry upland forest; dry-mesic upland forest. 4032

Crataegus engelmanii Sarg. Barberry-leaved Hawthorn. Occasional. Dry upland forest; xeric upland forest. 4156, 4418

Crataegus mollis (Torr. & Gray) Scheele. Red Haw. Infrequent. Dry upland forest. 4873

Crataegus pruinosa (Wendl.) K. Koch. Hawthorn. Infrequent. Dry-mesic upland forest; dry upland forest. 5169

Geum canadense Jacq. White Avens. Common. Mesic upland forest; dry mesic upland forest. 4661

Geum vernum (Raf.) Torr. & Gray. Spring Avens. Occasional. Mesic upland forest; successional areas in dry-mesic upland forst. 4138, 5165

Porteranthus stipulatus (Muhl.) Britt. Indian Physic. Occasional. Dry upland forest; dry-mesic upland forest; xeric upland forest. 4534

Potentilla simplex Michx. Common Cinquefoil. Common. Dry-mesic upland forest; dry upland forest. 4235, 4349

Prunus serotina Ehrh. Wild Black Cherry. Occasional. Mesic upland forest; dry-mesic upland forest; dry upland forest. 5173

Rosa carolina L. Pasture Rose. Occasional. Dry-mesic upland forest; dry upland forest. 4550

**Rosa multiflora* Thunb. Multiflora Rose. Occasional. Along intermittent streams in dry-mesic upland forest. 4345

Rosa setigera Michx. Prairie Rose. Local. Second growth, dry-mesic forest adjacent to *Pinus strobus* plantation. 4630

Rubus allegheniensis Porter. Common Blackberry. Occasional. Dry-mesic upland forest; dry upland forest. 4408, 4645

Rubus flagellaris Willd. Dewberry. Occasional. Outcrops along sandstone escarpment in dry upland forest. Not collected.

Rubus occidentalis L. Black Raspberry. Rare. Along intermittent streams in mesic upland forest. 4783

RUBIACEAE

Diodia teres Walt. Rough Buttonweed. Occasional. Sandstone outcrops in dry upland forest. 4868

Galium aparine L. Goosegrass. Occasional. Mesic upland forest. 4137

Galium circaezans Michx. Wild Licorice. Common. Dry-mesic upland forest; dry upland forest. 4319

Galium concinnum Torr. & Gray. Shining Bedstraw. Occasional. Dry-mesic upland forest; mesic upland forest. 4399, 4522, 4666

Galium pilosum Ait. Hairy Bedstraw. Occasional. Dry upland forest. Notvoucher available

Galium triflorum Michx. Sweet-scented Bedstraw. Common. Mesic upland forest, often along intermittent streams. 4640, 5160

Hedyotis longifolia (Gaertn.) Hook. Long-leaved Bluets. Common. Dry-mesic upland forest; dry upland forest. 4316, 4324

Hedyotis purpurea (L.) Torr. & Gray. Broad-leaved Bluets. Rare. Stream terrace in mesic upland forest. 4391

Hedyotis pusilla (Schoepf) Mohlenbr. Small Bluets. Occasional. Outcrops along sandstone escarpment in dry upland forest. 4327

SAXIFRAGACEAE

Heuchera americana L. var. hirsuticaulis (Wheelock) Rosend., Butt. & Lak. Tall Alumroot. Occasional. Dry upland forest; dry-mesic upland forest; sandstone cliffs. 4222

Heuchera parviflora Bartl. var. *rugelii* (Shuttlw.) Rosend., Butt. & Lak. Late Alumroot. Common. Moist sandstone cliffs and slideblocks in mesic upland forest. 4844

Mitella diphylla L. Bishops'-cap. Local. Sandstone boulders and slideblocks in mesic upland forest. 4027, J.Schwegman 1536 (SIU)

Saxifraga virginiensis Michx. Early Saxifrage. Common. Mesic upland forest, often on sandstone cliffs, ledges, and slide blocks. E. Shimp 4648, J. Schwegmen 1535 (SIU)

SCROPHULARIACEAE

Agalinis gattigeri (Small) Small. Rough-stemmed False Foxglove. Rare. Dry upland forest. 5021

Agalinis tenuifolia (Vahl) Raf. Slender False Foxglove. Occasional. Outcrops along sandstone escarpment in dry upland forest. 5350

Aureolaria flava (L.) Farw. Smooth False Foxglove. Occasional. Xeric upland forest; dry upland forest. 4897, 4942

Mimulus alatus Ait. Winged Monkey-flower. Occasional. Sandy wash of intermittent stream in mesic and dry-mesic upland forest. 4922

Pedicularis canadensis L. Lousewort. Local. Along intermittent stream in dry-mesic upland forest; dry upland forest. 4355

Penstemon digitalis Nutt. Foxglove Beardstongue. Occasional. Along intermittent stream in dry upland forest. 4404

Penstemon pallidus Small. Pale Beardstongue. Occasional. Dry upland forest. Not collectedvoucher available

Scrophularia marilandica L. Late Figwort. Rare. Along intermittent stream in mesic upland forest. 4940

SMILACACEAE

Smilax bona-nox L. Catbrier. Common. Dry upland forest. 4321, 4322, 4409

Smilax glauca Walt. Catbrier. Common. Dry upland forest; dry-mesic upland forest. 4688

Smilax hispida Muhl. Bristly Catbrier. Occasional. Stream terrace in mesic upland forest. 4393

Smilax pulverulenta Michx. Carrion Flower. Occasional. Mesic upland forest; dry-mesic upland forest. 5265, 5266

STAPHYLEACEAE

Staphylea trifolia L. Bladdernut. Abundant. Talus slopes in mesic upland forest. 5482

THELYPTERIDACEAE

Phegopteris hexagonoptera (Michx.) Fee. Broad Beech Fern. Local. Mesic upland forest. 4314, 4866

TILIACEAE

Tilia heterophylla Vent. White Basswood. Common. Mesic upland forest. 4156, E. Shimp 4644

ULMACEAE

Celtis laevigata Willd. Sugarberry. Occasional. Stream terrace in mesic upland forest. 4679

Celtis occidentalis L. Hackberry. Occasional. Stream terrace in mesic upland forest. 4654

Ulmus alata Michx. Winged Elm. Common. Dry-mesic upland forest; dry upland forest. 4381

Ulmus americana L. American Elm. Rare. Mesic upland forest. 4845

Ulmus rubra Muhl. Slippery Elm. Occasional. Mesic upland forest. 4665

URTICACEAE

Boehmeria cylindrica (L.) Sw. False Nettle. Common. Mesic upland forest; along intermittent stream in dry-mesic upland forest. 4850

Laportea canadensis (L.) Wedd. Wood Nettle. Abundant. Stream terrace in mesic upland forest. 4970

Parietaria pensylvanica Muhl. Pellitory. Local. Sandstone overhangs in dry-mesic and mesic upland forest. 4667

Pilea pumila (L.) Gray. Clearweed. Common. Mesic upland forest, often associated with intermittent streams. 4662

VALERIANACEAE

Valeriana pauciflora Michx. Pink Valerian. Local. Talus slope in mesic upland forest. 4159

VERBENACEAE

Verbena urticifolia L. White Vervain. Local. Successional dry-mesic upland forest adjacent to *Pinus strobus* plantation. 4890

VIOLACEAE

Hybanthus concolor (T. F. Forst.) Spreng. Green Violet. Occasional. Stream terrace in mesic upland forest. 4157

Viola pratincola Greene. Common Blue Violet. Common. Mesic upland forest; dry-mesic upland forest; often associated with intermittent streams. 4015, 4039, 5152

Viola pubescens Ait. var. *eriocarpa* (Schwein.) Russell. Smooth Yellow Violet. Occasional. Mesic upland forest. 4025

Viola rafinesquii Greene. Johnny-jump-up. Infrequent. Exposed sandstone of intermittent stream channel in dry upland forest. 5176

Viola sororia Willd. Wooly Blu Violet. Mesic upland forest; dry-mesic upland forest, often associated with intermittent streams. 5154

Viola triloba Schwein. var. *dilatata* (Ell.) Brainerd. Cleft Violet. Occasional. Dry mesic upland forest. 4141, 4538

VITACEAE

Parthenocissus quinquefolia (L.) Planch. Virginia Creeper. Common. Mesic upland forest; dry-mesic upland forest; dry upland forest, often on sandstone cliffs and outcrops. 4635

Vitis aestivalis Michx. Summer Grape. Common. Dry upland forest; dry-mesic upland forest; mesic upland forest. 4417, 4538

Vitis vulpina L. Frost Grape. Occasional. Mesic upland forest; dry-mesic upland forest. 4539