

## INITIAL REPORT ON THE VASCULAR PLANTS OF SOUTHERN ILLINOIS

WILLIAM M. BAILEY

*Southern Illinois University, Carbondale*

The part of the state commonly designated as Southern Illinois consists of the eleven southernmost counties, namely Jackson, Williamson, Saline, Gallatin, Union, Johnson, Pope, Hardin, Alexander, Pulaski, and Massac. The area has 3,751 square miles. Two great rivers form its boundaries, the Ohio on the south and east, and the Mississippi on the west. The Ozark Hills extend east and west across the central part of the region. This name is applied because the range of hills was formed by the same general uplift that produced the Ozark Mountains in Missouri. The Ozark Hills were formed from an escarpment at the southern edge of the Pennsylvanian rocks. These hills and their slopes are very much dissected by erosion.

Immediately north of the Ozark Hills is the plain which is the oldest glaciated area in Illinois. South of the Ozark Hills is a low, flat plain, which is in the Mississippi embayment of the coastal plain of the Gulf of Mexico. Much of the vegetation of this plain is decidedly southern.

To the areas described above may be added the Mississippi River, Ohio River, and Wabash River borders.

The altitude of much of the plains north and south of the Ozark Hills is less than 400 feet above sea-level; that of the Ozark Hills is generally between 600 and 800 feet. The two

highest points are William's Hill, in Pope County, with an altitude of 1065 feet, and Bald Knob, in Union County, with an altitude a little less than that of William's Hill.

The plain north of the Ozark Hills and the northern slopes of these hills are drained by two rivers, the Big Muddy River which flows southwestward into the Mississippi River and the Saline River which flows southeastward into the Ohio River. The plain south of the Ozark Hills and the southern slopes of the hills are also drained by two rivers, the Cache River and the Big Bay, both of which occupy an old channel of the Ohio River. The Cache River flows southwestward, and discharges its water into the Ohio a short distance above the junction of the latter with the Mississippi. The Big Bay flows southeastward into the Ohio.

The soils of the greater part of Southern Illinois are not of very good quality. The fine texture and impervious subsoil of the upland soils prevent good drainage and aeration. During the winters the soil is unfrozen much of the time. There is much erosion and leaching by the winter as well as the summer and spring rains. The rapid leaching has resulted in soil acidity and in deficiency of mineral nutrients for plants.

Climate is the greatest factor in the development of soils and of vegetation. Southern Illinois extends from 37 degrees to 38 degrees north latitude. The summers are hot, averaging about 80 degrees F. for July. The temperature for January averages near the freezing point. The growing season has an average length of 190 days in the north part of the region to 210 days in the south part. The average annual rainfall of Southern Illinois ranges from 35 inches to 50 inches in different parts of the area. The highest rainfall of 45 to 50 inches occurs on the south slopes of the Ozark Hills. This higher rainfall is probably caused by the cooling of the warm, damp winds from the south as they ascend these slopes. The vegetation in this area is more mesic than in other parts of the region.

The heaviest rainfall is usually in the spring and early summer. In the later part of the summer the low pressure areas are sometimes so far north that the hot, dry subtropical winds blow across the region.

The principal type of vegetation in Southern Illinois consists of the hardwood forests. On the hills and uplands the oaks and hickories are the dominant species, associated with elms, maples, ash, sycamore, wild black cherry, and other species. On the flood-plains of the streams are found mixed hardwood forests.

Clearing the land for agricultural purposes, cutting the timber for commercial and domestic uses, and destructive fires have resulted in the destruction of most of the virgin timber. The Shawnee National Forest in Southern Illinois has been established by the purchase of forest land and submarginal land by the

United States Government, in order to protect the forests from destruction and preserve them for future use, to protect the land with steep slopes from destructive erosion, and to alleviate destructive floods. Already the forestry station at Jonesboro is more than paying expenses by the sale of timber.

Only isolated, comparatively small areas of prairie vegetation occurred in Southern Illinois. A few small remnants of this prairie vegetation may still be found.

In Southern Illinois there are numerous species of plants that are limited to the southern part of the state, so far as Illinois is concerned. Among these are the following: the Short-leaf Yellow Pine (*Pinus echinata*), on the bluffs just east of Wolf Lake, in the northwest part of Union County; the Pink Azalea (*Rhododendron roseum*) in the same locality; the Winged Elm (*Ulmus alata*), the Cucumber Tree (*Magnolia acuminata*), the Tulip Tree (*Liriodendron tulipifera*), the Chestnut Oak (*Quercus montana*) on the higher elevations of some of the hills of Atwood Ridge, in Union County; the Bald Cypress (*Taxodium distichum*), Water Elm (*Planera aquatica*), Tupelo Gum (*Nyssa aquatica*), Water Locust (*Gleditsia aquatica*), and Virginia Willow (*Itea virginica*), in the swamps and low woods of the plain south of the Ozark Hills; the Willow Oak (*Quercus phellos*) in Massac County; the Overcup Oak (*Quercus lyrata*), in the south third of Illinois, in swamps and bottom-land woods; Schneck's Oak (*Quercus shumardii*), in damp woods near streams; Mississippi Hackberry (*Celtis laevigata*), in the southern third of Illinois, on bottom lands of

large rivers; *Catalpa speciosa*, on bottom lands of the Ohio and Wabash Rivers; Sweet Gum Tree (*Liquidambar styraciflua*), in swampy woods; Red Buckeye (*Aesculus discolor*), in Union County State Forest and the Forest at Horseshoe Lake, in Alexander County; Farkleberry (*Vaccinium arboreum*), Southern Buckthorn (*Bumelia lycioides*), Mistletoe (*Phoradendron flavescens*), parasitic on elms and other bottomland trees; Gray Polypody (*Polypodium polypodioides*), a fern growing on rocks and trees in Jackson County and southward; Filmy Fern (*Trichomanes boschianum*), found in Jackson Hollow, Pope County; *Sedum pulchellum*, on sandstone rocks; Southern Cane (*Arundinaria gigantea*), on stream banks and in swamp places; wisteria (*Wisteria macrostachya*), and cross-vine (*Bignonia capreolata*), near the Ohio River.

In our explorations for vascular plants in Southern Illinois, we have collected more than 600 species. We are planning to continue this work.

## REFERENCES

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## LIST OF SPECIES COLLECTED

- Equisetaceae  
Equisetum arvense L.
- Ophioglossaceae  
Botrychium virginianum (L.) Sw.
- Polypodiaceae  
Adiantum pedatum L.  
Asplenium platyneuron (L.) Oakes  
Asplenium trichomanes L.  
Athyrium angustum (Willd.) Presl.  
Camptosorus rhizophyllus (L.) Link  
Cheilanthes lanosa (Michx.) D.C. Eaton  
Cystopteris fragilis (L.) Bernh.  
Diplazium pycnocarpon (Spreng.) Broun  
Dryopteris marginalis (L.) Gray  
Onoclea sensibilis L.  
Pellaea atropurpurea (L.) Link  
Phegopteris hexagonoptera (Michx.) Fee  
Polypodium polypodioides (L.) Watt  
Polypodium virginianum L.  
Polystichum acrostichoides (Michx.) Schott.  
Pteridium latiusculum (Desv.) Hieron.  
Woodsia obtusa (Spreng.) Torr.
- Pinaceae  
Pinus echinata Mill.
- Taxodiaceae  
Taxodium distichum (L.) Rich.
- Cupressaceae  
Juniperus virginiana L.
- Typhaceae  
Typha angustifolia L.  
Typha latifolia L.
- Sparganiaceae  
Sparganium eurycarpum Engelm.
- Alismaceae  
Alisma subcordatum Raf.  
Echinodorus radicans (Nutt.) Engelm.  
Sagittaria graminea Michx.  
Sagittaria latifolia Willd.
- Hydrocharitaceae  
Limnobium spongiosa (Bose) Steud.
- Gramineae  
Arundinaria gigantea (Walt.) Chapm.  
Bromus tectorum L.  
Poa pratensis L.  
Eragrostis pectinacea (Michx.) Nees  
Eragrostis poaeoides (L.) Beauv.  
Uniola latifolia Michx.  
Triodia flava (L.) Smyth.  
Elymus virginicus L.  
Hystrix patula Moench.  
Eleusine indica (L.) Gaertn.  
Digitaria sanguinalis (L.) Scop.  
Paspalum circulare Nash

- Paspalum fluitans* (Ell.) Kunth  
*Panicum anceps* Michx.  
*Panicum polyanthes* Schult.  
*Echinochloa crusgalli* (L.) Beauv.  
*Setaria lutescens* (Weigel) F. T. Hubb.  
*Cenchrus longispinus* (Hack.) Fern.  
*Andropogon virginicus* L.  
*Erianthus alopecuroides* (L.) Ell.  
*Erianthus contortus* Ell.  
*Sorghum halepense* (L.) Pers.
- Cyperaceae**  
*Cyperus ovularis* (Michx.) Torr.  
*Cyperus ferruginescens* Boeckl.
- Eleocharis obtusa** (Willd.) Schult.  
*Scirpus lineatus* Michx.  
*Carex vulpinoidea* Michx.  
*Carex projecta* Mack.  
*Carex grayii* Carey  
*Carex frankii* Kunth  
*Carex lupuliformis* Sartw.  
*Carex squarrosa* L.  
*Carex lurida* Wahl.
- Araceae**  
*Arisaema atrorubens* (Ait.) Blume  
*Arisaema dracontium* (L.) Schott  
*Peltandra virginica* (L.) Kunth  
*Acorus calamus* L.
- Commelinaceae**  
*Tradescantia canaliculata* Raf.  
*Tradescantia virginiana* L.  
*Commelina communis* L.
- Juncaceae**  
*Juncus effusus* L.  
*Juncus macer* S.F. Gray  
*Juncus marginatus* Rostk.  
*Juncus torreyi* Coville  
*Juncus acuminatus* Michx.  
*Luzula multiflora* (Ehrh.) Lej.
- Liliaceae**  
*Allium canadense* L.  
*Allium stellatum* Ker  
*Nothoscordum bivalve* (L.) Britt.  
*Hemerocallis fulva* L.  
*Erythronium americanum* Ker  
*Erythronium albidum* Nutt.  
*Camassia scilloides* (Raf.) Cory  
*Ornithogallum umbellatum* L.  
*Asparagus officinalis* L.  
*Smilacina racemosa* (L.) Desf.  
*Uvularia grandiflora* Sm.  
*Polygonatum biflorum* (Walt.) Ell.  
*Stenanthium gramineum* (Ker) Morong.  
*Trillium sessile* L.  
*Trillium recurvatum* Beck  
*Trillium grandiflorum* (Mich.) Salisb.  
*Smilax hispida* Muhl.  
*Smilax pulverulenta* Michx.
- Amaryllidaceae**  
*Agave virginica* L.  
*Hypoxis hirsuta* (L.) Coville
- Iridaceae**  
*Iris shrevei* Small  
*Iris fulva* Ker
- Iris cristata* Ait.  
*Sisyrinchium albidum* Raf.
- Orchidaceae**  
*Cypripedium parviflorum* Salisb.  
*Orchis spectabilis* L.  
*Habenaria peramoena* Gray  
*Calapogon pulchellus* (Salisb.) R. Br.  
*Liparis liliifolia* (L.) Rich.  
*Aplectrum hyemale* (Muhl.) Torr.  
*Corallorrhiza wisteriana* Conrad
- Saururaceae**  
*Saururus cernuus* L.
- Salicaceae**  
*Populus heterophylla* L.  
*Populus deltoides* Marsh.  
*Salix nigra* Marsh.  
*Salix cordata* Muhl.  
*Salix humilis* Marsh.
- Juglandaceae**  
*Juglans cinerea* L.  
*Juglans nigra* L.  
*Carya illinoensis* (Wang.) K. Koch  
*Carya cordiformis* (Wang.) K. Koch  
*Carya tomentosa* Nutt.  
*Carya ovata* (Mill.) K. Koch
- Betulaceae**  
*Betula nigra* L.  
*Alnus rugosa* (Duroi) Spreng.  
*Corylus americana* Walt.  
*Carpinus caroliniana* Walt.  
*Ostrya virginiana* (Mill.) K. Koch
- Fagaceae**  
*Fagus grandifolia* Ehrh.  
*Quercus imbricaria* Michx.  
*Quercus phellos* L.  
*Quercus marilandica* Muench.  
*Quercus rubra* L.  
*Quercus rubra*, var. *pagodaefolia* Ashe  
*Quercus borealis* Michx. f.  
*Quercus palustris* Muench.  
*Quercus shumardii* Buckl.  
*Quercus velutina* Lam.  
*Quercus alba* L.  
*Quercus stellata* Wang.  
*Quercus macrocarpa* Michx.  
*Quercus lyrata* Walt.  
*Quercus muhlenbergii* Engelm.  
*Quercus prinus* L.  
*Quercus montana* Willd.  
*Quercus bicolor* Willd.
- Ulmaceae**  
*Ulmus americana* L.  
*Ulmus alata* Michx.  
*Ulmus fulva* Michx.  
*Planera aquatica* (Walt.) J.F. Gmel.  
*Celtis occidentalis* L.  
*Celtis laevigata* Willd.
- Urticaceae**  
*Urtica chamaedryoides* Pursh  
*Boehmeria cylindrica* (L.) Sw.  
*Pilea pumila* (L.) Gray  
*Laportea canadensis* (L.) Gaud.

- Santalaceae  
Comandra umbellata (L.) Nutt.
- Loranthaceae  
Phoradendron flavescens (Pursh) Nutt
- Aristolochiaceae  
Aristolochia tomentosa Sims  
Asarum reflexum Bickn.
- Polygonaceae  
Rumex acetosella L.  
Rumex altissimus Wood  
Rumex verticillatus L.  
Rumex crispus L.  
Rumex obtusifolius L.  
Rumex fueginus Phil.  
Polygonum aviculare L.  
Polygonum pennsylvanicum L.  
Polygonum lapathifolium L.  
Polygonum hydropiperoides Michx.  
Polygonum periscaria L.  
Polygonum virginianum L.  
Polygonum sagittatum L.  
Polygonum scandens L.  
Brunnichia cirrhosa Gaertn.
- Chenopodiaceae  
Chenopodium album L.  
Chenopodium ambrosioides L.  
Chenopodium hybridum L.
- Amaranthaceae  
Amaranthus spinosus L.  
Amaranthus retroflexus L.  
Amaranthus blitoides Wats.  
Froelichia campestris Small
- Phytolaccaceae  
Phytolacca americana L.
- Nyctaginaceae  
Mirabilis nyctaginea (Michx.) MacM.
- Portulacaceae  
Claytonia virginica L.  
Portulaca oleracea L.
- Caryophyllaceae  
Cerastium nutans Raf.  
Stellaria media (L.) Cyrill.  
Stellaria longifolia Muhl.  
Silene antirrhina L.  
Silene stellata (L.) Ait.  
Saponaria officinalis L.
- Magnoliaceae  
Magnolia acuminata L.  
Liriodendron tulipifera L.
- Annonaceae  
Asimina triloba (L.) Dunal.
- Ranunculaceae  
Isopyrum biternatum (Raf.) T. & G.  
Aquilegia canadensis L.  
Actaea alba (L.) Mill.  
Delphinium tricornis Michx.  
Myosurus minimus L.  
Ranunculus flabellaris Raf.  
Ranunculus oblongifolius Ell.  
Ranunculus abortivus L.
- Ranunculus micranthus Nutt.  
Ranunculus pusillus Poir.  
Ranunculus septentrionalis Poir.  
Ranunculus fascicularis Muhl.  
Ranunculus hispidus Michx.  
Ranunculus parvulus L.  
Thalictrum revolutum DC.  
Anemone virginiana L.  
Anemonella thalictroides (L.) Spach.  
Hepatica acutiloba DC.  
Clematis pitcheri T. & G.
- Nelumbonaceae  
Nelumbo lutea (Willd.) Pers.
- Nymphaeaceae  
Nuphar advena Ait.
- Ceratophyllaceae  
Ceratophyllum demersum L.
- Berberidaceae  
Podophyllum peltatum L.  
Caulophyllum thalictroides (L.) Michx.
- Menispermaceae  
Cocculus carolinus (L.) DC.
- Lauraceae  
Sassafras albidum (Nutt.) Nees  
Lindera benzoin (L.) Blume
- Papaveraceae  
Sanguinaria canadensis L.  
Stylophorum diphyllum (Michx.) Nutt
- Fumariaceae  
Dicentra cucullaria (L.) Bernh.  
Corydalis flavula (Raf.) DC.
- Cruciferae  
Brassica arvensis (L.) Rabenh.  
Barbarea vulgaris R. Br.  
Rorippa palustris (L.) Besser  
Sisymbrium officinale (L.) Scop.  
Sisymbrium altissimum L.  
Descurainia brachycarpa (Richards) O.E. Schulz  
Draba brachycarpa Nutt.  
Draba verna L.  
Dentaria laciniata Muhl.  
Cardamine bulbosa (Schreb.) BSP.  
Cardamine pennsylvanica Muhl.  
Cardamine arenicola Britt.  
Arabis virginica (L.) Poir.  
Arabis laevigata (Muhl.) Poir.  
Arabidopsis thaliana (L.) Heynh.  
Nasturtium officinale R. Br.  
Neobeckia aquatica (Eaton) Greene  
Lepidium virginicum L.  
Thlaspi arvense L.  
Capsella bursa-pastoris (L.) Medic.
- Capparidaceae  
Polanisia graveolens Raf.
- Crassulaceae  
Sedum pulchellum Michx.  
Sedum ternatum Michx.  
Sedum telephioides Michx.  
Penthorum sedoides L.

- Saxifragaceae  
*Heuchera parviflora* Bartl.  
*Heuchera hirsuticaulis* (Wheelock) Rydb.  
*Saxifraga virginiana* Michx.
- Hydrangeaceae  
*Hydrangea arborescens* L.
- Grossulariaceae  
*Ribes cynosbati* L.
- Hamamelidaceae  
*Liquidambar styraciflua* L.
- Platanaceae  
*Platanus occidentalis* L.
- Rosaceae  
*Gillenia stipulata* (Muhl.) Trel.  
*Potentilla recta* L.  
*Potentilla monspeliensis* L.  
*Potentilla simplex* Michx.  
*Geum canadense* Jacq.  
*Agrimonia rostellata* Wallr.  
*Rubus occidentalis* L.  
*Rubus allegheniensis* Porter  
*Rubus argutus* Link  
*Rubus flagellaris* Willd.  
*Amelanchier arborea* (Michx. f.) Fern.  
*Malus ioensis* (Wood) Britt.  
*Prunus americana* Marsh.  
*Prunus hortulana* Bailey  
*Prunus serotina* Ehrh.  
*Rosa setigera* Michx.  
*Rosa carolina* L.
- Leguminosae  
*Desmanthus illinoensis* Michx. MacM.  
*Cercis canadensis* L.  
*Gymnocladus dioica* (L.) K. Koch  
*Gleditsia triacanthos* L.  
*Gleditsia aquatica* Marsh.  
*Cassia marilandica* L.  
*Cassia nictitans* L.  
*Baptisia leucantha* T. & G.  
*Crotalaria sagittalis* L.  
*Trifolium reflexum* L.  
*Trifolium repens* L.  
*Trifolium hybridum* L.  
*Trifolium pratense* L.  
*Trifolium procumbens* L.  
*Melilotus officinalis* (L.) Lam.  
*Melilotus alba* Desr.  
*Tephrosia virginiana* (L.) Pers.  
*Robinia pseudo-acacia* L.  
*Desmodium pauciflorum* (Nutt.) DC.  
*Desmodium glutinosum* (Muhl.) Wood  
*Desmodium nudiflorum* (L.) DC.  
*Desmodium illinoense* Gray  
*Desmodium dillenii* Darl.  
*Desmodium marilandicum* (L.) DC.  
*Desmodium ciliare* DC.  
*Desmodium canadense* (L.) DC.  
*Lеспедеза repens* (L.) Bart.  
*Lеспедеза procumbens* Michx.  
*Lеспедеза violacea* (L.) Pers.  
*Lеспедеза virginica* (L.) Britt.  
*Lеспедеза striata* (Thunb.) H. & A.
- Stylosanthes biflora* (L.) BSP.  
*Apios americana* Medic.  
*Phaseolus polystachys* (L.) BSP.  
*Strophostyles helvola* (L.) Britt.  
*Strophostyles leiosperma* (T. & G.) Piper  
*Clitoria mariana* L.  
*Amphicarpa comosa* (L.) G. Don  
*Galactia mississippiensis* (Vail) Rydb.
- Geraniaceae  
*Geranium maculatum* L.  
*Geranium carolinianum* L.
- Oxalidaceae  
*Oxalis violacea* L.  
*Oxalis stricta* L.  
*Oxalis cymosa* Small
- Linaceae  
*Linum medium* (Planch.) Britt.
- Balsaminaceae  
*Impatiens biflora* Walt.  
*Impatiens pallida* Nutt.
- Polygalaceae  
*Polygala sanguinea* L.
- Euphorbiaceae  
*Croton capitatus* Michx.  
*Acalypha gracilens* Gray  
*Chamaesyce maculata* (L.) Small  
*Chamaesyce supina* (Raf.) Moldenke  
*Euphorbia corollata* L.  
*Euphorbia marginata* Pursh  
*Poinsettia dentata* (Michx.) Small
- Celastraceae  
*Celastrus scandens* L.  
*Euonymus atropurpureus* Jacq.
- Aquifoliaceae  
*Ilex decidua* Walt.
- Anacardiaceae  
*Rhus copallina* L.  
*Rhus glabra* L.  
*Rhus radicans* L.  
*Rhus aromatica* Ait.
- Staphyleaceae  
*Staphylea trifolia* L.
- Aceraceae  
*Acer saccharinum* L.  
*Acer rubrum* L.  
*Acer saccharum* Marsh.  
*Acer nigrum* Michx. f.  
*Acer negundo* L.
- Aesculaceae  
*Aesculus glabra* Willd.  
*Aesculus discolor* Pursh
- Rhamnaceae  
*Ceanothus americanus* L.
- Vitaceae  
*Vitis aestivalis* Michx.  
*Ampelopsis arborea* (L.) Koehne  
*Parthenocissus quinquefolia* (L.) Planch.
- Tiliaceae  
*Tilia americana* L.

- Malvaceae**  
*Sida spinosa* L.  
*Hibiscus militaris* Cav.  
*Hibiscus lasiocarpus* Cav.
- Hypericaceae**  
*Hypericum punctatum* Lam.  
*Ascyrum multicaule* Michx.  
*Triadenum virginicum* (L.) Raf.
- Violaceae**  
*Hybanthus concolor* (Forst.) Spreng.  
*Viola pedata* L.  
*Viola falcata* Greene  
*Viola papilionacea* Pursh  
*Viola missouriensis* Greene  
*Viola sororia* Willd.  
*Viola eriocarpa* Schw.  
*Viola striata* Ait.  
*Viola rafinesquii* Greene  
*Viola viarum* Pollard
- Passifloraceae**  
*Passiflora lutea* L.
- Lythraceae**  
*Rotala ramosior* (L.) Koehne  
*Decodon verticillatus* (L.) Ell.  
*Lythrum alatum* Pursh  
*Cuphea petiolata* (L.) Koehne
- Onagraceae**  
*Jussiaea diffusa* Forsk.  
*Ludwigia alternifolia* L.  
*Oenothera biennis* L.  
*Oenothera laciniata* Hill  
*Oenothera pilosella* Raf.  
*Oenothera speciosa* Nutt.  
*Oenothera linifolia* Nutt.  
*Circaea latifolia* Hill
- Cornaceae**  
*Cornus racemosa* Lam.  
*Cornus florida* L.  
*Nyssa sylvatica* Marsh.  
*Nyssa aquatica* L.
- Araliaceae**  
*Aralia spinosa* L.  
*Aralia racemosa* L.
- Umbelliferae**  
*Eryngium yuccifolium* Michx.  
*Daucus carota* L.
- Torilis japonicus** (Houtt.) DC.  
*Sanicula marilandica* L.  
*Sanicula canadensis* L.  
*Osmorhiza longistylis* (Torr.) DC.  
*Cryptotaenia canadensis* (L.) DC.  
*Erigenia bulbosa* (Michx.) Nutt  
*Chaerophyllum procumbens* (L.) Crantz  
*Conium maculatum* L.  
*Sium cicutaefolium* Gmel.  
*Cicuta maculata* L.  
*Thaspium sylvaticum* (Benke) n. comb.  
*Polytaenia nuttallii* DC.
- Ericaceae**  
*Monotropa uniflora* L.  
*Rhododendron roseum* (Loisel.) Rehd.  
*Vaccinium vacillans* Kalm
- Primulaceae**  
*Lysimachia nummularia* L.  
*Lysimachia ciliata* L.  
*Lysimachia lanceolata* Walt.  
*Dodecatheon meadia* L.  
*Dodecatheon frenchii* (Vasey) Rydb.
- Ebenaceae**  
*Diospyros virginiana* L.
- Styracaceae**  
*Styrax americana* Lam.
- Oleaceae**  
*Fraxinus americana* L.  
*Fraxinus lanceolata* Borkh.  
*Forestiera acuminata* Poir.
- Loganiaceae**  
*Spigelia marylandica* L.
- Gentianaceae**  
*Sabatia angularis* (L.) Pursh  
*Obolaria virginica* L.
- Apocynaceae**  
*Amsonia tabernaemontana* Walt.  
*Apocynum cannabinum* L.
- Asclepiadaceae**  
*Asclepias tuberosa* L.  
*Asclepias syriaca* L.  
*Asclepias purpurascens* L.  
*Asclepias incarnata* L.  
*Asclepias perennis* Walt.  
*Acerates hirtella* Pennell  
*Ampelamus albidus* (Nutt.) Britt.  
*Asclepiodora viridis* (Walt.) Gray
- Convolvulaceae**  
*Convolvulus americanus* (Sims) Greene  
*Convolvulus arvensis* L.  
*Ipomoea pandurata* (L.) G.F.W. Mey.  
*Ipomoea lacunosa* L.  
*Ipomoea purpurea* (L.) Roth  
*Ipomoea hederacea* Jacq.  
*Cuscuta pentagona* Engelm.  
*Cuscuta polygonorum* Engelm.
- Polemoniaceae**  
*Phlox paniculata* L.  
*Phlox glaberrima* L.  
*Phlox pilosa* L.  
*Phlox divaricata* L.  
*Phlox bifida* Beck  
*Polemonium reptans* L.
- Hydrophyllaceae**  
*Hydrophyllum appendiculatum* Michx.  
*Phacelia bipinnatifida* Michx.  
*Phacelia purshii* Buckl.  
*Hydrolea affinis* Gray
- Boraginaceae**  
*Heliotropium indicum* L.  
*Mertensia virginica* (L.) Link  
*Myosotis verna* Nutt.  
*Lithospermum canescens* (Michx.) Lehm.  
*Lithospermum arvense* L.
- Verbenaceae**  
*Verbena bracteata* Lag. & Rodr.  
*Verbena urticaefolia* L.

- Verbena stricta Vent.  
 Verbena hastata L.  
 Verbena simplex Lehm.  
 Phyla lanceolata (Michx.) Greene
- Labiatae**
- Teucrium canadense L.  
 Scutellaria lateriflora L.  
 Scutellaria ovata Hill  
 Scutellaria ovalifolia Michx.  
 Scutellaria incana Spreng.  
 Scutellaria nervosa Pursh  
 Marrubium vulgare L.  
 Agastache nepetoides (L.) Ktze.  
 Nepeta cataria L.  
 Physostegia virginiana (L.) Benth.  
 Prunella vulgaris L.  
 Leonurus cardiaca L.  
 Stachys tenuifolia Willd.  
 Blephilia hirsuta (Pursh) Torr.  
 Monarda bradburiana Beck  
 Monarda fistulosa L.  
 Hedeoma pulegioides (L.) Pers.  
 Pycnanthemum pycnanthemoides  
 (Leavenw.) Fern.  
 Pycnanthemum flexuosum (Walt.) BSP.  
 Cunila origanoides (L.) Britt.  
 Lycopus rubellus Moench.  
 Lycopus americanus Muhl.  
 Perilla frutescens (L.) Britt.
- Solanaceae**
- Physalis pubescens L.  
 Datura stramonium L.  
 Solanum carolinense L.  
 Solanum rostratum Dunal  
 Solanum nigrum L.
- Scrophulariaceae**
- Verbascum thapsus L.  
 Chelone obliqua L.  
 Pentstemon hirsutus (L.) Willd.  
 Pentstemon pallidus Small  
 Pentstemon digitalis Nutt.  
 Pentstemon tubaeiflorus Nutt.  
 Collinsia verna Nutt.  
 Linaria vulgaris Mill.  
 Lindernia dubia (L.) Pennell  
 Gratiola virginiana L.  
 Mimulus alatus Soland.  
 Bacopa rotundifolia (Michx.) Wettst.  
 Veronicastrum virginicum (L.) Farw.  
 Veronica peregrina L.  
 Veronica arvensis L.  
 Aureolaria flava (L.) Farw.  
 Gerardia paupercula Gray  
 Gerardia tenuifolia Vahl  
 Dasistoma macrophylla (Nutt.) Raf.  
 Pedicularis canadensis L.
- Lentibulariaceae**
- Utricularia gibba L.
- Orobanchaceae**
- Epifagus virginiana (L.) Bart.  
 Orobanche unifora L.
- Bignoniaceae**
- Catalpa speciosa Warder  
 Bignonia capreolata L.  
 Campsis radicans (L.) Seem.
- Acanthaceae**
- Ruellia ciliosa Pursh  
 Ruellia pedunculata Torr.
- Phrymaceae**
- Phryma leptostachya L.
- Plantaginaceae**
- Plantago rugelii Dcne.  
 Plantago lanceolata L.  
 Plantago aristata Michx.
- Rubiaceae**
- Houstonia caerulea L.  
 Houstonia lanceolata (Poir) Britt.  
 Cephalanthus occidentalis L.  
 Diodia teres Walt.  
 Diodia virginiana L.  
 Spermaceoce glabra Michx.  
 Galium aparine L.  
 Galium circaezans Michx.  
 Galium concinuum T. & G.  
 Galium obtusum Bigel.  
 Galium tinctorium L.
- Caprifoliaceae**
- Sambucus canadensis L.  
 Symphoricarpos orbiculatus Moench.  
 Lonicera japonica Thunb.  
 Triosteum angustifolium L.
- Valerianaceae**
- Valerianella radiata (L.) DuRoi.
- Cucurbitaceae**
- Sicyos angulatus L.
- Campanulaceae**
- Campanula americana L.  
 Campanula intercedens Witasek  
 Specularia perfoliata (L.) A. DC.
- Lobeliaceae**
- Lobelia cardinalis L.  
 Lobelia siphilitica L.  
 Lobelia inflata L.
- Compositae**
- Iva ciliata Willd.  
 Ambrosia elatior L.  
 Ambrosia trifida L.  
 Ambrosia bidentata Michx.  
 Xanthium pennsylvanicum Wallr.  
 Vernonia altissima Nutt.  
 Vernonia missurica Raf.  
 Elephantopus carolinianus Willd.  
 Eupatorium purpureum L.  
 Eupatorium serotinum Michx.  
 Eupatorium rugosum Houtt.  
 Eupatorium coelestinum L.  
 Mikania scandens (L.) Willd.  
 Liatris squarrosa (L.) Willd.  
 Liatris bebbiana Rydb.  
 Chrysopsis villosa (Pursh) Nutt.  
 Solidago caesia L.



- Solidago rugosa* Mill.  
*Solidago nemoralis* Ait.  
*Solidago drummondii* T. & G.  
*Solidago altissima* L.  
*Solidago speciosa* Nutt.  
*Solidago speciosa rigidiuscula* T. & G.  
*Solidago rigida* L.  
*Boltonia asteroides* (L.) L'Her.  
*Aster anomalus* Engelm.  
*Aster shortii* Lindl.  
*Aster cordifolius* L.  
*Aster drummondii* Lindl.  
*Aster sagittifolius* Wedem.  
*Aster novae angliae* L.  
*Aster turbinellus* Lindl.  
*Aster ericoides* L.  
*Aster salicifolius* Lam.  
*Aster interior* Wieg.  
*Aster lateriflorus* (L.) Britt.  
*Aster patens* Ait.  
*Erigeron pulchellus* Michx.  
*Erigeron philadelphicus* L.  
*Erigeron strigosus* Muhl.  
*Erigeron annuus* (L.) Pers.  
*Erigeron divaricatus* Michx.  
*Erigeron canadensis* L.  
*Pluchea camphorata* (L.) DC.  
*Antennaria plantaginifolia* Hook.  
*Gnaphalium obtusifolium* L.  
*Silphium terebinthinaceum* Jacq.  
*Silphium laciniatum* L.  
*Silphium Silphium integrifolium* Michx.  
*Silphium perfoliatum* L.  
*Parthenium integrifolium* L.  
*Heliopsis helianthoides* (L.) Sweet
- Eclipta alba* (L.) Hassk.  
*Rudbeckia hirta* L.  
*Rudbeckia subtomentosa* Pursh  
*Galinsoga ciliata* (Raf.) Blake  
*Helianthus strumosus* L.  
*Helianthus tuberosus* L.  
*Helianthus maximiliani* Schrad.  
*Actinomeris alternifolia* (L.) DC.  
*Verbesina helianthoides* Michx.  
*Coreopsis pubescens* L.  
*Coreopsis tripteris* L.  
*Bidens comosa* (Gray) Wieg.  
*Bidens aristosa* (Michx.) Britt.  
*Helenium nudiflorum* Nutt.  
*Helenium tenuifolium* Nutt.  
*Achillea millefolium* L.  
*Anthemis cotula* L.  
*Chrysanthemum leucanthemum* L.  
*Cacalia atriplicifolia* L.  
*Senecio plattensis* Nutt.  
*Senecio aureus* L.  
*Senecio glabellus* Poir.  
*Arctium minus* (Hill) Bernh.  
*Cirsium vulgare* (Savi) Airy-Shaw  
*Cirsium discolor* (Muhl.) Spreng.  
*Cirsium altissimum* (L.) Spreng.  
*Serinia oppositifolia* (Raf.) Ktze.  
*Krigia dandelion* (L.) Nutt.  
*Krigia biflora* (Walt) Blake  
*Lactuca scariola* L.  
*Lactuca canadensis* L.  
*Lactuca floridana* (L.) Gaertn.  
*Pyrrhopappus carolinianus* (Walt.) DC.  
*Taraxacum vulgare* (Lam.) Schrank