

CHECK LIST OF THE VASCULAR PLANTS OF WINNEBAGO COUNTY, ILLINOIS

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Winnebago County is in the center of the northern boundary of the State of Illinois. It is traversed by the Rock River and two of its principal tributaries—the Kishwaukee and the Pecatonica—and Sugar River, a tributary of the Pecatonica, flows into the county from Wisconsin. Most of the county has moderate topography, the elevation ranging from 680 to 990 feet above sea level. The northwest corner is more hilly than the rest of the area.

Most of the county is covered by glacial drift which was deposited by the ice-sheet of the Illinoian glacial period. The Wisconsin ice-sheet, with its border to the north and east, contributed extensive terraces of glacial outwash gravel which filled the major stream valleys, in some places to a depth of more than 250 feet. The Belvidere lobe of the Early Wisconsin glaciation extended into the southeast corner of the county, cutting off the former valley of the Kishwaukee River and causing the stream to flow along the north edge of the glacier where it eroded a gorge in the bedrock about a hundred feet deep and several miles long. The lobe of ice also blocked the Rock River and caused it to form a new channel to the west of its former one, seen at Byron in Ogle County. Here, too, a gorge was cut into the bedrock, but not so clearly defined as along the Kishwaukee.

There are small outcrops of bedrock at a number of other widely

scattered places in the county where streams have eroded new channels through the glacial drift. Some of the hilltops, especially in the west part of the area, are devoid of glacial drift and have rock directly beneath the soil. All of these outcrops are Galena dolomite except a small exposure of St. Peter sandstone on the east bank of Sugar River. The area bounded by the Sugar, Pecatonica, and Rock rivers consists largely of sandy soil and dune sand. The geography and geology of the county have been described in detail by various authors of the Illinois Geological Survey (2, 10, 11).

Like most of Illinois, in Winnebago County the vegetation consisted of a mixture of prairie and deciduous forest. The forest vegetation was mostly concentrated above the Pecatonica River and along the south and east boundaries of the county. The central area was largely prairie. The soil survey (6) shows accurately the limits of the soils formed under prairie and forest conditions.

The plant associations and habitats may be divided roughly into the following groups: forest, of which at least one area is predominantly sugar maple, others which were largely oak; prairie, ranging from low wet areas to dry hills; bogs, mainly sedge, but with several Sphagnum areas; swamps, especially along the Pecatonica River; streams; limestone outcrops; and sand. A num-

ber of unusual northern species of plants can be found in the bog and rock outcrop areas.

Agriculturally, the county is on the boundary between the corn belt and dairy country. Cultivation and grazing have profoundly modified the entire vegetation except for a very few small areas, yet there remains a remarkably diverse flora.

The flora of the county has been studied by many botanists, beginning with Michael S. Bebb (1). Gleason (5), in 1910, reported on the Sugar River sand area vegetation. The Nature Study Society of Rockford published lists of the woody plants of the area (8, 9). More recently Dr. Fernald, of Rockford College, has reviewed the work of former botanists (3) and published a list of the herbaceous plants (not including the ferns) of the county (4).

As a part of the Rockford Museum Project of the W. P. A., Dr. Fernald directed the collection of more than 1,000 plants in the county during the seasons of 1939 and 1940. These were deposited in the herbarium of Rockford College, duplicates being given to the Illinois State Herbarium at Springfield.

During the last few year intensive study of the flora has been made by the junior authors and the collections thus obtained have been deposited in the herbarium of the Illinois State Museum, Springfield, and on these specimens this list is based with a few exceptions that are in the herbarium of the Chicago Natural History Museum and these exceptions have been checked by the senior author. There are also a few that are in the herbarium of Rockford College which are marked with an asterisk (*) but have been re-

ported in the previously published lists.

The taxonomic arrangement and nomenclature follow Jones (7) with very few exceptions.

- Lycopodiaceae
Lycopodium lucidulum Michx.
- Selaginellaceae
Selaginella rupestris (L.) Spring.
- Equisetaceae
Equisetum arvense L.
" *laevigatum* A. Br.
" *prealtum* Raf.
- Ophioglossaceae
Botrychium dissectum Spreng.
" *multifidum* (Gmel.) Rupr.
" *obliquum* Muhl.
" *virginianum* (L.) Sw.
- Osmundaceae
Osmunda cinnamomea L.
" *claytoniana* L.
" *regalis* L.
- Polypodiaceae
Cystopteris bulbifera (L.) Bernh.
" *fragilis* (L.) Bernh.
- Onoclea sensibilis L.
- Dryopteris cristata (L.) Gray
" *intermedia* (Muhl.) Gray
" *spinulosa* (Muell.) Watt
" *thelypteris* (L.) Gray
- Polypodium virginianum L.
- Camptosorus rhizophyllus (L.) Link
- Asplenium platyneuron (L.) Oakes
- Athyrium angustum (Willd.) Presl.
" *thelypteroides* (Michx.) Desv.
- Cryptogramma stelleri (Gmel.) Prantl.
- Pellaea glabella Mett.
- Adiantum pedatum L.
- Pteridium latiusculum (Desv.) Hieron.
- Taxaceae
Taxus canadensis Marsh.
- Pinaceae
Pinus strobus L.
- Juniperus virginiana L.
- Typhaceae
Typha angustifolia L.
" *latifolia* L.
- Sparganiaceae
Sparganium americanum Nutt.
" *eurycarpum* Engelm.
- Potamogetonaceae
Potamogeton americanus C. & S.
" *foliosus* Raf.
" *lucens* L.
" *pectinatus* L.
- Alismaceae
Alisma subcordatum Raf.
- Sagittaria brevirostra Mack & Bush
" *latifolia* Willd.
" *longirostra* (Micheli) Sm.*

- Hydrocharitaceae
Anacharis canadensis (Michx.) Planch.
 Gramineae
Bromus ciliatus L.
 " *commutatus* Schrad.*
 " *inermis* Leyss.
 " *kalmii* Gray
 " *secalinus* L.
 " *tectorum* L.
Festuca obtusa Spreng.
 " *octoflora* Walt.
Glyceria grandis Wats.
 " *septentrionalis* Hitchc.*
 " *striata* (Lam.) Hitchc.
Poa annua L.
 " *compressa* L.
 " *palustris* L.*
 " *pratensis* L.
 " *sylvestris* Gray
Eragrostis capillaris (L.) Nees.
 " *ciliatissima* (All.) Link
 " *frankii* C.A. Mey.
 " *hypnoides* (Lam.) BSP
 " *pectinacea* (Michx.) Nees.
 " *spectabilis* (Pursh) Steud.
Diarrenna americana Beauv.
Dactylis glomerata L.
Phragmites communis Trin.
Triodia flava (L.) Smyth
Agropyron repens (L.) Beauv.
 " *smithii* Rydb.
Elymus canadensis L.
 " *villosus* Muhl.
 " *virginicus* L.
Hystrix patula Moench.
Hordeum jubatum L.
Koeleria cristata (L.) Pers.
Arrehatherum elatius (L.) Mert. & Koch.
Danthonia spicata (L.) Beauv.
Calamagrostis canadensis (Michx.) Beauv.
Calamovilfa longifolia (Hook.) Scribn.
Agrostis alba L.
 " *hiemalis* (Walt.) BSP.
Cinna arundinacea L.
Phleum pratense L.
Alopeurus carolinianus Walt.
Muhlenbergia foliosa (R. & S.) Trin.
 " *mexicana* (L.) Trin.
 " *schreberi* Gmel.
Sporobolus cryptandrus (Torr.) Gray
 " *heterolepis* Gray
 " *neglectus* Nash.
Orzopsis asperifolia Michx.
 " *racemosa* (Sm.) Ricker
Stipa comata Trin. & Rupr.*
 " *spartea* Trin.
Aristida oligantha Michx.
 " *purpurascens* Poir.*
 " *tuberculosa* Nutt.
Eleusine indica (L.) Gaertn.
Spartina pectinata Link
Bouteloua curtipendula (Michx.) Torr.
Hierochloe odorata (L.) Beauv.*
Leersia oryzoides (L.) Sw.
 " *virginica* Willd.
Zizania aquatica L.
- Digitaria ischaemum* (Schreb.) Muhl.
 " *sanguinalis* (L.) Scop
Panicum capillare L.
 " *clandestinum* L.*
 " *dichotomum* L.
 " *huachucae* Ashe
 " *latifolium* L.
 " *perlustum* Nash.*
 " *scribnerianum* Nash.
 " *villosum* Nash.
 " *virgatum* L.
Echinochloa crus-galli (L.) Beauv.
 " *walteri* (Pursh) Heller
Setaria lutescens (Weigel) Hubb.
 " *viridis* (L.) Beauv.
Cenchrus longispinus (Hack.) Fern.
Andropogon furcatus Muhl.
 " *scoparius* Michx.
Sorghastrum nutans (L.) Nash.
- Cyperaceae
Cyperus aristatus Rottb.
 " *diandrus* L.
 " *engelmannii* Steud.
 " *esculentus* L.
 " *ferrugineus* Boeckl.
 " *filiformis* Vahl.
 " *houghtonii* Torr.
 " *rivularis* Kunth.
 " *schweinitzii* Torr.
 " *strigosus* L.
Dulichium arundinaceum (L.) Britt.
Eleocharis acicularis (L.) R. & S.
 " *compressa* Sulliv.
 " *engelmannii* Steud.
 " *obtusa* (Willd.) Schult.
 " *ovata* (Roth.) R. & S.
 " *palustris* (L.) R. & S.
 " *quadrangulata* (Michx.) R. & S.
 " *tenuis* (Willd.) Schult.
Bulbostylis capillaris (L.) Clarke
Hemicarpa micrantha (Vahl.) Britt
Fimbristylis autumnalis (L.) R. & S.
Scirpus americanus Pers.
 " *atrovirens* Muh.
 " *cyperinus* (L.) Kunth.
 " *fluvialis* (Torr.) Gray*
 " *lineatus* Michx.
 " *validus* Vahl.
Eriophorum angustifolium Honck.
 " *virginicum* L.
Rhynchospora alba (L.) Vahl.
Scleria trigloidea Michx.
Carex aurea Nutt.
 " *bebbii* Olney
 " *bicknellii* Britt.
 " *blanda* Dewey
 " *buxbaumii* Wahl.
 " *cephaloidea* Dewey
 " *cephalophora* Muhl.
 " *chordorrhiza* Ehrh.*
 " *comosa* Boott.
 " *conoidea* Schkuhr.
 " *cristatella* Britt
 " *eru-cori* Shuttlew

- Carex davisii Schw. & Torr.
 " festucacea Schk. *
 " filiformis L.
 " gracillima Schw.
 " granularis Muhl.
 " gravida Bailey
 " grisea Wahl.
 " grayii Carey
 " hirtifolia Mack. *
 " hystricina Muhl.
 " interior Bailey
 " lanuginosa Michx.
 " laxiflora Lam.
 " longirostris Torr.
 " lupulina Muhl.
 " lurida Wahl.
 " muskingumensis Schw. *
 " muhlenbergii Schk.
 " pennsylvanica L.
 " plantaginea Lam.
 " pseudo-cyperus L.
 " retrorsa Schwein. *
 " richardsonii R. Br.
 " rostrata Stokes
 " rosea Schk.
 " scoparia Schk.
 " shortiana Dewey
 " sparganooides Muhl. *
 " sprengelii Dewey
 " stipata Muhl.
 " straminea Willd.
 " stricta Lam.
 " tenera Dewey
 " tribuloides Wahl.
 " tuckermannii Dewey *
 " varia Muhl.
 " virescens Muhl.
 " vulpinoidea Michx.
- Araceae
Arisaema atrorubens (Ait.) Blume
 " *dracontium* (L.) Schott.
Symplocarpus foetidus (L.) Nutt.
Acorus calamus L.
- Lemnaceae
Lemna minor L.
 " *trisulca* L.
- Spirodela polyrhiza* (L.) Schleiden
- Xyridaceae
Xyris torta Sm.
- Commelinaceae
Commelinia communis L.
 " *virginica* L.
- Tradescantia canaliculata* Raf.
 " *virginiana* L.
- Pontederiaceae
Pontederia cordata L.
- Heteranthera dubia (Jacq.) MacM.
- Juncaceae
Juncus acuminatus Michx.
 " *balticus* var. *littoralis* Engelm.
 " *dudleyi* Wieg.
 " *effusus* L.
 " *greenei* Oakes & Tuck.
- Juncus interior* Wieg.
 " *macer* S. F. Gray
 " *marginatus* Rostk.
 " *nodosus* L.
 " *scirpooides* Lam.
 " *vaseyi* Engelm.
- Luzula multiflora* (Ehrh.) Lej.
- Liliaceae
Hemerocallis fulva L.
Allium canadense L.
 " *cernuum* Roth.
 " *tricoccum* Ait.
- Asparagaceae
Asparagus officinalis L.
Camassia scilloides (Raf.) Cory
Erythronium albidum Nutt
 " *americanum* Ker.
- Lily Family
Lilium michiganense Farw.
 " *umbellatum* Pursh
- Maianthemum canadense var. interius Fern.
- Ornithogalum umbellatum L.
Polygonatum biflorum (Walt.) Ell.
- Uvularia grandiflora Sm.
- Trillium gleasoni Fern.
 " *recurvatum* Beck.
- Smilacina racemosa (L.) Desf.
 " *stellata* (L.) Desf.
- Smilax ecirrhata (Engelm.) Wats.
 " *lasioneuron* Hook.
 " *hispida* Muhl.
 " *rotundifolia* L.
- Dioscoreaceae
Dioscorea villosa L.
- Amaryllidaceae
Aletris farinosa L.
- Hypoxis hirsuta (L.) Coville
- Iridaceae
Belamcanda chinensis (L.) DC
- Iridaceae
Iris shrevei Small
- Sisyrinchium albidum Raf.
 " *angustifolium* Mill.
 " *graminoides* Bickn.
- Orchidaceae
Cypripedium candidum Muhl.
 " *parviflorum* Salisb.
 " *reginae* Walt.
- Orchis spectabilis L.
- Herbaria
Bracteata (Muhl.) R. Br.
 " *lacera* (Michx.) Lodd.
 " *leucophaea* (Nutt.) Gray
 " *psycodes* (L.) Spreng.
- Calopogon pulchellus (Salisb.) R. Br.
- Triphora trianthophora (Sw.) Rydb.
- Spiranthes cernua (L.) Rich.
- Goodyera pubescens (Willd.) R. Br.
- Liparis liliifolia (L.) Rich.
- Aplectrum hyemale (Muhl.) Torr.
- Corallorrhiza maculata Raf.
- Salicaceae
Populus alba L.
 " *deltoides* Marsh.
 " *grandidentata* Michx.
 " *tremuloides* Michx.

- Salix amygdaloides* Anders.
 " *bebbiana* Sarg.
 " *candida* Fluegge.
 " *cordata* Muhl.
 " *discolor* Muhl.
 " *fragilis* L.
 " *glaucocephala* Bebb.
 " *humilis* Marsh.
 " *interior* Rowlee
 " *lucida* Muhl.
 " *nigra* Marsh.
 " *pedicellaris* Pursh.*
 " *petiolaris* Sm.
 " *sericea* Marsh.
 " *tristis* Ait.
- Juglandaceae
Juglans cinerea L.
 " *nigra* L.
- Carya cordiformis* (Wang.) K. Koch.
 " *ovata* (Mill.) K. Koch.
- Betulaceae
Alnus incana (L.) Moench.
Corylus americana Walt.
Ostrya virginiana (Mill.) Koch.
Carpinus caroliniana Walt.
Betula lutea Michx. f.
 " *glandulifera* (Regel) Butler
 " *pumila* L.
- Fagaceae
Quercus alba L.
 " *bicolor* Willd.
 " *borealis* Michx. f.
 " *ellipticalis* Hill
 " *macrocarpa* Michx.
 " *muhlenbergia* Engelm.
 " *palustris* Muench.
 " *velutina* Lam.
- Ulmaceae
Ulmus americana L.
 " *fulva* Michx.
Celtis occidentalis L.
Morus rubra L.
- Cannabaceae
Cannabis sativa L.
- Humulus americanus Nutt.
- Urticaceae
Urtica procera Muhl.
Boehmera cylindrica (L.) Sw.
Pilea pumila (L.) Gray
Laportea canadensis (L.) Gaud.
Parietaria pensylvanica Muhl.
- Santalaceae
Comandra umbellata (L.) Nutt.
- Aristolochiaceae
Asarum acuminatum (Ashe) Bickn.
 " *reflexum* Bickn.
- Polygonaceae
Rumex acetosella L.
 " *altissimus* Wood
 " *britannica* L.
 " *crispus* L.
 " *orbiculatus* Gray
 " *verticillatus* L.
- Polygonum aviculare L.
 " *buxiforme* Small
 " *coccineum* Muhl.
 " *convolvulus* L.
 " *hydropiper* L.
 " *hydropiperoides* Michx.
 " *lapathifolium* L.
 " *orientale* L.
 " *natans* (Michx.) Eaton
pennsylvanicum L.
persicaria L.
 " *punctatum* Ell.
ramosissimum Michx.
scandens L.
 " *sagittatum* L.
 " *tenue* Michx.
virginianum L.
- Polygonella articulata* (L.) Meis.
- Chenopodiaceae
Chenopodium album L.
 " *berlandieri* Moq.*
 " *boscianum* Moq.
 " *capitatum* L.
 " *glaucum* L.
 " *hybridum* L.
 " *leptophyllum* Nutt.*
 " *urbicum* L.
- Kochia scoparia* (L.) Schrad.
Atriplex patula L.
Salsola pestifer A. Nels.
- Amaranthaceae
Amaranthus blitoides Wats.
 " *gracicans* L.
 " *hybridus* L.
 " *retroflexus* L.
 " *spinulosus* L.
- Aenida altissima* Riddell
 " *tamariscina* (Nutt.) Wood.
- Froelichia gracilis* Moq.
- Phytolaccaceae
Phytolacca americana L.
- Nyctaginaceae
Mirabilis nyctaginea (Michx.) MacM.
- Illecebraceae
Paronychia canadensis (L.) Wood
Scleranthus annuus L.
- Aizoaceae
Mollugo verticillata L.
- Portulacaceae
Talinum rugospermum Holz.
Claytonia virginica L.
Portulaca oleracea L.
- Caryophyllaceae
Cerastium nutans Raf.
 " *vulgatum* L.
- Stellaria aquatica* (L.) Scop.
 " *longifolia* Muhl.
 " *media* (L.) Cyril.
- Arenaria lateriflora* L.
 " *serpyllifolia* L.
 " *stricta* Michx.
- Agrostemma githago* L.

- Silene antirrhina L.
 " cucubalus Wibel.
 " dichotoma Ehrh.
 " nivea (Nutt.) Otth.
 " noctiflora L.
 " stellata (L.) Ait.
Lychnis alba Mill.
Saponaria officinalis L.
 " vaccaria L.
- Ranunculaceae
Caltha palustris L.
Hydrastis canadensis L.
Isopyrum biternatum (Raf.) T. & G.
Aquilegia canadensis L.
Actaea alba (L.) Mill.
 " rubra (Ait.) Willd.
 " rubra var. neglecta Gill.
- Ranunculus abortivus* L.
 " acinus L.
 " fascicularis Muhl.
 " flabellaris Raf.
 " hispidus Michx.
 " pennsylvanicus L. f.
 " recurvatus Poir.
 " repens L.
 " rhomboideus Goldie
 " scleratus L.
 " septentrionalis Poir.
 " trichophyllum Chaix.
- Thalictrum dasycarpum* F. & L.
 " dioicum L.
 " revolutum DC.
- Anemone canadensis* L.
 " caroliniana Walt.
 " cylindrica Gray
 " ludoviciana Nutt.
 " quinquefolia L.
 " virginiana L.
- Anemonella thalictroides* (L.) Spach.
Hepatica acutiloba DC.
 " americana (DC.) Ker.
- Clematis virginiana* L.
- Nymphaeaceae
Nuphar advena Ait.
Nymphaea tuberosa Paine
- Berberidaceae
Podophyllum peltatum L.
Jeffersonia diphylla (L.) Pers.
Caulophyllum thalictroides (L.) Michx.
 Menispermaceae
Menispermum canadense L.
- Lauraceae
Lindera benzoin (L.) Blume
- Papaveraceae
Sanguinaria canadensis L.
 Fumariaceae
Dicentra canadensis (Goldie) Walp.
 " *cucullaria* (L.) Bernh.
- Corydalis flavula (Raf.) DC.
 " montana Engelm.
- Fumaria officinalis L.
- Cruciferæ
Alliaria officinalis Andrz.
- Brassica alba (L.) Rabenh.
 " arvensis (L.) Raben.
 " campestris L.
 " juncea (L.) Cossion
 " nigra (L.) Koch.
- Diplotaxis muralis* (L.) DC.
Rorippa palustris (L.) Bess.
 " *sessiflora* (Nutt.) Hitchc.
 " *sylvestris* (L.) Besser
- Sisymbrium altissimum* L.
 " *officinale* (L.) Scop.
- Conringia orientalis* (L.) Dum.
- Erysimum cheiranthoides* L.
 " *inconspicuum* (Wats.) MacM.
- Hesperis matronalis* L.
- Descurainia brachycarpa* (Rich.) Schulz.
- Draba reptans* (Lam.) Fern.
- Dentaria laciniata* Muhl.
- Iodanthus pinnatifidus* (Michx.) Steud.
- Cardamine bulbosa* (Schreb.) BSP.
 " *douglasii* (Torr.) Britt.
 " *pennsylvanica* Muhl.
- Arabis canadensis* L.
 " *confinis* Wats.
 " *dentata* T. & G.
 " *laevigata* (Muhl.) Poir.
 " *lyrata* L.
 " *pyrenocarpa* Hopkins
- Arabidopsis thaliana* (L.) Heynh.
- Nasturtium officinale* R. Br.
- Armoracia aquatica* (Eaton) Greene
 " *rusticana* Gaertn.
- Berteroa incana* (L.) DC.
- Camelina microcarpa* Andrz.
- Lepidium campestre* (L.) R. Br.
 " *perfoliatum* L.
 " *virginicum* L.
- Thlaspi arvense* L.
- Capsella bursa-pastoria* (L.) Medic.
- Capparidaceae
Polianisia graveolens Raf.
 " *trachysperma* T. & G.
- Crassulaceae
Penthorum sedoides L.
- Parnassiaceae
Parnassia glauca Raf.
- Saxifragaceae
Heuchera hispida Pursh
Mitella diphylla L.
Sullivantia renifolia Rosend.
Saxifraga pensylvanica L.
 " *virginiana* Michx.
- Grossulariaceae
Ribes americanum Mill.
 " *cynosbatii* L.
 " *missouriense* Nutt.*
 " *odoratum* Wendl.
- Hamamelidaceae
Hamamelis virginiana L.
- Platanaceae
Platanus occidentalis L.

- Rosaceae
Physocarpus opulifolius (L.) Maxim.
Spiraea alba DuRoi
 " *tomentosa* L.
Aruncus dioicus (Walt.) Fern.
Fragaria americana (Porter) Britt.
 " *virginiana* Duch.
Potentilla anserina L.
 " *argentea* L.
 " *arguta* Pursh
 " *fruticosa* L.
 " *monspeliensis* L.
 " *palustris* (L.) Scop.*
 " *recta* L.
 " *simplex* Michx.
Geum canadense Jacq.
 " *laciniatum* Murr.
 " *strictum* Ait.
 " *triflorum* Pursh
Agrimonia gryposepala Wallr.
 " *parviflora* Ait.
 " *pubescens* Wallr.
 " *rostellata* Wallr.
Rubus allegheniensis Porter
 " *flagellaris* Willd.
 " *hispidus* L.
 " *occidentalis* L.
 " *pubescens* Raf.
 " *strigosus* Michx.
 " spp.
Rosa blanda Ait.
 " *carolina* L.
 " *palustris* Marsh.
 " *suffulta* Greene
Amelanchier arborea (Michx. f.) Fern.
 " *laevis* Wieg.
 " *spicata* (Lam.) K. Koch.
Pyrus communis L.
Malus ioensis (Wood) Britt.
Aronia melanocarpa (Michx.) Ell.
 " *prunifolia* (Marsh.) Rehd.
Crataegus calpodendron (Ehrh.) Medic.
 " *locuples* Sarg.
 " *mollis* (T. & G.) Scheele
 " *pedicellata* Sarg.
 " *pruinosa* (Wendl.) K. Koch.
 " *punctata* Jacq.
 " *succulenta* Link
Prunus americana Marsh.
 " *lanata* (Sudw.) M. & B.
 " *nigra* L.
 " *pumila* L.
 " *pennsylvanica* L.
 " *serotina* Ehrh.
 " *virginiana* L.
 Leguminosae
Desmanthus illinoensis (Michx.) MacM.
Gymnocladus dioica (L.) K. Koch.
Gleditsia triacanthos L.
Cassia fasciculata Michx.
 " *hebecarpa* Fern.
Baptisia leucantha T. & G.
 " *leucophaea* Nutt.
Lupinus perennis L.
- Trifolium arvense* L.
 " *hybridum* L.
 " *pratense* L.
 " *procumbens* L.
 " *repens* L.
Melilotus alba Desr.
 " *officinalis* (L.) Lam.
Medicago lupulina L.
 " *sativa* L.
Psoralea tenuiflora Pursh
Amorpha canescens Pursh
 " *fruticosa* L.
Petalostemum candidum (Willd.) Michx.
 " *purpureum* (Vent.) Rydb.
Tephrosia virginiana (L.) Pers.
Robinia pseudoacacia L.
Caragana arborescens Lam.
Astragalus canadensis L.
Desmodium canadense (L.) DC.
 " *canescens* (L.) DC.
 " *dillenii* Darl.
 " *glutinosum* (Muhl.) Wood
 " *illinoense* Gray
 " *nudiflorum* (L.) D.C.
 " *paniculatum* (L.) DC.
Lespedeza capitata Michx.
 " *hirta* (L.) Horn.
 " *intermidia* (Wats.) Britt.
 " *repens* (L.) Bart.
 " *violacea* (L.) Pers.
Vicia americana Muhl.
 " *caroliniana* Walt.
 " *cracca* L.*
 " *sativa* L.
 " *villosa* Roth.
Lathyrus myrtifolius Muhl.
 " *ochroleucus* Hook.
 " *plastris* L.
 " *venosus* Muh.
Apios americana Medic.
Strophostyles helvola (L.) Britt.
Amphicarpa bracteata (L.) Fern.
 " *comosa* (L.) G. Don.
- Geraniaceae
Geranium carolinianum L.
 " *maculatum* L.
 " *sibiricum* L.
- Oxalidaceae
Oxalis corniculata L.
 " *cymosa* Small
 " *stricta*
 " *violacea* L.
- Linaceae
Linum sulcatum Riddell
 " *medium* (Planch.) Britt.
 " *usatissimum* L.
- Balsaminaceae
Impatiens biflora Walt.
 " *pallida* Nutt.
- Limnanthaceae
Floerkea proserpinacoides Willd.

- Rutaceae
Zanthoxylum americanum Mill.
Ptelea trifoliata L.
- Polygalaceae
Polygala cruciata L.
 " *incarnata* L.
 " *polygama* Walt.
 " *sanquinea* L.
 " *senega* L.
 " *verticillata* L.
- Euphorbiaceae
Acalypha virginica L.
Euphorbia commutata Engelm.
 " *corollata* Pursh
 " *cyparissias* L.
 " *esula* L.
 " *geyeri* Engelm.
 " *humistrata* Engelm.*
 " *maculata* L.
 " *marginata* Pursh
 " *obtusata* Pursh
 " *peplus* L.
 " *polygonifolia* L.
 " *supina* Raf.
- Poinsettia dentata* (Michx.) Small
 " *heterophylla* (L.) Small
- Callitrichaceae
Callitricha heterophylla Pursh
 " *palustris* L.
- Celastraceae
Euonymus atropurpureus Jacq.
 " *obovatus* Nutt.
- Celastrus scandens* L.
- Aquifoliaceae
Ilex verticillata (L.) Gray
- Anacardiaceae
Rhus aromatica Ait.
 " *arenaria* (Greene) Jones
 " *glabra* L.
 " *radicans* L.
 " *typhina* L.
- Staphyleaceae
Staphylea trifolia L.
- Aceraceae
Acer nigrum Michx. f.
 " *negundo* L.
 " *rubrum* L.
 " *saccharum* Marsh.
 " *saccharinum* L.
- Rhamnaceae
Rhamnus cathartica L.
 " *frangula* L.
 " *lanceolata* Pursh
- Ceanothus americanus* L.
 " *ovatus* Desf.
- Vitaceae
Vitis aestivalis Michx.
 " *riparia* Michx.
 " *vulpina* L.
- Parthenocissus quinquefolia* (L.) Planch.
- Tiliaceae
Tilia americana L.
- Malvaceae
Malva rotundifolia L.
Callirhoe triangulata (Leav.) Gray
Napaea dioica L.
Sida spinosa L.
Abutilon theophrasti Medic.
Hibiscus trionum L.
- Hypericaceae
Hypericum canadense L.
 " *ellipticum* Hook.
 " *muticum* L.
 " *perforatum* L.
 " *prolificum* L.
 " *punctatum* Lam.
 " *sphaerocarpum* Michx.
- Sarothra gentianoides* L.
- Triadenium virginicum* (L.) Raf.
- Cistaceae
Helianthemum canadense (L.) Michx.
 " *bicknellii* Fern.
- Lechea leggettii* Britt. & Hollick
 " *stricta* Legg.
 " *tenuifolia* Michx.
 " *villosa* Ell.
- Violaceae
Viola canadensis L.
 " *conspersa* Reich.
 " *cucullata* Ait.
 " *eriocarpa* Schw.
 " *fimbriatula* Sm.
 " *lanceolata* L.
 " *nephrophylla* Greene
 " *pallens* (Banks) Brain.
 " *papilionacea* Pursh
 " *pedata* L.
 " *pedatifida* Don.
 " *pubescens* Ait.
 " *sagittata* Ait.
 " *striata* Ait.
 " *sororia* Willd.
- Cactaceae
Opuntia rafinesquii Engelm.
- Thymelaeaceae
Dirca palustris L.
- Lythraceae
Rotala ramosior (L.) Koehne
Ammania coccinea Rottb.
Decodon verticillatus (L.) Ell.*
Lythrum alatum Pursh
 " *salicaria* L.
- Onagraceae
Epilobium adenocaulon Hauss.
 " *augustifolium* L.
 " *coloratum* Muhl.
 " *leptophyllum* Raf.
 " *strictum* Muhl.
- Ludwigia alternifolia* L.
 " *palustris* (L.) Ell.
 " *polycarpa* S. & P.
- Oenothera biennis* L.
 " *laciniata* Hill.
 " *pumila* L.

- Oenothera rhombipetala Nutt.
 " speciosa Nutt.
- Gaura biennis L.
- Circaeа latifolia Hill
 Haloragidaceae
- Myriophyllum heterophyllum Michx.
 " verticillatum L.
- Proserpinaca palustris L.
- Cornaceae
- Cornus alternifolia L. f.
 " obliqua Raf.
 " racemosa Lam.
 " rugosa Lam.
 " stolonifera Michx.
- Araliaceae
- Aralia nudicaulis L.
 " racemosa L.
- Panax quinquefolium L.
- Umbelliferae
- Eryngium yuccifolium Michx.
- Daucus carota L.
- Sanicula canadensis L.
 " gregaria Bickn.
 " marilandica L.
 " trifoliata Bickn.
- Osmorrhiza claytoni (Michx.) Clark
 " longistylis (Torr.) DC.
- Cryptotaenia canadensis (L.) DC.
- Chaerophyllum procumbens (L.) Crantz.
- Zizia aptera (Gray) Fern.
 " aurea (L.) Koch.
- Taenidia integriflora (L.) Drude
- Sium suave Walt.
- Cicuta bulbifera L.
 " maculata L.
- Thaspium sylvaticum (Benke) Jones
 " barbinode (Michx.) Nutt.
- Polytaenia nuttallii DC.
- Angelica atropurpurea L.
- Heracleum lanatum Michx.
- Pastinaca sativa L.
- Conioselinum chinense (L.) BSP.
- Oxypolis rigidior (L.) Raf.
- Carum carvi L.
- Ericaceae
- Chimaphila corymbosa Pursh
- Pyrola elliptica Nutt.
 " secunda L.
- Monotropa uniflora L.
- Gaylussacia baccata (Wang.) K. Koch.
- Arctostaphylos uva-ursi (L.) Spreng.
- Vaccinium angustifolium Ait.
 " canadense Richards
 " corymbosum L.
- Primulaceae
- Androsace occidentalis Pursh
- Trientalis borealis Raf.
- Lysimachia ciliata L.
 " lanceolata Walt.
 " nummularia L.
 " quadriflora Sims.
 " quadrifolia L.
 " terrestris (L.) BSP.
- Lysimachia thrysiflora L.
 " vulgaris L.
- Dodecatheon meadia L.
- Oleaceae
- Fraxinus americana L.
 " lanceolata Borkh.
 " nigra Marsh.
 " pennsylvanica Marsh.
 " quadrangulata Michx.
- Gentianaceae
- Gentiana andrewsii Griseb.
 " crinita Froel.
 " flava Gray
 " procera Holm.
 " puberula Michx.
 " quinquefolia L.
 " saponaria L.
- Bartonia virginica (L.) BSP.
- Nymphoides peltatum (Gmel.) Britten & Rendle
- Apocynaceae
- Apocynum androsaemifolium L.
 " cannabinum L.
 " pubescens R. Br.
 " sibericum Jacq.*
- Asclepiadaceae
- Asclepias amplexicaulis Sm.
 " incarnata L.
 " phytolaccoides Pursh
 " purpurascens L.
 " pulchra Ehrh.
 " quadrifolia Jacq.
 " sullivantii Engelm.
 " syriaca L.
 " tuberosa L.
 " verticillata L.
- Acerates hirtella Pennell.
 " languinosa Nutt.
 " viridiflora (Raf.) Eaton*
- Convolvulaceae
- Convolvulus arvensis L.
 " sepium L.
 " spithameus L.
- Cuscuta glomerata Choisy
 " gronovii Willd.
 " spp.
- Ipomoea purpurea (L.) Roth.
- Polemoniaceae
- Phlox bifida Beck.
 " divaricata L.
 " glaberrima L.
 " pilosa L.
- Collomia linearis Nutt.
- Polemonium reptans L.
- Hydrophyllaceae
- Hydrophyllum appendiculatum Michx.
 " virginianum L.
- Ellisia nyctelea L.
- Boraginaceae
- Cynoglossum officinale L.
- Lappula echinata Gilib.
 " virginiana (L.) Greene

- Mertensia virginica* (L.) Link
Myosotis arvensis (L.) Hill
 " *scorpioides* L.
 " *verna* Nutt.
Lithospermum angustifolium Michx.
 " *arvense* L.
 " *canescens* (Michx.) Lehm.
 " *croceum* Fern.
 " *latifolium* Michx.
Onosmodium hispidissimum Mack.
 " *occidentale* Mack.
- Verbenaceae**
- Verbena bracteata* Lag. & Rodr.
 " *hastata* L.
 " *simplex* Lehm.
 " *stricta* Vent.
 " *urticaefolia* L.
- Phyla lanceolata* (Michx.) Greene
- Labiatae**
- Teucrium canadense* L.
 " *occidentale* Gray
Isanthus brachiatus (L.) BSP.
Scutellaria ambigua Nutt.
 " *epilobifolia* Hamilt.
 " *lateriflora* L.
 " *ovata* Hill
 " *parvula* Michx.
Marrubium vulgare L.
Agastache nepetoides (L.) Ktze.
 " *scrophulariaefolia* (Willd.) Ktze.
Nepeta cataria L.
Physotegia speciosa Sweet
Physostegia virginiana (L.) Benth.
Glecoma hederacea L.
Prunella vulgaris L.
Leonurus cardiaca L.
Stachys arenicola Britt.
 " *aspera* Michx.
 " *cordata* Ridd.
 " *germanica* L.
 " *homotrichia* (Fern.) Rydb.
 " *tenuifolia* Willd.
Salvia reflexa Hornem.
Blephilia ciliata (L.) Raf.
 " *hirsuta* (Pursh) Torr.
Monarda fistulosa L.
 " *fistulosa* f. *alba*
 " *punctata* L.
Hedeoma hispida Pursh
 " *pulegioides* (L.) Pers.
Pycnanthemum flexuosum (Walt.) BSP.
 " *pilosum* Nutt.
 " *virginianum* (L.) D. & J.
Lycopodium americanum Muhl.
 " *ruberulus* Moench.
 " *uniflorus* Michx.
 " *virginicus* L.
Mentha canadensis L.
 " *citrata* Ehrh.
 " *gentilis* L. Glabrior (Hook) Rydb.
 " *piperita* L.
 " *spicata* L.
- Solanaceae**
- Solanum carolinense* L.
 " *dulcamara* L.
- Solanum nigrum* L.
 " *rostratum* Dunal
Physalis heterophylla Nees.
 " *lanceolata* Michx.
 " *pubescens* L.
 " *subglabrata* M. & B.
 " *virginiana* Mill.
Lyctium halimifolia Mill.
Datura stramonium L.
 Scrophulariaceae
Verbascum blattaria L.
 " *thapsus* L.
Chelone glabra L.
Penstemon hirsutus (L.) Willd.
 " *digitalis* Nutt.
 " *pallidus* Small
Collinsia verna Nutt.
Scrophularia lanceolata Pursh
 " *marilandica* L.
Linaria canadensis (L.) Dum.-Cours.
 " *minor* (L.) Desf.
 " *vulgaris* Mill.
Lindernia dubia (L.) Pennell
Gratiola neglecta Torr.
Leucospora multifida (Michx.) Nutt.
Mimulus ringens L.
Veronicastrum virginicum (L.) Farw.
Veronica americana (Raf.) Schw.
 " *arvensis* L.
 " *connata* Raf.
 " *peregrina* L.
 " *serpyllifolia* L.
Synthyris bullii (Eaton) Hell.
Aureolaria flava (L.) Farw.
 " *grandiflora* (Benth.) Pennell
 " *pedicularia* (L.) Raf.
Gerardia asper Dougl.
 " *gattingeri* Small
 " *purpurea* L.
 " *tenuifolia* Vahl.
Dasistoma macrophylla (Nutt.) Raf.
Castilleja coccinea (L.) Spreng.
 " *sessiflora* Pursh
Pedicularis canadensis L.
 " *lanceolata* Michx.
- Lentibulariaceae**
- Utricularis vulgaris* L.
- Orobanchaceae**
- Orobanche uniflora* L.
- Phrymaceae**
- Phryma leptostachya* L.
- Acanthaceae**
- Dianthera americana* L.
- Ruellia ciliosa* Pursh
- Plantaginaceae**
- Plantago aristata* Michx.
 " *lanceolata* L.
 " *major* L.*
 " *purshii* R. & S.
 " *rugelii* Dene.
- Rubiaceae**
- Houstonia lanceolata* (Poir.) Britt.
Cephalanthus occidentalis L.
Diodia teres Walt.

- Mitchella repens L.
 Galium aparine L.
 " asprellum Michx.
 " boreale L.
 " circaezans Michx.
 " concinnum T. & G.
 " obtusum Bigel.
 " tinctorium L.
 " trifidum L.
 " triflorum Michx.
 Caprifoliaceae
 Sambucus canadensis L.
 " pubens Michx.
 Viburnum acerifolium L.
 " affine Bush.
 " lentago L.
 " prunifolium L.
 " rafinesquianum Schult.
 " trilobum Marsh.
 Symphoricarpos occidentalis Hook.
 " rivularis Suksd.
 Lonicera dioica L.
 " flava Sims.
 " prolifera (Kirsch.) Rehd.
 Diervilla lonicera Mill.
 Triosteum aurantiacum Bickn.
 " perfoliatum L.
 Valerianaceae
 Valeriana ciliata T. & G.
 Cucubitaceae
 Echinocystis lobata (Michx.) T. & G.
 Cucurbita foetidissima HBK.
 Sicyos angulatus L.
 Campanulaceae
 Campanula americana L.
 " aparinoidea Pursh.
 " rotundifolium L.
 " uliginosa Rydb.
 Specularia perfoliata (L.) A. DC.
 Lobeliaceae
 Lobelia cardinalis L.
 " inflata L.
 " kalmii L.
 " siphilitica L.
 " spicata Lam.
 Compositae
 Iva ciliata Willd.
 " xanthifolia Nutt.
 Ambrosia coronopifolia T. & G.
 " elatior L.
 " trifida L.
 Xanthium commune Britt.
 Vernonia fasciculata Michx.
 Eupatorium altissimum L.
 " maculatum L.
 " perfoliatum L.
 " purpureum L.
 " rugosum Houtt.
 " serotinum Michx.
 Kuhnia eupatorioides L.
 Liatris aspera Michx.
 " bebbiana Rydb.
 " cylindracea Michx.
 " spicata (L.) Willd.
- Grindelia squarrosa (Pursh) Dunal
 Solidago altissima L.
 " canadensis L.
 " glaberrima Martens
 " hirtella (Greene) Bush
 " juncea Ait
 " latifolia L.
 " media (Greene) Bush
 " nemoralis Ait.
 " riddellii Frank
 " rigida L.
 " serotina Ait.
 " speciosa Nutt.
 " ulmifolia Muhl.
 " uliginosa Nutt.
 Boltonia asteroides (L.) L'Her.
 Aster anomalous Engelm.
 " azurus Lindl.
 " cordifolius L.
 " drummondii Lindl.
 " dumosus L.
 " ericoides L.
 " junceus Ait.
 " laevis L.
 " lateriflorus (L.) Britt.
 " linariifolius L.
 " novae-angliae L.
 " oblongifolius Nutt.
 " paniculatus Lam.
 " pilosus Willd.
 " prealtus Poir.
 " prenanthoides Muhl.
 " ptarmicoides (Nees.) T. & G.
 " sagittifolius Wed.
 " sericeus Vent.
 " shortii Lindl.
 " umbellatus Mill.
 " vimineus Lam.*
 Erigeron annuus (L.) Pers.
 " canadensis L.
 " divaricatus Michx.*
 " philadelphicus L.
 " pulchellus Michx.
 " strigosus Muhl.
 Antennaria fallax Greene
 " neglecta Greene
 " neodioica Greene
 " plantaginifolia Hook.
 Gnaphalium obusifolium L.
 Polymnia canadensis L.
 Silphium integrifolium Michx.
 " laciniatum L.
 " perfoliatum L.
 " terebinthinaceum Jacq.
 Parthenium integrifolium L.
 Heliopsis helianthoides (L.) Sweet
 Rudbeckia hirta L.
 " laciniata L.
 " subtomentosa Pursh
 " triloba L.
 Brauneria pallida (Nutt.) Britt.
 " purpurea (DC.) Britt.
 Ratibida pinnata (Raf.) Blake
 " columnifera (Nutt.) W. & S.
 Galinsoga ciliata (Raf.) Blake

Helianthus annuus L.
 " *decapetalus* L.
 " *divaricatus* L.
 " *giganteus* L.
 " *grosseserratus* Martens
 " *hirsutus* Raf. L *Mollis* Lam.
 " *occidentalis* Riddell
 " *petiolaris* Nutt.
 " *rigidus* (Cass.) Desf.
 " *strumosus* L.
 " *tuberosus* L.
Coreopsis lanceolata L.
 " *palmata* Nutt.
Bidens aristosa (Michx.) Britt.
 " *comosa* (Gray) Wieg.
 " *connata* Muhl.
 " *coronata* (L.) Britt.
 " *frondosa* L.
 " *laevis* (L.) BSP.
Helenium autumnale L.
Achillea millefolium L.
Chrysanthemum leucanthemum L.
Anthemis cotula L.
 " *tinctoria* L.
Tanacetum vulgare L.
Artemisia annua L.
 " *binnis* Willd.
 " *caudata* Michx.
 " *dracunculoides* Pursh
 " *gnaphaloides* Nutt.
 " *serrata* Nutt.
Cacalia atriplicifolia L.
 " *muhlenbergii* (Sch-Bip.) Fern.
 " *suaveolens* L.
 " *tuberosa* Nutt.
Erechtites hieracifolia (L.) Raf.
Senecio araeus L.
 " *pauperculus* Michx.
 " *plattensis* Nutt.
Arctium minus (Hill) Bern.
Cirsium altissimum (L.) Spreng.
 " *arvense* (L.) Scop.
 " *dicolor* (Muhl.) Spreng.
 " *hillii* (Canby) Fern.
 " *muticum* Michx.
 " *vulgare* (Savi) Airy-Shaw
Centaurea cyanus L.
 " *maculosa* Lam.
 " *nigra* L.
Tragopogon pratensis L.
Krigia biflora (Walt.) Blake
 " *virginica* (L.) Willd.
Cichorium intybus L.
Lactuca canadensis L.
 " *biennis* (Moench) Fern.
 " *floridana* (L.) Gaertn.
 " *pulchella* (Pursh) DC.
 " *sagittifolia* Ell.
 " *scariola* L.

Sonchus arvensis L.
 " *asper* (L.) Hill
 " *oleraceus* L.
Prenanthes alba L.
 " *altissima* L.
 " *aspera* Michx.
 " *cripidinea* Michx.
 " *racemosa* Michx.
Hieracium aurantiacum L.*
 " *canadense* Michx.
 " *gronovii* L.
 " *longipilum* Torr.
 " *scabrum* Michx.
Agoseris cuspidata (Pursh) D. Dietr.
Taraxacum vulgare (Lam.) Schrank
 " *laevigatum* (Willd.) DC.

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