

AN ANNOTATED LIST OF THE VASCULAR PLANTS OF SAND RIDGE STATE FOREST,
MASON COUNTY, ILLINOIS

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ABSTRACT

During a three year study, 459 species of vascular plants were recorded from Sand Ridge State Forest, Mason County, Illinois. The habitats, abundances, and flower phenologies are given where possible. The families with the most species were the Compositae (65), the Graminae (64), and Leguminosae (32). Plants adapted to xeric conditions were very common throughout the area.

INTRODUCTION

Sandy soil, characteristic of Sand Ridge State Forest (formerly Mason State Forest) and much of the Illinois River Valley, is responsible for the edaphic conditions which have promoted the establishment of many xeric species, including invaders from the western plains. Meltwater rivers of glaciers originally deposited this sand in late Wisconsin and Holocene times, and transportation by wind increased its distribution (Willman and Frye, 1970). The action of wind continues today and is readily apparent in the form of blowouts and dunes.

The biology of Illinois sand areas received general descriptive treatment by Hart and Gleason (1907). Shortly thereafter Gleason (1910) defined the floral formations and associations of the inland sand areas of Illinois. Vestal (1913) added an associational study which emphasized the fauna. No other salient literature exists on Illinois sand areas although Evers (1955) complemented the earlier work with a monograph on the hill prairies of Illinois. The generally dry conditions of hill prairies and sand prairies permit a substantial species overlap.

Unfortunately, many of the floral elements, both species and associations, described by Gleason (1910) are absent or scarce at Sand Ridge State Forest. This may be partially explained by the small area (ca. 6400 acres), the lowered water table, and man's activities. Prominent examples of human disturbances in this century include clearing of the forest, cultivation of the land, and planting of pines and other exotics which grow well on sand. The numerous plantings and fencerows have decreased the amount of wind-blown

sand and, as a consequence, have altered delicately balanced successional processes. On the other hand, plowed firelanes, abandoned farms, and other disturbed areas have provided habitats in several stages of succession. Nonetheless, these artificially cycled areas show little resemblance to Gleason's (1910) associations. The frequencies of many species apparently have changed, and numerous species, commonly considered weeds, have colonized disturbed sites.

The objectives of this study were to (1) identify the vascular plants, (2) define their habitat(s), (3) assess their abundance, and (4) record their flowering times. Hopefully, this compilation will assist scientists and naturalists who visit the area and will stimulate others to seek out additional species and subsequently update this account.

METHODS

This survey was conducted weekly from late March-October of 1974-75 along Sand Ridge Road. Other areas (e.g., mesic woods, pine plantations, and ponds) were occasionally examined during 1974-76 for highly local species which grow within state forest boundaries. Aquatics, grasses, sedges, and trees were recorded only in 1975. Additional records were obtained from the University of Illinois Herbarium.

Habitats: Sand Ridge State Forest consists primarily of disturbed sand prairie interdigitated with extensive oak woodlands and pine plantations. The habitat designations which follow are largely the products of convenience; nevertheless, most of the habitats are probably valid units.

Oak woods--forests dominated by Quercus spp., often with abundant Carya spp. The understory varies from Carex spp. and scattered herbs in the dry open areas to abundant shrubs, lianas, and mesophytic plants in the areas with more soil moisture and shade.

Clearings in woods--unforested patches surrounded by oak woods. The centers of depressed clearings (apparently interdunal) hold much leaf litter while more level ones usually have exposed sand. The perimeters characteristically abound with Carex spp.

Borders of woods--transition zones between the oak woods and prairie. Well shaded borders usually possess some characteristic species.

Pine plantations--pure stands of exotic pines planted throughout the area. Except in light gaps there is little or no development of an understory.

Prairie--fields, often containing brush piles, not cultivated for 10 or more years or of unknown history. The species composition may vary from predominantly lichens, Opuntia compressa (Salisb.) Macbr., and Panicum spp. to an almost pure cover of bunch grasses.

Abandoned fields--fields apparently cultivated in the past 2-10 years, usually for the planting of pines. Good index species are Asclepias syriaca L., Aster spp., Erigeron spp., Solidago spp., and Strophostyles spp.

Margins of blowouts--the zone of moving, sparsely vegetated sand at the perimeters of blowouts. Typical species include Aristida spp., Carex muhlenbergii Schk., and Panicum pseudopubescens Nash.

Blowouts--hollows formed by the wind. They may become sparsely vegetated in late summer.

Firelanes--annually plowed firebreaks.

Fencerows--shrubby borders to fields which often harbor mesic species.

Ponds--woodland or man-made depressions filled with water.

Pond margins--zones of wet sand and detritus within 0-3 m of standing water. These areas suffer periodic inundation.

Moist areas near ponds--zones, generally within 2-40 m of ponds, which support a variety of ferns, Salix spp., Viola spp., and others, including mats of Polytrichum.

Roadsides--areas, generally within 5 m of roads, which because of runoff and disturbances have a rather characteristic weedy flora. The best development of this habitat category can be seen along the roads at the boundaries of the state forest. Remnants of Gleason's (1910) bunch grass association are sometimes present.

Disturbed areas--a very general designation for disturbed sites other than roadsides, for example, the campgrounds and construction sites. Naturally, such areas share many species with roadsides.

Whenever a species exhibited an obvious preference within a habitat (e.g., shaded roadside or exposed roadside), the information is included in the annotation. Furthermore, only the typical habitats are mentioned for the abundant species. Where only herbarium records were available, the habitat description was taken from the label of the herbarium sheet.

Abundance: The categories refer strictly to species abundances within habitats and not to abundances of the habitats.

Uncommon--4 or fewer plants encountered during the study.

Occasional--several or more plants occurred in 2-4 disjunct habitat patches, not necessarily of the same type.

Common--moderate numbers of plants found in at least one-half of the habitat patches of the listed type(s).

Very common--plants were abundant in most habitat patches of the listed type(s).

The species determinations were based on the keys or descriptions in Jones (1963), Marcks (1974), Mohlenbrock (1975), and Rehder (1940). Voucher specimens of all collections will be deposited in the University of Illinois Herbarium (Urbana, Illinois).

ANNOTATED CHECKLIST

A total of 459 species were identified from Sand Ridge State Forest. The best represented families were the Compositae (65 spp.), the Graminae (64 spp.), and the Leguminosae (32 spp.). With the exception of cultivated plants, there were 22 county records (marked with *) which were not listed in Jones and Bell (1974).

PTERIDOPHYTA

EQUISETACEAE

Equisetum hyemale L. Margins of blowouts and roadsides. Occasional.

OPHIOGLOSSACEAE

Botrychium dissectum Spreng. Moist areas near ponds. Occasional.
Sept.-Oct.

B. virginianum (L.) Sw. Well shaded areas in oak woods. Occasional.
May-June.

POLYPODIACEAE

Asplenium platyneuron (L.) Oakes. Moist areas near ponds and pine plantations. Common. July-Aug.

Onoclea sensibilis L. Moist areas near ponds. Occasional. Aug.-Oct.
Pteridium aquilinum (L.) Kuhn. Southern slopes of forested dunes in oak woods. Occasional.

Thelypteris palustris Schott. Moist areas near ponds. Common. June-Aug.
Woodisia obtusa (Spreng.) Torr. Pine plantations. Occasional.

SPERMATOPHYTA

Gymnospermae

CUPRESSACEAE

Juniperus virginiana L. Planted.

PINACEAE

Pinus banksiana Lamb. Planted.

P. densiflora Sieb. & Zucc. Planted

P. resinosa Ait. Planted.

P. rigida Mill. Planted.

P. strobus L. Planted
P. sylvestris L. Planted. Apr.-May.
P. thunbergii Parl. Planted.
P. virginiana Mill. Planted. Apr.-May.
Pseudotsuga menziesii (Mirb.) Franco. Planted in oak woods.

TAXODIACEAE

Taxodium distichum (L.) Rich. Ponds and their margins. Planted

Angiospermae

ACANTHACEAE

Ruellia humilis Nutt. Prairie with abundant bunch grass. Occasional.
July-Aug.

ACERACEAE

Acer negundo L. Abandoned fields, fencerows, and roadsides. Occasional.
Mar.-Apr.
A. saccharinum L. Oak woods. Uncommon.

AIZOACEAE

Mollugo verticillata L. Abandoned fields and firelanes. Very common.
June-Sept.

AMARANTHACEAE

Amaranthus albus L. Abandoned fields and firelanes. Very common.
July-Aug.
A. hybridus L. Roadsides and other disturbed areas. Uncommon.
Aug.-Sept.
Froelichia floridana (Nutt.) Moq. Abandoned fields and firelanes.
Very common. June-Sept.

ANACARDIACEAE

Rhus aromatica Ait. [incl. R. arenaria (Greene) G.N. Jones]. Fencerows,
oak woods, and prairie. Very common. Mar.-May.
R. glabra L. Borders of woods and fencerows. Occasional. June-July.
*R. typhina L. Borders of woods. Occasional. June.
Toxicodendron radicans (L.) Kuntze. Fencerows and oak woods. Common.
May-June.

APOCYNACEAE

Apocynum cannabinum L. Abandoned fields and oak woods. Common.
June-Aug.

ASCLEPIADACEAE

Ampelamus albidus (Nutt.) Britt. Fencerows. Uncommon.
Asclepias amplexicaulis Sm. Abandoned fields, firelanes, and margins
of blowouts. Common. May-June.
A. incarnata L. Moist areas near ponds. Occasional. July-Sept.
A. syriaca L. Abandoned fields and roadsides. Very common. June-Aug.
A. tuberosa L. Abandoned fields, firelanes, prairie, and roadsides.
Common. June-Sept.
A. verticillata L. Oak woods and roadsides. Common. June-Aug.
A. viridiflora Raf. Sparsely vegetated sand at margin of blowout.
Uncommon. Collected in flower on 15 June 1975 by P.W. Price.

BERBERIDACEAE

Podophyllum petatum L. Well shaded, moist areas of oak woods.
Occasional. Apr.-May.

BETULACEAE

Alnus glutinosa (L.) Gaertn. Planted in moist area near the pond on
the Black Oak Nature Trail. Mar.-Apr.
Betula nigra L. Planted in same area as species listed above.
Corylus americana Walt. Oak woods. Occasional. Mar.

BIGNONIACEAE

Campsis radicans (L.) Seem. Fencerows and disturbed areas. Occasional.
July-Aug.
Catalpa speciosa Warden. Roadsides. Occasional. May-June.

BORAGINACEAE

Cynoglossum officinale L. Roadsides. Uncommon. May-June.
Hackelia virginiana (L.) I.M. Johnston. Oak woods. Common. July-Aug.
Lithospermum arvense L. Disturbed areas. Uncommon. May-June.
L. carolinense (Walt.) MacM. Firelanes, margins of blowouts, oak
woods, prairie, and roadsides. Very common. Apr.-July.
L. incisum Lehm. Roadsides and other disturbed areas. Uncommon. May.
Mertensia virginica (L.) Pers. Oak woods. Uncommon. Apr.-May.

CACTACEAE

Opuntia compressa (Salisb.) Macbr. Oak woods, prairie, and roadsides.
common. June-July.

CAMPANULACEAE

Campanula americana L. Well shaded areas in oak woods. Occasional.
July-Sept.
Specularia perfoliata (L.) A. DC. Abandoned fields and prairie.
Common. May-June.

CAPPARIDACEAE

Polanisia dodecandra (L.) DC. Prairie and disturbed areas. Occasional. July-Sept.

CAPRIFOLIACEAE

Lonicera maackii Maxim. Planted in moist area near pond on the Black Oak Nature Trail. May-June.

Sambucus canadensis L. Fencerows, moist areas in oak woods, and roadsides. Common. June-Aug.

Symporicarpos orbiculatus Moench. Shaded roadsides. Occasional. Aug.

CARYOPHYLLACEAE

Cerastium vulgatum L. Disturbed areas. Common. Apr.-Aug.

Holosteum umbellatum L. Sides of paved roads. Occasional. Mar.-May.

Lychnis alba Mill. Roadsides and other disturbed areas. Occasional. May-July.

Paronychia canadensis (L.) Wood. Open oak woods. Very common.

June-Aug.

P. fastigiata (Raf.) Fern. Open oak woods. Occasional.

Saponaria officinalis L. Roadsides. Occasional. June-Oct.

Silene antirrhina L. Firelanes and roadsides. Common. May-June.

*S. dichotoma Ehrh. Sandy soil. Collected in flower on 10 July 1960 by J.K. Bouseman.

S. stellata (L.) Ait. f. Borders of woods, under shrubs in fencerows, and shaded roadsides. Common. July-Aug.

Stellaria media (L.) Cyrillo. Disturbed areas and oak woods. Occasional. Apr.-June.

CELASTRACEAE

Celastrus scandens L. Fencerows and oak woods. Common. May-June.

Euonymus atropurpureus Jacq. Well shaded, moist areas in oak woods. Occasional. June-July.

CHENOPodiaceae

Chenopodium album L. Abandoned fields, firelanes, and roadsides. Common. June-Sept.

C. hybridum L. Shaded roadsides and other disturbed areas. Occasional. June-Sept.

Cycloloma atriplicifolia (Spreng.) Coulter. Abandoned fields, firelanes, and margins of blowouts. Very common. June-Aug.

Kochia scoparia (L.) Roth. Abandoned fields and roadsides. Uncommon.

CISTACEAE

Helianthemum bicknellii Fern. Open oak woods and the exposed borders. Occasional.

H. canadense (L.) Michx. Open oak woods. Common. May-June.

Lechea tenuifolia Michx. Open oak woods and disturbed areas. Occasional. July.

COMMELINACEAE

Commelina erecta L. Abandoned fields and firelanes. Common. June-Sept.
Tradescantia ohiensis Raf. Oak woods, prairie, and roadsides. Very common. May-Aug.

COMPOSITAE

Achillea millefolium L. Pine plantations and roadsides. Occasional. May-July.

Ambrosia artemisiifolia L. Firelanes and other disturbed areas. Common. July-Sept.

A. psilostachya DC. Abandoned fields, oak woods, and prairie. Common. July-Sept.

A. trifida L. Abandoned fields, firelanes, and roadsides. Very common. July-Sept.

Antennaria neglecta Greene. Slopes of forested dunes in oak woods. Uncommon. Apr.-May.

A. plantaginifolia (L.) Hook. Oak woods. Common. Apr.-May.

*Arctium minus (Hill) Bernh. Shaded roadsides and other disturbed areas. Occasional. July-Aug.

Artemisia caudata Michx. Firelanes and roadsides. Occasional. July-Aug.

Aster azureus Lindl. Open oak woods. Very common. Sept.-Oct.

A. ericoides L. Abandoned fields. Occasional. Aug.-Oct.

A. lateriflorus (L.) Britt. Open oak woods. Occasional. Sept.-Oct.

A. linariifolius L. Open oak woods. Uncommon.

A. ontarionis Wieg. Moist areas near ponds and shaded roadsides. Common. Aug.-Oct.

A. pilosus Willd. Abandoned fields and roadsides. Common. Aug.-Oct.

A. sagittifolius Wedem. Open oak woods. Occasional. Sept.-Oct.

A. simplex Willd. Moist areas near ponds and roadsides. Occasional. Aug.-Oct.

Bidens bipinnata L. Pine plantations. Occasional. July-Sept.

B. frondosa L. Moist areas near ponds. Occasional. Aug.-Oct.

Brickellia eupatorioides (L.) Shinners. Clearings in oak woods and open oak woods. Uncommon. July-Aug.

Cacalia atriplicifolia L. Oak woods and roadsides. Common. July-Sept.

*Carduus nutans L. Disturbed areas. Uncommon. June-July.

Chrysanthemum leucanthemum L. Roadsides and other disturbed areas. Occasional. June-July.

Chrysopsis camporum Greene. Roadsides and open oak woods. Very common. May-Oct.

Cirsium discolor (Muhl.) Spreng. Abandoned fields and roadsides. Common. Aug.-Sept.

C. vulgare (Savi) Tenore. Roadsides and other disturbed areas.

Common. Aug.-Sept.

Coreopsis lanceolata L. Roadsides and adjacent prairie. Occasional. May-June.

C. palmata Nutt. Oak woods and shaded roadsides. Occasional. June-July.

Erechtites hieracifolia (L.) Raf. Oak woods. Common. Aug.-Sept.

Erigeron annuus (L.) Pers. Disturbed areas and open oak woods. Occasional. June-July.

E. canadensis L. Abandoned fields. Very common. July-Sept.

- E. strigosus Muhl. Abandoned fields, open oak woods, and roadsides. Very common. May-Aug.
- Eupatorium perfoliatum L. Moist areas near ponds. Occasional. Aug.-Sept.
- E. rugosum Houtt. Oak woods. Very common. July-Oct.
- E. serotinum Michx. Moist areas near ponds and pine plantations. Occasional. Aug.-Sept.
- Gnaphalium obtusifolium L. Abandoned fields and prairie. Common. Aug.-Oct.
- Helianthus annuus L. Planted in fields and escaped from cultivation. Occasional. July-Sept.
- H. divaricatus L. Oak woods. Common. July-Sept.
- H. hirsutus Raf. [incl. H. tuberosus L. and hybrids]. Oak woods and roadsides. July-Sept.
- H. occidentalis Riddell. Borders of woods, clearings in woods, and roadsides. Occasional. July-Sept.
- H. petiolaris Nutt. Firelanes and roadsides. Very common. June-Oct.
- H. rigidus (Cass.) Desf. Borders of woods. Occasional. July-Sept.
- H. strumosus L. [incl. hybrids]. Roadsides. Common. Aug.-Sept.
- Heliospis helianthoides (L.) Sweet. Oak woods and roadsides. Occasional. July-Sept.
- Hieracium longipilum Torr. Open oak woods and their borders. Occasional. July-Sept.
- H. scabrum Michx. Oak woods. Common. Aug.-Sept.
- Krigia virginica (L.) Willd. Abandoned fields and exposed areas in the prairie and oak woods. Common. Apr.-July.
- Lactuca canadensis L. Abandoned fields, oak woods, and roadsides. Common. July-Sept.
- L. scariola L. Abandoned fields and roadsides. Common. July-Sept.
- Liatis aspera Michx. Open oak woods, prairie, and roadsides. Common. Aug.-Sept.
- Matricaria matricarioides (Less.) Porter. Disturbed areas. Occasional. May-July.
- Ratibida pinnata (Vent.) Barnh. Roadsides. Occasional. June-July.
- Rudbeckia hirta L. Prairie and shaded roadsides. Very common. June-Aug.
- Senecio plattensis Nutt. Open oak woods, prairie, and roadsides. Very common. Apr.-May.
- Solidago canadensis L. [incl. S. altissima L.]. Abandoned fields and moist areas near ponds. Common. July-Oct.
- S. gigantea Ait. Abandoned fields. Occasional. Aug.-Sept.
- S. graminifolia (L.) Salisb. [incl. S. media (Greene) Bush]. Borders of woods, moist areas near ponds, and prairie. Occasional. Aug.-Oct.
- S. juncea Ait. Abandoned fields. Occasional. July-Aug.
- S. nemoralis Ait. Open oak woods. Very common. Aug.-Oct.
- S. speciosa Nutt. Open oak woods. Occasional. Aug.-Oct.
- S. ulmifolia Muhl. Oak woods. Occasional. Aug.-Oct.
- Taraxacum officinale Wiggers. Roadsides and other disturbed areas. Occasional. Mar.-Oct.
- Tragopogon dubius Scop. Roadsides. Very common. May-Aug.
- T. pratensis L. Roadsides and other disturbed areas. Occasional. May-July.
- Vernonia missurica Raf. Moist areas near ponds. Common. Aug.-Sept.
- *Xanthium strumarium L. Roadsides. Uncommon.

CONVOLVULACEAE

*Cuscuta cuspidata Engelm. Moist areas near ponds and roadsides. Parasitic on Compositae. Occasional. July-Sept.

Ipomoea hederacea Jacq. Abandoned fields. Common. July-Sept.

I. lacunosa L. Abandoned fields and fencerows. Occasional. July-Aug.

CORNACEAE

Cornus drummondii C.A. Meyer. Fencerows, oak woods, and isolated clones in prairie. Common. May-June.

C. florida L. Oak woods. Uncommon. Apr.-May.

C. racemosa Lam. Fencerows, oak woods, and isolated clones in prairie. Occasional. May-June.

CRUCIFERAE

*Alliaria petiolata (Bieb.) Car. & Gr. Well shaded roadsides and other disturbed areas. Occasional. Apr.-June.

Arabis canadensis L. Oak woods. Common. May-July.

Barbarea vulgaris R. Br. Roadsides and other disturbed areas. Occasional. Apr.-May.

Brassica nigra (L.) Koch. Roadsides. Uncommon.

Capsella bursa-pastoris (L.) Medic. Disturbed areas. Occasional. Apr.-June.

Descurainia pinnata (Walt.) Britt. Roadsides and other disturbed areas. Common. Apr.-May.

Draba reptans (Lam.) Fern. Abandoned fields and roadsides. Common. Apr.

Erysimum asperum (Nutt.) D.C. Borders of woods, open oak woods, and roadsides. Very common. Apr.-July.

Hesperis matronalis L. Roadsides. Escaped from cultivation. Uncommon. May-June.

*Lepidium campestre (L.) R. Br. Disturbed areas. Occasional. May-July.

L. virginicum L. Abandoned fields, firelanes, and roadsides. Very common. Apr.-Oct.

Sisymbrium altissimum L. Roadsides. Occasional. May-July.

S. officinale (L.) Scop. Disturbed areas. Occasional. June-July.

CUCURBITACEAE

Sicyos angulatus L. Borders of woods. Occasional. Aug.-Sept.

CYPERACEAE

Bulbostylis capillaris (L.) C.B. Clarke. Shaded, moist areas in fire-lanes and moist areas near ponds. Occasional. June-July.

Carex blanda Dewey. Oak woods and shaded roadsides. Occasional. Apr.-May.

C. brevior (Dewey) Mack. Oak woods. Common. Apr.-May.

C. davisi Schw. & Torr. Oak woods and shaded roadsides. Occasional. Apr.-May.

- C. lanuginosa Michx. Open oak woods and clearing in woods. Common. Apr.-May.
- C. meadii Dewey. Open oak woods. Common. Apr.-May.
- C. muhlenbergii Schk. Abandoned fields, margins of blowouts, and open oak woods. Very common. Apr.-May.
- C. pensylvanica Lam. Open oak woods. Very common. Apr.-May.
- C. scoparia Schk. Moist areas near ponds. Common. Apr.-May.
- C. umbellata Schk. Margins of blowouts, sparsely vegetated areas in oak woods, and clearings in woods. Very common. Mar.-Apr.
- C. vulpinoides Michx. Disturbed areas. Uncommon. Apr.-May.
- Cyperus erythrorhizos Muhl. Moist areas near ponds. Occasional.
- C. esculentus L. Moist areas near ponds. Occasional.
- C. grayioides Mohlenbrock. Firelanes and margins of blowouts. Occasional.
- C. lupulinus (Spreng.) Marcks. [incl. hybrids and subspecies]. Abandoned fields, firelanes, and margins of blowouts. Very common. June-Aug.
- C. schweinitzii Torr. Firelanes and margins of blowouts. Occasional.
- Eleocharis acicularis (L.) Roem. & Schult. Pond margins. Common. Aug.-Sept.
- E. obtusa (Willd.) Schult. Moist areas near ponds. Occasional. June-July.
- Fimbristylis autumnalis (L.) Roem. & Schult. Pond margins. July-Aug.
- Hemicarpha micrantha (Vahl) Pax. Pond margins. Common.

EBENACEAE

Diospyros virginiana L. Margin of small woodland pond. Uncommon.

ELAEAGNACEAE

Elaeagnus umbellata Thunb. Row plantings in numerous fields. Apr.-May.

EUPHORBIACEAE

- Acalypha rhomboidea Raf. Shaded roadsides and other disturbed areas. Occasional.
- Chamaesyce geyeri (Engelm.) Small. Firelanes and margins of blowouts. Common. July-Sept.
- C. maculata (L.) Small. Firelanes and roadsides. Common. July-Sept.
- C. supina (Raf.) Moldenke. Firelanes and roadsides. Common. June-Sept.
- Croton glandulosus L. Firelanes and margins of blowouts. Common. June-Sept.
- Crotonopsis linearis Michx. Abandoned fields, blowouts and their margins, and firelanes. Very common. June-Sept.
- Euphorbia corollata L. Abandoned fields, prairie, and roadsides. Very common. June-Sept.
- E. marginata Pursh. Roadsides. Uncommon. July-Aug.
- Poinsettia dentata (Michx.) Small. Firelanes and other disturbed areas. Common. June-Sept.

FAGACEAE

Quercus marilandica Muench. [hybridizes with next species]. Codominant of oak woods. Very common. Apr.-May.

Q. velutina Lam. Codominant of oak woods. Very common. Apr.-May.

GERANIACEAE

Geranium carolinianum L. Firelanes and roadsides. Common. May-June.

GRAMINAE

a1. Agropyron repens (L.) Beauv. Oak woods and pine plantations. Occasional. June-July.

Agrostis alba L. Oak woods. Occasional.

A. hyemalis (Walt.) BSP. Abandoned fields and roadsides. Common. June-July.

Andropogon furcatus Muhl. Prairie and roadsides. Common. Aug.-Sept.

A. scoparius Michx. Prairie and roadsides. Common. Aug.-Sept.

A. virginicus L. Disturbed areas and moist areas near ponds. Occasional. Sept.

Aristida desmantha Trin. & Rupr. Prairie without bunch grass. Occasional. July-Aug.

A. purpurascens Poir. Open oak woods. Occasional. Aug.

A. tuberculosa Nutt. Blowouts and their margins, clearings in woods, and disturbed areas. Very common. July-Aug.

Avena sativa L. Disturbed areas. Occasional. May-July.

Bouteloua hirsuta Lag. Margins of blowouts, clearings in woods, and sparsely vegetated areas in prairie. Occasional. Aug.-Sept.

*Bromus ciliatus L. Oak woods. Occasional.

B. inermis Leyss. Roadsides and other disturbed areas. Common. June-July.

*B. japonicus Thunb. Firelanes. Common. May-June.

B. tectorum L. Firelanes and other disturbed areas. Very common.

May-June.

Calamovilfa longifolia (Hook.) Scribn. Margins of blowouts and roadsides. Occasional. July-Aug.

Cenchrus pauciflorus Benth. Firelanes and roadsides. Very common. July-Aug.

Dactylis glomerata L. Abandoned fields and roadsides. Occasional. May-June.

*Danthonia spicata (L.) Beauv. Open oak woods and roadsides. Occasional.

Digitaria filiformis (L.) Koel. Firelanes and roadsides. Common. Aug.-Sept.

D. ischaemum (Schreb.) Muhl. Firelanes and roadsides. Common. Aug.-Sept.

D. sanguinalis (L.) Scop. Firelanes and roadsides. Very common. June-Sept.

Echinochloa crusgalli (L.) Beauv. Moist, disturbed areas and roadsides. Occasional. July-Aug.

Eleusine indica (L.) Gaertn. Roadsides and other disturbed areas. Occasional. July-Aug.

Elymus canadensis L. Borders of woods and roadsides. Common. June-July.

- Eragrostis cilianensis (All.) Mosher. Roadsides. Common. July-Aug.
- E. hypnoides (Lam.) BSP. Pond margins. Common.
- E. pectinacea (Michx.) Nees. Roadsides. Common. June-Sept.
- E. spectabilis (Pursh) Steud. Abandoned fields, prairie, and roadsides. Very common. July-Sept.
- E. trichodes (Nutt.) Wood. Abandoned fields, prairie, and roadsides. Very common. July-Sept.
- Festuca elatior L. Roadsides and other disturbed areas. Common. June-July.
- F. octoflora Walt. Firelanes, roadsides, and other disturbed areas. Common. May.
- Hordeum pusillum Nutt. Roadsides. Common. May-June.
- Koeleria cristata (L.) Pers. Open oak woods and prairie. Occasional.
- Leersia oryzoides (L.) Sw. Pond margins. Uncommon.
- Leptoloma cognatum (Schult.) Chase. Abandoned fields and prairie. Very common. July-Sept.
- *Muhlenbergia frondosa (Poir.) Fern. Moist, shaded roadsides and other disturbed areas. Occasional. Aug.-Sept.
- M. racemosa (Michx.) BSP. Moist, shaded roadsides and other disturbed areas. Occasional. Aug.-Sept.
- M. schreberi J.F. Gmel. Moist, shaded roadsides and other disturbed areas. Occasional. Aug.
- Panicum capillare L. Moist areas near ponds and shaded roadsides. Occasional. July-Sept.
- P. depauperatum Muhl. Open oak woods and prairie. Very common. June-July.
- P. dichotomiflorum Michx. Roadsides along prairie. Occasional. Aug.-Sept.
- P. huachucae Ashe. Moist areas near ponds, pine plantations, and shaded roadsides. Common. June-Aug.
- P. oligosanthes Schult. [incl. P. scribnierianum Nash]. Prairie and open oak woods. Very common. June.
- P. praecoxius Hitchc. & Chase. Borders of woods and prairie. Occasional.
- P. pseudopubescens Nash. Margins of blowouts. Very common. June-July.
- P. virgatum L. Margins of blowouts and roadsides. Common. July-Sept.
- Paspalum ciliatifolium Michx. [incl. P. pubescens Muhl. and P. stramineum Nash]. Firelanes and roadsides. Common. July-Sept.
- Phleum pratense L. Abandoned fields and roadsides. Occasional. June-July.
- *Poa annua L. Disturbed areas. Planted(?).
- P. compressa L. Roadsides and other disturbed areas. Occasional. June.
- P. pratensis L. Oak woods and roadsides. Very common. May.
- *P. sylvestris Gray. Disturbed areas. Occasional. June-July.
- Setaria faberii Herm. Abandoned fields, roadsides, and other disturbed areas. Common. June-Sept.
- S. lutescens (Weigel) Hubb. Roadsides. Occasional.
- S. viridis (L.) Beauv. Roadsides and other disturbed areas. Very common. June-July.
- Sorghastrum nutans (L.) Nash. Prairie with other bunch grasses. Common. Aug.-Sept.
- Sphenopholis obtusata (Michx.) Scribn. Prairie. Uncommon.

Sporobolus clandestinus (Biehler) Hitchc. Oak woods. Common. Aug.-Sept.

Stipa spartea Trin. Prairie and roadsides. Occasional. May.

Tridens flavus (L.) Hitchc. Shaded roadsides. Common. July-Sept.

Triplasis purpurea (Walt.) Chapm. Clearings in woods, firelanes, and sparsely vegetated areas in prairie. Occasional. Aug.-Sept.

Triticum aestivum L. Roadsides and other disturbed areas. Escaped from cultivation. Occasional. May-June.

Zea mays L. Roadsides. Escaped from cultivation.

HYDROPHYLACEAE

Ellisia nyctelea L. Firelanes and other disturbed areas. Occasional. Apr.-May.

HYPERICACEAE

Hypericum mutilum L. Moist areas near ponds. Common. July-Sept.

H. perforatum L. Abandoned fields and roadsides. Occasional. June-Sept.

H. punctatum Lam. Firelanes and other disturbed areas. Occasional. July-Sept.

IRIDACEAE

Iris sp. Roadsides. Escaped from cultivation. Uncommon. May-June.

Sisyrinchium campestre Bickn. Abandoned fields, prairie, and roadsides. Occasional. Apr.-May.

JUGLANDACEAE

Carya ovalis (Wang.) Sarg. Oak woods. Common.

C. texana Buckl. Oak woods. Occasional.

C. tomentosa (Poir.) Nutt. Oak woods. Common.

Juglans nigra L. Oak woods and roadsides. Occasional. May.

JUNCACEAE

Juncus acuminatus Michx. Pond margins. Occasional. May-June.

J. interior Wieg. Shaded, disturbed areas. Occasional. May-June.

J. tenuis Willd. Shaded, disturbed areas. Occasional. May-June.

LABIATAE

Agastache nepetoides (L.) Kuntze. Well shaded, moist areas at borders of woods. Occasional. Aug.-Sept.

Hedeoma hispida Pursh. Roadsides. Occasional. May-July.

H. pulegioides (L.) Pers. Oak woods. Occasional. Aug.-Sept.

Lamium amplexicaule L. Roadsides. Occasional. Apr.-May.

Leonurus cardiaca L. Oak woods and shaded roadsides. Occasional. May-July.

Lycopus americanus Muhl. Moist areas near ponds. Common. July-Sept.

Monarda fistulosa L. Shaded roadsides and other disturbed areas. Occasional. June-Aug.

- M. punctata L. Prairie with little bunch grass and roadsides. Very common. June-Sept.
- Nepeta cataria L. Fencerows, oak woods, and pine plantations. Occasional. June-Sept.
- Prunella vulgaris L. Moist, shaded roadsides. Occasional. July-Sept.
- Pycnanthemum pilosum Nutt. Moist areas near ponds. Occasional. July-Sept.
- Scutellaria lateriflora L. Moist areas near ponds. Occasional. July-Sept.
- S. Leonardii Epling. Oak woods. Occasional. June-July.
- Teucrium canadense L. [incl. T. occidentale Gray]. Shaded borders of woods and roadsides. Common. June-Aug.

LAURACEAE

- Sassafras albidum (Nutt.) Nees. Borders of woods and roadsides. Occasional. Apr.-May.

LEGUMINOSAE

- Amorpha canescens Pursh. Open oak woods, clearings in woods, and prairie. Occasional. June-July.
- Amphicarpa bracteata (L.) Fern. Oak woods. Common. Aug.-Sept.
- Apis americana Medic. Moist areas near ponds. Occasional.
- Astragalus distortus Torr. & Gray. Clearings in woods and prairie. Occasional. Apr.-May.
- Baptisia leucophaea Nutt. Open oak woods. Common. May-June.
- Cassia fasciculata Michx. Firelanes and roadsides. Very common. July-Oct.
- C. marilandica L. Fencerows. Uncommon. July-Aug.
- Cercis canadensis L. Oak woods. Uncommon. Mar.-Apr.
- *Coronilla varia L. Roadside slopes, perhaps planted. June-Oct.
- Crotalaria sagittalis L. Abandoned fields and disturbed areas. Occasional. July-Sept.
- Desmodium glutinosum (Muhl.) Wood. Well shaded border of woods. Uncommon. July-Aug.
- D. illinoense Gray. Open oak woods and roadsides. Very common. June-Aug.
- D. paniculatum (L.) DC. Borders of oak woods. Uncommon. Aug.
- D. sessilifolium (Torr.) Torr. & Gray. Oak woods. Common. Aug.-Sept.
- Gleditsia triacanthos L. Oak woods. Uncommon.
- Glycine max (L.) Merr. Roadsides. Escaped from cultivation.
- Lespedeza capitata Michx. Prairie and roadsides. Common. Aug.-Sept.
- L. stipulacea Maxim. Roadsides. Occasional. Aug.-Sept.
- Medicago lupulina L. Roadsides and other disturbed areas. Common. May-Aug.
- M. sativa L. Roadsides and planted in fields. Occasional. June-Aug.
- Melilotus alba Desr. Abandoned fields and roadsides. Common. June-Sept.
- M. officinalis (L.) Lam. Roadsides. Common. May-Aug.
- Petalostemum candidum (Willd.) Michx. Prairie with abundant bunch grass. Uncommon. July.

P. purpureum (Vent.) Rydb. Sparsely vegetated areas in prairie.
Uncommon. June-July.
Robinia pseudoacacia L. Planted. May-June.
Strophostyles helvola (L.) Ell. Abandoned fields and firelanes.
Very common. July-Sept.
S. leiosperma (Torr. & Gray) Piper. Abandoned fields. Common.
July-Sept.
Tephrosia virginiana (L.) Pers. Clearings in woods. Very common. June-July.
Trifolium hybridum L. Disturbed areas, planted in campgrounds. Common.
May-Aug.
T. pratense L. Abandoned fields and roadsides. Common. May-Sept.
Vicia villosa Roth. Abandoned fields and roadsides. Occasional.
May-July.
Vigna sinensis (L.) Endl. Sandy soil in oak woods. Collected on 13 Aug.
1949 by J.A. Steyermark.

LEMNACEAE

Lemna minor L. Ponds. Very common.
Spirodela polyrhiza (L.) Schleid. Ponds. Very common.

LILIACEAE

Allium vineale L. Abandoned fields and roadsides. Occasional. Apr.-May.
Asparagus officinalis L. Roadsides and other disturbed areas. Occasional. Apr.-June.
Polygonatum commutatum (Schult.) A. Dietr. Borders of woods and under shrubs in fencerows. Occasional. May-June.
Smilacina racemosa (L.) Desf. Oak woods. Occasional. May-June.
Smilax hispida Muhl. Fencerows and oak woods. Common. May.

LYTHRACEAE

Rotala ramosior (L.) Koehne. Pond margins. Occasional. July-Aug.

MALVACEAE

Callirhoe triangulata (Leavenw.) Gray. Prairies and roadsides.
Common. July-Sept.

MELASTOMACEAE

Rhexia virginica L. Moist areas near ponds. Occasional. July-Sept.

MENISPERMACEAE

Menispermum canadense L. Well shaded areas in oak woods. Occasional.
May-June.

MORACEAE

- Cannabis sativa L. Roadsides and other disturbed areas. Common.
July-Aug.
Maclura pomifera (Raf.) Schneider. Borders of woods and fencerows.
Occasional. May.
Morus rubra L. Borders of woods and fencerows. Occasional. May.

NYCTAGINACEAE

- Mirabilis nyctaginea (Michx.) MacM. Roadsides. Common. May-June.

OLEACEAE

- Syringa vulgaris L. Persistent around abandoned farms. Occasional.
Apr.-May.

ONAGRACEAE

- Gaura biennis L. Roadsides. Common. July-Sept.
Ludwigia alternifolia L. Moist areas near ponds. Very common. June-Aug.
L. palustris (L.) Ell. Ponds and their margins. Common.
Oenothera biennis L. [incl. O. strigosa (Rydb.) Mack. & Bush].
Abandoned fields, moist areas near ponds, and oak woods. Occasional.
July-Sept.
O. laciniata Hill. Abandoned fields, firelanes, and other disturbed
areas. Common. May-July.
O. rhombipetala Nutt. Abandoned fields, firelanes, and roadsides.
Very common. June-Sept.

ORCHIDACEAE

- Spiranthes cernua (L.) Rich. Moist areas near ponds, particularly in
Polytrichum mats. Occasional. Aug.-Sept.

OXALIDACEAE

- Oxalis dillenii Jacq. Abandoned fields, roadsides, and other disturbed
areas. Common. May-Sept.
O. stricta L. Moist areas near ponds and shaded roadsides. Occasional.
June-Sept.
O. violacea L. Disturbed areas, firelanes, and oak woods. Common.
Apr.-June.

PAPAVERACEAE

- Corydalis micrantha (Engelm.) Gray. Abandoned fields and sparsely
vegetated areas in prairie. Occasional. Apr.-May.
Dicentra cucullaria (L.) Bernh. Well shaded areas in oak woods.
Uncommon. Apr.

PHYTOLACCACEAE

Phytolacca americana L. Oak woods, pine plantations, and shaded road-sides. Common. June-Sept.

PLANTAGINACEAE

Plantago aristata Michx. Roadsides. Occasional. June-July.

P. lanceolata L. Disturbed areas. Occasional. June-Sept.

P. purshii Roem. & Schult. Prairie with little bunch grass. Common. May-June.

P. rugelii Dcne. Shaded roadsides and other disturbed areas. Common. June-Sept.

P. virginica L. Roadsides. Occasional. May-June.

PLATANACEAE

Platanus occidentalis L. Borders of woods and roadsides. Occasional.

POLEMONIACEAE

Phlox bifida Beck. Oak woods. Very common. Mar.-May.

POLYGALACEAE

Polygala polygama Walt. Sparsely vegetated areas in abandoned fields and prairie. Uncommon. June.

P. sanguinea L. Moist areas near ponds. Common. July-Sept.

POLYGONACEAE

Fagopyrum esculentum Moench. Firelanes. Occasional. May-Sept.

*Polygonella articulata (L.) Meisn. Oak woods. Common. Aug.-Oct.

Polygonum aviculare L. Lanes in oak woods and roadsides. Occasional. June-Sept.

P. coccineum Muhl. Moist areas near ponds. Occasional.

P. convolvulus L. Fencerows and roadsides. Very common. June-Aug.

P. cristatum Engelm. & Gray. Borders of woods, fencerows, and roadsides. Common. July-Sept.

P. fluitans Eaton. Abandoned fields. Occasional. June-Sept.

P. pensylvanicum L. Moist areas near ponds and shaded roadsides. Occasional. July-Sept.

P. punctatum Ell. Ponds and their margins. Occasional. Aug.-Oct.

P. ramosissimum Michx. Open oak woods. Occasional. Aug.-Sept.

P. sagittatum L. Moist areas near ponds. Common. Aug.-Sept.

P. scandens L. Oak woods and roadsides. Common. July-Sept.

P. tenue Michx. Firelanes and sparsely vegetated areas in oak woods. Very common. July-Sept.

P. virginianum L. Shaded, moist areas in oak woods. Occasional. Aug.-Sept.

Rumex acetosella L. Abandoned fields, roadsides, and other disturbed areas. Common. May-Aug.

R. crispus L. Roadsides. Common. May-June.

POTULACACEAE

Claytonia virginica L. Oak woods and shaded roadsides. Occasional. Mar.-May.

*Portulaca oleracea L. Roadsides and other disturbed areas. Uncommon.
*Talinum rugospermum Holz. Clearings in woods. Common. June-Aug.

POTAMOGETONACEAE

Potamogeton diversifolius Raf. Ponds. Common. Aug.-Sept.

PRIMULACEAE

Androsace occidentalis Pursh. Abandoned fields and roadsides. Very common. Mar.-May.

Lysimachia lanceolata Walt. Moist areas near ponds and shaded roadsides. Occasional. June-July.

RANUNCULACEAE

Anemone caroliniana Walt. Exposed slopes at roadside. Occasional. Mar.-May.

A. cylindrica Gray. Oak woods. Common. June-July.

A. virginiana L. Oak woods. Common. June-July.

Aquilegia canadensis L. Shaded roadsides. Uncommon. May-June.

Ranunculus abortivus L. Disturbed areas and oak woods. Occasional. Mar.-June.

RHAMNACEAE

Ceanothus americanus L. Oak woods and prairie with little bunch grass. Common. June-July.

ROSACEAE

Agrimonia parviflora Ait. Moist areas near ponds and in oak woods. Occasional. July-Sept.

Fragaria virginiana Duch. Oak woods and roadsides. Common. Apr.-June.

Geum canadense Jacq. Oak woods and shaded roadsides. Common. May-July.

Malus ioensis (Wood) Britt. Moist areas near ponds and roadsides. Occasional. Apr.-May.

Potentilla monspeliensis L. Roadsides and other disturbed areas. Common. May-Sept.

P. recta L. Roadsides and other disturbed areas. Occasional. May-Aug.

P. simplex Michx. Moist areas near ponds and well shaded areas in oak woods. Common. Apr.-July.

Prunus lanata (Sudw.) Mack. & Bush. Fencerows and roadsides. Common. Apr.-May.

P. persica (L.) Batsch. Shaded roadsides. Uncommon.

P. serotina Ehrh. Pine plantations and roadsides. Common. May.

P. virginiana L. Abandoned fields, fencerows, and the roadsides. Occasional. Apr.-May.
Pyrus communis L. Shaded roadsides. Escaped from cultivation. Uncommon.
Rosa carolina L. Oak woods and their borders. Common. May-July.
*R. multiflora Thunb. Borders of woods and roadsides. Occasional.
May-June.
R. palustris Marsh. Moist areas near ponds. Common. June-Aug.
Rubus allegheniensis Porter. Borders of woods and disturbed prairie near brush piles. Common. May-June.
R. flagellaris Willd. Moist areas near ponds. Common. June-July.
*R. hispida L. Shaded borders of woods. Occasional.
R. occidentalis L. Fencerows and pine plantations. Occasional.
May-June.

RUBIACEAE

Cephaelanthus occidentalis L. Moist areas near ponds. Uncommon. July-Aug.
Diodia teres Walt. Abandoned fields and firelanes. Common. June-Sept.
Gaulium aparine L. Abandoned fields and oak woods. Common. May-June.
G. circaeans Michx. Oak woods. Occasional. June-July.
G. pilosum Ait. Oak woods. Common. June-Sept.

RUTACEAE

Ptelea trifoliata L. Borders of woods and roadsides. Occasional.
May-June.
Zanthoxylum americanum Mill. Fencerows and oak woods. Common. Apr.

SALICACEAE

Populus deltoides Marsh. Moist areas near ponds and roadsides. Occasional. Apr.
*Salix eriocephala Michx. Ditches along paved roads. Uncommon. Apr.
S. humilis Marsh. Moist areas near ponds and prairie. Common. Mar.-Apr.
S. interior Rowlee. Moist areas near ponds and along paved roads.
Occasional. Apr.-June.
S. nigra Marsh. Moist areas near ponds. Occasional. Apr.-May.

SANTALACEAE

Comandra umbellata (L.) Nutt. Open oak woods and prairie. Very common.
May-June.

SAXIFRAGACEAE

Ribes missouriense Nutt. Oak woods. Very common. Apr.-May.
R. odoratum Wendt. Roadsides. Uncommon. Apr.

SCROPHULARIACEAE

- Aureolaria grandiflora (Benth.) Pennell. Oak woods. Occasional.
Aug.-Sept.
- Linaria canadensis (L.) Dumort. Abandoned fields, firelanes, and sparsely vegetated areas in prairie. Very common. Apr.-June.
- *L. dalmatica (L.) Mill. Open oak woods. Occasional. May-Sept.
- Lindernia anagallidea (Michx.) Pennell. Pond margins. Common.
- Penstemon pallidus Small. Oak woods. Very common. May-June.
- Scrophularia lanceolata Pursh. Open oak woods and their borders. Common. May-July.
- Verbascum thapsus L. Abandoned fields, oak woods, and roadsides. Common. June-Sept.
- Veronica arvensis L. Abandoned fields and disturbed areas. Occasional. Apr.-June.
- V. peregrina L. Abandoned fields, roadsides, and other disturbed areas. Common. Apr.-June.

SOLANACEAE

- *Datura stramonium L. In planted fields of sunflowers. July-Sept.
- Physalis heterophylla Nees. Abandoned fields and firelanes. Common. May-Aug.
- P. virginiana Mill. Oak woods. Occasional. May-June.
- Solanum carolinense L. Abandoned fields and disturbed areas. Occasional. June-Sept.
- S. nigrum L. Oak woods and disturbed areas. Occasional. June-Oct.

TILIACEAE

- Tilia americana L. Moist areas in oak woods. Occasional.

ULMACEAE

- Celtis occidentalis L. Oak woods and roadsides. Occasional.
- Ulmus americana L. Moist areas in oak woods and roadsides. Common. Mar.
- U. rubra Muhl. Roadsides. Occasional.

UMBELLIFERAE

- Cryptotaenia canadensis (L.) DC. Moist areas near ponds. Uncommon. June-July.
- Daucus carota L. Roadsides and other disturbed areas. Common. June-Sept.
- Osmorhiza longistylis (Torr.) DC. Oak woods. Uncommon. Apr.-May.
- Pastinaca sativa L. Roadsides. Occasional. May-July.
- Sanicula canadensis L. Well shaded areas in oak woods. Occasional. May-July.

URTICAEAE

Boehmeria cylindrica (L.) Sw. Moist areas near ponds. Common. June-Sept.

Parietaria pensylvanica Muhl. Well shaded areas in oak woods and shaded roadsides. Common. June-Sept.

VERBENACEAE

Phyla lanceolata (Michx.) Greene. Moist areas near ponds. Common. June-Sept.

Verbena hastata L. Moist areas near ponds. Occasional. July-Sept.

V. stricta Vent. Abandoned fields, roadsides, and other disturbed areas. Common. June-Sept.

V. urticifolia L. Roadsides and other disturbed areas. Occasional. July-Aug.

VIOLACEAE

Viola fimbriatula Smith. Moist areas near ponds, particularly in Polytrichum mats. Common. Apr.-May.

V. lanceolata L. Moist areas near ponds, particularly in Polytrichum mats. Common. Apr.-May.

V. papilionacea Pursh. Well shaded, moist areas in oak woods. Occasional. Apr.-May.

V. pedata L. Oak woods. Common. Apr.-May.

V. rafinesquii Greene. Abandoned fields and oak woods. Very common. Apr.-May.

VITACEAE

Parthenocissus quinquefolia (L.) Planch. Fencerows and oak woods. Very common. June-July.

Vitis aestivalis Michx. Well shaded, moist areas in oak woods. Occasional.

V. vulpina L. Abandoned fields, fencerows, and oak woods. Common. May.

XYRIDACEAE

Xyris torta Sm. Moist areas near ponds, particularly in Polytrichum mats. Occasional.

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