

FLORA OF KIOWA COUNTY, OKLAHOMA

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Lottie Opal Baldock

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[ABSTRACT]

This paper presents the results of taxonomic and ecological studies of the plants of Kiowa County, Oklahoma. The collections were begun in 1933 and continued until the summer of 1938; however, little intensive collecting was done until the spring and summer of 1938. The Flora of Kiowa County, Oklahoma includes six species of pteridophytes, one species of gymnosperms, and 489 species of angiosperms. More than one third of these are in Compositae, Gramineae, and Leguminosae. There are 81 families represented. The 11 largest families, with the number of species are Compositae, 86; Gramineae, 58; Leguminosae, 41; Onagraceae, 17; Euphorbiaceae, 16; Cruciferae, 16; Polygonaceae, and Solanaceae, 12 each; Asclepiadaceae, Cyperaceae, and Labiatae, 11 each. The three largest families comprise 37.4 per cent of the total number of species.

[Species names used in the original thesis which appear in brackets have been updated using the USDA Plants Database.]

PREFACE

The main value of studies such as this is to establish the distribution of species and to observe the varying ecological conditions in which the plants under consideration are growing.

Plants considered in this study and included in the list are native wild species and mainly indigenous to the county; however, a few species of cultivated plants are listed in cases where they have escaped cultivation and seem to have established themselves in the new habitat.

The author does not aim to give a complete list of the vascular plants of the county as the time was limited, and such a survey is a fit subject for more advanced graduate work.

INTRODUCTION

This paper presents the results of taxonomic and ecological studies of the plants of Kiowa County, Oklahoma (Figure). The collections were begun in 1933 and continued until the summer of 1938; however, little intensive collecting was done until the spring and summer of 1938. More systematic work has been done with the spring and summer flowering plants than with those flowering in the fall. In most cases the nomenclature is that of *Gray's Manual* (Robinson and Fernald 1908); however, the *Oklahoma Flora* by Stemen and Meyers (1937) was used as a check, and in some cases plants were listed in the latter publication only. For the grasses, Hitchcock (1935) was the final authority.

LOCATION AND SIZE

Kiowa County is in southwestern Oklahoma. It comprises an area of 1,025 square miles, or 656,000 acres [2,655 km²]. The county is bounded by Washita on the north, Greer and Jackson on the west, Tillman on the south, and Comanche and Caddo counties on the east. Hobart, the county seat and largest town, is located in the northwestern part, about 136 miles [219 km] southwest of Oklahoma City. The elevation at Hobart is 1,536 feet [468 m] (Wahlgren).

HISTORY

In 1834, a large military expedition was sent out from Forts Gibson and Towson to stop the warfare among the Indians and to pay a visit to the wild bands of Kiowas, Wichitas, and Comanches who lived among the Wichita Mountains. This was probably the first official expedition to reach any part of Kiowa County. They explored the region about the Wichita Mountains going as far west as North Fork Red River. George Catlin, the famous painter of Indian pictures, was with this expedition and left many pictures of things he observed.

The county was opened to settlement by a proclamation of President McKinley on July 4, 1901. The land was allotted by drawing for a choice. This county was formerly a part of the Kiowa, Comanche, and Apache Indian Reservation. In 1910, a part of the county was taken with a part of Comanche County to form Swanson County (Goke and Holopeter 1931), but the creation of Swanson County was declared illegal by a decision of the Supreme Court of Oklahoma, August 9, 1911, and the territory was restored to the former counties. A part was annexed to Tillman County.

The main industry is farming, with cotton and wheat as the leading crops.

Quarrying of granite is carried on to a small extent.

Original dominant vegetation in the county consisted of grasses, a scattered growth of mesquite (*Prosopis glandulosa* Torr. var. *glandulosa* [= *Prosopis juliflora glandulosa*]), and cactus (*Opuntia humifusa* (Raf.) Raf.). Along the streams, cottonwood (*Populus deltoids* W. Bartram ex Marshall), elm (*Ulmus americana* L.), and pecan (*Carya illinoensis* (Wagenh.) K. Koch) were in predominance. During the winter, the grasses in the valley provide the chief source of feed for livestock. Before the land was open for settlement, these valleys were highly prized among the Indians for grazing purposes.

TOPOGRAPHY

The Wichita Mountains in the south central and eastern portion rise abruptly above the gently rolling plains which are characteristic of the prairies. The mountains are composed of igneous rocks surrounded by sedimentary formations. The igneous rocks are pre-cambrian, but younger than the Proterozoic rocks which they have intruded. Most of the rock is medium to fine grained pink granite, except those of the northern range in the eastern part of the county which are made up of limestone. The granite mountains are covered with a scrubby growth of oaks, but the limestone hills are comparatively barren. The southward facing escarpment which crosses the northern part of the county shows a distinctly different physical feature. This escarpment is composed of calcareous ledges of the Blaine formation (Sawyer 1929).

STREAMS AND DRAINAGE

North Fork Red River, bounding the county on the west, and Washita River, along the northeastern edge, are the two largest streams. Most of the drainage waters flow through them from their several

tributaries. East Fork of Deep Red Creek and its tributaries with East, West, and Middle Otter Creeks drain the lower southern section. North Fork Red River with Elk Creek and their tributaries drain the western section. The northeastern section of the county is drained by Washita River and Rainy Mountain, Saddle Mountain, and Stinking Creeks.

SOIL

The soils of 95 per cent of the area of Kiowa County are heavy in texture either in the surface soil or subsoil, with clay loam mainly in both; the rest, which occur in irregularly shaped areas in different parts of the county, are sandy. The sandy soils are found along the two rivers mentioned, at the western boundary and the northeastern corner. The outstanding difference between the sandy soils and the clay loam soils is that the material of the sandy areas is much more friable throughout the surface soil and subsoil, continuing to a depth of several inches.

Foard silt loam comprises about 128,896 acres [522 km²] (Goke and Holopeter 1931) or 19.6 per cent of the total. This type has a dark-brown surface soil that extends to a depth of six inches, where it gradually passes downward to a dark-brown or brown heavy plastic subsoil. The color in this layer gradually changes to a yellowish-brown. At a depth of 18 inches [46 cm], lime is present in sufficient quantities to effervesce in acid.

Tillman clay loam is next in importance with 112,064 acres [454 km²] or 17.1 per cent. It has a chocolate-brown friable surface soil that passes at a depth of six inches [15 cm] into a dark-brown friable subsurface soil. At about 12 inches [30 cm], this changes to a chocolate-brown or reddish-brown clay subsoil which is tough and plastic when wet and very hard and dense when dry. At a depth of about 24 inches [60 cm], lime is first reached in the

form of hard concretions or in a finely disseminated form.

The third important type of soil is Vernon clay loam which covers 65,536 acres [265 km²] or 10.0 per cent of the land. The surface soil of Vernon clay loam consists of reddish-brown, brown, or chocolate-brown friable material to a depth of four inches. The subsoil is reddish-brown granular clay loam which continues to a depth of about 12 inches [30 cm] where it changes into a reddish-brown clay which is plastic when wet but very hard when dry. This soil is found chiefly on slopes along the valleys and in areas that are cut by many drainage channels. Both Tillman and Vernon clay loams are best suited for pasture (Goke and Holopeter 1931), as shown by the severely eroded areas over the county where these soils have not been cultivated carefully. In many places, erosion is quite severe although the land has been cultivated little more than 30 years. Foard silt loam belongs to the better productive group of soils and is more suited to cultivation.

CLIMATE

The average yearly rainfall for Hobart from 1903 to 1930 was 28.13 inches [71 cm]. The months April, May, and June received the most rainfall while December, January, and February proved to be the driest months for those years. The lowest average rainfall came in the year 1910, which was 12.72 inches [32 cm]. The other extreme was 43.33 inches [110 cm] for 1908 (Wahlgren); however, the year 1938 proved a record one for moisture. From January to May, the average precipitation was from an inch to an inch and one-half [2.5-3.75 cm] above the average for each month.

Prevailing winds are from the south in all months except December when they are from the north. The lowest temperature recorded over a period of 28 years is -11°F [-23.9°C]; the highest is 114°F [45.6°C], with an average minimum temperature of 48°F

[8.9°C] and an average maximum of 74.6°F [23.7°C] for the period. The average date of the last killing frost comes on November 2. There is an average growing season of 213 days.

PREVIOUS COLLECTORS

Dr. G. G. Shumard (Bull 1932; Eskew 1937) was perhaps the first person to make a collection of plants in this vicinity. He was with Captain R. B. Marcy on his expedition of 1852 to the source of the North Fork of the Red River. The expedition entered the state near the center of the southern border and passed through the Wichita Mountains and into the panhandle of Texas. About 100 plants were collected within the present boundaries of Oklahoma.

Probably the largest single collection was made by the late Dr. G. W. Stevens in 1913 while he was preparing his *Flora of Oklahoma*. This complete collection is now in the Gray Herbarium at Harvard. Oklahoma Agricultural and Mechanical College has more specimens from the Stevens collection than any other herbarium within the state.

Professor Robert Stratton of Oklahoma Agricultural and Mechanical College has collected in the vicinity to add to his personal herbarium of Leguminosae and for the college herbarium. In 1932, Miss Rotha Bull made a collection of the plants of Greer County which is separated from Kiowa County on the west by North Fork Red River. Mr. C. T. Eskew made a collection of plants in 1937 of the Wichita National Forest within the boundaries of Comanche County which adjoins Kiowa County on the east.

ECOLOGY

The most common pre-vernal plants are *Claytonia virginica* L., *Glandularia canadensis* (L.) Nutt. [= *Verbena canadensis*], *Viola bicolor* Pursh [= *Viola rafinesquii*], *V. sororia* Willd.

[= *V. papilionacea*], *Erysimum asperum* (Nutt.) DC., *Anemone caroliniana* Walter, *A. berlandieri* Pritz. [= *A. decapetala*], *Lithospermum incisum* Lehm. [= *Lithospermum angustifolium*], *Cercis canadensis* L., *Glandularia bipinnatifida* (Nutt.) Nutt. [= *Verbena bipinnatifida*], *Allium canadense* L. var. *mobile* (Regel) Ownbey [= *Allium mutabile*], *A. drummondii* Regel [= *A. nuttallii*], *Nothascordum bivalve* (L.) Britton, and *Quincula lobata* (Torr.) Raf. [= *Physalis lobata*]. All of these were to be found on the streams and ravines. The prairie communities have fewer flowering plants; the outstanding ones are *Glandularia bipinnatifida*, *Allium drummondii*, *Nothascordum bivalve*, *Quincula lobata*, *Anemone*, and *Lepidium* [= *Lepidium apetalum*]. Liliaceae and Violaceae have more representatives at this time than other families.

Among the spring plants are *Tradescantia obiensis* Raf. [= *Tradescantia reflexa*], *T. occidentalis* (Britton) Smyth, *Baptisia bracteata* Muhl. ex Elliott, *B. australis* (L.) R. Br., *Corydalis*, *Oxalis*, and a great percent of *Cruciferae*, all of which appear on mountains and streams with the budding trees and other woody plants. *Cruciferae* are in more abundance on the prairies along with *Sphaeralcea coccinea* (Nutt.) Rydb. [= *Malvastrum coccineum*], *Opuntia humifusa*, *Oenothera laciniata* Hill, *Hordeum pusillum* Nutt., *Bromus catharticus* Vahl. [= *Bromus unioides*], *Vulpia octoflora* (Walter) Rydb. [= *Festuca octoflora*], *Aristida purpurea* Nutt., *Yucca glauca* Nutt., and *Oxalis*. Grasses begin flowering in late spring and early summer when they become predominant.

Leguminosae is another family which flowers mainly in the summer. Other plants which become predominant at this time are *Argemone albiflora* Hornem. [= *Argemone alba*], *A. polyanthemos* (Fedde) G.B. Ownbey [= *A. intermedia*], *Cirsium* [= *Cirsium discolor*], *Centaurea americana* Nutt., *Gaillardia*, *Tribulus terrestris* L., *Plantago patagonica* Jacq. [= *Plantago purshii*], *Krameria lanceolata* Torr. [= *Krameria secundiflora*], *Erigeron strigosus* Muhl. ex Willd.

[=*Erigeron ramosus*], *Chloris verticillata* Nutt., *Solanum elaeagnifolium* Cav., *S. rostratum* Dunal, *Polygonum*, *Salsola tragus* L. [= *Salsola kali*], and the greatest percent of Euphorbiaceae.

During the latter part of the summer the composites begin to gain predominance as for number of species in flower, but the grass family is still the most important as to the amount of space it covers. During the autumn the outstanding plants are *Helianthus*, *Rhus*, *Vernonia*, *Euphorbia marginata* Pursh, *Liatris punctata* Hook., *Solidago*, *Aster*, *Ambrosia*, *Xanthium*, *Sorghastrum nutans* (L.) Nash, and others of the tall grass group.

Annual and biennial plants on the mountains and streams are not so different from those of the prairies in the summer and fall as they are in the spring. The fall grasses are more adapted to the former habitat. Many woody plants are seeding in the autumn, and in the latter part of the year the mountainsides are colorful with the brilliant foliage of the trees and shrubs.

Along the streams, trees and woody plants are dominant. *Carya illinoensis*, *Juglans nigra* L., *Rhus glabra* L., *Ulmus americana*, *Vitis*, *Fraxinus*, *Toxicodendron*, *Sapindus saponaria* L. var. *drummondii* (Hook. & Arn.) L.D. Benson [= *Sapindus drummondii*], and *Salix nigra* Marshall are the outstanding plants in this type of vegetation. These same genera are found on the mountains, but species of *Quercus* become dominant in the eastern section of the county. Other mountain plants are *Rhus aromatica* Aiton [= *Rhus trilobata*], *Ptelea trifoliata* L., *Ribes aureum* Pursh, *Baptisia*, *Sedum*, *Ceanothus americanus* L., *Rubus*, *Galium aparine* L., and *Poa arachnifera* Torr.

Plants in dry sand and along the rivers form another distinctly different type. *Artemisia*, *Mentzelia*, *Sporobolus*, and species of *Prunus* form the dominant covering on the sand hills, and *Tamarix* [= *Tamarix gallica*] is found in abundance in damp sandy soil. Other outstanding plants here are

Glandularia canadensis, *Comandra umbellata* (L.) Nutt. ssp. *pallida* (A. DC.) Piehl [= *Comandra pallida*], *Lithospermum incisum*, *Cenchrus*, and a species of *Gaura*.

The types of vegetation mentioned above are all connected by the prairie type which covers the greatest percent of the area of the county. Here is found one main association in the undisturbed pastures. *Prosopis glandulosa* var. *glandulosa* forms an orchard type of growth, and under the trees the dominant vegetation is *Bouteloua dactyloides* (Nutt.) J.T. Columbus [= *Buchloe dactyloides*] interspersed with *Opuntia humifusa*.

SUMMARY

The Flora of Kiowa County, Oklahoma includes six species of pteridophytes, one species of gymnosperms, and 489 species of angiosperms. More than one third of these are in Compositae, Gramineae, and Leguminosae. There are 81 families represented. The 11 largest families, with the number of species, are Compositae, 86; Gramineae, 58; Leguminosae, 41; Onagraceae, 17; Euphorbiaceae, 16; Cruciferae, 16; Polygonaceae and Solanaceae, 12 each; and Asclepiadaceae, Cyperaceae, and Labiatae, 11 each. The three largest families comprise 37.4 per cent of the total number of species.

The county lies in the plains region. The prairies are broken by the Wichita Mountains and a few streams, of these the North Fork Red River is the largest. The vegetation is mainly that adapted to the prairies. Tall grass is found near mountains or streams; it is predominately a short-grass area. Trees are to be seen along streams or on mountainsides. The only native trees on the prairies are mesquite (*Prosopis glandulosa* var. *glandulosa*) which grow in association with cactus (*Opuntia humifusa*) and buffalo grass (*Bouteloua dactyloides*).

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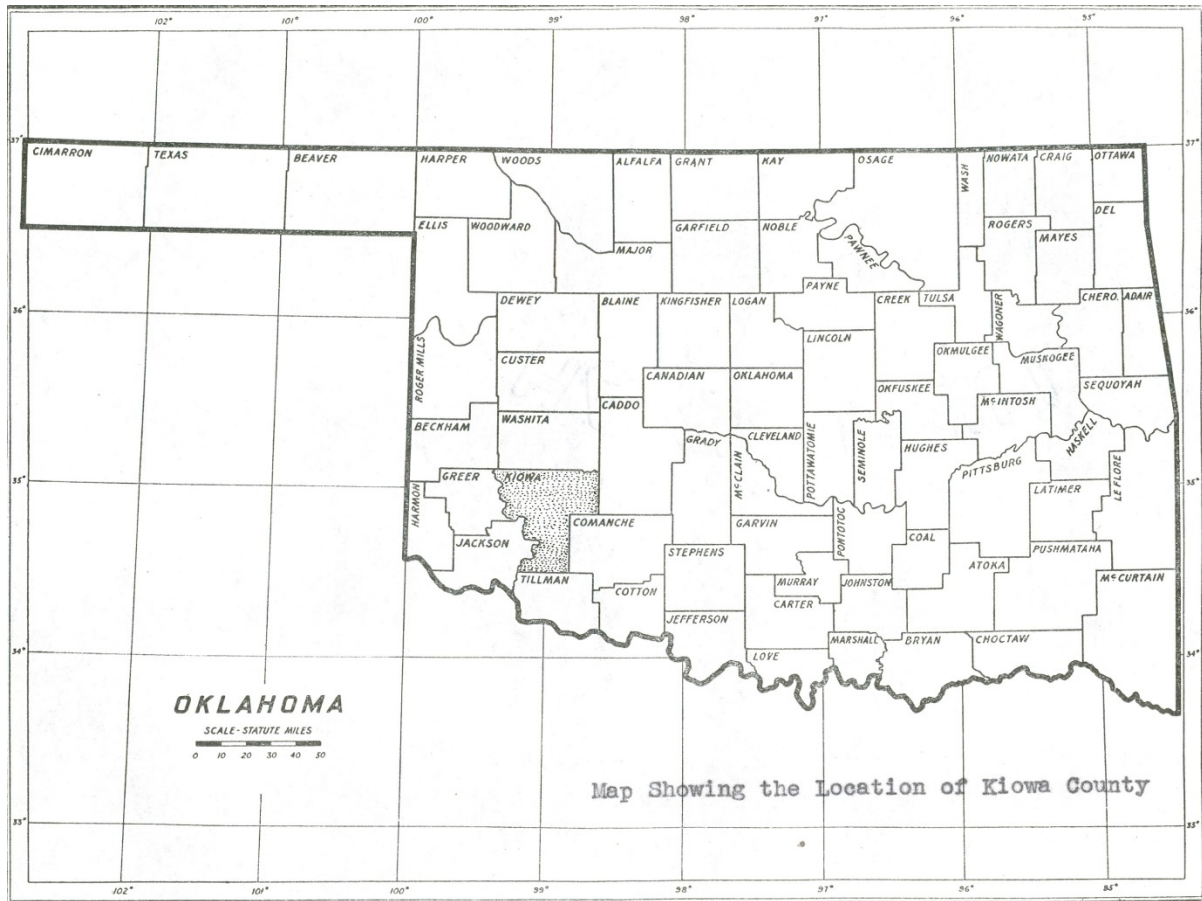


Figure Map of Kiowa County, Oklahoma

APPENDIX A

List of Species, Kiowa County, OK

[Nomenclature has been updated using the PLANTS Database (<http://plants.usda.gov/plants>).]

PTERIDOPHYTA

Dryopteridaceae [Polypodiaceae]

Woodsia obtusa (Spreng.) Torr. blunt-lobed woodsia mountainsides

Marsileaceae

Marsilea vestita Hook. & Grev. water fern, hairy pepperwort low places, pastures

Pteridaceae [Polypodiaceae]

Cheilanthes eatonii Baker Eaton's lip fern mountainsides

Cheilanthes lanosa (Michx.) D.C. Eaton hairy lip fern mountainsides

[=*Cheilanthes lanulosa* (Michx.) Watt]

Notholaena standleyi Maxon Standley's notholaena mountainsides

Pellaea atropurpurea (L.) Link purple cliff brake mountainsides

SPERMATOPHYTA

Gymnosperms

Cupressaceae [Pinaceae]

Juniperus virginiana L. red cedar hillsides

Angiosperms

Acanthaceae

Ruellia pedunculata Torr. ex A. Gray stalked ruellia mountainsides;
 summer, fall

Ruellia sp. hairy ruellia rivers; summer, fall
 [= *Ruellia ciliosa* Pursh, misapplied]

Agavaceae [Liliaceae]

Yucca glauca Nutt. yucca, bear-grass, soap weed pastures, roadsides;
 spring

Aizoaceae

Mollugo verticillata L. carpet-weed pastures, common;
 summer

Amaranthaceae

Amaranthus blitoides S. Watson prostrate amaranth fields, pastures,
 common; summer

<i>Amaranthus hybridus</i> L.	dark green pig-weed	pastures; spring to fall
<i>Amaranthus retroflexus</i> L.	red root	roadsides; spring, summer
<i>Amaranthus tuberculatus</i> (Moq.) Sauer	western water-hemp	pastures; summer
Anacardiaceae		
<i>Rhus aromatica</i> Aiton [= <i>Rhus canadense</i> Mill., <i>Rhus trilobata</i> Nutt.]	fragrant sumac, sumac	mountains, streams; spring, summer
<i>Rhus glabra</i> L.	smooth upland sumac	creeks, hillsides; common; summer
<i>Toxicodendron radicans</i> (L.) Kuntze	poison ivy	mountainsides, streams; summer
Apocynaceae		
<i>Amsonia tabernaemontana</i> Walter	broad-leaved amsonia	mountain ravines; spring
<i>Apocynum cannabinum</i> L.	dogbane, Indian hemp	roadsides; common; summer
Asclepiadaceae		
<i>Asclepias amplexicaulis</i> Sm.	milkweed, silkweed	near rivers; spring, summer
<i>Asclepias asperula</i> (Decne.) Woodson ssp. <i>capricornu</i> (Woodson) Woodson [= <i>Asclepiodora decumbens</i> (Nutt.) A. Gray]	milkweed	mountainsides; spring
<i>Asclepias engelmanniana</i> Woodson [= <i>Acerates auriculata</i> Engelm. ex Torr.]	green milkweed	roadsides; summer
<i>Asclepias latifolia</i> (Torr.) Raf.	broad-leaved milkweed	dry sandy soils; summer
<i>Asclepias stenophylla</i> A. Gray [incl. <i>Acerates angustifolia</i> (Nutt.) Decne.]	narrow-leaved milkweed	prairies; summer
<i>Asclepias tuberosa</i> L.	butterfly weed	sand, near rivers; spring, summer
<i>Asclepias verticillata</i> L.	whorled milkweed	mountainsides; spring, summer
<i>Asclepias viridiflora</i> Raf. [= <i>Acerates viridiflora</i> (Raf.) Pursh ex Eaton]	green milkweed	prairies; summer
<i>Asclepias viridis</i> Walter [= <i>Asclepiodora viridis</i> (Walter) A. Gray]	oblong-leaved milkweed	prairies; summer
<i>Gonolobus suberosus</i> (L.) R. Br. [= <i>Vincetoxicum gonocarpus</i> Walter]	large-leaved angle-pod	rivers; early summer
Boraginaceae		
<i>Heliotropium convolvulaceum</i> (Nutt.) A. Gray	sand heliotrope	rivers; late summer
<i>Heliotropium indicum</i> L.	Indian heliotrope	pastures, creeks; spring to fall

<i>Lappula occidentalis</i> (S. Watson) Greene [= <i>Lappula redowskii</i> (Hornem.) Greene var. <i>occidentalis</i> (S. Watson) Rydb.]	western stick-weed	mountainsides; spring
<i>Lithospermum incisum</i> Lehm. [= <i>Lithospermum angustifolium</i> Michx.]	puccoon	dry sandy soils; spring
<i>Myosotis verna</i> Nutt. [= <i>Myosotis virginica</i> (L.) Britton, Sterns & Poggenb., misapplied]	spring or early scorpion-grass	sand near rivers; spring
<i>Onosmodium bejariense</i> DC. ex A. DC. [= <i>Onosmodium occidentale</i> Mack.]	western false gromwell	prairies; summer
Cactaceae		
<i>Echinocereus reichenbachii</i> (Terscheck ex Walp.) J.N. Haage [= <i>Echinocereus caespitosus</i> (Engelm.) Engelm.]	lace cactus	mountainsides
<i>Opuntia humifusa</i> (Raf.) Raf.	western prickly-pear	pastures; common; spring
Campanulaceae [incl. Lobeliaceae]		
<i>Lobelia cardinalis</i> L.	cardinal flower, red lobelia	mountain ravines; summer
<i>Lobelia spicata</i> Lam. var. <i>leptostachys</i> (A. DC.) Mack. & Bush [= <i>Lobelia leptostachys</i> A. DC.]	spiked lobelia	mountainsides; summer
<i>Triodanis leptocarpa</i> (Nutt.) Nieuwl. [= <i>Specularia leptocarpa</i> (Nutt.) A. Gray]	western Venus's looking-glass	pastures; spring, summer
<i>Triodanis perfoliata</i> (L.) Nieuwl. [= <i>Specularia perfoliata</i> (L.) A. DC.]	Venus's looking-glass	prairies, streams; spring, summer
Capparaceae		
<i>Cleome serrulata</i> Pursh <i>Cleomella angustifolia</i> Torr.	pink cleome, stinking clover	prairies; summer
Caprifoliaceae		
<i>Symphoricarpos orbiculatus</i> Moench <i>Viburnum rufidulum</i> Raf.	coral-berry, Indian currant southern black-haw	streams; summer mountainsides; spring
Caryophyllaceae [incl. Illecebraceae]		
<i>Cerastium brachypodum</i> (Engelm. ex A. Gray) B.L. Rob.	short-stalked chickweed	prairies; spring
<i>Cerastium nutans</i> Raf.	long-stalked chickweed	mountainsides; spring
<i>Paronychia jamesii</i> Torr. & A. Gray <i>Silene antirrhina</i> L. <i>Stellaria media</i> (L.) Vill.	James's whitlow-wort sleepy catchfly common chickweed, starwort	prairies; summer roadsides; spring low damp places; early spring

Chenopodiaceae

<i>Chenopodium album</i> L.	lamb's quarters	roadsides, common; summer
<i>Cycloloma atriplicifolium</i> (Spreng.) J.M. Coult.	sand tumbleweed	rivers; summer
<i>Monolepis nuttalliana</i> (Schult.) Greene	monolepis	common near dwellings; spring
<i>Salsola tragus</i> L. [= <i>Salsola kali</i> L., misapplied]	Russian thistle	roadsides, cultivated soil; summer

Commelinaceae

<i>Commelina erecta</i> L. [incl. <i>Commelina crispa</i> Woot.]	slender day-flower, crinkle-leaved day-flower	mountainsides, creeks; spring, summer, fall
<i>Commelina virginica</i> L. [incl. <i>Commelina hirtella</i> Vahl]	Virginia day-flower, bearded day-flower	mountain ravines, streams; summer
<i>Tradescantia occidentalis</i> (Britton) Smyth	western spiderwort, trinity	mountainsides; spring

Compositae

<i>Achillea millefolium</i> L. [incl. <i>Achillea lanulosa</i> Nutt.]	common yarrow, wooly common yarrow	roadsides, prairies, creeks; summer
<i>Ambrosia artemisiifolia</i> L.	ragweed	ravines; summer, fall
<i>Ambrosia psilostachya</i> DC.	western ragweed	roadsides, pastures; fall
<i>Ambrosia trifida</i> L.	great ragweed	creeks; summer, fall
<i>Amphiachyris dracunculoides</i> (DC.) Nutt.	August flower kindling-weed	roadsides; fall
<i>Aphanostephus ramosissimus</i> DC. [= <i>Aphanostephus humilis</i> (Benth.) A. Gray, misapplied]	sand-daisy	hillsides; summer
<i>Aphanostephus skirrhobasis</i> (DC.) Trel.	white-flowered sand-daisy	rivers; summer
<i>Artemisia ludoviciana</i> Nutt.	dark-leaved mugwort	dry hillsides near rivers; late summer
<i>Baccharis salicina</i> Torr. & A. Gray	willow baccharis	rivers; early summer
<i>Berlandiera betonicifolia</i> (Hook.) Small [= <i>Berlandiera texana</i> DC.]	Texas berlandiera	streams; summer
<i>Brickellia eupatorioides</i> (L.) Shinnars	false boneset	prairies; summer, fall
<i>Centaurea americana</i> Nutt.	centaurea	roadsides; summer
<i>Chaetopappa asteroides</i> Nutt. ex DC.	chaetopappa	rivers; spring
<i>Chaetopappa ericoides</i> (Torr.) G.L. Nesom [= <i>Aster ericaefolius</i> Rothr.]	aster	hillsides; summer
<i>Chrysopsis pilosa</i> Nutt.	Nuttall's golden aster	mountainsides; summer, fall
<i>Chrysopsis</i> sp. [= <i>Chrysopsis villosa</i> (Pursh) Nutt. ex DC. var. <i>hispida</i> (Hook.) A. Gray, misapplied]	hispid golden aster	rivers; summer

<i>Cirsium ochrocentrum</i> A. Gray	yellow-spined thistle	prairie pastures; summer
<i>Cirsium</i> sp. [= <i>Cirsium discolor</i> (Muhl. ex Willd.) Spreng., misapplied]	field thistle	roadsides; common; summer
<i>Conyza canadensis</i> (L.) Cronquist [= <i>Erigeron canadensis</i> L.]	horsetail, horse-weed	pastures; summer, fall
<i>Coreopsis grandiflora</i> Hogg ex Sweet	large-flowered coreopsis	rivers; summer
<i>Coreopsis tinctoria</i> Nutt.	golden coreopsis, garden tickseed	streams; spring, summer
<i>Coreopsis</i> sp. [= <i>Coreopsis verticillata</i> L., misapplied]	whorled tickseed	rivers; late summer
<i>Dracopis amplexicaulis</i> (Vahl) Cass. [= <i>Rudbeckia amplexicaulis</i> Vahl]	cone flower	streams; late spring
<i>Echinacea angustifolia</i> DC. [= <i>Brauneria angustifolia</i> (DC.) A. Heller]	narrow-leaved purple cone-flower	hillsides; spring to fall
<i>Engelmannia peristenia</i> (Raf.) Goodman & C.A. Lawson [= <i>Engelmannia pinnatifida</i> A. Gray ex. Nutt.]	engelmannia	hillsides; summer
<i>Erigeron strigosus</i> Muhl. ex Willd. [= <i>Erigeron ramosus</i> (Walter) Britton, Sterns & Poggenb.]	daisy fleabane	pastures; spring
<i>Euthamia gymnospermoides</i> Greene	viscid bushy goldenrod	prairies; late summer
<i>Evax prolifera</i> Nutt. ex DC.	rabbit tobacco	roadsides, pastures; spring, summer
<i>Evax verna</i> Raf. [= <i>Evax multicaulis</i> DC.]	rabbit tobacco	roadsides, pastures; common; spring, early summer
<i>Flaveria campestris</i> J.R. Johnst.	plains flaveria	dry plains; late summer
<i>Gaillardia pulchella</i> Foug.	showy gaillardia	hillsides; summer, fall
<i>Gaillardia suavis</i> (A. Gray & Engelm.) Britton & Rusby	cut-leaved rayless three-nerved gaillardia	prairie roadsides; spring
<i>Gaillardia</i> sp. [= <i>Gaillardia aristata</i> Pursh, misapplied]	gaillardia	roadsides; common; summer
<i>Grindelia papposa</i> G.L. Nesom & Suh [= <i>Haplopappus ciliatus</i> (Nutt.) DC.]	rosin-weed	prairie roadsides; spring to fall
<i>Grindelia squarrosa</i> (Pursh) Dunal	broad-leaved gum plant, rosin-weed	rivers; summer, fall
<i>Helenium amarum</i> (Raf.) H. Rock var. <i>amarum</i> [= <i>Helenium tenuifolium</i> Nutt.]	fine-leaved sneezeweed	creeks; summer
<i>Helenium amarum</i> (Raf.) H. Rock var. <i>badium</i> (A. Gray ex S. Watson) Waterf. [= <i>Helenium tenuifolium</i> Nutt. var. <i>badium</i> A. Gray ex S. Watson]	fine-leaved sneezeweed	streams; summer

<i>Helenium autumnale</i> L.	false or swamp sunflower	creeks; late summer
<i>Helianthus annuus</i> L.	common sunflower	prairies; common; summer
<i>Helianthus hirsutus</i> Raf.	stiff-haired sunflower	mountainsides; summer
<i>Helianthus maximiliani</i> Schrad.	Maximilian's sunflower	prairies; late summer
<i>Helianthus petiolaris</i> Nutt.	sunflower	roadsides; common; summer
<i>Heterotheca subaxillaris</i> (Lam.) Britton & Rusby	heterotheca	hillsides; summer
<i>Hymenopappus scabiosaesus</i> L'Hér. var. <i>corymbosus</i> (Torr. & A. Gray) B.L. Turner	corymbed, smooth hymenopappus	roadside ditches; summer
[= <i>Hymenopappus corymbosus</i> Torr. & A. Gray]		
<i>Hymenopappus scabiosaesus</i> L'Hér. var. <i>scabiosaesus</i>	Carolina hymenopappus	roadsides; spring
[= <i>Hymenopappus carolinensis</i> (Lam.) Porter]		
<i>Hymenopappus tenuifolius</i> Pursh	wooly white hymenopappus	prairies; spring to fall
<i>Iva annua</i> L. [= <i>Iva ciliata</i> Willd.]	rough marsh elder	creeks; late summer
<i>Lactuca ludoviciana</i> (Nutt.) Riddell	western lettuce	prairies; common; summer to fall
<i>Lactuca</i> sp. [= <i>Lactuca virosa</i> L., misapplied]	prickly lettuce	fields, pastures; late summer
<i>Liatris punctata</i> Hook.	dotted button snakeroot, small blazing star	prairies; late summer
<i>Liatris squarrosa</i> (L.) Michx.	scaly blazing star	roadsides; summer
<i>Packera plattensis</i> (Nutt.) W.A. Weber & Á. Löve [= <i>Senecio plattensis</i> Nutt.]	prairie ragwort	pastures, prairies; spring
<i>Pyrrhopappus carolinianus</i> (Walter) DC.	leaf-stemmed false dandelion	fields; infrequent; spring
<i>Pyrrhopappus grandiflorus</i> (Nutt.) Nutt. [= <i>Pyrrhopappus scaposus</i> DC.]	rough false dandelion	roadsides; prairies; spring
<i>Ratibida columnifera</i> (Nutt.) Woot. & Standl. [= <i>Lepachys columnaris</i> (Pursh) Torr. A. Gray]	lepachys, cone-flower	common; late spring, summer
<i>Senecio riddellii</i> Torr. & A. Gray	Riddell's ragwort	prairies; late summer
<i>Silphium integrifolium</i> Michx.	entire-leaved rosin-weed	prairies; late summer
<i>Silphium laciniatum</i> L.	compass-plant	prairies; common; summer
<i>Solidago altissima</i> L.	tall goldenrod	hillsides; late summer
<i>Solidago arguta</i> Aiton var. <i>boottii</i> (Hook.) Palmer & Steyererm. [= <i>Solidago boottii</i> Hook.]	Boott's goldenrod, wreath goldenrod	mountains; summer, fall

<i>Solidago gigantea</i> Aiton [= <i>Solidago serotina</i> Aiton]	late goldenrod	creeks; late summer
<i>Solidago missouriensis</i> Nutt.	Missouri goldenrod	mountainsides; summer
<i>Solidago petiolaris</i> Aiton	downy ragged goldenrod	fields; fall
<i>Solidago radula</i> Nutt.	western rough goldenrod	prairies; summer
<i>Sonchus asper</i> (L.) Hill	spiny sow-thistle	roadsides; spring to fall
<i>Symphotrichum divaricatum</i> (Nutt.) G.L. Nesom [<i>Aster exilis</i> Elliott]	slim aster	creeks; summer
<i>Symphotrichum ericoides</i> (L.) G.L. Nesom [= <i>Aster multiflorus</i> Aiton]	many-flowered aster	prairies; summer, fall
<i>Symphotrichum falcatum</i> (Lindl.) G.L. Nesom var. <i>commutatum</i> (Torr. & A. Gray) G.L. Nesom [= <i>Aster commutatus</i> (Torr. & A. Gray) A. Gray]	aster	prairies; spring
<i>Symphotrichum fendleri</i> (A. Gray) G.L. Nesom [= <i>Aster fendleri</i> A. Gray]	Fendler's aster	pastures; summer
<i>Taraxacum officinale</i> F.H. Wigg. [= <i>Taraxacum vulgare</i> Lam.]	common dandelion	fields, pastures; spring to fall
<i>Tetraneuris linearifolia</i> (Hook.) Greene [= <i>Actinea linearifolia</i> (Hook.) Kuntze]	fine-leaved actinea	hillsides; summer
<i>Tetraneuris scaposa</i> (DC.) Greene [= <i>Actinea scaposa</i> (DC.) Kuntze var. <i>linearis</i> (Nutt.) B.L. Rob.]	narrow-leaved actinea	ivers; summer
<i>Thelesperma filifolium</i> (Hook.) A. Gray [= <i>Thelesperma trifidum</i> (Poir.) Britton]	thelesperma, tickseed	prairies, mountains; common; summer to fall
<i>Thelesperma megapotamicum</i> (Spreng.) Kuntze [= <i>Thelesperma gracile</i> (Torr.) A. Gray]	rayless thelesperma	prairies; summer
<i>Vernonia baldwinii</i> Torr.	Baldwin's ironweed	ivers; summer
<i>Vernonia gigantea</i> (Walter) Trel. [= <i>Vernonia altissima</i> Nutt.]	tall ironweed	streams; summer
<i>Vernonia missurica</i> Raf.	Missouri ironweed	prairies; fall
<i>Xanthisma texanum</i> DC.	Texas xanthisma, sleepy daisy	prairies; summer
<i>Xanthium strumarium</i> L. [= <i>Xanthium pensylvanicum</i> Wallr., <i>Xanthium speciosum</i> Kearney]	cocklebur, great cocklebur	roadsides, ravines; common; summer, fall
Convolvulaceae		
<i>Cuscuta cephalanthi</i> Engelm.	button-bush dodder	parasite; summer
<i>Cuscuta cuspidata</i> Engelm.	cuspidate dodder	pastures; ragweeds; summer
<i>Cuscuta indecora</i> Choisy	pretty dodder	on composites; summer
<i>Evolvulus nuttallianus</i> Schult. [<i>Evolvulus argenteus</i> Pursh]	dwarf morning-glory	prairies; summer

<i>Ipomoea leptophylla</i> Torr.	bush morning-glory	roadsides; early summer
<i>Ipomoea pandurata</i> (L.) G. Mey.	wild potato vine	roadside ditches; summer
Cornaceae		
<i>Cornus drummondii</i> C.A. Mey. [= <i>Cornus asperifolia</i> Michx., misapplied]	rough-leaved dogwood	streams; spring
<i>Cornus florida</i> L.	flowering dogwood	mountainsides; spring
Crassulaceae		
<i>Sedum nuttallianum</i> Raf.	Nuttall's stonecrop	rocks on mountainsides; spring
Cruciferae		
<i>Capsella bursa-pastoris</i> (L.) Medik.	shepherd's purse	fields, meadows; spring
<i>Descurainia pinnata</i> (Walter) Britton [= <i>Sisymbrium canescens</i> Nutt.]	tansy-mustard	hillsides; spring
<i>Descurainia</i> sp. [= <i>Sisymbrium incisum</i> Englem. ex A. Gray, misapplied]	western tansy-mustard	prairie roadsides; spring, summer
<i>Dimorphocarpa candicans</i> (Raf.) Rollins [= <i>Dithyrea wislizeni</i> Engelm.]	spectacle pod	dry, sandy soils, near rivers; summer
<i>Draba brachycarpa</i> Nutt. ex Torr. & A. Gray	short-fruited whitlow-grass	fields, pastures; early spring
<i>Draba cuneifolia</i> Nutt. ex Torr. & A. Gray	wedge-leaved whitlow-grass	fields; common; early spring
<i>Erysimum asperum</i> (Nutt.) DC.	yellow phlox	mountainsides; spring
<i>Lepidium virginicum</i> L.	wild pepper grass	abundant; spring
<i>Lepidium</i> sp. [= <i>Lepidium apetalum</i> Willd., misapplied]	wild pepper grass	roadsides; common; spring
<i>Lesquerella auriculata</i> (Engelm. & A. Gray) S. Watson	hairy bladder-pod	prairies; early spring
<i>Lesquerella densiflora</i> (A. Gray) S. Watson	bladder-pod	near rivers; spring
<i>Lesquerella ovalifolia</i> Rydb. ex Britton	slender bladder-pod	rocky hillsides; spring
<i>Nasturtium officinale</i> W.T. Aiton [= <i>Radicula nasturtium-aquaticum</i> (L.) Britten & Rendle]	water cress	streams; spring
<i>Rorippa sessiliflora</i> (Nutt.) Hitchc. [= <i>Radicula sessiflora</i> (Nutt.) Greene]	sessile-flowered cress	mountain ravines; spring
<i>Sibara virginica</i> (L.) Rollins [= <i>Arabis virginica</i> (L.) Poir.]	cut-leaved rock-cress	mountainsides; early spring

Cucurbitaceae

Cucurbita foetidissima Kunth Missouri gourd fields, streams;
 [= *Pepo foetidissima* (Kunth) Britton] summer

Cyperaceae

Carex vulpinoidea Michx. fox sedge mountain ravines;
 summer
Cyperus echinatus (L.) Alph. Wood globose cyperus rivers
 [= *Cyperus ovularis* (Michx.) Torr.]
Cyperus esculentus L. yellow nut-grass rivers
Cyperus odoratus L. coarse cyperus damp soils,
 pastures
Cyperus strigosus L. straw colored cyperus mountain ravines
Eleocharis compressa Sull. flat-stemmed spike-rush ponds; summer
Fuirena simplex Vahl western-umbrella-grass rivers; late summer
Lipocarpa micrantha (Vahl) G. Tucker dwarf sedge riversides; summer
 [= *Hemicarpha micrantha* (Vahl) Pax]
Schoenoplectus americanus (Pers.) Volkart three-cornered bulrush, damp ravines;
 ex Schinz & R. Keller sand-bar bulrush summer
 [= *Scirpus americanus* Pers.]
Scirpus pendulus Muhl. reddish bulrush damp ravines;
 [= *Scirpus lineatus*, misapplied] summer

Ebenaceae

Diospyros virginiana L. persimmon mountain ravines;
 spring

Euphorbiaceae

Cnidoscolus texanus (Müll. Arg.) Small spurge nettle rivers; spring,
 [= *Jatropha stimulosa* Michx.] summer
Croton capitatus Michx. goat-weed, hogwort roadsides; spring to
 fall
Croton glandulosus L. var. *septentrionalis* Müll. Arg. creeks; summer
Croton lindheimerianus Scheele Lindheimer's croton-weed pastures; summer
Croton texensis (Klotzsch) Müll. Arg. Texas croton roadsides; mid-
 summer
Euphorbia dentata Michx. toothed spurge streams; summer
Euphorbia spathulata Lam. reticulate-seeded spurge plains; summer
 [= *Euphorbia dictyosperma* Fisch. & C.A. Mey.]
Euphorbia geyeri Engelm. & A. Gray Geyer's spurge rivers; summer
Euphorbia maculata L. spurge prairies; spring to
 fall
Euphorbia marginata Pursh snow-on-the-mountain hillsides, rivers;
 summer, fall
Euphorbia missurica Raf. white-flowered spurge prairies; summer
 [= *Euphorbia petaloidea* Engelm.]

<i>Euphorbia nutans</i> Lag. [= <i>Euphorbia preslii</i> Guss.]	large spotted spurge, upright spotted spurge	mountains, spring to fall
<i>Euphorbia serpens</i> Kunth	round-leaved spreading spurge	prairies; spring to fall
<i>Stillingia sylvatica</i> L.	queen's delight	prairies; spring to fall
<i>Tragia ramosa</i> Torr.	branching tragia	mountainsides; summer
<i>Tragia</i> sp. [= <i>Tragia nepetifolia</i> Cav., misapplied]	catnip-leaved tragia	rivers; summer
Fagaceae		
<i>Quercus fusiformis</i> Small [= <i>Quercus virginiana</i> Mill., misapplied]	live oak	mountains; pre-vernal
<i>Quercus macrocarpa</i> Michx.	bur oak, mossy-cup oak	mountainsides; pre-vernal
<i>Quercus marilandica</i> Münchh.	black jack oak	mountains; pre-vernal
<i>Quercus muehlenbergii</i> Engelm.? [= <i>Quercus prinus</i> L.]	cow oak, swamp oak	mountains; spring
<i>Quercus shumardii</i> Buckley var. <i>schneckii</i> (Britton) Sarg.	Schneck's red oak, spotted oak	mountains; spring
<i>Quercus stellata</i> Wangenh.	post oak	mountains; pre-vernal
Fumariaceae		
<i>Corydalis aurea</i> Willd.	golden corydalis	prairies; spring
<i>Corydalis micrantha</i> (Engelm. ex A. Gray) A. Gray [= <i>Corydalis campestris</i> (Britton) J. Bucholz & Palmer]	plains corydalis	creeks, pastures, near moisture; spring
Gentianaceae		
<i>Eustoma exaltatum</i> (L.) Salisb. ex G. Don [= <i>Eustoma russellianum</i> (Hook.) G. Don]	Russell's eustoma	creeks; summer
<i>Sabatia angularis</i> (L.) Pursh	rose pink, bitter bloom	creeks; summer
<i>Sabatia campestris</i> Nutt.	prairie sabatia	prairies; summer
Geraniaceae		
<i>Geranium carolinianum</i> L.	wild geranium	mountains, streams; spring
Gramineae		
<i>Agrostis hyemalis</i> (Watt) Britton, Sterns & Poggenb.	ticklegrass	mountainsides
<i>Alopecurus geniculatus</i> L.	foxtail	streams
<i>Andropogon gerardii</i> Vitman [= <i>Andropogon furcatus</i> Muhl. ex Willd.]	forked beard-grass, big blue-stem	mountainsides

<i>Aristida dichotoma</i> Michx.	aristida	prairies; summer
<i>Aristida oligantha</i> Michx.	few-flowered aristida	pastures; summer
<i>Aristida purpurascens</i> Poir.	purplish aristida	pastures, roadsides
<i>Aristida purpurea</i> Nutt.	purple three-awn	prairies; spring
<i>Bothriochloa laguroides</i> (DC.) Herter ssp. <i>torreyana</i> (Steud.) Allred & Gould	andropogon	creeks; summer
<i>Bouteloua curtipendula</i> (Michx.) Torr.	fall grama-grass	prairies; summer
<i>Bouteloua dactyloides</i> (Nutt.) J.T. Columbus [= <i>Buchlöe dactyloides</i> (Nutt.) Engelm.]	buffalo grass	pastures; summer
<i>Bouteloua gracilis</i> (Willd. ex Kunth) Lag. ex. Griffiths	blue grama-grass	pastures; summer, fall
<i>Bouteloua hirsuta</i> Lag.	hairy mesquite-grass	pastures; summer
<i>Bouteloua</i> sp. [= <i>Bouteloua breviseta</i> Vasey, not in OK]	bouteloua	creeks; spring, summer
<i>Bromus arvensis</i> L.	field chess	roadsides; summer
<i>Bromus catharticus</i> Vahl [= <i>Bromus unioloides</i> Kunth]	brome grass	pastures, roadsides; spring
<i>Bromus racemosus</i> L. [= <i>Bromus commutatus</i> Schrad.]	brome grass	roadsides; common; summer
<i>Cenchrus spinifex</i> Cav. [= <i>Cenchrus pauciflorus</i> Benth.]	field sandbur	ivers; summer
<i>Chasmanthium latifolium</i> (Michx.) Yates [= <i>Uniola latifolia</i> Michx.]	broadleaf uniola	mountains; autumn
<i>Chloris verticillata</i> Nutt.	windmill grass	prairies; common; spring
<i>Cynodon dactylon</i> (L.) Pers.	Bermuda grass	roadsides; common
<i>Dichantherium acuminatum</i> (Sw.) Gould & C.A. Clark [= <i>Panicum tennesseense</i> Ashe]	panicum	mountain ravines
<i>Digitaria cognata</i> (Schult.) Pilg. [= <i>Leptoloma cognata</i> (Schult.) Chase]	diffuse crag-grass	fields; fall
<i>Digitaria sanguinalis</i> (L.) Scop.	large crab-grass	fields
<i>Echinochloa crus-galli</i> (L.) P. Beauv.	barnyard grass	streams
<i>Eleusine indica</i> (L.) Gaertn.	goosegrass	pastures
<i>Elymus canadensis</i> L.	Canada wild-rye	streams, ravines
<i>Elymus glabriflorus</i> (Vasey ex L.H. Dewey) Scribn. & C.R. Ball [= <i>E. virginicus</i> L. var. <i>glabriflorus</i> (Vasey) Bush]	Virginia wild-rye	streams
<i>Elymus repens</i> (L.) Gould [= <i>Agropyron repens</i> (L.) P. Beauv.]	couch grass	fields; summer
<i>Eragrostis capillaris</i> (L.) Nees	lace-grass	prairies; summer
<i>Eragrostis cilianensis</i> (All.) Vign. ex Janchen	stinkgrass	fields, roadsides; summer
<i>Eragrostis curtipedicellata</i> Buckley	short-stalked love-grass	roadsides, pastures; summer
<i>Eragrostis secundiflora</i> J. Presl	love-grass	near river; summer
<i>Eragrostis trichodes</i> (Nutt.) Alph. Wood	eragrostis	near river; summer

<i>Erioneuron pilosum</i> (Buckley) Nash [= <i>Triodia pilosa</i> (Buckley) Merr.] <i>Hordeum pusillum</i> Nutt. <i>Melica nitens</i> (Scribn.) Nutt. ex Piper	hairy triodia little barley three-flower melic	mountainsides; spring prairies; spring mountainsides; spring rivers
<i>Panicum anceps</i> Michx. <i>Panicum capillare</i> L. <i>Panicum dichotomiflorum</i> Michx. <i>Panicum obtusum</i> Kunth <i>Panicum rigidulum</i> Bosc ex Nees [= <i>Panicum agrostoides</i> Spreng.] <i>Panicum virgatum</i> L. <i>Pascopyrum smithii</i> (Rydb.) Á. Löve [= <i>Agropyron smithii</i> Rydb.] <i>Paspalum setaceum</i> Michx. [= <i>Paspalum pubescens</i> Muhl. ex Willd.] <i>Phalaris caroliniana</i> Walter	panicum witch-grass, tumbleweed fall panicum blunt panic-grass, range-grass panicum switch-grass, wild red-top western wheat-grass paspalum	fields; summer streams; fall rivers streams creeks; fall prairies; spring, summer along rivers
<i>Poa arachnifera</i> Torr.	Texas blue grass	moist places, roadsides; spring highways, hillsides; spring
<i>Schedonnardus paniculatus</i> (Nutt.) Trel.	Texas crab-grass, wire-grass	prairies; common; summer roadsides
<i>Schizachyrium scoparium</i> (Michx.) Nash <i>Setaria parviflora</i> (Poir.) Kerguélen [= <i>Setaria geniculata</i> (Willd.) P. Beauv.] <i>Setaria pumila</i> (Poir.) Roem. & Schult. [= <i>Setaria lutescens</i> (Weigel) F.T. Hubbard] <i>Setaria viridis</i> (L.) P. Beauv. <i>Sorghastrum nutans</i> (L.) Nash <i>Sorghum halepense</i> (L.) Pers.	prairie beard-grass knot-root bristle-grass yellow fox-tail green foxtail-grass Indian-grass Johnson grass	creeks, roadsides; spring roadsides; common; late spring fields; summer mountains; fall roadside ditches; summer streams
<i>Sphenopholis obtusata</i> (Michx.) Scribn. <i>Sporobolus cryptandrus</i> (Torr.) A. Gray <i>Tridens flavus</i> (L.) Hitchc. [= <i>Triodia flava</i> (L.) Smyth] <i>Vulpia octoflora</i> (Walter) Rydb. [= <i>Festuca octoflora</i>]	prairie wedge grass sand dropseed purpletop six-weeks fescue	rivers; summer, fall mountains, ravines fields, pastures; spring
Grossulariaceae [Saxifragaceae] <i>Ribes aureum</i> Pursh	Missouri or buffalo currant	hillsides, streams; spring
Hydrophyllaceae <i>Phacelia hirsuta</i> Nutt. <i>Phacelia</i> sp. [= <i>Phacelia dubia</i> (L.) Trel., misapplied]	hairy phacelia small-flowered phacelia	prairies; spring prairies; spring

Iridaceae

<i>Sisyrinchium angustifolium</i> Mill. [incl. <i>Sisyrinchium gramineum</i> Curtis] <i>Sisyrinchium langloisii</i> Greene [= <i>Sisyrinchium varians</i> E.P. Bicknell]	blue-eyed grass , stout blue-eyed grass variable blue-eyed grass	creeks, prairies; spring prairies; spring
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Juglandaceae

<i>Carya illinoensis</i> (Wagenh.) K. Koch <i>Juglans microcarpa</i> Berl. [= <i>Juglans rupestris</i> Engelm. ex Torr.] <i>Juglans nigra</i> L.	pecan little walnut black walnut	streams; spring creeks; spring creeks; spring
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Juncaceae

<i>Juncus biflorus</i> Elliott [= <i>Juncus aristulatus</i> Michx.] <i>Juncus brachycarpus</i> Engelm.	large grass-leaved rush rush	riversides roadside ditches; summer
<i>Juncus interior</i> Wiegand	Indian rush	roadside ditches; summer
<i>Juncus marginatus</i> Rostk. <i>Juncus torreyi</i> Coville	awn-petaled rush Torrey's rush	rivers; summer rivers; summer

Krameriaceae [Leguminosae]

<i>Krameria lanceolata</i> Torr. [= <i>Krameria secundiflora</i> DC., misapplied]	bank-bur	prairie roadsides; common; summer
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Labiatae

<i>Hedeoma hispida</i> Pursh <i>Lamium amplexicaule</i> L.	rough or little pennyroyal henbit, dead nettle	plains; summer fields, roadsides; early spring
<i>Monarda citriodora</i> Cerv. ex Lag. [= <i>Monarda dispersa</i> Small] <i>Monarda fistulosa</i> L.	purple lemon mint horse mint, wild bergamot	praries; summer ravines; early summer
<i>Monarda punctata</i> L.	horse mint	dry sandy soils; summer
<i>Salvia azurea</i> Michx. ex Lam. var. <i>grandiflora</i> Benth. <i>Salvia reflexa</i> Hornem. [= <i>Salvia lancaefolia</i> Poir.] <i>Scutellaria drummondii</i> Benth.	tall blue sage lance-leaved sage Drummond's skullcap	plains; spring, summer creeks; spring, summer roadside ditches; common; spring
<i>Scutellaria wrightii</i> A. Gray <i>Teucrium canadense</i> L.	Wright's skullcap germander, wood sage	hillsides; spring ravines; summer

Leguminosae

<i>Acacia angustissima</i> (Mill.) Kuntze	acacia	sandy soils, near rivers; summer
<i>Amorpha canescens</i> Pursh	lead-plant, devil's shoe-string	creeks; summer
<i>Amorpha fruticosa</i> L.	river-locust, false indigo	streams; summer
<i>Astragalus canadensis</i> L.	tall astragalus	creeks; summer
<i>Astragalus crassicaarpus</i> Nutt. [= <i>Astragalus caryocarpus</i> Ker Gawl.]	ground plum	creeks, pastures; spring
<i>Astragalus lotiflorus</i> Hook.	low astragalus	prairies; spring
<i>Astragalus nuttallianus</i> DC.	Annual astragalus	prairies; spring
<i>Baptisia australis</i> (L.) R. Br.	blue false indigo	mountainsides; spring
<i>Baptisia bracteata</i> Muhl. ex Elliott	false indigo	mountainsides; spring
<i>Cercis canadensis</i> L.	redbud, Judas tree	creeks, mountain ravines; pre-vernal
<i>Chamaecrista fasciculata</i> (Michx.) Greene [= <i>Cassia chamaecrista</i> L.]	partridge pea	fields, pastures; summer
<i>Dalea aurea</i> Nutt. ex Pursh [= <i>Parosela aurea</i> (Nutt. ex Pursh) Britton]	golden parosela	hillsides; summer
<i>Dalea candida</i> Michx. ex Willd. [= <i>Petalostemon candidus</i> Michx.]	white prairie clover	near rivers, sandy soils; summer
<i>Dalea enneandra</i> Nutt. [= <i>Parosela enneandra</i> (Nutt.) Britton]	slender parosela	rivers; summer
<i>Dalea multiflora</i> (Nutt.) Shinnery [= <i>Petalostemon multiflorus</i> Nutt.]	round-headed prairie clover	prairies; summer
<i>Dalea purpurea</i> Vent. [= <i>Petalostemon purpureus</i> (Vent.) Rydb.]	purple prairie-clover	prairies; summer
<i>Dalea</i> sp. [= <i>Petalostemon gracilis</i> Nutt., misapplied]	slender white prairie clover	prairies; summer
<i>Desmanthus illinoensis</i> (Michx.) MacMill. ex B.L. Rob. & Fernald	Illinois desmanthus	rivers; summer
<i>Desmodium cuspidatum</i> (Muhl. ex Willd.) DC. [= <i>Desmodium grandiflorum</i> DC.]	pointed-leaved tick trefoil, sticktight	prairies; summer
<i>Desmodium sessilifolium</i> (Torr.) Torr. & A. Gray	sessile-leaved tick-trefoil	mountains; summer
<i>Glycyrrhiza lepidota</i> Pursh	wild liquorice	dry sands, roadsides; summer
<i>Gymnocladus dioica</i> (L.) K. Koch	Kentucky coffee-tree	ravines; spring
<i>Hoffmannseggia glauca</i> (Ortega) Eifert [= <i>Hoffmannseggia falcaria</i> Cav.]	blue-weed	prairies; spring
<i>Indigofera miniata</i> Ortega [= <i>Indigofera leptosepala</i> Nutt. ex Torr. & A. Gray]	western indigo plant	prairies; summer to fall
<i>Lathyrus pusillus</i> Elliott	low wild pea	rivers; spring
<i>Lotus unifoliolatus</i> (Hook.) Benth. [= <i>Hosackia americana</i> (Nutt.) Piper]	prairie bird's foot, trefoil	prairies; summer

<i>Medicago sativa</i> L.	alfalfa	escaped cultivation, fields, roadsides; spring, summer
<i>Melilotus officinalis</i> (L.) Lam.	yellow melilot, sweet clover	roadsides; abundant; summer
<i>Mimosa microphylla</i> Dryand. [= <i>Schrankia angustata</i> Torr. & A. Gray, <i>Schrankia uncinata</i> Willd.]	sensitive brier	roadside ditches; common; summer
<i>Neptunia lutea</i> (Leavenworth) Benth.	neptunia	mountain ravines; summer
<i>Pediomelum cuspidatum</i> (Pursh) Rydb. [= <i>Psoralea cuspidata</i> Pursh]	large-bracted psoralea	prairies; spring
<i>Pomaria jamesii</i> (Torr. & A. Gray) Walp. [= <i>Hoffmannseggia jamesii</i> Torr. & A. Gray]	James's hoffmannseggia	prairies; early summer
<i>Prosopis glandulosa</i> Torr. var. <i>glandulosa</i> [= <i>Prosopis juliflora</i> (Sw.) DC. var. <i>glandulosa</i> (Torr.) Cockerell]	prairie mesquite	prairies; common; late spring
<i>Psoralidium tenuiflorum</i> (Pursh) Rydb. [= <i>Psoralea tenuiflora</i> Pursh]	few-flowered psoralea	prairies; spring to fall
<i>Robinia pseudoacacia</i> L.	black or yellow locust	low waste places, cultivated; summer
<i>Vicia caroliniana</i> Walter	pale vetch	prairies; spring
Liliaceae [incl. Amaryllidaceae]		
<i>Allium canadense</i> L. var. <i>mobile</i> (Regel) Ownbey [= <i>Allium mutabile</i> Michx.]	wild onion	damp soils, roadsides; spring
<i>Allium drummondii</i> Regel [= <i>Allium nuttallii</i> S. Watson]	Nuttall's wild onion	roadsides; spring
<i>Allium textile</i> A. Nelson & J.F. Macbr. [= <i>Allium reticulatum</i> G. Don]	wild onion	mountain ravines; late spring
<i>Androstephium coeruleum</i> (Scheele) Greene	androstephium	prairies, rare; early spring
<i>Camassia scilloides</i> (Raf.) Cory [= <i>Camassia esculenta</i> (Raf.) Cory]	hyacinth, eastern camas	mountain ravines
<i>Cooperia drummondii</i> Herb.	prairie lily	mountain ravines; spring
<i>Nothoscordum bivalve</i> (L.) Britton	yellow false garlic	pastures, fields; spring, fall
<i>Polygonatum biflorum</i> (Walter) Elliott	great Solomon's seal	damp shady places; summer
Linaceae		
<i>Linum lewisii</i> Pursh	Lewis's wild flax	roadsides; spring
<i>Linum rigidum</i> Pursh	large-flowered yellow flax	prairies; spring
<i>Linum sulcatum</i> Riddell		prairies; summer

Loasaceae

<i>Mentzelia decapetala</i> (Pursh ex Sims) Urb. & Gilg ex Gilg	stick-leaf	sand, near rivers; summer
<i>Mentzelia oligosperma</i> Nutt. ex Sims	stick-leaf, few seeded mentzelia	rivers; summer

Lythraceae

<i>Ammannia coccinea</i> Rottb.	long-leaved ammannia	mountain ravines; summer
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Malvaceae

<i>Callirhoe involucreta</i> (Torr. & A. Gray) A. Gray	purple poppy mallow	roadside ditches; common; spring
<i>Callirhoe papaver</i> (Cav.) A. Gray	larger purple poppy mallow	creeks; spring, summer
<i>Sphaeralcea coccinea</i> (Nutt.) Rydb. [= <i>Malvastrum coccineum</i> (Nutt.) A. Gray]	red false-mallow	roadsides; common; spring

Martyniaceae

<i>Proboscidea louisianica</i> (Mill.) Thell. [= <i>Martynia louisiana</i> Mill.]	unicorn plant	cultivated soils; summer
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Menispermaceae

<i>Cocculus carolinus</i> (L.) DC.	Carolina moonseed	streams; summer
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Moraceae [Urticaceae]

<i>Morus rubra</i> L.	red mulberry; wild mulberry	creeks; spring
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Nyctaginaceae

<i>Mirabilis albida</i> (Walter) Heimerl [= <i>Oxybaphus albidus</i> (Walter) Sweet]	white oxybaphus	roadsides, dry sand; summer
<i>Mirabilis hirsuta</i> (Pursh) MacMill. [= <i>Oxybaphus hirsutus</i> (Pursh) Sweet]	hairy oxybaphus	dry soils, roadsides; summer
<i>Mirabilis linearis</i> (Pursh) Heimerl [= <i>Oxybaphus linearis</i> (Pursh) B.L. Rob.]	oxybaphus	prairies; summer
<i>Mirabilis nyctaginea</i> (Michx.) MacMill. [= <i>Oxybaphus nyctagineus</i> (Michx.) Sweet]	petioled wild four-o'clock	creeks; spring

Oleaceae

<i>Fraxinus americana</i> L.	white ash	creeks; spring, summer
<i>Fraxinus pennsylvanica</i> Marshall	red ash	mountain ravines; spring

Onagraceae

<i>Ludwigia peploides</i> (Kunth) P.H. Raven [= <i>Jussiaea repens</i> L.]	creeping primrose-willow	ponds; summer
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<i>Oenothera cinerea</i> (Wooton & Standl.) W.L. Wagner & Hoch [= <i>Gaura villosa</i> Torr.]	wooly gaura	creeks; summer
<i>Oenothera curtiflora</i> W.L. Wagner & Hoch [= <i>Gaura parviflora</i> Douglas ex Lehm.]	gaura	dry sandy soils; summer
<i>Oenothera glaucifolia</i> W.L. Wagner & Hoch [= <i>Stenosiphon linifolius</i> (Nutt. ex E. James) Heynh.]	flax-leaved stenosisiphon	sandy soils near rivers; summer
<i>Oenothera grandis</i> (Britton) Smyth [= <i>Oenothera laciniata</i> Hill var. <i>grandiflora</i> (S. Watson) B.L. Rob.]	evening-primrose	hillsides; spring
<i>Oenothera hartwegii</i> Benth.	evening-primrose	plains; summer
<i>Oenothera laciniata</i> Hill	evening-primrose	sand, near rivers; summer
<i>Oenothera macrocarpa</i> Nutt. [= <i>Oenothera missouriensis</i> Sims]	Missouri evening-primrose	hillsides; summer
<i>Oenothera rhombipetala</i> Nutt. ex Torr. & A. Gray	evening-primrose	near rivers; summer
<i>Oenothera serrulata</i> Nutt.	tooth-leaved primrose	pastures, roadsides; summer
<i>Oenothera sinuosa</i> W.L. Wagner & Hoch [= <i>Gaura sinuata</i> Nutt. ex Ser.]	wavy-leaved gaura	hillsides; summer
<i>Oenothera speciosa</i> Nutt.	showy evening-primrose	prairies; spring
<i>Oenothera suffrutescens</i> (Ser.) W.L. Wagner & Hoch [= <i>Gaura coccinea</i> Nutt. ex Pursh]	scarlet gaura	roadside ditches, mountainsides; spring
<i>Oenothera triloba</i> Nutt.	three-lobed evening-primrose	rivers; summer
<i>Oenothera</i> sp. [= <i>Gaura biennis</i> L., misapplied]	biennial gaura	rivers; summer
<i>Oenothera</i> sp. [= <i>Oenothera humifusa</i> Nutt., misapplied]	evening-primrose	near rivers; summer
<i>Oenothera</i> sp. [= <i>Oenothera oakesiana</i> (A. Gray) J.W. Robbins ex S. Watson & J.M. Coult., misapplied]	evening-primrose	sandy soils, near rivers; summer
Oxalidaceae		
<i>Oxalis corniculata</i> L.	yellow or procumbent wood-sorrel	damp soils, mountainsides; spring
<i>Oxalis stricta</i> L.	upright yellow wood-sorrel	damp soils, mountainsides; spring
<i>Oxalis violacea</i> L.	violet wood-sorrel	damp soils, creeks, mountainsides; spring

Papaveraceae

<i>Argemone albiflora</i> Hornem. [= <i>Argemone alba</i> Lestib. f.]	white prickly poppy	roadsides; spring, summer
<i>Argemone polyanthemus</i> (Fedde) G.B. Ownbey [= <i>Argemone intermedia</i> Sweet]	prickly poppy	roadsides; summer

Phrymaceae

<i>Phryma leptostachya</i> L.	lop-seed	mountains; summer
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Phytolaccaceae

<i>Phytolacca americana</i> L.	pokeweed	creek banks; summer
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Plantaginaceae

<i>Plantago aristata</i> Michx.	ribwort	prairies; common; spring
<i>Plantago patagonica</i> Jacq. [= <i>Plantago purshii</i> Roem. & Schult.]	Pursh's plantain	pastures, roadsides; spring
<i>Plantago rhodosperma</i> Decne.	red-seeded plantain	rivers; early spring
<i>Plantago virginica</i> L.	dwarf plantain	creeks; spring

Polemoniaceae

<i>Ipomopsis rubra</i> (L.) Wherry [= <i>Gilia rubra</i> (L.) A. Heller]	red gilia	mountainsides; summer
<i>Phlox pilosa</i> L.	phlox	prairie roadsides; spring, summer

Polygalaceae

<i>Polygala alba</i> Nutt.	white milkwort	prairies; summer
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Polygonaceae

<i>Eriogonum annuum</i> Nutt.	annual gray-weed	prairies; summer
<i>Eriogonum longifolium</i> Nutt.	long-leaved gray-weed	rivers; summer, fall
<i>Polygonum aviculare</i> L.	joint-weed, pink-weed	near dwellings; summer
<i>Polygonum hydropiper</i> L.	common smart-weed	lakes; late summer
<i>Polygonum lapathifolium</i> L.	dock-leaved joint-weed	ravines; summer
<i>Polygonum pensylvanicum</i> L.	showy joint-weed	streams; summer
<i>Polygonum punctatum</i> Elliott [= <i>Polygonum acre</i> Kunth]	water smart-weed, dotted water pepper	mountain ravines; summer, fall
<i>Polygonum ramosissimum</i> Michx.	bushy joint-weed	rivers; summer
<i>Polygonum tenue</i> Michx.	slender joint-weed	mountains; summer
<i>Rumex altissimus</i> Alph. Wood	tall dock	roadsides; summer
<i>Rumex crispus</i> L. [incl. <i>Rumex elongatus</i> Guss.]	dock, curly dock	damp soils, mountains; spring, summer

Portulacaceae [incl. Caryophyllaceae, in part]

Claytonia virginica L. spring beauty creeks, pastures;
 common; early
 spring

Primulaceae

Androsace occidentalis Pursh androsace pastures, fields;
 early spring
Samolus valerandi L. water pimpernel, brookweed streams; summer
 [= *Samolus floribundus* Kunth]

Ranunculaceae

Anemone berlandieri Pritz. ten-petaled anemone pastures; spring
 [= *Anemone decapetala* Ard.]
Anemone caroliniana Walter Carolina anemone pastures; common;
 March, April
Clematis pitcheri Torr. & A. Gray virgin's bower, leather-flower creeks, mountain
 ravines; spring
Delphinium carolinianum Walter ssp. larkspur mountains,
virescens (Nutt.) R.E. Brooks roadsides; spring
 [= *Delphinium penardii* Huth]
Myosurus minimus L. mouse tail streams, fields;
 early spring

Rhamnaceae

Ceanothus americanus L. New Jersey tea mountains, streams;
 spring

Rosaceae

Crataegus crus-galli L. cock-spur haw, red raw rivers; spring
Crataegus viridis L. southern thorn streams; early
 spring
Geum canadense Jacq. white avena mountain ravines;
 summer
Prunus americana Marshall wild yellow or red plum rivers; spring
Prunus angustifolia Marshall Chickasaw plum roadside ditches,
 near rivers; spring
Rubus argutus Link bramble rivers; spring
Rubus sp. Bailey's blackberry mountainsides;
 spring
 [= *Rubus baileyanus* Britton, misapplied]

Rubiaceae

Cephalanthus occidentalis L. button-bush streams, mountains;
 late spring
Diodia teres Walter rough button-weed rivers; summer
Galium aparine L. cleavers mountains, streams;
 spring

<i>Galium pilosum</i> Aiton	hairy bedstraw	mountains, streams; summer
<i>Houstonia pusilla</i> Schoepf [= <i>Houstonia minima</i> Beck]	bluets	creeks, pastures; early spring
<i>Stenaria nigricans</i> (Lam.) Terrell [= <i>Houstonia angustifolia</i> Michx.]	narrow-leaved houstonia	mountains; spring
Rutaceae		
<i>Ptelea trifoliata</i> L.	tree-leaved hop-tree	mountainsides; spring
Salicaceae		
<i>Populus deltoides</i> W. Bartram ex Marshall <i>Salix nigra</i> Marshall	cottonwood, necklace poplar black willow	creeks; pre-vernal damp soils, streams; spring
Sapotaceae		
<i>Sideroxylon lanuginosum</i> Michx. [= <i>Bumelia lanuginosa</i> (Michx.) Pers.]	chittim-wood, wooly buckthorn	mountainsides; summer
Smilacaceae [Liliaceae]		
<i>Smilax bona-nox</i> L. <i>Smilax herbacea</i> L.	spiny-leaved greenbrier carrion flower	creeks; spring mountain ravines; summer
<i>Smilax rotundifolia</i> L.	common greenbrier, horse-brier	creeks; spring
Santalaceae		
<i>Comandra umbellata</i> (L.) Nutt. ssp. <i>pallida</i> (A. DC.) Piehl [= <i>Comandra pallida</i> A. DC.]	bastard toad-flax	dry sandy soils, near rivers; spring
Sapindaceae		
<i>Sapindus saponaria</i> L. var. <i>drummondii</i> (Hook. & Arn.) L.D. Benson [= <i>Sapindus drummondii</i> Hook. & Arn.]	wild China-tree, Drummond's soapberry	creeks; spring
Scrophulariaceae		
<i>Castilleja purpurea</i> (Nutt.) G. Don var. <i>lindheimeri</i> (A. Gray) Shinnery [= <i>Castilleja lindheimeri</i> A. Gray]	Indian paint brush	mountains, pastures; spring
<i>Castilleja sessiliflora</i> Pursh	downy painted-cup	mountainsides; summer
<i>Collinsia violacea</i> Nutt.	violet or narrow-leaved collinsia	mountainsides; spring
<i>Nuttallanthus canadensis</i> (L.) D.A. Sutton [= <i>Linaria canadensis</i> (L.) Chaz.]	linaria	mountains; spring

<i>Penstemon cobaea</i> Nutt.	beard-tongue	prairies; late spring
<i>Penstemon tubaeiflorus</i> Nutt.	funnel-shaped beard-tongue	creeks; summer
<i>Penstemon</i> sp. [= <i>Penstemon acuminatus</i> Douglas ex Lindl., misapplied]	sharp-leaved beard-tongue	hillsides; summer
<i>Veronica agrestis</i> L.	field speedwell	fields, pastures; spring
<i>Veronica peregrina</i> L.	neckweed purslane, speedwell	creeks; early spring
Solanaceae		
<i>Chamaesaracha</i> sp. [= <i>Chamaesaracha sordida</i> (Dunal) A. Gray, misapplied]	hairy chamaesaracha	roadsides; summer
<i>Datura stramonium</i> L.	jimson weed	roadsides; summer
<i>Physalis cinerascens</i> (Dunal) Hitchc. [= <i>Physalis viscosa</i> L., misapplied]	ground-cherry	creeks; spring
<i>Physalis longifolia</i> Nutt. var. <i>longifolia</i>	smooth ground-cherry	creeks; spring
<i>Physalis longifolia</i> Nutt. var. <i>subglabrata</i> {Mack. & Bush} Cronq. [= <i>Physalis subglabrata</i> Mack. & Bush]	smooth ground-cherry	sandy soils, near rivers; summer
<i>Physalis mollis</i> Nutt.	velvety ground-cherry	roadsides; summer
<i>Quincula lobata</i> (Torr.) Raf. [= <i>Physalis lobata</i> Torr.]	purple-flowered ground-cherry	roadsides, prairies; spring, early summer
<i>Solanum carolinense</i> L.	horse nettle	prairies; common; spring, summer
<i>Solanum elaeagnifolium</i> Cav.	horse nettle	pastures, roadsides; common; spring, summer
<i>Solanum rostratum</i> Dunal	buffalo bur	abundant; summer, fall
<i>Solanum</i> sp. [= <i>Solanum nigrum</i> L., misapplied]	nightshade	dry sandy soils; summer
Tamaricaceae		
<i>Tamarix</i> sp. [= <i>Tamarix gallica</i> L., misapplied]	tamarish	damp sandy soils; summer
Typhaceae		
<i>Typha latifolia</i> L.	broad-leaved cat-tail	ponds; summer
Ulmaceae [Urticaceae]		
<i>Celtis laevigata</i> Willd.	southern hackberry	creeks; spring
<i>Celtis occidentalis</i> L.	rough-leaved hackberry	mountains, streams; early spring
<i>Ulmus americana</i> L.	white, American, or water elm	creeks; early spring

<i>Ulmus rubra</i> Muhl. [= <i>Ulmus fulva</i> Michx.]	slippery or red elm	mountain ravines; spring
Umbelliferae		
<i>Chaerophyllum tatinturieri</i> Hook.	Teinturier's chervil	roadsides; common; spring
<i>Daucus pusillus</i> Michx.	American carrot	fields, pastures; spring
<i>Lomatium foeniculaceum</i> (Nutt.) J.M. Coult. & Rose ssp. <i>daucifolium</i> (Torr. & A. Gray) W.L. Theobald [= <i>Lomatium daucifolium</i> (Torr. & A. Gray) J.M. Coult. & Rose]	carrot-leaved parsley	rivers; summer
<i>Ptilimnium nuttallii</i> (DC.) Britton	Nuttall's mock bishop-weed	low places near mountains; summer
<i>Sanicula canadensis</i> L.	short-styled snake-root	mountainsides; summer
<i>Spermolepis echinata</i> (Nutt. ex DC.) A. Heller	bristly-fruited spermolepis	mountainsides; spring
<i>Spermolepis inermis</i> (Nutt. ex DC.) Mathias & Constance [= <i>Spermolepis patens</i> (Nutt. ex DC.) B.L. Rob.]	spreading spermolepis	rivers; spring
Valerianaceae		
<i>Valerianella radiata</i> (L.) Dufr.	beaked corn salad	creeks; spring
Verbenaceae		
<i>Glandularia bipinnatifida</i> (Nutt.) Nutt. [= <i>Verbena bipinnatifida</i> Nutt.]	small-flowered verbena	creeks, pastures; early spring, summer
<i>Glandularia canadensis</i> (L.) Nutt. [= <i>Verbena canadensis</i> (L.) Britton]	large-flowered verbena	sandy soils, near rivers; spring
<i>Glandularia pumila</i> (Rydb.) Umber [= <i>Verbena pumila</i> Rydb.]	dwarf verbena	roadsides; summer
<i>Phyla cuneifolia</i> (Torr.) Greene [= <i>Lippia cuneifolia</i> (Torr.) Steud.]	wedge-leaved fog-fruit	hillsides; summer
<i>Phyla lanceolata</i> (Michx.) Greene [= <i>Lippia lanceolata</i> Michx.]	fog-fruit	creeks; summer
<i>Phyla nodiflora</i> (L.) Greene [= <i>Lippia nodiflora</i> (L.) Michx.]	spatulate-leaved fog-fruit	streams; summer
<i>Verbena bracteata</i> Cav. ex Lag. & Rodr. [= <i>Verbena bracteosa</i> Michx.]	large-bracted verbena	prairies; summer
<i>Verbena stricta</i> Vent.	hoary vervain	mountainsides; summer
Violaceae		
<i>Viola bicolor</i> Pursh [= <i>Viola rafinesquei</i> Greene]	pansy or heart's ease	streams, pastures; early spring

<i>Viola sororia</i> Willd. [= <i>Viola papilionacea</i> Pursh]	violet	damp sandy soils; early spring
Vitaceae		
<i>Ampelopsis cordata</i> Michx. [= <i>Cissus ampelopsis</i> Pers.]	simple-leaved cissus	rivers; spring
<i>Cissus trifoliata</i> (L.) L. [= <i>Cissus incisa</i> Des Moulins, misapplied]	rock-grape	mountains; summer
<i>Parthenocissus quinquefolia</i> (L.) Planch.	Virginia creeper, five-leaved ivy	creeks; summer
<i>Vitis cinerea</i> (Engelm.) Engelm. ex Millard	ashy or downy grape	streams; spring
<i>Vitis vulpina</i> L. [incl. <i>Vitis cordifolia</i> Michx.]	frost-grape, sweet scented grape	creeks, rivers; spring
Zygophyllaceae		
<i>Kallstroemia parviflora</i> J.B.S. Norton [= <i>Kallstroemia maxima</i> (L.) Hook. & Arn., misapplied]	greater caltrop	rivers; summer
<i>Tribulus terrestris</i> L.	caltrop	roadsides; common; summer

APPENDIX B

Tabular List of the Families, Kiowa County, OK

[This table includes taxa as they were in the original thesis.]

Divisions, Orders, Families, Etc.	Genera	Species	Varieties
PTERIDOPHYTA			
Filicales			
Polypodiaceae	4	5	
Marsileaceae	1	1	
SPERMATOPHYTA			
Gymnospermae			
Coniferales			
Pinaceae	1	1	
Angiospermae			
MONOCOTLEDONEAE			
Pandales			
Typhaceae	1	1	
Graminales			
Gramineae	31	58	2
Cyperaceae	6	11	
Xyridales			
Commelinaceae	2	6	
Liliales			
Juncaceae	1	6	
Liliaceae	7	11	
Amaryllidaceae	1	1	
Iridaceae	1	3	
DICOTYLEDONEAE			
Salicales			
Salicaceae	2	2	
Juglandales			
Juglandaceae	2	3	
Fagales			
Fagaceae	1	6	
Urticales			
Urticaceae	4	5	1
Santalales			
Santalaceae	1	1	
Polygonales			
Polygonaceae	3	12	
Chenopodiales			

Chenopodiaceae	4	5	1
Amaranthaceae	3	5	
Phytolaccaceae	1	1	
Nyctaginaceae	1	4	
Illecebraceae	1	1	
Aizoaceae	1	1	
Caryophyllales			
Caryophyllaceae	3	4	
Portulacaceae	1	1	
Ranunculales			
Ranunculaceae	4	5	
Menispermaceae	1	1	
Papavervales			
Papaveraceae	1	2	
Fumariaceae	2	2	
Cruciferae	8	16	
Capparidaceae	2	2	
Rosales			
Crassulaceae	1	1	
Saxifragaceae	1	1	
Rosaceae	4	7	
Leguminosae	25	42	20
Geraniales			
Linaceae	1	3	
Oxalidaceae	1	3	
Geraniaceae	1	1	
Zygophyllaceae	1	2	
Rutaceae	1	1	
Polygalaceae	1	1	
Euphorbiaceae	5	16	1
Sapindales			
Anacardiaceae	2	4	
Sapindaceae	1	1	
Rhamnales			
Rhamnaceae	1	1	
Vitaceae	3	6	
Malvales			
Malvaceae	2	3	
Tamaricales			
Tamaricaceae	1	1	
Violales			
Violaceae	1	2	
Loasaceae	1	2	

Opuntiales			
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Cactaceae	2	2	
Myrtales			
Lythraceae	1	1	
Onagraceae	4	17	1
Umbellales			
Umbelliferae	6	7	
Cornaceae	1	2	
Primulales			
Primulaceae	2	2	
Ebenales			
Sapotaceae	1	1	
Ebenaceae	1	1	
Gentianales			
Oleaceae	1	2	
Gentianaceae	2	3	
Apocynaceae	2	2	
Asclepiadaceae	4	11	
Polemoniales			
Convolvulaceae	3	6	
Polemoniaceae	2	2	
Hydrophyllaceae	1	2	
Boraginaceae	5	6	1
Verbenaceae	2	8	
Labiatae	6	11	1
Solanaceae	4	12	
Scrophulariaceae	5	9	
Martyniaceae	1	1	
Acanthaceae	1	2	
Phrymaceae	1	1	
Plantaginales			
Plantaginaceae	1	4	
Rubiales			
Rubiaceae	4	6	
Caprifoliaceae	4	2	
Valerianaceae	1	1	
Campanulales			
Curcubitaceae	1	1	
Campanulaceae	1	2	
Lobeliaceae	1	2	
Compositae	42	86	2

ADDENDA

[Nomenclature has been updated according to the PLANTS database (<http://plants.usda.gov/plants>).]

The following plants were counted in the tabular list but are not given in the list of species:

Artemisia filifolia
Desmodium obtusum
Draba reptans [*Draba caroliniana*]
Eleocharis obtusa
Gaillardia suavis [*Gaillardia trinervata*]
Juncus tenuis
Physalis virginiana
Rudbeckia hirta
Scutellaria parvula
Symphotrichum oblongifolium [*Aster oblongifolius*]
Vicia minutiflora [*Vicia micrantha*]
Xanthisma texanum

The following plants listed in the Stevens' collection were not found by the author:

Artemisia ludoviciana spp. *mexicana* [*Artemisia mexicana*]
Beta vulgaris
Bouteloua rigidiseta [*Bouteloua texana*]
Carex gravida
Distichlis spicata
Dyssodiopsis tagetoides [*Dyssodia tagetoides*]
Eleocharis rostellata
Muhlenbergia arenicola
Palafoxia sphacelata
Samolus ebracteatus