

Oklahoma Native Plant Record



Journal of the Oklahoma Native Plant Society
Volume 2, Number 1, December 2002

Oklahoma Native Plant Record

Journal of the Oklahoma Native Plant Society

Vol. 2 No. 1 December 2002

ISSN 1536-7738

Managing Editor, Sheila A. Strawn
Technical Editor, Patricia Folley
Technical Advisor, Bruce Hoagland
CD-ROM Producer, Chadwick Cox
Website: <http://www.usao.edu/~onps/>

The purpose of the ONPS is to encourage the study, protection, propagation, appreciation and use of the native plants of Oklahoma. Membership in ONPS shall be open to any person who supports the aims of the Society. ONPS offers individual, student, family, and life membership.

Officers and Board Members

President: Patricia Folley
Vice-president: Chadwick Cox
Secretary: Maurita Nations
Treasurer: Mary Korthase
Board Members:
 Berlin Heck
 Iris McPherson
 Sue Amstutz
 James Elder
 Paul Reimer
 Lawrence Magrath

Northeast Chapter Chair: James Elder
Central Chapter Chair: Judy Jordan
Cross-timbers Chapter Chair: Ronald Tyrl
Historian: Lynn Allen

Conservation Chair: *open*
Publicity Co-chairs:
 Ruth Boyd & Betty Culpepper
Marketing Chair: Lawrence Magrath
Photo Contest: Paul Reimer
Ann Long Award Chair: Paul Reimer
Harriet Barclay Award Chair:
 Constance Taylor
ONPS Service Award Chair: Sue Amstutz
Newsletter Editor: Chadwick Cox
Librarian: Bonnie Winchester
Website Manager: Chadwick Cox

Cover: *Gaillardia pulchella* (Indian Blanket)
Photo by Paul Buck, April 25, 1981. Winner
of the first ONPS Photo Contest in 1988.

Articles (c) The Authors

Journal compilation (c) Oklahoma Native Plant Society

Except where otherwise noted, this work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike4.0 International License, <https://creativecommons.org/licenses/by-nc-sa/4.0/>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly attributed, not used for commercial purposes, and, if transformed, the resulting work is redistributed under the same or similar license to this one. <https://doi.org/10.22488/okstate.17.100009>

Oklahoma Native Plant Record

Volume 2, Number 1

Table of Contents

Forward	3
Ms. Patricia Folley, ONPS President	
Vascular Plants of the Wichita Mountains	4
Dr. Paul Buck	
Floristic List for Comanche County, Oklahoma	22
Dr. Bruce W. Hoagland	
<i>Schoenoplectus hallii</i> and <i>S. saximontanus</i>	54
Wichita Mountains Wildlife Refuge Survey 2000	
Dr. Lawrence K. Magrath	
Pontotoc Ridge Floristic Survey: 1999.....	64
Dr. Forrest L. Johnson	
Ms. Patricia Folley (ed.)	
ONPS <i>Editorial</i>	82
Water, Soil, and Plant Diversity in Oklahoma	
Dr. Sheila A. Strawn	

Foreword

Continuing our goal of publishing historical and current floristic surveys of the different areas of Oklahoma, this 2002 edition features Comanche County and the Wichita Mountains of southwestern Oklahoma. These beautiful pink granite remains of ancient high mountains are completely contained within our state and have an interesting history from the viewpoints of Native Americans and the later European settlers.

Several decades ago a young botanist named Paul Buck spent summers sleeping on concrete picnic tables at the Wichita Wildlife Refuge while making the best-known specific survey of the flora of that site. The resulting list of plants is still in use by visitors to the refuge and others interested in the plants of that region. We have published that survey for you here, for use whenever you visit the Refuge. More recently, the U.S. Army at Ft. Sill, which adjoins the refuge, contracted with the Oklahoma Biological Survey to make a similar study of the flora of the military reservation. From voucher specimens taken during those surveys and from many other botanists who visited the area for the love of its wild beauty, the Oklahoma Natural Heritage Inventory has compiled a floristic list for the whole of Comanche County. Dr. Bruce Hoagland, at the Oklahoma Biological Survey, has provided that list. We hope it will inspire today's botanists to continue to monitor extant species on the Refuge and surrounding areas.

The Wichita Wildlife Refuge was established by President William McKinley in 1901, with 57,120 acres of land. Currently, about 22,500 acres are open to the public. The Refuge is a part of the National Wildlife Refuge system, and maintained by the federal government. A visitors' center provides assistance, educational material, and a library and gift shop. But a remarkable organization of volunteers manages the prodigious task of everyday contact with the many visitors who enter the Refuge every day of the year. By planned tours, educational programs, and hours of labor maintaining trails, the Friends of the Wichitas have made the Refuge a comfortable place for people without reducing the quality of the environment for wildlife. A sister organization of ONPS, the Friends and we share many members. Through the years Oklahoma Native Plant Society volunteers, especially Dr. Buck, have helped staff the field trips. In the process, some of us who might not have made the trip to Comanche County quite so often before, have come to love it as part of our 'home state'.

Next year, we hope to feature another, and very different section of this varied state: the Ozarks. All who have, or know about, material on that area that might be suitable for this publication, should contact our editor, Sheila Strawn. Also planned for future issues are lists of the plants reported at specific sites by our intrepid teams of field-trippers. Help us make this publication grow!

Patricia Folley
President, ONPS
August, 2002

**VASCULAR PLANTS OF THE WICHITA MOUNTAINS
WILDLIFE REFUGE (1977)**

**Paul Buck
Department of Life Sciences
The University of Tulsa
Tulsa, Oklahoma**

Introduction

This list is an effort to update a popular list of the vascular plants of the Wichita Mountains Wildlife Refuge prepared by the author approximately ten years ago. The earlier work was compiled from lists published by Eskew (1938), Osborn and Allen (1949) and from studies of several regional herbaria.

The changes over the previous list reflect new species found during field activities in the Refuge through the years, additions reported in the literature and modifications of scientific names as published in floras, keys, and manuals. Common names are always a problem, frequently changing several times within relatively small geographic areas. In an effort to avoid this difficulty the common names have been taken from *A Guide to Plant Names*, (Rechenthin, 1954) which was prepared for use by the regional Soil Conservation Service. The very few not listed in this publication were obtained from Fernald (1950) and the updated version of Britton and Brown (Gleason 1952).

The asterisks (*) indicate species that are questionable as present inhabitants of the Refuge for a couple of reasons: (1) Many were reported in the area by earlier workers but recent literature indicates their ranges do not extend into the Wichita Mountains system. It might be inferred these were misidentified, and in several cases where the specimens were located, this proved to be the case.

(2) During the 1930's thousands of seedlings of non-native woody species were introduced and planted (example: *Mahonia aquifolium*, Barberry; *Spiraea arguta*, Spirea; *Hibiscus syriacus*, Rose of Sharon; *Lagerstroemia indica*, Crape myrtle, etc.). Most of these were subsequently moved to other locations within the southwest. Probably none of those left in the Refuge survived the competition of the native flora.

The identity of the maple within the Refuge has been a subject of debate for many years. Opinions have been divided between the bigtooth maple (*Acer grandidentatum*) and sugar maple (*A. saccharum*). The writer felt, when the earlier list was prepared, the Wichita maple was the latter and deleted the bigtooth maple from the list. Dent (1969) made a study of the sugar maples of Oklahoma and concluded the Caddo Canyon and Wichita Mountains groups are both *Acer saccharum*.

References Cited

- Dent, Thomas Curtis 1969
Relationships of two isolated groups of sugar maple in central Oklahoma to eastern and western species. Unpublished PhD Dissertation, University of Oklahoma, Norman.
- Eskew, Cletis T. 1938 The flowering plants of the Wichita Mountains Wildlife Refuge, Oklahoma. Amer. Mid. Nat. 20:695-703.
- Fernald, M.L. 1950 Gray's Manual of Botany. American Book Company, New York.

Gleason, Henry A. 1952 The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada. The New York Botanical Garden, New York.

Osborn, B. and P. F. Allan 1949 Vegetation of an abandoned prairie-dog town in tall-grass prairie. Ecology 30:322-332.

Rechenthin, C.A. 1954 A Guide to Plant Names in Texas, Oklahoma, Louisiana, Arkansas. United States Department of Agriculture, Soil Conservation Service.

Species List

EQUISETACEAE

Equisetum laevigatum
Kansas horsetail

SELAGINELLACEAE

Selaginella peruviana
Sheldon selaginella
Selaginella rupestris
Rock selaginella

ISOETACEAE

Isoetes butleri
Butler quillwort
Isoetes melanopoda
Blackfoot quillwort

POLYPODIACEAE

Asplenium trichomanes
Spleenwort
Cheilanthes eatoni
Eaton lipfern
*Cheilanthes fendleri**
Fendler lipfern
Cheilanthes lanosa
Hairy lipfern
Cheilanthes lindheimeri
Lindheimer lipfern
Cheilanthes vestita
Lipfern
*Cheilanthes wootoni**
Wooton lipfern
Dryopteris marginalis
Standley's lipfern
Notholaena standleyi
Standley's lipfern
Pellaea atropurpurea
Purple cliffbrake
Pellaea ternifolia

Wright's cliffbrake
Woodsia obtuse
Woodsia

MARSILEACEAE

Pilularia americana
American pillwort
Marsilea mucronata
Pepper wort

PINACEAE

Juniperus virginiana
Eastern Red Cedar
*Pinus echinata**
Shortleaf pine
*Pinus edulis**
Nut pine
*Pinus ponderosa**
Western Yellow pine
*Pinus taeda**
Loblolly pine

CUPRESSACEAE

*Thuja orientalis**
Oriental Arbor-Vitae

TYPHACEAE

Typha angustifolia
Narrow leaf cattail
Typha domingensis
Cattail
Typha latifolia
Cattail

ZOSTERACEAE

Potamogeton amplifolius
Largeleaf pondweed
Potamogeton diversifolius
Waterthread pondweed
Potamogeton nodosus
Longleaf pondweed
Potamogeton pusillus
Baby pondweed

NAJADACEAE

Najas guadalupensis
Southern naiad

ALISMACEAE

Echinodorus cordifolius
Erect burhead
Sagittaria calycina
Longlobe arrowhead
Sagittaria latifolia
Arrowhead

POACEAE

*Agropyron repens**
Couch grass
Agrostis ellottiana

Elliott bentgrass	Bermuda grass
<i>Agrostis hymenalis</i>	<i>Dactylis glomerata</i>
Winter bentgrass	Orchard grass
<i>Alopecurus caroliniana</i>	<i>Digitaria sanguinalis</i>
Carolina foxtail	Hairy crabgrass
<i>Andropogon barbinodis</i>	<i>Diplachne fascicularis</i>
Cane bluestem	Bearded spranglegrass
<i>Andropogon gerardi</i>	<i>Echinochloa crusgalli</i>
Big bluestem	Barnyard grass
<i>Andropogon saccharoides</i>	<i>Elusine indica</i>
Silver bluestem	Goosegrass
<i>Andropogon scoparius</i>	<i>Elymus canadensis</i>
Little bluestem	Canada wildrye
<i>Aristida dichotoma</i>	<i>Elymus virginicus</i>
var. <i>dichotoma</i>	Virginia wildrye
Churchmouse threeawn	<i>Eragrostis capillaris</i>
<i>Aristida dichotoma</i>	Lacegrass
var. <i>curtissii</i>	<i>Eragrostis curtipedicellata</i>
Curtis threeawn	Gummy lovegrass
<i>Aristida longiseta</i>	<i>Eragrostis hypnoides</i>
Red threeawn	Teal lovegrass
<i>Aristida longespica</i>	<i>Eragrostis intermedia</i>
Slimspike threeawn	Plains lovegrass
<i>Aristida oligantha</i>	<i>Eragrostis cilianensis</i>
Oldfield threeawn	Stinkgrass
<i>Aristida purpurea</i>	<i>Eragrostis oxylepsis</i>
Purple threeawn	var. <i>oxylepis</i>
<i>Aristida wrightii</i>	Red lovegrass
Wright threeawn	<i>Eragrostis oxylepsis</i>
<i>Bouteloua curtipendula</i>	var. <i>beyrichii</i>
Sideoats grama	Wichita lovegrass
<i>Bouteloua gracilis</i>	<i>Eragrostis pectinacea</i>
Blue grama	Carolina lovegrass
<i>Bouteloua hirsute</i>	<i>Eragrostis pilosa</i>
Hairy grama	India lovegrass
<i>Bouteloua rigidiseta</i>	<i>Eragrostis reptans</i>
Texas grama	Creeping lovegrass
<i>Bromus japonicus</i>	<i>Eragrostis sessilispica</i>
Japanese brome	Tumble lovegrass
<i>Bromus arvensis*</i>	<i>Eragrostis spectabilis</i>
Field brome	Purple lovegrass
<i>Bromus purgans</i>	<i>Eragrostis trichodes</i>
Canada brome	Sand lovegrass
<i>Bromus tectorum</i>	<i>Eriochloa contracta</i>
Cheatgrass	Prairie cutgrass
<i>Bromus uniloides</i>	<i>Festuca octoflora</i>
Rescuegras	Sixweeks fescue
<i>Buchloe dactyloides</i>	<i>Festuca pratensis</i>
Buffalo grass	Suiter fescue
<i>Cenchrus pauciflorus</i>	<i>Festuca versuta</i>
Mat sandbur	Texas fescue
<i>Chloris verticillata</i>	<i>Hordeum pusillum</i>
Tumble windmillgrass	Little barley
<i>Chloris virgata</i>	<i>Leersia oryzoides</i>
Showy chloris	Rice grass
<i>Cynodon dactylon</i>	<i>Leptochloa dubia</i>

Green sprangletop
Leptoloma cognatum
Fall witchgrass
Limnodea arkansana
Ozark grass
Manisuris cylindrica
Carolina jointtail
Melica nitens
Threeflower melic
Muhlenbergia capillaris
Hairawn muhly
Muhlenbergia frondosa
Wirestem muhly
Muhlenbergia racemosa
Green muhly
Panicum agrostoides
Redtop panicum
Panicum anceps
Beaked panicum
Panicum capillare
Witchgrass
Panicum depauperatum
Poor panic grass
Panicum dichotomiflorum
Fall panicum
Panicum lanuginosum
Wooly panicum
Panicum linearifolium
Slimleaf panicum
Panicum malacophyllum
Shortleaf panicum
Panicum obtusum
Vine-mesquite
Panicum obligosanthos
var. *scribnerianum*
Scribner panicum
Panicum perlongum
Elongate panic grass
Panicum philadelphicum
Philadelphia witchgrass
Panicum virgatum
Switchgrass
Paspalum pubiflorum
var. *publiflorum*
Hairyseed paspalum
Paspalum publiflorum
var. *glabrum*
Smoothseed paspalum
Paspalum setaceum
Fringeleaf paspalum
Phalaris caroliniana
Carolina canary grass
Poa annua
Annual bluegrass
Poa arachnifera
Texas bluegrass
Poa compressa
Canada bluegrass
Schedonnardus paniculatus
Tumblegrass
Setaria geniculata
Knotroot bristlegrass
Setaria viridis
Green bristlegrass
Sorghastrum nutans
Indiangrass
Sorghum halapense
Johnson grass
Spartina pectinata var. *suttiei*
Prairie cordgrass
Sphenopholis obtusata
Prairie wedgescale
Sporobolus airoides
Alkali Sacaton
Sporobolus asper
Tall dropseed
Sporobolus cryptandrus
Sand dropseed
Sporobolus pyramidatus
Whorled dropseed
Sporobolus vaginiflorus
var. *vaginiflorus*
Poverty dropseed
Sporobolus vaginiflorus
var. *neglectus*
Puffsheath dropseed
Trichachne californica
Arizona cottontop
Tridens albescens
White tridens
Tridens flavus
Purpletop
Tridens muticus var. *muticus*
Slim tridens
Tridens muticus var. *elongatus*
Rough tridens
Tridens pilosus
Hairy tridens
Tridens strictus
Longspike tridens
Tripsacum dactyloides
Eastern gamagrass
Uniola latifolia
Broadleaf uniola

CYPERACEAE

Bulbostylis capillaris
Hairsedge
Carex amphibola
Narrowleaf sedge
Carex annectens
Yellowfruit sedge

Carex austrina
 Southern sedge
Carex blanda
 Woodland sedge
Carex festucacea
 Fescue sedge
Carex frankii
 Frank sedge
Carex gravida var. *lunellina*
 Lunnell sedge
Carex joori
 Hummock sedge
Carex microrhyncha
 Littlesnout sedge
Carex praegracilis
 Slender sedge
Carex stricta var. *elongata*
 Emory sedge
Carex vulpinoidea
 Fox sedge
Cyperus acuminatus
 Taperleaf flatsedge
Cyperus aristatus
 Bearded flatsedge
Cyperus erythrorhizos
 Redroot flatsedge
Cyperus esculentus
 Chufa
Cyperus filiculmis
 Slender flatsedge
Cyperus odoratus
 Fragrant flatsedge
Cyperus ovularis
 Globe flatsedge
Cyperus schweinitzii
 Schweinitz flatsedge
Cyperus setigerus
 Bristled spike flatsedge
Cyperus strigosus
 False nut sedge
Cyperus virens
 Green flatsedge
Eleocharis compressa
 Flatstem spikesedge
Eleocharis engelmannii
 Englemann spikesedge
Eleocharis macrostachya
 Longspike spikesedge
Eleocharis montevidensis
 Sand spikesedge
Eleocharis obtusa
 Blunt spikesedge
Eleocharis parvula
 Dwarf spikesedge
Eleocharis quadrangulata
 Squarestem spikesedge

Eleocharis tenuis
 Slender spikesedge
Fimbristylis spadicea
 Plains fimbry
Fimbristylis vahlii
 Vahl fimbry
Fuirena simplex
 Western umbrella sedge
Hemicarpha micrantha
 Hemicarpha
Scirpus acutus
 Hardstem bulrush
Scirpus americanus
 American bulrush
Scirpus atrovirens
 Green bulrush
Scirpus lacustris
 Softstem bulrush
Scirpus lineatus
 Rusty bulrush
Scirpus paludosis
 Alkali bulrush
Scirpus pauciflora
 Fewflower nutrush

ARACEAE

Arisaema dracontium
 Dragonroot or
 Jack-in-the-Pulpit

LEMNACEAE

Lemna minor
 Duckweed

COMMELINACEAE

Commelina erecta
 var. *angustifolia*
 Narrowleaf
 dayflower
Commelina virginica
 Virginia dayflower
Tradescantia hirsutiflora
 Hairyflower spiderwort
Tradescantia occidentalis
 Prairie spiderwort
Tradescantia ohiensis
 Smoothstalk spiderwort
Tradescantia tharpianii
 Tharp spiderwort

PONTEDERIACEAE

Heteranthera limosa
 Blue mudplantain

JUNCACEAE

Juncos acuminatus
 Knotleaf rush

Juncus balticus
Baltic rush
Juncus interior
Inland rush
Juncus marginatus
Grassleaf rush
Juncus tenuis var. *tenuis*
Poverty rush
Juncus tenuis var. *dudleyi*
Dudley rush
Juncus
torreyi Torrey
rush

LILIACEAE

Allium canadense
Canada garlic
Allium drummondii
Drummond onion
Allium stellatum
Prairie onion
Androstephium coeruleum
Blue funnellily
Camassia scilloides
Atlantic camass
Erythronium americanum
Fawn lily
Nothoscordum bivalve
Yellow false garlic
Smilax bona-nox
Saw greenbrier
Smilax herbacea
Carrionflower
Smilax rotundifolia
Greenbrier
Smilax tamnoides
Bristly greenbrier
Yucca glauca
Small soapweed

AMARYLLIDACEAE

Agave lata
Agave
Zephyranthes brazosensis
Evening start or Rain lily

IRIDACEAE

Nemastylis geminiflora
Prairie iris
Sisyrinchium angustifolium
Blueeye grass

ORCHIDACEAE

Spiranthes cernua
Nodding ladiestresses

SALICACEAE

Populus deltoids
Cottonwood
Salix amygdaloides
Peachleaf willow
Salix caroliniana
Ward's willow
Salix interior
Sandbar willow
*Salix matsudana**
Willow
Salix nigra
Black willow

JUGLANDACEAE

Carya cordiformis
Bitternut hickory
Carya illinoensis
Pecan
Juglans nigra
Black walnut
Juglans rupestris
Little walnut

FAGACEAE

Quercus falcate
Southern red oak
Quercus macrocarpa
Bur oak
Quercus marilandica
Blackjack oak
Quercus mohriana
Mohrs oak
Quercus muhlenbergii
Chinquapin oak
Quercus rubus var. *borealis*
Red oak
Quercus shumardii
var. *shumardii*
Shumard's oak
Quercus shumardii
var. *schneckii*
Schneck's oak
Quercus stellata
Post oak
Quercus velutina
Black oak
Quercus virginiana
Live oak

ULMACEAE

Celtis laevigata
Sugar hackberry
Celtis occidentalis
Hackberry
Celtis reticulata
Netleaf hackberry

Ulmus americanus
American elm
*Ulmus pumila**
Chinese elm
Ulmus rubra
Slippery elm

MORACEAE

Maclura pomifera
Osage orange
Morus microphylla
Texas mulberry
Morus rubra
Red mulberry
*Morus tatarica**
Russian mulberry

URTICACEAE

Boehmeria cylindrica
Smallspike false-nettle
Parietaria pensylvanica
Pennsylvania pellitory

SANTALACEAE

Comandra pallida
Western comandra

LORANTHACEAE

Phoradendron serotinum
Mistletoe

ARISTOLOCHACEAE

Aristolochia tomentosa
Woolly dutchmanpipe

POLYGONACEAE

Eriogonum annuum
Annual wild buckwheat
Eriogonum longifolium
Longleaf wild buckwheat
Polygonum aviculare
Prostrate knotweed
Polygonum bicorne
Longstipe smartweed
Polygonum coccinium
Bigroot smartweed
Polygonum convolvulus
Dullseed cornbind
Polygonum hydropiper
Marshpepper smartweed
Polygonum hydropiperoides
var. *hydropiperoides*
Swamp smartweed
Polygonum hydropiperoides
var. *opelousanum*
Opelousas swamp smartweed
Polygonum lapathifolium

Curlytop smartweed
Polygonum pensylvanicum
Pennsylvania smartweed
Polygonum punctatum
Dotted smartweed
Polygonum ramosissimum
Bushy knotweed
Polygonum scandens
Hedge cornbind
Polygonum tenue
Pleatleaf knotweed
Rumex altissimus
Pale dock
Rumex crispus
Curly dock

CHENOPODIACEAE

Chenopodium album
Lambsquarters
Chenopodium hybridum
var. *gigantospermum*
Bigseed goosefoot
Chenopodium leptophyllum
Slimleaf goosefoot
Chenopodium standleyanum
Standley goosefoot
Salsola Kali var. *tenuifolia*
Russian thistle
Monolepis nuttalliana
Nuttall monolepis

AMARANTHACEAE

Alternanthera repens
Mat chaff flower
Amaranthus graecizans
Tumbleweed
Amaranthus hybridus
Slim amaranth
Amaranthus palmeri
Palmer amaranth
Amaranthus retroflexus
Redroot amaranth
Amaranthus tamarascinus
Waterhemp
*Brayulinea densa**
Cottonflower
Froelichia floridana
Florida snakecotton
Floelichia gracilis
Slender snakecotton
Gossypianthus lanuginosus
Woolly cottonflower
Gossypianthus tenuiflorus
Lanceleaf cottonflower

NYCTAGINACEAE

Mirabilis albida
Pale umbrella-wort
Mirabilis inearis
Narrowleaf umbrella-wort
Mirabilis nyctaginea
Heartleaf umbrella-wort

PHYTOLACCACEAE

Phytolacca americana
Pokeberry

AIZOACEAE

Mollugo verticillata
Green carpetweed

PORTULACACEAE

Claytonia virginica
Virginia spring beauty
Portulaca oleracea
Purslane
Portulaca parvula
Shaggy purslane
Portulaca umbraticola
Wingpod purslane
Talinum calycinum
Rockpink
Talinum parviflorum
Prairie fameflower
*Talinum rugospermum**
Roughseed fameflower

CARYOPHYLLACEAE

Arenaria patula
Pitcher's sandwort
Arenaria stricta var. *texana*
Texas sandwort
Cerastium brachypodum
Shortstalk chickweed
Sagina decumbens
Trailing pearlwort
Silene antirrhina
Sleepy catchfly

ILLECEBRACEAE

Paronychia jamesii
James nailwort
Paronychia virginica
Virginia nailwort

CERATOPHYLLACEAE

Ceratophyllum demersum
Coontail

RANUNCULACEAE

Anemone caroliniana
Carolina anemone

Anemone decapetala
Tenpetal anemone
Clematis pitcheri
Pitcher clematis
Delphinium virescens
Plains larkspur

BERBERIDACEAE

*Mahonia aquifolium**
Barberry

MENISPERMACEAE

Cocculus carolinus
Carolina snailseed
Menispermum canadense
Moonseed

PAPAVERACEAE

Argemone polyanthemus
Prickle poppy

FUMARIACEAE

Corydalis aurea
var. *occidentalis*
Goldon corydalis

CAPPARIDACEAE

Cleome serrulata
Bee spider flower
Cleomella angustifolia
Narrowleaf rhombopod
Polanisia dodecandra
Roughseed
clammywort

CRUCIFERAE

Arabis missouriensis
Green rockcress
Capsella bursa-pastoris
Shepherdspurse
Descurainia pinnata
Pinnate tansymustard
Dithyrea wislizenii
Wislizen's spectacle pod
Draba brachycarpa
Shortpod draba
Draba cuneifolia
Wedgeleaf draba
Draba reptans
Carolina draba
Erysimum capitatum
Plains erysimum
Lepidium oblongum
Veiny pepperwort
Lepidium virginicum
Virginia pepperwort
Lesquerella auriculata
Earleaf bladderpod

Lesquerella gordonii
Gordon bladderpod
Lesquerella gracilis
Lax bladderpod
Lesquerella ovalifolia
var. *alba*
Roundleaf bladderpod
Nasturtium officinale
Watercress
Rorippa islandica
Bog marshcress
Rorippa sessilifolia
Stalkless yellowcress
Sibara virginica
Virginia rockcress

CRASSULACEAE

Sedum nuttallianum
Yellow stonecrop
Sedum pulchellum
Texas stonecrop

SAXIFRAGACEAE

Ribes odoratum
Clove current

ROSACEAE

Argimonia parviflora
Mayflower grovebur
Amelanchier arborea
Service berry
Crataegus crus-galli
Cockspur hawthorn
Crataegus engelmannii
Engelmann hawthorn
Crataegus reverchonii
Reverchon hawthorn
Geum canadense
White avens
*Geum virginiana**
Bristly avens
Potentilla arguta
Cinquefoil
Prunus americana
American plum
Prunus angustifolia
Chickasaw plum
*Prunus armeniaca**
Apricot
Prunus persica
Peach
Prunus gracilis
Oklahoma plum
Prunus mexicana
Mexican plum
Prunus virginiana

Chokecherry
*Rosa foliolosa**
Leafy rose
*Rosa multiflora**
Multiflora rose
Rubus aboriginum
Northern dewberry
Rubus idaeus
Red raspberry
Rubus louisianus
Louisiana
blackberry
Rubus occidentalis
Blackcap raspberry
Rubus trivialis
Lowbush blackberry
*Spiraea arguta**
Spirea
*Spiraea cantoniensis**
Spirea
*Spiraea vanhouttei**
Spirea

LEGUMINOSAE

Acacia angustissima
Prairie acacia
Amorpha canescens
Leadplant
Amorpha fruticosa
Indigobush amorpha
*Amorpha microphylla**
Smallleaf amorpha
*Amorpha nana**
Fragrant false indigo
Apios americana
Groundnut
Astragalus crassicaarpus
Groundplum milkvetch
Astragalus lindheimeri
Lindheimer milkvetch
Astragalus plattensis
Platte milkvetch
Baptisia australis var. *minor*
Blue wild indigo
Baptisia leucophaea
Plains wild indigo
Baptisia sphaerocarpa
Golden wild indigo
Cassia fasciculata
Showy partridgepea
Cassia marilandica
Wild senna
Cercis canadensis
Redbud
Clitoria mariana
Atlantic pigeonwings

<i>Colutea arborescens*</i>	White prairie clover
Bladder senna	<i>Petalostemum multiflorum</i>
<i>Crotalaria sagittalis</i>	Roundtop prairie clover
Arrow crotalaria	<i>Petalostemum purpureum</i>
<i>Dalea aurea</i>	Purple prairie clover
Siltop aurea	<i>Petalostemum tenuifolium</i>
<i>Dalea enneandra</i>	Slimleaf prairie clover
Bigtop dalea	<i>Prosopis juliflora</i>
<i>Dalea purpurea</i>	Mesquite
Purple prairie-clover	<i>Psoralea cuspidata</i>
<i>Desmanthus illinoensis</i>	Tallbread scurfpea
Illinois bundleflower	<i>Psoralea esculenta</i>
<i>Desmodium ciliare</i>	Indian breadroot
Littleleaf tickclover	<i>Psoralea linearifolia</i>
<i>Desmodium glutinosum</i>	Slimleaf scurfpea
Sticky tickclover	<i>Psoralea tenuiflora</i>
<i>Desmodium nudiflorum</i>	Wild alfalfa
Barestem tickclover	<i>Robinia pseudoacacia</i>
<i>Desmodium paniculatum</i>	Black locust
Panicled tickclover	<i>Shrankia uncinata</i>
<i>Desmodium sessilisovium</i>	Catclaw sensitive brier
Sessile tickclover	<i>Strophostyles helvola</i>
<i>Galactia volubilis</i>	Trailing wildbean
Downy milkpea	<i>Strophostyles leiosperma</i>
<i>Gleditsia triacanthos</i>	Slickseed wildbean
Honeylocust	<i>Stylosanthes riparia</i>
<i>Glycyrrhiza lepidota</i>	Endbeak pencilflower
American licorice	<i>Trifolium reflexum</i>
<i>Gymnocladus dioica</i>	Buffalo clover
Kentucky coffee tree	<i>Vicia ludoviciana</i>
<i>Hoffmanseggia densiflora</i>	Louisiana vetch
Indian rushpea	<i>Vicia sparsifolia</i>
<i>Indigofera miniata</i>	Stiffleaf vetch
var. <i>leptosepala</i>	
Coast indigo	<u>GERANIACEAE</u>
<i>Krameria secundiflora</i>	<i>Geranium carolinianum</i>
Trailing ratany	Carolina geranium
<i>Lespedeza capitata</i>	<i>Erodium cicutarium</i>
Roundhead lespedeza	Storcksbill
<i>Lespedeza intermedia</i>	
Intermediate lespedeza	<u>OXALIDACEAE</u>
<i>Lespedeza procumbens</i>	<i>Oxalis stricta</i>
Trailing lespedeza	Oxalis
<i>Lespedeza virginica</i>	<i>Oxalis violacea</i>
Slender lespedeza	Violet woodsorrel
<i>Lotus americanus</i>	
Deervetch	<u>LINACEAE</u>
<i>Melilotus alba</i>	<i>Linum hudsonioides</i>
White sweet clover	Tufted flax
<i>Melilotus officianalis</i>	<i>Linum rigidum</i>
Yellow sweet clover	Stiffstem flax
<i>Neptunea lutea</i>	<i>Linum sulcatum</i>
Yellow neptunea	Grooved flax
<i>Oxytropis lamberti</i>	
Stemless loco	<u>ZYGOPHYLLACEAE</u>
<i>Petalostemum candidum</i>	<i>Tribulus terrestris</i>

- Puncturevine
- RUTACEAE
- Ptelea trifoliata*
Wafer ash
- SIMAROUBACEAE
- Ailanthus altissima**
Tree-of-Heaven
- POLYGALACEAE
- Polygala alba*
White milkwort
Polygala verticillata
Whorled milkwort
- EUPHORBIACEAE
- Acalypha gracilens*
Slender copperleaf
Acalypha ostryaefolia
Hophornbeam copperleaf
Croton capitatus
Woolly croton
Croton glandulosus
Tropic croton
Croton lindheimerianus
Threeseed croton
Croton monanthogynus
Oneseed croton
Croton texensis
Texas croton
Euphorbia commutata
Tinted euphorbia
Euphorbia corollata
Flowering spurge
Euphorbia dentata
Toothed euphorbia
Euphorbia glyptosperma
Ridgeseed euphorbia
Euphorbia hexagona
Six-angle euphorbia
Euphorbia marginata
Snow-on-the-mountain
Euphorbia missourica
Missouri euphorbia
Euphorbia nutans
Spotted euphorbia
Euphorbia obtusata
Roughpor euphorbia
Euphorbia prostrata
Prostrate euphorbia
Euphorbia spathulata
Warty euphorbia
Euphorbia supina
Milk purslane
Phyllanthus carolinienensis
- Carolina leafflower
Phyllanthus polygonoides
Knotweed leafflower
Stillingia sylvatica
Queen's delight
Tragia ramose
Branching noseburn
- CALLITRICHACEAE
- Callitriche heterophylla*
Larger waterstar
wort
- ANACARDIACEAE
- Rhus aromatica*
Skunkbush
Rhus copallina
Flameleaf sumac
Rhus glabra
Smooth sumac
Rhus toxicodendron
Poison ivy
- CELASTRACEAE
- Celastrus scandens*
American Bittersweet
Euonymus atropurpureus
Eastern wahoo
*Euonymus europaeus**
European spindle-tree
- ACERACEAE
- Acer saccharinum**
Silver maple
Acer saccharum
Sugar maple
- HIPPOSCASTANACEAE
- Aesculus glabra*
Ohio buckeye
- SAPINDACEAE
- Sapindus drummondii**
Western soapberry
- RHAMNACEAE
- Ceanothus herbaceus*
var. *pubescens*
Fuzzy ceanothus
*Rhamnus frangula**
Alder buckthorn
- VITACEAE
- Ampelopsis cordata*
Heartleaf ampelopsis
Cissus incisa
Ivy treebine
Parthenocissus quinquefolia
Virginia creeper

Vitis aestivalis

Summer grape

Vitis cinerea

Sweet grape

Vitis palmata

Cat grape

Vitis rotundifolia

Muscadine grape

Vitis rupestris

Sand grape

Vitis vulpina

Riverbank grape

MALVACEAE

Callirhoe involucreta

Low poppymallow

Callirhoe leiocarpa

Tall poppymallow

*Hibiscus syriacus**

Rose of Sharon

Sphaeralcea coccinea

Scarlet mallow

GUTTIFERAE

Hypericum drummondii

Nits and lice

Hypericum mutilum

Dwarf St. John's wort

TAMARICACEAE

*Tamarix hispida**

Kashgar tamarisk

*Tamarix odessana**

Tamarisk

*Tamarix pentandra**

Tamarisk

CISTACEAE

Lechea tenuifolia

Narrowleaf pinwheel

VIOLACEAE

Hybanthus verticillatus

Whorled nodviolet

Viola missouriensis

Missouri violet

Viola papilionacea

Butterfly violet

Viola rafinesquii

Johnny-jump-up

LOASACEAE

Mentzelia oligosperma

Chickthief

Mentzelia stricta

Sandlily

CACTACEAE

Echinocereus baileyi

Wichita pin cushion

Echinocereus reichenbachii

Lace echinocereus

Opuntia compressa

Prickly pear

LYTHRACEAE

Ammannia auriculata

Earleaf ammannia

Ammannia coccinea

Purple ammannia

*Lagerstroemia indica**

Crape myrtle

Lythrum alatum

Winged lythrum

ONAGRACEAE

Gaura biennis var. *pitcheri*

Pitcher gaura

Gaura coccinea

Scarlet gaura

Gaura parviflora

Smallflower gaura

Gaura sinuata

Wavyleaf gaura

Guara suffulta

Roadside gaura

Gaura tripetala

var. *triangulata*

Three petal gaura

Jussiaea decurrens

Wingleaf water primrose

Jussiaea peploides

var. *glabrescens*

Smooth water primrose

Ludwigia alternifolia

bushy boxseed

Ludwigia palustris

Marsh boxseed

Oenothera biennis

Evening primrose

Oenothera heterophylla

Varileaf evening primrose

Oenothera jamesii

Trumpet evening primrose

Oenothera laciniata

var. *laciniata*

Cutleaf evening primrose

Oenothera laciniata

var. *grandiflora*

Largeflowered cutleaf evening primrose

Oenothera linifolia

Threadleaf sundrops

Oenothera macrocarpa
var. *macrocarpa*
Ozark sundrops
Oenothera macrocarpa var. *incana*
Gray sundrops
Oenothera missouriensis
Missouri evening primrose
Oenothera serrulata
Halfshrub sundrops
Oenothera speciosa
Showy sundrops
Oenothera triloba
Stemless evening primrose
Stenosiphon virgatus
False gaura

HALORAGACEAE

Myriophyllum brasiliensis
Parrot feather
Myriophyllum exalbescens
Parrot feather

UMBELLIFERAE

Ammoselinum butleri
Butler sandparsley
Ammoselinum popei
Plains sandparsley
Chaerophyllum tainturieri
var. *dasycarpum*
Hairyfruit chervil
Cicuta maculata
Spotted water hemlock
*Daucus carota**
Wild carrot
Daucus pusillus
Southwestern carrot
Eryngium diffusum
Bushy eryngo
Eryngium leavenworthii
Leavenworth eryngo
Limnoscium pinnatum
Arkansas dogshade
Lomatium daucifolium
Carrotleaf lomatium
Polytaenia nuttallii
Prairie parsley
Ptilimnium nuttallii
Nuttall mockbishop
Sanicula canadensis
Canada sanicle
Spermolepis divaricata
Forked scaleseed
Spermolepis echinata
Bristly scaleseed

CORNACEAE

Cornus drummondii
Roughleaf dogwood
*Cornus florida**
Flowering dogwood

PRIMULACEAE

Androsace occidentalis
Western rockjasmine
Dodecatheon meadia
Shooting star
Samolus parviflorus
Thinleaf brookweed

SAPOTACEAE

Bumelia lanuginosa
Woollybucket bumelia

EBENACEAE

Diospyros virginiana
Persimmon

OLEACEAE

Forsythia suspensa
var. *fortunei**
Golden bells
Fraxinus americana
White ash
Fraxinus pennsylvanica
var. *pennsylvanica*
Red ash
Fraxinus pennsylvanica
var. *subintegerrima*
Green ash
*Fraxinus velutina**
Arizona ash
*Jasminum nudiflorum**
Jasmine
*Ligustrum amurense**
Privet
*Ligustrum vulgare**
Privet

GENTIANACEAE

Sabatia angularis
Squarestem rosegentium
Sabatia campestris
Prairie rosegentian

APOCYNACEAE

Amsonia ciliata var. *texana*
Texas slimpod
Amsonia tabernaemontana
Willow slimpod
Apocynum cannabinum
var. *glaberrimum*
Hemp dogbane

ASCLEPIADACEAE

Asclepias asperula
var. *decumbens*
Trailing milkweed
Asclepias latifolia
Broadleaf milkweed
Asclepias pumila
Plains milkweed
Asclepias stenophylla
Slimleaf milkweed
Asclepias sullivantii
Sullivant milkweed
Asclepias tuberosa
Butterfly milkweed
Asclepias verticillata
Whorled milkweed
Asclepias viridiflora
Green acerates
Asclepias viridis
Green antelope horn

CONVOLVULACEAE

Convolvulus arvensis
Small bindweed
Convolvulus incanus
Gray bindweed
Cuscuta coryli
Hazel dodder
Cuscuta gronovii
Gronovius dodder
Cuscuta indecora
Showy dodder
Cuscuta cuspidata
Cusp dodder
Evolvulus nuttallianus
Silver evolvulus
Ipomoea shumardiana
Narrowleaf morning glory

POLEMONIACEAE

Gilia rubra
Texasplume
Phlox pilosa
Downy phlox

HYDROPHYLLACEAE

Nama hispidum
Rough nama
Phacelia congesta
Spike phacelia
Phacelia hirsuta
Hairy phacelia

BORAGINACEAE

Lithospermum arvense
Corn Gromwell

Lithospermum incisum
Narrowleaf
Gromwell
Myosotis macrosperma
Southern
forget-me-not
Myosotis verna
Forget-me-not
Onosmodium molle
Marbleseed

VERBENACEAE

Phyla cuneifolia
Wedgeleaf
fogfruit
Phyla incisa
Sawtooth fogfruit
Verbena bipinnatifida
Dakota verbena
Verbena bracteata
Bigbract verbena
Verbena canadensis
Rose verbena
Verbena pumila
Pink verbena
Verbena stricta
Woolly verbena
Verbena urticifolia
White verbena
*Vitex agnus-castus**
Chaste tree

LABIATAE

Hedeoma drummondii
Drummond hedeoma
Hedeoma hispida
Rough hedeoma
Lamium amplexicaule
Henbit
Lycopus americanus
American bugleweed
Monarda citriodora
Lemon beebalm
Monarda clinopodioides
Basil beebalm
Monarda fistulosa
Shrubby beebalm
Monarda punctata
Spotted beebalm
Nepeta cataria
Catnip
Salvia azurea var. *grandiflora*
Azure sage
Salvia reflexa
Lanceleaf sage
Scutellaria drummondii

Drummond skullcap
Scutellaria resinosa
Resindot skullcap
Scutellaria wrightii
Wright skullcap
Teucrium canadense
American germander
Teucrium laciniatum
Cutleaf germander
Trichostema brachiatum
Fluxweed

SOLANACEAE

Physalis lobata
Purple groundcherry
Physalis virginiana
var. *sonorae*
Virginia groundcherry
Physalis viscosa
var. *cinerascens*
Beach groundcherry
Physalis viscosa var. *mollis*
Field groundcherry
Solanum carolinense
Carolina horsenettle
*Solanum citrullifolium**
Watermelon leaved solanum
Solanum elaeagnifolium
Silverleaf nightshade
Solanum rostratum
Buffalobur
Solanum torreyi
Torrey horsenettle

SCROPHULARIACEAE

Bacopa rotundifolia
Disc waterhyssop
Castilleja citrina
Citron paintbrush
Castilleja sessiliflora
Downy paintbrush
Collinsia violacea
Violet collinsia
Gratiola virginiana
Virginia hedgehyssop
Leucospora multifida
Narrowleaf conobea
Linaria canadensis var. *texana*
Oldfield toadflax
Lindernia anagallidea
Clasping False-pimpernel
Lindernia dubia
Yellowseed false-pimpernel
Penstemon albidus
White penstemon
Penstemon cobeae

Cobaea penstemon
Penstemon oklahomensis
Oklahoma penstemon
Penstemon tubaeflorus
Tube panstemon
Scrophularia lanceolata
Narrowleaf figwort
Veronica arvensis
Speedwell
Veronica peregrina
Purslane speedwell
Verbascum thapsus
Flannel mullein

BIGNONIACEAE

Catalpa speciosa
Catalpa
*Chilopsis linearis**
Desert willow

MARTYNIACEAE

Proboscidea louisianica
Unicorn plant

LENTIBULARIACEAE

Utricularia biflora
Bladderwort
Utricularia vulgaris
Bladderwort

ACANTHACEAE

Justicia americana
Justicia
Ruellia humilis
Low ruellia
Ruellia pedunculata
Stalked ruellia

PHRYMACEAE

Phryma leptostachya
Lopseed

PLANTAGINACEAE

Plantago aristata
Bottlebrush plantain
Plantago elongata
Elongate plantain
Plantago purshii var. *purshii*
Slender plantain
Plantago purshii var. *spinulosa*
Bristlebract plantain
Plantago rhodosperma
Redseed plantain
Plantago virginica
Paleseed plantain
Plantago wrightiana
Wright plantain

RUBIACEAE

Cephalanthus occidentalis
Buttonbush
Diodia teres var. *setifera*
Rough buttonweed
Galium aparine
Catchweed bedstraw
Galium pilosum
Hairy bedstraw
Galium texense
Texas bedstraw
Galium triflorum
Fragrant bedstraw
Galium virgatum
Southwest bedstraw
Hedyotis crassifolia
Tiny bluet
Hedyotis nigricans
Narrowleaf bluet
Hedyotis purpurea
var. *longifolia*
Purple bluet

CAPRIFOLIACEAE

*Lonicera japonica**
Honeysuckle
*Lonicera tatarica**
Tatarian honeysuckle
Symphoricarpos orbiculatus
Coralberry
Viburnum prunifolium
var. *ferrugineum*
Rusty blackhaw

VALERIANACEAE

Valerianella radiata
var. *radiata*
Beaked cornsalad
Valerianella radiata
var. *parviflora*
Narrowcell
cornsalad

CUCURBITACEAE

Cucurbita foetidissima
Buffalo gourd
Cyclanthera dissecta
Cutleaf cyclanthera
Ibervillea lindheimeri
Lindheimer globeberry
Melothria pendula
Drooping melonette

CAMPANULACEAE

Specularia biflora
Small venus-looking glass

Specularia leptocarpa
Slimpod venus-looking glass
Specularia perfoliata
Clasping venus-looking glass

LOBELIACEAE

Lobelia appendiculata
Earflower lobelia
Lobelia cardinalis
Cardinal flower
Lobelia spicata
Palespike lobelia

COMPOSITAE

Achillea lanulosa
Western yarrow
Achillea millefolium
Yarrow
Agoseris cuspidate
Wavyleaf agoseris
Ambrosia artemisiifolia
Ragweed
Ambrosia psilostachys
Western ragweed
Ambrosia trifida
Giant ragweed
Antennaria plantaginifolia
Plantain-leaf pussy toes
Aphanostephus pilosus
Hairy dozedaisy
Aphanostephus ramosissimus
Plains dozedaisy
Aphanostephus skirrhobasis
Arkansas dozedaisy
Artemisia carruthii
Carruth sagewort
Artemisia filifolia
Fingleaf sagewort
Artemisia glauca
False terragon sagewort
Artemisia ludoviciana
var. *ludoviciana*
Louisiana sagewort
Artemisia ludoviciana
var. *mexicana*
American sagewort
*Artemisia serrata**
Sawtooth sagewort
*Aster communtatus**
Cluster aster
Aster ericoides
Heath aster
Aster fendleri
Fendler aster
Aster oblongifolius
Aromatic aster

<i>Aster patens</i>	<i>Erigeron strigosus</i>
Skydrop aster	Prairie fleabane
<i>Aster subulatus</i>	<i>Eupatorium serotinum</i>
Awl shaped aster	Late eupatorium
<i>Baccharis salicina</i>	<i>Evax multicaulis</i>
Willow groundsel-tree	Manystem evax
<i>Berlandiera texana</i>	<i>Evax prolifera</i>
Texas greeneyes	Bighead evax
<i>Bidens cernua</i>	<i>Gaillardia pulchella</i>
Nodding beggarticks	Roserling gaillardia
<i>Bidens frondosa</i>	<i>Gaillardia suavis</i>
Devil's beggarticks	Sweet gaillardia
<i>Centaurea americana</i>	<i>Gnaphalium chilense</i>
Basketflower	Cottonbatting cudweed
<i>Chaetopappa asteroides</i>	<i>Gnaphalium purpureum</i>
Least daisy	Purple cudweed
<i>Chrysopsis pilosa</i>	<i>Gnaphalium wrightii</i>
Soft goldaster	Wright cudweed
<i>Chrysopsis villosa</i> var. <i>villosa</i>	<i>Grindelia squarrosa</i>
Hairy goldaster	var. <i>squarrosa</i>
<i>Chrysopsis villosa</i>	Curlycup gumweed
var. <i>canescens</i>	<i>Grindelia squarrosa</i>
Hairy goldaster	var. <i>nuda</i>
<i>Chrysopsis villosa</i>	Rayless gumweed
var. <i>stenophylla</i>	<i>Gutierrezia dracunculoides</i>
Narrowleaf goldaster	Broom weed
<i>Cirsium ochrocentrum</i>	<i>Gutierrezia sarothrae</i> *
Yellowspine thistle	Broom snakeweed
<i>Cirsium undulatum</i>	<i>Haplopappus ciliatus</i>
Wavyleaf thistle	Wax goldenweed
<i>Conyza canadensis</i>	<i>Haplopappus spinulosus</i>
Horseweed fleabane	Cutleaf goldonweed
<i>Conyza ramoisissima</i>	<i>Helenium amarum</i> var. <i>amarum</i>
Conyza	Bitter sneezeweed
<i>Coreopsis grandiflora</i>	<i>Helenium amarum</i> var. <i>badium</i>
var. <i>longipes</i>	Basin sneezeweed
Bigflower coreopsis	<i>Helenium autumnale</i>
<i>Coreopsis lanceolata</i>	Sneezeweed
var. <i>villosa</i>	<i>Helenium flexuosum</i>
Lanceleaf coreopsis	Flexuous sneezeweed
<i>Coreopsis tinctoria</i>	<i>Helenium microcephalum</i>
Plains coreopsis	Smallhead sneezeweed
<i>Dyssodia tagetioides</i>	<i>Helianthus annuus</i>
Marigold dogweed	Annual sunflower
<i>Echinacea angustifolia</i>	<i>Helianthus hirsutus</i>
Black sampson	Hairy sunflower
<i>Echinacea pallida</i>	<i>Helianthus laetiflorus</i>
Pale purple coneflower	Stiff sunflower
<i>Eclipta alba</i>	<i>Helianthus maximilani</i>
Yerba de tajo	Maximilian sunflower
<i>Englemannia pinnatifida</i>	<i>Helianthus petiolaris</i>
Engelmann daisy	Prairie sunflower
<i>Erigeron bellidiastrum</i>	<i>Hieracium longipilum</i>
Western fleabane	Longbeard hawkseed
<i>Erigeron divergens</i>	<i>Hymenopappus scabiosaeus</i>
Spreading fleabane	Flat-top woollywhite

Hymenopappus tenuifolius
Chalkhill woollywhite
Hymenoxys linearifolia
Fineleaf actinea
Hymenoxys scaposa var. *linearis*
Plains actinea
Iva ciliata
Seacoast sumpweed
Krigia dandelion
Tuber dwarf dandelion
Krigia oppositifolia
Weedy dwarf dandelion
Kuhnia eupatorioides
var. *corymbulosa*
Plains kuhnia
Lactuca canadensis
Canada lettuce
*Lactuca pulchella**
Chickory lettuce
Lactuca scariola
Prickly lettuce
Liatris aspera
Rough gayfeather
Liatris punctata
Dotted gayfeather
Liatris scariosa
Tall gayfeathcr
Palafoxia texana
Texas palafoxia
Pluchea camphorata
Camphor pluchea
Pyrrhopappus carolinianus
Carolina false-dandelion
Pyrrhopappus scaposus
Tuber false-dandelion
Ratisida columnifera
Upright prairie coneflower
Rudbeckia hirta
Blackeyed susan
*Santolina chamaecyparissus**
Lavender cotton
Senecio plattensis
Prairie groundsel
Senecio riddellii
Riddell groundsel
Silphium asteriscus
Sand rosinweed
Silphium laciniatum
Compass plant
*Solidago bootii**
Boot goldenrod
Solidago gigantea
var. *leiophylla*
November goldenrod
Solidago missouriensis
var. *fasciculata*

Missouri goldenrod
Solidago mollis
Ashy goldenrod
Solidago petiolaris
Downy goldenrod
Solidago radula
Rough goldenrod
Taraxacum officinale
Dandelion
Thelesperma ambiguum
Colorado greenthread
Thelesperma filifolium
Plains greenthread
Thelesperma megapotamicum
Rayless greenthread
Townsendia excapa
Stemless Townsendia
Tragopogon major
Yellow goat's beard
Verbescina virginica
White crownbeard
Vernonia baldwinii
Baldwin ironweed
Vernonia missurica
Missouri ironweed
Xanthisma texanum
Texas
sleepydaisy
Xanthium
strumarium
Cocklebur

Editor's note:

This paper, written in 1977, was originally distributed by the Wichita Mountains Wildlife Refuge as an informational handout but never published. Scientific names that were originally underlined have been italicized and species epithets derived from a person's name are not capitalized as they were in the original work to abide with current taxonomic practice. The author emphasizes that there is a great need to update this twenty-five year old floristic list and, together with WMWR, encourages new research on this site.

Floristic List for Comanche County, Oklahoma

Bruce Hoagland
Oklahoma Biological Survey/Department of Geography
University of Oklahoma
Norman, OK 73019

Floristic lists are vital tools for conservation planning, research, and wildflower appreciation. The diverse physical geography of Comanche County contributes to the high degree of plant diversity and habitats. The county is probably best known for the Wichita Mountains, which are composed of Cambrian gabbro and granites. To the north of the Wichita Mountains is the Slick Hill, an extensive outcropping of limestone. The surface geology of most of the county is composed of Permian sandstones. Land use in the county includes row crop agriculture and pastureland.

INTRODUCTION

The floristic list presented here was generated from the Atlas of the Flora of Oklahoma database. The database contains records for specimens deposited in Oklahoma herbaria. Voucher specimens for plants on the list can be found at one of the following herbaria: Oklahoma State University, Cameron University, University of Science and Arts of Oklahoma, Southeastern Oklahoma State University, and the Bebb Herbarium at the University of Oklahoma. Taxonomy and common names follow the United States Department of Agriculture's *Plants Database* (www.plants.gov.us).

There are 1,137 species and subspecific taxa, from the 116 families listed. There is a total of 3,560 specimens currently recorded in the database. Of those records,

2,009 list the Wichita Mountains as the place of collection and 1,661 list the Wichita Mountains Wildlife Refuge specifically. Other locations in the Wichitas include Medicine Park and Meers. There are 836 records listed for Fort Sill, which includes the Wichita Mountains and a portion of Permian sandstone. The earliest collections in the database are dated 2 July 1903 and were collected by A. Van Vleet in the Wichita Mountains. These specimens are deposited at the Bebb Herbarium. Botanists with large numbers of collections in the database include F. L. Johnson and R. Thompson (790 records for specimens collected as part of floristic inventory of Fort Sill), F. B. McMurry (498 records, all from the Wichita Mountains National Wildlife Refuge), B. Osborn (262 records), and U.T. Waterfall (121 records).

Floristic List for Comanche County, Oklahoma

Ferns and allies

Aspleniaceae

- Asplenium platyneuron* (L.) B.S.P.
ebony spleenwort
Asplenium resiliens Kunze
blackstem spleenwort
Asplenium trichomanes L.
maidenhair spleenwort

Dryopteridaceae

- Dryopteris marginalis* (L.) Gray
marginal woodfern
Woodsia obtusa (Spreng.) Torr.
bluntlobe cliff fern

Equisetaceae

- Equisetum hyemale* L.
scouringrush horsetail
Equisetum hyemale L.
var. *affine* (Engelm.) A.A. Eat.
scouringrush horsetail
Equisetum laevigatum A. Braun
smooth horsetail
Equisetum X ferrissii Clute (pro sp.)

Marsileaceae

- Marsilea vestita* Hook. & Grev.
hairy waterclover
Pilularia americana A. Braun
American pillwort

Ophioglossaceae

- Ophioglossum engelmannii* Prantl
limestone adderstongue
Ophioglossum vulgatum L.
southern adderstongue

Pteridaceae

- Cheilanthes eatonii* Baker
Eaton's lipfern
Cheilanthes lanosa (Michx.) D.C. Eat.
hairy lipfern
Cheilanthes lindheimeri Hook.
fairyswords
Cheilanthes tomentosa Link
woolly lipfern

- Cheilanthes wootonii* Maxon
beaded lipfern
Notholaena sinuata (Lag. ex Sw.)
Kaulfuss
Notholaena standleyi Maxon
star cloak fern
Pellaea atropurpurea (L.) Link
purple cliffbrake
Pellaea wrightiana Hook.
Wright's cliffbrake

Selaginellaceae

- Selaginella peruviana* (Milde) Hieron.
Peruvian spikemoss
Selaginella rupestris (L.)
Spring
northern selaginella

Gymnosperms

Cupressaceae

- Juniperus virginiana* L.
eastern redcedar
Thuja orientalis L.
oriental arborvitae

Angiosperms

Monocotyledonae

Agavaceae

- Manfreda virginica* (L.) Salisb. ex
Rose false aloe
Yucca glauca Nutt.
soapweed yucca

Alismataceae

- Echinodorus berteroi* (Spreng.) Fassett
upright burrhead
Sagittaria brevirostra
Mackenzie & Bush
Shortbeak arrowhead
Sagittaria calycina Engelm.
hooded arrowhead
Sagittaria calycina Engelm.
var. *calycina*
hooded arrowhead

Sagittaria latifolia Willd.
broadleaf arrowhead

Araceae

Arisaema dracontium (L.) Schott
green dragon

Callitrichaceae

Callitriche heterophylla Pursh
twoheaded water-starwort

Ceratophyllaceae

Ceratophyllum demersum L.
coon's tail

Commelinaceae

Commelina erecta L.
whitemouth dayflower
Commelina erecta L.
var. *angustifolia* (Michx.) Fern.
whitemouth dayflower
Commelina erecta L.
var. *deamiana* Fern.
whitemouth dayflower
Commelina virginica L.
Virginia dayflower
Tradescantia ernestiana
E.S. Anderson &
Woods.
Ernest's spiderwort
Tradescantia
occidentalis
(Britt.) Smyth
prairie spiderwort
Tradescantia
occidentalis (Britt.)
Smyth
var. *occidentalis*
prairie spiderwort
Tradescantia ohiensis
Raf. bluejacket
Tradescantia tharpia
E.S. Anderson &
Woods.
Tharp's spiderwort

Hydrocharitaceae

Egeria densa Planch.
Brazilian waterweed

Liliaceae

Allium canadense L.
meadow garlic
Allium canadense L.
var. *fraseri* Ownbey
Fraser meadow garlic
Allium canadense L.
var. *hyacinthoides*
(Bush)
Ownbey & Aase
hyacinth meadow
garlic
Allium canadense L.
var. *mobile*
(Regel) Ownbey
meadow garlic
Allium drummondii Regel
Drummond's onion
Allium stellatum Nutt. ex
Ker-Gawl.
autumn onion
Androstephium
coeruleum (Scheele)
Greene [orthographic
variant]
Camassia angusta
(Engelm. & Gray) Blank.
prairie camas
Camassia scilloides
(Raf.) Cory
Atlantic camas
Cooperia drummondii
Herbert evening
rainlily
Erythronium albidum
Nutt.
white fawnlily
Erythronium
mesochoreum Knerr
midland fawnlily

Erythronium rostratum

W. Wolf
yellow troutlily

Nolina texana S. Wats.

Texas sacahuista

Nothoscordum bivalve

(L.) Britt.
crowpoison

Polygonatum biflorum

(Walt.) Ell.
smooth Solomon's
seal

Polygonatum biflorum

(Walt.) Ell.
var. *commutatum*
(J.A. & J.H. Schultes)
Morong smooth
Solomon's seal

Zigadenus nuttallii (Gray)

S. Wats.
Nuttall's deathcamas

Najadaceae

Najas guadalupensis (Spreng.) Magnus

southern water nymph

Orchidaceae

Spiranthes cernua (L.)

L.C. Rich.
nodding
ladies'-tresses

Spiranthes

magnicamporum
Sheviak
Great Plains
ladies'-tresses

Spiranthes vernalis Engelm. & Gray

spring ladies'-tresses

Poaceae

Aegilops cylindrica Host

jointed goatgrass

Agropyron smithii Rydb.

Agrostis hyemalis (Walt.)

B.S.P.
winter bentgrass

Alopecurus carolinianus

Walt.
Carolina foxtail

Andropogon gerardii

Vitman
big bluestem

Aristida curtissii

(Gray ex S. Wats. &
Coult.) Nash

Aristida dichotoma

Michx.
churchmouse
threeawn

Aristida dichotoma Michx.

var. *curtissii*
Gray ex S. Wats. & Coult.
Curtis' threeawn

Aristida longispica Poir.

var. *longispica*
slimspike threeawn

Aristida oligantha Michx.

prairie threeawn

Aristida purpurascens

Poir.
arrowfeather
threeawn

Aristida purpurea Nutt.

var. *fendleriana*
(Steud.) Vasey
Fendler's threeawn

Aristida purpurea Nutt.

var. *longiseta* (Steud.)
Vasey
Fendler threeawn

Bothriochloa barbinodis

(Lag.) Herter
cane bluestem

Bothriochloa ischaemum

(L.) Keng
yellow bluestem

Bothriochloa

saccharoides
(Sw.) Rydb.
silver bluestem

Bouteloua gracilis

(Willd. ex Kunth) Lag.

- ex Griffiths
 blue grama
Bouteloua hirsuta Lag.
 hairy grama
Bouteloua pectinata
 Featherly
Bouteloua rigidiseta
 (Steud.)
 A.S. Hitchc.
 Texas grama
Bromus catharticus Vahl
 rescuegrass
Bromus commutatus
 Schrad.
 meadow brome
Bromus japonicus Thunb.
 ex Murr.
 Japanese brome
Bromus pubescens Muhl.
 ex Willd.
 hairy woodland brome
Bromus tectorum L.
 cheatgrass
Buchloe dactyloides
 (Nutt.) Engelm.
 buffalograss
Cenchrus incertus M.A.
 Curtis
Cenchrus longispinus
 (Hack.) Fern.
 mat sandbur
Chasmanthium latifolium
 (Michx.) Yates
 Indian woodoats
Chloris verticillata Nutt.
 tumble windmill grass
Chloris virgata Sw.
 feather fingergrass
Cinna arundinacea L.
 sweet woodreed
Cynodon dactylon (L.)
 Pers.
 Bermudagrass
Dactylis glomerata L.
 orchardgrass
Dichanthelium acuminatum (Sw.)
 Gould & C.A. Clark
 tapered rosette grass
Dichanthelium acuminatum (Sw.)
 Gould & C.A. Clark
 var. *fasciculatum*
 (Torr.) Freckmann
 western panicgrass
Dichanthelium acuminatum (Sw.)
 Gould & C.A. Clark
 var. *lindheimeri*
 (Nash) Gould & C.A. Clark
 Lindheimer panicgrass
Dichanthelium linearifolium
 (Scribn. ex Nash) Gould
 slimleaf panicgrass
Dichanthelium malacophyllum
 (Nash) Gould
 softleaf rosette grass
Dichanthelium oligosanthes
 (J.A. Schultes) Gould Heller's
 rosette grass
Dichanthelium oligosanthes
 (J.A. Schultes) Gould
 var. *scribnerianum* (Nash) Gould
 Scribner's rosette grass
Digitaria californica (Benth.) Henr.
 Arizona cottontop
Digitaria cognata
 (J.A. Schultes) Pilger
 Carolina crabgrass
Digitaria ischaemum (Schreb.)
 Schreb. ex Muhl.
 smooth crabgrass
Digitaria sanguinalis (L.) Scop.
 hairy crabgrass
Echinochloa colona (L.) Link
 jungle rice
Echinochloa crus-galli (L.) Beauv.
 barnyardgrass
Echinochloa crus-galli (L.) Beauv.
 barnyardgrass
Eleusine indica (L.) Gaertn.
 Indian goosegrass
Eragrostis barrelieri Daveau
 Mediterranean lovegrass

- Eragrostis capillaris* (L.) Nees
lace grass
- Eragrostis cilianensis* (All.) Vign.
ex Janchen
stinkgrass
- Eragrostis curtipedicellata* Buckl.
gummy lovegrass
- Eragrostis curvula* (Schrad.) Nees
weeping lovegrass
- Eragrostis hypnoides* (Lam.) B.S.P.
teal lovegrass
- Eragrostis intermedia* A.S. Hitchc.
plains lovegrass
- Eragrostis pectinacea*
(Michx.) Nees ex Steud.
tufted lovegrass
- Eragrostis pectinacea* (Michx.)
Nees ex Steud. var. *pectinacea*
tufted lovegrass
- Eragrostis pilosa* (L.) Beauv.
Indian lovegrass
- Eragrostis reptans* (Michx.) Nees
- Eragrostis secundiflora* J. Presl
red lovegrass
- Eragrostis sessilispica* Buckl.
tumble lovegrass
- Eragrostis spectabilis* (Pursh) Steud.
purple lovegrass
- Eragrostis trichodes* (Nutt.) Wood
sand lovegrass
- Eriochloa contracta* A.S. Hitchc.
prairie cupgrass
- Eriochloa sericea* (Scheele)
Munro ex Vasey
Texas cupgrass
- Erioneuron pilosum* (Buckl.) Nash
hairy woollygrass
- Festuca octoflora* Walt.
- Festuca subverticillata*
(Pers.) Alexeev
nodding fescue
- Leersia oryzoides* (L.) Sw.
rice cutgrass
- Leersia virginica* Willd.
whitegrass
- Leptochloa fascicularis* (Lam.) Gray
- Leptochloa mucronata* (Michx.)
Kunth
- Melica nitens* (Scribn.) Nutt. ex Piper
threeflower melicgrass
- Muhlenbergia racemosa*
(Michx.) B.S.P.
marsh muhly
- Muhlenbergia sobolifera*
(Muhl. ex Willd.) Trin.
rock muhly
- Panicum anceps* Michx
beaked panicgrass
- Panicum capillare* L.
witchgrass
- Panicum dichotomiflorum* Michx.
fall panicgrass
- Panicum hallii* Vasey
Hall's panicgrass
- Panicum hillmanii* Chase
Hillman's panicgrass
- Panicum obtusum* Kunth
vine mesquite
- Panicum virgatum* L.
switchgrass
- Pascopyrum smithii* (Rydb.) A. Löve
western wheatgrass
- Paspalidium geminatum*
(Forsk.) Stapf
Egyptian panicgrass
- Paspalum distichum* L.
knotgrass
- Paspalum pubiflorum* Rupr. ex
Fourn.
hairyseed paspalum
- Paspalum pubiflorum* Rupr. ex
Fourn.
var. *glabrum* Vasey ex Scribn.
- Paspalum setaceum* Michx.
thin paspalum
- Paspalum setaceum* Michx.
var. *stramineum* (Nash) D. Banks
- Phalaris caroliniana* Walt.
Carolina canarygrass
- Poa annua* L.
annual bluegrass

Poa arachnifera Torr.
Texas bluegrass
Poa compressa L.
Canada bluegrass
Schedonnardus paniculatus
(Nutt.) Trel.
tumblegrass
Schizachyrium scoparium
(Michx.) Nash
little bluestem
Setaria glauca (L.) Beauv.
Sphenopholis obtusata (Michx.)
Scribn.
prairie wedgescale
Sporobolus airoides (Torr.) Torr.
alkali sacaton
Sporobolus asper (Michx.) Kunth
Sporobolus asper (Michx.) Kunth
var. *drummondii* (Trin.) Vasey
Sporobolus clandestinus (Biehler)
A.S. Hitchc.
rough dropseed
Sporobolus cryptandrus (Torr.) Gray
sand dropseed
Sporobolus neglectus Nash
puffsheath dropseed
Sporobolus ozarkanus Fern.
Sporobolus pyramidatus (Lam.)
A.S. Hitchc.
Sporobolus vaginiflorus
(Torr. ex Gray) Wood
poverty dropseed
Tripsacum dactyloides (L.) L.
eastern gamagrass
Vulpia octoflora (Walt.) Rydb.
sixweeks fescue

Potamogetonaceae

Potamogeton amplifolius Tuckerman
largeleaf pondweed
Potamogeton crispus L.
curly pondweed
Potamogeton diversifolius Raf.
waterthread pondweed
Potamogeton illinoensis Morong
Illinois pondweed

Potamogeton nodosus Poir.
longleaf pondweed
Potamogeton pusillus L.
small pondweed
Potamogeton pusillus L. ssp.
pusillus
small pondweed
Potamogeton pusillus L.
var. *tenuissimus* Mert. & Koch

Typhaceae

Typha angustifolia L.
narrowleaf cattail
Typha domingensis Pers.
southern cattail
Typha latifolia L.
broadleaf cattail

Zannichelliaceae

Zannichellia palustris L.
horned pondweed

Dicotyledonae**Acanthaceae**

Dicliptera brachiata (Pursh) Spreng.
branched foldwing
Justicia americana (L.) Vahl
American water-willow
Ruellia ciliosa Pursh.
Ruellia humilis Nutt.
fringeleaf wild petunia
Ruellia humilis Nutt.
var. *expansa* Fern.
Ruellia humilis Nutt. var. *longiflora*
(Gray) Fern.

Aceraceae

Acer negundo L.
boxelder
Acer negundo L.
var. *interius* (Britt.) Sarg.
boxelder
Acer negundo L. var. *texanum* Pax
boxelder
Acer saccharinum L.
silver maple

Acer saccharum Marsh.
sugar maple

Amaranthaceae

Amaranthus albus L.
prostrate pigweed
Amaranthus arenicola I.M. Johnston
sandhill amaranth
Amaranthus graecizans L.
Amaranthus hybridus L.
slim amaranth
Amaranthus retroflexus L.
redroot amaranth
Amaranthus rudis Sauer
tall amaranth
Froelichia floridana (Nutt.) Moq.
plains snakecotton
Froelichia gracilis (Hook.) Moq.
slender snakecotton
Gossypianthus lanuginosus
(Poir.) Moq.
woolly cottonflower
Gossypianthus lanuginosus (Poir.)
Moq. var. *lanuginosus*
woolly cottonflower
Iresine rhizomatosa Standl.
Juda's bush

Anacardiaceae

Rhus aromatica Ait.
fragrant sumac
Rhus aromatica Ait. var. *serotina*
(Greene) Rehd.
fragrant sumac
Rhus glabra L.
smooth sumac
Rhus trilobata Nutt. var. *trilobata*
skunkbush sumac
Toxicodendron radicans (L.) Kuntze
eastern poison ivy

Apiaceae

Ammoselinum popei Torr. & Gray
plains sandparsley
Chaerophyllum procumbens
(L.) Crantz
spreading chervil

Chaerophyllum tainturieri Hook.
hairyfruit chervil
Chaerophyllum tainturieri Hook.
var. *dasycarpum* Hook.
ex S. Wats.
Chaerophyllum tainturieri Hook.
var. *tainturieri*
Chaerophyllum texanum
Coul. & Rose
Cicuta maculata L.
spotted water hemlock
Conium maculatum L.
poison hemlock
Daucus carota L.
Queen Anne's lace
Daucus pusillus Michx.
American wild carrot
Eryngium hookeri Walp.
Hooker's eryngo
Eryngium leavenworthii Torr. & Gray
Leavenworth's eryngo
Limnoscium pinnatum (DC.)
Mathias & Constance
tansy dogshade
Lomatium daucifolium
(Torr. & Gray) Coul. & Rose
Lomatium foeniculaceum (Nutt.)
Coul. & Rose ssp. *daucifolium*
(Torr. & Gray) Theobald
desert biscuitroot
Polytaenia nuttallii DC.
Nuttall's prairie parsley
Sanicula canadensis L.
Canadian blacksnakeroot
Spermolepis divaricata
(Walt.) Raf. ex Ser.
roughfruit scaleseed
Spermolepis echinata
(Nutt. ex DC.) Heller
bristly scaleseed
Spermolepis inermis (Nutt. ex DC.)
Mathias & Constance
Red River scaleseed
Spermolepis patens
(Nutt. ex DC.) B.L. Robins.

Torilis nodosa (L.) Gaertn.
knotted hedgeparsley

Apocynaceae

Amsonia ciliata Walt.
fringed bluestar
Amsonia ciliata Walt. var. *texana*
(Gray) Coult.
Texas bluestar
Amsonia illustris Woods.
Ozark bluestar
Apocynum cannabinum L.
Indianhemp
Apocynum cannabinum L.
var. *glaberrimum* A. DC.

Asclepiadaceae

Asclepias asperula (Dcne.) Woods.
spider milkweed
Asclepias asperula (Dcne.) Woods.
ssp. *capricornu* (Woods.) Woods.
antelopehorns
Asclepias asperula (Dcne.) Woods.
var. *decumbens* (Nutt.) Shinners
Asclepias engelmanniana Woods.
Engelmann's milkweed
Asclepias pumila (Gray) Vail
plains milkweed
Asclepias stenophylla Gray
slimleaf milkweed
Asclepias sullivantii Engelm. ex Gray
prairie milkweed
Asclepias tuberosa L.
butterfly milkweed
Asclepias tuberosa L.
ssp. *interior* Woods.
butterfly milkweed
Asclepias verticillata L.
whorled milkweed
Asclepias viridiflora Raf.
green comet milkweed
Asclepias viridis Walt.
green antelopehorn
Asclepiodora decumbens (Nutt.)
Gray

Matelea biflora (Raf.) Woods.
star milkvine

Asteraceae

Achillea millefolium L.
common yarrow
Achillea millefolium L.
var. *occidentalis* DC.
western yarrow
Ambrosia artemisiifolia L.
annual ragweed
Ambrosia artemisiifolia L. var. *elatior*
(L.) Descourtils
annual ragweed
Ambrosia psilostachya DC.
Cuman
ragweed
Ambrosia trifida L.
great ragweed
Ambrosia trifida L.
var. *texana* Scheele
Texan great ragweed
Amphiachyris dracunculoides
(DC.) Nutt.
prairie broomweed
Antennaria parlinii Fern. ssp. *fallax*
(Greene) Bayer & Stebbins
Parlin's pussytoes
Antennaria plantaginifolia (L.)
Richards.
woman's tobacco
Aphanostephus pilosus Buckl.
hairy dozedaisy
Aphanostephus skirrhobasis
(DC.) Trel.
Arkansas dozedaisy
Artemisia carruthii Wood ex Carruth.
Carruth's sagewort
Artemisia dracunculus L.
tarragon
Artemisia filifolia Torr.
sand sagebrush
Artemisia ludoviciana Nutt.
white sagebrush

- Artemisia ludoviciana* Nutt.
ssp. *ludoviciana*
white sagebrush
- Artemisia ludoviciana* Nutt.
ssp. *mexicana*
(Willd. ex Spreng.) Keck
white sagebrush
- Artemisia neomexicana*
Greene ex Rydb.
- Aster ericoides* L.
- Aster oblongifolius* Nutt.
- Aster oblongifolius* Nutt.
var. *rigidulus* Gray
- Aster ontarionis* Wieg.
- Aster patens* Ait.
- Aster patens* Ait. var. *patentissimus*
(Lindl. ex DC.) Torr. & Gray
- Aster subulatus* Michx.
- Aster subulatus* Michx.
var. *ligulatus* Shinnery
- Astranthium integrifolium* (Michx.)
Nutt. ssp. *ciliatum* (Raf.) DeJong
entireleaf western daisy
- Baccharis salicina* Torr. & Gray
Great Plains false willow
- Bidens bipinnata* L.
Spanish needles
- Bidens frondosa* L.
devil's beggartick
- Brickellia eupatorioides* (L.)
Shinnery var. *chlorolepis*
(Woot. & Standl.) B.L. Turner
false boneset
- Brickellia eupatorioides* (L.)
Shinnery var. *corymbulosa*
(Torr. & Gray) Shinnery
false boneset
- Centaurea americana* Nutt.
American star-thistle
- Chaetopappa asteroides* Nutt. ex
DC.
Arkansas lestdaisy
- Chrysopsis berlandieri* Greene
- Chrysopsis pilosa* Nutt.
soft goldenaster
- Chrysopsis stenophylla* (Gray)
Greene
- Chrysopsis villosa* (Pursh) Nutt.
ex DC.
- Chrysopsis villosa* (Pursh) Nutt.
ex DC. var. *stenophylla*
(Gray) Gray
- Cirsium altissimum* (L.) Hill
tall thistle
- Cirsium ochrocentrum* Gray
yellowspine thistle
- Cirsium texanum* Buckl.
Texas thistle
- Cirsium undulatum* (Nutt.) Spreng.
wavyleaf thistle
- Cirsium undulatum* (Nutt.) Spreng.
var. *megacephalum* (Gray) Fern.
- Conyza canadensis* (L.) Cronq.
Canadian horseweed
- Conyza canadensis* (L.) Cronq.
var. *canadensis*
Canadian horseweed
- Conyza ramosissima* Cronq.
dwarf horseweed
- Coreopsis grandiflora* Hogg ex
Sweet
largeflower tickseed
- Coreopsis grandiflora* Hogg ex
Sweet
var. *harveyana* (Gray) Sherff
largeflower tickseed
- Coreopsis grandiflora* Hogg ex
Sweet
var. *longipes* (Hook.) Torr. &
Gray
largeflower tickseed
- Coreopsis tinctoria* Nutt.
golden tickseed
- Coreopsis tinctoria* Nutt. var.
tinctoria
golden tickseed
- Dracopis amplexicaulis* (Vahl) Cass.
clasping coneflower
- Dysodiopsis tagetoides*
(Torr. & Gray) Rydb.
false dogfennel

- Dyssodia tagetoides* Torr. & Gray
Echinacea angustifolia DC.
 blacksamson echinacea
Echinacea purpurea (L.) Moench
 eastern purple coneflower
Eclipta prostrata (L.) L.
 false daisy
Elephantopus carolinianus Raeusch.
 Carolina elephantsfoot
Engelmannia pinnatifida Gray ex
 Nutt.
Erigeron canadensis L.
Erigeron philadelphicus L.
 Philadelphia fleabane
Erigeron ramosus (Walt.) B.S.P.
Erigeron strigosus Muhl. ex Willd.
 prairie fleabane
Erigeron strigosus Muhl. ex Willd.
 var. *strigosus*
 prairie fleabane
Erigeron tenuis Torr. & Gray
 slenderleaf fleabane
Evax prolifera Nutt. ex DC.
 bighead pygmycudweed
Filago prolifera (Nutt. ex DC.) Britt.,
 non Pomel
Gaillardia lanceolata Michx.
Gaillardia lutea Greene
Gaillardia pulchella Foug.
 firewheel
Gaillardia suavis (Gray & Engelm.)
 Britt. & Rusby
 perfumeballs
Gnaphalium obtusifolium L.
Gnaphalium wrightii Gray
Grindelia nuda Wood var. *nuda*
 curlytop gumweed
Grindelia squarrosa (Pursh) Dunal
 curlycup gumweed
Grindelia squarrosa (Pursh) Dunal
 var. *nuda* (Wood) Gray
Gutierrezia dracunculoides
 (DC.) Blake
Gutierrezia sarothrae (Pursh)
 Britt. & Rusby
 broom snakeweed
- Gutierrezia texana* (DC.) Torr. &
 Gray
 var. *texana*
 Texas snakeweed
Haplopappus ciliatus (Nutt.) DC.
Haplopappus divaricatus (Nutt.)
 Gray
Haplopappus spinulosus (Pursh)
 DC.
Haplopappus spinulosus (Pursh)
 DC.
 ssp. *australis* (Greene) Hall
Haplopappus spinulosus (Pursh)
 DC.
 ssp. *cotulus* (Small) Hall
Haplopappus spinulosus (Pursh)
 DC.
 ssp. *glaberrimus* (Rydb.) Hall
Haplopappus spinulosus (Pursh)
 DC.
 var. *turbinellus* (Rydb.) Blake
Helenium amarum (Raf.) H. Rock
 yellowdicks
Helenium amarum (Raf.) H. Rock
 var. *badium*
 (Gray ex S. Wats.) Waterfall
 yellowdicks
Helenium badium (Gray ex S. Wats.)
 Greene
Helenium microcephalum DC.
 smallhead sneezeweed
Helianthus annuus L.
 common sunflower
Helianthus hirsutus Raf.
 hairy sunflower
Helianthus maximiliani Schrad.
 Maximilian sunflower
Helianthus orgyalis DC.
Helianthus petiolaris Nutt.
 prairie sunflower
Helianthus salicifolius A. Dietr.
 willowleaf sunflower
Heterotheca canescens
 (DC.) Shinnery
 hoary false goldenaster
Heterotheca latifolia Buckl.

- Heterotheca latifolia* Buckl.
var. *macgregoris* Wagenkn.
Heterotheca stenophylla
(Gray) Shinners
stiffleaf false goldenaster
Heterotheca villosa (Pursh) Shinners
hairy false goldenaster
Heterotheca villosa
var. *villosa* (Pursh) Shinners
hairy goldenaster
Hieracium longipilum Torr.
hairy hawkweed
Hymenopappus corymbosus
Torr. & Gray
Hymenopappus scabiosaeus L'Hér.
Carolina woollywhite
Hymenopappus scabiosaeus L'Hér.
var. *corymbosus* (Torr. & Gray)
B.L. Turner
Carolina woollywhite
Hymenopappus tenuifolius Pursh
Chalk Hill hymenopappus
Hymenoxys linearifolia Hook.
Iva annua L.
annual marshelder
Iva annua L. var. *annua*
annual marshelder
Krigia biflora (Walt.) Blake
twoflower dwarfdandelion
Krigia caespitosa (Raf.) Chambers
weedy dwarfdandelion
Krigia cespitosa (Raf.) Chambers
[orthographic variant]
Krigia dandelion (L.) Nutt.
potato dwarfdandelion
Krigia occidentalis Nutt.
western dwarfdandelion
Kuhnia eupatorioides L.
false boneset
Kuhnia eupatorioides L.
var. *corymbulosa* Torr. & Gray
Kuhnia glutosina Ell.
false boneset
Lactuca canadensis L.
Canada lettuce
Lactuca canadensis L.
var. *latifolia* Kuntze
Lactuca ludoviciana (Nutt.) Riddell
biannual lettuce
Lactuca scariola L. var. *integrata*
Gren. & Godr.
Lactuca serriola L.
prickly lettuce
Liatris aspera Michx.
tall blazing star
Liatris punctata Hook.
dotted blazing star
Liatris punctata Hook.
var. *nebraskana* Gaiser
Nebraska blazing star
Liatris scabra (Greene) K. Schum.
Liatris squarrosa (L.) Michx.
scaly blazing star
Lindheimera texana Gray & Engelm.
Texas yellowstar
Machaeranthera annua
(Rydb.) Shinners
Machaeranthera spinulosa
(Greene) Cory
hoary tansyaster
Packera plattensis (Nutt.)
W.A. Weber & A. Löve
prairie groundsel
Packera tampicana (DC.) C. Jeffrey
Great Plains ragwort
Palafoxia rosea (Bush) Cory
rosy palafox
Palafoxia rosea (Bush) Cory
var. *rosea*
rosy palafox
Pluchea camphorata (L.) DC.
camphor pluchea
Pluchea odorata (L.) Cass.
var. *odorata* sweetscent
Prenanthes altissima L.
tall rattlesnakeroot
Prionopsis ciliata (Nutt.) Nutt.
Pyrrhopappus grandiflorus
(Nutt.) Nutt.
tuberous desert-chicory

- Rudbeckia hirta* L.
blackeyed Susan
- Rudbeckia hirta* L.
var. *pulcherrima* Farw.
blackeyed Susan
- Rudbeckia hirta* L.
var. *serotina* (Nutt.) Core
- Rudbeckia serotina* Nutt.
- Senecio plattensis* Nutt.
- Silphium asperrimum* Hook.
- Silphium asteriscus* L.
starry rosinweed
- Silphium laciniatum* L.
compassplant
- Solidago arguta* Ait.
Atlantic goldenrod
- Solidago canadensis* L.
var. *gilvocanescens* Rydb.
shorthair goldenrod
- Solidago delicatula* Small
- Solidago gigantea* Ait.
giant goldenrod
- Solidago missouriensis* Nutt.
Missouri goldenrod
- Solidago missouriensis* Nutt.
var. *fasciculata* Holz.
Missouri goldenrod
- Solidago mollis* Bartl.
velvety goldenrod
- Solidago nemoralis* Ait.
gray goldenrod
- Solidago nemoralis* Ait.
ssp. *longipetiolata*
(Mackenzie & Bush)
G.W. Douglas
- Solidago petiolaris* Ait.
downy ragged goldenrod
- Solidago petiolaris* Ait.
var. *petiolaris*
downy ragged goldenrod
- Solidago rigida* L.
- Solidago speciosa* Nutt.
var. *rigidiuscula* Torr. & Gray
showy goldenrod
- Solidago ulmifolia* Muhl. ex Willd.
var. *microphylla* Gray
elmleaf goldenrod
- Sonchus asper* (L.) Hill
spiny sowthistle
- Taraxacum officinale*
G.H. Weber ex Wiggers
common dandelion
- Tetranneuris acaulis* (Pursh) Greene
stemless four-nerve daisy
- Tetranneuris linearifolia*
(Hook.) Greene
fineleaf fournerved daisy
- Thelesperma filifolium* (Hook.) Gray
stiff greenthread
- Thelesperma filifolium* (Hook.) Gray
var. *filifolium*
stiff greenthread
- Thelesperma intermedium* Rydb.
- Thelesperma trifidum* (Poir.) Britt.
- Townsendia exscapa*
(Richards.) Porter
stemless Townsend daisy
- Tragopogon dubius* Scop.
yellow salsify
- Verbesina alternifolia* (L.)
Britt. ex Kearney
wingstem
- Verbesina encelioides* (Cav.)
Benth. & Hook. f. ex Gray
ssp. *encelioides*
golden crownbeard
- Verbesina virginica* L.
white crownbeard
- Vernonia baldwinii* Torr.
Baldwin's ironweed
- Vernonia baldwinii* Torr.
ssp. *interior* (Small) Faust
interior ironweed
- Vernonia interior* Small
- Vernonia missurica* Raf.
Missouri ironweed
- Xanthisma texanum* DC.
Texas sleepydaisy
- Xanthisma texanum* DC.
ssp. *drummondii*

(Torr. & Gray) Semple
Drummond's sleepydaisy
Xanthisma texanum DC.
var. *drummondii*
(Torr. & Gray) Gray
Xanthium strumarium L.
rough cockleburr
Xanthium strumarium L.
var. *canadense* (P. Mill.)
Torr. & Gray
Canada Cocklebur

Bignoniaceae

Campsis radicans (L.) Seem.
ex Bureau
trumpet creeper
Catalpa bignonioides Walt.
southern catalpa
Catalpa speciosa (Warder)
Warder ex Engelm.
northern catalpa

Boraginaceae

Heliotropium tenellum (Nutt.) Torr.
pasture heliotrope
Lithospermum incisum Lehm.
narrowleaf stoneseed
Myosotis verna Nutt.
spring forget-me-not
Onosmodium molle
Michx. ssp. *occidentale*
(Mackenzie) Cochrane
western marbleseed

Brassicaceae

Arabis fendleri (S. Wats.) Greene
Fendler's rockcress
Arabis laevigata
(Muhl. ex Willd.) Poir.
smooth rockcress
Arabis missouriensis Greene
green rockcress
Camelina microcarpa DC.
littlepod false flax
Capsella bursa-pastoris (L.) Medik.
shepherd's purse

Chorisporea tenella (Pallas) DC.
crossflower
Descurainia pinnata (Walt.) Britt.
ssp. *brachycarpa*
(Richards.) Detling
western tansymustard
Draba brachycarpa Nutt.
ex Torr. & Gray
shortpod draba
Draba cuneifolia Nutt. ex Torr. &
Gray
wedgeleaf draba
Draba cuneifolia Nutt. ex Torr. &
Gray
var. *cuneifolia*
wedgeleaf draba
Draba cuneifolia Nutt. ex Torr. &
Gray
var. *helleri* (Small) O.E. Schulz
Draba platycarpa Torr. & Gray
broadpod draba
Draba reptans (Lam.) Fern.
Carolina draba
Erysimum asperum (Nutt.) DC.
Erysimum asperum (Nutt.) DC.
var. *arkansanum* (Nutt.) Gray
Erysimum capitatum (Dougl. ex
Hook.) Greene
sanddune wallflower
Erysimum capitatum
(Dougl. ex Hook.)
Greene var. *capitatum*
sanddune wallflower
Erysimum repandum L.
spreading wallflower
Lepidium austrinum Small
southern pepperwort
Lepidium densiflorum Schrad.
common pepperweed
Lepidium densiflorum Schrad.
var. *densiflorum*
common pepperweed
Lepidium oblongum Small
veiny pepperweed
Lepidium virginicum L.
Virginia pepperweed

Lepidium virginicum L.
var. *medium* (Greene) C.L.
Hitchc.
medium pepperweed
Lesquerella auriculata
(Engelm. & Gray) S. Wats.
earleaf bladderpod
Lesquerella gordonii (Gray) S. Wats.
Gordon's bladderpod
Lesquerella gracilis (Hook.) S. Wats.
spreading bladderpod
Lesquerella gracilis (Hook.) S. Wats.
ssp. *nuttallii*
(Torr. & Gray) Rollins & Shaw
Nuttall's bladderpod
Lesquerella ovalifolia Rydb.
ex Britt.
roundleaf bladderpod
Lesquerella ovalifolia Rydb. ex Britt.
ssp. *alba* (Goodman)
Rollins & Shaw
roundleaf bladderpod
Nasturtium officinale Ait. f.
Rorippa nasturtium-aquaticum (L.)
Hayek
watercress
Rorippa palustris (L.) Bess.
bog yellowcress
Rorippa sessiliflora (Nutt.)
A.S.Hitchc.
stalkless yellowcress
Sibara virginica (L.) Rollins Virginia
winged rockcress

Cactaceae

Echinocereus baileyi Rose
Echinocereus reichenbachii
(Terscheck ex Walp.) Haage f.
lace hedgehog cactus
Echinocereus reichenbachii
(Terscheck ex Walp.) Haage f.
var. *albispinus* (Lahman)
L. Benson
Echinocereus reichenbachii
(Terscheck ex Walp.) Haage f.

var. *baileyi* (Rose) N.P. Taylor
Bailey's hedgehog cactus
Opuntia engelmannii Salm-Dyck
cactus apple
Opuntia humifusa (Raf.) Raf.
devil's-tongue

Campanulaceae

Lobelia appendiculata A. DC.
pale lobelia
Lobelia cardinalis L.
cardinalflower
Lobelia cardinalis L.
ssp. *graminea* (Lam.) McVaugh
Triodanis leptocarpa (Nutt.) Nieuwl.
slimpod Venus' looking-glass
Triodanis perfoliata (L.) Nieuwl.
var. *biflora* (Ruiz & Pavón)
Bradley
clasping Venus' looking-glass

Capparaceae

Cleome serrulata Pursh
Rocky Mountain beeplant
Cleomella angustifolia Torr.
narrowleaf rhombopod
Polanisia dodecandra (L.) DC.
redwhisker clammyweed
Polanisia dodecandra (L.) DC.
ssp. *trachysperma*
(Torr. & Gray) Iltis
sandyseed clammyweed

Caprifoliaceae

Lonicera albiflora Torr. & Gray
western
white honeysuckle
Lonicera japonica Thunb.
Japanese honeysuckle
Sambucus nigra L. ssp. *Canadensis*
(L.) R. Bolli
common elderberry
Symphoricarpos orbiculatus Moench
coralberry
Viburnum rufidulum Raf.
rusty blackhaw

Caryophyllaceae

- Cerastium brachypodum*
(Engelm. ex Gray) B.L. Robins.
shortstalk chickweed
Cerastium glomeratum Thuill.
sticky chickweed
Minuartia michauxii (Fenzl) Farw.
Michaux's stitchwort
Minuartia michauxii (Fenzl) Farw.
var. *texana* (B.L. Robins.) Mattf.
Texas stitchwort
Minuartia patula (Michx.) Mattf.
pitcher's stitchwort
Minuartia patula
var. *patula* (Michx.) Mattf.
Paronychia jamesii Torr. & Gray
James' nailwort
Paronychia virginica Spreng.
yellow nailwort
Sagina decumbens (Ell.) Torr. &
Gray
trailing pearlwort
Silene antirrhina L.
sleepy silene

Celastraceae

- Celastrus scandens* L.
American bittersweet
Euonymus atropurpurea Jacq.
eastern wahoo

Chenopodiaceae

- Chenopodium album* L.
lambsquarters
Chenopodium ambrosioides L.
Mexican tea
Chenopodium leptophyllum (Moq.)
Nutt. ex S. Wats.
narrowleaf goosefoot
Chenopodium pratericola Rydb.
desert goosefoot
Chenopodium simplex (Torr.) Raf.
mapleleaf goosefoot
Chenopodium standleyanum Aellen
Standley's goosefoot

- Kochia scoparia* (L.) Schrad.
Mexican-fireweed
Salsola kali L.
prickly Russian thistle
Salsola kali L. ssp. *tragus* (L.) Celak.

Cistaceae

- Lechea tenuifolia* Michx.
narrowleaf pinweed

Clusiaceae

- Hypericum drummondii* (Grev. &
Hook.)
Torr. & Gray
nits and lice
Hypericum mutilum L.
dwarf St. Johnswort

Convolvulaceae

- Convolvulus arvensis* L.
field bindweed
Convolvulus equitans Benth.
Texas bindweed
Convolvulus incanus auct. non Vahl
Evolvulus nuttallianus J.A. Schultes
shaggy dwarf morning-glory
Evolvulus pilosus Nutt.
Ipomoea pandurata (L.) G.F.W. Mey.
man of the earth
Ipomoea shumardiana
(Torr.) Shinnors
narrowleaf morning-glory

Cornaceae

- Cornus drummondii* C.A. Mey.
roughleaf dogwood

Crassulaceae

- Sedum nuttallianum* Raf.
yellow stonecrop

Cucurbitaceae

- Cucurbita foetidissima* Kunth
Missouri gourd
Cyclanthera dissecta
(Torr. & Gray) Arn.
cutleaf cyclanthera

Ibervillea lindheimeri (Gray) Greene
Lindheimer's globeberry
Melothria pendula L.
Guadeloupe cucumber

Cuscutaceae

Cuscuta glabrior (Engelm.) Yuncker
var. *pubescens* (Engelm.)
Yuncker
Cuscuta gronovii Willd. ex J.A.
Schultes
scaldweed
Cuscuta indecora Choisy
bigseed alfalfa dodder
Cuscuta indecora Choisy
var. *indecora*
bigseed alfalfa dodder
Cuscuta pentagona Engelm.
fiveangled dodder
Cuscuta pentagona Engelm.
var. *pentagona*
fiveangled dodder

Cyperaceae

Bolboschoenus maritimus (L.) Palla
Bulbostylis capillaris (L.)
Kunth ex C.B. Clarke
densetuft hairsedge
Bulbostylis capillaris (L.) Kunth
ex C.B. Clarke ssp. *capillaries*
densetuft hairsedge
Carex albicans Willd. ex Spreng.
var. *albicans*
whitetinge sedge
Carex austrina Mackenzie
southern sedge
Carex blanda Dewey
eastern woodland sedge
Carex brevior (Dewey) Mackenzie
shortbeak sedge
Carex emoryi Dewey
Emory's sedge
Carex fissa Mackenzie
hammock sedge
Carex frankii Kunth Frank's sedge
Carex granularis Muhl. ex Willd.
limestone meadow sedge

Carex gravida Bailey
heavy sedge
Carex gravida Bailey var. *lunelliana*
(Mackenzie) F.J. Herm.
heavy sedge
Carex grisea Wahlenb.
Carex jorii Bailey
cypress swamp sedge
Carex muehlenbergii Schkuhr
ex Willd. var. *enervis* Boott
Muhlenberg's sedge
Carex muehlenbergii Schkuhr
ex Willd. var. *muehlenbergii*
Muhlenberg's sedge
Carex tetrastachya Scheele
Britton's sedge
Carex umbellata Schkuhr ex Willd.
parasol sedge
Carex vulpinoidea Michx.
fox sedge
Cyperus acuminatus Torr. & Hook.
ex Torr.
tapertip flatsedge
Cyperus echinatus (L.) Wood
globe flatsedge
Cyperus erythrorhizos Muhl.
redroot flatsedge
Cyperus esculentus L.
chufa flatsedge
Cyperus ferax L.C. Rich.
Cyperus filiculmis auct. non Vahl
Cyperus hallii Britt.
Cyperus lupulinus (Spreng.) Marcks
ssp. *lupulinus*
Great Plains flatsedge
Cyperus odoratus L.
fragrant flatsedge
Cyperus ovularis (Michx.) Torr.
Cyperus pseudovegetus Steud.
marsh flatsedge
Cyperus schweinitzii Torr.
Schweinitz's flatsedge
Cyperus setigerus Torr. & Hook.
lean flatsedge
Cyperus squarrosus L.
bearded flatsedge

- Cyperus strigosus* L.
strawcolored flatsedge
- Eleocharis acutisquamata* Buckl.
sharpscale spikerush
- Eleocharis atropurpurea*
(Retz.) J. & K. Presl.
purple spikerush
- Eleocharis compressa* Sullivant
flatstem spikerush
- Eleocharis engelmannii* Steud.
Engelmann's spikerush
- Eleocharis erythropoda* Steud.
bald spikerush
- Eleocharis montevidensis* Kunth
sand spikerush
- Eleocharis obtusa* (Willd.)
J.A. Schultes
blunt spikerush
- Eleocharis palustris* (L.)
Roemer & J.A. Schultes
common spikerush
- Eleocharis parvula*
(Roemer & J.A. Schultes)
Link ex Bluff, Nees & Schauer
dwarf spikerush
- Eleocharis quadrangulata* (Michx.)
Roemer & J.A. Schultes
squarestem spikerush
- Fimbristylis puberula* (Michx.) Vahl
hairy fimbry
- Fimbristylis puberula* (Michx.) Vahl
var. *puberula*
hairy fimbry
- Fimbristylis spadicea* auct.
non (L.) Vahl.
- Fimbristylis vahlii* (Lam.) Link
Vahl's fimbry
- Fuirena simplex* Vahl
western umbrella-sedge
- Hemicarpha aristulata* (Coville)
Smyth
- Hemicarpha drummondii* Nees
- Hemicarpha micrantha* (Vahl) Pax
- Lipocarpha aristulata* (Coville)
G. Tucker
awned halfchaff sedge
- Lipocarpha drummondii* (Nees)
G. Tucker
Drummond's halfchaff sedge
- Lipocarpha micrantha* (Vahl)
G. Tucker
smallflower halfchaff sedge
- Schoenoplectus acutus* (Muhl.
ex Bigelow) A. & D. Löve
var. *acutus*
hardstem bulrush
- Schoenoplectus americanus* (Pers.)
Volk. ex Schinz & R. Keller
chairmaker's bulrush
- Schoenoplectus hallii* (Gray) S.G.
Sm.
Hall's bulrush
- Schoenoplectus pungens* (Vahl)
Palla
common threesquare
- Schoenoplectus tabernaemontani*
(K.C. Gmel.) Palla
softstem bulrush
- Scirpus americanus* Pers.
- Scirpus atrovirens* Willd.
green bulrush
- Scirpus lineatus* Michx.
rusty bulrush, drooping bulrush
- Scirpus pallidus* (Britt.) Fern.
cloaked bulrush
- Scirpus pendulus* Muhl.
rufous bulrush
- Scleria ciliata* Michx.
fringed nutrush
- Scleria pauciflora* Muhl. ex Willd.
fewflower nutrush

Ebenaceae

- Diospyros virginiana* L.
common persimmon

Elatinaceae

- Bergia texana* (Hook.) Seub. ex
Walp.
Texas bergia

Euphorbiaceae

Acalypha gracilens Gray
var. *monococca* Engelm. ex Gray
Acalypha monococca
(Engelm. ex Gray) L.
Mill. & Gandhi
slender threeseed mercury
Acalypha ostryifolia Riddell
pineland threeseed mercury
Acalypha virginica L.
Virginia threeseed mercury
Argythamnia mercurialina
(Nutt.) Muell.-Arg.
tall silverbush
Argythamnia mercurialina (Nutt.)
Muell.-Arg. var. *mercurialina*
tall silverbush
Chamaesyce maculata (L.) Small
spotted sandmat
Chamaesyce missurica
(Raf.) Shinnery
prairie sandmat
Chamaesyce nutans (Lag.) Small
eyebane
Chamaesyce prostrata (Ait.) Small
prostrate sandmat
Chamaesyce serpens (Kunth) Small
matted sandmat
Cnidoscolus texanus
(Muell.-Arg.) Small
Texas bullnettle
Croton capitatus Michx.
hogwort
Croton capitatus Michx. var.
capitatus
hogwort
Croton capitatus Michx.
var. *lindheimeri*
(Engelm. & Gray) Muell.-Arg.
Lindheimer's hogwort
Croton glandulosus L.
vente conmigo
Croton glandulosus L.
var. *septentrionalis* Muell.-Arg.
vente conmigo

Croton lindheimerianus Scheele
threeseed croton
Croton monanthogynus Michx.
prairie tea
Croton texensis (Klotzsch)
Muell.-Arg.
Texas croton
Euphorbia chamaesyce auct. non L.
Euphorbia corollata L.
flowering spurge
Euphorbia cyathophora Murr.
fire on the mountain
Euphorbia dentata Michx.
toothed spurge
Euphorbia lata Engelm.
Euphorbia longicuris Scheele
wedgeleaf spurge
Euphorbia maculata L.
Euphorbia marginata Pursh
snow on the mountain
Euphorbia missurica Raf.
Euphorbia nutans Lag.
Euphorbia serpens Kunth
Euphorbia spathulata Lam.
warty spurge
Euphorbia supina Raf.
Phyllanthus abnormis Baill.
Drummond's leaf-flower
Phyllanthus abnormis Baill.
var. *abnormis*
Drummond's leaf-flower
Phyllanthus caroliniensis Walt.
Carolina leaf-flower
Phyllanthus polygonoides
Nutt. ex Spreng.
smartweed leaf-flower
Stillingia sylvatica Garden ex L.
queen's-delight
Tragia ramosa Torr.
branched noseburn

Fabaceae

Acacia angustissima (P. Mill.)
Kuntze
var. *hirta* (Nutt.) B.L. Robins.
prairie acacia

- Amorpha canescens* Pursh
leadplant
- Amorpha fruticosa* L.
desert false indigo
- Apios americana* Medik.
groundnut
- Astragalus caryocarpus* Ker-Gawl.
- Astragalus crassicus*
Nutt. var. *crassicus*
groundplum milkvetch
- Astragalus crassicus* Nutt.
var. *trichocalyx* (Nutt.) Barneby
groundplum milkvetch
- Astragalus distortus* Torr. & Gray
Ozark milkvetch
- Astragalus lindheimeri* Engelm.
ex Gray
Lindheimer's milkvetch
- Astragalus nuttallianus* DC.
var. *nuttallianus*
smallflowered milkvetch
- Astragalus plattensis* Nutt. Platte
River milkvetch
- Baptisia australis* (L.) R. Br. ex Ait. f.
blue wild indigo
- Baptisia australis* (L.) R. Br. ex Ait. f.
var. *minor* (Lehm.) Fern.
blue wild indigo
- Baptisia bracteata* Muhl. ex Ell.
longbract wild indigo
- Baptisia bracteata* Muhl. ex Ell.
var. *glabrescens* (Larisey) Isely
- Baptisia bracteata* Muhl.
ex Ell. var. *leucophaea* (Nutt.)
Kartesz & Gandhi
longbract wild indigo
- Baptisia leucophaea* Nutt.
- Baptisia sphaerocarpa* Nutt.
yellow wild indigo
- Baptisia* Vent.
wild indigo
- Cassia fasciculata* Michx.
- Cassia marilandica* L.
- Cercis canadensis* L.
eastern redbud
- Chamaecrista fasciculata*
(Michx.) Greene
sleepingplant
- Clitoria mariana* L.
Atlantic pigeonwings
- Crotalaria sagittalis* L.
arrowhead rattlebox
- Dalea aurea* Nutt. ex Pursh
golden prairie clover
- Dalea candida* Michx. ex Willd.
white prairie clover
- Dalea candida* Michx. ex Willd.
var. *candida*
white prairie clover
- Dalea candida* Michx. ex Willd.
var. *oligophylla* (Torr.) Shinnery
white prairie clover
- Dalea enneandra* Nutt.
nineanther prairie clover
- Dalea frutescens* Gray
black prairie clover
- Dalea multiflora* (Nutt.) Shinnery
roundhead prairie clover
- Dalea purpurea* Vent.
violet prairie clover
- Dalea purpurea* Vent. var. *purpurea*
violet prairie clover
- Dalea tenuifolia* (Gray) Shinnery
slimleaf prairie clover
- Dalea villosa* (Nutt.) Spreng.
var. *villosa*
silky prairie clover
- Desmanthus illinoensis* (Michx.)
MacM. ex B.L. Robins. & Fern.
prairie bundleflower
- Desmanthus leptolobus* Torr. & Gray
slenderlobe bundleflower
- Desmodium canescens* (L.) DC.
hoary ticktrefoil
- Desmodium ciliare*
(Muhl. ex Willd.) DC.
hairy small-leaf ticktrefoil
- Desmodium dillenii* Darl. p.p.
- Desmodium glutinosum*
(Muhl. ex Willd.) Wood
pointedleaf ticktrefoil

- Desmodium illinoense* Gray
Illinois ticktrefoil
- Desmodium nudiflorum* (L.) DC.
nakedflower ticktrefoil
- Desmodium paniculatum* (L.) DC.
panicledleaf ticktrefoil
- Desmodium paniculatum* (L.) DC.
var. *paniculatum*
panicledleaf ticktrefoil
- Desmodium sessilifolium* (Torr.)
Torr. & Gray
sessileleaf ticktrefoil
- Desmodium tweedyi* Britt.
Tweedy's ticktrefoil
- Desmodium viridiflorum* (L.) DC.
velvetleaf ticktrefoil
- Galactia volubilis* (L.) Britt.
downy milkpea
- Gleditsia triacanthos* L.
honeylocust
- Gymnocladus dioicus* (L.) K. Koch
Kentucky coffeetree
- Hoffmannseggia glauca*
(Ortega) Eifert
Indian rushpea
- Hosackia americana* (Nutt.) Piper
- Indigofera miniata* Ortega
coastal indigo
- Indigofera miniata* Ortega
var. *leptosepala*
(Nutt. ex Torr. & Gray) B.L.
Turner
western indigo
- Lespedeza capitata* Michx.
roundhead lespedeza
- Lespedeza intermedia*
sensu Clewell, 1966
- Lespedeza procumbens* Michx.
trailing lespedeza
- Lespedeza repens* (L.) W. Bart.
creeping lespedeza
- Lespedeza virginica* (L.) Britt.
slender lespedeza
- Lotus purshianus*
F. E. & E. S. Clements
- Lotus unifoliolatus* (Hook.) Benth.
var. *unifoliolatus*
American bird's-foot trefoil
- Lupinus texensis* Hook.
Texas lupine
- Medicago minima* (L.) L.
Bur medick
- Medicago sativa* L.
alfalfa
- Melilotus albus*
- Melilotus officinalis* (L.) Lam.
yellow sweetclover
- Mimosa nuttallii* (DC.) B.L. Turner
Nuttall's sensitive-briar
- Neptunia lutea* (Leavenworth) Benth.
yellow puff
- Oxytropis lambertii* Pursh
purple locoweed
- Oxytropis lambertii* Pursh
var. *articulata*
(Greene) Barneby
purple locoweed
- Oxytropis lambertii* Pursh
var. *lambertii*
purple locoweed
- Pediomelum cuspidatum*
(Pursh) Rydb.
largebract Indian breadroot
- Pediomelum esculentum*
(Pursh) Rydb.
large Indian breadroot
- Pediomelum linearifolium*
(Torr. & Gray) J. Grimes
narrowleaf Indian breadroot
- Petalostemon occidentalis*
(Heller) Fern.
- Petalostemon purpureus*
(Vent.) Rydb.
- Prosopis glandulosa* Torr.
honey mesquite
- Prosopis glandulosa* Torr.
var. *glandulosa*
honey mesquite
- Prosopis juliflora* (Sw.) DC.
var. *glandulosa* (Torr.) Cockerell
- Psoralea argophylla* Pursh

Psoralea cuspidata Pursh
Psoralea esculenta Pursh
Psoralea linearifolia Torr. & Gray
Psoralea tenuiflora Pursh
Psoralidium lanceolatum
(Pursh) Rydb.
lemon scurfpea
Psoralidium tenuiflorum
(Pursh) Rydb.
slimflower scurfpea
Robinia pseudoacacia L.
black locust
Schrankia uncinata Willd.
Senna marilandica (L.) Link
Maryland senna
Sophora affinis Torr. & Gray
Eve's necklacepod
Strophostyles helvula (L.) Ell.
trailing fuzzybean
Strophostyles leiosperma
(Torr. & Gray) Piper
slickseed fuzzybean
Tephrosia onobrychoides Nutt.
multibloom hoarypea
Tephrosia virginiana (L.) Pers.
Virginia tephrosia
Trifolium dubium Sibthorp
suckling clover
Trifolium reflexum L.
buffalo clover
Trifolium repens L.
white clover
Vicia americana Muhl. ex Willd.
ssp. *minor* (Hook.) C.R. Gunn
mat vetch
Vicia caroliniana Walt.
Carolina vetch
Vicia ludoviciana Nutt.
Louisiana vetch
Vicia ludoviciana Nutt.
ssp. *ludoviciana*
Louisiana vetch
Vicia ludoviciana Nutt. var. *texana*
(Torr. & Gray) Shinnery
Vicia texana (Torr. & Gray) Small

Fagaceae

Quercus buckleyi Nixon & Dorr
Buckley oak
Quercus fusiformis Small
plateau oak
Quercus macrocarpa Michx.
bur oak
Quercus marilandica Muench.
blackjack oak
Quercus mohriana Buckl. ex Rydb.
Mohr oak
Quercus muehlenbergii Engelm.
chinkapin oak
Quercus shumardii Buckl.
Shumard's oak
Quercus stellata Wangenh.
post oak
Quercus velutina Lam.
black oak

Fumariaceae

Corydalis aurea Willd.
scrambled eggs
Corydalis aurea Willd.
ssp. *occidentalis*
(Engelm. ex Gray) G.B. Ownbey
Corydalis curvisiliqua Engelm.
curvepod fumewort
Corydalis curvisiliqua Engelm.
ssp. *grandibracteata*
(Fedde) G.B. Ownbey
curvepod fumewort
Corydalis micrantha
(Engelm. ex Gray) Gray
smallflower fumewort
Corydalis micrantha
(Engelm. ex Gray)
Gray ssp. *micrantha*
smallflower fumewort

Gentianaceae

Centaurium texense (Griseb.) Fern.
Lady Bird's centaurium
Eustoma russellianum (Hook.) G.
Don

Sabatia campestris Nutt.
Texas star

Geraniaceae

Erodium cicutarium (L.) L'Hér. ex Ait.
redstem stork's bill
Geranium carolinianum L.
Carolina geranium

Grossulariaceae

Ribes aureum Pursh
var. *villosum* DC.
golden currant

Haloragaceae

Myriophyllum aquaticum (Vell.)
Verdc.
parrot feather watermilfoil
Myriophyllum heterophyllum Michx.
twoleaf watermilfoil
Myriophyllum pinnatum (Walt.)
B.S.P.
cutleaf watermilfoil
Myriophyllum sibiricum Komarov
shortspike watermilfoil
Myriophyllum spicatum L.
spike watermilfoil
Myriophyllum spicatum L.
var. *exalbescens* (Fern.) Jepson

Hippocastanaceae

Aesculus glabra Willd.
Ohio buckeye
Aesculus glabra Willd. var. *arguta*
(Buckl.) B.L. Robins.
Ohio buckeye

Hydrophyllaceae

Ellisia nyctelea (L.) L.
Aunt Lucy
Nama hispidum Gray
bristly nama
Nemophila phacelioides Nutt.
largeflower baby blue eyes
Phacelia congesta Hook.
caterpillars

Phacelia strictiflora
(Engelm. & Gray) Gray
prairie phacelia
Phacelia strictiflora (Engelm. &
Gray)
Gray var. *lundelliana* Constance
Lundell's phacelia

Iridaceae

Nemastylis geminiflora Nutt.
prairie pleatleaf
Sisyrinchium angustifolium P. Mill.
narrowleaf blue-eyed grass
Sisyrinchium campestre Bickn.
prairie blue-eyed grass

Isoetaceae

Isoetes melanopoda Gay & Durieu
ex Durieu
blackfoot quillwort

Juglandaceae

Carya cordiformis
(Wangenh.) K. Koch
bitternut hickory
Carya illinoensis
(Wangenh.) K. Koch
pecan
Juglans microcarpa Berl.
little walnut
Juglans nigra L.
black walnut

Juncaceae

Juncus acuminatus Michx.
tapertip rush
Juncus aristulatus Michx.
Juncus brachycarpus Engelm.
whiteroot rush
Juncus diffusissimus Buckl.
slimpod rush
Juncus dudleyi Wieg.
Dudley's rush
Juncus interior Wieg.
inland rush
Juncus marginatus Rostk.
grassleaf rush

Juncus marginatus Rostk.
var. *setosus* Coville
Juncus nodatus Coville
stout rush
Juncus scirpoides Lam.
needlepod rush
Juncus secundus Beauv. ex Poir.
lopsided rush
Juncus tenuis Willd.
poverty rush
Juncus torreyi Coville
Torrey's rush

Krameriaceae

Krameria lanceolata Torr.
trailing krameria

Lamiaceae

Hedeoma hispida Pursh
rough false pennyroyal
Hedeoma reverchonii (Gray) Gray
Reverchon's false pennyroyal
Lamium amplexicaule L.
henbit deadnettle
Lycopus americanus Muhl.
ex W. Bart.
American water horehound
Lycopus americanus Muhl.
ex W. Bart.
var. *scabrifolius* Fern.
Mentha spicata L.
spearmint
Monarda citriodora Cerv. ex Lag.
lemon beebalm
Monarda clinopodioides Gray
basil beebalm
Monarda dispersa Small
Monarda fistulosa L.
wild bergamot
Monarda mollis L.
Monarda pectinata Nutt.
pony beebalm
Monarda punctata L.
spotted beebalm
Nepeta cataria L.
catnip

Prunella vulgaris L.
common selfheal
Salvia azurea Michx. ex Lam.
azure blue sage
Scutellaria drummondii Benth.
Drummond's skullcap
Scutellaria ovata Hill
heartleaf skullcap
Scutellaria wrightii Gray
Wright's skullcap
Teucrium canadense L.
Canada germander
Teucrium canadense L.
var. *occidentale*
(Gray) McClintock & Epling
western germander
Teucrium canadense L.
var. *virginicum* (L.) Eat.
Teucrium laciniatum Torr.
lacy germander

Lentibulariaceae

Utricularia gibba L.
humped bladderwort

Linaceae

Linum berlandieri Hook.
var. *berlandieri*
Berlandier's yellow flax
Linum hudsonioides Planch.
Texas flax
Linum imbricatum (Raf.)
Shinners tufted flax
Linum lewisii Pursh
prairie flax
Linum pratense (J.B.S. Norton)
Small
meadow flax
Linum rigidum Pursh
stiffstem flax
Linum rigidum Pursh
var. *berlandieri* (Hook.)
Torr. & Gray
Linum rigidum Pursh var. *rigidum*
stiffstem flax

Linum sulcatum Riddell
grooved flax
Linum sulcatum Riddell var.
sulcatum
grooved flax

Loasaceae

Mentzelia albescens
(Gillies & Arn.) Griseb.
wavyleaf blazingstar
Mentzelia decapetala
(Pursh ex Sims)
Urban & Gilg ex Gilg
tenpetal blazingstar
Mentzelia oligosperma Nutt. ex Sims
chickenthiel
Mentzelia reverchonii (Urban & Gilg)
H.J. Thompson & Zavortink
Reverchon's blazingstar

Lythraceae

Ammannia auriculata Willd.
eared redstem
Ammannia coccinea Rottb.
valley redstem
Ammannia robusta Heer & Regel
grand redstem
Lythrum alatum Pursh
winged lythrum
Lythrum alatum Pursh
var. *lanceolatum* (Ell.)
Torr. & Gray ex Rothrock
Rotala ramosior (L.) Koehne
lowland rotala

Malvaceae

Abutilon incanum (Link) Sweet
pelotazo
Callirhoe alcaeoides (Michx.) Gray
light poppymallow
Callirhoe digitata Nutt.
winecup
Callirhoe involucrata
(Torr. & Gray) Gray
purple poppymallow

Callirhoe involucrata (Torr. & Gray)
Gray var. *involucrata*
purple poppymallow
Callirhoe leiocarpa R.F. Martin
tall poppymallow
Callirhoe pedata
(Nutt. ex Hook.) Gray
palmleaf poppymallow
Hibiscus trionum L.
flower of an hour
Sida spinosa L.
prickly fanpetals
Sphaeralcea coccinea (Nutt.) Rydb.
scarlet globemallow
Sphaeralcea coccinea (Nutt.) Rydb.
ssp. *coccinea*
scarlet globemallow

Menispermaceae

Cocculus carolinus (L.) DC.
Carolina coralbead
Menispermum canadense L.
common moonseed

Molluginaceae

Mollugo verticillata L.
green carpetweed

Moraceae

Maclura pomifera (Raf.) Schneid.
osage orange
Morus alba L.
white mulberry
Morus rubra L.
red mulberry

Nelumbonaceae

Nelumbo lutea Willd.
American lotus

Nyctaginaceae

Mirabilis albida (Walt.) Heimerl
white four o'clock
Mirabilis glabra (S. Wats.) Standl.
smooth four o'clock
Mirabilis hirsuta (Pursh) MacM.
hairy four o'clock

Mirabilis linearis (Pursh) Heimerl
narrowleaf four o'clock
Mirabilis nyctaginea (Michx.) MacM.
heartleaf four o'clock

Nymphaeaceae

Nymphaea odorata Ait.
American white waterlily

Oleaceae

Fraxinus pennsylvanica Marsh.
green ash

Onagraceae

Calylophus berlandieri Spach
Berlandier's sundrops
Calylophus berlandieri Spach
ssp. *pinifolius*
(Engelm. ex Gray) Towner
Berlandier's sundrops
Calylophus hartwegii (Benth.) Raven
ssp. *pubescens* (Gray)
Towner & Raven
Hartweg's sundrops
Calylophus serrulatus (Nutt.) Raven
yellow sundrops
Gaura coccinea Nutt. ex Pursh
scarlet beeblossom
Gaura longiflora Spach
longflower beeblossom
Gaura parviflora Dougl. ex Lehm.
Gaura sinuata Nutt. ex Ser.
wavyleaf beeblossom
Gaura suffulta Engelm. ex Gray
kisses
Gaura suffulta Engelm. ex Gray
ssp. *suffulta*
kisses
Gaura triangulata Buckl.
prairie beeblossom
Jussiaea diffusa auct. non Forsk.
Jussiaea repens L.
var. *glabrescens* Kuntze
Ludwigia alternifolia L.
seedbox
Ludwigia decurrens Walt.
wingleaf primrose-willow

Ludwigia palustris (L.) Ell.
marsh seedbox
Ludwigia peploides (Kunth) Raven
ssp. *glabrescens* (Kunze) Raven
floating primrose-willow
Ludwigia repens J.R. Forst.
creeping primrose-willow
Oenothera biennis L.
common evening-primrose
Oenothera grandis (Britt.) Smyth
showy evening-primrose
Oenothera laciniata Hill
cutleaf evening-primrose
Oenothera linifolia Nutt.
threadleaf evening-primrose
Oenothera macrocarpa Nutt.
ssp. *incana* (Gray) Wagner
bigfruit evening-primrose
Oenothera macrocarpa Nutt.
ssp. *macrocarpa*
bigfruit evening-primrose
Oenothera speciosa Nutt.
pinkladies
Oenothera triloba Nutt.
stemless evening-primrose
Stenosiphon linifolius
(Nutt. ex James) Heynh.
false gaura

Oxalidaceae

Oxalis corniculata L.
creeping woodsorrel
Oxalis dillenii Jacq.
Oxalis stricta L.
common yellow oxalis
Oxalis violacea L.
violet woodsorrel

Papaveraceae

Argemone polyanthemus
(Fedde) G.B. Ownbey
crested prickly poppy
Papaver dubium L.
blindeyes

Passifloraceae

Passiflora lutea L.
yellow passionflower

Pedaliaceae

Proboscidea louisianica
(P. Mill.) Thellung
ram's horn

Phytolaccaceae

Phytolacca americana L.
American pokeweed
Rivina humilis L.
rougeplant

Plantaginaceae

Plantago aristata Michx.
largebracted plantain
Plantago elongata Pursh
prairie plantain
Plantago major L.
common plantain
Plantago patagonica Jacq.
woolly plantain
Plantago pusilla Nutt.
dwarf plantain
Plantago rhodosperma Dcne.
redseed plantain
Plantago rugelii Dcne.
blackseed plantain
Plantago virginica L.
Virginia plantain
Plantago wrightiana Dcne.
Wright's plantain

Platanaceae

Platanus occidentalis L.
American sycamore

Polemoniaceae

Gilia aggregata (Pursh) Spreng.
ssp. *formosissima*
(Greene) Wherry
Gilia rubra (L.) Heller
Ipomopsis rubra (L.) Wherry
standing-cypress

Phlox longipilosa Waterfall
longhair phlox

Polygalaceae

Polygala alba Nutt.
white milkwort
Polygala verticillata L.
whorled milkwort
Polygala verticillata L.
var. *isocycla* Fern.
whorled milkwort

Polygonaceae

Eriogonum annuum Nutt.
annual buckwheat
Eriogonum longifolium Nutt.
longleaf buckwheat
Eriogonum longifolium Nutt.
var. *longifolium*
longleaf buckwheat
Persicaria punctata (Ell.) Small
Polygonum amphibium L.
var. *emersum* Michx.
longroot smartweed
Polygonum aviculare L.
prostrate knotweed
Polygonum bicornes Raf.
Polygonum convolvulus L.
black bindweed
Polygonum hydropiper L.
marshpepper knotweed
Polygonum hydropiperoides Michx.
swamp smartweed
Polygonum lapathifolium L.
curlytop knotweed
Polygonum pensylvanicum L.
Pennsylvania smartweed
Polygonum persicaria L.
spotted ladythumb
Polygonum punctatum Ell.
dotted smartweed
Polygonum ramosissimum Michx.
bushy knotweed
Polygonum ramosissimum Michx.
var. *prolificum* Small
bushy knotweed

- Polygonum scandens* L.
climbing false buckwheat
Polygonum striatulum B.L. Robins.
striped knotweed
Polygonum tenue Michx.
pleatleaf knotweed
Polygonum virginianum L.
jumpseed
Rumex altissimus Wood
pale dock
Rumex crispus L.
curly dock

Pontederiaceae

- Heteranthera limosa* (Sw.) Willd.
blue mudplantain
Pontederia cordata L.
pickerelweed

Portulacaceae

- Claytonia virginica* L.
Virginia springbeauty
Portulaca pilosa L.
kiss me quick
Portulaca umbraticola Kunth
ssp. *lanceolata* (Engelm.)
Matthews & Ketron
Talinum calycinum Engelm.
largeflower fameflower
Talinum parviflorum Nutt.
sunbright

Primulaceae

- Androsace occidentalis* Pursh
western rockjasmine
Dodecatheon meadia L.
pride of Ohio
Dodecatheon meadia L. ssp. *meadia*
pride of Ohio
Samolus floribundus Kunth
Samolus parviflorus Raf.
Samolus valerandi L. ssp. *parviflorus*
(Raf.) Hultén
seaside brookweed

Ranunculaceae

- Anemone berlandieri* Pritz.
tenpetal thimbleweed
Anemone caroliniana Walt.
Carolina anemone
Anemone decapetala auct. non Ard.
Clematis pitcheri Torr. & Gray
bluebill
Clematis versicolor Small ex Rydb.
pale leather flower
Consolida ajacis (L.) Schur
doubtful knight's-spur
Delphinium carolinianum Walt.
Carolina larkspur
Delphinium carolinianum Walt.
ssp. *virescens* (Nutt.) Brooks
Carolina larkspur
Myosurus minimus L.
tiny mousetail
Ranunculus abortivus L.
littleleaf buttercup
Ranunculus longirostris Godr.
longbeak buttercup
Ranunculus sceleratus L.
cursed buttercup

Rhamnaceae

- Ceanothus herbaceus* Raf.
Jersey tea

Rosaceae

- Agrimonia parviflora* Ait.
harvestlice
Crataegus crus-galli L.
cockspur hawthorn
Crataegus engelmannii Sarg.
Engelmann's hawthorn
Crataegus mollis Scheele Arnold
hawthorn
Crataegus reverchonii Sarg.
Reverchon's hawthorn
Crataegus viridis L.
green hawthorn
Crataegus viridis L. var. *viridis*
green hawthorn

Fragaria virginiana Duchesne
Virginia strawberry
Geum canadense Jacq.
white avens
Geum canadense Jacq.
var. *camporum*
(Rydb.) Fern. & Weatherby
white avens
Potentilla arguta Pursh
tall cinquefoil
Potentilla arguta Pursh ssp. *arguta*
tall cinquefoil
Prunus angustifolia Marsh.
Chickasaw plum
Prunus gracilis Engelm. & Gray
Oklahoma plum
Prunus hortulana Bailey
hortulan plum
Prunus mexicana S. Wats.
Mexican plum
Prunus persica (L.) Batsch
peach
Prunus rivularis Scheele
creek plum
Prunus virginiana L.
chokecherry
Rosa foliolosa Nutt. ex Torr. & Gray
white prairie rose
Rosa multiflora Thunb. ex Murr.
multiflora rose
Rubus aboriginum Rydb.
garden dewberry
Rubus allegheniensis Porter
Allegheny blackberry
Rubus frondosus Bigelow
yankee blackberry
Rubus idaeus L.
ssp. *strigosus* (Michx.) Focke
grayleaf red raspberry
Rubus ostryaifolius Rydb.
highbush blackberry
Rubus trivialis Michx.
southern dewberry
Sanguisorba annua (Nutt. ex Hook.)
Torr. & Gray
prairie burnet

Rubiaceae

Cephalanthus occidentalis L.
common buttonbush
Diodia teres Walt.
poorjoe
Galium aparine L.
stickywilly
Galium circaezans Michx.
var. *hypomalacum* Fern.
licorice bedstraw
Galium obtusum Bigelow
bluntleaf bedstraw
Galium pilosum Ait.
hairy bedstraw
Galium pilosum Ait.
var. *pilosum*
hairy bedstraw
Galium texense Gray
Texas bedstraw
Galium virgatum Nutt.
southwestern bedstraw
Hedyotis nigricans (Lam.) Fosberg
diamondflowers
Hedyotis nigricans (Lam.) Fosberg
var. *nigricans*
diamondflowers
Houstonia longifolia
var. *longifolia* Gaertn.
Houstonia purpurea L. var. *purpurea*
Venus' pride
Houstonia pusilla Schoepf
tiny bluet
Sherardia arvensis L.
blue fieldmadder

Rutaceae

Ptelea trifoliata L.
common hoptree
Ptelea trifoliata L. ssp. *polyadenia*
(Greene) V. Bailey
pallid hoptree
Ptelea trifoliata L. ssp. *trifoliata*
var. *trifoliata*
common hoptree

Ptelea trifoliata ssp. *trifoliata* L.
var. *mollis* Torr. & Gray
common hoptree

Salicaceae

Populus deltoides Bartr. ex Marsh.
eastern cottonwood
Salix caroliniana Michx.
coastal plain willow
Salix nigra Marsh.
black willow

Santalaceae

Comandra umbellata (L.) Nutt.
ssp. *pallida* (A. DC.) Piehl
pale bastard toadflax

Sapindaceae

Cardiospermum halicacabum L.
love in a puff
Sapindus drummondii Hook. & Arn.
Sapindus saponaria L.
var. *drummondii*
(Hook. & Arn.) L.Benson
western soapberry

Sapotaceae

Sideroxylon lanuginosum Michx.
gum bully
Sideroxylon lanuginosum Michx.
ssp. *rigidum* (Gray)
T.D. Pennington

Scrophulariaceae

Agalinis heterophylla (Nutt.)
Small ex Britt.
prairie false foxglove
Bacopa rotundifolia (Michx.) Wettst.
disk waterhyssop
Castilleja coccinea (L.) Spreng.
scarlet Indian paintbrush
Castilleja purpurea (Nutt.) G. Don
downy Indian paintbrush
Castilleja purpurea (Nutt.) G. Don
var. *citrina* (Pennell) Shinnery
prairie Indian paintbrush

Collinsia verna Nutt.
spring blue eyed Mary
Collinsia violacea Nutt.
violet blue eyed Mary
Gratiola sphaerocarpa Eil.
Gratiola virginiana L.
roundfruit hedgehyssop
Leucospora multifida (Michx.) Nutt.
narrowleaf paleseed
Lindernia anagallidea
(Michx.) Pennell
Lindernia dubia (L.) Pennell
yellowseed false pimpernel
Macuillamia rotundifolia (Michx.)
Raf.
Mimulus glabratus Kunth
roundleaf monkeyflower
Mimulus glabratus Kunth var. *jamesii*
(Torr. & Gray ex Benth.) Gray
James' monkeyflower
Nuttallanthus canadensis (L.)
D.A. Sutton
Canada toadflax
Nuttallanthus texanus (Scheele)
D.A. Sutton
Texas toadflax
Penstemon albidus Nutt.
white penstemon
Penstemon australis Small
ssp. *laxiflorus* (Pennell) Bennett
Penstemon cobaea Nutt.
cobaea beardtongue
Penstemon fendleri Torr. & Gray
Fendler's penstemon
Penstemon oklahomensis Pennell
Oklahoma beardtongue
Scrophularia lanceolata Pursh
lanceleaf figwort
Veronica arvensis L.
corn speedwell
Veronica peregrina L.
neckweed
Veronica peregrina L. ssp.
xalapensis
(Kunth) Pennell
hairy purslane speedwell

Simaroubaceae

Ailanthus altissima (P. Mill.) Swingle
tree of heaven

Smilacaceae

Smilax bona-nox L.
saw greenbrier
Smilax rotundifolia L.
roundleaf greenbrier
Smilax tamnoides L.
bristly greenbrier

Solanaceae

Datura meteloides
auct. p.p. non Dunal
Physalis angulata L.
cutleaf groundcherry
Physalis cinerascens
(Dunal) A.S. Hitchc.
var. *cinerascens*
smallflower groundcherry
Physalis heterophylla Nees
clammy groundcherry
Physalis lobata Torr.
Physalis longifolia Nutt.
longleaf groundcherry
Physalis mollis Nutt.
field groundcherry
Physalis mollis Nutt.
var. *mollis*
field groundcherry
Physalis pubescens L.
var. *integrifolia* (Dunal) Waterfall
husk tomato
Physalis pumila Nutt.
dwarf groundcherry
Physalis viscosa L.
ssp. *mollis* (Nutt.) Waterfall
Quincula lobata (Torr.) Raf.
Chinese lantern
Solanum citrullifolium A. Braun
watermelon nightshade
Solanum dimidiatum Raf.
western horsenettle
Solanum elaeagnifolium Cav.
silverleaf nightshade

Solanum nigrum auct. non L.
Solanum ptychanthum Dunal
West Indian nightshade
Solanum rostratum Dunal
buffalobur nightshade

Tamaricaceae

Tamarix gallica L.
salt cedar

Ulmaceae

Celtis laevigata Willd.
sugarberry
Celtis laevigata Willd. var. *reticulata*
(Torr.) L. Benson
netleaf hackberry
Celtis laevigata Willd.
var. *texana* Sarg.
Texan sugarberry
Ulmus americana L.
American elm
Ulmus rubra Muhl.
slippery elm

Urticaceae

Boehmeria cylindrica (L.) Sw.
smallspike false nettle
Boehmeria cylindrica (L.) Sw.
var. *drummondiana*
(Weddell) Weddell
Parietaria pensylvanica Muhl.
ex Willd.
Pennsylvania pellitory
Parietaria pensylvanica Muhl.
ex Willd. var. *obtusata*
(Rydb. ex Small) Shinnery

Valerianaceae

Valerianella radiata (L.) DuRoi.
beaked cornsalad

Verbenaceae

Glandularia bipinnatifida (Nutt.) Nutt.
var. *bipinnatifida*
Dakota mock vervain
Glandularia canadensis (L.) Nutt.
rose mock vervain

Glandularia pumila (Rydb.) Umber
pink mock vervain
Lippia lanceolata Michx.
Phryma leptostachya L.
American lopseed
Phyla incisa Small
Phyla lanceolata (Michx.) Greene
lanceleaf fogfruit
Verbena bipinnatifida Nutt.
Verbena bracteata Lag. & Rodr.
bigbract verbena
Verbena canadensis (L.) Britt.
Verbena pumila Rydb.
Verbena stricta Vent.
hoary verbena
Verbena urticifolia L.
white vervain

Violaceae

Hybanthus verticillatus (Ortega)
Baill.
babyslippers
Viola bicolor Pursh
field pansy
Viola missouriensis Greene
Viola retusa Greene
Viola sororia Willd.
common blue violet

Viscaceae

Phoradendron flavescens Nutt.
ex Engelm.
Phoradendron leucarpum (Raf.)
Reveal & M.C. Johnston
oak mistletoe

Vitaceae

Ampelopsis cordata Michx.
heartleaf peppervine
Cissus incisa auct. non Des Moulins
Cissus trifoliata (L.) L.
sorrelvine
Parthenocissus quinquefolia
(L.) Planch.
Virginia creeper
Parthenocissus vitacea (Knerr)
A.S. Hitchc.
woodbine
Vitis cinerea (Engelm.) Millard
graybark grape
Vitis cinerea (Engelm.) Millard
var. *cinerea*
graybark grape
Vitis riparia Michx.
riverbank grape
Vitis rupestris Scheele
sand grape
Vitis vulpina L.
frost grape

Zygophyllaceae

Tribulus terrestris L.
Puncturevine

Schoenoplectus hallii and S. saximontanus 2000 Wichita Mountain Wildlife Refuge Survey

Dr. Lawrence K. Magrath
Curator-USAO (OCLA) Herbarium
Chickasha, OK 73018-5358

A survey to determine locations of populations of *Schoenoplectus hallii* and *S. saximontanus* was conducted at Wichita Mountains Wildlife Refuge in August and September 2000. One or both species were found at 20 of the 134 locations surveyed. A distinctive terminal achene character was found specifically that the transverse ridges of *S. hallii* appeared to be rounded and *S. saximontanus* appeared to be rounded with a projecting narrow wing. Basal macroachenes have not yet been properly described but are borne singly at the base of each culm and are about 3-4 times larger than the terminal achenes. It is speculated that amphicarpny may be related to grazing pressure, the basal macroachene being produced even if the upper portion is consumed, as a response to grazing. Both species are grazed/disturbed by bison, elk, and longhorns on the Refuge.

Introduction

A survey to determine locations of populations of *Schoenoplectus hallii* (A. Gray) S.G. Smith (Hall's bulrush) and *S. saximontanus* (Fernald) J. Raynal (Rocky Mountain bulrush) was conducted on the Wichita Mountains Wildlife Refuge during late August through September 2000. The survey team members were myself, Sam Waldstein, Refuge Manager; Chip Kimball, Range Biologist; and Bob Timberman, Biology Technician. Sites selected for observation were areas similar to the Jed Johnson Dam habitat, which is the site of the original collection of *S. hallii* made in 1987. Selection of sites to be surveyed was done by WMWR team members. The three Sundays spent in the field were some of the hottest of the season with temperatures ranging from 100° to 110°F.

General Observations

The presence of *Schoenoplectus hallii* and *S. saximontanus* at the various sites sampled represent, for the most part, a response to the drawdown of water levels in the various lakes and ponds. The plants seem to occur mainly on

the drawdown mud, sand, or gravel flats. However in some places they occur in shallow water up to a depth of about a foot [30.5cm]. They seem to compete with perennial emergent plants and with most emergent annuals.

In addition to the 36 sites that I personally examined, WMWR staff examined an additional 98 sites with similar habitat and found no *Schoenoplectus* present. *Schoenoplectus* occurred in only 20 of the 134 sites (14.93%). Of those 134 sites, 4 had both species present (3%), 14 had *S. hallii* present (10.45%) and 10 had *S. saximontanus* present (7.46%) (see Table).

Based on the WMWR observations, it is strongly advised that the adjacent area of Fort Sill should be inventoried since these two species are, most likely, present there. However, Rahmona Thompson who has conducted plant surveys at Fort Sill has not found either species at this time (pers. comm. 2002).

At several of the sites plants had been uprooted as a result of trampling by bison and other animals in the mud flat areas. The number of uprooted plants ranged between 0.0% and 1.0% at those

locations, but in general was less than .05%. While this obviously does cause some damage to populations in localized areas the damage appears to be negligible and it is even possible that it may be an important transport method of matured achenes to previously uncolonized areas. This could readily be accomplished by mud containing seeds or inflorescences with seeds adhering to the hooves, hair, or skin of the lower part of the animals' legs.

There appear to be three useful characters associated with the achenes that can be used to separate the two species: style branching, achene cross section, and transverse ridges.

	<i>S. ballii</i>	<i>S. saximontanus</i>
Style	mostly	trifid
Branches	bifid	
Achene cross section	unequally biconvex (1 of 2 sides may be flat)	Trigonous (3-sided)
Transverse ridges	rounded	mostly rounded with narrow wing

To my knowledge, "Transverse ridges" has not been mentioned in the literature on these two taxa. McKenzie (1988) does not mention this character in his status assessment report on *S. ballii*, nor does Yatskievych (1999) in *Steyermark's Flora of Missouri*. Dr. Marian Smith at Southern Illinois University is working on both terminal achenes and basal macroachenes using Scanning Electron Microscopy and more precise measuring techniques (pers. comm. 2001). So this may be a new useful character to separate these two taxa. (see Figures).

McKenzie (1998) reports that "heavy grazing has been noted at sites in Kansas, Missouri, and Wisconsin but it is not known whether this disturbance negatively impacts the species..."

It is my hypothesis that amphicarp may well be a response to heavy grazing pressure disturbance by native grazing animals such as bison, elk, and deer prior to the introduction of exotic grazers such as cattle, horses and sheep by European settlers. It would be a way that the plant could insure seed production even if it is heavily grazed and the terminal achenes damaged or destroyed. The observation that the plant produces only a very limited number of basal macroachenes (one per culm) with significantly more food reserves per achene would seem to support this interpretation. The smaller, more numerous terminal achenes would offer a relatively easy method for seeds to be transported farther distances and to new sites while the macroachenes would provide an excellent way to persist in presently occupied sites.

The number and identification of the two species at sites where both occur could be somewhat problematic. S.G. Smith and A. E. Schuyler independently identified a hybrid from WMWR that was collected by M. Smith and McKenzie July 28, 2002 as the first documented, putative hybrid of the two species ever recorded. [USA Oklahoma: Comanche Co., WMWR, 28 July 02, P. McKenzie 2028 pers., WIS, MO] (pers. comm. McKenzie 2002; Smith 2002).

There obviously needs to be further research done to confirm or deny this hypothesis as well as possible hybridization between the two species at the Refuge.

Voucher Specimens of *Schoenoplectus ballii* and *S. saximontanus* resulting from this study are kept in the USAO Herbarium (OCLA) at the University of Science and arts of Oklahoma in Chickasha, Oklahoma.

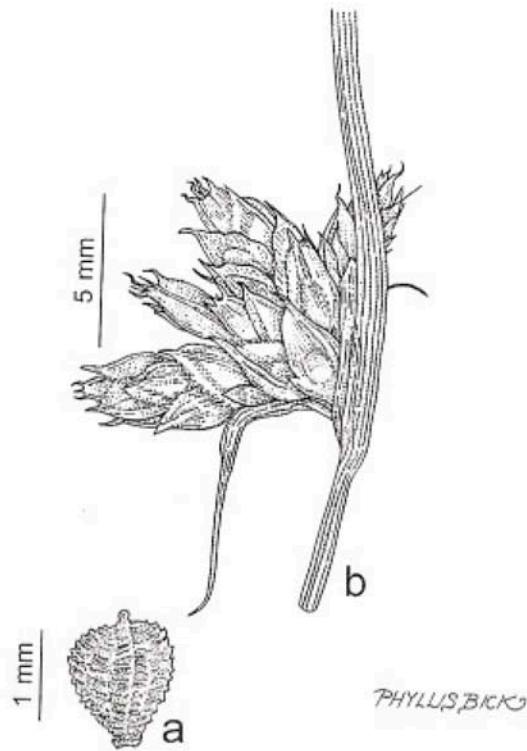


FIG. (a) and (b) Fruit and inflorescence of *Schoenoplectus saximontanus* (Steysmark's Flora of Missouri, 1999. Used by permission).

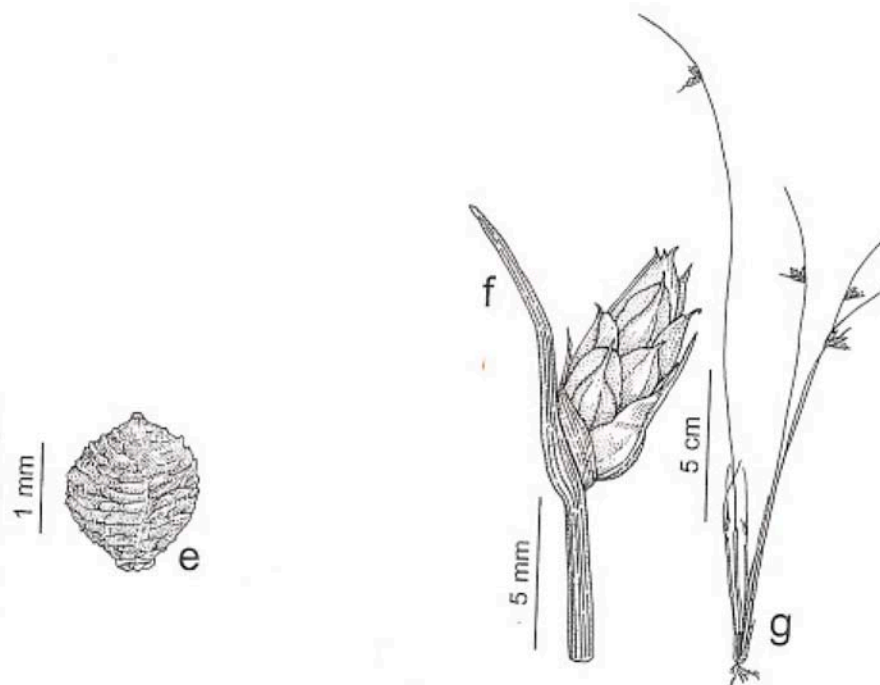


FIG. (e), (f), and (g) Fruit, inflorescence, and habit of *Schoenoplectus hallii* (Steysmark's Flora of Missouri, 1999. Used by permission).

TABLE
***Schoenoplectus* occurrence in thirty-six survey sites**
August and September 2000
 (based on achene characteristics of the two species)

Site # Description & Date	abundance/# collected/voucher#	
	<i>S. hallii</i>	<i>S. saximontanu</i>
1-Pond		
27-Aug Draw-down mudflat around pond Some plants grazed, some uprooted Some dried out on shore Few floating in water still alive	0	scat/8/21254
2-Pond		
27-Aug Draw-down mudflat	0	0
3-Pond		
27 Aug Draw-down mudflat	0	0
4-Corral area		
27 Aug Stream with draw-down mudflat <i>Utricularia</i> observed	0	0
5-Kiowa Lake		
27 Aug Draw-down mud flat around pond Some plants grazed, some uprooted Some dried out on shore Few floating in water still alive	0	scattered/4/21259
6-Wing Pasture west of creek		
27 Aug Draw-down mud flat around pond Some plants grazed	0	rare/12/21261
7-Buford Lake		
27 Aug Draw-down mud flats <i>Utricularia</i> and <i>Nelumbo</i> abundant	0	0

8-Quanah Parker Lake		
27 Aug Near Nature Center Draw-down mud flat around pond	scat/6/21263	0
9-New Pond by Crater Lake		
27 Aug South of Visitor Center Draw-down mud flat	0	0
10-Pond at Sulphur Trap Corrals		
27 Aug East of Visitor Center Draw-down mud flat	0	0
11-Pond in Sulphur Trap		
27 Aug North of Visitor Center Draw-down mud flat around pond	0	0
12-Jed Johnson Lake		
18 Aug 8 identifiable plants. Not collected Plants just coming into bloom Original site for the original Collections for WMWR	rare/0/-	0
27 Aug 8 identifiable plants No collections made	rare/0/-	0
13-Crater Lake		
27 Aug Draw-down mud flat Apparently too much perennial vegetation present	0	0
14-West Gate Pond		
3 Sep Draw-down mud flat Apparently too much perennial vegetation present	0	0
15-Comanche Lake		
18 Aug Draw-down mud flat	scat/2/21237	0

3 Sep Draw-down mud flat Mixed populations	scat-loc com/24/21272	scat-locom/83/27271
16-Grama Lake near dam & Gram Flat		
18 Aug Draw-down mud flat Several hundred plants Numerous basal rosettes in shallow water (20-30 cm)	0	scat/3/21236
3 Sep Mixed populations on draw-down Several hundred plants Numerous submerged basal rosettes in shallow water (20-30 cm)	scat-loc com/48/21274	scat-loc com/15/21273
10 Sep Revisit & complete walk-around Both present on draw-down mud flat Several thousand plants Dominant plant in a few places Numerous basal rosettes present in shallows in several areas	scat-loc abd/211/21216	scat/99/21322
17-Hollis Lake		
3 Sep Apparently too much perennial vegetation in draw-down zone	0	0
18-Pond 0.5 mile west of Hollis		
3 Sep	com-loc abd/300+/21278	0
19-Pond		
3 Sep Draw-down mudflat	0	0
20-Pond		
3 Sep Draw-down mudflat	0	0
21-Boggy Flats		
18 August 2000 Draw-down mudflat around pond Some plants grazed or uprooted Some dried out on shore Few floating in water still alive First located by Sam Waldenstein on Aug 17, 2000.	0	loc abd/x/21231

Sun 3 September 2000 Draw-down mud flats on ponds	0	loc abd/5/21280
22-Pond southwest of Grace Mountain		
3 Sep Draw-down mud flat Water-clover fern present	0	0
23-Cut Throat Lake		
3 Sep Draw-down mud flat Water-clover fern present Beautiful clear water and bass	0	0
24-Northwest Corner of Pinchot Loop		
3 Sep Draw-down mud flat around pond	0	0
25-Barow Pit east side of Pinchot Loop		
3 Sep Draw-down mud flat around pond	0	0
26-Straight east of site 25		
3 Sep Draw-down mud flat around pond <i>Bacopa</i> present	scat/8/21287	0
27-Medicine Tank		
3 Sep Draw-down mud flat around pond Colonial Bryozoan <i>Pectinatella magnifica</i> Leidy in shallow water by dam Identification by Dr. Mike Mather, USAO	common/12/21290	scat/3/21289
28-West Gate Road, Buffalo Gap		
10 sep Draw-down mud flat around pond <i>Bacopa</i> present	0	scat/11/21303
29-Winter Valley at end of Wing Fence at Hot Trap		
10 Sep Draw-down mud flat around pond Mixed collection not discovered until laboratory observations were made.	rare/3/21304 in part*	rare/6/21304 in part*

30-Winter Valley southeast fo Road		
10 Sep Draw-down mudflat around pond <i>Bacopa</i> present	scat/2/21305	0
31-North end of Research		
10 Sep Draw-down mud flat around pond <i>Bacopa</i> present	0	scat/14/21306
32-Pond in Exhibition Pasture		
10 Sep Pond in Exhibition Pasture Draw-down mud flat	one plant/0/0	0
33 Ingram House Pond		
10 Sep Draw-down mud flat Several hundred plants <i>Bacopa</i> present	scat-loc com/19/21309	0
34-Quanah Parker		
10 Sep Near dam Draw-down mud flat Several thousand? plants	scat-loc com/54/21210	0
35-Quanah Parker		
10 Sep SE of Environmental Center Draw-down mud flat Several hundred plants	scat-loc com/7/21313	scat-loc com/25/21311
36-Elmer Thomas Lake		
10 Sep Draw-down mud flat along north shore	scat-loc abd/46/21314	0

Key to abundance descriptors

- rare = fewer than 10 plants at site
- scat = scattered, a few plants occurring over several square meters
- common = many plants occurring over several square meters
- abundant = large numbers of plants (often the local dominant plant)
- loc com = many plants in a small area, but may be scattered over a large area
- loc abd = large numbers of plants in small area, but may be scattered over a large area

References

- McKenzie, Paul M. 1998. Hall's Bulrush
(*Schoenoplectus hallii*) Status
Assessment.
U.S. Fish and Wildlife Service.
Columbia, MO.
- Yatskievych, George. 1999. Steyermark's
Flora of Missouri, Vol 1, rev. ed. Missouri
Dept. of Conservation in cooperation
with the Missouri Botanical Garden
Press. St. Louis, MO.

Editor's Note: Exact locations of
individual sites were determined by
GPS and are recorded in the WMWR
database. However, that information
and access to the sites is strictly limited
and permission must be requested
from the refuge manager.



**Wichita Mountains
Wildlife Refuge,
Comanche County**

Echinocereus baileyi on
Elk Mountain Trail
(photos by Sheila Strawn)

Magrath, L.K.

The Nature Conservancy's Pontatoc Ridge Preserve, Johnston County



Entrance to Pontatoc Ridge Preserve (photo by Patricia Folley)



Wildflower community on exposed limestone formation at Pontatoc Ridge Preserve
(photo by Patricia Folley)

Pontotoc Ridge Floristic Survey: 1999

transcribed with later additions

Forrest L. Johnson
Oklahoma Biological Survey

Patricia Folley (ed.)
President, Oklahoma Native Plant Society

In 1997, the Oklahoma Biological Survey and the Oklahoma Native Plant Society undertook an unusual joint project: the surveying of the plant resources of a preserve recently acquired by The Nature Conservancy. In part this was because of the deep attachment of some of the participants for this nearby and very interesting place. During the early exploration of the “Smith Ranch Site”, as it was called, amateurs and interns were brought in to call out the names of plants as they walked, or in some cases, rode past in trucks. As a rapid assessment, that was probably a good thing, but it certainly wasn’t scientific, and none of those names called could be verified for publication. The Biological Survey allotted the necessary manpower and equipment to conduct a survey structured after the ones being done for several military bases in the area. Frequent, disciplined visits were made to view the diverse habitats as the plants thereon developed over the course of the growing year. One or two specimens of each species was taken, processed, identified and preserved in a public herbarium for the use of future researchers. The herbarium chosen was the Robert Bebb Herbarium (OKL) at the University of Oklahoma, host institution for the Biological Survey.

2002 INTRODUCTION

Forrest Johnson of the Biological Survey, Patricia Folley of the Oklahoma Native Plant Society and a co-editor of the Flora of Oklahoma Project, and two field assistants, Newell McCarty and Deborah Benesh from the University of Oklahoma’s Bebb Herbarium carried out the fieldwork for the Survey. Almost all processing of specimens, including identification, was done by the late Dr. Johnson. Folley made the identifications of the specimens of sedges, and Benesh and Johnson maintained the database and prepared labels. Eventually, over 500 specimens were mounted and placed in the herbarium.

Also included in the survey is *Plantago rugelii*, which was collected by Patricia Folley in 1993 when the site was still known as

“Smith Ranch”. Since the survey Folley and others have added a few species, similarly documented, to those surveyed in 1997. They are identified by a later collection date in the inventory. No natural living place can ever be fully documented and there are still species known to exist in that preserve that have not yet been found in flowering or fruiting condition. It will no doubt provide interesting work for our successors.

After the original introduction was written, an infestation of *Lespedeza cuneata* (seresia lespedeza) proliferated in the old pastures and a program of removal was begun.

The research team is indebted to the kindness and assistance so generously contributed by TNC’s on-site managers, Jim and Hollie Erwin.

INTRODUCTION

In the growing season (March-October) of 1997, The Nature Conservancy's Pontotoc Ridge Preserve was visited approximately every two weeks by a team of botanists from the Oklahoma Native Plant Society and the Oklahoma Biological Survey for the purpose of preparing an inventory of the plant species on the Preserve. Two to four persons on each visit examined several sites on the Preserve. The number and location of sites varied with the condition of the primitive roads on the property. When roads were muddy, we collected plants at three or four sites along the west side of the Preserve. When the roads were dry enough, we visited several widely separated sites spread over the whole property. At each collecting site members of the team walked separate paths through the area. Any plant in flower or fruit that was not on a list of the plants previously collected or which could not be positively identified was collected. Some trees and shrubs that are usually identified by their leaves, buds, etc., were collected without flowers or fruits.

Each specimen was pressed, dried, and fumigated to eliminate insects. Then they were stored in the Robert Bebb Herbarium at the University of Oklahoma. The specimens were identified with the keys and descriptions in *Flora of the Great Plains* (Great Plains Flora Association, 1986, University Press of Kansas, Lawrence) and *Keys to the Flora of Oklahoma*, (U. T. Waterfall, 1973, published by the author, Stillwater, OK), then confirmed by comparison with known specimens in the Bebb Herbarium. The specimens from Pontotoc Ridge will remain in the Bebb Herbarium and become part of its permanent collection.

Several plant names have been changed since the publication of *Keys to the Flora of Oklahoma* and *Flora of the Great Plains*. Names in our list names comply with the PLANTS online database: plants.usda.gov/plants/qurymenu.html, maintained by the U.S. Department of Agriculture, Natural Resources Conservation Service. We included

both the old and new names for a few plants that have had recent name changes. The older name is listed in brackets below the new name.

Two status and 17 habit categories are defined by the *National List of Scientific Plant Names* (1982, U.S.D.A. Soil Conservation Service Publication SCS-TP-159, Washington, D.C.) They are applied as appropriate for each species. The categories and representative symbols used to define status categories are: (**N**) native and (**I**) introduced. Habit is represented by one or more of the following: (**A**) annual; (**B**) biennial; (**P**) perennial; (**F**) herbaceous; (**S**) shrub; (**T**) tree; (**G**) grasslike; (**H**) partly woody; (**W**) woody; (**\$**) succulent; (**V**) vine; (**Z**) submersed; (**E**) emergent; (**L**) floating; (**@**) tree epiphyte; (**+**) parasitic; and (**_**) saprophytic. This information is determined by examining the specimens and consulting the designated floras. These symbols are combined into a convenient status/habit code for each species. For example, NPG = native perennial grasslike; NT = native tree, etc.

In the 1997 growing season, we collected 399 species in 261 genera and 79 families. About a third of the species found were in the three common Great Plains families: Asteraceae (composites); Poaceae (grasses) and Fabaceae (legumes). Only about 6 percent of the species are exotic and none of the exotic species is conspicuous or seems to present a threat to the native vegetation. No truly rare plants were found, although *Penstemon oklahomensis* (S3) and *Echinocereus riechenbachii* (S2) are present.

Based on previous experience, we are likely to have found about 80% of the total plant species present at Pontotoc Ridge. There are probably about 500 plant species in the area. Some perennial plant species do not flower every year, and some annuals vary greatly in abundance from year to year. Continued investigation will result in more species being found. Several field trips to Pontotoc Ridge are planned in 1998.

Pontotoc Ridge Floristic Survey

- Acanthaceae** (acanthus)
Ruellia humilis Nutt.
NPF 29 May, 10 Sep 1997
Low ruellia
infrequent, prairie
Ruellia strepens L.
NPF 29 May 1997
Limestone ruellia
- Aceraceae** (maple)
Acer negundo L.
NT 18 Jul 1997
Box elder
infrequent, floodplain forest
- Agavaceae** (yucca, agave family)
Yucca glauca Nuttall
NS (not yet collected)
Common yucca
infrequent, uplands
- Anacardiaceae** (sumac, poison ivy)
Rhus aromatica Ait.
NS 28 Mar, 18 Jul 1997
Aromatic sumac
common, rocky upland
Rhus copallinum L.
NS 18 Jul 1997
Winged sumac
infrequent, rocky upland
Rhus glabra L.
NS 18 Jun 1997
Smooth sumac
common, rocky upland
- Apiaceae** (carrot, celery, etc.)
**Ammoselinum popei*, see *Chaerophyllum*
Bifora americana (DC.) Watson
NAF 14 May 1997
Prairie bishop's weed
infrequent, rocky upland
Chaerophyllum procumbens (L.) Crantz
NAF 15 Apr 1997
Wild chervil
common, disturbed area
Chaerophyllum taintureiri Hook.
NAF 15 Apr, 14 May 1997
Wild chervil
common, disturbed area, mowed meadow
Cryptotaenia canadensis (L.) DC.
NPF 29 May 1997
Honesty
common, floodplain forest
Daucus pusillus Michaux
NAF 18 Jun 1997
Rattlesnake weed
common, disturbed area
Eryngium leavenworthii T. & G.
NAF 10 Sep 1997
Rattlesnake master
common, rocky upland
Eryngium yuccifolium Michaux
- var. *synchaetum* Gray ex C & Rose
NPF 31 July 1997
Button snakeroot
common, prairie
Lomatium foeniculaceum (Nutt.) C.&R.
var. *foeniculaceum*
NPF 28 March 1997
Wild parsley
common, rocky upland
Osmorhiza longistylis (Torr.) DC.
NPF 30 April 1997
Anise root
common, floodplain forest
Polytaenia nuttallii (Nutt.) DC.
NPF 14 May 1997
Prairie parsley
common, prairie
Sanicula canadensis L.
NPF 30 April, 29 May 1997
Snakeroot
common, floodplain forest
Torilis arvensis (Huds.) Link
IAF 18 June 1997
Hedge parsley
common, disturbed area
Trepocarpus aethusae Nuttall
NAF 18 June 1997
White nymph
infrequent, rocky upland
Zizia aurea (L.) Koch
NPF 14 May 1997
Golden alexanders
infrequent, floodplain forest
- Apocynaceae** (dogbane)
Amsonia ciliata Walt.
NPF 10 April 1996
Fringed bluestars
infrequent, rocky upland
Apocynum cannabinum L.
var. *cannabinum*
NPF 29 May 1997
Indian hemp
infrequent, prairie
- Araceae** (arum)
Arisaema dracontium (L.) Schott
NPF (not yet collected)
Green dragon
infrequent, floodplain forest
- Asclepiadaceae** (milkweed)
Asclepias asperula (Dcne.) Woodson
var. *decumbens* (Nutt.) Shinnery
NPF 30 Apr, 14 May 1997
Spider antelopehorn
common, rocky upland
Asclepias stenophylla (Gray)
NPF 18 June 1997
Narrowleaf milkweed
infrequent, prairie

- Asclepias tuberosa* L.
NPF 18 June 1997
Butterfly milkweed
common, prairie
- Asclepias viridis* Walt.
NPF 29 May 1997
Green milkweed
common, prairie
- Matelia biflora* (Raf.) Woodson
NPV 14 May 1997
Twoflower milkvine
infrequent, rocky upland
- Matelia gonocarpa* (Walt.) Shinnery
NPV 18 July 1997
Climbing milkweed
infrequent, disturbed area
- Aspleniaceae** (*cliff ferns*)
- Woodsia obtusa* (Spreng.) Torr.
NPF 29 May 1997
Blunt-lobed cliff fern
infrequent, Cross Timbers
- Asteraceae** (asters, daisies, sunflowers)
- Achillea millefolium* L.
NPF 14 May 1997
Yarrow
common, prairie
- Ambrosia artemisiifolia* L.
NAF 10 Sept 1997
Common ragweed
common, disturbed areas
- Ambrosia bidentata* Michaux
NAF 10 Sept 1997
Southern ragweed
common disturbed area
- Ambrosia psilostachya* DC.
NPF 8 October 1997
Western ragweed
infrequent, disturbed areas
- Ambrosia trifida* L.
NAF 20 August 1997
Giant ragweed
common, disturbed areas
- Amphiachyris dracunculoides* (DC.) Shinnery
NAF 10 Sept. 1997
Broomweed
infrequent, disturbed area
- Artemisia ludoviciana* Nuttall
var. *mexicana* (Willd.) Fernald
NPF 10 Sept, 8 October 1997
White sage, watersage
infrequent, disturbed area, prairie
- Aster drummondii* Lindl.
var. *parviceps* (Shinnery) A.G. Jones
NPF 8 October 1997
Blue wood aster
infrequent, disturbed areas
- Aster ericoides* L.
NPF 8 October 1997
Heath aster
common, disturbed area
- Aster oolentangensis* Riddell
NPF 8 October 1997
Blue aster
infrequent, disturbed area
- Aster patens* Ait.
NPF 8 October 1997
Spreading aster
infrequent, disturbed area, rocky upland
- Aster prealtus* Poir.
NPF 8 October 1997
Willowleaf aster
infrequent, disturbed area
- Astranthium integrifolium* (Michx.) Nutt.
NAF 15 April, 30 April 1997
Western daisy
common, disturbed area
- Brickellia eupatorioides* (L.) Raf.
NPF
False snakeweed
uncommon, disturbed area
- Centaurea americana* Nuttall
NAF 18 June 1997
Basketflower
common, rocky upland
- Chaetopappa asteroides* Nutt. Ex DC.
NAF 30 April 1997
Least daisy
infrequent, disturbed area
- Chrysopsis pilosa* Nuttall
NAF 31 July, 8 Oct. 1997
Golden aster
infrequent, disturbed area, prairie
- Cirsium altissimum* (L.) Spreng.
NPF 31 July, 10 Sept 1997
Tall thistle
infrequent, prairie
- Cirsium undulatum* (Nutt.) Spreng.
NPF 18 June 1997
Wavy-leaf thistle
common, disturbed area
- Conyza canadensis* (L.) Cronq.
NAF 20 August 1997
Horseweed
common, disturbed area
- Echinacea atrorubens* Nuttall
NPF
Rose coneflower
common, rocky upland
- Eclipta prostrata* (L.) L.
NAF 10 Sept 1997
Yerba de tajo
infrequent, pond margin
- Elephantopus carolinianus* Willd.
NPF 10 Sept 1997
Elephant's foot
common, floodplain forest
- Engelmannia pinnatifida* Gray ex Nutt.
NPF 14 May 1997
Engelmann's daisy
common, rocky upland, prairie
- Erigeron annuus* (L.) Pers.
NAF 14 May 1997

- Daisy fleabane
common, prairie
Erigeron philadelphicus L.
NAF 15 April 1997
Philadelphia fleabane
common, riparian
Eupatorium serotinum Michaux
NPF 20 August 1997
Late boneset
infrequent, disturbed areas
Gaillardia aestivalis (Walt.) Rock
NAF 10 Sept 1997
Summer gaillardia
infrequent, prairie
Gaillardia pulchella Fouq.
NAF 9 May, 18 June 1997
Indian blankets, firewheels
common, prairie, rocky upland
Gamochaeta purpurea (L.) Cabrera
NPF 30 April 1997
Purple cudweed
infrequent, disturbed area
Gnaphalium obtusifolium L.
NPF 10 Sept 1997
Sweet everlasting
infrequent, prairie
Helenium amarum (Raf.) H. Rock
NAF 18 Jun 1997
Bitterweed
common, disturbed area
Helianthus annuus L.
NAF 18 July 1997
Common sunflower
infrequent, disturbed area
Helianthus hirsutus Raf.
NPF 18 July 1997
Hairy or rough sunflower
infrequent, disturbed area
Helianthus mollis Lam.
NPF 31 July 1997
Ashy or soft sunflower
common, prairie
Heliopsis helianthoides (L.) Sweet
NPF 31 July 1997
False sunflower
common, floodplain forest
Heterotheca latifolia Buckl.
NPF 10 Sept 1997
Golden aster
common, prairie
Hieracium longipilum Torrey
NPF 19 Sept 1997
Longbeard hawkweed
infrequent, prairie
Hymenopappus scabioseus L'Her.
NPF 14 May 1997
Old plainsmen
common, rocky upland
Hymenoxys linearifolia Hook.
NAF 15 April – 15 May 1997
Narrowleaf hymenoxys
common, rocky upland, disturbed area
Iva annua L.
NAF 10 Sept 1997
Annual false ragweed, sumpweed
common, disturbed area
Krigia caespitosa (Raf.) Chambers
NAF 14 May 1997
Common dwarf dandelion
infrequent, prairie
Krigia dandelion (L.) Nuttall
NPF 14 May 1997
Potato dandelion
common, prairie
Lactuca ludoviciana (Nutt.) DC.
NAF 18 Jun 1997
Western wild lettuce
infrequent, disturbed area
Liatris punctata Hook.,
var. *nebraskana* Geiser
NPF 10 Sept 1997
Dotted gayfeather
abundant, prairie
Liatris pycnostachya Michaux
NPF 31 July 1997
Button snakeroot
common, prairie
Liatris squarrosa (L.) Michaux
NPF 31 July 1997
Gayfeather
common, prairie
Lindheimeria texana Gray & Engelm
NAF 30 April, 11 June 1997
Texas yellow star
infrequent, rocky upland, prairie
Marshallia caespitosa Nutt. Ex DC.
NPF 14 May, 18 June 1997
Barbara's buttons
infrequent, prairie, rocky upland
Pluchea odorata (L.) Cass.
NAF 8 October 1997
Purple camphorweed
common, pond margin
Prionopsis ciliata Nuttall
NAF 10 Sep 1997
Wax goldenweed
infrequent, disturbed area
Pyrrhopappus grandiflorus Nuttall
NPF 30 April 1997
False dandelion
common, disturbed area
Pyrrhopappus pauciflorus DC.
NAF 14 May 1997
Geiser's false dandelion
common, prairie
Ratibida columnifera Woot. & Standl.
NPF 18 June 1997
Yellow coneflower
common, disturbed area
Rudbeckia hirta L.
NABPF 18 June 1997
Blackeyed Susan
common, disturbed area

- Rudbeckia missouriensis*** Engelm.
NPF 31 July 1997
Missouri coneflower
common, prairie
- Rudbeckia triloba*** L.
NPF 31 July 1997
Browneyed Susan
infrequent, floodplain forest
- Senecio plattensis*** Nuttall
NPF 28 March 1997
Prairie groundsel
common, Cross timbers, floodplain
- Silphium laciniatum*** L.
NPF 31 July 1997
Compass plant
common, prairie
- Solidago arguta*** Ait.
NPF 31 July 1997
Boott's woodland goldenrod
infrequent, floodplain forest
- Solidago canadensis*** L.
var. *Gilvocanescens* Rydb.
NPF 8 October 1997
Prairie goldenrod
common, rocky upland
- Solidago nemoralis*** Ait.
NPF 10 Sept. 1997
Oldfield goldenrod
infrequent, prairie
- Solidago rigida*** L.
NPF 19 Sept. 1997
Stiff prairie goldenrod
infrequent, prairie
- Thelesperma filifolia*** (Hook.) Gray
NPF 29 May 1997
Greenthread
common, prairie
- Verbesina virginica*** L.
NPF 28 Sept 1999
Virginia crownbeard
uncommon, floodplain forest
- Vernonia baldwinii*** Torrey
NPF 31 July 1997
Western ironweed
common, prairie
- Xanthium strumarium*** L.
NAF 10 Sept. 1997
Cocklebur
common, pond margin
- Berberidaceae** (barberry family)
Podophyllum peltatum L.
NPF 10 Apr 1996, 15 April 1997
Mayapple
abundant, Cross timbers
- Boraginaceae** (borage, heliotrope family)
Heliotropium tenellum (Nutt.) Torrey
NAF 18 June, 31 July 1997
Pasture heliotrope
infrequent, prairie, rocky upland
- Lithospermum incisum*** Lehm.
- NPF 28 March, 18 June 1997
Narrowleaf puccoon
infrequent, rocky upland
- Myosotis macrosperma*** Engelmann
NPF 30 April 1997
Spring forget-me-not
common, disturbed area
- Myositis verna*** Nuttall
NAF 15 April 1997
Early scorpiongrass
common, disturbed area
- Brassicaceae** (mustard family)
Capsella bursa-pastoris (L.) Medik
IAF 30 April 1997
Shepherd's purse
infrequent, disturbed area
- Draba brachycarpa*** Nutt. Ex T.&G.
NAF 28 Feb. 1997
Whitlow
infrequent, mowed meadow
- Draba cuneifolia*** Nutt. Ex T. & G. Whitlow
NAF 28 March 1997
infrequent, disturbed area
- Lepidium densiflorum*** Schrad.
IAF 30 April 1997
Peppergrass
common, disturbed area
- Lepidium virginicum*** L.
NAF 30 April 1997
Virginia peppergrass
infrequent, disturbed area
- Lesquerella gracilis*** (Hook.) Wats.
var. *repandum* (Nutt.) Payson
NAF 15 April 1997
Spreading bladderpod
common, disturbed area
- Lesquerella ovalifolia*** Rydb.
var. *alba* Goodman
NPF 15 April 1997
Oval-leaf or white bladderpod
abundant, rocky upland
- Rorippa nasturtium-aquaticum*** (L.) Hayek
IAE 15 April 1997
Water cress
common, aquatic
- Cactaceae** (Cactus family)
Echinocereus riechenbachii
(Tersch.) Hogue
NP\$ 12 May 2001
Lace or pincushion cactus
infrequent, rocky upland
- Opuntia engelmannii*** Salm-Dyck
var. *lindheimeri* (Engl.) Parfit. & Pink.
NP\$ 11 June 1997
Texas or limestone prickly-pear
infrequent, rocky upland
- Callitrichaceae** (waterweed family)
Callitriche heterophylla Pursh
NZF 14 May 1997

- Water starwort
common, aquatic
- Campanulaceae** (bellflower family)
Lobelia appendiculata DC.
NPF 29 May 1997
Earflower lobelia
common, prairie
Lobelia siphilitica L.
var. *ludoviciana* DC.
NPF 10 Sept. 1997
Blue cardinal flower
uncommon, seeps
Triodanis leptocarpa (Nutt.) Niew.
NAF 29 May 1997
Western Venus' looking-glass
common, prairie
Triodanis perfoliata (L.) Niew.
NAF 14 May 1997
Venus' looking glass
infrequent, prairie
- Caprifoliaceae** (honeysuckle family)
Symphoricarpos orbiculatus Moench
NS (in fruit) 10 Sept. 1997
Coralberry, buckbrush
common, cross timbers
Viburnum rufidulum Raf.
NST 15 April 1997
Rusty blackhaw
infrequent, cross timbers
- Caryophyllaceae** (Pink, carnation family)
Arenaria patula Michaux
NAF 28 March, 30 April 1997
Sandwort
infrequent, rocky upland
Arenaria stricta Michx.,
var. *texana* Rydberg
NAF 30 April, 29 May 1997
rock sandwort
common, rocky upland
Paronychia jamesii T. & G.
NPF 20 August 1997
James' nailwort
common, rocky upland
- Celastraceae** (bittersweet family)
Celastrus scandens L.
NWV (in fruit) 8 October 1997
Climbing bittersweet
infrequent, disturbed area
- Cistaceae** (pinweed family)
Lechea villosa Raf.
NPF 20 August 1997
Pinweed
infrequent, disturbed area
- Clusiaceae** (St. John's Wort family)
Hypericum drummondii T. & G.
NAF 20 August 1997
- Nits-and-lice
infrequent, rocky upland
Hypericum sphaerocarpon Michx.
NPF 18 June 1997
Roundfruit St. John's Wort
infrequent, rocky upland
- Commelinaceae** (spiderwort & dayflower family)
Tradescantia ohimensis Raf.
NPF 14 May 1997
Ohio spiderwort
infrequent, prairie
Tradescantia tharpii Anders & Woods
NPF 30 April 1997
Tharp's spiderwort
common, rocky upland
- Convolvulaceae** (morning glory family)
Convolvulus equitans Benth.
NAVF 29 May, 18 June 1997
Texas bindweed
common, disturbed area
Evolvulus nuttallianus R. & S.
NPF 30 April 1997
Hairy evolvulus
infrequent, rocky upland
- Cornaceae** (dogwood family)
Cornus drummondii Meyer
NS 14 May 1997
Rough-leaf dogwood
common, rocky upland
Cornus florida L.
NT 15 April 1997
Flowering dogwood
infrequent, cross-timbers
- Crassulaceae** (stonecrop family)
Sedum nuttallianum Rf.
NAF 29 May 1997
Yellow stonecrop
infrequent, seep
Sedum pulchellum Michaux
NAF 14 May 1997
Pink stonecrop, widow's cross
infrequent, wet meadow
- Cyperaceae** (sedge family)
Carex festucea Schkuhr
NPG 30 April 1997
None
infrequent, disturbed area
Carex flaccosperma Dewey
NPG
None
infrequent, floodplain forest
Carex frankii Kunth
NPG 29 May to 31 July 1997
None
common, floodplain forest
Carex grvida Bailey
NPG 15 April 1997

- Heavy sedge
common, rocky upland
Carex hirsutella Mackenzie
NPG
Hairy sedge
common, disturbed area
Carex leavenworthii Dewey
NPG 30 April 1997
None
infrequent, disturbed area
Carex retroflexa Muhlenberg
NPG
None
common, rocky ground
Carex vulpinoidea Michaux
NPG 30 April 1997
None
infrequent, aquatic
Cyperus filiculmis Vahl
NPG 18 June 1997
Slender flatsedge
common, prairie
Cyperus odoratus L.
NAG 10 Sept. 1997
Fragrant flatsedge
infrequent, pond margin
Cyperus ovularis (Michaux) Torrey
NPG 18 June 1997
Globe flatsedge
common, disturbed area
Eleocharis compressa Sulliv.
NPG 14 May 1997
Weakstem spikerush
common, riparian
Eleocharis engelmannii Steudel
NPG 10 Sept 1997
Engelmann's spikerush
common, pond margin
Eleocharis parvula (R.&S.) Link
NAG 10 Sept. 1997
Dwarf spikesedge
common, pond margin
Fimbristylis puberula (Michx) Vahl
NPG 30 April 1997
None
infrequent, rocky upland
Fuirena simplex Vahl
NPG 31 July 1997
Umbrella sedge
common, seep
Rhynchospora nivea Boeckl.
NPG 8 Oct 1998
White-top sedge
infrequent, seep
Scirpus koilolepis (Steud.) Gleason
NAG
None
common, pond margin
Scirpus pendulus Muhlenberg
NPG 31 July 1997
None
common, floodplain forest
Scleria pauciflora Michx. Ex Willd.
NPG 31 July 1997
Few-flower nutrush
infrequent, prairie
- Ebenaceae** (Ebony family)
Diospyros virginiana L.
NT 29 May 1997
Persimmon
infrequent, crosstimbers
- Euphorbiaceae** (spurge family)
Acalypha gracilens Gray
NAF 18 July 1997
Three-seeded mercury
infrequent, rocky upland
Argythamnia mercurialina Muell.
NPF 11 June 1997
Wild mercury
infrequent, forest margin
Chamaesyce missurica (Raf.) Shinners
NAF 20 August 1997
[*Euphorbia missurica* Lag.]
Missouri spurge
common, disturbed areas
Chamaesyce nutans Lag.) Small
NAF 20 Aug. – 10 Sept. 1997
[*Euphorbia nutans* Lag.]
Eyebane
common, disturbed areas
Croton capitatus Michaux
NAF 10 Sept. 1997
Wooly croton
common, disturbed area
Croton monanthogynus Michaux
NAF 18 July – 20 Aug. 1997
One-seed croton
common, disturbed area
Euphorbia corollata L.
NAF 10 Sept. 1997
Flowering spurge
infrequent, prairie
Euphorbia dentata Michaux
NAF 18 July 1997
Toothed spurge
infrequent, rocky upland
Euphorbia hexagona Nuttall
NAF 8 October 1996
6-angle spurge
infrequent, rocky upland
Euphorbia spathulata Lam.
NAF 30 April 1997
Warty spurge
infrequent, rocky upland
Phyllanthus polygonoides Nuttall
NPF 29 May 1997
Knotweed leaf-flower
common, prairie
Stillingia sylvatica Graden ex L.
NPF 29 May 1997
Queen's delight
infrequent, prairie

- Tragia ramosa* Torrey
 NPF 29 May 1997
 Nettle-leaf, noseburn
 common, prairie
- Fabaceae** (legume, bean and pea family)
 [includes Caesalpinaceae and Mimosaceae]
- Albizia julibrissin* Durazz.
 IT 18 July 1997
 Mimosa
 infrequent, disturbed area
- Amorpha canescens* Pursh
 NS 31 July 1997
 Leadplant
 infrequent, prairie
- Amorpha fruticosa* L.
 NS 10 Sept. 1997
 False indigo
 common, pond margin
- Astragalus nuttallianus* DC.
 NAF 30 April 1997
 Nuttall's milkvetch
 infrequent, rocky upland
- Baptisia australis* (L.) R. Br.
 NPF 30 April 1997
 Blue wild indigo
 common, rocky upland
- Cercis canadensis* L.
 NT 13-28 March, 1997
 Redbud
 common, Crosstimbers, rocky upland
- Chamaecrista fasciculata* (Michx.)
 NAF 18 July 1997
 Greene Partridge pea
 frequent, disturbed area, prairie
- Dalea aurea* Nuttall ex Pursh
 NPF 18 July 1997
 Golden prairie clover
 infrequent, rocky upland
- Dalea candida* Willdenow
 NPF 18 June 1997
 White prairie clover
 common, rocky upland
- Dalea enneandra* Nuttall
 NPF 31 July 1997
 Nine-anther prairieclover
 infrequent, prairie
- Dalea purpurea* Vent.
 NPF 18 June 1997
 Purple prairieclover
 common, rocky upland
- Desmanthus illinoensis* (Michx.)
 NPF 18 July 1997
 MacM.
 Bundleflower
 common, disturbed area
- Desmodium glutinosum* (Muhl.) Wood
 NPF 18 June 1997
 Large-flowered tickclover
 common, floodplain forest
- Desmodium paniculatum* (L.) DC.
 NPF 10 Sept. 1997
 Panicked tickclover
 common, floodplain forest
- Gleditsia triacanthos* L.
 NT 31 July 1997
 Honey locust
 common, mowed meadow
- Lespedeza cuneata* G. Don
 IPF 20 August 1997
 Sericea lespedeza
 common, disturbed area
- Lespedeza stipulacea* Maxim.
 IAF 20 August, 1997
 Korean clover
 common, disturbed area
- Lespedeza stuevei* Nuttall
 NPF 10 Sept 1997
 Stueve's lespedeza
 common, prairie
- Mimosa nuttallii* (DC.) B.L. Turner
 NWV 14 May 1997
 [Schranksia nuttallii DC.]
 Sensitive brier
 common, rocky upland
- Pediomelum cuspidatum* (Pursh)
 NPF 14 May 1997
 Rydb.
 [Psoralea cuspidata Pursh]
 Tallbread scurfpea
 infrequent, rocky upland
- Pediomelum esculentum* (Pursh)
 NPF 14 May 1997
 Rydb.
 [Psoralea esculenta Pursh]
 Prairie turnip
 common, rocky upland
- Psoralidum tenuifolium* (Pursh) Rydb.
 NPF 14 – 29 May 1997
 [Psoralea tenuifolia Pursh]
 Wild alfalfa
 common, prairie, rocky upland
- Stylosanthes biflora* (L.) B.S.P.
 NPF 31 July 1997
 Pencil flower
 infrequent, prairie
- Tephrosia virginica* (L.) Pers.
 NPF 31 July 1997
 Goat's rue
 infrequent, prairie
- Trifolium dubium* Sibth.
 IAF 15 – 30 April 1997
 Small hop-clover
 common, mowed meadow
- Trifolium repens* L.
 IPF 30 April 1997
 White clover
 common, disturbed area
- Vicia sativa* L.
 IAF 15 April 1997
 Common vetch
 common, disturbed area

Fagaceae (oak, beech, chestnut family)

- Quercus macrocarpa* Michaux
NT 18 July 1997
Burr oak
infrequent, floodplain forest
- Quercus marilandica* Muench.
NT 18 July 1997
Blackjack
common, crosstimbers
- Quercus muehlenbergii* Engelm.
NT 14 May 1997
Chinquapin oak
common, floodplain forest
- Quercus stellata* Wang.
NT 18 July 1997
Post oak
dominant, crosstimbers
- Quercus velutina* Lam.
NT 8 October 1997
Black oak
infrequent, crosstimbers

Gentianaceae (gentian family)

- Sabatia campestris* Nuttall
NAF 11 June 1997
Prairie rose, pink gentian
infrequent, prairie

Geraniaceae (geranium family)

- Geranium carolinianum* L.
NAF 30 April 1997
Carolina crane'sbill
infrequent, disturbed area

Grossulariaceae (gooseberry family)

- Ribes aureum* Pursh
NS 30 April 1997
Golden or buffalo current
infrequent, rocky upland

Iridaceae (iris family)

- Nemastylis geminiflora* Nuttall
NPF 30 April 1997
Prairie iris
- Sisyrinchium angustifolium* Miller
NPF 30 April 1997
Blue-eyed grass
infrequent, mowed meadow
- Sisyrinchium campestre* Bicknell
NPF 15 April 1997
Prairie blue-eyed grass
infrequent, rocky upland

Juglandaceae (walnuts, hickory family)

- Carya cordiformis* (Wang.) Koch
NT 18 July 1997
Bitternut hickory
infrequent, floodplain forest
- Carya illinoensis* (Wang.) Koch
NT 31 July 1997
Pecan

- common, ravine
- Carya texana* Buckley
NT 18 July 1997
Black hickory
infrequent, crosstimbers
- Juglans nigra* L.
NT 31 July 1997
Black walnut
common, floodplain forest

Juncaceae (rush family)

- Juncus brachycarpus* Engelmann
NPG 18 June 1997
Whiteroot rush
common, disturbed area
- Juncus marginatus* Rostk.
NPG 18 June 1997
Grassleaf rush
infrequent, prairie
- Juncus tenuis* Willdenow
NPG 18 June 1997
Slender rush
common, disturbed area
- Juncus validus* Coville
NPG 31 July 1997
Bulrush
common, seep

Krameriaceae (ratany family)

- Krameria lanceolata* Torrey
NPF 29 May 1997
Trailing ratany
infrequent, prairie

Lamiaceae (mint family)

- Hedeoma drummondii* Benth.
NPF 20 August 1997
False pennyroyal
common, disturbed area, rocky upland
- Mondarda citriodora* Cerv. Ex Lagasca
NAF 29 May 1997
Lemon beebalm
infrequent, prairie
- Monarda fistulosa* L.
NPF 22 June 1997
Wild bergamot
infrequent, mowed meadow
- Prunella vulgaris* L.
NPF 29 May – 31 July 1997
Heal-all
common, floodplain forest
- Pycnanthemum tenuifolium* Schrad.
NPF 10 Sept. 1997
Narrowleaf mountain mint
common, prairie
- Salvia azurea* Lam.
NPF 10 Sept. 1997
Blue sage
common, prairie
- Satureja calamintha* (L.) Scheele
NPF 14-29 May 1997
Ozark savory
abundant, prairie, rocky upland

- Scutellaria parvula* Michaux
NPF 30 April – 29 May 1997
Small skullcap
infrequent, prairie, rocky upland
- Teucrium canadense* L.
NPF 31 July 1997
American germander
common, seep
- Trichostema brachiatum* L.
NAF 20 August 1997
Blue curls
infrequent, rocky upland
- Lemnaceae** (duckweed family)
- Wolffia columbiana* Karst
NPL 8 October 1997
Watermeal
common, aquatic
- Liliaceae** (lily family)
- Allium canadense* L.
NPF 30 April 1997
Wild onion/garlic
common, rocky upland
- Allium drummondii* Regel
NPF 15 April 1997
Drummond's wild onion
common, rocky upland
- Allium stellatum* Nuttall
NPF 8 October 1997
Autumn wild onion
common, rocky upland
- Androstaphium coeruleum* (Scheele) Torr.
NPF 28 March 1997
Blue funnel lily
common, rocky upland
- Camassia scilloides* (Raf.) Cory
NPF 14 May 1997
Eastern camass
infrequent, rocky upland
- Cooperia drummondii* Herb.
NPF 10 Sept 1997
Rain lily
infrequent, disturbed area
- Erythronium albidum* Nuttall
NPF 13 March 1997
White dogtooth violet, fawn lily
common, rocky upland
- Lythraceae** (loosestrife family)
- Lythrum alatum* Pursh
var. *lanceolatum* (Ell.) T. & G.
NPF 31 July – 10 Sept. 1997
Tall loosestrife
infrequent, wet prairie
- Rotala ramosior* (L.) Koehne
var. *interior* Fern. & Grisc.
NAF 10 Sept. 1997
Toothcup
common, pond margin
- Malvaceae** (mallow, hibiscus, cotton family)
- Callirhoe alcaeoides* (Michx.) Gray
NPF 30 April 1997
Pink poppy mallow
infrequent, disturbed area
- Callirhoe digitata* Nuttall
var. *stipulata* Waterfall
ssp. *glabrescens* (Kuntze) Raven
NPF 29 May 1997
Fringed poppy mallow
infrequent, prairie
- Callirhoe involucreta* (Nutt.) Gray
NPF 29 May 1997
Winecup, cowboy rose
common, prairie
- Sida procumbens* Sw.
NPF 31 July – 10 Sept. 1997
Spreading sida
common, rocky upland
- Menispermaceae** (moonseed family)
- Cocculus carolinus* (L.) DC.
NWV 29 May 1997
Carolina snailseed
infrequent, floodplain forest
- Moraceae** (mulberry, fig family)
- Maclura pomifera* (Raf.) Schneider
NT 14 May 1997
Bois d'arc, osage orange
common, rocky upland
- Morus rubra* L.
NT 31 July 1997
Red mulberry
common, floodplain forest
- Oleaceae** (olive, privet, ash family)
- Forestiera pubescens* Nuttall
NS 28 Feb – 13 Mar 1997
Elbowbush
abundant, rocky upland
- Fraxinus americana* L., var. *Americana*
NT 30 April 1997
White ash
infrequent, rocky upland
- Fraxinus pennsylvanica* Marsh.
NT 31 July 1997
Green ash
common, floodplain forest
- Ligustrum sinense* Lour.
IS 29 May 1997
Privet
infrequent, disturbed area
- Onagraceae** (evening primrose family)
- Calylophus serrulatus* (Nutt.) Raven
NPF 14, 29 May 1997
Sundrops, plains yellow primrose
common, prairie, rocky upland
- Gaura longiflora* Spach.
NAF 20 Aug, 10 Sept. 1997
Common, prairie
- Gaura parviflora* Dougl. Ex Lehm

- NAF 31 July 1997
Velvety gaura
common, disturbed area
Gaura suffulta Engelm. Ex Gray
NAF 14 May – 18 Jun 1997
Beeblossom
common, rocky upland, prairie
Ludwigia peploides (H.B.K.) Raven
NAE 31 July – 10 Sept. 1997
Water primrose, water pennies
common pond margin
Oenothera linifolia Nuttall
NAF 14 May 1997
Flax-leaf evening primrose
common, rocky upland, prairie
Oenothera macrocarpa Nuttall
NPF 14 May 1997
Large-fruited evening primrose
infrequent, rocky upland
Oenothera speciosa Nuttall
NPF 29 May 1997
Showy evening primrose
common, prairie
Stenosiphon linifolius (Nutt.) Heynh.
NPF 10 Sept. 1997
Stenosiphon
common, prairie
- Ophioglossaceae** (grape fern, adder's-tongue family)
Botrychium virginicum (L.) Sw.
NPF 15 April – 29 May 1997
Virginia grape-fern
common, crosstimbers
Ophioglossum engelmannii Prandtl
NPF 30 April 1997
Limestone adder's tongue
common, rocky upland
- Orchidaceae** (orchid family)
Spiranthes cernua (L.) L.C. Rich.
NPF 8 October 1997
Nodding ladies'-tresses
infrequent, rocky upland
Spiranthes lacera Raffinesque
NPF 10 Sept. 1997
Slender ladies'-tresses
infrequent, prairie
Spiranthes magnicamporum Sheviak
NPF
Great plains ladies'-tresses
infrequent, seep
Spiranthes ovalis Lindl.
NPF
October ladies'-tresses
infrequent, prairie
- Orobanchaceae** (broomrape family)
Orobanche uniflora L.
NPF(*one, no voucher*) 29 April 2000
One-flowered broomrape
infrequent, floodplain forest
- Oxalidaceae** (oxalis family)
Oxalis corniculata L.
NPF 30 April 1997
Yellow wood-sorrel
common, disturbed area
Oxalis volacea L.
NPF 15 April 1997
Violet wood-sorrel
common, floodplain forest
- Passifloraceae** (passionflower family)
Passiflora incarnata L.
NPF 2 August 2001
Blue passionflower
infrequent, prairie
Passiflora lutea L.
NPF (not yet found, but predicted)
Yellow passionvine
infrequent, floodplain forest
- Phytolaccaceae** (pokeweed family)
Phytolacca americana L.
NPF 18 June 1997
Pokeweed
infrequent, disturbed area
- Plantaginaceae** (plantain family)
Plantago aristata Michaux
NAF 29 May 1997
Bottlebrush plantain
infrequent, prairie
Plantago lanceolata L.
IPF 29 May 1997
English plantain
infrequent, prairie
Plantago patagonica Jacq.
NAF 29 May 1997
Wooly plantain
infrequent, prairie
Plantago pusilla Nuttall
NAF April 1999
Dwarf plantain
infrequent, disturbed area
Plantago rugelii Dcne.
NPF 16 July 1993
Blackseed plantain
infrequent, prairie
Plantago virginica L.
NAF 29 May 1997
Paleseed plantain
common, prairie
- Platanaceae** (sycamore family)
Platanus occidentalis L.
NT 31 July 1997
Sycamore
common, floodplain forest
- Poaceae** (grass family)
Agrostis hyemalis (Walt.) B.S.P.
NPG 29 May 1997
Ticklegrass

- common, prairie
Aira elegantissima Schur.
IAG 14 May 1997
Hairgrass
infrequent, rocky upland
Andropogon gerardii Vitman
NPG 20 August 1997
Big bluestem
infrequent, rocky upland
Aristida dichotoma Michaux
NAG 8 October 1997
Churchmouse threeawn
infrequent, disturbed area
Aristida oligantha Michaux
NAG 10 Sept. 1997
Oldfield threeawn
common, disturbed area
Aristida purpurea Nuttall
NPG 14 May 1997
Purple threeawn
common, rocky upland
Bothriochloa saccharoides (Sw) Rydb
NPG 18 June 1997
Silvertop bluestem
common, disturbed area
Buteloua curtipendula (Michx.) Torrey
NPG 18 July 1997
Sideoats grama
infrequent, rocky upland
Bouteloua hirsuta Lag.
NPG 20 August 1997
Hairy grama
common, rocky upland
Bouteloua pectinata Featherly
NPG 20 August 1997
Tall grama
common, rocky upland, prairie
Bromus catharticus Vahl
IAG 30 April 1997
Rescue grass
infrequent, rocky upland, disturbed area
Bromus pubescens Muhl. Ex Willd.
NPG 14 May 1997
Canada brome
common, floodplain forest
Buchloe dactyloides (Nutt.) Engelm
NPG 14 May 1997
Buffalo grass
infrequent, prairie
Chasmanthium latifolium (Michx.) Yates
NAG 18 July – 10 Sept. 1997
Inland sea oats
common, floodplain forest, Crosstimbers
Coelorachis cylindrica (Michx.) Nash
NPG 29 May, 18 June 1997
Mousetail
common, disturbed area, prairie
Cynodon dactylon (L.) Pers.
IPG 29 May 1997
Bermuda grass
common, disturbed area
Dactylis glomerata L.
IPG 30 April - 29 May 1997
Orchard grass
common, disturbed area
Dicanthelium acuminatum (Sw.)
Gould & Clark
NPG 29 May & 10 Sept. 1997
Early panicum
common, disturbed area, prairie
Dicanthelium boscii (Poir.) Gould & Clark
NPG 14 May 1997
Bosc's panic
common, floodplain forest
Dicanthelium oligosanthes
Schult.) Gould var. *oligosanthes*
NPG 14 – 29 May 1997
Small panicgrass
infrequent, disturbed area, rocky upland, prairie
Dicanthelium sphaerocarpon (Ell.) Gould
NPG 14 May 1997
Leafy panicum
common, prairie
Digitata cognata (Schult.) Pilger
NPG 10 Sept. 1997
[Leptoloma cognatum (Schult.) Chase]
Fall witchgrass
common, floodplain forest
Echinochloa crusgalli (L.) Beauv.
IAG 20 Aug – 10 Sept. 1997
Barnyard grass
infrequent, pond margin
Eleusine indica (L.) Gaertn.
IAG 18 July 1997
Goosegrass
infrequent, disturbed area
Elymus virginicus L.
NPG 18 June 1997
Virginia wild rye
common, disturbed area
Erioneuron pilosum (Buckl.) Nash
NPG 30 April 1997
Hairy tridens
infrequent, disturbed area
Festuca arundinacea Schreb.
IPG 30 April – 14 May 1997
Meadow fescue
infrequent, disturbed area, floodplain forest
Hordeum pusillum Nuttall
NAG 29 May 1997
Little barley
infrequent, disturbed area
Koeleria macrantha (Ledeb.) J.A. Schultes
NPG 14 May 1997
Junegrass
infrequent, rocky upland
Leptochloa fusca (L.) Kunth
NPG 10 Sept. 1997
Bearded sprangletop
infrequent, pond margin
Lolium perenne L.
IPG 29 May 1997
Perennial ryegrass

- common, prairie
Muhelbergia reverchonii Vasey & Scrib.
NPG 20 Aug 1999
Seep muhly
infrequent, rocky upland
Muhlenbergia schreberii J.F. Gmel.
NPG
Nimblewill
infrequent, floodplain forest
Nassella leucotricha (T.& R.) Barkw.
NPG 14 May 1997
[*Stipa leucotricha* Trin & Rupr.]
Texas wintergrass
common, prairie
Panicum anceps Michaux
NPG 31 July 1997
Beaked panic
common, floodplain forest
Panicum capillare L.
NAG 18 July 1997
Witchgrass
infrequent, rocky upland
Panicum virgatum L.
NPG 10 Sept. 1997
Switchgrass
common, prairie
Paspalum dilatatum Poir.
IPG 18 June 1997
Dallis grass
common, disturbed area
Phalaris caroliniana Walt.
NAG 14 May 1997
Maygrass
infrequent, prairie
Poa annua L.
IAG 15 April 1997
Annual bluegrass
common, disturbed area
Poa pratensis L.
IPG 30 April 1997
Kentucky bluegrass
common, disturbed area
Schizachyrium scoparium (Michx.) Nash
NPG 20 August 1997
Little bluestem
common, rocky upland
Setaria geniculata (Lam.) Beauv.
NPG 18 June – 30 July 1997
Knotroot foxtail
common, disturbed area
Sorghastrum nutans (L.) Nash
NPG 10 Sept. 1999
Indiangrass
infrequent, prairie
Sorghum halapense (L.) Pers.
IPG 18 June 1997
Johnson grass
common, disturbed area
Sporobolus compositus (Poir) Merr.
[*Sporobolus asper* (Michx.) Kunth
NAG 28 Sept. 1999
Dropseed
infrequent, disturbed area
Sporobolus vaginiflorus (T.ex G.) Wood
NAG 10 Sept. 1997
Poverty dropseed
common, disturbed area
Tridens flavus (L.) Hitchcock
NPG 31 July 1997
Purpletop
common, floodplain forest
Tridens strictus (Nutt.) Nash
NPG 10 Sept. 1997
Longspike tridens
infrequent, pond margin
Tripsacum dactyloides L.
NPG 18 June 1997
Gama grass
infrequent, prairie
Vulpia octoflora (Walt.) Rydb.
IAG 8 October 1997
Poverty grass
common, disturbed area
- Polygalaceae** (milkwort family)
Polygala incarnata L.
NAF 31 July 1997
Pink milkwort
infrequent, prairie
- Polygonaceae** (buckwheat, knotweed family)
Eriogonum longifolium Nuttall
NPF 20 August – 8 Oct. 1997
Longleaf buckwheat
common, rocky upland, prairie
Polygonum hydropiperoides Michx.
NPF 8 October 1997
Mild water-pepper
infrequent, pond margin
Polygonum lapathifolium L.
NAF 10 Sept. 1997
Pale smartweed
infrequent, pond margin
Polygonum persicaria L.
NAF 20 August 1997
Lady's thumb
common, disturbed area
Polygonum punctatum L.
NAF 20 August 1997
Water smartweed
infrequent, pond margin
Rumex crispus L.
IPF 29 May 1997
Curly dock
common, riparian
Rumex hastatulus Baldw.
NAF 18 June 1997
Heartwing sorrel
common, disturbed area
- Portulacaceae** (portulaca family)
Claytonia virginica L.
NPF 28 March 1997
Spring beauty
common, rocky upland

Primulaceae (primrose family)

- Dodecatheon meadia* L.
var. *brachycarpa* (Small) Fassett
NPF 30 April 1997, 16 July 1993
Shooting star
common, rocky upland
Samolus parviflorus Raf
NAEF 14 May 1997
Smallflower brookweed
common, aquatic

Pteridaceae (bracken fern)

- Pellaea atropurpurea* (L.) Link.
NPF 29 May 1997
Purple cliff brake

Ranunculaceae (buttercup, larkspur family)

- Anemone berlandieri* Pritz
NPF 28 March, 14 May 1997
Ten-petal windflower
infrequent, rocky upland, prairie
Delphinium carolinianum Walt
NPF 14 - 29 May 1997
Ssp. *Virescens* (Nutt.) Brooks
Plains larkspur
common, prairie
Ranunculus hispidus Michaux
NPF 30 April 1997
Bristly buttercup
infrequent, disturbed area

Rhamnaceae (buckthorn family)

- Berchemia scandens* (Hill) K. Koch
NWV 14 May 1997
Rattan vine
common, disturbed area, forest edges
Ceanothus herbaceus Raffinesque
NS 30 April 1997
New Jersey tea
infrequent, rocky upland
Fragula caroliniana (Walt.) Gray
NT 29 May 1997
[*Rhamnus caroliniana* Walt.]
Indian cherry
common, rocky upland, Crosstimbers, forest

Rosaceae (rose family)

- Agrimonia pubescens* Wallr.
NPF 20 August 1997
Downy agrimony
infrequent, floodplain forest
Agrimonia rostellata Wallr.
NPF 28 Sept. 1999
Beaked agrimony
infrequent, floodplain forest
Crataegus crus-gallii L.
NST 30 April 1999
Cockspur hawthorn
infrequent, rocky upland
Crataegus mollis (T. & G.) Scheele
NT 10 Sept. 1997

- Downy haw
infrequent, rocky upland
Fragaria virginica P. Mill.
var. *illinoensis* (Prince) Gray
NPF 15 April 1997
Wild strawberry
infrequent, crosstimbers
Geum canadense Jacq.
NPF 29 May 1997
White avens
infrequent, crosstimbers
Prunus angustifolia Marsh.
NS 13 March 1997
Chickasaw plum
infrequent, rocky upland
Prunus mexicana Wats.
NT 13 March 1997
Mexican plum
common, crosstimbers
Prunus serotina Ehrh.
NT 18 July 1997
Wild cherry
infrequent, crosstimbers
Pyrus communis L.
IT 28 March 1997
Common pear
infrequent, rocky upland
Rosa foliolosa Nuttall
NPF 18 June 1997
Prairie rose
infrequent, rocky upland
Rosa carolina L.
NS 14 May 1997
Swamp rose
common, pond margins
Rosa setigera Michaux
NS 18 June 1997
Climbing prairie rose
common, rocky upland
Rubus flagellaris Willdenow
NS 15 April 1997
Northern dewberry
common, disturbed area

Rubiaceae (madder, coffee family)

- Cephalanthus occidentalis* L.
NS 31 July 1997
Buttonbush
infrequent, seep
Diodia teres Walt.
NAF 20 August 1997
Poor-Joe
infrequent, rocky upland
Galium circaeans Michaux
NPF 14 - 29 May 1997
Weedy bedstraw
infrequent, floodplain forest
Galium virgatum Nuttall
NAF 14 May 1997
Southwest bedstraw
infrequent, rocky upland

- Hedyotis crassifolia* Raffinesque
NAF 13 March 1997
Prairie bluets, Quaker ladies
common, rocky upland
- Rutaceae** (citrus family)
Ptelea trifoliata L.
NST(fruit) 10 Sept. 1997
Hop tree, wafer ash
infrequent, rocky upland
Zanthoxylum americanum Miller
NS 30 April 1997
Prickly ash
common, crosstimbers
Zanthoxylum clava-herculis L.
NT (no flrs) 10 Sept. 1997
Hercules' club
infrequent, old homesite
- Salicaceae** (willow, cottonwood family)
Populus nigra L.
NT Not collected: need specimen
Cottonwood
infrequent, floodplain forest
Salix nigra Marsh
NT 30 April 1997
Black willow
infrequent, riparian, pond margin
- Sapotaceae** (sapodilla family)
Sideroxylon lanuginosum Michaux
NT 18 July 1997
[*Bumelia lanuginosa* (Mix.) Pers
Chittanwood
common, rocky upland
- Scrophulariaceae** (penstemon family)
Agalinis fasciculata (Ell.) Raf.
NAF 10 Sept. 1997
Beach gerardia
abundant, disturbed area
Castilleja indivisa Engelman
NAF 15 April 1997
Indian paintbrush
common, rocky upland
Nuttallanthus texanus (Scheele) D.A.Sutton
NAF 15 April 1997
[*Linaria texana* Scheele]
Texas toadflax
common, rocky upland
Penstemon cobraea Nuttall
NPF 14 May 1997
Large beardtongue
common, rocky upland
Penstemon oklahomensis Pennell
NPF 14 May 1997
Oklahoma penstemon
infrequent, prairie
Veronica arvensis L.
IAF 15 April 1997
Common speedwell
infrequent, mowed meadow
Veronica peregrina L.
- NAF 15 April 1997
Purslane speedwell
common, mowed meadow
- Smilacaceae** (greenbrier family)
Smilax bona-nox L.
NWV 14 May 1997
Greenbrier, cat's claw
common, rocky upland
Smilax rotundifolia L.
NWV 30 April 1997
Greenbrier
infrequent, floodplain forest
- Solanaceae** (nightshade, potato family)
Physalis angulata L.
NAF 18 June 1997
Cutleaf ground cherry
common, disturbed area
Solanum carolinense L.
NPF 18 June 1997
Carolina horsenettle
infrequent, disturbed area
Solanum dimidiatum Raffinesque
NAF 18 June 1997
Horsenettle
common, disturbed area
Solanum rostratum Dunal
NAF 18 June 1997
Buffalo bur
infrequent, disturbed area
- Typhaceae** (cattail family)
Typha angustifolia L.
NPEF 18 June 1997
Narrowleaf cattail
infrequent, aquatic
- Ulmaceae** (elm, hackberry family)
Celtis laevigata Willdenow
NT 31 July 1997
Sugarberry
common, floodplain forest
Celtis reticulata Torrey
NT 18 July 1997
Roughleaf hackberry
common, rocky upland
Ulmus alata Michaux
NT 28 Feb 1997
Winged elm
common, rocky upland, crosstimbers
Ulmus americana L.
NT 13 March 1997
American elm
infrequent, floodplain forest, rocky upland
Ulmus rubra Muhlenberg
NT 28 Feb 1997
Slippery elm
common, crosstimbers

Urticaceae (nettle family)

Parietaria pennsylvanica Muhl.
NAF 29 May 1997
Pennsylvania pellitory
common, floodplain forest

Valerianaceae (valerian family)

Valerianella radiata Dufr.
NAF 30 April 1997
Beaked cornsalad
infrequent, rocky upland

Verbenaceae (vervain family)

Glandularia bipinnatifida Nuttall
NAF 15 April 1997
[*Verbena bipinnatifida* Nuttall]
Sweet William
common, rocky upland
Verbena stricta Ventenat
NPF 18 June – 31 July 1997
Wooly vervain
common, disturbed area
Verbena urticifolia L.
NAF 18 June 1997
White vervain
infrequent, floodplain forest

Violaceae (violet family)

Viola bicolor Pursh
NAF 13 March 1997
Johnny-jump-up
common, mowed meadow

Viola sororia Willdenow
NPF 28 March 1997
Butterfly violet
common, floodplain forest

Viscaceae (mistletoe family)

Phoradendron leucarpum (Raf.)
Reveal & Johnston
NP% @S 13 March 1997
Mistletoe
infrequent, crosstimbers

Vitaceae (grape family)

Ampelopsis cordata Michaux
NWV 18 July 1997
Raccoon grape
infrequent, crosstimbers pond margin,
disturbed area
Cissus incisa (Nutt.) Des Moulins
NWV 29 May 1997
Possum grape
infrequent, rocky upland
Parthenocissus quinquefolia (L.) Planch
NWV 31 July 1997
Virginia creeper
common, ravine, floodplain forest,
crosstimbers
Vitis aestivalis Michaux
NWV 18 July 1997
Pigeon grape
infrequent, disturbed

Editorial

Water, Soil, and Plant Diversity in Oklahoma

Sheila Strawn

In 1963 John Shed and William Penfound did a study on legume distribution. They found a general relationship between soils and vegetation types. Sand deposits generally became forests while limestone and clay deposits generally became prairie (Proc. Okla. Acad. Sci. 44:2-6). But soil-to-plant relationships are not always that simple. Topographic effects such as slope and solar and wind exposure as well as precipitation rates can override the characteristics of the various soils making it difficult to determine specific soil types based on vegetation.

In 1964 Dr. Paul Buck wrote "Relationships of the Woody Vegetation of the Wichita Mountains Wildlife Refuge to Geological Formations and Soil Types (Ecology 45:2). He had found that when it rains, soil type and topographic features, together, control the movement of water. Granite formations at the Refuge erode to make a cobbly soil at the foot of the mountains that drains quickly, making it difficult for some plants to become established. Different amounts and patterns of precipitation can also interact with soil type producing gradients of moisture availability for plants with different moisture requirements. Some species can live only at certain positions across the moisture gradient. Others are more tolerant of variable moisture availability. Sugar Maple is able to dominate some of the more mesic, cobbly patches near streams, while Black-jack Oak dominates the less mesic, cobbly upland patches in this newly formed soil.

In places like the Carolinas bountiful precipitation on limestone soils can actually make soil very poor in nutrients. Organic acids from the abundant vegetation react with calcium, sodium, and magnesium ions in the soil. The abundant rainfall then leaches them from the soil and washes them into the groundwater below the reach of roots. However, this is not usually the case in Oklahoma. Oklahoma actually loses more water to evaporation than it gets in precipitation. Rivers and groundwater from the Rocky Mountains make up the difference. Here,

precipitation is not sufficient to leach all the minerals from our limestone soils. Dense stands of forbs and grasses grow in the Tallgrass Prairie Preserve where these mineral-rich formations are not leached by excess precipitation.

Southwest of the Refuge the precipitation rate is so low that much of the water evaporates before it gets very deep into the soil. In those soils, the calcium ions accumulate at the lowest level of water penetration, sometimes, just inches from the surface and form a calcium carbonate. Known as "caliche", this layer restricts root growth, so fewer species grow on caliche. Gypswm, mostly calcium sulfate, was formed long ago in a similar manner when the seawater evaporated from the plains. In Oklahoma Mesquite and mixed grass are associated with "gyp soil".

Soil and water relations alone do not explain why plants grow where they do in Oklahoma. Other variables like humus, micro-organisms, nematodes, grazing animals, fire, ice, windstorms, and human influence all work on a smaller scale and are responsible for much of the physical heterogeneity and resultant biodiversity. This small-scale heterogeneity is what actually accounts for our having more species than other continental United States, except California, Florida, and Texas.

Ironically, plant diversity in Oklahoma has been woefully understudied. With the promise of improved medical treatments based on genetic engineering, we need to know where species are in Oklahoma that might be beneficial. We are, therefore, obliged to preserve as much of our diversity as we can. But we will need to save it on the landscape level, because it is our diverse landscape that supports our diverse biota. Indeed, researching and preservmg Oklahoma's landscape-to-species relationships is worth researching and preserving twice as much elsewhere.



Editorial Policies and Practices

***Oklahoma Native Plant Record* is published annually by Oklahoma Native Plant Society. Submission for publication in the journal is open to all. Manuscripts will be accepted on topics related to Oklahoma's regional botany, including historical research reports, current research articles, site record species lists, and descriptions of new or important species sightings in Oklahoma. Oklahoma's environmental gradients of human impact, climate, and elevation make us a prime target for research on habitat edges, species ranges, and edge species, but articles of other themes may be included as well. Important works overlooked by journals of broader geographic regions will also be considered for publication here.**

Papers must not have been published previously or accepted for submission elsewhere and should represent research conducted in accordance with accepted procedures and scientific ethics. Submission of the article implies the granting of copyright permission to Oklahoma Native Plant Society.

Manuscripts will be reviewed for content and appropriateness by at least two reviewers. The title page should state the affiliation and complete addresses of all authors and telephone numbers for the corresponding author. Research and technical papers should include a one-paragraph abstract of not more than 250 words. It should concisely state the goals, principal results, and major conclusions of the paper. All references, figures, and tables should be cited in the text. Common names should be referenced to a scientific name. Abbreviations of authorities for scientific names should follow *Authors of Plant Names* (Brummitt and Powell, 1992). Titles of periodicals should be abbreviated following *Botanico-Periodicum-Huntianum* and its supplement - except in historic publications when original format will be used.

Authors with access to IBM-compatible microcomputers are encouraged to send a copy of the manuscript on diskette in rtf (rich text format). If the manuscript is typed, manuscripts should be double-spaced on 8^{1/2} X 11 inch paper with minimum one-inch margins and should be submitted in duplicate. Diskette or hardcopy manuscripts should be sent to the managing editor at the ONPS address on the back cover by June 1.

**Oklahoma Native Plant Society
c/o Tulsa Garden Center
2435 South Peoria
Tulsa, Oklahoma 74114**

Non-Profit
Organization
U.S. Postage Paid
Tulsa, OK
Permit No. 357

In this issue of *Oklahoma Native Plant Record* Volume 2, Number 1, December 2002:

- 4 Vascular Plants of the Wichita Mountains. *Dr. Paul Buck*
- 22 Floristic List for Comanche County, Oklahoma. *Dr. Bruce W. Hoagland*
- 54 *Schoenoplectus ballii* and *S. saximontanus*
Wichita Mountains Wildlife Refuge Survey 2000. *Dr. Lawrence K. Magrath*
- 65 Pontotoc Ridge Floristic Survey: 1999. *Dr. Forest Johnson, Ms. Patricia Folley (ed.)*
- 82 ONPS Editorial: Water, Soil, and Plant Diversity in Oklahoma