

MISSOURI SPECIES AND COMMUNITIES* OF CONSERVATION CONCERN *Checklist*



Asclepias meadii and *Bombus griseocollis* photo: Mike Leahy

JANUARY 2021

*Terrestrial Natural Communities. Does not include aquatic, geologic, or cave communities.

SCI077

CONTENTS

ACKNOWLEDGMENTS	2
INTRODUCTION.....	3
TERMS AND DEFINITIONS	4
SPECIES CHANGES.....	12
TERRESTRIAL NATURAL COMMUNITIES.....	12
THREATENED AND ENDANGERED SPECIES IN MISSOURI	15
SPECIES AND STATUSES	
LICHENS	17
LIVERWORTS AND HORNWORTS	17
MOSSES	18
FERNS AND FERN ALLIES	21
FLOWERING PLANTS	22
FLATWORMS.....	34
MOLLUSKS	34
ARACHNIDS.....	36
CRUSTACEANS	36
MILLIPEDES.....	37
INSECTS.....	37
FISH	40
AMPHIBIANS	42
REPTILES.....	42
BIRDS (See Appendix A for tracking criteria)	43
MAMMALS.....	44
REFERENCES.....	45
FOR MORE INFORMATION (including Webpage and Citation)	49
APPENDIX A: BIRD SPECIES TRACKED IN MONHP AND THEIR CRITERIA FOR EOs	50
APPENDIX B: MISSOURI BIRD CONSERVATION PLAN FOCAL SPECIES	52
PLANTS OF CONSERVATION CONCERN REPORTING FORM.....	53
ANIMALS OF CONSERVATION CONCERN REPORTING FORM.....	54
TERRESTRIAL NATURAL COMMUNITY REPORTING FORM	55
AQUATIC NATURAL COMMUNITY REPORTING FORM.....	56

ACKNOWLEDGMENTS

The following individuals contributed to the development of this document: Bruce Allen (Missouri Botanical Garden-MOBOT), Mike Arduser (Missouri Department of Conservation-MDC-retired), John Atwood (MOBOT), Alan Brant, John Brinda (MOBOT), Jeff Briggler (MDC), Malissa Briggler (MDC), Christopher Brown (Monsanto), Steve Buback (MDC), Dorothy Butler (MDC), Rick Clawson (MDC-retired), Bob DiStefano (MDC), Bill Elliott (MDC-retired), Tony Elliott (MDC), Randy Evans (MDC), Debby Fantz (MDC), Susan Farrington (MDC), Dennis Figg (MDC-retired), Jane Fitzgerald (Partners In Flight), Matt Gompper (University of Missouri - Columbia), Lonnie Hansen (MDC-retired), Janet Haslerig (MDC), Nels Holmberg (MOBOT), Peggy Horner (Ozark Regional Land Trust), Bob Hrabik (MDC), Vicki Jackson (University of Central Oklahoma), Brad Jacobs (MDC-retired), Tom Johnson (MDC-retired), Harold Kerns (MDC-retired), Dave Knuth (MDC), Phil Koenig, Jeff Koppelman (MDC-retired), Doug Ladd (The Nature Conservancy), Mike Leahy (MDC), Bill Mabee (MDC), Ted MacRae (Monsanto), Paul McKenzie (U.S. Fish and Wildlife Service-USFWS), Stephen McMurray (MDC), Elizabeth Middleton (MDC), Tim Nigh (MDC-retired), Doug Novinger (MDC), Elizabeth Olson (MDC), William Pflieger (MDC-retired), Barry Poulton (U.S. Geological Survey), Lynn Robbins (Missouri State University-retired), Randy Sarver (Department of Natural Resources), John Scheibe (Southeast Missouri State University), Tim Smith (MDC-retired), Janet Sternburg (MDC), Bill Summers, Richard Thoma (Monsanto-retired), Justin Thomas (NatureCITE), James Trager (MOBOT, Shaw Nature Reserve), Jacob Westhoff (MDC), Kathryn Womack (MDC), George Yatskievych (UT Austin).

NOTICE: Please submit reports of all sightings of species and natural communities listed in this checklist on the forms provided in the back of this checklist. Special criteria apply to birds and reports should follow the guidelines listed in Appendix A.

The Missouri Bird Plan Focal Species (Appendix B) provides a list of states priority breeding bird species that are the most threatened and information on their habitat needs can be used to guide management actions, goals and objectives. Not all species listed in Appendix B are tracked in the Natural Heritage database.

INTRODUCTION

The Missouri Department of Conservation (MDC) is charged with the protection and management of Missouri's fish, forest, and wildlife resources. In the brief time since the settlement of Missouri, many plants and animals have declined to levels of concern and some have disappeared entirely. The species cataloged in this checklist represent 18 percent of the native vascular plants, 14 percent of the nonvascular plants, 28 percent of the vertebrate animals, and an unknown percentage of the native invertebrate species in Missouri. Together, the animals, plants, and natural communities represent Missouri's biological diversity—a natural heritage worth protecting.

The Department maintains two references relating to the status of listed plants and animals in Missouri: the *Missouri Species and Communities of Conservation Concern Checklist (Checklist)* and the *Wildlife Code of Missouri (Code)*. The *Checklist* is used mainly for planning and communication purposes. All native animal species in the State of Missouri are protected as biological diversity elements unless a method of legal harvest, harm or take is described in the *Code*. All native plant species in the State of Missouri are protected as biological diversity elements only on land owned by the Missouri Department of Conservation. Species listed in the *Code* under 3 CSR 10-4.111 and all federally listed endangered and threatened plants and animals protected by the Endangered Species Act of 1973 (ESA) are protected by the State Endangered Species Law 252.240. Some additional plants and animals in this *Checklist* also appear in the *Code* and are afforded special legal protection.

How to use the checklist

The checklist, developed with the cooperation of specialists throughout the state, is a list of plants, animals, and natural communities that MDC is particularly concerned about due to population declines or apparent vulnerability. The global and state ranks indicate the level of concern for each Element's (i.e., a species or type of natural community) continued existence throughout its range and in Missouri, respectively. Global ranks are assigned by the Natural Heritage/Conservation Data Center personnel and/or NatureServe. State Ranks in Missouri are assigned by the Missouri Natural Heritage Program within the Missouri Department of Conservation.

The Global and State Ranking System methodology was developed and provided by The Nature Conservancy, Conservation Science Division, in association with the Network of Natural Heritage Programs and Conservation Data Centers.

The checklist is arranged by broad taxonomic groups (e.g., terrestrial natural communities, flowering plants, insects, fish, and mammals). Within each group, species are arranged alphabetically by their scientific names and terrestrial natural communities by community type. Each Element is identified by its scientific name, common name, state rank, global rank, state status, and federal status.

TERMS AND DEFINITIONS

FEDERAL STATUS

The federal status is derived from the provisions of the Endangered Species Act of 1973, as amended, which is administered by the U.S. Fish and Wildlife Service (USFWS). Passage of the Endangered Species Act of 1973 gave the United States one of the most important laws ever enacted by any country to prevent the extinction of imperiled animals and plants. Protecting endangered and threatened species and restoring them to the condition where their existence is no longer jeopardized is the primary objective of the USFWS Endangered Species Program.

E: Endangered: Any species which is in danger of extinction throughout all or a significant portion of its range.

T: Threatened: Any species which is likely to become endangered within the foreseeable future.

C: Candidate: Plants or animals which USFWS is reviewing for possible addition to the list of endangered and threatened species.

PE: Proposed Endangered: Species officially proposed for listing as endangered; final ruling not yet made.

PT: Proposed Threatened: Species officially proposed for listing as threatened; final ruling not yet made.

SAT: Threatened due to similarity of appearance: Species is listed for its protection due to similarity of appearance with another listed species. Species listed as SAT are not biologically threatened.

STATE STATUS

Rule 3CSR10-4.111 of the *Wildlife Code of Missouri* and certain state statutes apply to state *Code*-listed species.

E: Endangered: Determined by MDC under constitutional authority.

GLOBAL RANK (GRANK)

Global ranks are assigned and maintained by the Natural Heritage/Conservation Data Center and/or NatureServe. A numeric rank (G1 through G5) of relative imperilment based on standard rank factors:

- the estimated number of Element Occurrences (EOs) throughout the Element's global, national, or subnational range;
- the estimated numbers of those EOs with good viability;
- the estimated abundance of the Element (measured in terms of population for species Elements as well as occupied area or linear distance for both species and communities);
- the estimated size of the Element's range;
- the short- and long-term trends in the Element's distribution over its range;
- the estimated number of adequately protected EOs throughout the Element's range globally, nationally, or subnationally;
- the scope, severity, and immediacy of threats to the Element;
- the vulnerability of the Element to intrusion; and
- the specificity of the Element's environmental requirements.

GLOBAL RANK (Cont.)

G1: Critically Imperiled: At very high risk of extinction or elimination due to extreme rarity, very steep declines, or other factors.

G2: Imperiled: At high risk of extinction or elimination due to very restricted range, very few populations or occurrences, steep declines, or other factors.

G3: Vulnerable: At moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors.

G4: Apparently Secure: Uncommon but not rare; some cause for long-term concern due to declines or other factors.

G5: Secure: Common; widespread and abundant.

G#G#: **Range Rank:** A numeric range rank (e.g., G2G3) is used to indicate uncertainty about the exact status of a taxon. Ranges cannot skip more than two ranks (e.g., GU should be used rather than G1G4).

GU: Unrankable: Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. Note: Whenever possible (when the range of uncertainty is three consecutive ranks or less), a range rank (e.g., G2G3) should be used to delineate the limits (range) of uncertainty.

GNR: Unranked: Global rank not yet assessed.

GH: Possibly Extinct: Known from only historical occurrences but still some hope of rediscovery. There is evidence that the species may be extinct but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching or some evidence of significant habitat loss or degradation; and (2) that a species has been searched for unsuccessfully, but not thoroughly enough to presume that it is extinct.

GX: Presumed Extinct: Not located despite intensive searches and virtually no likelihood of rediscovery.

SUBRANK:

T#: Intraspecific Taxon (binomial): Rank applies to a subspecies or variety. Rules for assigning T-ranks follow the same principles outlined above.

QUALIFIERS:

?: Inexact Numeric Rank: Denotes inexact numeric rank; it is not used in combination with range ranks, GH, or GX.

Q: Questionable Taxonomy: Distinctiveness of this entity as a taxon at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, inclusion of this taxon in another taxon, with the resulting taxon having a lower-priority (numerically higher) conservation status rank.

STATE RANK

Assigning national and subnational conservation status ranks for species and ecosystems (ecological communities and systems) follows the same general principles as used in assigning global status ranks. Subnational ranks are assigned and maintained by the Missouri Natural Heritage Program (MONHP).

S1: Critically Imperiled: Critically imperiled in the state because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2: Imperiled: Imperiled in the state because of rarity due to very restricted range, very few populations or occurrences, steep declines, or other factors making it very vulnerable to extirpation from the state.

S3: Vulnerable: Vulnerable in the state due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors making it vulnerable to extirpation.

S4: Apparently Secure: Uncommon but not rare; some cause for long-term concern due to declines or other factors.

S5: Secure: Common, widespread, and abundant in the state.

S#S#: Range Rank: A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4).

SU: Unrankable: Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.

S?: Unranked: State rank not yet assessed.

SE: Exotic: An exotic established in the state; may be native in nearby regions (e.g., house finch or catalpa in eastern U.S.).

SA: Accidental: Accidental or casual in the state, in other words, infrequent and outside its usual range. Includes species (usually birds or butterflies) recorded once or only a few times at a location. A few of these species may have bred on the one or two occasions they were recorded. Examples include European strays or western birds on the East Coast and vice-versa.

SP: Potential: Potential that the species occurs in the state, but no extant or historic occurrences are accepted.

SR: Reported: Species reported in the state but without a basis for either accepting or rejecting the report, or the report not yet reviewed locally. Some of these are very recent discoveries for which the Program has not yet received first-hand information; others are old, obscure reports.

SRF: Reported Falsely: Species erroneously reported in the state and the error has persisted in the literature.

STATE RANK (Cont.)

SH: Possibly Extirpated: Known from only historical records but still some hope of rediscovery. There is evidence that the species may no longer be present in the state, but not enough information to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching or some evidence of significant habitat loss or degradation; and (2) that a species has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the state.

SX: Presumed Extirpated: Species is believed to be extirpated from the state. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.

QUALIFIERS:

?: Inexact or Uncertain: Denotes inexact or uncertain rank; this should not be used with range ranks, SH, or SX.

SPECIES CHANGES

STATUS CHANGES

PLANTS

Acalypha deamii (Large Seeded Mercury) from S1 to S2. Recent Element Occurrence Reports from field biologists indicate that the status for this species is more secure than previously thought.

Castanea pumila var. *pumila* (Chinquapin) from SU to SH. No extant populations are documented and the species has not been reported in MO for more than 25 years.

Houstonia rosea (Rose Bluets) from SU to SH. No extant populations are documented and the species has not been reported in MO for more than 25 years.

Juncus brachyphyllus (Small-headed Rush) from S1 to S3. New populations of these species have been reported and have shown up in area inventories, indicating a more secure status.

Lactuca hirsuta (Hairy Lettuce) from SU to S3. Recent Element Occurrence Reports from field biologists indicate that while the conservation status is not imperiled, it may be vulnerable. Reports of additional populations would be helpful to remove it from the list.

Lactuca ludoviciana (Western Lettuce) from SH to S1. A population was recently discovered in Atchison County.

MOLLUSKS

Hendersonia occulta (from Cherrystone Snail to Cherrystone Drop) from S3 to S1. Based on recently published "Land Snails & Slugs of Missouri" Cherrystone Drop is recently known only from Boone County.

Millerelix deltoidea (Oklahoma Liptooth) from SU to SH. Based on recently published "Land Snails & Slugs of Missouri" Oklahoma Liptooth known only from Newton County, but not found in more recent collecting.

Patera perigrapta (Engraved Bladetooth) from S2 to S1. Based on recently published "Land Snails & Slugs of Missouri" Engraved Bladetooth is known from five counties in the Ozark natural division.

Strobilops affinis (Eightfold Pinecone) from S2 to S1. Based on recently published "Land Snails & Slugs of Missouri" Eightfold Pinecone is known historically from three counties and recently from only one.

Triodopsis cragini (Post Oak Threetooth) from SH to S1. Based on recently published "Land Snails & Slugs of Missouri" Post Oak Threetooth is known from six counties along the border of the Ozark and Osage Plains natural divisions.

CRUSTACEANS

Faxonius medius (Saddleback Crayfish) from S3? to S3.

Faxonius peruncus (Bif Creek Crayfish) is Federally Proposed Threatened.

Faxonius quadruncus (St. Francis River Crayfish) is Federally Proposed Threatened.

Orconectes stygocaneyi (Caney Mountain Cave Crayfish) is State Endangered.

INSECTS

Nicrophorus americanus (American Burying Beetle) from Federally Endangered to Federally Threatened.

FISH

Hybopsis amnis (Pallid Shiner) from SX to SU. Pallid Shiner was last collected in MO in 1956, but was rediscovered in September 2019 at Cane Creek CA. We don't have enough information about the current status of the species to assign it an accurate rank.

BIRDS

Anhinga anhinga (Anhinga) SU to S3S4. Track range expansion and breeding locations.

Falco peregrinus (Peregrine falcon) S1 to S3. Currently going through regulation processes to delist this species. Missouri currently has more breeding pairs of falcons than historically documented. The Missouri peregrine population is stable. Ongoing banding and nest box efforts.

Laterallus jamaicensis jamaicensis (Eastern Black Rail) is Federally Threatened.

Sitta pusilla (Brown-headed Nuthatch) SX to SU. Southern Missouri reintroduction efforts in summer 2020 and 2021.

Sterna antillarum athalassos (Interior Least Tern) from S1 to S2 and Federally delisted because population has grown from less than 2,000 birds in a few dozen nesting sites in 1985, when the bird was listed under the ESA, to more than 18,000 individuals at more than 480 nesting sites in 18 states today. Stakeholders efforts have helped ensure populations are healthy, stable and increasing into the foreseeable future.

ADDITIONS

FERNS AND FERN ALLIES

Thelypteris noveboracensis (New York Fern) added as S1. Recently documented as new to the state (Wayne Co.) by Alan Brant (*Missouriensis*. 2018, 36: 18-20).

PLANTS

Juglans cinerea (Butternut) added as SU. Field biologists have noted declines in occurrence over the past few decades.

Planera aquatica (Water Elm) added as SU. Known populations are restricted to four southeastern counties. Field biologists have noted declines in occurrence over the past few decades.

Rorippa tenerrima (Modoc Yellowcress) added as S1. Only 2 documented locations (Cole and Saline counties) since the late 19th century.

Vicia americana (American Vetch) added as S1. This species was thought to be extirpated as the only known location had been farmed, until a population was recently discovered in Atchison County.

MOLLUSKS

Cochlicopa morseana (Appalachian Pillar) added as S3. Based on recently published "Land Snails & Slugs of Missouri". Appalachian Pillar is found in scattered counties in the Ozark and Glaciated Plains in moist upland woods.

MOLLUSKS (Cont.)

Gastrocopta abbreviate (Plains Snaggletooth) added as S1. Based on recently published "Land Snails & Slugs of Missouri". Plains Snaggletooth is restricted to prairie areas in northwestern Missouri.

Gastrocopta similis (Great Lakes Snaggletooth) added as S2. Based on recently published "Land Snails & Slugs of Missouri" Great Lakes Snaggletooth has been found in glade, prairie, and woodland habitats in the Osage Plains and Glaciated Plains.

Glyphyalinia solida (Imperforate Glyph) added as S1. Based on recently published "Land Snails & Slugs of Missouri" Imperforate Glyph is known from only three counties in southern Missouri.

Glyphyalinia wheatleyi (Bright Glyph) added as S1. Based on recently published "Land Snails & Slugs of Missouri" Bright Glyph occurs in the Ozark and Ozark Border natural divisions.

Hawaiiia alachuana (Southeastern Gem) added as S1. Based on recently published "Land Snails & Slugs of Missouri" Southeastern Gem occurs in the Glaciated Plains and Ozark natural divisions.

Lucilla singleyanus (Smooth Coil) added as S1. Based on recently published "Land Snails & Slugs of Missouri" Smooth Coil is known historically from two counties and recently from only one.

Oxyloma retusum (Blunt Ambersnail) added as S1. Based on recently published "Land Snails & Slugs of Missouri" Blunt Ambersnail is found in scattered counties in southeastern and northwestern Missouri in low, wet places near margins of lakes or swamps.

Paravitrea simpsoni (Amber Supercoil) added as S1. Based on recently published "Land Snails & Slugs of Missouri" Amber Supercoil occurs in the Ozark and Ozark Border natural divisions.

Patera pennsylvanica (Proud Globelet) added as S2. Based on recently published "Land Snails & Slugs of Missouri" Proud Globelet is recently known from only seven counties in the Glaciated Plains and Ozark natural divisions.

Stenotrema blandianum (Missouri Slitmouth) added as S2. Based on recently published "Land Snails & Slugs of Missouri" Missouri Slitmouth is restricted to southwest Missouri.

Stenotrema labrosum (Ozark Slitmouth) added as S2. Based on recently published "Land Snails & Slugs of Missouri" Ozark Slitmouth is restricted to southwest Missouri.

Triodopsis discoidea (Rivercliff Threetooth) added as S1. Based on recently published "Land Snails & Slugs of Missouri" Rivercliff Threetooth is restricted to bluffs along the Mississippi, Missouri, and Meramec rivers in the Ozark Border natural division.

Triodopsis neglecta (Ozark Threetooth) added as S2. Based on recently published "Land Snails & Slugs of Missouri" Ozark Threetooth occurs in southwest Missouri in the Ozark and Osage Plains natural divisions.

Vallonia excentrica (Iroquois Vallonia) added as S3. Based on recently published "Land Snails & Slugs of Missouri" Iroquois Vallonia is known from northern Missouri in the Glaciated Plains, Osage Plains, Ozark, and Ozark Border.

MOLLUSKS (Cont.)

Vallonia gracilicosta (Multirib Vallonia) added as S1. Based on recently published "Land Snails & Slugs of Missouri" Multirib Vallonia is known only from Pike County, at a limestone bluff with associated glade habitat.

Vertigo meramecensis (Bluff Vertigo) added as S3. Based on recently published "Land Snails & Slugs of Missouri" Bluff Vertigo occurs on wooded limestone bluffs along creeks and rivers, known historically from two counties and recently from ten.

BIRDS

Antrostomus carolinensis (Chuck-will's-widow) as S3. Very little is known about Chuck-will's-widow breeding occurrences in the state and tracking confirmed breeding would be advantageous.

Antrostomus vociferous (Eastern Whip-poor-will) as S3. Very little is known about Eastern Whip-poor-will breeding occurrences in the state and tracking confirmed breeding would be advantageous.

Thryomanes bewickii (Bewick's Wren) as S3. Regional agencies (USFWS) and NGO's concern with this species decline. MO Concern Score: 17. BBS data indicate long and shorter term annual declines 3.3%.

DELETIONS

PLANTS

Elatine triandra var. *triandra* (Waterwort) is removed as it is considered an introduced species.

BIRDS

Certhia Americana (Brown Creeper) is removed because very few breeding records or sightings in Missouri. Edge of range species.

Coragyps atratus (Black Vulture) is removed because large winter population and suspect increase breeding with limited documentation.

Empidonax minimus (Least Flycatcher) because very few breeding records or sightings in Missouri. Edge of range species.

Setophaga pensylvanica (Chestnut-sided Warbler) because very few breeding records or sightings in Missouri. Edge of range species.

Spinus pinus (Pine Siskin) because very few breeding records or sightings in MO. Edge of range species.

Tyto alba (Barn Owl) because population stable, increasing, based on continued nest box installations and banding efforts. The species has adapted well to utilizing human-altered habitats.

TAXONOMIC CHANGES

PLANTS

Echinodorus tenellus (Dwarf Burhead) will be tracked as *Helianthium tenellum*.

Elymus glaucus (Blue Wild Rye) will be tracked as *E. glaucus* ssp. *glaucus* (Blue Wild Rye). Currently, this is the only spp. known to exist in MO. However, spp. *arkansana* should be looked for.

BIRDS

Laterallus jamaicensis (Black Rail) to *Laterallus jamaicensis jamaicensis* (Eastern Black Rail).

TERRESTRIAL NATURAL COMMUNITIES

In addition to lichens, plants, and animals, the MONHP tracks occurrences of high quality natural communities. Terrestrial natural communities are interrelated assemblages of plants, animals, and other living organisms incorporated into their physical surroundings- including geologic substrate, soils, topography and aspect - that are shaped by climate and other natural processes. High quality sites are ones that provide diverse assemblages of native species and represent the least distressed examples of ecosystems that existed in Missouri prior to European settlement. These natural communities frequently provide the habitat necessary for Missouri's listed lichens, plants, and animals. Examples of high-quality aquatic natural communities are included in the MONHP, although SRANKs have not been assigned to individual aquatic natural community types. Because MDC tracks occurrences of high quality natural communities, we encourage the submission of site information on natural communities as we do for species listed in this Checklist.

State ranks are assigned to natural communities using criteria that are similar to species SRANKs. Criteria include total number of occurrences, number of occurrences by grade [A-D], total acres, number of counties in which the community type occurs, number of protected occurrences, and threats. Global ranks are not applied to communities due to the difficulty in reconciling Missouri's classification system with larger scale classifications.

Natural community types have been classified using *The Terrestrial Natural Communities of Missouri* (Nelson, 2005). This classification system was developed to accomplish an inventory of the state's natural communities, prioritized by quality, size and distribution, to help meet land protection goals. The terrestrial natural communities tracked in MONHP (high-quality examples) are listed below with their SRANKs by major community type.

NATURAL COMMUNITY TYPES

<u>FOREST</u>	<u>SRANK</u>
Dry-Mesic Loess/Glacial Till Forest	S3
Mesic Loess/Glacial Till Forest	S3
Dry-Mesic Limestone/Dolomite Forest	S3
Mesic Limestone/Dolomite Forest	S3
Dry-Mesic Chert Forest	S4
Dry-Mesic Sandstone Forest	S3
Mesic Sandstone Forest	S2
Dry-Mesic Sand Forest	S1
Mesic Sand Forest	S1
Dry-Mesic Igneous Forest	S4
Dry-Mesic Bottomland Forest	S3
Mesic Bottomland Forest	S2
Wet-Mesic Bottomland Forest	S2
Wet Bottomland Forest	S3
Riverfront Forest	S4
Total Forest Types: 15	

WOODLAND

	<u>SRANK</u>
Dry Loess/Glacial Till Woodland	S3
Dry-Mesic Loess/Glacial Till Woodland	S3
Dry Limestone/Dolomite Woodland	S3
Dry-Mesic Limestone/Dolomite Woodland	S3
Dry Chert Woodland	S4
Dry-Mesic Chert Woodland	S4
Dry Sandstone Woodland	S3
Dry-Mesic Sandstone Woodland	S3
Dry Sand Woodland	S1
Dry-Mesic Sand Woodland	S2
Dry Igneous Woodland	S4
Dry-Mesic Igneous Woodland	S4
Upland Flatwoods	S2
Bottomland Flatwoods	S1
Sinkhole Flatwoods	S2
Dry-Mesic Bottomland Woodland	S2
Mesic Bottomland Woodland	SH
Wet-Mesic Bottomland Woodland	S1

Total Woodland Types: 18**SAVANNA**

	<u>SRANK</u>
Dry-Mesic Loess/Glacial Till Savanna	S1
Mesic Loess/Glacial Till Savanna	SH
Limestone/Dolomite Savanna	SH
Chert Savanna	S1
Sandstone/Shale Savanna	SH
Sand Savanna	S1

Total Savanna Types: 6**PRAIRIE**

	<u>SRANK</u>
Dry Loess/Glacial Till Prairie	S2
Dry-Mesic Loess/Glacial Till Prairie	S1
Mesic Loess/Glacial Till Prairie	S1
Dry Limestone/Dolomite Prairie	S2
Dry-Mesic Limestone/Dolomite Prairie	S2
Dry-Mesic Chert Prairie	S3
Dry-Mesic Sandstone/Shale Prairie	S3
Sand Prairie	S1
Prairie Swale	S2
Hardpan Prairie	S2
Wet-Mesic Bottomland Prairie	S1
Wet Bottomland Prairie	S1

Total Prairie Types: 12

GLADE

Limestone Glade
Dolomite Glade
Chert Glade
Sandstone Glade
Igneous Glade

SRANK

S2
S3
S2
S2
S3

Total Glade Types: 5**CLIFF/TALUS**

Dry Limestone/Dolomite Cliff
Moist Limestone/Dolomite Cliff
Dry Sandstone Cliff
Moist Sandstone Cliff
Dry Chert Cliff
Moist Chert Cliff
Dry Igneous Cliff
Moist Igneous Cliff
Unconsolidated Bluff
Limestone/Dolomite Talus
Igneous Talus

SRANK

S5
S4
S4
S3
S3
S2
S4
S4
S3
S4
S4

Total Cliff/Talus Types: 11**STREAM EDGE**

Sand Bar
Gravel Wash
Stream Bank/River Bank

SRANK

S3
S3
S2

Total Stream Edge Types: 3**WETLAND**

Marsh
Shrub Swamp
Swamp
Pond Marsh
Pond Shrub Swamp
Pond Swamp
Ozark Fen
Prairie Fen
Forested Fen
Glacial Fen
Acid Seep
Saline Seep
Limestone/Dolomite Spring

SRANK

S2
S2
S1
S1
S2
S1
S2
S2
S2
S1
S2
S1
S3

Total Wetland Types: 13**CAVE**

Aquatic Cave
Terrestrial Cave

SRANK

S4
S4

Total Cave Types: 2**Total Terrestrial Natural Communities: 85**

THREATENED AND ENDANGERED SPECIES IN MISSOURI

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
PLANTS			
<i>Asclepias meadii</i>	Mead's Milkweed	Endangered	Threatened
<i>Boltonia decurrens</i>	Decurrent False Aster	Endangered	Threatened
<i>Geocarpum minimum</i>	Geocarpum	Endangered	Threatened
<i>Helenium virginicum</i>	Virginia Sneezeweed	Endangered	Threatened
<i>Isotria medeoloides</i>	Small Whorled Pogonia*	Endangered	Threatened
<i>Lindera melissifolia</i>	Pondberry	Endangered	Endangered
<i>Physaria filiformis</i>	Missouri Bladderpod	Endangered	Threatened
<i>Platanthera leucophaea</i>	Eastern Prairie Fringed Orchid*	Endangered	Threatened
<i>Platanthera praeclara</i>	Western Prairie Fringed Orchid	Endangered	Threatened
<i>Trifolium stoloniferum</i>	Running Buffalo Clover	Endangered	Endangered
MOLLUSKS			
<i>Alasmodonta viridis</i>	Slippershell Mussel	Endangered	
<i>Antrobia culveri</i>	Tumbling Creek Cavesnail	Endangered	Endangered
<i>Elliptio crassidens</i>	Elephantear	Endangered	
<i>Epioblasma curtisii</i>	Curtis Pearlymussel	Endangered	Endangered
<i>Epioblasma triquetra</i>	Snuffbox	Endangered	Endangered
<i>Lampsilis abrupta</i>	Pink Mucket	Endangered	Endangered
<i>Lampsilis higginsii</i>	Higgins Eye	Endangered	Endangered
<i>Lampsilis rafinesqueana</i>	Neosho Mucket	Endangered	Endangered
<i>Leptodea leptodon</i>	Scaleshell	Endangered	Endangered
<i>Margaritifera monodonta</i>	Spectaclecase	Endangered	Endangered
<i>Plethobasus cyphus</i>	Sheepnose	Endangered	Endangered
<i>Potamilus capax</i>	Fat Pocketbook	Endangered	Endangered
<i>Quadrula fragosa</i>	Winged Mapleleaf	Endangered	Endangered
<i>Reginaia ebenus</i>	Ebonyshell	Endangered	
<i>Simpsonia ambigua</i>	Salamander Mussel	Endangered	
<i>Theliderma cylindrica</i>	Rabbitsfoot	Endangered	Threatened
CRUSTACEANS			
<i>Cambarus aculabrum</i>	Benton County Cave Crayfish		Endangered
<i>Faxonius eupunctus</i>	Coldwater Crayfish	Endangered	
<i>Faxonius peruncus</i>	Big Creek Crayfish		Proposed Threatened
<i>Faxonius quadruncus</i>	St. Francis River Crayfish		Proposed Threatened
<i>Faxonius roberti</i>	Spring River Crayfish	Endangered	
<i>Orconectes stygocaneyi</i>	Caney Mountain Cave Crayfish	Endangered	
INSECTS			
<i>Bombus affinis</i>	Rusty Patch Bumblebee		Endangered
<i>Nicrophorus americanus</i>	American Burying Beetle*	Endangered	Threatened
<i>Papaipema eryngii</i>	Rattlesnake-master Borer Moth		Candidate
<i>Somatochlora hineana</i>	Hine's Emerald	Endangered	Endangered
FISH			
<i>Acipenser fulvescens</i>	Lake Sturgeon	Endangered	
<i>Cottus specus</i>	Grotto Sculpin		Endangered
<i>Crystallaria asprella</i>	Crystal Darter	Endangered	
<i>Etheostoma fusiforme</i>	Swamp Darter	Endangered	
<i>Etheostoma histrio</i>	Harlequin Darter	Endangered	

FISH (Cont.)

Etheostoma nianguae	Niangua Darter	Endangered	Threatened
Etheostoma parvipinne	Goldstripe Darter	Endangered	
Etheostoma whipplei	Redfin Darter	Endangered	
Forbesichthys agassizii	Spring Cavefish	Endangered	
Hybognathus hayi	Cypress Minnow	Endangered	
Notropis maculatus	Taillight Shiner	Endangered	
Notropis sabinae	Sabine Shiner	Endangered	
Notropis topeka	Topeka Shiner	Endangered	Endangered
Noturus eleutherus	Mountain Madtom	Endangered	
Noturus placidus	Neosho Madtom	Endangered	Threatened
Percina nasuta	Longnose Darter	Endangered	
Platygobio gracilis	Flathead Chub	Endangered	
Scaphirhynchus albus	Pallid Sturgeon	Endangered	Endangered
Scaphirhynchus platyrhynchus	Shovelnose Sturgeon		Threatened/SA
Troglichthys rosae	Ozark Cavefish	Endangered	Threatened
Umbra limi	Central Mudminnow	Endangered	

AMPHIBIANS

Cryptobranchus a. alleganiensis	Eastern Hellbender	Endangered	Proposed Endangered
Cryptobranchus a. bishopi	Ozark Hellbender	Endangered	Endangered

REPTILES

Deirochelys reticularia miaria	Western Chicken Turtle	Endangered	
Emydoidea blandingii	Blanding's Turtle	Endangered	
Kinosternon flavescens	Yellow Mud Turtle	Endangered	
Nerodia cyclopion	Mississippi Green Watersnake*	Endangered	
Sistrurus catenatus	Eastern Massasauga*	Endangered	Threatened
Sistrurus tergeminus tergeminus	Prairie Massasauga	Endangered	

BIRDS

Botaurus lentiginosus	American Bittern	Endangered	
Circus hudsonius	Northern Harrier	Endangered	
Egretta thula	Snowy Egret	Endangered	
Falco peregrinus	Peregrine Falcon	Endangered	
Laterallus jamaicensis jamaicensis	Eastern Black Rail		Threatened
Limnothlypis swainsonii	Swainson's Warbler	Endangered	
Peucaea aestivalis	Bachman's Sparrow	Endangered	
Rallus elegans	King Rail	Endangered	
Sterna antillarum athalassos	Interior Least Tern	Endangered	
Tympanuchus cupido	Greater Prairie-chicken	Endangered	

MAMMALS

Canis lupus	Gray Wolf*		Endangered
Canis rufus	Red Wolf*		Endangered
Corynorhinus townsendii ingens	Ozark Big-eared Bat*	Endangered	Endangered
Lepus californicus	Black-tailed Jackrabbit	Endangered	
Myotis grisescens	Gray Myotis	Endangered	Endangered
Myotis septentrionalis	Northern Long-eared Myotis	Endangered	Threatened
Myotis sodalis	Indiana Myotis	Endangered	Endangered
Spilogale putorius interrupta	Plains Spotted Skunk	Endangered	

*Considered extirpated, historical or accidental occurrence in Missouri.

SPECIES AND STATUSES

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
LICHENS					
Cladonia cervicornis ssp. verticillata	A Lichen	S?	G5		
Cladonia leporina	A Lichen	S2	G4G5		
Coenogonium missouriense	Missouri Cave Lichen	SH	GH		
Collema nigrescens	A Lichen	SU	G5?		
Dendroscopula intricatum	A Lichen	S?	GUQ		
Dermatocarpon moulinsii	A Lichen	S1	GNR		
Dibaeis absoluta	A Lichen	S1	G4		
Flavoparmelia rutidota	A Lichen	S?	G4G5		
Graphina sophisticascens	A Lichen	SH	GNR		
Imshaugia aleurites	A Lichen	S?	G5		
Lecidea lurida	A Lichen	SU	GNR		
Pannaria rubiginosa	A Lichen	S1	G4G5		
Parmelia squarrosa	A Lichen	S?	G5		
Parmelina horrescens	A Lichen	S1	G5		
Parmotrema hypoleucinum	A Lichen	S1	G4G5		
Parmotrema tinctorum	A Lichen	S2	G5?		
Parmotrema xanthinum	A Lichen	S?	G3G5		
Pseudocyphellaria aurata	A Lichen	S1	G3G5		
Psora icterica	A Lichen	S1	G5?		
Pycnothelia papillaria	A Lichen	S1	G5		
Ramalina intermedia	A Lichen	S1	G5		
Rimelia subisidiosa	A Lichen	S1	G4G5		
Tuckermannopsis ciliaris	A Lichen	S?	G5		
Usnea angulata	A Lichen	S1	G3G5		
Xanthoparmelia australasica	A Lichen	S1	G5		
Total Lichen Records: 25					
LIVERWORTS AND HORNWORTS					
Aneura sharpii	A Liverwort	S1	GNR		
Anthoceros agrestis	A Hornwort	S2	G4G5		
Bazzania trilobata var. depauperata	A Liverwort	S1	G5TUQ		
Bazzania trilobata var. trilobata	A Liverwort	S1	G5T5		
Calypogeia muelleriana ssp. muelleriana	A Liverwort	SU	G5T5		
Calypogeia sullivantii	A Leafy Liverwort	S1	G4		
Frullania kunzei	A Liverwort	S1	G4		
Fuscocephaloziopsis catenulata	A Liverwort	S2	G5		
Fuscocephaloziopsis connivens	A Liverwort	S1	G5		
Jungermannia leiantha	A Liverwort	S1	G5		
Kurzia pauciflora	A Liverwort	S1	G5		
Kurzia sylvatica	A Liverwort	S1	G5		
Leucolejeunea unciloba	A Liverwort	S1	G4G5		
Marchantia polymorpha ssp. polymorpha	A Liverwort	S1	G5TNR		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
LIVERWORTS AND HORNWORTS (<i>Cont.</i>)					
Marsupella sullivantii	A Liverwort	S2	G5		
Metzgeria conjugata	A Liverwort	S1	G5		
Metzgeria furcata	A Liverwort	S2	G5		
Nardia lescurii	A Liverwort	S1	G3?		
Notothylas orbicularis	A Hornwort	S1	G5		
Nowellia curvifolia	A Liverwort	S2	G5		
Odontoschisma denudatum	A Liverwort	S1	G5		
Oxymitra incrassata	A Liverwort	S1	GNR		
Phaeoceros oreganus	A Hornwort	S1	GNRQ		
Plagiochasma wrightii	A Liverwort	SH	G3?		
Ptilidium pulcherrimum	A Liverwort	S1	G5		
Radula australis	A Liverwort	SR	G3G4		
Rectolejeunea maxonii	A Liverwort	S1	G4		
Riccardia multifida	A Liverwort	S1	G5		
Riccardia palmata	A Liverwort	S1	G5		
Riccia austini	A Liverwort	S2	G5		
Riccia bifurca	A Liverwort	SU	G5		
Riccia cavernosa	A Liverwort	S1	G5		
Riccia crystallina	A Liverwort	SU	G4G5		
Riccia frostii	A Liverwort	S1	G5		
Riccia hirta	A Liverwort	S2	G5		
Riccia macallisteri	A Liverwort	S1	G2G4		
Riccia nigrella	A Liverwort	SU	G4G5		
Riccia ozarkiana	A Liverwort	SH	G1G2		
Riccia sorocarpa	A Liverwort	S1	G5		
Riccia sullivantii	A Liverwort	S?	G4G5T4T5Q		
Schistochilopsis incisa	A Liverwort	S1	G5		

Total Liverwort and Hornwort Records: 41

MOSSES

Acaulon muticum var. muticum	A Moss	S1	G4G5TNR		
Anacamptodon splachnoides	Knothole Moss	S1	G3G5		
Anomobryum julaceum	A Moss	S1	G5		
Archidium alternifolium	A Moss	S1	G4G5		
Atrichum crispulum	A Moss	S2	G5		
Atrichum crispum	A Moss	S1	G5		
Atrichum cylindricum	A Moss	S1	G5		
Brachelyma subulatum	A Moss	S1	G4G5		
Brachythecium campestre	A Moss	S1	G5		
Brachythecium salebrosum var. salebrosum	A Moss	SU	G5TNR		
Bruchia texana	A Moss	SU	G3G5		
Bryhnia novae-angliae	A Moss	S1	G5		
Bryoxiphium norvegicum	Sword Moss	S1	G5?		
Calliergonella cuspidata	A Moss	S1	G5		
Campylium protensum	A Moss	S2	G3G5		
Campylopodiella stenocarpa	A Moss	S1	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
MOSSES (Cont.)					
Campylopus tallulensis	A Moss	S2	G4		
Codriophorus aciculare	A Moss	S1	G5		
Dichelyma capillaceum	A Moss	S1	G5		
Dicranella rufescens	A Moss	S1	G5?		
Dicranum polysetum	A Moss	S1	G5		
Didymodon revolutus	A Moss	S1	G4		
Didymodon rigidulus var. rigidulus	A Moss	S1	G5T4?		
Ditrichum rhynchostegium	A Moss	S1	G3G5		
Drepanocladus aduncus	A Moss	SU	G5		
Drepanocladus polygamus	A Moss	S1	G5		
Encalypta procera	Extinguisher Moss	S1	G5		
Entodon brevisetus	A Moss	S1	G4?		
Ephemerum crassinervium var. texanum	A Moss	SU	G4T3?		
Ephemerum serratum	A Moss	S1	G4		
Fissidens exilis	Small Pocket Moss	S2	G3G4		
Fissidens hallianus	A Moss	S2	GNRQ		
Forsstroemia producta	A Moss	S1	G5?		
Funaria americana	A Moss	SU	G3?		
Gemmabryum klinggraeffii	A Moss	S1	G4G5		
Gemmabryum ruderae	A Moss	S2	G3G5		
Gemmabryum subapiculatum	A Moss	SX	G5?		
Grimmia olneyi	A Moss	S2	G3G5		
Grimmia plagiopodia	A Moss	S1	G4G5		
Gymnostomum calcareum	A Moss	SU	G5?		
Herzogiella striatella	A Moss	SU	G5		
Homaliadelphus sharpii	Sharp's Homaliadelphus	S1	G3?		
Hypnum cupressiforme var. filiforme	A Moss	S1	G5TNR		
Hypnum lindbergii	Lindberg's Hypnum Moss	SU	G5		
Hypnum pallescens	A Moss	S1	G5		
Hypnum pratense	A Moss	S1	G5		
Imbriobryum miniatum	A Moss	S1	G4G5		
Isopterygiopsis muelleriana	A Moss	S1	G5		
Jaffuelobryum rauyi	A Moss	S2	G4?		
Jaffuelobryum wrightii	A Moss	S1	G4G5		
Leskea polycarpa	A Moss	SU	G5		
Micromitrium megalosporum	A Moss	S1S2	G4		
Micromitrium synoicum	A Moss	SU	G4		
Micromitrium tenerum	A Moss	S1	G4G5		
Mnium hornum	A Moss	S1	G5		
Mnium thomsonii	A Moss	S?	G5		
Myurella sibirica	A Moss	S2	G5		
Neckera besseri	A Moss	S1	G4G5		
Orthotrichum anomalum	A Moss	S?	G5		
Orthotrichum diaphanum	A Moss	S2	G5		
Orthotrichum elegans	A Moss	S1	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
MOSSES (Cont.)					
Orthotrichum lescurii	A Moss	S1	GNR		
Physcomitrium collenchymatum	A Moss	S1	G2G4		
Physcomitrium hookeri	A Moss	SU	G2G4		
Plagiomnium medium	A Moss	SU	G5		
Plagiothecium denticulatum	A Moss	S1	G5		
Platylomella lescurii	A Moss	S2	G5		
Pleuridium acuminatum	A Moss	S2	GNR		
Pleuridium sullivantii	A Moss	S1	G3G5		
Pohlia annotina	A Moss	S2	G4G5		
Polytrichastrum formosum var. densifolium	A Moss	S1	G5TNR		
Pseudocampylium radicale	A Moss	S1	G3G5		
Pseudotaxiphyllum distichaceum	A Moss	S1	G4G5		
Ptychomitrium serratum	A Moss	S1	G4?		
Ptychomitrium sinense	A Moss	S1	G3?Q		
Ptychostomum cernuum	A Moss	S1	G3G5		
Ptychostomum cyclophyllum	A Moss	S?	G4G5		
Ptychostomum pallescens	A Moss	SU	G5		
Ptychostomum pendulum	A Moss	S1	G5		
Pylaisia intricata	A Moss	SU	G5		
Pylaisiadelphina tenuirostris	A Moss	S2	G5?		
Pyramidula tetragona	A Moss	S1	G3G5		
Rhabdoweisia crispata	A Moss	S1	G5		
Rhytidium rugosum	Golden Glade-moss	S1	G5		
Rosulabryum flaccidum	A Moss	S2	GNR		
Schistidium liliputanum	A Moss	S1	GNR		
Seligeria calcarea	A Moss	S?	G4?		
Seligeria donniana	A Moss	S1	G4G5		
Seligeria pusilla	A Moss	S1	G3G5		
Sematophyllum marylandicum	A Moss	S1	G5		
Sphagnum affine	Sphagnum	S1	G5		
Sphagnum angustifolium	Narrowleaf Peatmoss	S1	G5		
Sphagnum bartlettianum	Sphagnum	S1	G4G5		
Sphagnum capillifolium	Northern Peatmoss	S2	G5		
Sphagnum cuspidatum	Sphagnum	S1	G5		
Sphagnum fallax	Sphagnum	S1	G5		
Sphagnum fimbriatum var. fimbriatum	Sphagnum	S1	G5T5		
Sphagnum henryense	Sphagnum	S1	G4?		
Sphagnum inundatum	Sphagnum	S1	G4		
Sphagnum magellanicum	Magellan's Peatmoss	S1	G5		
Sphagnum platyphyllum	Sphagnum	SU	G5		
Sphagnum recurvum	Sphagnum	S1	G5		
Sphagnum russowii	Sphagnum	S1	G5		
Sphagnum subtile	Sphagnum	S2	G5		
Sphagnum trinitense	Sphagnum	S1	G4		
Syntrichia papillosa	A Moss	S2	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
MOSESSES (Cont.)					
Syrrhopodon texanus	A Moss	S2	G5		
Thamnobryum alleghaniense	A Moss	S1	G5?		
Tortella fragilis	Fragmented Screw-moss	SU	G5		
Tortella tortuosa	Twisted Moss	SU	G5		
Trematodon longicollis	A Moss	S2	G5		
Trichostomum tenuirostre var. gemmiparum	A Moss	S1	G5TU		
Ulota hutchinsiae	Hutchins' Ulota Moss	S1	G5		
Weissia phascopsis	A Pygmy Moss	S1	G3G4		
Zygodon apiculatus	A Moss	S1	GU		
Total Moss Records: 115					
FERNS AND FERN ALLIES					
Asplenium bradleyi	Bradley's Spleenwort	SU	G4		
Asplenium montanum	Mountain Spleenwort	SH	G5		
Asplenium pinnatifidum	Lobed Spleenwort	SU	G4		
Asplenium trichomanes ssp. trichomanes	Maidenhair Spleenwort	SU	G5T5		
Azolla caroliniana	Eastern Mosquito Fern	S1S3	G5		
Botrychium biternatum	Few-lobed Grape Fern	S1	G5		
Cheilanthes alabamensis	Alabama Lip-fern	S1	G4G5		
Cheilanthes tomentosa	Woolly Lip-fern	S1	G5		
Cystopteris tenuis	A Bladderfern	S1	G5		
Dennstaedtia punctilobula	Hay-scented Fern	S2	G5		
Dryopteris carthusiana	Spinulose Shield Fern	S2	G5		
Dryopteris celsa	Log Fern	S1	G4		
Dryopteris cristata	Crested Fern	S1	G5		
Dryopteris goldiana	Goldie's Fern	S2	G4G5		
Dryopteris intermedia	Evergreen Woodfern	S1	G5		
Huperzia porophila	Fir Clubmoss	S2	G4		
Isoetes engelmannii var. engelmannii	Engelmann's Quillwort	S1?	G4TNRQ		
Lycopodium dendroideum	Round-branched Ground Pine	S1	G5		
Lycopodium tristachyum	Ground Cedar	S1	G5		
Matteuccia struthiopteris var. pennsylvanica	Ostrich Fern	S2	G5T5		
Ophioglossum crotalophoroides	Bulbous Adder's-tongue	SH	G5		
Ophioglossum petiolatum	Stalked Adder's-tongue	SX	G5		
Pellaea glabella var. missouriensis	Missouri Cliffbrake	S1S2	G5T1T2		
Pilularia americana	American Pillwort	SU	G5		
Pteridium aquilinum var. pseudocaudatum	Bracken	SU	G5T5		
Thelypteris noveboracensis	New York Fern	S1	G5		
Woodsia obtusa ssp. occidentalis	Blunt-lobed Woodsia	S1	G5T3T4		
Woodwardia areolata	Netted Chain Fern	S2	G5		
Total Ferns and Fern Allies Records: 28					

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS					
Acalypha deamii	Large Seeded Mercury	S2	G4?		
Aconitum uncinatum	Southern Monkshood	S1	G4		
Agalinis auriculata	Auriculate False Foxglove	S3	G3		
Agalinis heterophylla	Prairie False Foxglove	S1	G4G5		
Agalinis purpurea	Purple False Foxglove	S2	G5		
Agalinis viridis	Green False Foxglove	S1	G4?		
Agastache scrophulariifolia	Purple Giant-hyssop	S1	G4		
Agrimonia gryposepala	Tall Agrimony	SU	G5		
Allium burdickii	Wild Leek	S2	G4G5		
Alopecurus aequalis	Floating Foxtail Grass	S2	G5		
Amorpha nitens	Shining False Indigo	S1	G3?		
Amsonia ciliata var. filifolia	Ciliate Blue Star	S2S3	G5?T4?		
Andropogon hirsutior	Bushy Bluestem	SU	G5T5		
Anemone cylindrica	Thimbleweed	S2	G5		
Anemone quinquefolia var. quinquefolia	Wood Anemone	S1	G5T5		
Aralia nudicaulis	Wild Sarsaparilla	S2	G5		
Aristida adscensionis	Sixweeks Three-awn	SH	G5		
Aristida desmantha	Curly Three-awn	S2	G5		
Aristida lanosa	Woollyleaf Three-awn	S1	G5		
Aristida ramosissima	Slender Three-awn	SH	G5		
Aronia melanocarpa	Black Chokeberry	S1	G5		
Artemisia dracunculus	A Wormwood	SH	G5		
Asclepias exaltata	Poke Milkweed	S1	G5		
Asclepias meadii	Mead's Milkweed	S2	G2	E	T
Asclepias speciosa	Showy Milkweed	SA	G5		
Astragalus lotiflorus	Low Milk Vetch	S2	G5		
Astranthium ciliatum	Western Daisy	S2	G5T5		
Baptisia sphaerocarpa	Round-fruited Yellow Wild Indigo	SU	G4G5		
Bartonia paniculata ssp. paniculata	Screwstem	S1	G5T5		
Bartonia virginica	Yellow Bartonia	S1	G5		
Berberis canadensis	American Barberry	S1	G3G4		
Bergia texana	Bergia	S2	G5		
Berula erecta var. incisa	Cut-leaved Water-parsnip	S1	G4G5T4T5		
Bidens beckii	Water Marigold	SU	G5		
Bidens laevis	A Beggar's Tick	S1	G5		
Bolboschoenus maritimus ssp. paludosus	Bayonet Grass	S1	G5T5		
Boltonia decurrens	Decurrent False Aster	S1	G2G3	E	T
Bouteloua gracilis	Blue Grama	S1	G5		
Bouteloua hirsuta var. hirsuta	Hairy Grama	S2	G5T5		
Bromus latiglumis	A Brome	S3	G5		
Buchloe dactyloides	Buffalo Grass	SH	G4G5		
Calamagrostis porteri ssp. Insperata	Oferhollow Reed Grass	S3	G4T3		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Calamagrostis stricta ssp. inexpansa	Northern Reedgrass	S2S3	G5T5		
Calamovilfa longifolia var. longifolia	Long-leaved Reed Grass	SH	G5T5		
Callicarpa americana	French Mulberry	S1	G5		
Callirhoe bushii	Bush's Poppy Mallow	S2	G3		
Callirhoe triangulata	Clustered Poppy Mallow	SH	G3		
Callitriche palustris	Vernal Water Starwort	SU	G5		
Calopogon oklahomensis	Grass Pink Orchid	S2	G2		
Calopogon tuberosus	Grass Pink Orchid	S2	G5		
Caltha palustris	Marsh Marigold	S1	G5		
Campanula aparinoides var. aparinoides	Marsh Bellflower	S1	G5TNR		
Campanula rotundifolia	Harebell	S1	G5		
Carex abscondita	A Sedge	S1	G4G5		
Carex alata	Broadwing Sedge	S2S3	G5		
Carex albicans var. australis	Bellow Beaked Sedge	S1	G5T5		
Carex albolutescens	Greenish-white Sedge	S1S2	G5		
Carex aquatilis var. substricta	A Sedge	SH	G5TNR		
Carex atherodes	Awned Sedge	SH	G5		
Carex atlantica ssp. atlantica	A Sedge	S1	G5T5		
Carex atlantica ssp. capillacea	Prickly Bog Sedge	S1	G5T5?		
Carex bromoides ssp. bromoides	A Sedge	S2	G5T5		
Carex buxbaumii	Brown Bog Sedge	S2	G5		
Carex communis var. communis	Fibrous-root Sedge	S2	G5T5		
Carex comosa	Bristly Sedge	S2	G5		
Carex conoidea	Field Sedge	S1	G5		
Carex cumberlandensis	A Sedge	S1	GNR		
Carex debilis var. debilis	White-edge Sedge	S1	G5T5		
Carex decomposita	Epiphytic Sedge	S3	G3G4		
Carex echinodes	A Sedge	SH	G5TNR		
Carex fissa var. fissa	A Sedge	S1	G4?T3T4		
Carex flaccosperma	A Sedge	S2	G5		
Carex gigantea	Giant Sedge	S1S2	G4		
Carex gracillima	Graceful Sedge	S1	G5		
Carex inops ssp. heliophila	Sun Sedge	SU	G5T5		
Carex jorii	Cypress-swamp Sedge	SH	G4G5		
Carex lacustris	Lake-bank Sedge	S2	G5		
Carex laxiculmis var. copulata	A Sedge	SU	G5T4		
Carex laxiculmis var. laxiculmis	A Sedge	SU	G5T5		
Carex laxiflora var. laxiflora	A Carex	S1	G5T5		
Carex longii	Greenish-white Sedge	SH	G5		
Carex microdonta	A Sedge	S1	G4		
Carex missouriensis	Missouri Sedge	SU	G4		
Carex molestiformis	A Sedge	S2	G4		
Carex oxylepis	Sharp-scale Sedge	S2	G5?		
Carex prasina	Drooping Sedge	S1	G4		
Carex reniformis	Reniform Sedge	S1	G4?		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Carex reznicekii	A Sedge	S2?	G5		
Carex sartwellii	Sartwell's Sedge	S1	G5		
Carex scabrata	Rough Sedge	SH	G5		
Carex socialis	A Sedge	S2	G4		
Carex sprengelii	Longbeak Sedge	S2	G5		
Carex sterilis	A Sedge	S2	G4G5		
Carex straminea	Straw Sedge	S1	G5		
Carex sychnocephala	A Sedge	SH	G5		
Carex tetanica	Rigid Sedge	S3	G4G5		
Carex tonsa var. rugosperma	Shaved Sedge	S1	G5T5		
Carex tonsa var. tonsa	Shaved Sedge	SH	G5T5		
Carex triangularis	Triangular Sedge	S2	G5		
Carex trichocarpa	Hairy-fruited Sedge	S1	G4		
Carex vesicaria var. monile	A Sedge	S2?	G5T4		
Carex willdenowii	Willdenow's Sedge	S1	G5		
Carex woodii	A Sedge	S1	G4		
Carya pallida	Sand Hickory	S2S3	G5		
Castanea pumila var. ozarkensis	Ozark Chinquapin	S2	G5T3		
Castanea pumila var. pumila	Chinquapin	SH	G5T5?		
Castilleja purpurea var. purpurea	Purple Paintbrush	SH	G5T4?		
Castilleja sessiliflora	Downy Painted Cup	S2	G5		
Cayaponia quinqueloba	A Gourd	S1	G4		
Centaurea americana	American basket flower	SH	G5		
Centrosema virginianum	Coastal Butterfly-pea	SH	G5		
Ceratophyllum echinatum	Coontail	S1?	G4		
Chaetopappa asteroides var. asteroides	Common Leastdaisy	S2S3	G5T3T5		
Chasmanthium laxum ssp. laxum	Slender Spike Grass	S1	G5		
Chasmanthium sessiliflorum	A Spike Grass	SX	G5		
Chelone obliqua	Rose Turtlehead	S2	G4		
Chenopodium berlandieri var. boscianum	Pitseed Goosefoot	SU	G5T3T5		
Chenopodium strictum var. glaucophyllum	A Goosefoot	SH	G5TU		
Cicuta maculata var. bolanderi	Common Water Hemlock	SU	G5T3T4		
Cirsium hillii	Hill's Thistle	SU	G3		
Cirsium undulatum	Wavy-leaved Thistle	S1	G5		
Cissus trifoliata	Marine Vine	S2	G5		
Cladium jamaicense	Jamaica Swamp Sawgrass	S1	G5T5		
Clematis fremontii	Fremont's Leather Flower	S3	G5		
Clematis viorna	A Leatherflower	S1	G5		
Cleome serrulata	Rocky Mountain Bee Plant	SH	G5		
Coeloglossum viride var. virescens	Long-bracted Orchid	S1	G5T5		
Coelorachis cylindrica	Joint Grass	S1	G4G5		
Coleataenia longifolia ssp. longifolia	Panicgrass	SU	G5T5?		
Conyza canadensis var. pusilla	Fleabane	S1S2	G5T5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Corispermum americanum	American Bugseed	SU	G5?		
Corispermum pallasii	A Bugseed	SH	G4?		
Corispermum villosum	Oriental Tick-seed	SU	G4?		
Corydalis aurea ssp. aurea	Golden Corydalis	SU	G5T5		
Corydalis micrantha ssp. australis	A Corydalis	S2	G5T5?		
Crataegus berberifolia var. berberifolia	Barberry-leaved Hawthorn	SU	G4G5Q		
Crataegus collina var. lettermanii	Hillside Hawthorn	SU	GNRTNR		
Crataegus collina var. sordida	Hillside Hawthorn	SU	GNRTNR		
Crataegus fecunda	St. Clair Hawthorn	SU	GXC		
Crataegus lanuginosa	Woolly Hawthorn	SU	GH		
Crataegus macrosperma	Eastern Hawthorn	SU	G5		
Crataegus margarettae var. brownii	Margaret's Hawthorn	SU	G5?TNR		
Crataegus marshallii	Parsley Haw	S1	G5		
Crataegus pruinosa var. magnifolia	Frosty Hawthorn	SU	G5TNR		
Crataegus schuettei	Royal Hawthorn	SU	G5?		
Crataegus spathulata	A Hawthorn	S1	G5		
Crataegus spes-aestatum	Summers Hawthorn	SU	GNR		
Crataegus succulenta var. succulenta	Succulent Hawthorn	SU	G5T5		
Crataegus texana var. dasyphylla	Texas Red Hawthorn	SU	GNRTNR		
Crataegus transmississippiensis	A Hawthorn	SU	GNR		
Crataegus viridis var. nitens	Green Hawthorn	SU	G5TNR		
Croton michauxii	Narrowleaf Rushfoil	S1	G5		
Cuscuta obtusiflora var. glandulosa	Peruvian Dodder	SU	G5T4T5		
Cyclachaena xanthiifolia	A Marsh Elder	S1	G5		
Cynosciadium digitatum	Finger Dog-shade	S2	G4G5		
Cyperus compressus	Coco Grass	S1	G5		
Cyperus croceus	Baldwin's Cyperus	S1	G5		
Cyperus diandrus	Umbrella Flatsedge	S1	G5		
Cyperus flavicomus	An Umbrella Sedge	S1	G5		
Cyperus hystricinus	Flatsedge	S2	G4		
Cyperus plukenetii	Plukenet's Cyperus	S2	G5		
Cyperus retroflexus	Umbrella Sedge	S1	G5		
Cyperus retrofractus	Teasel-like Cyperus	S1S2	G5		
Cyperus retrorsus	An umbrella sedge	SH	G5		
Cyperus schweinitzii	Schweinitz's Flatsedge	S3	G5		
Cyperus setigerus	Bristled Cyperus	S1	G3G5		
Cypripedium candidum	Small White Lady-slipper	S1	G4		
Cypripedium reginae	Showy Lady-slipper	S2S3	G4G5		
Dalea enneandra	Nine-anther Dalea	S2	G5		
Dalea gattingeri	Gattinger Prairie-clover	S1	G3G4		
Dalea multiflora	Round-headed Prairie Clover	SH	G5		
Dalea villosa var. villosa	Silky Prairie Clover	SU	G5T5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Decodon verticillatus	Swamp Loosestrife	S1	G5		
Delphinium exaltatum	Tall Larkspur	S2	G3		
Descurainia pinnata ssp. pinnata	Tansy Mustard	S2S3	G5T5		
Desmodium ochroleucum	Creamflower Tick Trefoil	SH	G2G3		
Desmodium strictum	Pineland Tick Trefoil	S2	G4		
Desmodium viridiflorum	Velvety Tick Trefoil	S1	G5?		
Diarrhena americana	American Beakgrass	S1	G4G5		
Dichanthelium dichotomum ssp. mattamuskeetense	A Panic Grass	SH	G4?		
Dichanthelium dichotomum var. nitidum	A Panic Grass	S1	G5TNR		
Dichanthelium leibergii	A Panic Grass	SU	G4		
Dichanthelium yadkinense	A Panic Grass	S1	G5T4Q		
Dichondra carolinensis	Pony-foot Grass	S1	G5		
Dirca decipiens	Leatherwood	SU	G1G2		
Distichlis spicata var. spicata	Seashore Salt Grass	S1	G5TNR		
Doellingeria umbellata var. pubens	Flat-topped White Aster	S1	G5T5		
Echinacea angustifolia	Narrow-leaved Coneflower	S1	G4		
Echinochloa walteri	A Barnyard Grass	S1	G5		
Elatine triandra var. americana	Waterwort	SH	G4		
Eleocharis atropurpurea	A Spike Rush	S1	G4G5		
Eleocharis bifida	Glades Spikerush	S1	G3G4		
Eleocharis equisetoides	Horsetail Spike Rush	SH	G4		
Eleocharis lanceolata	Lance-like Spike Rush	S2	G4G5		
Eleocharis parvula	Small Spike Rush	SU	G5		
Elodea canadensis	Broad Waterweed	SU	G5		
Elymus churchii	Church's Wildrye	S1	G2G3		
Elymus glaucus ssp. glaucus	Blue Wild Rye	SU	G5T5		
Epifagus virginiana	Beech Drops	S2	G5		
Epilobium leptophyllum	Willow Herb	S1	G5		
Eragrostis curtipedicellata	Gummy Lovegrass	S1	G5		
Eragrostis glomerata	A Love Grass	S1	G3G5		
Eragrostis reptans	Creeping Love Grass	SH	G5		
Erianthus giganteus	Plume Grass	S1	G5		
Erianthus strictus	Narrow Plumegrass	SH	G5		
Eriogonum longifolium var. longifolium	Umbrella Plant	S2	G4T4		
Erysimum capitatum var. capitatum	Western Wallflower	S3?	G5TNR		
Euonymus americanus	Strawberry Bush	S2	G5		
Eupatorium album	White Thoroughwort	SU	G5		
Eupatorium maculatum var. bruneri	Spotted Joe-pye Weed	S1	G5T5		
Eupatorium rotundifolium var. scabridum	A Thoroughwort	S1?	G5T3T5		
Eupatorium semiserratum	A Thoroughwort	S1S2	G5		
Euphorbia geyeri var. geyeri	Geyer's Spurge	S1	G5T5		
Euphorbia ouachitana	A Spurge	SU	GNR		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Eurybia furcata	Forked Aster	S2	G3		
Eurybia macrophylla	Big-leaved Aster	S2	G5		
Festuca sororia	A Fescue	SH	G4		
Filipendula rubra	Queen of the Prairie	S2	G4G5		
Fimbristylis littoralis var. littoralis	A Fimbristylis	S1	G3G5TNR		
Fimbristylis perpusilla	Harper's Fimbry	SH	G2		
Floerkea proserpinacoides	False Mermaid	SU	G5		
Fragaria vesca	Woodland Strawberry	S1	G5		
Fraxinus biltmoreana	Biltmore Ash	SU	G5		
Fuirena simplex var. aristulata	An Umbrella Grass	S2?	G5T4		
Gaillardia aestivalis var. flavovirens	A Blanket Flower	SH	G5T3T5		
Galium boreale	Northern Bedstraw	S2	G5		
Gaylussacia baccata	Black Huckleberry	S1	G5		
Gentiana andrewsii var. andrewsii	Closed Gentian	S1	G5?T5?		
Geocarpon minimum	Geocarpon	S2	G2	E	T
Geum fragarioides	Barren Strawberry	S2	G5T5		
Gillenia trifoliata	Indian Physic	SH	G4G5		
Glyceria acutiflora	Sharp-scaled Manna Grass	S3	G5		
Glyceria septentrionalis var. arkansana	Eastern Manna Grass	SU	G5		
Glycyrrhiza lepidota var. lepidota	Wild Licorice	S1	G5TNRQ		
Gratiola viscidula	Hedge Hyssop	S1	G4G5		
Grindelia ciliata	A Goldenweed	S1	G4G5		
Helanthium tenellum	Dwarf Burhead	S1	G5?		
Helenium virginicum	Virginia Sneezeweed	S3	G3	E	T
Helianthemum canadense	A Rockrose	SU	G5		
Helianthus angustifolius	Swamp Sunflower	S2	G5		
Helianthus decapetalus	Thin-leaved Sunflower	SU	G5		
Heliotropium curassavicum var. curassavicum	Seaside Heliotrope	S1	G5T5		
Heteranthera reniformis	Mud Plantain	SU	G5		
Heterotheca canescens	Hoary Golden Aster	SH	G5?		
Heuchera parviflora var. parviflora	Little Leaved Alum Root	S1	G4T4		
Hottonia inflata	Featherfoil	S2	G4		
Houstonia canadensis	Canadian Summer Bluet	S1	G4G5		
Houstonia rosea	Rose Bluets	SH	G5		
Hydrocotyle ranunculoides	Floating Pennywort	S1S2	G5		
Hydrocotyle verticillata	Water Pennywort	S1	G5		
Hydrolea ovata	Ovate Fiddleleaf	S2	G5		
Hypericum adpressum	Creeping St. John's-wort	S1	G3		
Hypericum lobocarpum	A St. John's Wort	S1	G4Q		
Hypericum majus	Greater St. John's-wort	SH	G5		
Hypericum pyramidatum	Great St. John's-wort	S1	G4T4		
Ilex verticillata var. padifolia	Winterberry	S3	G5TNR		
Isolepis molesta	Gulf Coast Bulrush	SH	G4?		
Isotria medeoloides	Small Whorled Pogonia	SH	G2G3	E	T
Isotria verticillata	Large Whorled Pogonia	S1S2	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (<i>Cont.</i>)					
<i>Juglans cinerea</i>	Butternut	SU	G3		
<i>Juncus alpinoarticulatus</i>	Richardson Rush	SH	G5		
<i>Juncus balticus</i> var. <i>littoralis</i>	Baltic Rush	S1	G5T5		
<i>Juncus brachyphyllus</i>	Small-headed Rush	S3	G5		
<i>Juncus bufonius</i> var. <i>bufonius</i>	Toad Rush	S1	G5T5		
<i>Juncus canadensis</i> var. <i>canadensis</i>	Canada Rush	S1	G5T5		
<i>Juncus debilis</i>	Weak Rush	S1	G5		
<i>Juncus filipendulus</i>	Ringseed Rush	SU	G5		
<i>Juncus nodosus</i>	Knotted Rush	SH	G5		
<i>Juncus validus</i>	A Rush	S1	G5		
<i>Justicia ovata</i> var. <i>lanceolata</i>	A Water Willow	S2	G5T4T5		
<i>Kelloggchloa verrucosa</i>	Warty Panicgrass	S1	G4		
<i>Lactuca hirsuta</i>	Hairy Lettuce	S3	G5?		
<i>Lactuca ludoviciana</i>	Western Lettuce	S1	G4G5		
<i>Lactuca tatarica</i> ssp. <i>pulchella</i>	Blue Lettuce	S1	G5T5		
<i>Lathyrus pusillus</i>	A Wild Pea	SH	G5?		
<i>Lathyrus venosus</i>	Bushy Vetchling	SU	G5		
<i>Leavenworthia torulosa</i>	Necklace Goldcress	SU	G4		
<i>Lechea racemulosa</i>	Illinois Pinweed	SH	G5		
<i>Leitneria pilosa</i> ssp. <i>ozarkana</i>	Corkwood	S2	G2G3T2T3		
<i>Lemna obscura</i>	A Duckweed	SU	G5		
<i>Lemna trisulca</i>	Star Duckweed	S2	G5		
<i>Lemna turionifera</i>	A Duckweed	SH	G5		
<i>Liatris punctata</i> var. <i>punctata</i>	A Blazing Star	S3	G5T5		
<i>Liatris scariosa</i> var. <i>nieuwlandii</i>	A Blazing Star	S2	G5?T3T5		
<i>Liatris spicata</i>	Button Snakeroot	SX	G5		
<i>Lilium philadelphicum</i> var. <i>andinum</i>	Wood Lily	S1	G5T4T5		
<i>Lilium superbum</i>	Turk's Cap Lily	S1	G5		
<i>Limnobia spongia</i> ssp. <i>spongia</i>	American Frogbit	S2	G4		
<i>Limnoscium pinnatum</i>	Pinnate Dogshade	S1	G5?		
<i>Limosella aquatica</i>	Mudwort	SH	G5		
<i>Lindera melissifolia</i>	Pondberry	S1	G3	E	E
<i>Linum floridanum</i> var. <i>floridanum</i>	Florida Yellow Flax	SU	G5?T5?		
<i>Liparis loeselii</i>	Loesel's Twayblade	S2	G5		
<i>Lipocarpa aristulata</i>	Lipocarpa	SH	G5?		
<i>Lipocarpa drummondii</i>	A Lipocarpa	S1	G4G5		
<i>Lippia nodiflora</i>	Fog Fruit	SH	G5		
<i>Listera australis</i>	Southern Twayblade	S1	G4		
<i>Lithospermum latifolium</i>	American Gromwell	S2	G4		
<i>Lobelia puberula</i>	Downy Lobelia	SH	G5		
<i>Lomatium foeniculaceum</i> ssp. <i>foeniculaceum</i>	Hairy Parsley	S1S3	G5T5		
<i>Ludwigia glandulosa</i> ssp. <i>glandulosa</i>	Cylindricfruit Primrose-willow	S2	G5T5		
<i>Ludwigia leptocarpa</i>	Primrose Willow	S2	G5		
<i>Ludwigia linearis</i>	Narrow-leaved Primrose	S1	G5		
<i>Ludwigia microcarpa</i>	A False Loosestrife	S2	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (<i>Cont.</i>)					
Ludwigia repens	A False Loosestrife	SU	G5		
Lycopus asper	Bugle Weed	SH	G5		
Lycopus uniflorus	Northern Bugleweed	S1	G5		
Lygodesmia juncea	Skeleton Plant	S3	G5		
Lyonia mariana	Stagger Bush	SH	G5		
Lysimachia terrestris	Swamp Candle	S1	G5		
Lysimachia thyriflora	Tufted Loosestrife	S1	G5		
Maianthemum stellatum	Starry False Solomon's Seal	SU	G5		
Malus angustifolia	Narrow-leaved Wild Crab	S2	G5?		
Malvastrum angustum	Yellow False Mallow	S3	G3G5		
Marshallia caespitosa var. caespitosa	Barbara's Buttons	S3	G4T4		
Marshallia caespitosa var. signata	Barbara's Buttons	S1	G4T4		
Mecardonia acuminata	Water Hyssop	S1	G5		
Medeola virginiana	Indian Cucumber-root	SH	G5		
Melica mutica	Two-flowered Melic Grass	S1	G5		
Melothria pendula	Creeping Cucumber	S3	G5?		
Menyanthes trifoliata	Bogbean	S1	G5		
Mimosa strigillosa	Powderpuff	S1	G4G5		
Mimulus glabratus var. jamesii	Roundleaf Monkey Flower	SH	G5T5		
Minuartia muscorum	Dixie Stitchwort	S1	GNR		
Mirabilis linearis var. linearis	Narrow-leaved Four-o'clock	SU	G5TNR		
Mitreola petiolata	Miterwort	S1	G5		
Moehringia lateriflora	Grove Sandwort	S2S3	G5		
Monarda clinopodia	A Horsemint	S1	G5		
Monarda punctata var. arkansana	Arkansas Bee Balm	SA	G5TNR		
Monarda punctata var. occidentalis	Dotted Monarda	SA	G5T4T5		
Monarda punctata var. villicaulis	Horsemint	S3	G5T5?		
Muhlenbergia asperifolia	Scratchgrass	S1	G5		
Muhlenbergia cuspidata	Plains Muhly	SU	G5		
Muhlenbergia glabrifloris	Inland Muhly	SU	G4?		
Najas flexilis	A Naiad	SH	G5		
Najas gracillima	Thread-like Naiad	S2	G5?		
Nemastylis geminiflora	Prairie Iris	S2	G4		
Neviusia alabamensis	Snow Wreath	SH	G3		
Nothocalais cuspidata	Prairie Dandelion	S2	G5		
Nyssa biflora	Swamp Black Gum	SH	G5		
Obolaria virginica	Virginia Pennywort	S2	G5		
Oenothera clelandii	Evening Primrose	S2	G3G5		
Oenothera fruticosa ssp. fruticosa	Shrubby Sundrops	S1	G5T5		
Oenothera fruticosa ssp. glauca	Shrubby Sundrops	SH	G5T5		
Oenothera glaucifolia	Stenosiphon	S2	G5		
Oenothera grandis	Cut-leaved Evening Primrose	SU	G5?		
Oenothera nutans	Nodding Evening Primrose	S1S2	G4		
Oenothera parviflora	Northern Evening Primrose	SU	G5		
Oenothera perennis	Small Sundrops	S1	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Oenothera rhombipetala	An Evening Primrose	SH	G4G5		
Oenothera suffrutescens	Scarlet Gaura	S1	G5		
Oenothera triloba	Stemless Evening Primrose	S2	G4		
Oldenlandia boscii	A Bluet	S1	G5		
Oldenlandia uniflora	Clustered Bluets	S1	G5		
Opuntia macrorhiza var. macrorhiza	Low Prickly Pear	S2	G5T5		
Orobanche ludoviciana	A Broomrape	S1	G5		
Orobanche riparia	A Broomrape	S1	G4?		
Oxytropis lambertii var. lambertii	Locoweed	S2	G5TNR		
Packera tomentosa	Hairy Groundsel	SH	G4G5		
Paronychia virginica	Virginia Whitlow Wort	S1	G4		
Paspalum bifidum	Pitchfork Paspalum	S1	G5		
Paspalum dissectum	Mudbank Paspalum	SH	G4?		
Paspalum setaceum var. setaceum	Slender Paspalum	S1	G5T5		
Patis racemosa	Black-seeded Mountain Rice	S1	G5		
Pediomelum argophyllum	Silvery Psoralea	S2	G5		
Peltandra virginica ssp. virginica	Arrow Arum	S2	G5T5		
Penstemon cobaea var. purpureus	Purple Beard-tongue	S3	G4TNRQ		
Penstemon grandiflorus	Large Beard-tongue	S1	G5?		
Penstemon tenuis	Gulf Coast Beard-tongue	SU	G4		
Perideridia americana	Eastern Eulophus	S2	G4		
Persicaria amphibia var. stipulacea	Water Smartweed	S1	G5T5		
Persicaria arifolia	Halberd-leaved Tear Thumb	S1	G5		
Persicaria bicornis	Pink Smartweed	SU	GNR		
Persicaria glabra	Dense-flower Smartweed	S1S2	G5		
Persicaria robustior	Dotted Smartweed	SH	G4G5		
Phacelia covillei	Coville's Phacelia	S1	G3		
Philadelphus pubescens var. verrucosus	Mock Orange	S1	G5?TU		
Phlox amplifolia	Large-leaved Phlox	S3?	G3G5		
Phlox bifida	Bifid Phlox	S1	G5?		
Phlox maculata ssp. pyramidalis	Wild Sweet William	S2	G5T4T5		
Phyllanthus polygonoides	Knotweed Leaf-flower	S1	G5		
Physalis grisea	Strawberry-tomato	SU	G5?		
Physalis missouriensis	Missouri Groundcherry	SU	G5?		
Physaria filiformis	Missouri Bladderpod	S3	G3	E	T
Physostegia intermedia	A False Dragonhead	S1	G5		
Planera aquatica	Water Elm	SU	G5		
Plantago heterophylla	Slender Plantain	SU	G5		
Plantago patagonica	Woolly Plantain	S2	G5		
Platanthera ciliaris	Yellow-fringed Orchid	S1	G5		
Platanthera clavellata	Green Wood Orchid	S2	G5		
Platanthera flava var. flava	Pale Green Orchid	S2	G4?T4?Q		
Platanthera flava var. herbiola	Northern Rein Orchid	S2	G4?T4Q		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Platanthera leucophaea	Eastern Prairie Fringed Orchid	S1	G2G3	E	T
Platanthera praeclara	Western Prairie Fringed Orchid	S1	G3	E	T
Platanthera psychodes	Small Purple-fringed Orchid	SX	G5		
Pluchea foetida var. foetida	March Fleabane	SH	G5T5		
Pogonia ophioglossoides	Snake-mouth Orchid	S1	G5		
Polygonum americanum	Jointweed	S2	G5		
Polymnia laevigata	Smooth Leaf-cup	SX	G3		
Populus grandidentata	Big-toothed Aspen	S1	G5		
Populus tremuloides	Quaking Aspen	S2	G5		
Portulaca pilosa	Kiss Me Quick	SU	G5		
Potamogeton epihydrus	Nuttall Pondweed	SH	G5		
Potamogeton pulcher	Spotted Pondweed	S2S3	G5		
Potamogeton pusillus var. pusillus	Slender Pondweed	S3	G5T5		
Potentilla supina ssp. paradoxa	Bushy Cinquefoil	S2	G5T5		
Prenanthes racemosa	Rattlesnake Root	SH	G5		
Primula fassettii	Amethyst Shooting Star	S2	G4		
Primula frenchii	French's Shooting Star	S1	G3?		
Proserpinaca palustris var. palustris	Mermaid Weed	SU	G5T5		
Pseudognaphalium helleri	Heller's Cudweed	SU	G4G5		
Pseudognaphalium micradenium	Rabbit Tobacco	SU	G4G5T3?		
Ptilimnium capillaceum	Mock Bishop's Weed	SH	G5		
Pycnanthemum muticum	Blunt Mountain Mint	S2	G5		
Pycnanthemum torrei	Torrey Mountain Mint	SH	G2		
Quercus ellipsoidalis	Northern Pin Oak	S1	G5		
Quercus margarettiae	Sand Post Oak	SRF	G5		
Quercus nigra	Water Oak	S2	G5		
Quercus prinoides	Dwarf Chinquapin Oak	S3?	G5		
Quercus texana	Nuttall's Oak	S2	G4G5		
Ranunculus cymbalaria	Seaside Crowfoot	SH	G5		
Rhynchosia difformis	Double-formed Snoutbean	S1	G5?		
Rhynchospora globularis var. globularis	Globe Beaksedge	S1	G5?T5?		
Rhynchospora glomerata	Clustered Beaksedge	SU	G5		
Rhynchospora harveyi	Harvey's Beak-rush	S1	G4		
Rhynchospora macrostachya var. macrostachya	Horned Rush	S1	G4T4Q		
Rhynchospora scirpoides	Longbeak Beaksedge	SU	G4		
Ribes americanum	Gooseberry	S1	G5		
Rorippa aquatica	Lake Cress	S2	G4?		
Rorippa tenerima	Modoc Yellowcress	S1	G5		
Rosa blanda	Smooth Rose	S1	G5		
Rosa foliolosa	White Prairie Rose	S1	G5		
Rubus plicatifolius	A Blackberry	SU	G5		
Rubus rosa	Rose Blackberry	SU	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Rubus satis	Ithaca Blackberry	SU	G4G5Q		
Rudbeckia amplexicaulis	Clasping Leaved Coneflower	S1	G5		
Rudbeckia bicolor	Pine-woods Coneflower	S1	G3G5		
Rudbeckia grandiflora var. grandiflora	Rough Coneflower	S1	G5T4?		
Ruppia maritima	Ditch Grass	S1	G5		
Sabatia brachiata	Marsh Pink	S1	G5?		
Sacciolepis striata	American Cupscale	S1	G5		
Sagina procumbens	Matted Pearlwort	SU	G5		
Sagittaria ambigua	Kansas Arrowhead	S1	G2?		
Sagittaria platyphylla	Ovate-leaved Arrowhead	S1	G5		
Salix discolor	Pussy Willow	S1	G5		
Salix famelica	Diamond Willow	SU	G5T5		
Salix petiolaris	Meadow Willow	S1	G5		
Sambucus pubens	Red-berried Elderberry	S1	G4G5Q		
Sanicula smallii	Black Snakeroot	SH	G5		
Sapindus saponaria var. drummondii	Soapberry	S2	G5T5		
Schoenoplectiella hallii	Hall's Bulrush	S2	G3		
Schoenoplectiella purshiana	Weakstalk Bulrush	S2	G4G5		
Schoenoplectiella saximontana	Rocky Mountain Bulrush	S1	G5		
Schoenoplectus americanus	Olney's Bulrush	SH	G5		
Schoenoplectus californicus	Giant Bulrush	S1	G5		
Schoenoplectus deltarum	Delta Bulrush	SH	G3G4		
Schoenoplectus etuberculatus	Canby's Bulrush	SH	G3G4		
Schoenoplectus heterochaetus	Giant Bulrush	SU	G5		
Schoenoplectus subterminalis	Swaying Rush	S1	G5		
Schoenoplectus torreyi	Torrey's Bulrush	SH	G5?		
Scirpus divaricatus	A Bulrush	SH	G5		
Scirpus pallidus	Pale Bulrush	S2	G5		
Scirpus pedicellatus	A Bulrush	S2	G4		
Scleria reticularis var. pubescens	Muhlenberg's Nut-rush	S1	G5		
Scrophularia lanceolata	Early Figwort	SH	G5		
Scutellaria elliptica var. hirsuta	Hairy Skullcap	SH	G5T5		
Scutellaria galericulata	Marsh Skullcap	S1	G5		
Sida elliotii	Elliott Sida	S1	G4G5		
Sisyrinchium atlanticum	Eastern Blue-eyed Grass	S2	G5		
Smilax illinoensis	Carrion Flower	S2S3	G4?		
Solanum elaeagnifolium	White Horse Nettle	SU	G4G5		
Solidago riddellii	Riddell's Goldenrod	S3	G5		
Solidago rigida ssp. humilis	Stiff Goldenrod	SU	G5T5		
Spermolepis diffusa	Rough-fruit Spermolepis	S1	GNR		
Sphenopholis pensylvanica	Swamp Oats	SH	G4		
Spiraea alba var. alba	Meadow-sweet	S1	G5T5		
Spiraea tomentosa	Hardhack	S1	G5		
Spiranthes praecox	Greenvein Ladies' Tresses	S1	G5		
Sporobolus airoides	Alkali Sacaton	SH	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
Stachys aspera	Hedge Nettle	SH	G4?		
Steinchisma hians	Gaping Panic Grass	S3	G5		
Stylisma pickeringii var. pattersonii	A Stylisma	S1	G4T4		
Styrax grandifolius	Bigleaf Snowbell	SU	G5		
Sullivantia sullivantii	Sullivantia	S2	G4		
Symphoricarpos occidentalis	Wolfberry	S1	G5		
Symphyotrichum ciliatum	Rayless Alkali Aster	SH	G5		
Symphyotrichum patens var. gracile	Spreading Aster	SU	G5T4T5		
Symphyotrichum racemosum var. subdumosum	Small White Aster	S2	G4G5T3T5Q		
Thalia dealbata	Water Canna	S2	G4		
Thelesperma filifolium	Thelesperma	S2	G4G5		
Tilia americana var. heterophylla	White Basswood	SU	G5T5		
Tipularia discolor	Crane-fly Orchid	S3	G4G5		
Torreyochloa pallida var. pallida	Pale Manna Grass	S1	G5T5?		
Tradescantia ozarkana	Ozark Spiderwort	S2	G3		
Tragia cordata	Heart-leaved Noseburn	S2	G4		
Trautvetteria caroliniensis	False Bugbane	S2	G5		
Trepocarpus aethusae	Trepocarpus	S1	G4G5		
Triadenum tubulosum	Marsh St. John's Wort	S1	G4?		
Trichostema setaceum	Blue Curls	S1	G5		
Tridens flavus var. chapmanii	A Grass	S2	G5T3		
Tridens muticus var. elongatus	Slim Tridens	SH	G5T4?		
Trifolium carolinianum	Carolina Clover	S1	G5		
Trifolium stoloniferum	Running Buffalo Clover	S1	G3	E	E
Trillium nivale	Snow Trillium	S3	G4		
Trillium pusillum var. ozarkanum	Ozark Wake Robin	S2	G3T3		
Triodanis holzingeri	A Venus' Looking Glass	SH	G4		
Triodanis lamprosperma	A Venus' Looking Glass	S2	G5?		
Turritis glabra	Tower Mustard	S1	G5		
Typha domingensis	Southern Cattail	S1	G4G5		
Ulmus crassifolia	Cedar Elm	S1	G5		
Ulmus thomasii	Rock Elm	S2	G5		
Urtica chamaedryoides	Weak Nettle	S1	G4G5		
Utricularia minor	Lesser Bladderwort	S1	G5		
Utricularia subulata	Slender Bladderwort	S1	G5		
Valerianella ozarkana	Ozark Corn Salad	S2	G3		
Veronica americana	American Brooklime	SH	G5		
Viburnum bracteatum	Ozark Arrow Wood	S1S2	G3		
Viburnum dentatum	Southern Arrow-wood	S1	G5		
Viburnum lentago	Nannyberry	S1	G5		
Viburnum recognitum	Northern Arrow-wood	S1	G4G5		
Vicia americana	American Vetch	S1	G5		
Vicia ludoviciana ssp. leavenworthii	Louisiana Vetch	SH	G5T5		
Vicia minutiflora	Pygmy-flowered Vetch	SH	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FLOWERING PLANTS (Cont.)					
<i>Viola affinis</i>	Sand Violet	S1	G5		
<i>Viola pallens</i>	Smooth White Violet	S2	G5T5		
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	Muscadine	S1	G5T5		
<i>Wolffia borealis</i>	Dotted Watermeal	SU	G5		
<i>Wolffia columbiana</i>	Columbia Water-meal	SU	G5		
<i>Wolffiella gladiata</i>	Wolffiella	S1	G5		
<i>Xyris jupicai</i>	Yellow-eyed-grass	S1	G5		
<i>Xyris torta</i>	Yellow-eyed Grass	S1	G5		
<i>Yucca arkansana</i>	Arkansas Yucca	S2	G5		
<i>Yucca glauca</i>	Small Soapweed Yucca	S2	G5		
<i>Zannichellia palustris</i> var. <i>major</i>	Horned Pondweed	S3?	G5TNR		
<i>Zigadenus elegans</i> ssp. <i>glaucus</i>	White Camas	S2	G5T4T5		
<i>Zigadenus nuttallii</i>	Death Camas	S1	G5		
<i>Zizania palustris</i> var. <i>interior</i>	Interior Wild Rice	SH	G5T4T5		
Total Flowering Plant Records: 536					
FLATWORMS					
<i>Kenkia glandulosa</i>	Pink Planarian	S1	G2G3		
<i>Macrocotyla lewisi</i>	Lewis' Cave Planarian	S1	G1		
<i>Sphalloplana evaginata</i>	Perryville Cave Planarian	S1	G1G2		
<i>Sphalloplana hubrichti</i>	Hubricht's Cave Planarian	S1	G2G4		
Total Flatworm Records: 4					
MOLLUSKS					
<i>Alasmodonta marginata</i>	Elktoe	S2	G4		
<i>Alasmodonta viridis</i>	Slippershell Mussel	S1	G4G5	E	
<i>Amnicola stygius</i>	Stygian Amnicola	S1	G1		
<i>Anodontoides ferussacianus</i>	Cylindrical Papershell	S1	G5		
<i>Antrobia culveri</i>	Tumbling Creek Cavesnail	S1	G1	E	E
<i>Arcidens confragosus</i>	Rock Pocketbook	S3	G4		
<i>Campeloma crassulum</i>	Ponderous Campeloma	SU	G5		
<i>Cochlicopa morseana</i>	Appalachian Pillar	S3	G5		
<i>Cyclonaias nodulata</i>	Wartyback	S3	G4		
<i>Cyprogenia aberti</i>	Western Fanshell	S2	G2G3Q		
<i>Discus nigrimontanus</i>	Black Mountain Disc	S3	G4		
<i>Elliptio crassidens</i>	Elephantear	S1	G5	E	
<i>Epioblasma curtisii</i>	Curtis Pearlymussel	S1	G1	E	E
<i>Epioblasma triquetra</i>	Snuffbox	S1	G3	E	E
<i>Fontigens aldrichi</i>	Hoosier Springsnail	S4	G4		
<i>Fontigens antroecetes</i>	Missouri Cavesnail	S2	G2		
<i>Fontigens proserpina</i>	Proserpine Cavesnail	S1	G1		
<i>Gastrocopta abbreviata</i>	Plains Snaggletooth	S1	G4		
<i>Gastrocopta cristata</i>	Crested Snaggletooth	S1	G5		
<i>Gastrocopta pellucida</i>	Slim Snaggletooth	S1	G5		
<i>Gastrocopta similis</i>	Great Lakes Snaggletooth	S2	G5		
<i>Glyphyalinia solida</i>	Imperforate Glyph	S1	G5		
<i>Glyphyalinia wheatleyi</i>	Bright Glyph	S1	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
MOLLUSKS (Cont.)					
Hawaiiia alachuana	Southeastern Gem	S1	G4G5Q		
Hendersonia occulta	Cherrystone Drop	S1	G4		
Lampsilis abrupta	Pink Mucket	S2	G1G2	E	E
Lampsilis brittsi	Northern Brokenray	S3	G3		
Lampsilis higginsii	Higgins Eye	S1	G1G2	E	E
Lampsilis rafinesqueana	Neosho Mucket	S2	G1	E	E
Leptodea leptodon	Scaleshell	S1	G1G2	E	E
Leptoxis arkansensis	Arkansas Mudalia	S1	G1		
Ligumia recta	Black Sandshell	S2	G4G5		
Lioplax sulculosa	Furrowed Lioplax	S1	G5		
Lucilla singleyanus	Smooth Coil	S1	G5		
Margaritifera monodonta	Spectaclecase	S3	G3	E	E
Marstonia ozarkensis	Ozark Pyrg	SH	G1		
Marstonia scalariformis	Moss Pyrg	S1	G1		
Mesodon mitchellianus	Sealed Goblet	S1	G4		
Micromenetus sampsoni	Sampson Sprite	S2	G2G3Q		
Millerelix deltoidea	Oklahoma Liptooh	SH	G2		
Neohelix divesta	Ozark Whitelip	S3	G3G4		
Obovaria arkansasensis	Southern Hickorynut	S1	GNR		
Obovaria olivaria	Hickorynut	S3	G4		
Oxyloma retusum	Blunt Ambersnail	S1	G5		
Paravitrea simpsoni	Amber Supercoil	S1	G4		
Patera pennsylvanica	Proud Globelet	S2	G4		
Patera perigrapta	Engraved Bladetooth	S1	G5		
Plectomerus dombeyanus	Bankclimber	S3	G5		
Plethobasus cyphus	Sheepnose	S2	G3	E	E
Pleurocera alveare	Rugged Hornsnail	S1S3	G3		
Potamilus capax	Fat Pocketbook	S1	G2	E	E
Ptychobranhus occidentalis	Ouachita Kidneyshell	S3	G3G4		
Quadrula fragosa	Winged Mapleleaf	S1	G1	E	E
Reginaia ebenus	Ebonysnail	S1	G4G5	E	
Simpsonaias ambigua	Salamander Mussel	S1	G3	E	
Somatogyrys depressus	Sandbar Pebblesnail	S2	G2		
Somatogyrys rosewateri	Elk Pebblesnail	S1	G1		
Stagnicola elodes	Marsh Pondsnailed	S2	G5		
Stenotrema blandianum	Missouri Slitmouth	S2	G2		
Stenotrema labrosum	Ozark Slitmouth	S2	G3G4		
Stenotrema stenotrema	Inland Slitmouth	S3	G5		
Strobilops affinis	Eightfold Pinecone	S1	G4		
Theliderma cylindrica	Rabbitsfoot	S1	G3G4	E	T
Toxolasma lividum	Purple Lilliput	S1	G3		
Toxolasma texasiense	Texas Lilliput	S3	G4		
Triodopsis cragini	Post Oak Threetooth	S1	G4		
Triodopsis discoidea	Rivercliff Threetooth	S1	G3		
Triodopsis neglecta	Ozark Threetooth	S2	G3		
Utterbackiana suborbiculata	Flat Floater	S2	G5		
Vallonia excentrica	Iroquois Vallonia	S3	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
MOLLUSKS (Cont.)					
Vallonia gracilicosta	Multirib Vallonia	S1	G5		
Ventridens demissus	Perforate Dome	SU	G5		
Vertigo meramecensis	Bluff Vertigo	S3	G2G3		
Vertigo oscariana	Capital Vertigo	S1	G4		
Villosa lienosa	Little Spectaclecase	S3	G5		
Zonitoides limatulus	Dull Gloss	S1	G4G5		
Total Mollusk Records: 76					
ARACHNIDS					
Apochthonius mysterius	Mystery Cave Pseudoscorpion	S1	G1G2		
Apochthonius typhlus	Stone County Cave Pseudoscorpion	S1	G1G2		
Hesperochnes occidentalis	Guano Pseudoscorpion	S3	G5		
Mundochthonius cavernicolus	Cavernicolous Pseudoscorpion	SU	G1G2		
Phanetta subterranea	Subterranean Cave Spider	S1	G5		
Porrhomma cavernicola	Cavernicolous Porrhomma Spider	S2	G5		
Total Arachnid Records: 6					
CRUSTACEANS					
Allocrangonyx hubrichti	Hubricht's Long-tailed Amphipod	S3	G2G3		
Batrurus brachycaudus	Short-tailed Groundwater Amphipod	S4	G4		
Batrurus hubrichti	Sword-tail Cave Amphipod	S1	G4		
Batrurus pseudomucronatus	False Sword-tailed Cave Amphipod	S2	G2G3		
Brackenridgia ashleyi	Ashley's Isopod	S2	G1G3		
Caecidotea antricola	A Cave Obligate Isopod	S4	G5		
Caecidotea dimorpha	An Isopod	S1S3	G2G3		
Caecidotea fustis	Fustis Cave Isopod	S2	G2G3		
Caecidotea salemensis	Salem Cave Isopod	S2	G4		
Caecidotea serrata	Serrated Cave Isopod	S1	G1G2		
Caecidotea stiladactyla	Slender-fingered Cave Isopod	S1	G3G4		
Caecidotea stygia	Stygian Cave Isopod	S1	G5		
Cambarellus puer	Swamp Dwarf Crayfish	S3?	G5		
Cambarellus shufeldtii	Cajun Dwarf Crayfish	S3?	G5		
Cambarus aculabrum	Benton County Cave Crayfish	SP	G1		E
Cambarus hubrichti	Salem Cave Crayfish	S3	G4		
Cambarus maculatus	Freckled Crayfish	S3	G4		
Cambarus setosus	Bristly Cave Crayfish	S3	G3		
Creaserinus fodiens	Digger Crayfish	S2S3	G5		
Diacyclops yeatmani	Yeatman's Groundwater Copepod	S1S3	G2G3		
Faxonella clypeata	Ditch Fencing Crayfish	S2S3	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
CRUSTACEANS (Cont.)					
Faxonius eupunctus	Coldwater Crayfish	S1	G2	E	
Faxonius harrisonii	Belted Crayfish	S3	G3		
Faxonius lancifer	Shrimp Crayfish	S1S2	G5		
Faxonius marchandi	Mammoth Spring Crayfish	S1S2	G2		
Faxonius medius	Saddleback Crayfish	S3	G4		
Faxonius meeki meeki	Meek's Crayfish	S1	G4T4		
Faxonius peruncus	Big Creek Crayfish	S2	G2		PT
Faxonius quadruncus	St. Francis River Crayfish	S2	G2		PT
Faxonius roberti	Spring River Crayfish	SH	GNR	E	
Faxonius wagneri	Eleven Point River Crayfish	S1	GNR		
Faxonius williamsi	Williams' Crayfish	S2	G3		
Lacunicambarus ludovicianus	Painted Devil Crayfish	SU	G5		
Lacunicambarus polychromatus	Paintedhand Mudbug	S1S2	G5		
Lirceus megapodus	An Isopod	SU	GNR		
Macrobrachium ohione	Ohio Shrimp	S1	G4		
Orconectes stygocaneyi	Caney Mountain Cave Crayfish	S1	G1	E	
Procambarus viaeviridis	Vernal Crayfish	S3?	G5		
Stygobromus barri	Barr's Groundwater Amphipod	S1S3	G2G3		
Stygobromus clantoni	Clanton's Groundwater Amphipod	S1S3	G4		
Stygobromus heteropodus	Pickle Springs Amphipod	SX	G1G2		
Stygobromus onondagaensis	Onondaga Cave Amphipod	S3?	G3		
Stygobromus ozarkensis	Ozark Cave Amphipod	S3?	G4		
Stygobromus subtilis	Subtle Groundwater Amphipod	S1S3	G2		
Triops longicaudatus	Longtail Tadpole Shrimp	SU	G5		
Total Crustacean Records: 45					
MILLIPEDES					
Causeyella dendropus	Causeyella Cave Millipede	S2	G1G3		
Chaetaspis aleyorum	Aleys' Cave Millipede	S1	G1		
Tingupa pallida	Tingupa Cave Millipede	S4	G4		
Zosteractis interminata	Zosteractis Cave Millipede	SU	G2G3		
Total Millipede Records: 4					
INSECTS					
Acroneuria ozarkensis	Ozark Stone	S2	G2		
Agapetus artesus	Artesian Agapetus Caddisfly	S3	G3		
Aleochara speculicollis	A Staphylinid Beetle	SU	GNR		
Allocapnia pygmaea	Pygmy Snowfly	S3	G5		
Alloperla hamata	Barbed Sallfly	S3	G4		
Alloperla leonarda	Truncate Sallfly	S3	G4		
Amblyscirtes linda	Linda's Roadside Skipper	S2S3	G2G3		
Amblytropidia mysteca	A Glade Grasshopper	SU	G5		
Amphiagrion saucium	Eastern Red Damsel	S2	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
INSECTS (Cont.)					
Andrena beameri	An Andrenid Bee	S3	GNR		
Argia alberta	Paiute Dancer	S1	G4		
Arigomphus maxwelli	Bayou Clubtail	SU	G5		
Arrhopalites clarus	Clarus Cave Springtail	S3	G4		
Attaneuria ruralis	Giant Stone	S3	G4		
Baetisca obesa	A Mayfly	S3	G5		
Beameria venosa	A Concealed-tymbal Cicada	S3	GNR		
Biblopectus chickasaw	A Staphylinid Beetle	SU	GNR		
Bombus affinis	Rusty-patched Bumble Bee	SA	G2		E
Bombus fervidus	Yellow Bumblebee	S1	G3G4		
Calephelis borealis	Northern Metalmark	S1	G3		
Calephelis muticum	Swamp Metalmark	S3	G3		
Catocala marmorata	Marbled Underwing Moth	S3	G3G4		
Catocala pretiosa texarkana	Precious Underwing Moth	S3?	G4T4		
Ceratopsyche piatrix	A Net-spinning Caddisfly	S4	G4		
Chalybion zimmermanni	A Blue Mud Dauber	SU	GNRTNR		
Conocephalus saltans	Prairie Meadow Katydid	S3	G5		
Cylindera celeripes	Swift Tiger Beetle	S1	G2G4		
Deinopsis virginiana	A Staphylinid Beetle	SU	GNR		
Derops divalis	A Staphylinid Beetle	S3	GNR		
Dianthidium texanum	A Leafcutter Bee	S1	GNR		
Dichagyris reliqua	A Noctuid Moth	S1	G2G3		
Dromochorus pruinina	Loamy-ground Tiger Beetle	S1	GNR		
Euphyes dukesi	Duke's Skipper	S1	G3G4		
Formica creightoni	Creighton's Slavemaking Ant	S3	GNR		
Formica fossiceps	Haystack Thatching Ant	S1	G5		
Formica querquetulana	Oak-grove Ant	S1	GNR		
Gennadota canadensis	A Staphylinid Beetle	SU	GNR		
Glyphopsyche missouri	Missouri Glyphopsyche Caddisfly	S1	G1		
Gomphus fraternus	Midland Clubtail	SU	G5		
Gomphus ventricosus	Skillet Clubtail	SU	G3		
Gryllotalpa major	Prairie Mole Cricket	S3	G3		
Habroscelimorpha circumpicta johnsonii	Saline Spring Tiger Beetle	S1	G5T5		
Hesperia ottoe	Ottoe Skipper	S1	G3		
Hesperus stehri	A Staphylinid Beetle	SU	GNR		
Hydroperla fugitans	Austin Springfly	S3	G3		
Inscudderia taxodii	Bald Cypress Katydid	S1	GNR		
Isoperla burksi	Banded Stripetail	S3	G4		
Isoperla longiseta	Plains Stripetail	SX	G5		
Lasia purpurata	Purple Small-headed Fly	SU	GNR		
Leptysma marginicollis	Cattail Toothpick Grasshopper	S2S3	G5		
Leucotrichia pictipes	A Micro Caddisfly	S3	G5		
Libellula auripennis	Golden-winged Skimmer	SU	G5		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
INSECTS (Cont.)					
Lordithon niger	A Staphylinid Beetle	S3	GU		
Lytrosis permagnaria	Geometrid Moth	SU	G3G4		
Maccaffertium bednariki	A Heptageniid Mayfly	S3	G2G4		
Macropis steironematis	An Oil-collecting Bee	S1	GNR		
Melanoplus fasciatus	Huckleberry Grasshopper	S3	G5		
Melanoplus francoisensis	A Spur-throat Grasshopper	S1	GNR		
Melanoplus impudicus	Immodest Grasshopper	S3	G4G5		
Melanoplus packardii	Packard's Grasshopper	S2	G5		
Melanoplus punctulatus griseus	Grizzly Grasshopper	SU	G5T4		
Melanoplus viridipes viridipes	Green-legged Grasshopper	S3	G4		
Melissodes intorta	A Callirhoe Bee	S1	GNR		
Mermiria picta	Mermiria Grasshopper	S3	G5		
Merope tuber	A Meropid Scorpionfly	S3	G3G5		
Metaleptea brevicornis	Short-horned Grasshopper	S4	G5		
Nehalennia gracilis	Sphagnum Sprite	S1?	G5		
Nehalennia irene	Sedge Sprite	S1	G5		
Neoconocephalus exiliscanorus	Slightly-musical Conehead Katydid	S3	GNR		
Neoconocephalus lyristes	Bog Conehead Katydid	S1	GNR		
Neoperla carlsoni	Spiny Stone	S3?	G5		
Neotrichia kitae	Kite's Neotrichian Caddisfly	SU	GU		
Neotridactylus apicalis	Larger Pygmy Grasshopper	SU	GNR		
Nicrophorus americanus	American Burying Beetle	SH	G3	E	T
Ochrotrichia contorta	Contorted Ochrotrichian Micro Caddisfly	SU	G1		
Oecleus chrisjohni	A Cixiid Planthopper	SU	GNR		
Oncopodura hoffi	Hoff's Cave Springtail	S1S3	G1G2		
Oxybleptes kiteleyi	A Staphylinid Beetle	SU	GNR		
Papaipema eryngii	Rattlesnake-master Borer Moth	S3	G1G2		C
Papilio joanae	Ozark Woodland Swallowtail	S1S2	G2?		
Pardalophora saussurei	A Glade Grasshopper	SU	G5		
Paroxya hoosieri	Hoosier Grasshopper	S1	G5		
Pentacora signoreti	A Shore Bug	S1	GNR		
Phoetaliotes nebrascensis	Large-headed Grasshopper	S3	G5		
Phrixocnemis truculentus	Truculent Camel Cricket	SU	GNR		
Phyllobrotica lengi	A Leaf Beetle	SU	GNR		
Phyllobrotica nigratarsis	A Leaf Beetle	SU	GNR		
Phyllobrotica physostegiae	A Leaf Beetle	S4?	GNR		
Polyergus longicornis	Long-horned Shining Amazon Ant	S1	GNR		
Polyergus montivagus	Foothills Shining Amazon Ant	S1	GNR		
Polyergus ruber	Ruby-red Shining Amazon Ant	S1	GNR		
Polyergus sanwaldi	Sanwald's Shining Amazon Ant	S1	GNR		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
INSECTS (Cont.)					
Prostoia similis	Longhorn Forestfly	S3	G5		
Pseudomasaris occidentalis	A Pollen Wasp	S3	GNR		
Pseudosinella espana	Espana Cave Springtail	S3	G2G3		
Psinidia fenestralis	Sand Grasshopper	S2S3	G5		
Satyrodes appalachia leeuwi	Appalachian Eyed Brown	S1	G4T4		
Sepedophilus campbelli	A Staphylinid Beetle	SU	GNR		
Serratella frisoni	Frison's Seratellan Mayfly	S2	G4		
Sinella avita	Avita Cave Springtail	SU	G3G4		
Sinella barri	Barr's Cave Springtail	SU	G5		
Somatochlora hineana	Hine's Emerald	S2	G2G3	E	E
Somatochlora ozarkensis	Ozark Emerald	S1S2	G3		
Somatochlora provocans	Treetop Emerald	S1	G4		
Speyeria diana	Diana Fritillary	SA	G2G3		
Speyeria idalia	Regal Fritillary	S3	G3?		
Stethophyma celatum	Sedge Grasshopper	S3	G4		
Stylurus intricatus	Brimstone Clubtail	S1S2	G4		
Stylurus notatus	Elusive Clubtail	S2S3	G3		
Telebasis byersi	Duckweed Firetail	S1	G5		
Telebasis salva	Desert Firetail	SU	G5		
Tettigidea armata	Spined Grouse Locust	S2S3	G5		
Tomocerus missus	Missus Cave Springtail	SU	G4		
Trimerotropis maritima	Seaside Grasshopper	S1	G5		
Xenochalepus potomaca	A Leaf Beetle	SU	GNR		
Xenotrechus condei	Northern Xenotrechus Cave Beetle	S1	G1G2		
Xenotrechus denticollis	Southern Xenotrechus Cave Beetle	S1	G1G2		
Xylodromus capito	A Staphylinid Beetle	SU	GNR		
Total Insect Records: 118					
FISH					
Acipenser fulvescens	Lake Sturgeon	S1	G3G4	E	
Alosa alabamae	Alabama Shad	S2	G2G3		
Alosa chrysochloris	Skipjack Herring	SU	G5		
Ameiurus nebulosus	Brown Bullhead	S3?	G5		
Ammocrypta clara	Western Sand Darter	S2S3	G3		
Ammocrypta vivax	Scaly Sand Darter	S3	G5		
Anguilla rostrata	American Eel	SU	G4		
Atractosteus spatula	Alligator Gar	S1	G3G4		
Carpionodes velifer	Highfin Carpsucker	S2	G4G5		
Centrarchus macropterus	Flier	S3	G5		
Cottus specus	Grotto Sculpin	S1	G2		E
Crystallaria asprella	Crystal Darter	S1	G3	E	
Cyprinella camura	Bluntnose Shiner	S2S3	G5		
Erimyzon sucetta	Lake Chubsucker	S2	G5		
Etheostoma cragini	Arkansas Darter	S3S4	G3G4		
Etheostoma euzonum erizonum	Current Saddled Darter	S3	G3G4T3T4		

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FISH (Cont.)					
Etheostoma euzonum euzonum	Arkansas Saddled Darter	S2	G3G4T3T4		
Etheostoma fusiforme	Swamp Darter	S1	G5	E	
Etheostoma histrio	Harlequin Darter	S2	G5	E	
Etheostoma microperca	Least Darter	S2	G5		
Etheostoma nianguae	Niangua Darter	S2	G2	E	T
Etheostoma parvipinne	Goldstripe Darter	S1	G4G5	E	
Etheostoma whipplei	Redfin Darter	S1	G4	E	
Forbesichthys agassizii	Spring Cavefish	S1	G4	E	
Fundulus chrysotus	Golden Topminnow	S1	G5		
Fundulus dispar	Starhead Topminnow	S2	G4		
Fundulus kansae	Northern Plains Killifish	S2	G5		
Fundulus sciadicus	Plains Topminnow	S3	G4		
Hybognathus argyritus	Western Silvery Minnow	S2	G4		
Hybognathus hankinsoni	Brassy Minnow	S3	G5		
Hybognathus hayi	Cypress Minnow	S1	G4G5	E	
Hybognathus nuchalis	Mississippi Silvery Minnow	S3S4	G5		
Hybognathus placitus	Plains Minnow	S2	G4		
Hybopsis amnis	Pallid Shiner	SU	G4		
Ichthyomyzon gagei	Southern Brook Lamprey	S2S3	G5		
Lepomis marginatus	Dollar Sunfish	S2	G5		
Lepomis symmetricus	Bantam Sunfish	S2	G5		
Lethenteron appendix	American Brook Lamprey	S2	G4		
Macrhybopsis gelida	Sturgeon Chub	S3	G3		
Mugil cephalus	Striped Mullet	SA	G5		
Notropis buchanani	Ghost Shiner	S2	G5		
Notropis chalybaeus	Ironcolor Shiner	S1	G4		
Notropis heterolepis	Blacknose Shiner	S2	G5		
Notropis maculatus	Taillight Shiner	S1	G5	E	
Notropis ozarcanus	Ozark Shiner	S2	G3		
Notropis sabinae	Sabine Shiner	S1	G4	E	
Notropis texanus	Weed Shiner	S3	G5		
Notropis topeka	Topeka Shiner	S1	G3	E	E
Noturus eleutherus	Mountain Madtom	S1S2	G4	E	
Noturus flavater	Checkered Madtom	S3S4	G3G4		
Noturus placidus	Neosho Madtom	S1	G2	E	T
Opsopoeodus emiliae	Pugnose Minnow	S4	G5		
Percina copelandi	Channel Darter	S3	G4		
Percina cymatotaenia	Bluestripe Darter	S2	G2		
Percina nasuta	Longnose Darter	S1	G3	E	
Percina shumardi	River Darter	S3	G5		
Percina uranidea	Stargazing Darter	S2	G3		
Percopsis omiscomaycus	Trout-perch	S1?	G5		
Pimephales tenellus parviceps	Eastern Slim Minnow	S2S3	G4T2T3		
Pimephales tenellus tenellus	Western Slim Minnow	S3	G4T4		
Platygobio gracilis	Flathead Chub	S1	G5	E	
Scaphirhynchus albus	Pallid Sturgeon	S1	G2	E	E
Troglichthys rosae	Ozark Cavefish	S2	G3	E	T

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
FISH (Cont.)					
Typhlichthys eigenmanni	Salem Plateau Cavefish	S2S3	GNR		
Umbra limi	Central Mudminnow	S1	G5	E	
Total Fish Records: 65					
AMPHIBIANS					
Ambystoma annulatum	Ringed Salamander	S3	G4		
Ambystoma talpoideum	Mole Salamander	S2	G5		
Ambystoma tigrinum	Eastern Tiger Salamander	S3	G5		
Amphiuma tridactylum	Three-toed Amphiuma	S2	G5		
Anaxyrus cognatus	Great Plains Toad	S3	G5		
Cryptobranchus alleganiensis alleganiensis	Eastern Hellbender	S1	G3T2	E	PE
Cryptobranchus alleganiensis bishopi	Ozark Hellbender	S1	G3T2	E	E
Eurycea spelaea	Grotto Salamander	S2S3	G4		
Hemidactylium scutatum	Four-toed Salamander	S4	G5		
Lithobates areolatus circulosus	Northern Crawfish Frog	S3	G4T4		
Lithobates pipiens	Northern Leopard Frog	S2	G5		
Lithobates sylvaticus	Wood Frog	S3	G5		
Pseudacris illinoensis	Illinois Chorus Frog	S2	G3		
Scaphiopus holbrookii	Eastern Spadefoot	S2	G5		
Total Amphibian Records: 14					
REPTILES					
Cemophora coccinea copei	Northern Scarletsnake	S2S3	G5T5Q		
Clonophis kirtlandii	Kirtland's Snake	S1	G2		
Crotaphytus collaris	Eastern Collared Lizard	S4	G5		
Deirochelys reticularia miaria	Western Chicken Turtle	S1	G5T5	E	
Emydoidea blandingii	Blanding's Turtle	S1	G4	E	
Farancia abacura reinwardtii	Western Mudsnake	S2	G5T5		
Heterodon gloydi	Dusty Hog-nosed Snake	S1	G3G4Q		
Heterodon nasicus	Plains Hog-nosed Snake	SX	G5		
Kinosternon flavescens	Yellow Mud Turtle	S1	G5	E	
Macrochelys temminckii	Alligator Snapping Turtle	S2	G3		
Nerodia cyclopion	Mississippi Green Watersnake	SX	G5	E	
Opheodrys vernalis	Smooth Greensnake	SX	G5		
Pantherophis ramspotti	Western Foxsnake	S1	G5		
Pantherophis vulpinus	Eastern Foxsnake	S1	G5		
Phrynosoma cornutum	Texas Horned Lizard	S2	G4G5		
Pituophis catenifer sayi	Bullsnake	SU	G5T5		
Plestiodon obsoletus	Great Plains Skink	S2	G5		
Plestiodon septentrionalis obtusirostris	Southern Prairie Skink	S3	G5T5		
Plestiodon septentrionalis septentrionalis	Northern Prairie Skink	S3	G5T5		
Sistrurus catenatus	Eastern Massasauga	SX	G3	E	T
Sistrurus tergeminus tergeminus	Prairie Massasauga	S1	G3G4TNR	E	
Total Reptile Records: 21					

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
BIRDS (See Appendix A for Tracking Criteria)					
Accipiter striatus	Sharp-shinned Hawk	S2	G5		
Anhinga anhinga	Anhinga	S3S4	G5		
Antigone canadensis	Sandhill Crane	S1	G5		
Antrostomus carolinensis	Chuck-will's-widow	S3	G5		
Antrostomus vociferus	Eastern Whip-poor-will	S3	G5		
Ardea alba	Great Egret	S3	G5		
Asio flammeus	Short-eared Owl	S2	G5		
Asio otus	Long-eared Owl	SU	G5		
Athene cunicularia	Burrowing Owl	SX	G4		
Bonasa umbellus	Ruffed Grouse	SU	G5		
Botaurus lentiginosus	American Bittern	S1	G5	E	
Buteo swainsoni	Swainson's Hawk	S2	G5		
Campephilus principalis	Ivory-billed Woodpecker	SX	G1		E
Chlidonias niger	Black Tern	SX	G4G5		
Circus hudsonius	Northern Harrier	S2	G5	E	
Cistothorus palustris	Marsh Wren	S3	G5		
Corvus corax	Common Raven	SX	G5		
Coturnicops noveboracensis	Yellow Rail	SU	G4		
Cygnus buccinator	Trumpeter Swan	S1	G4		
Egretta caerulea	Little Blue Heron	S3	G5		
Egretta thula	Snowy Egret	S1	G5	E	
Elanoides forficatus	Swallow-tailed Kite	SX	G5		
Falco peregrinus	Peregrine Falcon	S3	G4	E	
Gallinula galeata	Common Gallinule	S2	G5		
Geococcyx californianus	Greater Roadrunner	S3	G5		
Haliaeetus leucocephalus	Bald Eagle	S3	G5		
Ictinia mississippiensis	Mississippi Kite	S3	G5		
Ixobrychus exilis	Least Bittern	S3	G4G5		
Lanius ludovicianus	Loggerhead Shrike	S2	G4		
Laterallus jamaicensis jamaicensis	Eastern Black Rail	SU	G3TNR		T
Limnothlypis swainsonii	Swainson's Warbler	S2	G4	E	
Nycticorax nycticorax	Black-crowned Night-heron	S3	G5		
Pandion haliaetus	Osprey	S2	G5		
Passerina ciris	Painted Bunting	S3	G5		
Peucaea aestivalis	Bachman's Sparrow	S1	G3	E	
Picoides borealis	Red-cockaded Woodpecker	SX	G3		E
Porzana carolina	Sora	S2	G5		
Rallus elegans	King Rail	S1	G4	E	
Rallus limicola	Virginia Rail	S2	G5		
Setophaga cerulea	Cerulean Warbler	S2S3	G4		
Setophaga virens	Black-throated Green Warbler	SU	G5		
Sitta pusilla	Brown-headed Nuthatch	SU	G4		
Sterna antillarum athalassos	Interior Least Tern	S2	G4T3Q	E	
Thryomanes bewickii	Bewick's Wren	S3	G5		
Tympanuchus cupido	Greater Prairie-chicken	S1	G4	E	

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SRANK</u>	<u>GRANK</u>	<u>STATE STATUS</u>	<u>FEDERAL STATUS</u>
BIRDS (Cont.)					
Vermivora bachmanii	Bachman's Warbler	SX	GH		E
Xanthocephalus xanthocephalus	Yellow-headed Blackbird	S3	G5		
Total Bird Records: 47					
MAMMALS					
Bison bison	American Bison	SX	G4		
Canis lupus	Gray Wolf	SX	G5		E
Canis rufus	Red Wolf	SX	G1Q		E
Cervus elaphus	Elk or Wapiti	S?	G5		
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	S1	G3G4		
Corynorhinus townsendii ingens	Ozark Big-eared Bat	SX	G4T1	E	E
Ictidomys tridecemlineatus	Thirteen-lined Ground Squirrel	S2	G5		
Lasionycteris noctivagans	Silver-haired Bat	S3	G3G4		
Lasiurus cinereus	Hoary Bat	S3	G3G4		
Lasiurus seminolus	Seminole Bat	SA	G5		
Lepus californicus	Black-tailed Jackrabbit	S1	G5	E	
Lepus townsendii	White-tailed Jackrabbit	SX	G5		
Mustela frenata	Long-tailed Weasel	S3	G5		
Mustela nivalis	Least Weasel	S3	G5		
Myotis austroriparius	Southeastern Myotis	S1	G4		
Myotis grisescens	Gray Myotis	S3	G4	E	E
Myotis leibii	Eastern Small-footed Myotis	S2	G4		
Myotis lucifugus	Little Brown Myotis	S2	G3		
Myotis septentrionalis	Northern Long-eared Myotis	S1	G1G2	E	T
Myotis sodalis	Indiana Myotis	S1	G2	E	E
Ochrotomys nuttalli	Golden Mouse	S3	G5		
Oryzomys palustris	Marsh Rice Rat	SU	G5		
Perimyotis subflavus	Tri-colored Bat	S2	G2G3		
Perognathus flavescens	Plains Pocket Mouse	S1	G5		
Peromyscus gossypinus	Cotton Mouse	S2	G5		
Poliocitellus franklinii	Franklin's Ground Squirrel	S2S3	G5		
Puma concolor	Mountain Lion	SX	G5		
Reithrodontomys montanus	Plains Harvest Mouse	S2	G5		
Spilogale putorius interrupta	Plains Spotted Skunk	S1	G4T4	E	
Sylvilagus aquaticus	Swamp Rabbit	S2	G5		
Tadarida brasiliensis	Brazilian Free-tailed Bat	SA	G5		
Taxidea taxus	American Badger	S3	G5		
Total Mammal Records: 32					
Total Records Processed: 1177					

REFERENCES

NATURAL COMMUNITIES

Terrestrial Natural Community Taxonomic Authority:

Nelson, P.W., et al. 2010. The Terrestrial Natural Communities of Missouri, Revised ed. The Missouri Natural Areas Committee. Jefferson City, Missouri. 550pp.

Aquatic Natural Community Taxonomic Authority:

Pflieger, W. L. 1989. Aquatic community classification system for Missouri. Aquatic Series Number 19. Missouri Department of Conservation, Jefferson City, Missouri, USA. 70 p.

For Additional Aquatic Natural Community Information:

Sowa, S.P., G. Annis, M.E. Morey, and D.D. Diamond. 2007. A gap analysis and comprehensive conservation strategy for riverine ecosystems of Missouri. Ecological Monographs 77(3): 301-334.

LICHENS

Taxonomic Authority:

Egan, R.S. 1987. A fifth checklist of the lichen-forming, lichenicolous and allied fungi of the continental United States and Canada. Bryologist 90:77-173.

For Additional Information:

Ladd, D. 1996. Checklist and bibliography of Missouri lichens. Missouri Department of Conservation. Natural History Series, No. 4. Jefferson City, Missouri. 92 pp.

LIVERWORTS AND HORNWORTS

Taxonomic Authority:

Schuster, R.M. 1966-1992. The Hepeticeae and Anthocerotae of North America, six volume series. Columbia Univ. Press, N.Y. and Field Museum of Natural History, Chicago, Illinois.

MOSSES

Taxonomic Authority:

Anderson, Louis E., H.A. Crum, and W.R. Buck. 1990. List of the mosses of North America north of Mexico. Bryologist 93:448-499.

For Additional Information:

Crum, H. 1984. Sphagnopsida: Sphagnaceae. North American Flora, Series 2, 11:i-iv, 1-180.

FERNS AND FERN ALLIES

Taxonomic Authority:

Yatskievych, G. 1999. Steyermark's Flora of Missouri, Vol. 1, Revised ed. Missouri Department of Conservation. Jefferson City, Missouri. 1991 pp.

FLOWERING PLANTS

Taxonomic Authority:

Flora of Missouri Database. 2016. Flora of Missouri Project. Missouri Botanical Garden. St. Louis, Missouri.

FLOWERING PLANTS (*Cont.*)

Ecological Checklist of the Missouri Flora for Floristic Quality Assessment. 2015. Doug Ladd and Justin Thomas, *Phytoneuron*, 12:1-274.

For Additional Information:

Denison, E. 2008. Missouri wildflowers: a field guide to wildflowers of Missouri. Sixth ed. Missouri Department of Conservation. Jefferson City, Missouri. 280 pp.

Smith, T.E. 2000. Missouri plants of conservation concern. Missouri Department of Conservation. Jefferson City, Missouri. 47pp.

Steyermark, J.A. 1963. Flora of Missouri. Iowa State Press. Ames, Iowa. 1728 pp.

Summers, B. 1996. Missouri orchids. Missouri Department of Conservation. Jefferson City, Missouri. 112 pp.

Yatskievych, G. 1999. Steyermark's Flora of Missouri, Vol. 1, Revised ed. Missouri Department of Conservation. Jefferson City, Missouri. 1991 pp.

Yatskievych, G. 2006. Steyermark's Flora of Missouri, Vol. 2, Revised ed. Missouri Botanical Garden Press. St. Louis, Missouri. 1181 pp.

Yatskievych, G. 2013. Steyermark's Flora of Missouri, Vol. 3, Revised ed. Missouri Botanical Garden Press. St. Louis, Missouri. 1382 pp.

FLATWORMS

For Additional Information:

Huggins, D.G., P.M. Liechti and L.C. Ferrington, Jr., eds. 1985. Guide to the freshwater invertebrates of the Midwest. Kansas Biological Survey, Technical Publication No. 11. 221 pp.

MOLLUSKS

Taxonomic Authority:

Johnson, P.D., A.E. Bogan, K.M. Brown, N.M. Burkhead, J.R. Cordeiro, J.T. Garner, P.D. Hartfield, D.A.W. Lepitzki, G.L. Mackie, E. Pip, T.A. Tarpley, J.S. Tiemann, N.V. Whelan, and E.E. Strong. 2013. Conservation status of freshwater gastropods of Canada and the United States. *Fisheries* 38(6):247-282.

Williams, J.D., A.E. Bogan, R.S. Butler, K.S. Cummings, J.T. Garner, J.L. Harris, N.A. Johnson, and G.T. Watters. 2017. A revised list of the freshwater mussels (Mollusca: Bivalvia: Unionida) of the United States and Canada. *Freshwater Mollusk Biology and Conservation* 20:33-58.

For Additional Information:

McMurray, S.E., J.S. Faiman, A. Roberts, B. Simmons, and M.C. Barnhart. 2012. A guide to Missouri's freshwater mussels. Missouri Department of Conservation, Jefferson City, MO.

Oesch, R.D. 1995. Missouri naiades: a guide to the mussels of Missouri. Missouri Department of Conservation. Jefferson City, Missouri. 270 pp.

MOLLUSKS (*Cont.*)

Oesch, R.D., L.W. Watrous, and M.C. Barnhart. 2013. Land snails & slugs of Missouri. Missouri Department of Conservation, Jefferson City.

Wu, S.K., R.D. Oesch and M.E. Gordon. 1997. Missouri aquatic snails. Missouri Department of Conservation. Jefferson City, Missouri. Natural History Series, No. 5. 97 pp.

CRUSTACEANS

Taxonomic Authority:

Committee on the Names of Crustaceans of the United States and Canada of the Crustacean Society and D. Turgeon. 2005. Common and scientific names of aquatic invertebrates from the United States and Canada: crustaceans. American Fisheries Society, Special Publication 31, Bethesda, Maryland.

For Additional Information:

Pflieger, W.L. 1996. The crayfishes of Missouri. Missouri Department of Conservation. Jefferson City, Missouri. 152 pp.

INSECTS

Taxonomic Authority:

Poole, R.W. and P. Gentili (Eds.). 1996-97. Nomina insecta nearctica. A checklist of the insects of North America. Entomological Information Services. Rockville, M.D. Four volumes.

For Additional Information:

Heitzman, J.R. and J.E. Heitzman. 1987. Butterflies and moths of Missouri. Missouri Department of Conservation. Jefferson City, Missouri. 385 pp.

FISH

Taxonomic Authority:

Page, L., E.J. Crossman, H. Espinosa-Perez, L.T. Findley, C.R. Gilbert, R.N. Lea, N.E. Mandrak, R.L. Mayden, and J.S. Nelson. 2013. Common and scientific names of fishes from the United States, Canada, and Mexico. Seventh edition. American Fisheries Society, Special Publication 34. Bethesda, Maryland.

For Additional Information:

Pflieger, W.L. 1997. The fishes of Missouri. Revised edition. Missouri Department of Conservation. Jefferson City, Missouri. 372 pp.

AMPHIBIANS AND REPTILES

Taxonomic Authority:

Crother, B.I. (ed) and Committee. 2017. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with comments regarding confidence in our understanding. Society for the Study of Amphibians and Reptiles. Web Access. September 2017, <http://ssarherps.org/publications/north-american-checklist/north-american-checklist-of-scientific-and-common-names/>.

For Additional Information:

Daniel, R.E. and B.S. Edmonds 2014. Atlas of Missouri Amphibians and Reptiles. Web Access. Sept 2014. <http://atlas.moherp.org/pubs/atlas13d.pdf>.

AMPHIBIANS AND REPTILES (*Cont.*)

Johnson, T.R. 2000. The amphibians and reptiles of Missouri. Missouri Department of Conservation. Jefferson City, Missouri. 400 pp.

BIRDS

Taxonomic Authority:

Chesser, R. T., S. M. Billerman, K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, N. A. Mason, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, and K. Winker. 2020. Check-list of North American Birds (online). American Ornithological Society. <http://checklist.aou.org/taxa>.

For Additional Information:

Jacobs, R. 2001. Birds in Missouri. Missouri Department of Conservation. Jefferson City, Missouri. 375 pp.

Jacobs, R. and J.D. Wilson. 1997. Missouri breeding bird atlas. Missouri Department of Conservation. Jefferson City, Missouri. 430 pp.

Robbins, M.B. 2018. The Status and Distribution of Birds in Missouri. University of Kansas Libraries. 342 pp. <https://kuscholarworks.ku.edu/handle/1808/26287#:~:text=The%20Status%20and%20Distribution%20of%20Birds%20in%20Missouri%20by%20Mark,the%20past%20twenty%2Dfive%20years>.

S. M. Billerman, B. K. Keeney, P. G. Rodewald, and T. S. Schulenberg (Editors) (2020). Birds of the World. Cornell Laboratory of Ornithology, Ithaca, NY, USA. <https://birdsoftheworld.org/bow/home>.

MAMMALS

Taxonomic Authority:

Wilson, D.E. & DeeAnn M. Reeder (editors). 2005. Mammal species of the world. A taxonomic and geographic reference (3rd ed), Johns Hopkins University Press, 2,142 pp.

For Additional Information:

Boyles, J.G., J. Timpone, and L. Robbins. 2009. Bats of Missouri. Indiana State University Center for North American Bat Research and Conservation. p 60.

Hall, E.R. 1981. The mammals of North America, 2nd edition. John Wiley & Sons, New York, 1181+ pp.

Schwartz, C.W. and E.R. Schwartz. 2016. The wild mammals of Missouri, 3rd Revised edition. D.K. Fantz and V.L. Jackson (editors). University of Missouri Press. Columbia, Missouri. 426 pp.

FOR MORE INFORMATION

MDC collects and manages information on the location and status of species and natural communities of conservation concern throughout the state. The Missouri Natural Heritage Database is a repository for this information.

If you have information on the location or questions about the status of any element on this *Checklist*, please contact:

Natural Heritage Coordinator
Missouri Department of Conservation
P.O. Box 180
2901 W Truman Blvd
Jefferson City, MO 65109
(573) 522-4115

If you are requesting information about any Element on this *Checklist* for the purposes of environmental review, please write:

Science Branch
Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO 65109

You can also conduct an online Natural Heritage Review by submitting your information to <https://naturalheritagereview.mdc.mo.gov/>

WEBPAGE

This checklist is updated annually. The most current version is always available by contacting MDC, Branch. *Checklist* information is also available on MDC's website: <http://mdc.mo.gov/145>.

CITATION

An appropriate citation for this edition of the *Checklist* is:

Missouri Natural Heritage Program. 2021. Missouri species and communities of conservation concern checklist. Missouri Department of Conservation. Jefferson City, Missouri. pp. 56.

APPENDIX A

BIRD SPECIES TRACKED IN MONHP AND THEIR CRITERIA FOR EORS

<u>Species (ranks)</u>	<u>MDC Regions*</u>	<u>Criteria** (safe dates), comments</u>
Anseriformes (Ducks, geese, swans)		
Trumpeter Swan (S1, G4)	All (NE, NW)	1
Galliformes (chicken-like birds)		
Ruffed Grouse (SU, G5)	CN, OZ, SL, SE	1
Greater Prairie-chicken (S1, G4)	SW, KC, NW, NE	Anytime observed
Suliformes (anhinga)		
Anhinga (S3S4, G5)	SE	1
Pelecaniformes (herons, egrets, storks, ibises)		
American Bittern (S1, G5)	All	1- extensive emergent marshes
Least Bittern (S3, G5)	All	1,2 (5/25-8/1)
Great Egret (S3, G5)	All (SE)	1
Snowy Egret (S1, G5)	SE	1
Little Blue Heron (S3, G5)	SE, SL	1
Black-crowned Night-Heron (S3, G5)	All (SE)	1
Accipitriformes (hawks, eagles, kites, vultures)		
Osprey (S2, G5)	All (confirmed NE, SW)	1- Any large open body of water
Swallow-tailed Kite (SX, G5)	SE	1- Formerly SE, large rivers
Mississippi Kite (S3, G5)	All (SE, SL, NE)	1- Expanding range
Bald Eagle (S3, G5)	All	1- Any large open body of water
Northern Harrier (S2, G5)	All (except OZ, SE)	1
Sharp-shinned Hawk (S2, G5)	All	1
Swainson's Hawk (S2, G5)	SW, KC	1
Gruiformes (rails, cranes)		
Yellow Rail (SU, G4)	All	Anytime observed (migrant)
Black Rail (SU, G3G4)	All	Anytime observed, large marshes
King Rail (S1, G4)	All (SE, SL, NE)	1,2 (5/30-7/31)
Virginia Rail (S2, G5)	All	1,2 (5/15-8/1)
Sora (S2, G5)	All	1,2 (5/30-7/31)
Common Gallinule (S2, G5)	All (except OZ)	1,2 (5/30-8/31)
Sandhill Crane (S1, G5)	NE, NW, CN, SL	1
Charadriiformes (gulls, terns, shorebirds)		
Interior Least Tern (S2, G4T2Q)	SE	1- Formerly along MS, MO Rivers
Black Tern (SX, G4G5)	NW	1
Cuculiformes (cuckoos, roadrunners)		
Greater Roadrunner (S3, G5)	SW, OZ	1
Caprimulgiformes (nightjars)		
Eastern Whip-poor-will (S3B, G5)	All	1
Chuck-Will's-widow (S3B, G5)	SW, OZ, SE	1
Strigiformes (Owls)		
Burrowing Owl (SX, G4)	NW	1

Strigiformes (Owls) (Cont.)

Long-eared Owl (SU, G5)	All	1-Forests, dense thickets near water
Short-eared Owl (S2, G5)	SW, NW, NE, KC	1,2 (5/1-8/31)

Piciformes (Woodpeckers)

Red-cockaded Woodpecker (SX, G3)	OZ, SE	Anytime observed
Ivory-billed Woodpecker (SX, G1)	All	Anytime observed

Falconiformes (falcons)

Peregrine Falcon (S3, G4)	SL, KC	1- Formerly along MO river bluffs
---------------------------	--------	-----------------------------------

Passeriformes (perching birds)

Loggerhead Shrike (S2, G4)	All (SW, KC, NW)	1,2 (4/20-7/20)
Common Raven (SX, G5)	All	Anytime observed
Brown-headed Nuthatch (SU, G4)	All	1
Marsh Wren (S3, G5)	All (except SW, SE, OZ)	1,2 (5/25-8/25)
Bachman's Warbler (SX, GH)	All	Anytime observed
Swainson's Warbler (S2, G4)	SE, OZ, SW	1,2 (5/25-8/15)
Cerulean Warbler (S2S3, G4)	All (OZ)	1,2 (6/1-8/10)
Black-throated Green Warbler (SU, G5)	SE	1
Bachman's Sparrow (S1, G3)	OZ, SW, SE	1,2 (6/1-8/15)
Painted Bunting (S3, G5)	SW, OZ	1,2 (5/25-8/1)
Yellow-headed Blackbird (S3, G5)	NW (possible anywhere)	1
Bewick's Wren (S3, G5)	All	1, 2 (5/15-8/15)

***MDC Regions (where species most likely to be recorded)**

CN - Central	KC - Kansas City
NE - Northeast	NW - Northwest
OZ - Ozark	SL - St. Louis
SE - Southeast	SW - Southwest

****Criteria**

1. Confirmed breeding. Evidenced one or more of the following:

- Nest building (except wrens and woodpeckers)
- Nest with egg(s) or young (seen or heard)
- Used nest or eggshells
- Physiological evidence of breeding based upon bird in hand (e.g. brood patch)
- Distraction display or injury feigning
- Recently fledged young
- Adults entering or leaving nest site in circumstances indicating nesting
- Adult carrying fecal sac
- Adult carrying food

2. Probable breeding (valid only between safe dates)

- Male and female seen together (not part of a flock)
- Bird holding territory
- Seven or more singing males detected in one visit
- Courtship or copulation
- Visiting probable nest site
- Agitated behavior or anxiety call (not provoked by observer)
- Nest building by wrens or woodpeckers

3. Possible breeding (valid only between safe dates)

- Species heard or seen in breeding habitat
- Species heard or seen but not in breeding habitat

APPENDIX B
MISSOURI BIRD CONSERVATION PLAN FOCAL SPECIES *

Natural Community	Common Name	MO Concern Score¹	Population Trend, MO	Threats to Breeding, MO	Relative Density - Breeding, MO	Population Size, Global	Breeding Distribution, Global
GRASSLAND BIRDS	Eastern Kingbird	15	5	3	4	2	1
	Grasshopper Sparrow	15	5	4	3	2	1
	Henslow's Sparrow	17	2	4	5	4	2
	Bobolink	11	1	4	2	2	2
	Eastern Meadowlark	17	5	4	5	2	1
	Dickcissel	16	4	3	5	2	2
SAVANNA, WOODLAND, AND YOUNG-FOREST BIRDS	Northern Bobwhite	16	5	4	4	2	1
	Yellow-billed Cuckoo	16	5	3	5	2	1
	Chuck-will's-widow	16	5	3	4	2	2
	Eastern Whip-poor-will	18	5	3	5	3	2
	Chimney Swift	16	5	4	4	2	1
	Red-headed Woodpecker	17	5	3	5	3	1
	Eastern Wood-Pewee	14	3	3	5	2	1
	Bewick's Wren	17	5	5	3	2	2
	Brown Thrasher	15	4	3	5	2	1
	Eastern Towhee	15	4	3	4	2	2
	Field Sparrow	17	5	3	5	2	2
	Yellow-breasted Chat	13	3	3	4	2	1
	Orchard Oriole	13	2	3	5	2	1
	Blue-winged Warbler	15	3	3	4	3	2
	Prairie Warbler	18	5	3	5	3	2
FOREST BIRDS	Blue Jay	14	4	3	4	2	1
	Wood Thrush	14	3	3	4	2	2
	Worm-eating Warbler	15	2	3	5	3	2
	Prothonotary Warbler	13	3	3	2	3	2
	Kentucky Warbler	15	2	3	5	3	2
	Cerulean Warbler	18	5	4	4	3	2
WETLAND BIRDS	Green Heron	15	5	3	3	3	1
GENERALIST BIRDS	Common Grackle	16	5	4	5	1	1
SPECIAL CIRCUMSTANCE BIRDS²	Ruffed Grouse	-					
	Greater Prairie-Chicken	-					
	King Rail	-					
	Bachman's Sparrow	-					
	Brown-headed Nuthatch	-					

***Not all Focal Species are tracked in Heritage**

¹ MO Concern Score = sum of other five scores: MO Population Trend, MO Threats to Breeding, MO Relative Density, Global Population Size, and Global Distribution. Each score's scale varies slightly, but in general 1=least concern/lowest threat level and 5=greatest concern/highest threat level.

² Special Circumstance Birds were not scored due to extremely low breeding populations caused by various circumstances. See SPECIAL CIRCUMSTANCE BIRDS section of the Missouri Conservation Bird Plan for more information.

PLANTS OF CONSERVATION CONCERN REPORTING FORM

NATURAL HERITAGE BOTANIST AND DATA MANAGER

EO Report Status (check one): New ☐ Update **WITH** mapping ☐ Update **WITHOUT** mapping ☐

EO_ID: _____ EONUM: _____ Srank: _____ EO Rank: _____ Origin Subrank: _____

EO Rank Comments: _____

Reference(s): _____

Heritage Mapper/Date: _____ Mapsheet Name(s): _____

Heritage Map QC/Date: _____ Heritage Botanist/Date: _____

SPECIES and LOCATION (please attach a map)

Scientific Name: _____ Common Name: _____

County Name(s): _____ Survey Site Name: _____

Directions to Survey Site: _____

Coordinates: _____, _____ if UTM, NAD: 83 Zone: 15

Locational Uncertainty (buffer radius): Mapped location is within _____ Meters ☐ Feet ☐ Miles ☐

ELEMENT OCCURRENCE DATA

Survey Date (yyyy-mm-dd): _____

Observer(s) (last name, first name): _____

EO [population] Data (actual and/or estimated number observed; condition: sterile or in bud/ flower/ fruit; evidence of disease, predation, or exotics; specimen/photo, etc.): _____

General Habitat Description: _____

OWNERSHIP

Managed Area/ Public Land Name(s): _____

Is the entire EO within the Managed Area boundaries? (check one): YES ☐ PARTIAL ☐

Owner Name(s): _____

Owner Comments (address, phone number, etc.): _____

Management Comments: _____

Protection Comments: _____

ADDITIONAL INFORMATION

General Comments (associated species, etc.): _____

Form completed by (last name, first name): _____ Date: _____

Thank you for helping maintain the Missouri Natural Heritage Program.

11/2020

Please return this form to: Natural Heritage Botanist, Science Branch, Missouri Dept. of Conservation,
P.O. Box 180, Jefferson City, MO 65102, 573-522-4115.

ANIMALS OF CONSERVATION CONCERN REPORTING FORM

NATURAL HERITAGE TAXA EXPERT AND DATA MANAGER

EO Report Status (check one): New ☐ Update **WITH** mapping ☐ Update **WITHOUT** mapping ☐

EO_ID: _____ EONUM: _____ Bat Biological Use: _____ Srank: _____

EO Rank: _____ Origin Subrank: _____ EO Rank Comments: _____

Reference(s): _____

Heritage Mapper/Date: _____ Mapsheet Name(s): _____

Heritage Map QC/Date: _____ Heritage Taxa Expert/Date: _____

SPECIES and LOCATION (please attach a map)

Scientific Name: _____ Common Name: _____

County Name(s): _____ Survey Site Name: _____

Directions to Survey Site: _____

Coordinates: _____, _____ if UTM, NAD: 83 Zone: 15

Locational Uncertainty (buffer radius): Mapped location is within _____ Meters ☐ Feet ☐ Miles ☐

ELEMENT OCCURRENCE DATA

Survey Date (yyyy-mm-dd): _____

Observer(s) (last name, first name): _____

EO [population] Data (number observed/trapped, condition: live/dead and age, evidence of reproduction, physical measurements, sampling methodology, person hrs, bat hibernaculum/maternity, specimen/photo, etc.):

General Habitat Description: _____

OWNERSHIP

Managed Area/ Public Land Name(s): _____

Is the entire EO within the Managed Area boundaries? (check one): YES ☐ PARTIAL ☐

Owner Name(s): _____

Owner Comments (address, phone number, etc.): _____

Management Comments: _____

Protection Comments: _____

ADDITIONAL INFORMATION

General Comments (associated species, etc.): _____

Form completed by (last name, first name): _____ Date: _____

Thank you for helping maintain the Missouri Natural Heritage Program.

11/2020

Please return this form to: Natural Heritage Coordinator, Science Branch, Missouri Dept. of Conservation,
P.O. Box 180, Jefferson City, MO 65102, 573-522-4115; or MDC Heritage Taxa Expert if known.

TERRESTRIAL NATURAL COMMUNITY REPORTING FORM

NATURAL HERITAGE COMMUNITY ECOLOGIST AND DATA MANAGER

EO Report Status (check one): New ☐ Update **WITH** mapping ☐ Update **WITHOUT** mapping ☐

EO_ID: _____ EONUM: _____ GELCODE: _____ Gelcode Conf. Level: 1 2 3

Reference(s): _____

Heritage Mapper/Date: _____ Mapsheet Name(s): _____

Heritage Map QC/Date: _____ Heritage Community Ecologist/Date: _____

NATURAL COMMUNITY TYPE and LOCATION (please attach a map)

Natural Community Name/Type: _____

County Name(s): _____ Survey Site Name: _____

Directions to Survey Site: _____

Coordinates: _____, _____ if UTM, NAD: 83 Zone: 15

Locational Uncertainty (buffer radius): Mapped location is within _____ Meters ☐ Feet ☐ Miles ☐

ELEMENT OCCURRENCE DATA

Survey Date (yyyy-mm-dd): _____

Observer(s) (last name, first name): _____

Plant species composition (5-10 dominant or characteristic plant taxa by scientific name): _____

General Habitat Description (describe substrate, topography and vegetation structure including acreage. E.g., "Glade system with three openings of 1, 5, and 10 acres." If part of a natural community complex, describe what percentage of the mapped polygon is made up of this EO type. E.g., "30% of a complex with wet-prairie and freshwater marsh."): _____

Community Significance (check one): Significant ☐ Exceptional ☐ Notable ☐

EO Rank: _____ EO Rank Comments (describe ecological integrity; i.e., resemblance to presettlement condition, lack of exotic species, presence of conservative species, floristic quality index values, etc.): _____

OWNERSHIP

Managed Area/ Public Land Name(s): _____

Is the entire EO within the Managed Area boundaries? (check one): YES ☐ PARTIAL ☐

Owner Name(s): _____

Owner Comments (address, phone number, etc.): _____

Management Comments: _____

Protection Comments: _____

ADDITIONAL INFORMATION

General Comments (associated species, etc.): _____

Form completed by (last name, first name): _____ Date: _____

Thank you for helping maintain the Missouri Natural Heritage Program.

11/2020

Please return this form to: Natural Heritage Community Ecologist, Statewide Resource Management Branch,
Missouri Dept. of Conservation, P.O. Box 180, Jefferson City, MO 65102, 573-522-4115.

AQUATIC NATURAL COMMUNITY REPORTING FORM

NATURAL HERITAGE AQUATIC COMMUNITY ECOLOGIST AND DATA MANAGER

EO Report Status (check one): New ☐ Update **WITH** mapping ☐ Update **WITHOUT** mapping ☐
EO_ID: _____ EONUM: _____ Reference(s): _____
Heritage Mapper/Date: _____ Mapsheet Name(s): _____
Heritage Map QC/Date: _____ Heritage Aquatic Comm. Ecologist/Date: _____

NATURAL COMMUNITY TYPE and LOCATION (please attach a map)

Aquatic Natural Community Name/Type: _____
County Name(s): _____ Survey Site Name: _____
Directions to Survey Site: _____
Coordinates: _____, _____ if UTM, NAD: 83 Zone: 15
Locational Uncertainty (buffer radius): Mapped location is within _____ Meters ☐ Feet ☐ Miles ☐

ELEMENT OCCURRENCE DATA

Survey Date (yyyy-mm-dd): _____
Observer(s) (last name, first name): _____
Aquatic assemblage (5-10 dominant or characteristic fish and/or aquatic invertebrate taxa by scientific name): _____
General Habitat Description (stream order, miles to headwaters, riparian corridor condition, composition of riffles and pools, and other physical factors): _____
Community Significance (check one): Significant ☐ Exceptional ☐ Notable ☐
EO Rank: _____ EO Rank Comments (describe ecological integrity; i.e., resemblance to presettlement condition, lack of exotic species, presence of conservative species, biologic integrity index values, etc.): _____

OWNERSHIP

Managed Area/ Public Land Name(s): _____
Is the entire EO within the Managed Area boundaries? (check one): YES ☐ PARTIAL ☐
Owner Name(s): _____
Owner Comments (address, phone number, etc.): _____
Management Comments: _____
Protection Comments: _____

ADDITIONAL INFORMATION

General Comments (associated species, etc.): _____
Form completed by (last name, first name): _____ Date: _____

Thank you for helping maintain the Missouri Natural Heritage Program.
Please return this form to: Natural Heritage Coordinator, Science Branch,
Missouri Dept. of Conservation, P.O. Box 180, Jefferson City, MO 65102, 573-522-4115.

11/2020