



**US Army Corps
of Engineers**

Little Rock District

Appendix C

Endangered Species Act Compliance Federal and State Lists of Threatened and Endangered Species and Species of Conservation Concern

for

**Beaver Lake
Proposed Land Acquisition Study**

February 2022



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arkansas Ecological Services Field Office
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<http://www.fws.gov/arkansas-es>

In Reply Refer To:

January 12, 2022

Consultation Code: 04ER1000-2022-SLI-0428

Event Code: 04ER1000-2022-E-01292

Project Name: Beaver Lake Proposed Land Acquisition

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies endangered, threatened, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). **This letter only provides an official species list and technical assistance; if you determine that listed species and/or designated critical habitat may be affected in any way by the proposed project, even if the effect is wholly beneficial, consultation with the Service will be necessary.**

If you determine that this project will have no effect on listed species and their habitat in any way, then you have completed Section 7 consultation with the Service and may use this letter in your project file or application.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found on our website.

Please visit our website at <http://www.fws.gov/arkansas-es/IPaC/home.html> for species-specific guidance to avoid and minimize adverse effects to federally endangered, threatened, proposed, and candidate species. Our web site also contains additional information on species life history and habitat requirements that may be useful in project planning.

If your project involves in-stream construction activities, oil and natural gas infrastructure, road construction, transmission lines, or communication towers, please review our project specific guidance at <http://www.fws.gov/arkansas-es/IPaC/ProjSpec.html>.

The karst region of Arkansas is a unique region that covers the **northern third of Arkansas** and we have specific guidance to conserve sensitive cave-obligate and bat species. **Please visit <http://www.fws.gov/arkansas-es/IPaC/Karst.html> to determine if your project occurs in the karst region and to view karst specific-guidance.** Proper implementation and maintenance of best management practices specified in these guidance documents is necessary to avoid adverse effects to federally protected species and often avoids the more lengthy formal consultation process.

If your species list includes any mussels, Northern Long-eared Bat, Indiana Bat, Yellowcheek Darter, Red-cockaded Woodpecker, or American Burying Beetle, your project may require a presence/absence and/or habitat survey prior to commencing project activities. Please check the appropriate species-specific guidance on our website to determine if your project requires a survey. We strongly recommend that you contact the appropriate staff species lead biologist (see office directory or species page) prior to conducting presence/absence surveys to ensure the appropriate level of effort and methodology.

Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Through the consultation process, we will analyze information contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at www.fws.gov/endangered/esa-library/index.html#consultations.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, **the accuracy of this species list should be verified after 90 days.** This verification can be completed formally or informally as desired. The Service recommends that verification be

completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arkansas Ecological Services Field Office

110 South Amity Suite 300

Conway, AR 72032-8975

(501) 513-4470

Project Summary

Consultation Code: 04ER1000-2022-SLI-0428

Event Code: Some(04ER1000-2022-E-01292)

Project Name: Beaver Lake Proposed Land Acquisition

Project Type: LAND - ACQUISITION

Project Description: The purpose of the Beaver Lake Proposed Land Acquisition Study is to develop and evaluate alternatives to address the frequent inundation of private property during normal lake elevations.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.255449999999996,-94.0209589692951,14z>



Counties: Arkansas

Endangered Species Act Species

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened
Ozark Big-eared Bat <i>Corynorhinus (=Plecotus) townsendii ingens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7245	Endangered

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot <i>Calidris canutus rufa</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

Fishes

NAME	STATUS
Ozark Cavefish <i>Amblyopsis rosae</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6490	Threatened

Clams

NAME	STATUS
Neosho Mucket <i>Lampsilis rafinesqueana</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3788	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5165	Threatened
Snuffbox Mussel <i>Epioblasma triquetra</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4135	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Missouri Bladderpod <i>Physaria filiformis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5361	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

11/2/2021

Arkansas Natural Heritage Commission
Division of Arkansas Heritage
Department of Parks, Heritage and Tourism
Elements of Special Concern within Five-mile Radius
Beaver Lake, Arkansas

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Animals-Invertebrates					
<i>Amblyscirtes belli</i>	Bell's Roadside-Skipper	-	INV	G3G4	S3S4
<i>Autochton cellus</i>	Golden Banded-Skipper	-	INV	G4	S2S3
✓★ <i>Caecidotea macropropoda</i>	bat cave isopod	-	INV	G2G3	S2
✓★ <i>Caecidotea steevesi</i>	an isopod	-	INV	G3G4	S1
✓★ <i>Caecidotea stiladactyla</i>	an isopod	-	INV	G3G4	S3
<i>Chlosyne gorgone</i>	Gorgone Checkerspot	-	INV	G5	S3
✓ <i>Crosbyella roeweri</i>	a cave obligate harvestman	-	INV	G1G2	S1
<i>Dendrocoelopsis americana</i>	a cave obligate planarian	-	INV	G2G3	S1
✓★ <i>Faxonius longidigitus</i>	Longpincered Crayfish	-	INV	G3G4	S3S4
<i>Faxonius meeki brevis</i>	Meek's Short Pointed Crayfish	-	INV	G4T3	S3
✓★ <i>Faxonius nana</i>	Midget Crayfish	-	INV	G3	S3
<i>Faxonius williamsi</i>	Williams Crayfish	-	INV	G3	S3
<i>Fusconaia ozarkensis</i>	Ozark Pigtoe	-	INV	G3G4	S3
✓★ <i>Gastrocopta rogersensis</i>	a land snail	-	INV	G3G4	S2
✓★ <i>Heterosternuta sulphuria</i>	Sulphur Springs diving beetle	-	INV	G1?	S1?
✓ <i>Ligidium elrodii</i>	an isopod	-	INV	G4G5	S2
<i>Pleurobema sintoxia</i>	Round Pigtoe	-	INV	G4G5	S3
<i>Polygonia progne</i>	Gray Comma	-	INV	G5	S2S3
<i>Ptychobranchus occidentalis</i>	Ouachita Kidneyshell	-	INV	G3G4	S3
✓★ <i>Stygobromus ozarkensis</i>	Ozark cave amphipod	-	INV	G4	S2
<i>Theliderma cylindrica</i>	Rabbitsfoot	LT	SE	G3G4	S3
<i>Toxolasma lividum</i>	Purple Lilliput	-	INV	G3	S3
<i>Trigenotyia parca</i>	a cave obligate millipede	-	INV	G1G2	S1
<i>Venustaconcha pleasii</i>	Bleedingtooth Mussel	-	INV	G3G4	S3
<i>Villosa iris</i>	Rainbow	-	INV	G5	S3
Animals-Vertebrates					
✓★ <i>Ambystoma annulatum</i>	Ringed Salamander	-	INV	G4	S3
✓★ <i>Carpionodes velifer</i>	highfin carpsucker	-	INV	G4G5	S3
<i>Centronyx henslowii</i>	Henslow's Sparrow	-	INV	G4	S1B,S2N
✓★ <i>Crotaphytus collaris</i>	Eastern Collared Lizard	-	INV	G5	S2
✓★ <i>Crystallaria asprella</i>	crystal darter	-	INV	G3	S2
✓★ <i>Cyprinella camura</i>	blunface shiner	-	INV	G5	SH
✓★ <i>Etheostoma autumnale</i>	autumn darter	-	INV	G4	S3
✓★ <i>Etheostoma mihileze</i>	sunburst darter	-	INV	G4	S3
✓★ <i>Etheostoma teddyroosevelt</i>	highland darter	-	INV	GNR	S3
✓★ <i>Eurycea spelaea sp. A</i>	Grotto Salamander, Eastern Clade	-	INV	G4TNR	S3
✓★ <i>Haliaeetus leucocephalus</i>	Bald Eagle	-	INV	G5	S3B,S4N
<i>Lithobates areolatus</i>	Crawfish Frog	-	INV	G4	S2

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
✓★ <i>Lithobates sylvaticus</i>	Wood Frog	-	INV	G5	S3
✓★ <i>Myotis grisescens</i>	gray bat	LE	SE	G4	S2S3
<i>Myotis lucifugus</i>	little brown bat	-	SE	G3	S1
✓★ <i>Myotis septentrionalis</i>	northern long-eared bat	LT	SE	G1G2	S1S2
✓★ <i>Myotis sodalis</i>	Indiana bat	LE	SE	G2	S1
<i>Nocomis asper</i>	redspot chub	-	INV	G4	S3
✓★ <i>Notropis ozarcanus</i>	Ozark shiner	-	INV	G3	S3
✓★ <i>Percina evides</i>	gilt darter	-	INV	G4	S3
✓★ <i>Percina nasuta</i>	longnose darter	-	INV	G3	S3
✓★ <i>Plestiodon obsoletus</i>	Great Plains Skink	-	INV	G5	S1
✓★ <i>Polyodon spathula</i>	paddlefish	-	INV	G4	S3
✓ <i>Setophaga cerulea</i>	Cerulean Warbler	-	INV	G4	S3B
✓ <i>Sorex longirostris</i>	southeastern shrew	-	INV	G5	S2
<i>Terrapene ornata</i>	Ornate Box Turtle	-	INV	G5	S2
<i>Thryomanes bewickii</i>	Bewick's Wren	-	INV	G5	S1B,S1S2N
✓★ <i>Troglichthys rosae</i>	Ozark cavefish	LT	SE	G3	S1

Plants-Vascular

✓★ <i>Acer saccharum var. nigrum</i>	black maple	-	INV	G5T5	S1S2
✓ <i>Allium canadense var. lavendulare</i>	tall pink glade onion	-	INV	G5TNR	S2
<i>Allium cernuum</i>	nodding wild onion	-	INV	G5	SH
✓★ <i>Amorpha canescens</i>	lead-plant	-	INV	G5	S1
✓ <i>Androsace occidentalis</i>	rock-jasmine	-	INV	G5	S1
✓★ <i>Arabis hirsuta var. adpressipilis</i>	hairy rockcress	-	INV	G5T4Q	S1?
✓★ <i>Argyrochosma dealbata</i>	powdery cloak fern	-	INV	G4G5	S2
✓ <i>Artemisia ludoviciana ssp. mexicana</i>	white sagebrush	-	INV	G5T5?	S1S2
✓ <i>Asarum canadense var. acuminatum</i>	taper-tip wild ginger	-	INV	G5TNR	S2
<i>Asclepias incarnata ssp. incarnata</i>	swamp milkweed	-	INV	G5T5	S2
✓ <i>Asclepias stenophylla</i>	narrow-leaf milkweed	-	INV	G4G5	S1
<i>Asplenium pinnatifidum</i>	lobed spleenwort	-	INV	G4	S3
<i>Asplenium x kentuckiense</i>	Kentucky spleenwort	-	INV	GNA	SH
✓★ <i>Brickellia grandiflora</i>	tassel-flower	-	INV	G5	S2
✓ <i>Bromus nottowayanus</i>	satin brome	-	INV	G4G5	S2
✓ <i>Callirhoe bushii</i>	Bush's poppy-mallow	-	INV	G3	S3
<i>Calopogon oklahomensis</i>	Oklahoma grass-pink	-	INV	G3	S2
<i>Carex aggregata</i>	cluster sedge	-	INV	G5	S1
<i>Carex buxbaumii</i>	brown bog sedge	-	INV	G5	S1
✓ <i>Carex careyana</i>	Carey's sedge	-	INV	G4G5	S3
<i>Carex conjuncta</i>	soft fox sedge	-	INV	G4G5	S1
<i>Carex conoidea</i>	open-field sedge	-	INV	G5	S1
<i>Carex emoryi</i>	Emory's sedge	-	INV	G5	S1
✓ <i>Carex gracilescens</i>	slender wood sedge	-	INV	G5?	S2
✓ <i>Carex hirtifolia</i>	hairy sedge	-	INV	G5	S3
✓ <i>Carex hitchcockiana</i>	Hitchcock's sedge	-	INV	G5	S1S2
<i>Carex opaca</i>	opaque prairie sedge	-	SE	G4	S2S3
<i>Carex prasina</i>	drooping sedge	-	INV	G4	SH

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
✓ <i>Carex scoparia</i> var. <i>scoparia</i>	pointed broom sedge	-	INV	G5T5	S1S2
✓ <i>Carex sparganioides</i>	bur-reed sedge	-	INV	G5	S3
<i>Carex timida</i>	timid sedge	-	INV	G2G4	S2S3
✓ <i>Caulophyllum thalictroides</i>	blue cohosh	-	INV	G5	S2
✓ <i>Collinsia verna</i>	blue-eyed Mary	-	INV	G5	S1
<i>Crataegus palmeri</i>	Palmer's hawthorn	-	INV	GNR	SNR
<i>Crataegus phaenopyrum</i>	Washington hawthorn	-	INV	G4?	S1
✓★ <i>Cuscuta glomerata</i>	rope dodder	-	INV	G5	S1
<i>Cypripedium kentuckiense</i>	Kentucky lady's-slipper	-	INV	G3	S2
✓★ <i>Delphinium treleasei</i>	Trelease's larkspur	-	INV	G3	S3
<i>Diaperia prolifera</i> var. <i>prolifera</i>	big-head rabbit-tobacco	-	INV	G5TNR	S1S3
<i>Dichanthelium roanokense</i>	Roanoke rosette grass	-	INV	G4?	S1
✓ <i>Dirca decipiens</i>	Ozark leatherwood	-	INV	G1G2	S1?
<i>Echinacea paradoxa</i> var. <i>paradoxa</i>	yellow coneflower	-	ST	G3T3	S2
✓ <i>Eleocharis wolfii</i>	Wolf's spike-rush	-	INV	G3G5	S3
✓★ <i>Elymus churchii</i>	Church's wild rye	-	INV	G2G3	S2?
✓★ <i>Elymus glaucus</i> ssp. <i>mackenzii</i>	Mackenzie's blue wild rye	-	INV	G5TNR	S1
✓ <i>Elymus riparius</i>	river-bank wild rye	-	INV	G5	S1S2
<i>Erysimum capitatum</i> var. <i>capitatum</i>	western wallflower	-	INV	G5T5	S2
✓ <i>Erythronium mesochoreum</i>	prairie trout-lily	-	INV	G4G5	S1S2
<i>Euphorbia missurica</i>	Missouri spurge	-	INV	G5	S2
✓ <i>Gentiana alba</i>	pale gentian	-	INV	G4	S1
✓ <i>Gentiana puberulenta</i>	downy gentian	-	INV	G4G5	S2
✓ <i>Gillenia trifoliata</i>	Bowman's-root	-	INV	G4G5	S1
✓ <i>Glandularia bipinnatifida</i> var. <i>bipinnatifida</i>	Dakota vervain	-	INV	G5T5	S2
✓★ <i>Helianthus occidentalis</i> ssp. <i>occidentalis</i>	naked-stem sunflower	-	INV	G5T5	S1S2
✓★ <i>Heuchera villosa</i> var. <i>arkansana</i>	Arkansas alumroot	-	INV	G5T3Q	S3
✓ <i>Humulus lupulus</i> var. <i>pubescens</i>	wild hop	-	INV	G5T4?	S1S2
<i>Juglans cinerea</i>	butternut	-	INV	G3	S3
<i>Koeleria macrantha</i>	prairie June grass	-	INV	G5	S2
✓★ <i>Liatris punctata</i> var. <i>mucronata</i>	dotted gayfeather	-	INV	G5T5	S2
<i>Liatris punctata</i> var. <i>punctata</i>	bottle-brush gayfeather	-	INV	G5T5	SH
<i>Liatris scariosa</i> var. <i>nieuwlandii</i>	northern blazing-star	-	INV	G5?T3T5	S2?
✓ <i>Limnodea arkansana</i>	Ozark grass	-	INV	G4?	S1
✓ <i>Malvastrum hispidum</i>	yellow false mallow	-	INV	G3G5	S2
✓ <i>Mentzelia oligosperma</i>	stick-leaf	-	INV	G4	S1
✓★ <i>Mimulus floribundus</i>	yellow monkey-flower	-	INV	G5	S2S3
<i>Minuartia michauxii</i>	rock sandwort	-	INV	G5	S1
✓ <i>Muhlenbergia bushii</i>	nodding muhly	-	INV	G5	S2
<i>Muhlenbergia glabrifloris</i>	inland muhly	-	INV	G4?	S1
✓★ <i>Nemastylis nuttallii</i>	Nuttall's pleat-leaf	-	INV	G4	S2
<i>Opuntia engelmannii</i> var. <i>lindheimeri</i>	Texas prickly-pear	-	INV	G5T4?	S1
✓ <i>Osmorhiza claytonii</i>	hairy sweet-cicely	-	INV	G5	S1S3
✓ <i>Pediomelum esculentum</i>	large Indian-breadroot	-	INV	G5	S2
<i>Penstemon cobaea</i>	showy beardtongue	-	INV	G4	S3

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
✓★ <i>Perideridia americana</i>	eastern yampah	-	INV	G4	S2
✓ <i>Phlox amplifolia</i>	broad-leaf phlox	-	INV	G3G5	S1
✓★ <i>Phlox bifida</i>	sand phlox	-	INV	G5?	S3
<i>Phyllanthus polygonoides</i>	knotweed leaf-flower	-	INV	G5	S1
✓★ <i>Physalis missouriensis</i>	Missouri ground-cherry	-	INV	G5?	S1
✓ <i>Physalis pumila</i>	prairie ground-cherry	-	INV	G5	S1
✓★ <i>Physaria filiformis</i>	Missouri bladderpod	LT	INV	G3	S1
<i>Polygala incarnata</i>	pink milkwort	-	INV	G5	S1S2
✓ <i>Prenanthes alba</i>	white rattlesnake-root	-	INV	G5	S1S2
✓ <i>Prenanthes aspera</i>	prairie rattlesnake-root	-	INV	G4?	S2S3
<i>Scleria muehlenbergii</i>	Muhlenberg's nut-rush	-	INV	G5	S1S2
✓ <i>Silene ovata</i>	ovate-leaf catchfly	-	ST	G3	S3
✓ <i>Silene regia</i>	royal catchfly	-	ST	G3	S2
✓ <i>Silphium integrifolium</i> var. <i>laeve</i>	rosinweed	-	INV	G5T4?	S1
✓ <i>Solidago gattingeri</i>	Gattinger's goldenrod	-	INV	G3?Q	S1
<i>Solidago ptarmicoides</i>	white flat-top goldenrod	-	INV	G5	S1S2
✓ <i>Spiranthes magnicamporum</i>	Great Plains ladies'-tresses	-	INV	G3G4	S1S2
✓ <i>Stenanthium gramineum</i>	featherbells	-	INV	G4G5	S3
<i>Symphotrichum pilosum</i> var. <i>pringlei</i>	Pringle's aster	-	INV	G5T5	S1
✓ <i>Symphotrichum sericeum</i>	silvery aster	-	INV	G5	S2
✓ <i>Tradescantia ozarkana</i>	Ozark spiderwort	-	INV	G3	S3
✓ <i>Trichophorum planifolium</i>	bashful bulrush	-	INV	G4G5	S1
<i>Tridens muticus</i> var. <i>elongatus</i>	slim tridens	-	INV	G5T4?	S1
✓ <i>Trillium ozarkanum</i>	Ozark trillium	-	INV	G3	S3
✓★ <i>Ulmus thomasi</i>	rock elm	-	INV	G5	S2
<i>Urtica gracilis</i>	slender nettle	-	INV	G5	S1
<i>Utricularia subulata</i>	zigzag bladderwort	-	INV	G5	S2
✓★ <i>Valerianella ozarkana</i>	Ozark cornsalad	-	INV	G3	S3
✓★ <i>Veratrum woodii</i>	Wood's false hellebore	-	INV	G5	S3
✓ <i>Vitis rupestris</i>	rock grape	-	INV	G3	S1

Special Elements-Natural Communities

Central Interior Highlands Calcareous Glade and Barrens	-	INV	GNR	S3
Southwest Ozark Prairie and Woodland	-	INV	GNR	S1

Special Elements-Other

✓★ Colonial nesting site, water birds	-	INV	GNR	SNR
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★ - These elements of special concern have been recorded on Corps managed land at Beaver Lake

✓ - These elements of special concern have been recorded within a one-mile radius of Beaver Lake

LEGEND

STATUS CODES

FEDERAL STATUS CODES

- C** = Candidate species. The U.S. Fish and Wildlife Service has enough scientific information to warrant proposing this species for listing as endangered or threatened under the Endangered Species Act.
- LE** = Listed Endangered; the U.S. Fish and Wildlife Service has listed this species as endangered under the Endangered Species Act.
- LT** = Listed Threatened; the U.S. Fish and Wildlife Service has listed this species as threatened under the Endangered Species Act.
- PD** = Proposed for Delisting; the U.S. Fish and Wildlife Service has proposed that this species be removed from the list of Endangered or Threatened Species.
- PE** = Proposed Endangered; the U.S. Fish and Wildlife Service has proposed this species for listing as endangered.
- PT** = Proposed Threatened; the U.S. Fish and Wildlife Service has proposed this species for listing as threatened.
- T/SA** = Threatened (or Endangered) because of similarity of appearance.
E/SA

STATE STATUS CODES

- INV** = Inventory Element - The Arkansas Natural Heritage Commission is currently conducting active inventory work on these elements. Available data suggests these elements are of conservation concern. These elements may include outstanding examples of Natural Communities or animal assemblages as well as plants and animals, which, according to current information, may be rare, peripheral, or of an undetermined status in the state. The ANHC is gathering detailed location information on these elements.
- WAT** = Watch List Species; The Arkansas Natural Heritage Commission is not conducting active inventory work on these species, however, available information suggests they may be of conservation concern. The ANHC is gathering general information on status and trends of these elements. An “*” indicates the status of the species will be changed to “INV” if the species is verified as occurring in the state (this typically means the agency has received a verified breeding record for the species).
- MON** = Monitored Species; The Arkansas Natural Heritage Commission is currently monitoring information on these species. These species do not have conservation concerns at present. They may be new species to the state, or species on which additional information is needed. The ANHC is gathering detailed location information on these elements
- SE** = State Endangered; this term is applied differently for plants and animals.
- Animals** – These species are afforded protection under Arkansas Game and Fish Commission (AGFC) Regulation. The AGFC states that it is unlawful to import, transport, sell, purchase, hunt, harass or possess any threatened or endangered species of wildlife or parts. The AGFC lists as endangered any wildlife species or subspecies endangered or threatened with extinction, listed or proposed as a candidate for listing by the U.S. Fish and Wildlife Service or any native species or subspecies listed as endangered by the Commission.
- Plants** – These species have been recognized by the Arkansas Natural Heritage Commission as being in danger of being extirpated from the state. This is an administrative designation with no regulatory authority.
- ST** = State Threatened; These plant species have been recognized by the Arkansas Natural Heritage Commission as being likely to become endangered in Arkansas in the foreseeable future, based on current inventory information. This is an administrative designation with no regulatory authority.

DEFINITION OF RANKS

Global Ranks

- G1** = Critically imperiled globally. At a very high risk of extinction due to extreme rarity, very steep declines, very severe threats or other factors.
- G2** = Imperiled globally. At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats or other factors.
- G3** = Vulnerable globally. At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- G4** = Apparently secure globally. At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

- G5** = Secure globally. At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
- GH** = Of historical occurrence, possibly extinct globally. Known from only historical occurrences but still some hope of rediscovery.
- GU** = Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- GX** = Presumed extinct globally. Not located despite intensive searches and virtually no likelihood of rediscovery.
- GNR** = Unranked. The global rank not yet assessed.
- GNA** = Not Applicable. A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities.
- T-RANKS**= Intraspecific Taxon (trinomial) - The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles as those for GRANKS.

State Ranks

- S1** = Critically imperiled in the state. At very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
- S2** = Imperiled in the state. At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- S3** = Vulnerable in the state. At moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- S4** = Apparently secure in the state. At a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
- S5** = Secure in the state. At very low or no risk of extirpation in the jurisdiction due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.
- SH** = Of historical occurrence in the state. Known from only historical records but still some hope of rediscovery. There is evidence that the species or ecosystem may no longer be present in the jurisdiction, 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 and/or some evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction.
- SU** = Unrankable in the state. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- SX** = Presumed extirpated from the state. Species or ecosystem not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
- SNR** = Unranked. The state rank not yet assessed.
- SNA** = Not Applicable. A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities.

General Ranking Notes

- Q** = A "Q" in the global rank indicates the element's taxonomic classification as a species is a matter of conjecture among scientists.
- RANGES**= Ranges are used to indicate a range of uncertainty about the status of the element.
- ?** = A question mark is used to denote an inexact numeric rank.
- B** = Refers to the breeding population of a species in the state.
- N** = Refers to the non-breeding population of a species in the state.