

ILLINOIS ENDANGERED SPECIES PROTECTION BOARD

MINUTES OF 204th MEETING, November 15, 2024

Illinois Department of Natural Resources, Director's Boardroom

One Natural Resources Way, Springfield, IL 62702

and remotely via WebEx

For approval at the 205th meeting, February 21, 2025

BOARD MEMBERS PRESENT IN-PERSON: Dr. Angelo Capparella, Ms. Samantha Chavez, Dr. Michael Dreslik, Dr. Joyce Hofmann, Mr. Randy Schietzelt, Dr. Tih-Fen Ting, Dr. Philip Willink, and Mr. Chris Young.

BOARD MEMBERS REMOTE: Dr. Janice Coons.

BOARD MEMBERS ABSENT: Dr. Jeremie Fant.

OTHERS PRESENT: Heather Osborn (IDNR Division of Natural Heritage ITA Coordinator), Brian Metzke (IDNR Division of Natural Heritage, Aquatic Ecologist), Ann Marie Holtrop (IDNR Division of Natural Heritage), Natalia Maass (IDNR Division of Natural Heritage Database Program), Michelle Bloomquist (IDNR Statewide Recovery Specialist), Leon Hinz (IDNR Division of Natural Heritage), Kelly Neal (INPC), Trent Thomas (IDNR Fisheries), Mark Alessi (IDNR), Roger Jansen (IDNR Division of Natural Heritage), Stan Taggart (IDNR), Andrew Adams (CNI), Angella Moorehouse (INPC), Chip O'Leary (IDNR), Kaleb Baker (INPC), Frank Sladek (INPC), Travis Wood (IDNR Coastal Management Program), Todd Strole (IDNR), Josh Nickelson (IDNR), Tom Anton (Field Museum), and Mike Redmer (USFWS).

1. Call to Order, Roll Call of Board Members, and Introduction of Guests

Chair Hofmann called the meeting to order at 10:00 A.M. and conducted the roll call. Seven voting Board members were physically in attendance, constituting a quorum. Dr. Hofmann welcomed the visitors and asked them to introduce themselves.

2. Adoption of Agenda

There was a typo in the posted agenda. Under item #9, 'Viola' should be 'Vicia'. Mr. Schietzelt moved that the agenda be adopted as corrected. The motion was seconded by Ms. Chavez. The motion passed unanimously.

3. Approval of Minutes from the 203rd Meeting on August 23, 2024

Draft minutes of the 203rd meeting had been distributed to Board members prior to the meeting by email. Dr. Capparella moved that the minutes of the 203rd meeting be approved as presented. Mr. Schietzelt seconded the motion and it passed unanimously. The minutes will be posted on the website.

4. Report from the Illinois Department of Natural Resources (IDNR)

The Department's report had been distributed to the Board via email. Ms. Holtrop commented briefly on the highlights.

IDNR was involved in many surveys and assessments. For example, they begun using a drone to take high-resolution aerial photographs of natural communities. The drone data can be used to create digital surface models to assess changes in vegetation height. All this information combined provides IDNR sufficient data to create precise and accurate natural community type boundaries.

IDNR Natural Heritage staff coauthored a peer-reviewed article in *Conservation Genetics* that evaluates the regional genetic composition of Shawnee Hills cavefish (*Forbesichthys papilliferus*), an Illinois state-threatened species. Shawnee Hills cavefish is difficult to assess as this troglobitic species does not recruit well to commonly employed survey techniques, and so genetic composition may be used as surrogate for traditional conservation status measures. Estimated effective population size in Illinois is approximately 10,000 individuals.

IDNR surveyed for state-threatened regal fritillary butterfly at two savanna / sand prairie localities. This was part of a larger effort to survey for the butterfly through the county that day.

IDNR worked with a contractor to survey for the Illinois cave amphipod (*Gammarus acherondytes*). This annual survey allows for monitoring of the abundance of this endemic crustacean.

IDNR surveyed for state-endangered prairie rose gentian (*Sabatia campestris*). Around a dozen plants were observed in the historic location, though the species had not been observed in a few years. Formerly listed ear-leaved foxglove (*Tamanthera auriculata*) was also observed.

IDNR met with ornate box turtle researchers in north-central Illinois to compare notes on species distribution and plan monitoring activities to learn how to better manage their habitat and reduce risks for their population.

Ghost sap, a rare parasitic plant, was located in McHenry County. This expands the known range of the plant. Other species located include flat-leaved bladderwort, lesser bladderwort, and white-beaked sedge.

The next meeting of the Natural Areas Evaluation Committee will be November 19, 2024.

Nearly \$1,000,000 of Natural Areas Stewardship Grants will be directed to conservation land trust partners to support stewardship of natural communities and listed species habitat located on sites enrolled in Illinois Nature Preserves Commission programs.

At the January 2025 INPC meeting, IDNR will be seeking approval to register 40 acres as an addition to Cedar-Draper's Bluff land and Water Reserve.

During the reporting period, IDNR acquired 2,029 acres of land valued at over \$8,000,000.

During the reporting period, there were 4,017 projects submitted to the EcoCAT tool, of which 1,090 were submitted for formal consultation. After going through the review process, an Incidental Take Authorization was recommended on two projects involving five species.

IDNR heavy equipment staff with support from Natural Heritage staff completed the first round of hydraulic dredging in Buttonland Swamp of the Cache River Land and Water Reserve.

IDNR partnered with researchers from the National Great Rivers Research and Education Center to assess results of decurrent false aster habitat management.

IDNR hosted the 44th Annual U.S. Fish and Wildlife Service Region 3 Endangered Species / Wildlife Action Plan / Wildlife Diversity Coordinator's meeting. A total of 55 in-person and 7 virtual attendees discussed new federal listing proposals and timelines, recovery implementation strategies, conservation benefit agreements, species status assessments, and prioritizing conservation actions for regional species of greatest conservation need.

IDNR, INPC, and U.S. Forestry Service staff toured a recent burn unit to discuss management and update records of listed species, some of which exhibited positive response to the fire, which helped shape future management goals for both this site and the adjoining land.

A total of 16 State Wildlife Grant Projects were active in support of the Illinois Wildlife Action Plan during this reporting period. Collectively these projects are expected to provide information or habitat management associated with 58 state-listed wildlife species, including eastern massasauga, migrating grassland birds, freshwater mussels, and bat populations.

Efforts to review, revise, and update the Illinois State Wildlife Action Plan are underway.

Dr. Capparella looked at the Environmental Review section of the report and noted that 21 parties responded that they are proceeding with their project as is. He asked if that meant they are rejecting IDNR recommendations. Ms. Holtrop replied that was the case. Dr. Capparella wondered if there was any recourse in situations like this. Ms. Holtrop replied that would depend on whether any "take" occurred. Dr. Capparella continued, asking if in the case of federally listed species, federal agencies conduct a review. Ms. Holtrop stated that it depends upon the circumstances, as there is a different avenue to determine if consultation is warranted.

Ms. Chavez asked if Illinois Wildlife Action Plan information is available online. Ms. Holtrop answered that the process had just started, so probably not yet. The IDNR is required to do so, so it will happen.

Ms. Chavez asked if there were any recent updates on the project at the Lockport State Police site. Ms. Holtrop replied that there was no recent information.

5. Report from the Illinois Nature Preserves Commission (INPC)

An INPC report was distributed to the Board prior to the meeting via email. Mr. Stole highlighted that INPC meets three times a year, and ESPB meets four times a year, so INPC does not have much to report at this time. Their most recent meeting was September 10, 2024 at Crab Orchard National Wildlife Refuge Visitor's Center in Marion, IL. Legal protection was completed by the Commission for six tracts of land totaling 659 acres. Four of these tracts are privately owned, one is owned by IDNR, and one owned by a not-for-profit organization.

The 2025 meeting dates are January 28, May 13, and September 9.

Earlier this year, there was a ribbon cutting ceremony at Illinois Beach State Park for the \$73 million breakwater project. Mr. Stole stated that by all accounts, it is a resounding success.

INPC staff attended a celebration on October 25 at the newly acquired Okan property in Hopkins Park, Pembroke Township in the Kankakee Sand Area Section of the Grand Prairie Natural division. The Community Development Corporation of Pembroke-Hopkins Park purchased 30

acres of this high-quality black oak savanna with assistance from other organizations. This is an ecologically, culturally, and historically significant area.

Interviews for a new INPC Executive Director have been completed and the paperwork is now being reviewed.

6. Report from the Chair of the Illinois Endangered Species Protection Board (ESPB)

Chair Hofmann provided a written report on her activities since the last meeting; the report is attached to these minutes. She performed the usual administrative tasks of dealing with email, reviewing draft minutes from the previous meeting, distributing draft ITAs and Conservation Plans to Board members, and distributing materials for the current meeting.

Chair Hofmann mentioned that the deadline for submitting petitions has passed. She is now looking ahead and preparing for the next steps (e.g., public hearing, submitting the final list) The petition cover sheets will be publicly available this time.

7. Compliance with Mandatory Annual Training for Board Members

All board members have completed all the mandatory annual trainings.

8. Preliminary Approval of a Petition to add Littlehead Nutrush (*Scleria oligantha*) to the Illinois List of Endangered and Threatened Species as Endangered

There was no formal presentation on this species. Chair Hofmann mentioned that Dr. Fant informed her that he agreed with the conclusions in the petition. Ms. Chavez was present at the Plant Endangered Species Technical Advisory Committee (ESTAC) meeting when this species was discussed, and that the ESTAC approved adding littlehead nutrush to the list as endangered.

Ms. Chavez motioned that Littlehead Nutrush *Scleria oligantha* be added to the Illinois List of Endangered and Threatened Species as endangered. The motion was seconded by Mr. Schietzelt. The motion passed unanimously.

9. Preliminary Approval of a Petition to add Wood Vetch (*Vicia caroliniana*) to the Illinois List of Endangered and Threatened Species as Endangered

There was no formal presentation on this species. Chair Hofmann mentioned that Dr. Fant also told her he agreed with the conclusions in the petition.

Ms. Chavez motioned that wood vetch *Vicia caroliniana* be added to the Illinois List of Endangered and Threatened Species as endangered. The motion was seconded by Dr. Capparella. The motion passed unanimously.

10. Preliminary Approval of a Petition to add Trout-Perch (*Percopsis omiscomaycus*) to the Illinois List of Endangered and Threatened Species as Threatened

Mr. Metzke gave a brief presentation on this species, mentioning that the Fish ESTAC for the 2020 list revision had voted in favor of this change, but a petition was never submitted. Mr. Metzke was asked to submit the petition for the current list revision.

Trout-perch's subnational conservation rank is S1, critically imperiled. It currently is an Illinois Species of Greatest Conservation Need.

Trout-perch is a benthic species, generally found in slow moving rivers or large lakes with sandy bottoms. It spawns over clean gravel. It has a generally northern distribution across Canada and the Great Lakes. Illinois is along the southern edge of its range.

The species has experienced an approximately 96% range decline in Illinois. It has not been found in Lake Michigan for many years. It now appears to be restricted to the central / upper Illinois River. There is also an apparent decline in abundance, but this is more difficult to discern because sampling for the species can be problematic.

Apparent threats include agriculture, point source pollution, channel modification, dams, invasive species (the round goby is suspected to be a major threat), and climate change.

Dr. Capparella asked why the recommendation was to list the species as threatened and not endangered. Mr. Metzke explained that it still has a relatively wide range. Because it is difficult to sample, we do not know its abundance for sure. There is also some uncertainty regarding population trends, as it could be actively declining or possibly stable but rare.

Mr. Schietzelt asked if trout-perch are found on state protected lands. Mr. Metzke replied that was not really the case. Some are near Starved Rock State Park, but that may be a coincidence.

Mr. Schietzelt motioned that trout-perch *Percopsis omiscomaycus* be added to the Illinois List of Endangered and Threatened Species as threatened. The motion was seconded by Dr. Capparella. The motion passed with six votes and one abstention (Dr. Willink).

11. Preliminary Approval of a Petition to Remove Southern Watersnake (*Nerodia fasciata*) from the Illinois List of Endangered and Threatened Species

Mr. Anton gave a brief presentation on this species, mentioning that many hours have been spent looking for this species. There is no evidence of currently reproducing populations in Illinois. The last unquestioned record in the state was in 1956. This is a highly visible species that has many young. There is currently a project looking at watersnake genetics.

There was some discussion about whether the southern watersnake was extirpated or was / is a peripheral species (defined as a species at the edge of its range, but not reproducing).

Dr. Dreslik wondered about the genetics of the most recent southern watersnake record. Mr. Anton replied they will try to get some data, but the specimen was badly damaged (salvaged road kill). They were able to get some data from older Field Museum specimens. Mr. Anton went on to clarify there are no records from Kentucky near the most recent Illinois record.

Dr. Dreslik suspects that there probably was a breeding population at Horseshoe Lake. Mr. Anton agreed that that was probably the case at one time, but the area is subject to catastrophic flooding. There also used to be Mississippi green watersnakes there as well, but they are now gone, even though they are still present farther inland.

Dr. Dreslik mentioned that the Herp ESTAC has been discussing this species for some time, then finally made a decision. He clarified that the species should be considered “extirpated for management purposes” instead of as a peripheral species (as indicated in the petition).

Dr. Dreslik motioned that southern watersnake *Nerodia fasciata* be removed from the Illinois List of Endangered and Threatened Species. Dr. Ting seconded the motion. The motion passed unanimously.

12. Preliminary Approval of a Petition to Remove Coachwhip (*Coluber flagellum*) from the Illinois List of Endangered and Threatened Species

Mr. Anton gave a brief presentation on this species, mentioning that many hours have also been spent looking for this species. There is no evidence of currently reproducing populations in the state. The last unquestioned record in Illinois was 1974.

Dr. Dreslik added that there was considerable discussion about this species by the Herp ESTAC. There is a lot of management in the area from which it has been reported from, but no sightings. The consensus is that it is a peripheral species (defined as a species at the edge of its range, but not reproducing).

Dr. Dreslik motioned that coachwhip *Coluber flagellum* be removed from the Illinois List of Endangered and Threatened Species. Ms. Chavez seconded the motion. The motion passed unanimously.

13. Preliminary Approval of Scientific and Common Name Changes

Chair Hofmann distributed a draft of the Preliminary List of Proposed Changes to the Illinois List of Endangered and Threatened Species. There are no new name changes at this time. Some typos were noticed and will be corrected.

14. Comments from the IDNR on Proposed Changed to the Illinois List of Endangered and Threatened Species

Ms. Holtrop started by mentioning the recent Memorandum of Understanding, highlighting how IDNR and ESPB work together. IDNR does not have a process for talking with the ESPB as a department, and is trying to find the best way forward to comment on proposed List changes. Along these lines, IDNR staff were given an opportunity to provide feedback on petitions.

The staff's feedback can be summarized by the following questions:

Is a species a Species of the State (i.e., resident or not)?

How is the distinction made between endangered and threatened status?

Does a species meet the criteria for listing?

Is more information available?

Some specific issues were raised by the staff, including the following.

There is variation in the amount of data available for different species. Data on invertebrates are highly variable.

Data are clustered where people are conducting searches. Data are needed throughout the species range in Illinois.

Some species are hard to identify. How should they be tracked in the Illinois Natural Heritage Database and handled by the Department?

Species can be listed if they are reproducing in Illinois or significantly using Illinois. What is the source of information? Is a species considered a resident if there are no historic records and no statewide surveys?

Sometimes a 10-15 year timeframe is used for both listing and delisting decisions. Are the decisions consistent and is the timeframe sufficient?

Should fire for management purposes be considered a threat or a tool?

Some species that were specifically mentioned were Ottoe skipper (proposed for delisting), cobweb skipper (proposed for delisting), Karner blue butterfly (proposed for delisting, but there is some confusion about its federal status), streamline chub (proposed for addition, but there is a question of whether it is a resident), smooth greensnake (proposed for addition, but data are regionally focused around Chicago), and 15 terrestrial invertebrates (there are questions about negative data).

There was considerable discussion on these topics, but no consensus. Without knowing details of the feedback beforehand, it was sometimes challenging for Board members to remember the specifics of the discussions at previous meetings.

There was a consensus that IDNR would submit comments at the upcoming public hearing, and they would be discussed at the next Board meeting.

At this point in the meeting there was a 30-minute lunch break.

15. Vote on the Preliminary List of Proposed Changes to the Illinois List of Endangered and Threatened Species

The List in question has the typos corrected, as alluded to under Agenda Item #13.

Dr. Hofmann mentioned that there is some confusion surrounding the federal status of the tricolored bat as to whether U.S. Fish and Wildlife Service will list it or not. A decision was anticipated in 2024, but there has been no news yet. No petition was submitted to the ESPB for listing the species in Illinois. It is possible this species may be brought up during the public hearing, and then the situation would be discussed at the next Board Meeting.

Ms. Chavez mentioned that the state endangered salamander mussel has been found alive in Illinois for the first time in many years. Dr. Dreslik continued by saying that part of the reason for listing the state threatened mudpuppy was because it is host for the glochidia larvae of the salamander mussel. Mudpuppies are more abundant than appears, but they are very difficult to sample.

Dr. Ting motioned to approve the preliminary list of proposed changes to the Illinois List of Endangered and Threatened Species. Dr. Capparella seconded the motion. The motion passed unanimously.

The Preliminary List can be found at the end of these minutes.

16. Preparation for the Public Hearing on the Preliminary List of Proposed Changes to the Illinois List of Endangered and Threatened Species

The public hearing is tentatively planned for January 17, 2025 at IDNR headquarters. Dr. Hofmann as Chair of the ESPB and Mr. Young as Hearing Officer will attend. Notice of the meeting will be posted at least seven days before the meeting. Oral and / or written comments can be submitted in person or remotely. Chair Hofmann will have registration forms for those wishing to submit comments. Written comments can be submitted up to two weeks after the public hearing.

Petition cover sheets will be made available for public review.

17. 2025 Meeting Schedule

There was a brief discussion about potential dates.

Dr. Capparella motioned that in 2025 the Endangered Species Protection Board meet on February 21, May 23, August 22, and November 14. Dr. Ting seconded the motion. The motion passed unanimously.

It is anticipated that all meetings will be at IDNR Headquarters in Springfield.

18. Public Comment Period

There were no public comments.

19. Other Business

Ms. Chavez wondered if there had been any movement on getting a Board staff person. Ms. Holtrop replied there was no movement at this time. The Department is waiting for the hiring process to open.

Dr. Hofmann asked if there was still interest in having a special meeting for discussion of general topics surrounding science and policy associated with the listing process. Ms. Holtrop indicated that IDNR was still open to the idea. Dr. Hofmann suggested possibly meeting in March or April 2025.

20. Adjournment

Chair Hofmann adjourned the meeting at 1:08 P.M.



ILLINOIS ENDANGERED SPECIES PROTECTION BOARD

One Natural Resources Way, Springfield, Illinois 62702 - 1271; dnr.espb@illinois.gov;

Report from the Chair, 15 November 2024

Joyce Hofmann

Activities for the period between the 203rd and 204th Board meetings

- performed follow-up for 203rd meeting – arranged for the final agenda of the 203rd meeting and the approved minutes of the 202nd Board meeting to be posted on the Board’s website, distributed final copy of 2022-2024 biennial report to members, updated list of proposed changes to the Illinois List of Endangered and Threatened Species (Illinois List) that have received preliminary approval as of 203rd meeting
- monitored the Board’s email account – responded to some messages, forwarded others to appropriate personnel at the Illinois Department of Natural Resources
- reviewed the draft minutes for the Board’s 203rd meeting
- updated the list of Board members
- performed administrative review of five petitions for changes to the Illinois List
- began preparation for the public hearing on proposed changes to the Illinois List – worked on notice, registration form, agenda, list of proposed changes arranged by taxon, and collected cover sheets of petitions for changes to the Illinois List for posting on the Board’s website
- attended the 248th Illinois Nature Preserves Commission meeting and presented the report from the Board
- distributed draft three Incidental Take Authorizations and one Conservation Plans to Board members for potential review
- completed state-mandated LGBTQIA+ training for 2024
- prepared for the 204th Board meeting – prepared the notice for the 204th meeting, developed a draft agenda for the 204th meeting, and distributed materials for the 204th meeting to Board members

Summary of all ESPB preliminary listing decisions for the changes to the 2020 Illinois List of
Endangered and Threatened Species

Confirmed at the 204th meeting, 15 November, 2024

Change from Endangered to Threatened

Fish

Nothonotus camurus

Bluebreast Darter

Amphibians

none

Reptiles

none

Birds

none

Mammals

none

Invertebrates

none

Plants

Carex intumescens

Swollen Sedge

Chamaesyce polygonifolia

Seaside Spurge

Change from Threatened to Endangered

Fish

Hybognathus hankinsoni

Brassy Minnow

Amphibians

none

Reptiles

none

Birds

none

Mammals

Myotis septentrionalis

Northern Long-Eared Bat

Invertebrates

none

Plants

Carya aquatica
Epilobium strictum
Juniperus communis

Water Hickory
Downy Willowherb
Ground Juniper

Remove from List as Endangered

Fish

none

Amphibians

none

Reptiles

TURTLES

none

SNAKES

Coluber flagellum
Nerodia fasciata

Coachwhip
Southern Watersnake

Birds

none

Mammals

none

Invertebrates

LEAFHOPPERS

Athysanella incongrua
BUTTERFLIES AND MOTHS
Hesperia metea
Hesperia ottoe
Lycaeides melissa samuelis

Leafhopper

Cobweb Skipper
Ottoe Skipper
Karner Blue Butterfly

Plants

Cystopteris laurentiana
Gymnocarpium robertianum
Valerianella chenopodifolia

Laurentian Fragile Fern
Scented Oak Fern
Corn Salad

Remove from List as Threatened

Fish

none

Amphibians

none

Reptiles

none

Birds

none

Mammals

none

Invertebrates

none

Plants

Rubus odoratus

Purple-flowering Raspberry

Add as Endangered

Fish

none

Amphibians

none

Reptiles

none

Birds

none

Mammals

none

Invertebrates

LEAFHOPPERS

Athysanella balli

Commellus colon

Flexamia grammica

BEES

Andrena quintilis

Andrena virginiana

Colletes aestivalis

Ball's Athysanella

Leafhopper

Sand Reed Leafhopper

Eastern Scaly Miner Bee

Virginia Mining Bee

Alumroot Cellophane Bee

Colletes andrewsi
Epeolus ainsliei
Epeolus interruptus
Macropis nuda
Melissodes apicatus
CRAYFISH
Faxonius stannardi

Andrews' Cellophane Bee
Ainslie's Epeolus
Interrupted Epeolus
Naked Oil-collecting Bee
Pickerelweed Long-nosed Bee

Little Wabash Crayfish

Plants

Carex albolutescens
Carex limosa
Carex pallescens
Corylus cornuta
Eriophorum gracile
Hypericum swinkianum
Ludwigia sphaerocarpa
Scleria oligantha
Uvularia floridana
Vicia caroliniana
Viola rugulosa
Viola viarum

Greenish-white Oval Sedge
Mud Sedge
Pale Sedge
Beaked Hazelnut
Slender Cotton Sedge
Swink's St. John's Wort
Round-fruited Loosestrife
Littlehead Nutrush
Florida Bellwort
Wood Vetch
Western Tall White Violet
Limestone Riverbank Violet

Add as Threatened

Fish

Elassoma zonatum
Erimystax dissimilis
Nothonotus tippecanoe
Percopsis omiscomaycus

Banded Pygmy Sunfish
Streamline Chub
Tippecanoe Darter
Trout-perch

Amphibians

none

Reptiles

Opheodrys vernalis

Smooth Greensnake

Birds

none

Mammals

none

Invertebrates

LEAFHOPPERS AND PLANTHOPPERS

Fitchiella robertsonii
Flexamia albida

Fitch's Elephanthopper
Leafhopper

Poblicia fuliginosa
Polyamia rossi
 BUTTERFLIES AND MOTHS
Argynnis aphrodite
Tharsalea helloides
 BEES
Anthophora walshii
Dieunomia nevadensis bakeri
Nomia nortoni
Protandrena bancrofti

Planthopper
 Ross' Polyamia

 Aphrodite Fritillary
 Purplish Copper

 Walsh's Athophora
 Baker's Nomia
 Norton's Nomia
 Mining Bee

Plants
 none

No Change in Status

Fish

<i>Acipenser fulvescens</i>	Lake Sturgeon	ILE
<i>Ammocrypta clara</i>	Western Sand Darter	ILE
<i>Ammocrypta pellucida</i>	Eastern Sand Darter	ILT
<i>Catostomus catostomus</i>	Longnose Sucker	ILT
<i>Coregonus artedi</i>	Cisco	ILE
<i>Cottus bairdii</i>	Mottled Sculpin	ILT
<i>Crystallaria asprella</i>	Crystal Darter	ILE
<i>Erimystax x-punctatus</i>	Gravel Chub	ILT
<i>Etheostoma histrio</i>	Harlequin Darter	ILE
<i>Forbesichthys agassizii</i>	Spring Cavefish	ILT
<i>Fundulus diaphanus subsp. menona</i>	Western Banded Killifish	ILT
<i>Fundulus dispar</i>	Starhead Topminnow	ILT
<i>Hybognathus hayi</i>	Cypress Minnow	ILE
<i>Hybopsis amblops</i>	Bigeye Chub	ILT
<i>Hybopsis amnis</i>	Pallid Shiner	ILE
<i>Ichthyomyzon fossor</i>	Northern Brook Lamprey	ILE
<i>Lampetra aepyptera</i>	Least Brook Lamprey	ILT
<i>Lepomis miniatus</i>	Redspotted Sunfish	ILT
<i>Lepomis symmetricus</i>	Bantam Sunfish	ILT
<i>Lethenteron appendix</i>	American Brook Lamprey	ILT
<i>Macrhybopsis gelida</i>	Sturgeon Chub	ILE
<i>Moxostoma carinatum</i>	River Redhorse	ILT
<i>Moxostoma valenciennesi</i>	Greater Redhorse	ILE
<i>Nocomis micropogon</i>	River Chub	ILE
<i>Notropis anogenus</i>	Pugnose Shiner	ILE
<i>Notropis boops</i>	Bigeye Shiner	ILE
<i>Notropis chalybaeus</i>	Ironcolor Shiner	ILT
<i>Notropis heterodon</i>	Blackchin Shiner	ILT
<i>Notropis heterolepi</i>	Blacknose Shiner	ILE

<i>Notropis maculatus</i>	Taillight Shiner	ILE
<i>Notropis nubilus</i>	Ozark Minnow	ILT
<i>Notropis texanus</i>	Weed Shiner	ILE
<i>Noturus stigmosus</i>	Northern Madtom	ILE
<i>Scaphirhynchus albus</i>	Pallid Sturgeon	ILE, FE

Amphibians

SALAMANDERS

<i>Ambystoma jeffersonianum</i>	Jefferson Salamander	ILT
<i>Ambystoma platineum</i>	Silvery Salamander	ILE
<i>Cryptobranchus alleganiensis</i>	Hellbender	ILE
<i>Desmognathus conanti</i>	Spotted Dusky Salamander	ILE
<i>Hemidactylium scutatum</i>	Four-toed Salamander	ILT
<i>Necturus maculosus</i>	Mudpuppy	ILT

FROGS AND TOADS

<i>Gastrophryne carolinensis</i>	Eastern Narrow-mouthed Toad	ILT
<i>Hyla avivoca</i>	Bird-voiced Treefrog	ILT
<i>Pseudacris illinoensis</i>	Illinois Chorus Frog	ILT

Reptiles

TURTLES

<i>Apalone mutica</i>	Smooth Softshell	ILT
<i>Clemmys guttata</i>	Spotted Turtle	ILE
<i>Emydoidea blandingii</i>	Blanding's Turtle	ILE
<i>Kinosternon flavescens</i>	Yellow Mud Turtle	ILE
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	ILE
<i>Pseudemys concinna</i>	River Cooter	ILE
<i>Terrapene ornata</i>	Ornate Box Turtle	ILT

SNAKES

<i>Clonophis kirtlandii</i>	Kirtland's Snake	ILT
<i>Crotalus horridus</i>	Timber Rattlesnake	ILT
<i>Heterodon nasicus</i>	Plains Hog-nosed Snake	ILT
<i>Nerodia cyclopion</i>	Mississippi Green Watersnake.	ILT
<i>Pantherophis emoryi</i>	Great Plains Ratsnake	ILE
<i>Sistrurus catenatus</i>	Eastern Massasauga	ILE, FT
<i>Tantilla gracilis</i>	Flat-headed Snake	ILT
<i>Thamnophis saurita</i>	Ribbonsnake	ILT
<i>Tropidoclonion lineatum</i>	Lined Snake	ILT

Birds

<i>Antrostomus carolinensis</i>	Chuck-will's-widow	ILT
<i>Asio flammeus</i>	Short-eared Owl	ILE
<i>Bartramia longicauda</i>	Upland Sandpiper	ILE
<i>Botaurus lentiginosus</i>	American Bittern	ILE
<i>Buteo swainsoni</i>	Swainson's Hawk	ILE
<i>Calidris canutus rufa</i>	Rufa Red Knot	ILT, FT

<i>Charadrius melodus</i>	Piping Plover	ILE, FE
<i>Chlidonias niger</i>	Black Tern	ILE
<i>Circus hudsonius</i>	Northern Harrier	ILE
<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo	ILT
<i>Egretta caerulea</i>	Little Blue Heron	ILE
<i>Egretta thula</i>	Snowy Egret	ILE
<i>Gallinula galeata</i>	Common Gallinule	ILE
<i>Ixobrychus exilis</i>	Least Bittern	ILT
<i>Lanius ludovicianus</i>	Loggerhead Shrike	ILE
<i>Laterallus jamaicensis</i>	Black Rail	ILE
<i>Limnothlypis swainsonii</i>	Swainson's Warbler	ILE
<i>Nyctanassa violacea</i>	Yellow-crowned Night Heron.	ILE
<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	ILE
<i>Pandion haliaetus</i>	Osprey	ILT
<i>Phalaropus tricolor</i>	Wilson's Phalarope	ILE
<i>Rallus elegans</i>	King Rail	ILE
<i>Setophaga cerulea</i>	Cerulean Warbler	ILT
<i>Sterna forsteri</i>	Forster's Tern	ILE
<i>Sterna hirundo</i>	Common Tern	ILE
<i>Sternula antillarum</i>	Least Tern	ILE, FE
<i>Thryomanes bewickii</i>	Bewick's Wren	ILE
<i>Tympanuchus cupido</i>	Greater Prairie-Chicken	ILE
<i>Xanthocephalus xanthocephalus</i>	Yellow-headed Blackbird	ILE

Mammals

<i>Canis lupus</i>	Gray/Timber Wolf	ILE, FE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	ILE
<i>Myotis austroriparius</i>	Southeastern Myotis	ILE
<i>Myotis grisescens</i>	Gray Bat	ILE, FE
<i>Myotis sodalis</i>	Indiana Bat	ILE, FE
<i>Myotis leibii</i>	Eastern Small-footed Bat	ILT
<i>Poliocitellus franklinii</i>	Franklin's Ground Squirrel	ILT

Invertebrates

SNAILS

<i>Discus macclintocki</i>	Iowa Pleistocene Snail	ILE, FE
<i>Fontigens antroecetes</i>	Hydrobiid Cave Snail	ILE
<i>Leptoxis praerosa</i>	Onyx Rocksnail	ILE
<i>Lithasia obovata</i>	Shawnee Rocksnail	ILE

CRUSTACEANS

<i>Caecidotea lesliei</i>	Isopod	ILE
<i>Crangonyx anomalus</i>	Anomalous Spring Amphipod	ILE
<i>Crangonyx packardii</i>	Packard's Cave Amphipod	ILE
<i>Faxonius indianensis</i>	Indiana Crayfish	ILE
<i>Faxonius kentuckiensis</i>	Kentucky Crayfish	ILE
<i>Faxonius lancifer</i>	Shrimp Crayfish	ILE

<i>Faxonius placidus</i>	Bigclaw Crayfish	ILE
<i>Gammarus acherondytes</i>	Illinois Cave Amphipod	ILE, FE
<i>Stygobromus iowae</i>	Iowa Amphipod	ILE
MUSSELS		
<i>Cyclonaias tuberculata</i>	Purple Wartyback	ILT
<i>Cyprogenia stegaria</i>	Fanshell	ILE, FE
<i>Elliptio crassidens</i>	Elephant-ear	ILE
<i>Ellipsaria lineolata</i>	Butterfly	ILT
<i>Epioblasma rangiana</i>	Northern Riffleshell	ILE, FE
<i>Epioblasma triquetra</i>	Snuffbox	ILE, FE
<i>Eurynia dilatata</i>	Spike	ILE
<i>Lampsilis abrupta</i>	Pink Mucket	ILE, FE
<i>Lampsilis fasciola</i>	Wavy-rayed Lampmussel	ILE
<i>Lampsilis higginsii</i>	Higgins Eye	ILE
<i>Leptodea leptodon</i>	Scaleshell	ILE, FE
<i>Margaritifera monodonta</i>	Spectaclecase	ILE, FE
<i>Plethobasus cooperianus</i>	Orangefoot Pimpleback	ILE, FE
<i>Plethobasus cyphus</i>	Sheepnose	ILE, FE
<i>Pleurobema clava</i>	Clubshell	ILE, FE
<i>Pleurobema cordatum</i>	Ohio Pigtoe	ILE
<i>Potamilus capax</i>	Fat Pocketbook	ILE, FE
<i>Ptychobranthus fasciolaris</i>	Kidneyshell	ILE
<i>Quadrula metanevra</i>	Monkeyface	ILT
<i>Reginaia ebenus</i>	Ebonysell	ILE
<i>Simpsonaias ambigua</i>	Salamander Mussel	ILE
<i>Theliderma cylindrica</i>	Rabbitsfoot	ILE, FT
<i>Toxolasma lividum</i>	Purple Lilliput	ILE
<i>Villosa iris</i>	Rainbow	ILE
SCORPIONS		
<i>Centruroides vittatus</i>	Common Striped Scorpion	ILE
BEES		
<i>Bombus affinis</i>	Rusty Patched Bumble Bee	ILE, FE
DRAGONFLIES		
<i>Somatochlora hineana</i>	Hine's Emerald Dragonfly	ILE, FE
<i>Nannothemis bella</i>	Elfin Skimmer	ILE
SPRINGTAILS		
<i>Pygmarrhopalites madonnensis</i>	Madonna Cave Springtail	ILE
STONEFLIES		
<i>Diploperla robusta</i>	Robust Springfly	ILE
<i>Prostoia ozarkensis</i>	Central Forestfly	ILE
BUTTERFLIES AND MOTHS		
<i>Calephelis muticum</i>	Swamp Metalmark	ILE
<i>Incisalia polios</i>	Hoary Elfin	ILE
<i>Papaipema eryngii</i>	Eryngium Stem Borer	ILT
<i>Speyeria idalia</i>	Regal Fritillary	ILT
LEAFHOPPERS		

Aflexia rubranura

Redveined Prairie Leafhopper ILT

Plants

<i>Actaea podocarpa</i>	American Bugbane	ILE
<i>Actaea racemosa</i>	False Bugbane	ILE
<i>Actaea rubifolia</i>	Black Cohosh	ILE
<i>Adoxa moschatellina</i>	Moschatel	ILE
<i>Agalinis skinneriana</i>	Pale False Foxglove	ILT
<i>Alnus incana</i> subsp. <i>rugosa</i>	Speckled Alder	ILE
<i>Amelanchier interior</i>	Shadbush	ILT
<i>Amelanchier sanguinea</i>	Shadbush	ILE
<i>Ammophila breviligulata</i>	Marram Grass	ILT
<i>Amorpha nitens</i>	Smooth False Indigo	ILE
<i>Andromeda glaucophylla</i>	Bog Rosemary	ILE
<i>Arctostaphylos uva-ursi</i>	Bearberry	ILE
<i>Artemisia dracunculus</i>	Dragon Wormwood	ILE
<i>Asclepias lanuginosa</i>	Woolly Milkweed	ILE
<i>Asclepias meadii</i>	Mead's Milkweed	ILE, FT
<i>Asclepias ovalifolia</i>	Oval Milkweed	ILE
<i>Asclepias stenophylla</i>	Narrow-leaved Green Milkweed	ILE
<i>Asplenium bradleyi</i>	Bradley's Spleenwort	ILE
<i>Asplenium resiliens</i>	Black Spleenwort	ILE
<i>Aster furcatus</i>	Forked Aster	ILT
<i>Astragalus crassicaarpus</i> var. <i>trichocalyx</i>	Large Ground Plum	ILE
<i>Astragalus distortus</i>	Bent Milk Vetch	ILE
<i>Astragalus tennesseensis</i>	Tennessee Milk Vetch	ILE
<i>Avenella flexuosa</i>	Hairgrass	ILE
<i>Baptisia tinctoria</i>	Yellow Wild Indigo	ILE
<i>Bartonia paniculata</i>	Screwstem	ILE
<i>Beckmannia syzigachne</i>	American Slough Grass	ILE
<i>Berchemia scandens</i>	Supple-Jack	ILE
<i>Besseyia bullii</i>	Kitten Tails	ILT
<i>Betula alleghaniensis</i>	Yellow Birch	ILE
<i>Boltonia decurrens</i>	Decurrent False Aster	ILT, FT
<i>Botrychium campestre</i>	Prairie Moonwort	ILE
<i>Botrychium matricariifolium</i>	Daisyleaf Grape Fern	ILE
<i>Botrychium multifidum</i>	Northern Grape Fern	ILE
<i>Botrychium simplex</i>	Dwarf Grape Fern	ILE
<i>Bouteloua gracilis</i>	Blue Grama	ILE
<i>Buchnera americana</i>	Bluehearts	ILT
<i>Bumelia lanuginosa</i>	Woolly Buckthorn	ILE
<i>Cakile edentula</i> var. <i>lacustris</i>	Sea Rocket	ILT
<i>Calamagrostis insperata</i>	Hollow Reed Grass	ILE
<i>Calla palustris</i>	Water Arum	ILE
<i>Calopogon oklahomensis</i>	Oklahoma Grass Pink Orchid	ILE
<i>Calopogon tuberosus</i>	Grass Pink Orchid	ILE

<i>Camassia angusta</i>	Wild Hyacinth	ILE
<i>Cardamine pratensis</i> var. <i>palustris</i>	Cuckoo Flower	ILE
<i>Carex alata</i>	Winged Sedge	ILE
<i>Carex arkansana</i>	Arkansas Sedge	ILE
<i>Carex atlantica</i>	Sedge	ILT
<i>Carex aurea</i>	Golden Sedge	ILT
<i>Carex bromoides</i>	Sedge	ILT
<i>Carex brunnescens</i>	Brownish Sedge	ILE
<i>Carex canescens</i>	Silvery Sedge	ILE
<i>Carex chordorrhiza</i>	Cordroot Sedge	ILE
<i>Carex crawfordii</i>	Crawford's Sedge	ILE
<i>Carex cryptolepis</i>	Yellow Sedge	ILT
<i>Carex cumulata</i>	Sedge	ILE
<i>Carex debilis</i>	White-edge Sedge	ILE
<i>Carex decomposita</i>	Cypress-knee Sedge	ILE
<i>Carex diandra</i>	Sedge	ILE
<i>Carex disperma</i>	Shortleaf Sedge	ILE
<i>Carex echinata</i>	Sedge	ILE
<i>Carex formosa</i>	Sedge	ILE
<i>Carex garberi</i>	Elk Sedge	ILE
<i>Carex gigantea</i>	Large Sedge	ILE
<i>Carex heliophila</i>	Plains Sedge	ILE
<i>Carex nigromarginata</i>	Black-edged Sedge	ILE
<i>Carex oligosperma</i>	Few-seeded Sedge	ILE
<i>Carex opaca</i>	Opaque Oval Sedge	ILE
<i>Carex oxylepis</i>	Sharp-scaled Sedge	ILT
<i>Carex physorhyncha</i>	Bellow's Beak Sedge	ILE
<i>Carex plantaginea</i>	Plantain-leaved Sedge	ILE
<i>Carex prasina</i>	Drooping Sedge	ILT
<i>Carex reniformis</i>	Reniform Sedge	ILE
<i>Carex straminea</i>	Eastern Straw Sedge	ILE
<i>Carex trisperma</i>	Three-seeded Sedge	ILE
<i>Carex tuckermanii</i>	Tuckerman's Sedge	ILE
<i>Carex viridula</i>	Little Green Sedge	ILT
<i>Carex willdenowii</i>	Willdenow's Sedge	ILT
<i>Carya pallida</i>	Pale Hickory	ILE
<i>Castilleja sessiliflora</i>	Downy Yellow Painted Cup	ILE
<i>Ceanothus herbaceus</i>	Redroot	ILE
<i>Chamaedaphne calyculata</i>	Leatherleaf	ILT
<i>Chamaelirium luteum</i>	Fairy Wand	ILE
<i>Chimaphila maculata</i>	Spotted Wintergreen	ILE
<i>Chimaphila umbellata</i>	Pipsissewa	ILE
<i>Circaea alpina</i>	Small Enchanter's Nightshade	ILE
<i>Cirsium pitcheri</i>	Pitcher's (Dune) Thistle	ILE, FT
<i>Cladrastis lutea</i>	Yellowwood	ILE
<i>Clematis crispa</i>	Blue Jasmine	ILE

<i>Clematis viorna</i>	Leatherflower	ILE
<i>Collinsia violacea</i>	Violet Collinsia	ILE
<i>Comptonia peregrina</i>	Sweetfern	ILE
<i>Conioselinum chinense</i>	Hemlock Parsley	ILE
<i>Corallorhiza maculata</i>	Spotted Coral-root Orchid	ILE
<i>Cornus canadensis</i>	Bunchberry	ILE
<i>Corydalis aurea</i>	Golden Corydalis	ILE
<i>Corydalis halei</i>	Hale's Corydalis	ILE
<i>Corydalis sempervirens</i>	Pink Corydalis	ILE
<i>Cynosciadium digitatum</i>	Cynosciadium	ILE
<i>Cyperus grayoides</i>	Umbrella Sedge	ILT
<i>Cyperus lancastricensis</i>	Galingale	ILT
<i>Cypripedium acaule</i>	Moccasin Flower	ILE
<i>Cypripedium parviflorum</i>	Small Yellow Lady's Slipper	ILE
<i>Cypripedium reginae</i>	Showy Lady's Slipper	ILE
<i>Dalea foliosa</i>	Leafy Prairie Clover	ILE, FE
<i>Delphinium carolinianum</i>	Hill Prairie Larkspur	ILE
<i>Dendrolycopodium dendroideum</i>	Ground Pine	ILE
<i>Dendrolycopodium hickeyi</i>	Hickey's Groundpine	ILE
<i>Dennstaedtia punctilobula</i>	Hay-scented Fern	ILE
<i>Dichanthelium boreale</i>	Northern Panic Grass	ILE
<i>Dichanthelium jooi</i>	Panic Grass	ILE
<i>Dichanthelium portoricense</i>	Hemlock Panic Grass	ILE
<i>Dichanthelium ravenelii</i>	Ravenel's Panic Grass	ILE
<i>Dichanthelium yadkinense</i>	Panic Grass	ILE
<i>Dodecatheon frenchii</i>	French's Shootingstar	ILT
<i>Draba cuneifolia</i>	Whitlow Grass	ILE
<i>Drosera intermedia</i>	Narrow-leaved Sundew	ILT
<i>Drosera rotundifolia</i>	Round-leaved Sundew	ILE
<i>Dryopteris celsa</i>	Log Fern	ILE
<i>Echinodorus tenellus</i>	Small Burhead	ILE
<i>Eleocharis olivacea</i>	Capitate Spikerush	ILE
<i>Eleocharis pauciflora</i>	Few-flowered Spikerush	ILE
<i>Eleocharis rostellata</i>	Beaked Spike Rush	ILT
<i>Elymus trachycaulus</i>	Bearded Wheat Grass	ILE
<i>Equisetum pratense</i>	Meadow Horsetail	ILT
<i>Equisetum scirpoides</i>	Dwarf Scouring Rush	ILE
<i>Equisetum sylvaticum</i>	Woodland Horsetail	ILE
<i>Eriophorum virginicum</i>	Rusty Cotton Grass	ILE
<i>Eryngium prostratum</i>	Eryngo	ILE
<i>Euonymus americanus</i>	American Strawberry Bush	ILT
<i>Eupatorium hyssopifolium</i>	Hyssop-leaved Thoroughwort	ILE
<i>Euphorbia spathulata</i>	Spurge	ILE
<i>Festuca paradoxa</i>	Cluster Fescue	ILT
<i>Filipendula rubra</i>	Queen-of-the-Prairie	ILT
<i>Fimbristylis vahlii</i>	Vahl's Fimbry	ILE

<i>Galactia mohlenbrockii</i>	Boykin's Dioclea	ILE
<i>Galium virgatum</i>	Dwarf Bedstraw	ILE
<i>Geranium bicknellii</i>	Northern Cranesbill	ILE
<i>Glyceria arkansana</i>	Arkansas Mannagrass	ILE
<i>Gratiola quartermaniae</i>	Hedge Hyssop	ILE
<i>Gymnocarpium dryopteris</i>	Oak Fern	ILE
<i>Hackelia deflexa</i> var. <i>americana</i>	Stickseed	ILE
<i>Halesia carolina</i>	Silverbell Tree	ILE
<i>Helianthus angustifolius</i>	Narrow-leaved Sunflower	ILE
<i>Helianthus giganteus</i>	Tall Sunflower	ILE
<i>Heliotropium tenellum</i>	Slender Heliotrope	ILE
<i>Heteranthera reniformis</i>	Mud Plantain	ILE
<i>Hexalectris spicata</i>	Crested Coralroot Orchid	ILE
<i>Hudsonia tomentosa</i>	False Heather	ILE
<i>Huperzia porophila</i>	Cliff Clubmoss	ILT
<i>Hymenopappus scabiosaeus</i>	Old Plainsman	ILE
<i>Hydrolea uniflora</i>	One-flowered Hydrolea	ILE
<i>Hyloteliphium telephioides</i>	American Orpine	ILT
<i>Hypericum adpressum</i>	Shore St. John's Wort	ILE
<i>Hypericum kalmianum</i>	Kalm's St. John's Wort	ILE
<i>Iliamna remota</i>	Kankakee Mallow	ILE
<i>Iresine rhizomatosa</i>	Bloodleaf	ILE
<i>Isoetes butleri</i>	Butler's Quillwort	ILE
<i>Isotria medeoloides</i>	Small Whorled Pogonia	ILE, FT
<i>Isotria verticillata</i>	Whorled Pogonia	ILE
<i>Juglans cinerea</i>	Butternut	ILE
<i>Juncus alpinoarticulatus</i>	Richardson's Rush	ILT
<i>Juncus vaseyi</i>	Vasey's Rush	ILE
<i>Juniperus horizontalis</i>	Trailing Juniper	ILE
<i>Justicia ovata</i>	Water Willow	ILE
<i>Larix laricina</i>	Tamarack	ILE
<i>Lathyrus ochroleucus</i>	Pale Vetchling	ILT
<i>Lechea intermedia</i>	Savanna Pinweed	ILE
<i>Lespedeza leptostachya</i>	Prairie Bush Clover	ILE, FT
<i>Lonicera dioica</i> var. <i>glaucescens</i>	Red Honeysuckle	ILE
<i>Lonicera flava</i>	Yellow Honeysuckle	ILE
<i>Luzula acuminata</i>	Hairy Woodrush	ILE
<i>Lycopodiella inundata</i>	Bog Clubmoss	ILE
<i>Lycopodium clavatum</i>	Running Pine	ILE
<i>Lysimachia radicans</i>	Creeping Loosestrife	ILE
<i>Malus angustifolia</i>	Narrow-leaved Crabapple	ILE
<i>Malvastrum hispidum</i>	False Mallow	ILE
<i>Matelea decipiens</i>	Climbing Milkweed	ILE
<i>Medeola virginiana</i>	Indian Cucumber Root	ILE
<i>Megalodonta beckii</i>	Water Marigold	ILE
<i>Melanthera nivea</i>	White Melanthera	ILE

<i>Melanthium virginicum</i>	Virginia Bunchflower	ILE
<i>Melica mutica</i>	Two-Flowered Melic Grass	ILE
<i>Melothria pendula</i>	Squirting Cucumber	ILT
<i>Mentzelia oligosperma</i>	Stickleaf	ILE
<i>Menyanthes trifoliata</i>	Buckbean	ILT
<i>Micranthes virginiensis</i>	Early Saxifrage	ILE
<i>Mimosa nuttallii</i>	Cat's Claw	ILE
<i>Mimulus glabratus</i>	Yellow Monkey Flower	ILE
<i>Minuartia patula</i>	Slender Sandwort	ILT
<i>Mirabilis hirsuta</i>	Hairy Umbrella-wort	ILE
<i>Monarda clinopodia</i>	White Bergamot	ILT
<i>Nemophila triloba</i>	Baby Blue-Eyes	ILE
<i>Nothocalais cuspidata</i>	Prairie Dandelion	ILE
<i>Opuntia fragilis</i>	Fragile Prickly Pear	ILE
<i>Orobanche fasciculata</i>	Clustered Broomrape	ILE
<i>Orobanche ludoviciana</i>	Broomrape	ILT
<i>Oxalis illinoensis</i>	Illinois Wood Sorrel	ILT
<i>Penstemon grandiflorus</i>	Large-flowered Beard Tongue	ILE
<i>Penstemon tubaeiflorus</i>	Tube Beard Tongue	ILE
<i>Phacelia gilioides</i>	Ozark Phacelia	ILE
<i>Phaeophyscia leana</i>	Lea's Bog Lichen	ILT
<i>Phegopteris connectilis</i>	Long Beech Fern	ILE
<i>Phemeranthus calycinus</i>	Fameflower	ILE
<i>Phemeranthus parviflorus</i>	Small Flower-Of-An-Hour	ILT
<i>Phlox pilosa</i> subsp. <i>sangamonensis</i>	Sangamon Phlox	ILE
<i>Physaria ludoviciana</i>	Silvery Bladderpod	ILE
<i>Pinus banksiana</i>	Jack Pine	ILE
<i>Pinus echinata</i>	Shortleaf Pine	ILE
<i>Pinus resinosa</i>	Red Pine	ILE
<i>Planera aquatica</i>	Water Elm	ILT
<i>Plantago cordata</i>	Heart-leaved Plantain	ILE
<i>Platanthera ciliaris</i>	Orange Fringed Orchid	ILE
<i>Platanthera clavellata</i>	Wood Orchid	ILE
<i>Platanthera flava</i>	Tubercled Orchid	ILT
<i>Platanthera leucophaea</i>	Eastern Prairie Fringed Orchid	ILE, FT
<i>Platanthera psycodes</i>	Purple Fringed Orchid	ILE
<i>Poa alsodes</i>	Grove Bluegrass	ILE
<i>Poa languida</i>	Weak Bluegrass	ILE
<i>Poa wolfii</i>	Wolf's Bluegrass	ILE
<i>Pogonia ophioglossoides</i>	Snake-mouth	ILE
<i>Polanisia jamesii</i>	James' Clammyweed	ILE
<i>Polygala incarnata</i>	Pink Milkwort	ILE
<i>Polygonatum pubescens</i>	Downy Solomon's Seal	ILE
<i>Polygonum careyi</i>	Carey's Heartsease	ILE
<i>Populus balsamifera</i>	Balsam Poplar	ILE
<i>Potamogeton gramineus</i>	Grass-leaved Pondweed	ILT

<i>Potamogeton praelongus</i>	White-stemmed Pondweed	ILE
<i>Potamogeton pulcher</i>	Spotted Pondweed	ILE
<i>Potamogeton robbinsii</i>	Fern Pondweed	ILE
<i>Potamogeton strictifolius</i>	Stiff Pondweed	ILE
<i>Primula mistassinica</i>	Bird's-eye Primrose	ILE
<i>Ptilimnium nuttallii</i>	Mock Bishop's Weed	ILE
<i>Quercus montana</i>	Rock Chestnut Oak	ILT
<i>Quercus phellos</i>	Willow Oak	ILT
<i>Quercus texana</i>	Nuttall's Oak	ILE
<i>Ranunculus harveyi</i>	Harvey's Buttercup	ILT
<i>Ranunculus rhomboideus</i>	Prairie Buttercup	ILE
<i>Rhamnus alnifolia</i>	Alder Buckthorn	ILE
<i>Rhexia mariana</i>	Dull Meadow Beauty	ILE
<i>Rhynchospora alba</i>	Beaked Rush	ILE
<i>Rhynchospora glomerata</i>	Clustered Beak Rush	ILE
<i>Ribes hirtellum</i>	Northern Gooseberry	ILE
<i>Rosa acicularis</i>	Bristly Rose	ILE
<i>Rubus pubescens</i>	Dwarf Raspberry	ILT
<i>Rubus schneideri</i>	Bristly Blackberry	ILT
<i>Rudbeckia missouriensis</i>	Missouri Orange Coneflower	ILT
<i>Sabatia campestris</i>	Prairie Rose Gentian	ILE
<i>Sagittaria australis</i>	Arrowhead	ILE
<i>Salix serissima</i>	Autumn Willow	ILE
<i>Salix syrticola</i>	Dune Willow	ILE
<i>Salvia azurea</i>	Blue Sage	ILT
<i>Sambucus racemosa</i> subsp. <i>pubens</i>	Red-berried Elder	ILE
<i>Sanguisorba canadensis</i>	American Burnet	ILE
<i>Sanicula smallii</i>	Southern Black Snakeroot	ILE
<i>Sarracenia purpurea</i>	Pitcher Plant	ILE
<i>Sceptridium biternatum</i>	Southern Grape Fern	ILE
<i>Schizachne purpurascens</i>	False Melic Grass	ILE
<i>Schoenoplectus hallii</i>	Hall's Bulrush	ILT
<i>Schoenoplectus purshianus</i>	Pursh's Bulrush	ILE
<i>Schoenoplectus smithii</i>	Smith's Bulrush	ILE
<i>Scirpus hattorianus</i>	Bulrush	ILE
<i>Scirpus microcarpus</i>	Small-fruited Bulrush	ILE
<i>Scirpus polyphyllus</i>	Leafy Bulrush	ILE
<i>Scleria muhlenbergii</i>	Muhlenberg's Nut Rush	ILE
<i>Scleria pauciflora</i>	Carolina Whipgrass	ILE
<i>Shepherdia canadensis</i>	Buffaloberry	ILE
<i>Silene ovata</i>	Ovate Catchfly	ILE
<i>Silene regia</i>	Royal Catchfly	ILE
<i>Sisyrinchium atlanticum</i>	Eastern Blue-eyed Grass	ILE
<i>Sisyrinchium montanum</i>	Mountain Blue-eyed Grass	ILE
<i>Solidago sciaphila</i>	Cliff Goldenrod	ILT
<i>Sorbus americana</i>	American Mountain Ash	ILE

<i>Sparganium americanum</i>	American Bur-reed	ILE
<i>Sparganium emersum</i>	Green-fruited Bur-reed	ILE
<i>Spiranthes lucida</i>	Yellow-lipped Ladies' Tresses	ILE
<i>Spiranthes vernalis</i>	Spring Ladies' Tresses	ILE
<i>Stellaria pubera</i>	Great Chickweed	ILE
<i>Stenanthium gramineum</i>	Grass-leaved Lily	ILT
<i>Stylisma pickeringii</i>	Patterson's Bindweed	ILE
<i>Styrax americana</i>	Storax	ILT
<i>Styrax grandifolius</i>	Bigleaf Snowbell Bush	ILE
<i>Sullivantia sullivantii</i>	Sullivantia	ILT
<i>Symphoricarpos albus</i> var. <i>albus</i>	Snowberry	ILE
<i>Synandra hispidula</i>	Hairy Synandra	ILT
<i>Tetraneuris herbacea</i>	Lakeside Daisy	ILE, FT
<i>Thelypteris noveboracensis</i>	New York Fern	ILE
<i>Tilia heterophylla</i>	White Basswood	ILE
<i>Tofieldia glutinosa</i>	False Asphodel	ILT
<i>Torreyochloa pallida</i>	Pole Manna-Grass	ILE
<i>Tracaulon arifolium</i>	Halberd-leaved Tearthumb	ILE
<i>Tradescantia bracteata</i>	Prairie Spiderwort	ILE
<i>Trichophorum cespitosum</i>	Tufted Bulrush	ILE
<i>Trientalis borealis</i>	Star-flower	ILE
<i>Trifolium reflexum</i>	Buffalo Clover	ILT
<i>Triglochin maritima</i>	Common Bog Arrowgrass	ILT
<i>Triglochin palustris</i>	Slender Bog Arrowgrass	ILT
<i>Trillium cernuum</i>	Nodding Trillium	ILE
<i>Trillium erectum</i>	Ill-scented Trillium	ILE
<i>Trillium viride</i>	Green Trillium	ILE
<i>Ulmus thomasii</i>	Rock Elm	ILE
<i>Urtica chamaedryoides</i>	Nettle	ILT
<i>Utricularia cornuta</i>	Horned Bladderwort	ILE
<i>Utricularia intermedia</i>	Flat-leaved Bladderwort	ILT
<i>Utricularia minor</i>	Small Bladderwort	ILE
<i>Utricularia subulata</i>	Hair Bladderwort	ILE
<i>Vaccinium corymbosum</i>	Highbush Blueberry	ILE
<i>Vaccinium macrocarpon</i>	Large Cranberry	ILE
<i>Vaccinium oxycoccos</i>	Small Cranberry	ILE
<i>Vaccinium stamineum</i>	Deerberry	ILE
<i>Valeriana uliginosa</i>	Marsh Valerian	ILE
<i>Valerianella umbilicata</i>	Corn Salad	ILE
<i>Vandenboschia boschiana</i>	Filmy fern	ILE
<i>Veronica americana</i>	American Brooklime	ILE
<i>Veronica scutellata</i>	Marsh Speedwell	ILT
<i>Viburnum molle</i>	Arrowwood	ILT
<i>Viola blanda</i>	Hairy White Violet	ILE
<i>Viola canadensis</i>	Canada Violet	ILE
<i>Viola primulifolia</i>	Primrose Violet	ILE

Woodsia ilvensis
Zigadenus elegans

Rusty Woodsia
White Camass

ILE
ILE

Change Scientific Name

Fish

Etheostoma camurum to *Nothonotus camurus*
Forbesichthys agassizii to *Forbesichthys papilliferus*
Notropis boops to *Miniellus boops*
Notropis chalybaeus to *Alburnops chalybaeus*
Notropis heterodon to *Miniellus heterodon*
Notropis nubilus to *Miniellus nubilus*
Notropis texanus to *Alburnops texanus*

Amphibians

none

Reptiles

none

Birds

none

Mammals

none

Invertebrates

BUTTERFLIES

Speyeria idalia to *Argynnis idalia occidentalis*

Plants

Aster furcatus to *Eurybia furcata*
Besseyia bullii to *Synthyris bullii*
Botrychium multifidum to *Sceptridium multifidum*
Bumelia lanuginosa to *Sideroxylon lanuginosum*
Calamagrostis insperata to *Calamagrostis porteri* ssp. *insperata*
Carex heliophila to *Carex inops* ssp. *heliophila*
Carex oxylepis to *Carex oxylepis* var. *oxylepis*
Carex physorhyncha to *Carex albicans* var. *australis*
Chamaesyce polygonifolia to *Euphorbia polygonifolia*
Cladrastis lutea to *Cladrastis kentukea*
Corydalis sempervirens to *Capnoides sempervirens*
Cypripedium parviflorum to *Cypripedium parviflorum* var. *makasin*
Dichanthelium joori to *Dichanthelium joorii*
Eleocharis pauciflora to *Eleocharis quinqueflora*
Eupatorium hyssopifolium to *Eupatorium hyssopifolium* var. *laciniatum*

Galactia mohlenbrockii to *Lackeya multiflora*
Hyloteliphium telephioides to *Hylotelephium telephioides*
Megalodonta beckii to *Bidens beckii*
Mimulus glabratus to *Erythranthe geyeri*
Nemophila triloba to *Nemophila aphylla*
Platanthera flava to *Platanthera flava* var. *flava*
Poa languida to *Poa saltuensis* ssp. *languida*
Polygonum careyi to *Persicaria careyi*
Rubus schneideri to *Rubus setosus*
Salix syrticola to *Salix cordata*
Salvia azurea to *Salvia azurea* var. *grandiflora*
Schoenoplectus hallii to *Schoenoplectiella hallii*
Schoenoplectus purshianus to *Schoenoplectiella purshiana*
Schoenoplectus smithii to *Schoenoplectiella smithii*
Stylisma pickeringii to *Stylisma pickeringii* var. *pattersonii*
Styrax americana to *Styrax americanus*
Tilia heterophylla to *Tilia americana* var. *heterophylla*
Tofieldia glutinosa to *Triantha glutinosa*
Villosa iris to *Cambarunio iris*

Change Common Name

Fish

Spring Cavefish to Shawnee Hills Cavefish

Amphibians

none

Reptiles

none

Birds

none

Mammals

none

Invertebrates

LEAFHOPPERS

Red veined Prairie Leafhopper to Red-tailed Prairie Leafhopper

BUTTERFLIES

Regal Fritillary to Western Regal Fritillary

Plants

none

Correct Typographical Errors

Plants

Small Whorled Pognoia to Small Whorled Pogonia

Silverbell Tre to Silverbell Tree