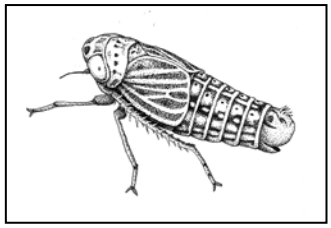
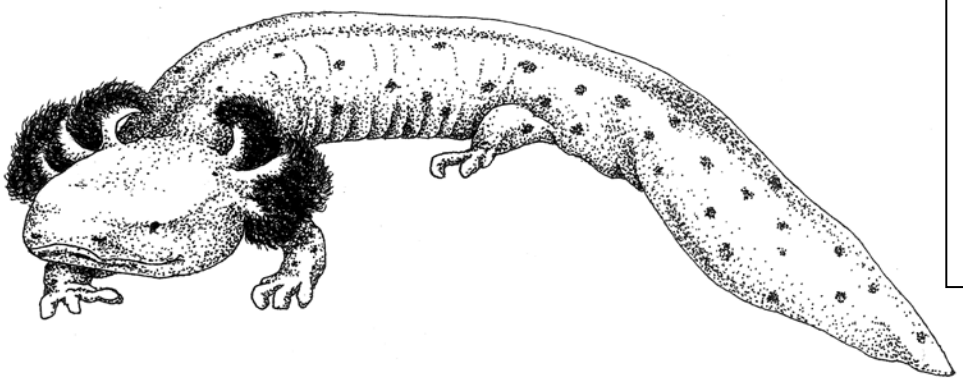
Endangered and Threatened Species of Illinois: Status and Distribution

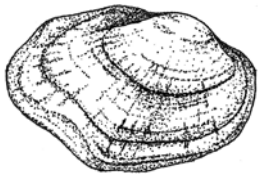


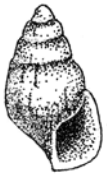


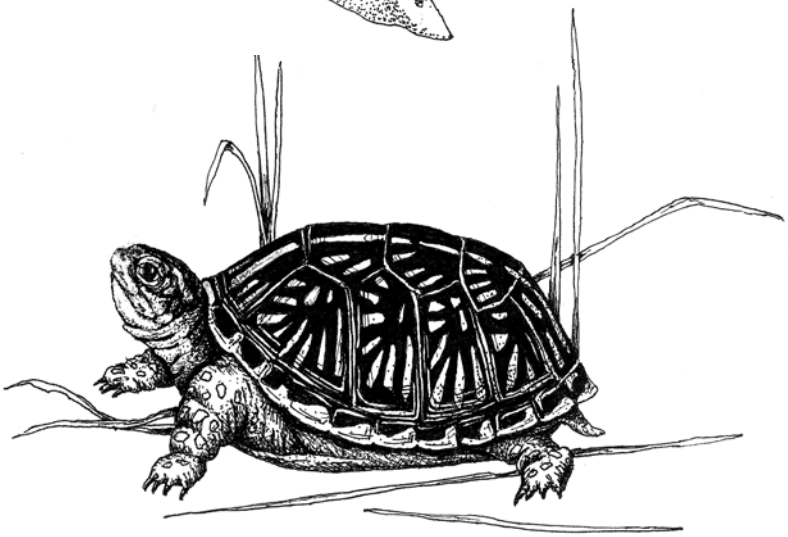


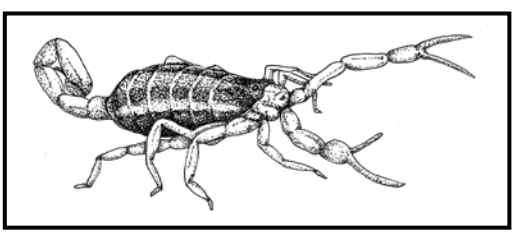












Volume 4 – 2009 and 2010 Changes

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On the cover, clockwise from upper right: Black-billed Cuckoo (*Coccyzus erythropthalmus*), Illinois Threatened; Blue Hearts (*Buchnera americana*), Illinois Threatened; Ornate Box Turtle (*Terrepene ornata*), Illinois Endangered; Common Striped Scorpion (*Centruroides vittatus*), Illinois Endangered; Wild Blue Larkspur (*Delphinium carolinianum*), Illinois Threatened; a leafhopper (*Anthysanella incongrua*), Illinois Endangered; Mudpuppy (*Necturus maculosus*), Illinois Threatened; Shawnee Rocksnail (*Lithasia obovata*), Illinois Endangered; and, Northern Riffleshell (*Epioblasma rangiana*), Illinois and Federally Endangered.

ENDANGERED AND THREATENED SPECIES OF ILLINOIS: STATUS AND DISTRIBUTION

VOLUME 4: 2009 AND 2010 CHANGES TO THE ILLINOIS LIST OF ENDANGERED AND THREATENED SPECIES

Anne Mankowski, Editor

Published by

ILLINOIS ENDANGERED SPECIES PROTECTION BOARD

FEBRUARY 2011

PREFACE

In 1981, *Endangered and Threatened Species of Illinois: Status and Distribution* was published as the culmination of a major effort known as the Endangered Species Project. While a number of attempts had previously been made to develop a list of species endangered in Illinois, the Endangered Species Project was a comprehensive effort to determine the status of our native species through literature reviews, museum searches, personal contacts, and workshops. The status information compiled during this project served as the basis for the first official state list of endangered and threatened species (List) with 436 species (72 animals and 364 plants) and was adopted by the Illinois Endangered Species Protection Board (Board) and protected by state law. At the conclusion of the project the book *Endangered and Threatened Species of Illinois: Status and Distribution* was produced. That publication continued to serve for a decade as the most readily available source of information on endangered and threatened species in Illinois.

Since the days of the first Endangered Species Project, considerable information has been accumulated about our native species and the process of determining species to be listed as endangered or threatened in Illinois has become more complex, with increasing rigor applied to the compilation and evaluation of scientific evidence. Additionally, a review, and revision as necessary, of the List is now required no less often than once every five years. As a result, a major revision of the List was completed in 1989 (500 species; 144 animals and 356 plants). That revision resulted in the Board publishing two updated volumes of the original status and distribution book, one volume concerning the endangered and threatened plants of Illinois (Herkert 1991) and another concerning the endangered and threatened animals of Illinois (Herkert 1992).

In January of 1994, the second major revision of the List was completed. As a result of that revision, a total of 511 species (148 animals and 363 plants) were officially recognized as endangered and threatened in Illinois. Herkert (1994) summarized the changes that were made to the Illinois list during that review and revision and provided status and distribution data for the species that were added to the List in 1994.

The List was reviewed and revised again in 1999, resulting in the listing of 478 species (147 animals and 331 plants). The Board produced an updated status and distribution book for plants (Herkert and Ebinger 2002), but lost its funding and, consequently, most of its staff in 2002 and was not able to produce a volume for animals.

In 2003, the Illinois Department of Natural Resources contractually hired one part-time staff for the Board, in time for the 2004 review and revision of the List. The 2004 revision produced a listing of 483 species (144 animals and 339 plants). Subsequent to that revision, the Board produced a status and distribution volume updating the 2004 changes to the list of endangered and threatened plants (Nÿboer and Ebinger 2004) and then an updated volume for animals reflecting changes to the list of endangered and threatened animals from the 1999 and 2004 revisions (Nÿboer, et al 2006).

Another review and revision of the List was completed in 2009, resulting in a list of 483 species (151 animals and 332 plants). In 2010, several corrections were made to the list and one federally endangered species (Northern Riffleshell, *Epioblasma rangiana*) was automatically added to the list – bringing the totals to 484 species (152 animals and 332 plants).

This current volume provides a summary of changes made during those two revisions and status and distribution data for newly listed species. Information for other listed species can be obtained from respective previous volumes: *Endangered and Threatened Species of Illinois: Status and Distribution, Volume 1: Plants (2002)*; *Endangered and Threatened Species of Illinois: Status and Distribution, Volume 2: Animals (2006)*; and, *Endangered and Threatened Species of Illinois: Status and Distribution, Volume 3: 2004 Plant Changes (2004)*, which can be accessed on the Board's webpage at http://www.dnr.state.il.us/espb/publications.html .

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ACKNOWLEDGEMENTS

The Illinois Endangered Species Protection Board (Board) is greatly indebted to those who assisted in the preparation of this volume. Valuable assistance was provided by Tara Kieninger and Jeannie Barnes of the Illinois Department of Natural Resources Natural Heritage Database, in reviewing various portions of the text and updating the records which are included in this work. This volume was also reviewed, both for accuracy of records, as well as content of text, by members of the Board's Endangered Species Technical Advisory Committees (ESTACs – see below), who assisted the Board with the review of data used to formulate recommendations to the Board regarding the recently completed fourth major revision of the Illinois list of endangered and threatened species (completed in 2009). In addition to species information provided by ESTAC members, Dr. R. Edward DeWalt, Dr. Jason Koontz, Alan Resetar, and Diane Tecic were especially helpful in tracking down specific location information for several species.

This volume, and the review and revision of the Illinois list of endangered and threatened species, could never have been completed without the ongoing data collection of the many dedicated zoologist and botanists in Illinois. Their work has enabled us to evaluate the status of our native flora and fauna, and determine which of these species are endangered or threatened with endangerment in Illinois. Among these dedicated individuals, we would especially like to thank the field staff of the Illinois Department of Natural Resources Office of Resource Conservation, Illinois Nature Preserves Commission, U.S. Fish and Wildlife Service, U.S. Forest Service, multiple Forest Preserve Districts, and non-governmental organizations such as the Nature Conservancy and Illinois Audubon, and researchers from the Illinois Natural History Survey, multiple state Universities, the Field Museum, the Chicago Botanic Garden, and the Morton Arboretum.

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SUMMARY OF 2009 AND 2010 CHANGES TO THE ILLINOIS LIST

In 2009, the Board completed a review and revision of the List. In 2010, several corrections were made, including correcting the status of Mudpuppy (*Necturus maculosus*) and Black-billed Cuckoo (*Coccyzus erythropthalmus*) from endangered to threatened, the generic placement for Madonna Cave Springtail from *Arrhopalites* to *Pygmarrhopalites*, adding the Northern Riffleshell (*Epioblasma rangiana*) as federally and Illinois endangered, and several spelling errors. The combined changes from 2009 and 2010 are listed in a February 2011 amendment to *17 Illinois Administrative Code 1010* and are outlined below.

ADDED AS ENDANGERED

REPTILES

Apalone mutica (Smooth Softshell)

INVERTEBRATES

Lithasia obovata (Shawnee Rocksnail)
Pygmarrhopalites madonnensis (Madonna Cave Springtail)
Diploperla robusta (Robust Springfly)
Epioblasma rangiana (Northern Riffleshell)*
Prostoia completa (Central Forestfly)
Anthysanella incongrua (a leafhopper)
Centruroides vittatus (Common Striped Scorpion)

PLANTS

Carex plantaginea (Plantain-leaved Sedge)
Gratiola quartermaniae (Hedge Hyssop)

ADDED AS THREATENED

AMPHIBIANS

+*Necturus maculosus* (Mudpuppy)

REPTILES

Terrapene ornata (Ornate Box Turtle)

BIRDS

+*Coccyzus erythropthalmus* (Black-billed Cuckoo)

PLANTS

Buchnera americana (Blue Hearts)
Delphinium carolinianum (Wild Blue Larkspur)

REMOVED FROM ENDANGERED [1]

PLANTS

Hydrocotyle ranunculoides (Water-pennywort) [6]
Ranunculus cymbalaria (Seaside Crowfoot) [2]
Scirpus paludosus (*Bolboschoenus maritimus*) (Alkali Bulrush) [2]
Carex lucorum (sedge) [5]
Carex striatula (Lined Sedge) [5]
Isotria medeoloides (Small Whorled Pogonia) [8]
Lathyrus maritimus (Beach Pea) [8]
Milium effusum (Millet Grass) [8]
Potentilla millegrana (Cinquefoil) [2, 8]
Pycnanthemum albescens (White Mountain Mint) [8]
Triadenum virginicum (Marsh St. John's Wort) [8]

REMOVED FROM THREATENED [1]

BIRDS

Haliaeetus leucocephalus (Bald Eagle) [9]
Ammodramus henslowii (Henslow's Sparrow) [9]

REMOVED FROM THREATENED [1]

BIRDS (continued)

Grus canadensis (Sandhill Crane) [9]

CHANGED STATUS FROM ENDANGERED TO THREATENED

BIRDS

Ictinia mississippiensis (Mississippi Kite)

PLANTS

Berchemia scandens (Supple-jack)

Cyperus lancastriensis (Galingale)

Juncus alpinus (*Juncus alpinoarticulatus*) (Richardson's Rush)

CHANGED STATUS FROM THREATENED TO ENDANGERED

FISH

Lepomis miniatus (Redspotted Sunfish)

REPTILES

Emydoidea blandingii (Blanding's Turtle)

BIRDS

Gallinula chloropus (Common Moorhen)

Lanius ludovicianus (Loggerhead Shrike)

INVERTEBRATES

Hesperia ottoe (Ottoe Skipper)

OFFICIAL NAME CHANGED

BIRDS

Nycticorax nyticorax (Black-crowned Night Heron) to Black-crowned Night-Heron

Nyctanassa violacea (Yellow-crowned Night Heron) to Yellow-crowned Night-Heron

Tympanuchus cupido (Greater Prairie Chicken) to Greater Prairie-Chicken.

Sterna antillarum (Least Tern) to *Sternula antillarum*

AMPHIBIANS

Cryptobranchus alleganiensis (Hellbender) to Eastern Hellbender

Pseudacris streckeri (Illinois Chorus Frog) to *Pseudacris illinoensis*

REPTILES

Elaphe emoryi (Great Plains Ratsnake) to *Pantherophis emoryi*

Heterodon nasicus (Western Hognose Snake) to Plains Hog-nosed Snake

Kinosternon flavescens (Illinois Mud Turtle) to Yellow Mud Turtle

TYPOGRAPHIC CORRECTION

Polygonum arifolium (Halbred-leaved Tearthumb) to Halberd-leaved Tearthumb

Notes:

* No Board action required, automatically added September 16, 2010 based on federally-led recovery activities that reintroduced the species to Illinois where it had been considered extirpated.

\+ The Board recommended these species for listing as threatened. Board staff incorrectly listed the species as endangered in amendment to 17 Ill. Adm. Code 1010 (2009). The status for these species was corrected in an August 20, 2010 amendment to the Ad Rule.

[1] Primary reasons for delisting species are noted by superscripts

[2] A peripheral species that has been determined to occur only in disturbed/non-native habitats in Illinois.

[3] Now considered to be only a vagrant breeding species in Illinois.

[4] All native populations are now considered to be extirpated in Illinois.

[5] Illinois records for this species are now believed to be based on misidentified specimens.

[6] Now known to be more common in Illinois than previously thought.

[7] Commercial fishing regulations determined by the Illinois Department of Natural Resources provide adequate protection for this species in Illinois.

[8] The species is now considered extinct.

[9] A species now considered to be recovered from endangerment or the threat of endangerment in Illinois.

SPECIES ACCOUNTS FOR SPECIES ADDED TO THE STATE LIST

How to Use this Section

The purpose of this section is to provide general information on the status and distribution of species added to the Illinois list of endangered and threatened species in October of 2009 and September of 2010. It is not intended to serve as a field guide for species identification, and for that reason no attempt has been made to illustrate particular species. It should not be used for precise location information on where a particular species occurs, as this information is constantly being revised as data are collected, and may be out-of-date for some species at the time of publication. Anyone desiring precise information on endangered and threatened species occurrences in Illinois should contact the Illinois Department of Natural Resources' Natural Heritage Database in Springfield.

Key

The narratives in this section are accompanied by a map of Illinois with county outlines shown. Counties from which the species is known to occur within the last 10 years (post-2000) according to the Illinois Natural Heritage Database are shown as a solid circle; county records which may no longer be extant (pre-2000) are shown as an open circle. An example of a species treatment is as follows:



Genus species **(Author)**
Common Name **FAMILY NAME**

Illinois Status: Listed as endangered or threatened in Illinois (Illinois Endangered Species Protection Board 2011).
Federal Status: Listed as endangered or threatened in the United States (United States Fish and Wildlife Service 2010).
Synonyms: if any
Present Distribution: A description of the species' general range in North America and current (post-2000) distribution in Illinois. Specific information on the exact location of populations is not given in order to protect these sensitive remnants. Locations are usually identified only to the county level.
Former Illinois Distribution: A description of the species' former distribution (pre-2000) in Illinois.
Habitat: Specific habitat requirements or associations of the species.
Reason for Status: Factor believed to have led to the species' endangered or threatened status in Illinois.
Management Recommendations: Management needs for the recovery and protection of the species.

References: Specific references pertaining to each species are given in species narratives, except for plant and animal account information obtained from the Illinois Natural Heritage Database and databases maintained by the Illinois Natural History Survey and some general information on listed plant species and their range, status, and distribution that was obtained from regional floras not specifically cited in the text. These include: Deam (1940), Fernald (1950), Gleason (1952), Gleason and Cronquist (1991), Iverson et al (1997), Jones (1963), Jones and Fuller (1955), Kibbe (1952), Mohlenbrock (1981), Mohlenbrock and Ladd (1978), Mohlenbrock and Thomson (1987), Mohlenbrock and Voigt (1959), Myers (1972), and Steyermark (1963)

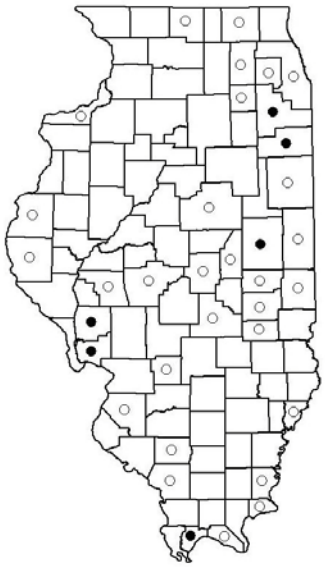
Organization of Text

Species have been arranged in the text alphabetically by scientific name within taxonomic classes. Species classified as endangered or threatened are intermixed, rather than broken into two groupings; the status of each species is noted in the narrative for that species. Because not all readers will know the scientific name of a species, and since species may be known by several Latin names (synonyms), readers can use the Index to look up species discussed in this volume. The Index gives both Latin and common names, as well as synonyms, allowing for a species to be located in several ways.

The Cross References of Species to County – County Listing and – Species Listing (Appendices III and IV, respectively) can be used to find what counties a particular species occurs in or conversely, a county can be checked for which species occur there. CAUTION: Please remember that new data are being collected all the time. The information in the species/county cross reference could be out-of-date for some species by the time this volume is published. This index, as is true of the entire document, should only be used to get a general picture of endangered and threatened species status in Illinois. It should never be used as a sole source of location information for any report, project, regional/local planning, or environmental impact assessment. For work of that nature, you must contact the Illinois Department of Natural Resources, Division of Resource Review and Coordination, One Natural Resources Way, Springfield, IL 62702-1271.

AMPHIBIANS

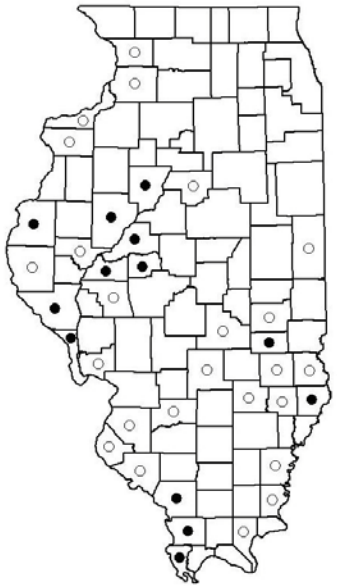
Necturus maculosus **(Rafinesque, 1818)**
Mudpuppy **PROTEIDAE**



Illinois Status: Threatened
Federal Status: None
Present Distribution: South Quebec, Lake Champlain drainage, and eastern New York, west to southeastern Manitoba and eastern Kansas, south to the Tennessee River system (Conant and Collins 1991). The Illinois Natural Heritage Database documents recent (post-2000) records from Champaign, Greene, Jersey, Kankakee, Pulaski, and Will counties (IDNR 2010).
Former Illinois Distribution: Phillips et al (1999) report this species from 31 counties prior to 1999, with 26 counties known for only pre-1980 records.
Habitat: Habitats include lakes, ponds, rivers, and large creeks, preferably with clear waters, but can include turbid water if gravel headwaters are available for reproduction (Phillips et al 1999).
Reason for Status: Numerous anecdotal observations indicate that this species may still be fairly abundant in near-shore areas of Lake Michigan including areas just off shore of downtown Chicago. However, recent observations in inland streams and rivers are few. In some cases turbidity may lead to difficulty in detection, though trapping (which can be effective) in some known streams has rarely resulted in captures.
Management Recommendations: *Necturus* is the only known glochidial host of the salamander mussel (*Simpsonaias ambigua*). The latter species is listed as endangered in Illinois and is currently undergoing a status review for possible Federal listing by the US Fish & Wildlife Service. Conserving mudpuppy populations may be a key in conserving/recovering the mussel. Additional surveys would increase knowledge of the species status and distribution in the state. Increased attention to watershed planning should consider the habitat of this species.

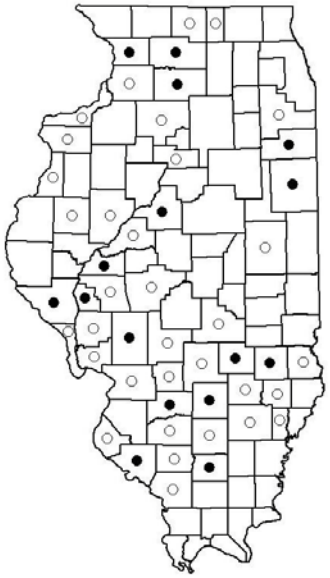
REPTILES

***Apalone mutica* (LeSueur, 1827)**
Smooth Softshell Turtle **TRIONYCHIDAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: Central United States, the Ohio, Mississippi, and Missouri rivers and their tributaries; streams draining to the Gulf of Mexico, from extreme western Florida to eastern Texas (Conant and Collins 1991). The Illinois Natural Heritage Database documents recent (post-2000) records from Calhoun, Cass, Cumberland, Fulton, Jackson, Lawrence, Mason, Menard, Peoria, Pike and Sangamon counties (IDNR 2010). Additionally, Anderson et al (2002) and Barko and Briggler (2006), recorded the species from locations in Hancock and Alexander and Union counties, respectively.
Former Illinois Distribution: Phillips et al (1999) report this species from 34 counties primarily along the border and larger interior rivers in Illinois prior to 1999, with 30 counties known for only pre-1980 records.
Habitat: Predominantly a river turtle, it inhabits rivers and large streams with sand substrate, bars, and banks. Uncommon in lakes (Phillips et al 1999).
Reason for Status: While this species is susceptible to trapping, it has not been captured in abundance at any site except for a recently sampled section of the Sangamon River in Menard County. Other sampling efforts at known sites on the Middlefork Vermilion, Wabash, and Embarrass Rivers have been unsuccessful in capturing additional animals. Sampling may be particularly difficult on large rivers (e.g., Wabash and Mississippi).
Management Recommendations: Poor water quality and lack of suitable nesting habitat may be an issue for this species. Increased attention to watershed planning should consider the habitat of this species. Additional survey efforts may help verify the status of the species in streams where recent efforts were unsuccessful.

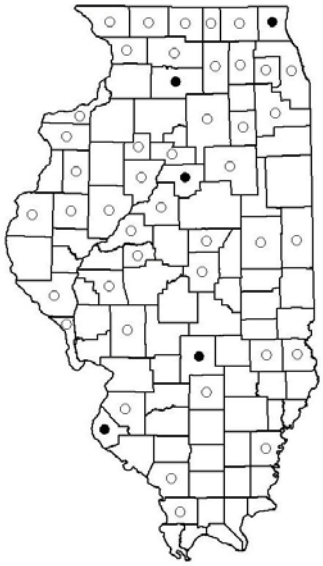
***Terrapene ornata* (Agassiz, 1857)**
Ornate Box Turtle **EMYDIDAE**



Illinois Status: Threatened
Federal Status: None
Present Distribution: Indiana to southeastern Wyoming, south through Texas and into the coastal prairies of Louisiana, then discontinuous to the northwest (Conant and Collins 1991). The Illinois Natural Heritage Database documents recent (post-2000) records for this species from Bond, Carroll, Cass, Clay, Clinton, Effingham, Franklin, Iroquois, Jasper, Jo Daviess, Kankakee, Lee, Macoupin, Marion, Menard, Ogle, Pike, Randolph, Scott, Tazewell, and Winnebago counties. Six populations are protected in Illinois Nature Preserves and/or Land and Water Preserves and five additional populations are found on State Parks, Recreation Areas, or Fish and Wildlife Areas (IDNR 2010).
Former Illinois Distribution: Phillips et al (1999) report this species from 44 counties across the state, except for extreme southern Illinois, prior to 1999, with 38 counties only known for pre-1980 records.
Habitat: Prairies and old field openings of former prairies, with soils other than black muck (Phillips et al 1999).
Reason for Status: In several of the disjunct range segments (e.g., Kanakakee Sands) where this species was formerly common, it is now very rarely encountered and several counties have no recent records. Areas in particular need of surveys include large portions of the Southern Till Plain and in the sand areas where considerable habitat on private land may be present but where recent occurrences are lacking. Threats include habitat loss, roads, and unsustainable collection by turtle enthusiasts.
Management Recommendations: Protection and management of habitat, as well as additional surveys and population assessment to verify current status and distribution, will help conserve this species in Illinois. Additionally, this species is admired by the public and resource managers alike, and it would likely be easy to mobilize recovery efforts for it.

BIRDS

Coccyzus erythropthalmus **(Wilson, 1811)**
Black-billed Cuckoo **CUCULIDAE**



Illinois Status: Threatened
Federal Status: None
Present Distribution: Fairly common in eastern North America, with breeding range extending from Newfoundland to Saskatchewan and Montana, south to Oklahoma, and east to Tennessee and Virginia
(Sibley 2000). In Illinois, black-billed cuckoos are currently known from five counties with recent (post-2000) reports indicating probable or confirmed nesting evidence. One location in Fayette County and one location in Lake County are in Illinois Nature Preserves (IDNR 2010).
Former Illinois Distribution: During the state's Breeding Bird Atlas project (1986-1991), black-billed cuckoos were reported from 277 atlas blocks, including 121 blocks, in 45 counties, with probable or confirmed nesting evidence (Kleen et al 2004).
Habitat: A low or ground nesting species of forests, orchards, and woodland edges (Bohlen 1989).
Reason for Status: The species appears to have experienced a substantial decline in the state, with a population trend estimate from 1980 to 2007 of –1.76% per year (Sauer et al 2008) and relatively few recent records. Review of recent information for the species shows 3-15 reports of the species per year between 2001-2006, with very few reports indicating probable or confirmed nesting (Kleen 2002-2007). Breeding Bird Survey data for 1965-79 showed a mean number of birds/route was 0.4 (Robbins et al 1986 *in* Bohlen 1989), compared to 0.16 birds/route from 1980-2007 (Sauer et al 2008).
Management Recommendations: Loss of nesting habitat such as orchards, hedgerows, and shrubby field borders is considered the major threat to this species. Additional surveys and habitat protection and management to increase suitable nesting habitat would contribute to the recovery of the black-billed cuckoo in Illinois.

INVERTEBRATES

***Athysanella incongrua* (Baker, 1898)**
a leafhopper **CICADELLIDAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: The range of this species is centered in the Great Plains and Illinois is the easternmost point with the exception of a dubious record from New Hampshire. The species is recorded from Iowa, Nebraska, Kansas, and Oklahoma, but not from Missouri. In Illinois, it appears to have been extirpated from one location and is currently known from only a single population in an Illinois Nature Preserve in Mason County (IDNR 2010).
Former Illinois Distribution: This species is historically known from only two locations, one each in Morgan and Mason Counties, within Illinois.
Habitat: A flightless species that is restricted to dry prairie.
Reason for Status: In addition to a statewide population reduction to only one known location, this leafhopper is associated with rare and restrictive habitat (dry prairie) that is threatened by destruction and degradation, due to invasive and exotic species encroachment.
Management Recommendations: This flightless insect may be sensitive to fire and therefore may require careful application of prescribed burn management in addition to other management activities to control and reduce woody succession and encroachment by invasive species.

***Centruroides vittatus* (Say)**
Common Striped Scorpion **BUTHIDAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: Texas, where it is most heavily concentrated, into Arkansas, Colorado, Illinois, Kansas, Louisiana, Mississippi, Missouri, Nebraska, New Mexico, Oklahoma, and Tennessee. It is also found in the Mexican states of Tamaulipas, Coahuila, Nuevo Leon, Chihahua, and Durango (Schaefer 2001). In Illinois, the
common striped scorpion is most recently (1996) known from several locations in only one of two historic counties (Monroe) in southwestern Illinois (IDNR 2010).
Former Illinois Distribution: This otherwise generally widespread scorpion is historically known from only Monroe and Randolph counties in southwestern Illinois (Anton 1996).
Habitat: Restricted to open talus slide microhabitat and forest openings and glades.
Reason for Status: The species has highly restrictive and specialized habitat requirements, a very limited distribution in the State, and its habitat is threatened by shading from invasive plant growth that alters
microhabitat conditions.
Management Recommendations: Management activities to control and reduce woody succession and encroachment by invasive species that shade-out the open talus slide microhabitats where the species occurs, permanent protection of these areas, and additional surveys will help conserve this species in Illinois.

Diploperla robusta **(Stark and Gaufin, 1974)**
Robust Springfly **PERLODIDAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: Connecticut, Kentucky, Illinois, Indiana, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia (Kondratieff 2004 *in* NatureServe 2009). In Illinois, this species is only known from a single ravine in an Illinois Nature Preserve in Vermilion County (IDNR).
Former Illinois Distribution: This species has only been collected from one location in Vermilion County (Stark and Armitage 2004; INHS 2010b).
Habitat: Ravines of large river bluffs and uplifted areas (Stark and Armitage 2004).
Reason for Status: The species is currently known from only one stream segment in the State and localized threats include increases in water temperature and nutrient enrichment of the stream system.
Management Recommendations: Improvements to water quality, including thermal conditions, and additional surveys are necessary to conserve this species in Illinois.

Epioblasma rangiana **(Lea, 1839)**
Northern Riffleshell **UNIONIDAE**



Illinois Status: Endangered
Federal Status: Endangered
Present Distribution: Extant populations are found in Fish Creek in Ohio and Indiana; Green River in Kentucky; Big Darby Creek in Ohio; Elk River in West Virginia; and Allegheny River, French Creek and LeBoeuf Creek in Pennsylvania (USFWS 1994). In Illinois, the species is currently known from two reintroduction locations within the Vermilion drainage in Champaign and Vermilion counties.
Former Illinois Distribution: Historic Illinois records for this species indicate that it had previously been known from the North Fork of the Vermilion River, Vermilion River, and Wabash River (INHS 2010c).
Habitat: Gravel riffles in medium to large rivers.
Reason for Status: Prior to being listed as Federally Endangered in 1993, the Northern Riffleshell had been considered extirpated from Illinois, with no live records recorded for nearly 70 years (USFWS 2008). As part of ongoing federal recovery activities for this species, on September 15 and 16, 2010, Illinois reintroduced animals to two sites within the Vermilion drainage in Illinois. Upon that reintroduction, the Northern Riffleshell was added to the Illinois list of endangered species because all federally designated endangered and threatened species that occur in the state are automatically listed as Illinois endangered or threatened and added to the Illinois list without notice or public hearing.
Management Recommendations: Improvements to water quality, protection of habitat from degradation, and continued reintroduction efforts and surveys will help in the recovery of this species in Illinois.

***Lithasia obovata* (Say, 1829)**
Shawnee Rocksnail **PLEUROCERIDAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: Ohio River and tributaries in Pennsylvania, Ohio, Indiana, Illinois, Kentucky, and Tennessee (Burch 1989 *in* NatureServe 2009). In Illinois, recent (post-2000) occurrences of this species are known from a small portion of the Little Wabash River in Gallatin and White counties (IDNR 2010).
Former Illinois Distribution: Data suggests that this species once historically found in five basins in the Wabash River drainage in Clay, Gallatin, Lawrence, Wabash, and White counties (IDNR 2010).
Habitat: Large rivers and tributaries.
Reason for Status: Habitat degradation including siltation, chemical pollution, impoundments, in-stream disturbances (e.g., gravel mining, dredging, and channelization), and competition from exotic species
threaten this species whose range has been reduced to one sub-watershed in Illinois.
Management Recommendations: Improvements to water quality, protection of habitat from degradation, and additional surveys will help conserve this species in Illinois.

***Prostoia completa* (Walker, 1852)**
Central Forestfly **NEMOURIDAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: Alabama to Quebec and west to Minnesota and Oklahoma (Stark et al 1986 *in* NatureServe 2009). Although widespread in medium sized creeks across much of the Midwest and into the Ozarks, this species is currently known from only one Illinois location in Union County (IDNR 2010).
Former Illinois Distribution: This species has only been recorded from the one location in a single drainage in Union County (INHS 2010b).
Habitat: Gravel bottomed rivers and streams.
Reason for Status: Degradation and destruction of this species' very specific in-stream habitat from activities that directly impact (substrate removal) or indirectly impact (result in increases sedimentation) threaten this singular population.
Management Recommendations: Management needs for the conservation and protection of the species include reduction of habitat degradation resulting from streambed substrate removal and other activities that compromise habitat structure and additional surveys.

Pygmarrhopalites madonnensis **(Zeppelini and Christiansen, 2003)**
Name change in late 2009, from ***Arrhopalites madonnensis***
Madonna Cave Springtail **ARRHOPALITIDAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: Only known from Illinois (Lewis et al 2003; Zeppelini et al 2009) and currently from only one Illinois location in Monroe County (IDNR 2010).
Former Illinois Distribution: This species has only been recorded from a singular location in Monroe County (Lewis et al 2003; Zeppelini et al 2009).
Habitat: This species is an obligatory cavernicole, i.e., troglobite (cave-dwelling animals that have adapted to their dark surroundings) (Zeppelini and Christiansen 2003).
Reason for Status: The species has highly restrictive and specialized habitat requirements, it has a very limited distribution, only being known from one location, and is threatened by development activities that impact water quality in that location (Lewis et al 2003; Zeppelini and Christiansen 2003).
Management Recommendations: Management activities to control and reduce impacts from local development activities (such as land clearing, sedimentation, nutrient enrichment, agrichemicals, and agricultural activities) that may negatively affect the quality of water entering the cave system, as well as permanent protection of the cave system, will help conserve this species in Illinois.

PLANTS

***Buchnera americana* L.**
Blue Hearts **SCROPHULARIACEAE**



Illinois Status: Threatened
Federal Status: None
Present Distribution: This species ranges from Florida to Texas, north to New Jersey, New York, Ontario, Michigan, Illinois, Missouri, and Kansas (NatureServe 2009). The Illinois Natural Heritage Database documents a recent (post-2000) record in an Illinois Nature Preserve in Morgan County (IDNR 2010).
Former Illinois Distribution: In Illinois, it is mostly restricted to the western central part of the state with historic (pre-2000) records from Calhoun, Cass, Greene, Jersey, Madison, Monroe, Morgan, Pike, Randolph, and St. Clair counties (INHS 2010a).
Habitat: A species of prairie and fields, particularly loess hill prairie, in Illinois.
Reason for Status: With the loss of loess hill prairie due to successional events, this species is becoming more rare in the state.
Management Recommendations: Additional surveys for the species, management activities to control and reduce woody succession and encroachment by invasive species of loess hill prairies where the species occurs, and permanent protection of these areas will help conserve and recover this species in Illinois.

***Carex plantaginea* Lam.**
Plantain-leaved Sedge **CYPERACEAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: New Brunswick to Manitoba, south to Minnesota, Iowa, Illinois, Pennsylvania, and Massachusetts; also in the mountains of Tennessee, Kentucky, Alabama, and Georgia (NatureServe 2009). In Illinois, this species is currently known from only one location in a State Park in LaSalle County (IDNR 2010).
Former Illinois Distribution: Prior to the 2006 discovery of a population in LaSalle County, this species was only known from Cook and Jackson counties (IDNR 2010).
Habitat: Rich woods.
Reason for Status: This species of sedge was once recognized as endangered in Illinois based on an 1896 collection from Cook County. It was removed from the list in 1989 when no extant populations had been relocated. A native population of this species was found in LaSalle County in 2006.
Management Recommendations: Management of habitat to control invasion by non-native species, as well as permanent protection of areas where the species occurs, will help with its conservation in Illinois.

Delphinium carolinianum **Walt.**
Wild Blue Larkspur **RANUNCULACEAE**



Illinois Status: Threatened
Federal Status: None
Present Distribution: North Carolina to Florida, west to Texas, north to Kansas and Iowa, and east to Ohio (NatureServe 2009). In Illinois, it is currently known from only three counties (Calhoun, Henderson, and Pike) in the west-central part of the state, where one location is protected in an Illinois Nature Preserve (IDNR 2010).
Former Illinois Distribution: Historically, this species was considered rare and only known from two additional counties (Adams and Mercer) (INHS 2010a).
Habitat: Dry prairies and open ground, in Illinois all populations are restricted to limestone glades.
Reason for Status: There are currently only eight populations in the State and all are small and restricted to limestone glade communities (IDNR 2010).
Management Recommendations: Management of habitat to control woody succession and invasion by non-native species, as well as permanent protection of areas where the species occurs, will help with its conservation in Illinois.

Gratiola quartermaniae **D. Estes**
Hedge Hyssop **SCROPHULARIACEAE**



Illinois Status: Endangered
Federal Status: None
Present Distribution: This recently described species is part of the *Gratiola neglecta* complex and was separated from that species in 2007 with a known range of including Alabama, Illinois, Texas, and Ontario. It is most common in the limestone cedar glades of middle Tennessee (NatureServe 2009). In Illinois, it is only known from two, or possibly three, populations in Will County (IDNR 2010).
Former Illinois Distribution: This species was only recently described in 2007 and is only known from Will County.
Habitat: Limestone or dolomite glades, outcrops, and calcareous prairies (NatureServe 2009). In, Illinois it occurs in vernal pools over dolomite pavement in dolomite prairie
Reason for Status: This species has restrictive habitat requirements and very limited status and distribution in Illinois, with only two or three populations (IDNR 2010).
Management Recommendations: Management needs for the conservation and protection of the species include permanent habitat protection and management to maintain suitable conditions and exclude encroachment by invasive and woody successional species.

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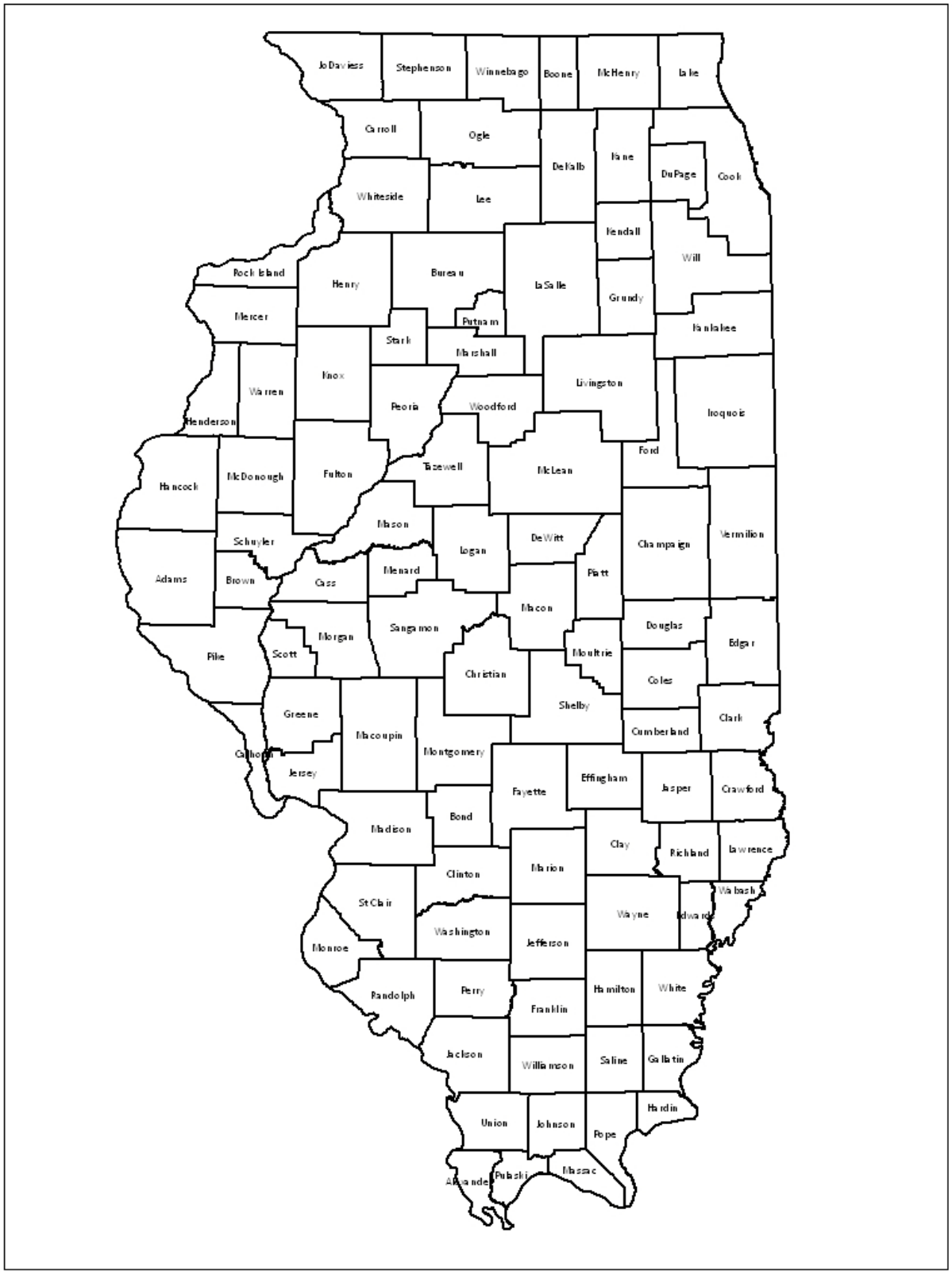
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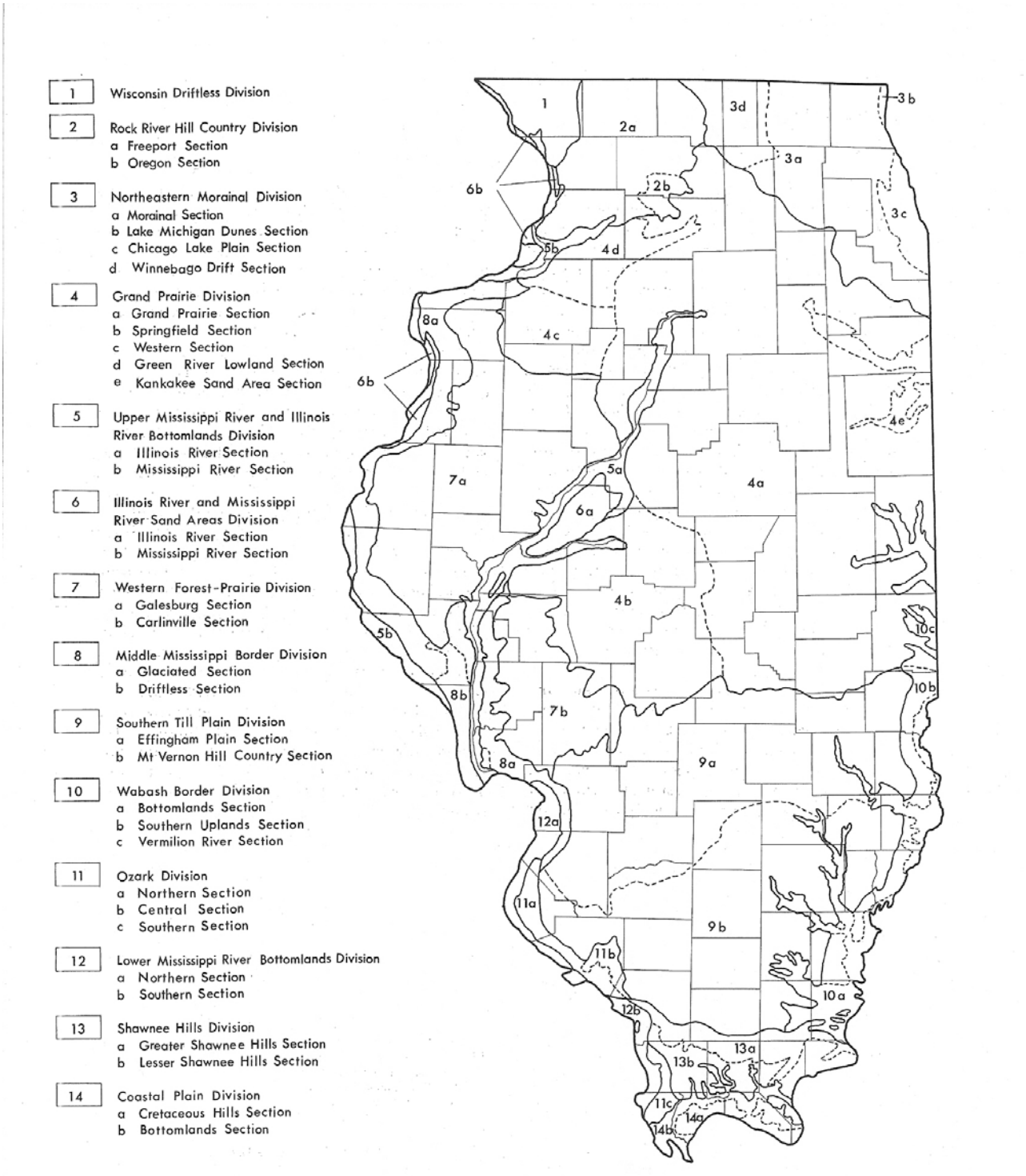
APPENDIX I

Illinois Counties



APPENDIX II

Natural Divisions of Illinois



From: Schwegman, John E. principal author. 1973. Comprehensive Plan for the Illinois Nature Preserves System. Part 2. The Natural Divisions of Illinois. Illinois Nature Preserves Commission, Rockford, Illinois. 32 pp.

APPENDIX III

Cross Reference of Species to County – County Listing

Counties with an asterisk (*) after them represent counties with recent (post-2000) records. Counties without an asterisk represent historic (pre-2000) records.

Adams
Apalone mutica
Delphinium carolinianum
Necturus maculosus

Alexander
*Apalone mutica**

Bond
Necturus maculosus
Terrapene ornata

Boone
Coccyzus erythropthalmus
Terrapene ornate

Bureau
Terrapene ornata

Calhoun
*Apalone mutica**
Buchnera americana
Coccyzus erythropthalmus
*Delphinium carolinianum**
Terrapene ornata

Carroll
Apalone mutica
Coccyzus erythropthalmus
*Terrapene ornata**

Cass
*Apalone mutica**
Buchnera americana
*Terrapene ornata**

Champaign
Coccyzus erythropthalmus
*Epioblasma rangiana**
*Necturus maculosus**
Terrapene ornata

Clark
Epioblasma rangiana

Clay
Apalone mutica
Lithasia obovata
Terrapene ornata

Clinton
Apalone mutica
*Terrapene ornata**

Coles
Apalone mutica
Necturus maculosus

Cook
Carex plantaginea
Coccyzus erythropthalmus
Necturus maculosus

Crawford
Apalone mutica
Coccyzus erythropthalmus
Terrapene ornata

Cumberland
*Apalone mutica**
Necturus maculosus

DeKalb
Coccyzus erythropthalmus

DeWitt
Coccyzus erythropthalmus

Douglas
Necturus maculosus

DuPage
Coccyzus erythropthalmus
Necturus maculosus

Edgar
*Necturus maculosus**

Edwards
Terrapene ornate

Effingham
*Terrapene ornata**

Fayette
Apalone mutica
*Coccyzus erythropthalmus**
Terrapene ornata

Franklin
*Terrapene ornata**

Fulton
*Apalone mutica**
Coccyzus erythropthalmus
Terrapene ornata

Gallatin
Apalone mutica
Necturus maculosus
*Lithasia obovata**

Greene
Apalone mutica
Buchnera americana
*Necturus maculosus**
Terrapene ornata

Grundy
Coccyzus erythropthalmus

Hancock
*Apalone mutica**
Coccyzus erythropthalmus
Necturus maculosus

Hardin
Necturus maculosus

Henderson
*Delphinium carolinianum**
Terrapene ornata

Iroquois
Necturus maculosus
*Terrepene ornata**

Jackson
*Apalone mutica**
Carex plantaginea
Coccyzus erythropthalmus
Necturus maculosus
Terrepene ornata

Jasper
Apalone mutica
Coccyzus erythropthalmus
*Terrapene ornata**

Jefferson
Terrapene ornata

Jersey
Buchnera americana
*Necturus maculosus**
Terrapene ornata

Jo Daviess
Coccyzus erythropthalmus
*Terrapene ornata**

Kane
Coccyzus erythropthalmus
Necturus maculosus

Kankakee
*Necturus maculosus**
*Terrapene ornata**

Kendall
Necturus maculosus

Lake
*Coccyzus erythropthalmus**
Necturus maculosus

LaSalle
*Carex plantaginea**
Coccyzus erythropthalmus

Lawrence
*Apalone mutica**
Epioblasma rangiana
Lithasia obovata

Lee
*Coccyzus erythropthalmus**
*Terrapene ornata**

Livingston
Coccyzus erythropthalmus

Macon
Coccyzus erythropthalmus
Necturus maculosus

Macoupin
Coccyzus erythropthalmus
*Terrapene ornata**

Madison
Buchnera americana
Terrapene ornata

Marion
Coccyzus erythropthalmus
*Terrapene ornata**

Marshall
Coccyzus erythropthalmus
Terrapene ornata

Mason
*Apalone mutica**
*Athysanella incongrua**
Coccyzus erythropthalmus
Terrapene ornata

Massac
Necturus maculosus

McDonough
Coccyzus erythropthalmus
Terrapene ornata

McHenry
Coccyzus erythropthalmus
Necturus maculosus

McLean
Necturus maculosus

Menard
*Apalone mutica**
Coccyzus erythropthalmus
*Terrapene ornata**

Mercer
Apalone mutica
Coccyzus erythropthalmus
Delphinium carolinianum
Terrapene ornata

Monroe
Apalone mutica
Buchnera americana
Centruroides vittatus
*Coccyzus erythropthalmus**
*Pygmarrhopalites madonnensis**
Terrapene ornata

Montgomery
Terrepene ornate

Morgan
Apalone mutica
Athysanella incongrua
*Buchnera americana**
Coccyzus erythropthalmus
Necturus maculosus
Terrapene ornate

Ogle
Coccyzus erythropthalmus
*Terrapene ornata**

Peoria
*Apalone mutica**
Coccyzus erythropthalmus

Perry
Necturus maculosus
Terrapene ornata

Piatt
Necturus maculosus

Pike
*Apalone mutica**
Buchnera americana
Coccyzus erythropthalmus
*Delphinium carolinianum**
*Terrapene ornata**

Pope
Apalone mutica

Pulaski
*Necturus maculosus**

Randolph
Apalone mutica
Buchnera americana
Centruroides vittatus
*Terrapene ornata**

Richland
Apalone mutica
Terrapene ornata

Rock Island
Apalone mutica
Coccyzus erythropthalmus
Necturus maculosus
Terrapene ornata

Sangamon
Necturus maculosus
Terrapene ornata

Schulyer
Apalone mutica

Scott
Apalone mutica
*Terrapene ornata**

Shelby
Apalone mutica
Necturus maculosus
Terrapene ornata

St. Clair
Apalone mutica
Buchnera americana
Coccyzus erythropthalmus
Necturus maculosus

Stark
Coccyzus erythropthalmus

Stephenson
Coccyzus erythropthalmus

Tazewell
Coccyzus erythropthalmus
*Terrapene ornata**

Union
*Apalone mutica**
Coccyzus erythropthalmus
*Lithasia obovata**
*Prostoia completa**

Vermilion
Apalone mutica
Coccyzus erythropthalmus
*Diploperla robusta**
*Epioblasma rangiana**
Necturus maculosus

Wabash
Lithasia obovata
Necturus maculosus

Warren
Coccyzus erythropthalmus

Washington
Terrapene ornate

Wayne
Terrapene ornata

White
Apalone mutica
Coccyzus erythropthalmus
Epioblasma rangiana
*Lithasia obovata**

Whiteside
Apalone mutica
Terrapene ornata

Will
Coccyzus erythropthalmus
*Gratiola quertermaniae**
*Necturus maculosus**
*Terrepene ornata**

Winnebago
Coccyzus erythropthalmus
Necturus maculosus
*Terrapene ornata**

Woodford
Apalone mutica
*Coccyzus erythropthalmus**

APPENDIX IV

Cross Reference of Species to County – Species Listing

Counties with an asterisk (*) after them represent counties with recent (post-2000) records. Counties without an asterisk represent historic (pre-2000) records.

Apalone mutica
Adams
Alexander*
Calhoun*
Carroll
Cass*
Clay
Clinton
Coles
Crawford
Cumberland*
Fayette
Fulton*
Gallatin
Greene
Hancock*
Jackson*
Jasper
Lawrence*
Mason*
Menard*
Mercer
Monroe
Morgan
Peoria*
Pike*
Pope
Randolph
Richland
Rock Island
Schuyler
Shelby
St. Clair
Union*
Vermilion
White
Whiteside
Woodford

Arrhopalites madonnensis (see *Pygmarrhopalites madonnensis*)

Athysanella incongrua
Mason*
Morgan

Buchnera americana
Calhoun
Cass
Greene
Jersey
Madison
Monroe
Morgan*
Pike
Randolph
St. Clair

Carex plantaginea
Cook
Jackson
LaSalle*

Centruroides vittatus
Monroe
Randolph

Coccyzus erythropthalmus
Boone
Calhoun
Carroll
Champaign
Cook
Crawford
DeKalb
DeWitt
DuPage
Fayette*
Fulton
Grundy
Hancock
Jackson
Jasper
Jo Daviess
Kane
Lake*
LaSalle
Lee*
Livingston
Macon
Macoupin
Marion
Marshall
Mason
McDonough
McHenry
Menard
Mercer
Monroe*
Morgon
Ogle
Peoria
Pike
Rock Island
St. Clair
Stark
Stephenson
Tazewell
Union
Vermilion
Warren
White
Will
Winnebago
Woodford*

Delphinium carolinianum
Adams
Calhoun*
Henderson*
Mercer
Pike*

Diploperla robusta
Vermilion*

Epioblasma rangiana
Champaign*
Clark
Lawrence
Vermilion*
White

Gratiola quartermaniae
Will*

Lithasia obovata
Clay
Gallatin*
Lawrence
Union*
Wabash
White*

Necturus maculosus
Adams
Bond
Champaign*
Coles
Cook
Cumberland
Douglas
DuPage
Edgar*
Gallatin
Greene*
Hancock
Hardin
Iroquois
Jackson
Jersey*
Kane
Kankakee*
Kendall
Lake
Macon
Massac
McHenry
McLean
Morgan
Perry
Piatt
Pulaski*
Rock Island
Sangamon
Shelby
St. Clair
Vermilion
Wabash
Will*
Winnebago

Prostoia completa
Union*

Pygmarrhopalites madonnensis
Monroe*

Terrapene ornata
Boone
Bond*
Bureau
Calhoun
Carroll*
Cass*
Champaign
Clay*
Clinton*
Crawford
Edwards
Effingham*
Fayette
Franklin*
Fulton
Greene
Henderson
Iroquois*
Jackson
Jasper*
Jefferson
Jersey
JoDaviess*
Kankakee*
Lee*
Macoupin*
Madison
Marion*
Marshall
Mason
McDonough
Menard*
Mercer
Monroe
Montgomery
Morgan
Ogle*
Perry
Pike*
Randolph*
Richland
Rock Island
Sangamon
Scott*
Shelby
Tazewell*
Washington
Wayne
Whiteside
Will
Winnebago*

APPENDIX V

Description of the List 5-year Review Process

(as per the Illinois Endangered Species Protection Act [520 ILCS 10/1] and the Illinois Administrative Procedure Act [5 ILCS 100/])**.**

By law, changes to the list must be based on scientific evidence. Factors that are considered when evaluating a species include changes in population size, changes in range in the state, whether it occurs at protected sites, any known threats to its existence, as well as features of its life history which might have a bearing on survival.

Over the course of several years and multiple quarterly meetings, the Illinois Endangered Species Protection Board (Board) reviews species status and distribution information and solicits input and recommendations on the same from its Endangered Species Technical Advisory Committees (ESTACs).

Recommendations for proposed changes to the Illinois list of endangered and threatened species (List) developed by the Board and the ESTACs are reviewed at one of the Board's quarterly meetings and the Board preliminarily approves a list of proposed changes.

The Board holds a public hearing for comments on the proposed changes to the List. The hearing record remains open for two weeks following the hearing date.

After considering public comments received from the hearing record, the Board makes final approval of changes at a subsequent quarterly meeting and submits the List to the Illinois Department of Natural Resources (IDNR).

The IDNR conducts an internal review of the List and then submits Administrative Rule changes to the List to the Secretary of State for publication in the Illinois Register and review by the Joint Committee on Administrative Rules (JCAR). This first notice for Administrative Rule changes to the List published in the Illinois Register includes a 45-day comment period.

If substantive comments are received during the 45-day comment period, the IDNR provides a response to comments to the JCAR.

JCAR approves the List at a regularly scheduled meeting of its committee.

Upon approval by JCAR, the IDNR submits the final Administrative Rule changes to the List to the Secretary of State for publication in the Illinois Register.

APPENDIX VI

CHECKLIST OF ENDANGERED AND THREATENED ANIMALS AND PLANTS OF ILLINOIS

Illinois Endangered Species Protection Board

Effective February 22, 2011

The Board revises the list of protected species at least once every five years and completed its most recent revisions in 2009. The following list reflects those 2009 and subsequent revisions in 2010: This booklet contains a list of all species which have been designated as endangered or threatened by the Illinois Endangered Species Protection Board. Species are listed alphabetically by scientific name. Species listed at the Federal level are indicated by asterisks -

** = Federally Endangered

* = Federally Threatened

CRITERIA FOR STATE LISTING

A species shall be included on the official list of endangered and threatened species when one or more of the following criteria exists: 1) Species included in the Federal list of Endangered or Threatened Species, 2) Species proposed for Federal Endangered or Threatened Species which occur in Illinois, 3) Species which formerly were widespread in Illinois but have been nearly extirpated from the State due to habitat destruction, collecting, or other pressures resulting from the development of Illinois, 4) Species which exhibit very restricted geographic ranges of which Illinois is a part, 5) Species which exhibit restricted habitats or low populations in Illinois, or 6) Species which are significant disjuncts in Illinois i.e., the Illinois population is far removed from the rest of the species' range.

DEFINITIONS:

FEDERALLY ENDANGERED SPECIES - Any species which is in danger of extinction throughout all or a significant portion of its range.
FEDERALLY THREATENED SPECIES - Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
STATE ENDANGERED SPECIES - Any species which is in danger of extinction as a breeding species in Illinois.
STATE THREATENED SPECIES - Any breeding species which is likely to become a state endangered species within the foreseeable future in Illinois.
TAKE - In reference to animals and animal products, to harm, hunt, shoot, pursue, lure, wound, kill, destroy, harass, gig, spear, ensnare, trap, capture, collect, or to attempt to engage in such conduct. In reference to plants and plant products, to collect, pick, cut, dig up, kill, destroy, bury, crush, or harm in any manner.

The Illinois Endangered Species Protection Act prohibits the possession, taking, transportation, sale, offer for sale, or disposal of any listed animal or products of listed animals without a permit issued by the Department of Conservation. Also prohibited are the taking of listed plants without the expressed written permission of the landowner and the sale or offer to sell plants or plant products of endangered species.

Citation: Illinois Endangered Species Protection Board. 2011. Checklist of Endangered and Threatened Animals and Plants of Illinois. Illinois Endangered Species Protection Board, Springfield, Illinois. 18 pp.

FISHES
19 Endangered, 12 Threatened

Endangered

Acipenser fulvescens	Lake Sturgeon
Ammocrypta clarum	Western Sand Darter
Etheostoma camurum	Bluebreast Darter
Etheostoma histrio	Harlequin Darter
Hybognathus hayi	Cypress Minnow
Hybopsis amblops	Bigeye Chub
Hybopsis amnis	Pallid Shiner
Ichthyomyzon fossor	Northern Brook Lamprey
Lepomis miniatus	Redspotted Sunfish
Macrhybopsis gelida	Sturgeon Chub
Moxostoma valenciennesi	Greater Redhorse
Nocomis micropogon	River Chub
Notropis anogenus	Pugnose Shiner
Notropis boops	Bigeye Shiner
Notropis heterolepis	Blacknose Shiner
Notropis maculatus	Taillight Shiner
Notropis texanus	Weed Shiner
Noturus stigmosus	Northern Madtom
*Scaphirhynchus albus***	Pallid Sturgeon

Threatened

Ammocrypta pellucidum	Eastern Sand Darter
Catostomus catostomus	Longnose Sucker
Coregonus artedi	Cisco
Erimystax x-punctatus	Gravel Chub
Etheostoma exile	Iowa Darter
Fundulus diaphanus	Banded Killifish
Fundulus dispar	Starhead Topminnow
Lampetra aepyptera	Least Brook Lamprey
Lepomis symmetricus	Bantam Sunfish
Moxostoma carinatum	River Redhorse
Notropis chalybaeus	Ironcolor Shiner
Notropis heterodon	Blackchin Shiner

AMPHIBIANS
3 Endangered, 6 Threatened

Endangered

Salamanders

Ambystoma platineum	Silvery Salamander
Cryptobranchus alleganiensis	Eastern Hellbender
Desmognathus conanti	Spotted Dusky Salamander

Threatened

Salamanders

Ambystoma jeffersonianum	Jefferson Salamander
Hemidactylium scutatum	Four-toed Salamander
Necturus maculosus	Mudpuppy

Frogs and Toads

Gastrophryne carolinensis	Eastern Narrowmouth Toad
Hyla avivoca	Bird-voiced Treefrog
Pseudacris illinoensis	Illinois Chorus Frog

REPTILES
10 Endangered, 8 Threatened

Endangered

Turtles

Apalone mutica	Smooth Softshell
Clemmys guttata	Spotted Turtle
Emydoidea blandingii	Blanding's Turtle
Kinosternon flavescens	Yellow Mud Turtle
Macrochelys temminckii	Alligator Snapping Turtle
Pseudemys concinna	River Cooter

Snakes

Masticophis flagellum	Coachwhip
Nerodia fasciata	Broad-banded Watersnake
Pantherophis emoryi	Great Plains Rat Snake
Sistrurus catenatus	Eastern Massasauga

Threatened

Turtles

Terrepene ornata	Ornate Box Turtle

Snakes

Clonophis kirtlandi	Kirtland's Snake
Crotalus horridus	Timber Rattlesnake
Heterodon nasicus	Plains Hog-Nosed Snake
Nerodia cyclopion	Mississippi Green Watersnake
Tantilla gracilis	Flathead Snake
Thamnophis sauritus	Eastern Ribbonsnake
Tropidoclonion lineatum	Lined Snake

BIRDS
25 Endangered, 5 Threatened

Endangered

Asio flammeus	Short-eared Owl
Bartramia longicauda	Upland Sandpiper
Botaurus lentiginosus	American Bittern
Buteo swainsoni	Swainson's Hawk
*Charadrius melodus***	Piping Plover
Chlidonias niger	Black Tern
Circus cyaneus	Northern Harrier
Egretta caerulea	Little Blue Heron
Egretta thula	Snowy Egret
Gallinula chloropus	Common Moorhen
Lanius ludovicianus	Loggerhead Shrike
Laterallus jamaicensis	Black Rail
Limnothlypis swainsonii	Swainson's Warbler
Nyctanassa violacea	Yellow-crowned Night-Heron
Nycticorax nycticorax	Black-crowned Night-Heron
Pandion haliaetus	Osprey
Phalaropus tricolor	Wilson's Phalarope
Rallus elegans	King Rail
Sterna forsteri	Forster's Tern
Sterna hirundo	Common Tern
*Sternula antillarum***	Least Tern
Thryomanes bewickii	Bewick's Wren
Tympanuchus cupido	Greater Prairie-Chicken
Tyto alba	Barn Owl
Xanthocephalus xanthocephalus	Yellow-headed Blackbird

Threatened

Coccyzus erythropthalmus	Black-billed Cuckoo
Dendroica cerulea	Cerulean Warbler
Falco peregrinus	Peregrine Falcon
Ictinia mississippiensis	Mississippi Kite
Ixobrychus exilis	Least Bittern

MAMMALS
5 Endangered, 4 Threatened

Endangered

Corynorhinus rafinesquii	Rafinesque's Big-eared Bat
Myotis austroriparius	Southeastern Myotis
*Myotis grisescens***	Gray Bat
*Myotis sodalis***	Indiana Bat
Neotoma floridana	Eastern Wood Rat

Threatened

*Canis lupus***	Gray/Timber Wolf
Ochrotomys nuttalli	Golden Mouse
Oryzomys palustris	Rice Rat
Spermophilus franklinii	Franklin's Ground Squirrel

INVERTEBRATES
43 Endangered, 12 Threatened

Endangered

Snails

*Discus macclintocki***	Iowa Pleistocene Snail
Fontigens antroecetes	Hydrobiid Cave Snail
Lithasia obovata	Shawnee Rocksnail

Mussels

Cumberlandia monodonta	Spectaclecase
*Cyprogenia stegaria***	Fanshell
*Epioblasma rangiana **	Northern Riffleshell
Epioblasma triquetra	Snuffbox
*Lampsilis abrupta***	Pink Mucket
Lampsilis fasciola	Wavy-rayed Lampmussel
*Lampsilis higginsii***	Higgins Eye
*Plethobasus cooperianus***	Orangefoot Pimpleback
Plethobasus cyphyus	Sheepnose
*Pleurobema clava***	Clubshell
Pleurobema cordatum	Ohio Pigtoe
*Potamilus capax***	Fat Pocketbook
Ptychobranchus fasciolaris	Kidneyshell
Quadrula cylindrica	Rabbitsfoot
Simpsonaias ambigua	Salamander Mussel
Toxolasma lividus	Purple Lilliput
Villosa iris	Rainbow

Crustaceans

Caecidotea lesliei	Isopod
Caecidotea spatulata	Isopod
Crangonyx anomalus	Anomalous Spring Amphipod
Crangonyx packardi	Packard's Cave Amphipod
*Gammarus acherondytes***	Illinois Cave Amphipod
Orconectes indianensis	Indiana Crayfish
Orconectes kentuckiensis	Kentucky Crayfish
Orconectes lancifer	Shrimp Crayfish
Orconectes placidus	Bigclaw Crayfish
Stygobromus iowae	Iowa Amphipod

Scorpions

Centruroides vittatus	Common Striped Scorpion

Endangered (continued)

Dragonflies

*Somatochlora hineana***	Hine's Emerald Dragonfly

Springtails

Arrhopalites madonnensis	Madonna Cave Springtail

Stoneflies

Diploperla robusta	Robust Springfly
Prostoia completa	Central Forestfly

Leafhoppers

Athysanella incongrua	Leafhopper
Paraphlepsius lupalus	Leafhopper

Butterflies and Moths

Atrytone arogos	Arogos Skipper
Calephelis mutica	Swamp Metalmark
Hesperia ottoe	Ottoe Skipper
Incisalia polios	Hoary Elfin
*Lycaeides melissa samuelis***	Karner Blue Butterfly
Papaipema eryngii	Eryngium Stem Borer

Threatened

Mussels

Alasmidonta viridis	Slippershell
Cyclonaias tuberculata	Purple Wartyback
Ellipsaria lineolata	Butterfly
Elliptio crassidens	Elephant-ear
Elliptio dilatata	Spike
Fusconaia ebena	Ebonyshell
Ligumia recta	Black Sandshell
Villosa lienosa	Little Spectaclecase

Dragonflies

Nannothemis bella	Elfin Skimmer

Leafhoppers

Aflexia rubranura	Redveined Prairie Leafhopper

INVERTEBRATES

Threatened (continued)

Butterflies

Hesperia metea	Cobweb Skipper
Speyeria idalia	Regal Fritillary

PLANTS
251 Endangered, 81 Threatened

Endangered

Adoxa moschatellina	Moschatel
Alnus incana subsp. *rugosa*	Speckled Alder
Amelanchier sanguinea	Shadbush
Ammophila breviligulata	Marram Grass
Amorpha nitens	Smooth False Indigo
Arctostaphylos uva-ursi	Bearberry
Artemisia dracunculus	Dragon Wormwood
Asclepias lanuginosa	Wooly Milkweed
*Asclepias meadii**	Mead's Milkweed
Asclepias ovalifolia	Oval Milkweed
Asclepias stenophylla	Narrow-leaved Green Milkweed
Asplenium bradleyi	Bradley's Spleenwort
Asplenium resiliens	Black Spleenwort
Astragalus crassicarpus var. *trichocalyx*	Large Ground Plum
Astragalus distortus	Bent Milk Vetch
Astragalus tennesseensis	Tennessee Milk Vetch
Baptisia tinctoria	Yellow Wild Indigo
Bartonia paniculata	Screwstem
Beckmannia syzigachne	American Slough Grass
Berberis canadensis	Allegheny Barberry
Betula alleghaniensis	Yellow Birch
Botrychium campestre	Prairie Moonwort
Botrychium matricariifolium	Daisyleaf Grape Fern
Botrychium multifidum	Northern Grape Fern
Botrychium simplex	Dwarf Grape Fern
Bouteloua gracilis	Blue Grama
Bumelia lanuginosa	Wooly Buckthorn
Calamagrostis insperata	Bluejoint Grass
Calla palustris	Water Arum
Calopogon oklahomensis	Oklahoma Grass Pink Orchid
Calopogon tuberosus	Grass Pink Orchid
Camassia angusta	Wild Hyacinth
Cardamine pratensis var. *palustris*	Cuckoo Flower
Carex alata	Winged Sedge
Carex arkansana	Arkansas Sedge
Carex brunnescens	Brownish Sedge
Carex canescens var. *disjuncta*	Silvery Sedge
Carex chordorrhiza	Cordroot Sedge
Carex crawfordii	Crawford’s Sedge

Endangered (continued)

Carex cryptolepis	Yellow Sedge
Carex cumulata	Sedge
Carex decomposita	Cypress-knee Sedge
Carex diandra	Sedge
Carex disperma	Shortleaf Sedge
Carex echinata	Sedge
Carex formosa	Sedge
Carex garberi	Elk Sedge
Carex gigantea	Large Sedge
Carex inops subsp. *heliophila*	Plains Sedge
Carex nigromarginata	Black-edged Sedge
Carex oligosperma	Few-seeded Sedge
Carex physorhyncha	Bellow’s Beak Sedge
Carex plantaginea	Plaintain-leaved Sedge
Carex reniformis	Reniform Sedge
Carex trisperma	Three-seeded Sedge
Carex tuckermanii	Tuckerman's Sedge
Carya pallida	Pale Hickory
Castilleja sessiliflora	Downy Yellow Painted Cup
Ceanothus herbaceus	Redroot
Chamaelirium luteum	Fairy Wand
Chamaesyce polygonifolia	Seaside Spurge
Chimaphila maculata	Spotted Wintergreen
Chimaphila umbellata	Pipsissewa
Cimicifuga americana	American Bugbane
Cimicifuga racemosa	False Bugbane
Circaea alpina	Small Enchanter's Nightshade
Cladrastis lutea	Yellowwood
Clematis crispa	Blue Jasmine
Clematis occidentalis	Mountain Clematis
Clematis viorna	Leatherflower
Collinsia violacea	Violet Collinsia
Comptonia peregrina	Sweetfern
Conioselinum chinense	Hemlock Parsley
Cornus canadensis	Bunchberry
Corydalis aurea	Golden Corydalis
Corydalis halei	Hale's Corydalis
Corydalis sempervirens	Pink Corydalis
Corylus cornuta	Beaked Hazelnut
Cynosciadium digitatum	Cynosciadium

Endangered (continued)

Cypripedium acaule	Moccasin Flower
Cypripedium parviflorum var. *makasin*	Small Yellow Lady's Slipper
Cypripedium reginae	Showy Lady's Slipper
Cystopteris laurentiana	Laurentian Fragile Fern
*Dalea foliosa***	Leafy Prairie Clover
Dennstaedtia punctilobula	Hay-scented Fern
Deschampsia flexuosa	Hairgrass
Dichanthelium boreale	Northern Panic Grass
Dichanthelium joori	Panic Grass
Dichanthelium portoricense	Hemlock Panic Grass
Dichanthelium ravenelii	Ravenel's Panic Grass
Dichanthelium yadkinense	Panic Grass
Draba cuneifolia	Whitlow Grass
Drosera rotundifolia	Round-leaved Sundew
Dryopteris celsa	Log Fern
Echinodorus tenellus	Small Burhead
Eleocharis olivacea	Capitate Spikerush
Eleocharis pauciflora	Few-flowered Spikerush
Equisetum scirpoides	Dwarf Scouring Rush
Equisetum sylvaticum	Woodland Horsetail
Eriophorum virginicum	Rusty Cotton Grass
Eryngium prostratum	Eryngo
Euonymus americanus	American Strawberry Bush
Eupatorium hyssopifolium	Hyssop-leaved Thoroughwort
Euphorbia spathulata	Spurge
Filipendula rubra	Queen-of-the-Prairie
Fimbristylis vahlii	Vahl's Fimbristylis
Galactia mohlenbrockii	Boykin's Dioclea
Galium lanceolatum	Wild Licorice
Galium virgatum	Dwarf Bedstraw
Geranium bicknellii	Northern Cranesbill
Glyceria arkansana	Arkansas Mannagrass
Gratiola quartermaniae	Hedge Hyssop
Gymnocarpium dryopteris	Oak Fern
Gymnocarpium robertianum	Scented Oak Fern
Hackelia deflexa var. *americana*	Stickseed
Halesia carolina	Silverbell Tree
Helianthus giganteus	Tall Sunflower
Heliotropium tenellum	Slender Heliotrope
Heteranthera reniformis	Mud Plantain

PLANTS

Endangered (continued)

Hexalectris spicata	Crested Coralroot Orchid
Hudsonia tomentosa	False Heather
Hydrolea uniflora	One-flowered Hydrolea
Hypericum adpressum	Shore St. John's Wort
Hypericum kalmianum	Kalm's St. John's Wort
Iliamna remota	Kankakee Mallow
Iresine rhizomatosa	Bloodleaf
Isoetes butleri	Butler's Quillwort
Isotria verticillata	Whorled Pogonia
Juncus vaseyi	Vasey's Rush
Juniperus horizontalis	Trailing Juniper
Justicia ovata	Water Willow
*Lespedeza leptostachya**	Prairie Bush Clover
Lesquerella ludoviciana	Silvery Bladderpod
Lonicera dioica var. *glaucescens*	Red Honeysuckle
Lonicera flava	Yellow Honeysuckle
Luzula acuminata	Hairy Woodrush
Lycopodiella inundata	Bog Clubmoss
Lycopodium clavatum	Running Pine
Lycopodium dendroideum	Ground Pine
Lysimachia radicans	Creeping Loosestrife
Malus angustifolia	Narrow-leaved Crabapple
Malvastrum hispidum	False Mallow
Matelea decipiens	Climbing Milkweed
Medeola virginiana	Indian Cucumber Root
Megalodonta beckii	Water Marigold
Melanthera nivea	White Melanthera
Melica mutica	Two-Flowered Melic Grass
Mimulus glabratus	Yellow Monkey Flower
Mirabilis hirsuta	Hairy Umbrella-wort
Nemophila triloba	Baby Blue-eyes
Nothocalais cuspidata	Prairie Dandelion
Opuntia fragilis	Fragile Prickly Pear
Orobanche fasciculata	Clustered Broomrape
Oxalis illinoensis	Illinois Wood Sorrel
Paspalum dissectum	Bead Grass
Penstemon brevisepalus	Short-sepaled Beard Tongue
Penstemon grandiflorus	Large-flowered Beard Tongue
Penstemon tubaeflorus	Tube Beard Tongue
Phacelia gilioides	Ozark Phacelia

Endangered (continued

Phegopteris connectilis	Long Beech Fern
Phlox pilosa subsp. *sangamonensis*	Sangamon Phlox
Pinus banksiana	Jack Pine
Pinus echinata	Shortleaf Pine
Pinus resinosa	Red Pine
Plantago cordata	Heart-leaved Plantain
Platanthera ciliaris	Orange Fringed Orchid
Platanthera clavellata	Wood Orchid
Platanthera flava var. *flava*	Tubercled Orchid
*Platanthera leucophaea**	Eastern Prairie Fringed Orchid
Platanthera psycodes	Purple Fringed Orchid
Poa alsodes	Grove Bluegrass
Poa languida	Weak Bluegrass
Poa wolfii	Wolf's Bluegrass
Pogonia ophioglossoides	Snake-mouth
Polanisia jamesii	James' Clammyweed
Polygala incarnata	Pink Milkwort
Polygonatum pubescens	Downy Solomon's Seal
Polygonum arifolium	Halberd-leaved Tearthumb
Polygonum careyi	Carey's Heartsease
Populus balsamifera	Balsam Poplar
Potamogeton praelongus	White-stemmed Pondweed
Potamogeton pulcher	Spotted Pondweed
Potamogeton robbinsii	Fern Pondweed
Potamogeton strictifolius	Stiff Pondweed
Primula mistassinica	Bird's-eye Primrose
Ptilimnium nuttallii	Mock Bishop's Weed
Quercus texana	Nuttall's Oak
Rhamnus alnifolia	Alder Buckthorn
Rhexia mariana	Dull Meadow Beauty
Rhynchospora glomerata	Clustered Beak Rush
Ribes hirtellum	Northern Gooseberry
Rosa acicularis	Bristly Rose
Rubus odoratus	Purple-flowering Raspberry
Sabatia campestris	Prairie Rose Gentian
Sagittaria australis	Arrowhead
Salix serissima	Autumn Willow
Salix syrticola	Dune Willow
Sambucus racemosa subsp. *pubens*	Red-berried Elder
Sanguisorba canadensis	American Burnet

PLANTS

Endangered (continued)

Sanicula smallii	Southern Sanicula
Sarracenia purpurea	Pitcher Plant
Saxifraga virginiensis	Early Saxifrage
Schizachne purpurascens	False Melic Grass
Schoenoplectus purshianus	Weak Bulrush
Schoenoplectus smithii	Smith's Bulrush
Scirpus hattorianus	Bulrush
Scirpus microcarpus	Bulrush
Scleria muhlenbergii	Muhlenberg’s Nut Rush
Scleria pauciflora	Carolina Whipgrass
Shepherdia canadensis	Buffaloberry
Silene ovata	Ovate Catchfly
Silene regia	Royal Catchfly
Sisyrinchium montanum	Mountain Blue-eyed Grass
Sorbus americana	American Mountain Ash
Sparganium americanum	American Burreed
Sparganium emersum	Green-fruited Burreed
Spiranthes lucida	Yellow-lipped Ladies' Tresses
Spiranthes vernalis	Spring Ladies' Tresses
Stellaria pubera	Great Chickweed
Stenanthium gramineum	Grass-leaved Lily
Stylisma pickeringii	Patterson's Bindweed
Styrax grandifolius	Bigleaf Snowbell Bush
Symphoricarpos albus var. *albus*	Snowberry
Synandra hispidula	Hairy Synandra
Talinum calycinum	Fameflower
*Tetraneuris herbacea**	Lakeside Daisy
Thelypteris noveboracensis	New York Fern
Tilia heterophylla	White Basswood
Torreyochloa pallida	Pole Manna-Grass
Trichomanes boschianum	Filmy fern
Trichophorum cespitosum	Tufted Bulrush
Trientalis borealis	Star-flower
Trillium cernuum	Nodding Trillium
Trillium erectum	Ill-scented Trillium
Trillium viride	Green Trillium
Ulmus thomasii	Rock Elm
Utricularia cornuta	Horned Bladderwort
Utricularia minor	Small Bladderwort
Vaccinium corymbosum	Highbush Blueberry

Endangered (continued)

Vaccinium macrocarpon	Large Cranberry
Vaccinium oxycoccos	Small Cranberry
Vaccinium stamineum	Deerberry
Valeriana uliginosa	Marsh Valerian
Valerianella chenopodifolia	Corn Salad
Valerianella umbilicata	Corn Salad
Veronica americana	American Brooklime
Viola blanda	Hairy White Violet
Viola canadensis	Canada Violet
Viola primulifolia	Primrose Violet
Woodsia ilvensis	Rusty Woodsia
Zigadenus elegans	White Camass

Threatened

Agalinus skinneriana	Pale False Foxglove
Amelanchier interior	Shadbush
Aster furcatus	Forked Aster
Berchemia scandens	Supple-Jack
Besseya bullii	Kitten Tails
*Boltonia decurrens**	Decurrent False Aster
Botrychium biternatum	Southern Grape Fern
Buchnera americana	Bluehearts
Cakile edentula	Sea Rocket
Carex atlantica	Sedge
Carex aurea	Golden Sedge
Carex bromoides	Sedge
Carex communis	Fibrous-rooted Sedge
Carex intumescens	Swollen Sedge
Carex oxylepis	Sharp-scaled Sedge
Carex prasina	Drooping Sedge
Carex viridula	Little Green Sedge
Carex willdenowii	Willdenow's Sedge
Carex woodii	Pretty Sedge
Carya aquatica	Water Hickory
Chamaedaphne calyculata	Leatherleaf
Cimicifuga rubifolia	Black Cohosh
*Cirsium pitcheri**	Pitcher's (Dune) Thistle
Corallorhiza maculata	Spotted Coral-root Orchid
Cyperus grayioides	Umbrella Sedge
Cyperus lancastriensis	Galingale

PLANTS

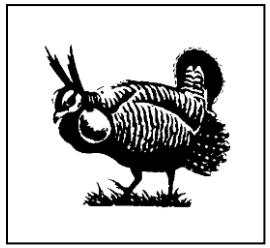
Threatened (continued)

Cypripedium candidum	White Lady's Slipper
Delphinium carolinianum	Wild Blue Larkspur
Dodecatheon frenchii	French's Shootingstar
Drosera intermedia	Narrow-leaved Sundew
Eleocharis rostellata	Beaked Spike Rush
Elymus trachycaulus	Bearded Wheat Grass
Epilobium strictum	Downy Willow Herb
Equisetum pratense	Meadow Horsetail
Helianthus angustifolius	Narrow-leaved Sunflower
Huperzia porophila	Cliff Clubmoss
Hymenopappus scabiosaeus	Old Plainsman
Juncus alpinus	Richardson's Rush
Juniperus communis	Ground Juniper
Larix laricina	Tamarack
Lathyrus ochroleucus	Pale Vetchling
Lechea intermedia	Pinweed
Liatris scariosa var. *nieuwlandii*	Blazing Star
Matelea obliqua	Climbing Milkweed
Melanthium virginicum	Bunchflower
Melothria pendula	Squirting Cucumber
Menyanthes trifoliata	Buckbean
Minuartia patula	Slender Sandwort
Oenothera perennis	Small Sundrops
Orobanche ludoviciana	Broomrape
Phaeophyscia leana	Lea's Bog Lichen
Planera aquatica	Water Elm
Platanthera flava var. *herbiola*	Tubercled Orchid
Potamogeton gramineus	Grass-leaved Pondweed
Quercus montana	Rock Chestnut Oak
Quercus phellos	Willow Oak
Ranunculus rhomboideus	Prairie Buttercup
Rhynchospora alba	Beaked Rush
Rubus pubescens	Dwarf Raspberry
Rubus schneideri	Bristly Blackberry
Rudbeckia missouriensis	Missouri Orange Coneflower
Salvia azurea subsp. *pitcheri*	Blue Sage
Schoenoplectus hallii	Hall's Bulrush
Scirpus polyphyllus	Bulrush
Sedum telephioides	American Orpine
Sisyrinchium atlanticum	Eastern Blue-eyed Grass

PLANTS

Threatened (continued

Solidago sciaphila	Cliff Goldenrod
Styrax americana	Storax
Sullivantia sullivantii	Sullivantia
Talinum parviflorum	Small Flower-of-an-hour
Tofieldia glutinosa	False Asphodel
Tomanthera auriculata	Ear-leafed Foxglove
Tradescantia bracteata	Prairie Spiderwort
Trifolium reflexum	Buffalo Clover
Triglochin maritima	Common Bog Arrowgrass
Triglochin palustris	Slender Bog Arrowgrass
Utricularia intermedia	Flat-leaved Bladderwort
Veronica scutellata	Marsh Speedwell
Viburnum molle	Arrowwood
Viola conspersa	Dog Violet



Illinois Endangered Species Protection Board



ILLINOIS ENDANGERED SPECIES PROTECTION BOARD

One Natural Resources Way, Springfield, Illinois 62702 - 1271, (217) 785-8687; FAX (217) 785-2438
Web page: http://dnr.state.il.us/espb/index.htm

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