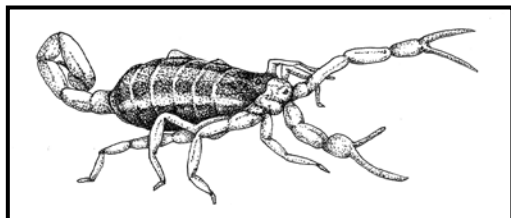
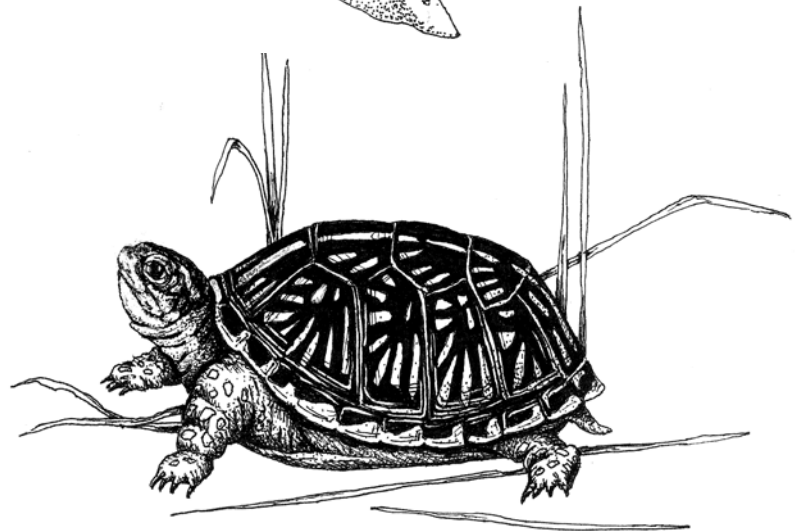
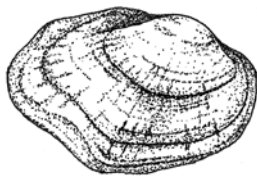
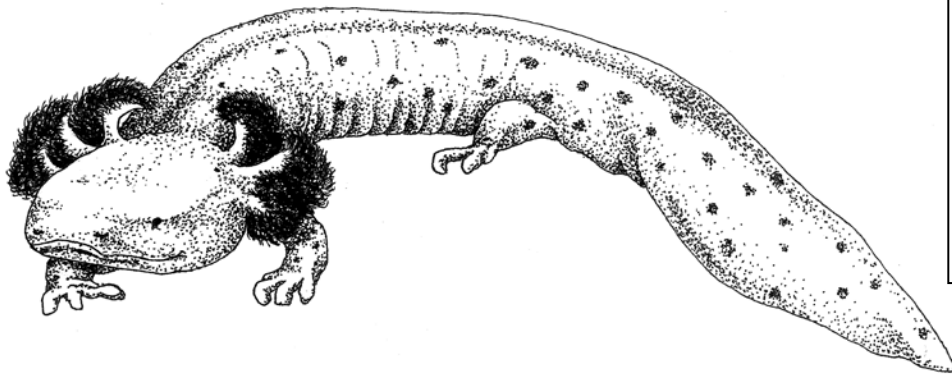
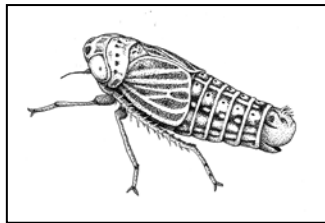


Endangered and Threatened Species of Illinois: Status and Distribution



Volume 4 – 2009 and 2010 Changes

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On the cover, clockwise from upper right: Black-billed Cuckoo (*Coccyzus erythrophthalmus*), Illinois Threatened; Blue Hearts (*Buchnera americana*), Illinois Threatened; Ornate Box Turtle (*Terrepenne 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 (Nýboer 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 (Nýboer, 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 erythrophthalmus*) 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 quartermantiae (Hedge Hyssop)

ADDED AS THREATENED

AMPHIBIANS

+*Necturus maculosus* (Mudpuppy)

REPTILES

Terrapene ornata (Ornate Box Turtle)

BIRDS

+*Coccyzus erythrophthalmus* (Black-billed Cuckoo)

PLANTS

Buchnera americana (Blue Hearts)

Delphinium carolinianum (Wild Blue Larkspur)

REMOVED FROM ENDANGERED¹

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 THREATENED¹

BIRDS

Haliaeetus leucocephalus (Bald Eagle)⁹

Ammodramus henslowii (Henslow's Sparrow)⁹

REMOVED FROM THREATENED¹

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 nycticorax (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

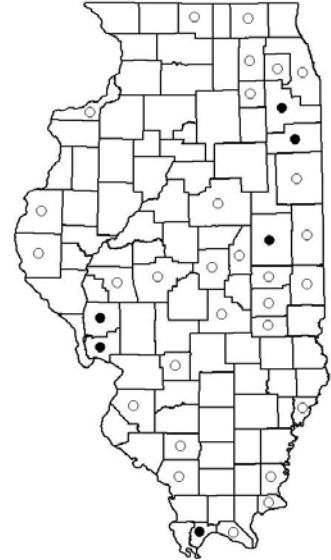
Present Distribution: South Quebec, Lake Champlain drainage, and eastern New York, west to southeastern Manitoba and eastern Kansas, south to the Tennessee River system (Conant and Collins 1991). The Illinois Natural Heritage Database documents recent (post-2000) records from Champaign, Greene, Jersey, 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

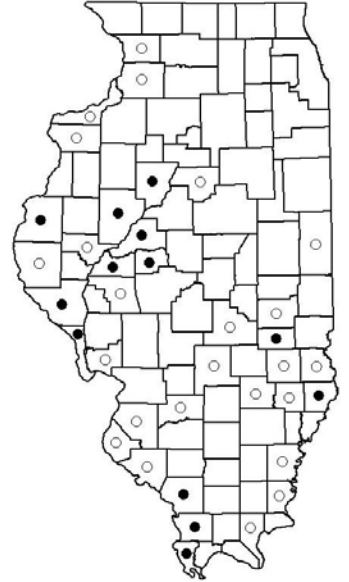
Present Distribution: Central United States, the Ohio, Mississippi, and Missouri rivers and their tributaries; streams draining to the Gulf of Mexico, from extreme western Florida to eastern Texas (Conant and Collins 1991). The Illinois Natural Heritage Database documents recent (post-2000) records from 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

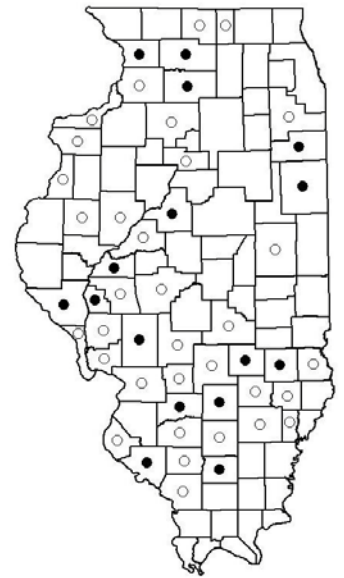
Present Distribution: Indiana to southeastern Wyoming, south through Texas and into the coastal prairies of Louisiana, then discontinuous to the northwest (Conant and Collins 1991). The Illinois Natural Heritage Database documents recent (post-2000) records for this species from Bond, Carroll, Cass, 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 erythrophthalmus (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, Chihuahua, 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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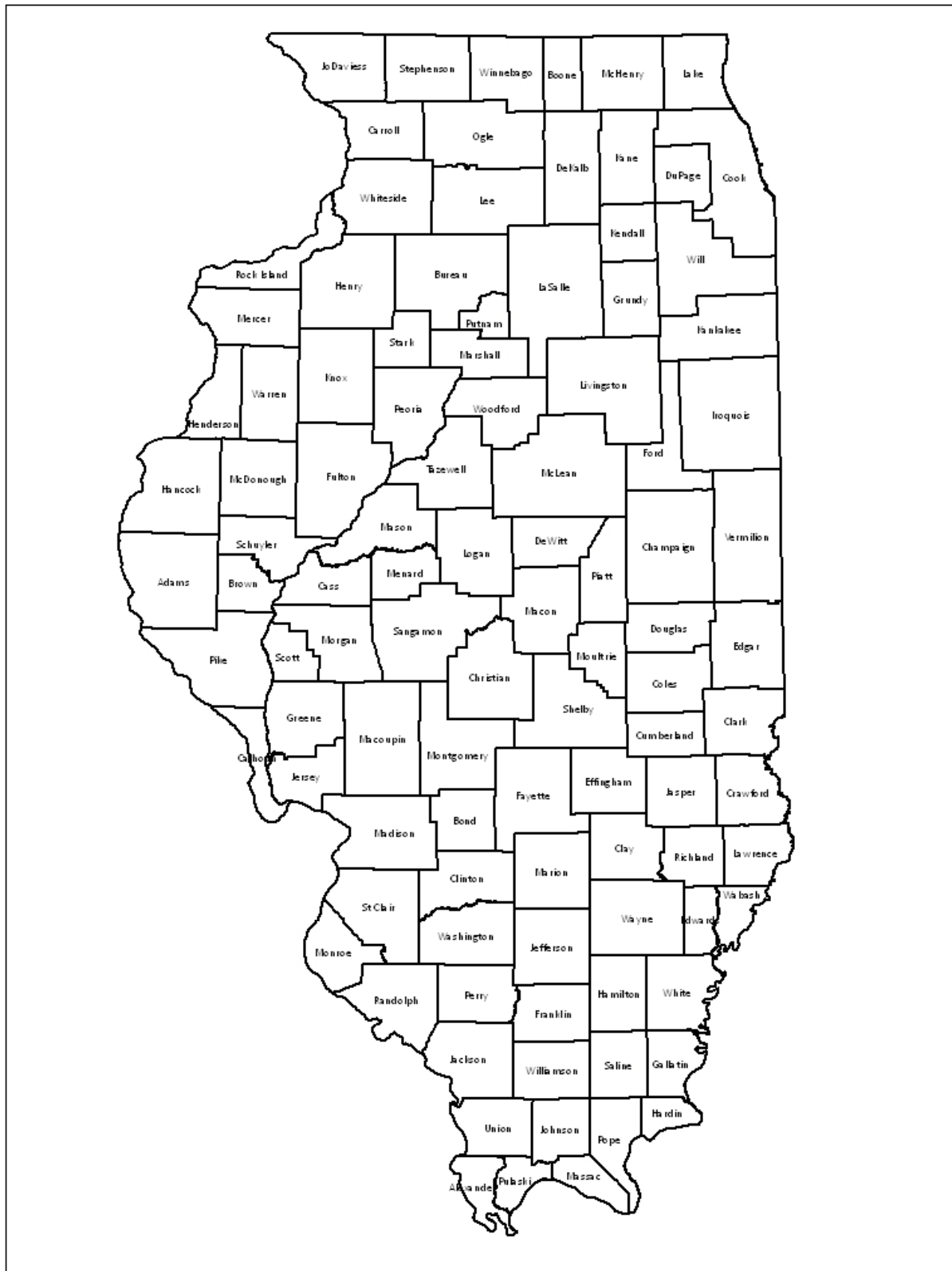
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<i>Ammodramus henslowii</i>	1	Halbred-leaved Tearthumb.....	2
<i>Anthysanella incongrua</i>	1, 9	Halberd-leaved Tearthumb.....	2
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<i>Gallinula chloropus</i>	2	<i>Pseudacris illinoensis</i>	2
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Yellow-crowned Night-Heron..... 2
Yellow Mud Turtle..... 2

APPENDIX I

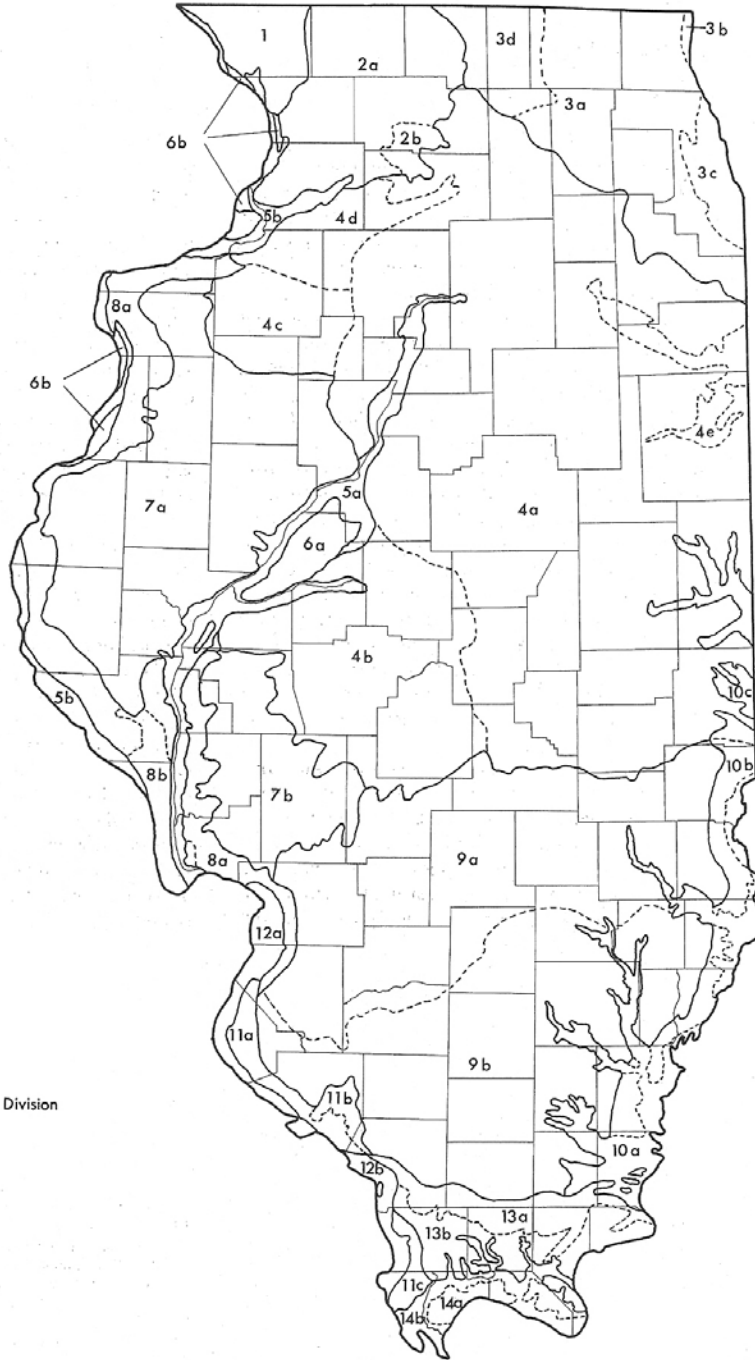
Illinois Counties



APPENDIX II

Natural Divisions of Illinois

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 - b Oregon Section
- 3 Northeastern Morainal Division
 - a Morainal Section
 - b Lake Michigan Dunes Section
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 - b Bottomlands Section



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 erythrophthalmus
Terrapene ornata

Bureau

Terrapene ornata

Calhoun

*Apalone mutica**
Buchnera americana
Coccyzus erythrophthalmus
*Delphinium carolinianum**
Terrapene ornata

Carroll

Apalone mutica
Coccyzus erythrophthalmus
*Terrapene ornata**

Cass

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

Champaign

Coccyzus erythrophthalmus
*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 erythrophthalmus
Necturus maculosus

Crawford

Apalone mutica
Coccyzus erythrophthalmus
Terrapene ornata

Cumberland

*Apalone mutica**
Necturus maculosus

DeKalb

Coccyzus erythrophthalmus

DeWitt

Coccyzus erythrophthalmus

Douglas

Necturus maculosus

DuPage

Coccyzus erythrophthalmus
Necturus maculosus

Edgar

*Necturus maculosus**

Edwards

Terrapene ornata

Effingham

*Terrapene ornata**

Fayette

Apalone mutica
*Coccyzus erythrophthalmus**
Terrapene ornata

Franklin

*Terrapene ornata**

Fulton

*Apalone mutica**
Coccyzus erythrophthalmus
Terrapene ornata

Gallatin

Apalone mutica
Necturus maculosus
*Lithasia obovata**

Greene

Apalone mutica
Buchnera americana
*Necturus maculosus**
Terrapene ornata

Grundy

Coccyzus erythrophthalmus

Hancock

*Apalone mutica**
Coccyzus erythrophthalmus
Necturus maculosus

Hardin

Necturus maculosus

Henderson

*Delphinium carolinianum**
Terrapene ornata

Iroquois

Necturus maculosus
*Terrapene ornata**

Jackson

*Apalone mutica**
Carex plantaginea
Coccyzus erythrophthalmus
Necturus maculosus
Terrapene ornata

Jasper

Apalone mutica
Coccyzus erythrophthalmus
*Terrapene ornata**

Jefferson

Terrapene ornata

Jersey

Buchnera americana
*Necturus maculosus**
Terrapene ornata

Jo Daviess

Coccyzus erythrophthalmus
*Terrapene ornata**

Kane

Coccyzus erythrophthalmus
Necturus maculosus

Kankakee

*Necturus maculosus**
*Terrapene ornata**

Kendall

Necturus maculosus

Lake

*Coccyzus erythrophthalmus**
Necturus maculosus

LaSalle

*Carex plantaginea**
Coccyzus erythrophthalmus

Lawrence

*Apalone mutica**
Epioblasma rangiana
Lithasia obovata

Lee

*Coccyzus erythrophthalmus**
*Terrapene ornata**

Livingston

Coccyzus erythrophthalmus

Macon

Coccyzus erythrophthalmus
Necturus maculosus

Macoupin

Coccyzus erythrophthalmus
*Terrapene ornata**

Madison

Buchnera americana
Terrapene ornata

Marion

Coccyzus erythrophthalmus
*Terrapene ornata**

Marshall

Coccyzus erythrophthalmus
Terrapene ornata

Mason

*Apalone mutica**
*Athysanella incongrua**
Coccyzus erythrophthalmus
Terrapene ornata

Massac

Necturus maculosus

McDonough

Coccyzus erythrophthalmus
Terrapene ornata

McHenry

Coccyzus erythrophthalmus
Necturus maculosus

McLean

Necturus maculosus

Menard

*Apalone mutica**
Coccyzus erythrophthalmus
*Terrapene ornata**

Mercer

Apalone mutica
Coccyzus erythrophthalmus
Delphinium carolinianum
Terrapene ornata

Monroe

Apalone mutica
Buchnera americana
Centruroides vittatus
*Coccyzus erythrophthalmus**
Pygmarhopalites
*madonnensis**
Terrapene ornata

Montgomery

Terrapene ornata

Morgan

Apalone mutica
Athysanella incongrua
*Buchnera americana**
Coccyzus erythrophthalmus
Necturus maculosus
Terrapene ornata

Ogle

Coccyzus erythrophthalmus
*Terrapene ornata**

Peoria

*Apalone mutica**
Coccyzus erythrophthalmus

Perry

Necturus maculosus
Terrapene ornata

Piatt

Necturus maculosus

Pike

*Apalone mutica**
Buchnera americana
Coccyzus erythrophthalmus
*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 erythrophthalmus
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 erythrophthalmus
Necturus maculosus

Stark

Coccyzus erythrophthalmus

Stephenson

Coccyzus erythrophthalmus

Tazewell

Coccyzus erythrophthalmus
*Terrapene ornata**

Union

*Apalone mutica**
Coccyzus erythrophthalmus
*Lithasia obovata**
*Prostoia completa**

Vermilion

Apalone mutica
Coccyzus erythrophthalmus
*Diploperla robusta**
*Epioblasma rangiana**
Necturus maculosus

Wabash

Lithasia obovata
Necturus maculosus

Warren

Coccyzus erythrophthalmus

Washington

Terrapene ornata

Wayne

Terrapene ornata

White

Apalone mutica
Coccyzus erythrophthalmus
Epioblasma rangiana
*Lithasia obovata**

Whiteside

Apalone mutica
Terrapene ornata

Will

Coccyzus erythrophthalmus
*Gratiola quertermaniae**
*Necturus maculosus**
*Terrapene ornata**

Winnebago

Coccyzus erythrophthalmus
Necturus maculosus
*Terrapene ornata**

Woodford

Apalone mutica
*Coccyzus erythrophthalmus**

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.

<i>Apalone mutica</i>	Morgan	Livingston
Adams		Macon
Alexander*	<i>Buchnera americana</i>	Macoupin
Calhoun*	Calhoun	Marion
Carroll	Cass	Marshall
Cass*	Greene	Mason
Clay	Jersey	McDonough
Clinton	Madison	McHenry
Coles	Monroe	Menard
Crawford	Morgan*	Mercer
Cumberland*	Pike	Monroe*
Fayette	Randolph	Morgon
Fulton*	St. Clair	Ogle
Gallatin		Peoria
Greene	<i>Carex plantaginea</i>	Pike
Hancock*	Cook	Rock Island
Jackson*	Jackson	St. Clair
Jasper	LaSalle*	Stark
Lawrence*		Stephenson
Mason*	<i>Centruroides vittatus</i>	Tazewell
Menard*	Monroe	Union
Mercer	Randolph	Vermilion
Monroe		Warren
Morgan	<i>Coccyzus erythrophthalmus</i>	White
Peoria*	Boone	Will
Pike*	Calhoun	Winnebago
Pope	Carroll	Woodford*
Randolph	Champaign	
Richland	Cook	<i>Delphinium carolinianum</i>
Rock Island	Crawford	Adams
Schuyler	DeKalb	Calhoun*
Shelby	DeWitt	Henderson*
St. Clair	DuPage	Mercer
Union*	Fayette*	Pike*
Vermilion	Fulton	
White	Grundy	<i>Diploperla robusta</i>
Whiteside	Hancock	Vermilion*
Woodford	Jackson	
	Jasper	<i>Epioblasma rangiana</i>
<i>Arrhopalites madonnensis</i> (see	Jo Daviess	Champaign*
<i>Pygmarrhopalites madonnensis</i>)	Kane	Clark
	Lake*	Lawrence
<i>Athysanella incongrua</i>	LaSalle	Vermilion*
Mason*	Lee*	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.

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
Ammocrypta clarum
Etheostoma camurum
Etheostoma histrio
Hybognathus hayi
Hybopsis amblops
Hybopsis amnis
Ichthyomyzon fossor
Lepomis miniatus
Macrhybopsis gelida
Moxostoma valenciennesi
Nocomis micropogon
Notropis anogenus
Notropis boops
Notropis heterolepis
Notropis maculatus
Notropis texanus
Noturus stigmosus
*Scaphirhynchus albus***

Threatened

Ammocrypta pellucidum
Catostomus catostomus
Coregonus artedi
Erimystax x-punctatus
Etheostoma exile
Fundulus diaphanus
Fundulus dispar
Lampetra aepyptera
Lepomis symmetricus
Moxostoma carinatum
Notropis chalybaeus
Notropis heterodon

Lake Sturgeon
Western Sand Darter
Bluebreast Darter
Harlequin Darter
Cypress Minnow
Bigeye Chub
Pallid Shiner
Northern Brook Lamprey
Redspotted Sunfish
Sturgeon Chub
Greater Redhorse
River Chub
Pugnose Shiner
Bigeye Shiner
Blacknose Shiner
Taillight Shiner
Weed Shiner
Northern Madtom
Pallid Sturgeon

Eastern Sand Darter
Longnose Sucker
Cisco
Gravel Chub
Iowa Darter
Banded Killifish
Starhead Topminnow
Least Brook Lamprey
Bantam Sunfish
River Redhorse
Ironcolor Shiner
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

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

Snakes

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

Threatened

Turtles

<i>Terrepenne ornata</i>	Ornate Box Turtle
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Snakes

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

BIRDS
25 Endangered, 5 Threatened

Endangered

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

Threatened

<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo
<i>Dendroica cerulea</i>	Cerulean Warbler
<i>Falco peregrinus</i>	Peregrine Falcon
<i>Ictinia mississippiensis</i>	Mississippi Kite
<i>Ixobrychus exilis</i>	Least Bittern

MAMMALS
5 Endangered, 4 Threatened

Endangered

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

Threatened

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

INVERTEBRATES
43 Endangered, 12 Threatened

Endangered

Snails

<i>Discus macclintocki**</i>	Iowa Pleistocene Snail
<i>Fontigens antroecetes</i>	Hydrobiid Cave Snail
<i>Lithasia obovata</i>	Shawnee Rocksnail

Mussels

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

Crustaceans

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

Scorpions

<i>Centruroides vittatus</i>	Common Striped Scorpion
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INVERTEBRATES

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

Alasmodonta 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

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

PLANTS

Endangered (continued)

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

PLANTS

Endangered (continued)

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

PLANTS

Endangered (continued)

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

PLANTS

Endangered (continued)

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

PLANTS

Endangered (continued)

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

PLANTS

Endangered (continued)

Vaccinium macrocarpon
Vaccinium oxycoccos
Vaccinium stamineum
Valeriana uliginosa
Valerianella chenopodifolia
Valerianella umbilicata
Veronica americana
Viola blanda
Viola canadensis
Viola primulifolia
Woodsia ilvensis
Zigadenus elegans

Threatened

Agalinus skinneriana
Amelanchier interior
Aster furcatus
Berchemia scandens
Besseyia bullii
*Boltonia decurrens**
Botrychium biternatum
Buchnera americana
Cakile edentula
Carex atlantica
Carex aurea
Carex bromoides
Carex communis
Carex intumescens
Carex oxylepis
Carex prasina
Carex viridula
Carex willdenowii
Carex woodii
Carya aquatica
Chamaedaphne calyculata
Cimicifuga rubifolia
*Cirsium pitcheri**
Corallorhiza maculata
Cyperus grayioides
Cyperus lancastricensis

Large Cranberry
Small Cranberry
Deerberry
Marsh Valerian
Corn Salad
Corn Salad
American Brooklime
Hairy White Violet
Canada Violet
Primrose Violet
Rusty Woodsia
White Camass

Pale False Foxglove
Shadbush
Forked Aster
Supple-Jack
Kitten Tails
Decurrent False Aster
Southern Grape Fern
Bluehearts
Sea Rocket
Sedge
Golden Sedge
Sedge
Fibrous-rooted Sedge
Swollen Sedge
Sharp-scaled Sedge
Drooping Sedge
Little Green Sedge
Willdenow's Sedge
Pretty Sedge
Water Hickory
Leatherleaf
Black Cohosh
Pitcher's (Dune) Thistle
Spotted Coral-root Orchid
Umbrella Sedge
Galingale

PLANTS

Threatened (continued)

Cypripedium candidum
Delphinium carolinianum
Dodecatheon frenchii
Drosera intermedia
Eleocharis rostellata
Elymus trachycaulus
Epilobium strictum
Equisetum pratense
Helianthus angustifolius
Huperzia porophila
Hymenopappus scabiosaeus
Juncus alpinus
Juniperus communis
Larix laricina
Lathyrus ochroleucus
Lechea intermedia
Liatris scariosa var. *nieuwlandii*
Matelea obliqua
Melanthium virginicum
Melothria pendula
Menyanthes trifoliata
Minuartia patula
Oenothera perennis
Orobanche ludoviciana
Phaeophyscia leana
Planera aquatica
Platanthera flava var. *herbiola*
Potamogeton gramineus
Quercus montana
Quercus phellos
Ranunculus rhomboideus
Rhynchospora alba
Rubus pubescens
Rubus schneideri
Rudbeckia missouriensis
Salvia azurea subsp. *pitcheri*
Schoenoplectus hallii
Scirpus polyphyllus
Sedum telephioides
Sisyrinchium atlanticum

White Lady's Slipper
Wild Blue Larkspur
French's Shootingstar
Narrow-leaved Sundew
Beaked Spike Rush
Bearded Wheat Grass
Downy Willow Herb
Meadow Horsetail
Narrow-leaved Sunflower
Cliff Clubmoss
Old Plainsman
Richardson's Rush
Ground Juniper
Tamarack
Pale Vetchling
Pinweed
Blazing Star
Climbing Milkweed
Bunchflower
Squirting Cucumber
Buckbean
Slender Sandwort
Small Sundrops
Broomrape
Lea's Bog Lichen
Water Elm
Tuberclad Orchid
Grass-leaved Pondweed
Rock Chestnut Oak
Willow Oak
Prairie Buttercup
Beaked Rush
Dwarf Raspberry
Bristly Blackberry
Missouri Orange Coneflower
Blue Sage
Hall's Bulrush
Bulrush
American Orpine
Eastern Blue-eyed Grass

PLANTS

Threatened (continued)

Solidago sciaphila

Styrax americana

Sullivantia sullivantii

Talinum parviflorum

Tofieldia glutinosa

Tomanthera auriculata

Tradescantia bracteata

Trifolium reflexum

Triglochin maritima

Triglochin palustris

Utricularia intermedia

Veronica scutellata

Viburnum molle

Viola conspersa

Cliff Goldenrod

Storax

Sullivantia

Small Flower-of-an-hour

False Asphodel

Ear-leafed Foxglove

Prairie Spiderwort

Buffalo Clover

Common Bog Arrowgrass

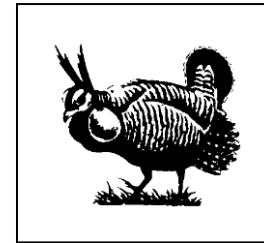
Slender Bog Arrowgrass

Flat-leaved Bladderwort

Marsh Speedwell

Arrowwood

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/esp/index.htm>

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