# **Chapter Three**

# Iowa Fish and Wildlife and Species of Greatest Conservation Need

Required Element #1: "Information on the distribution and abundance of species of wildlife, including low and declining populations as the state fish and wildlife agency deems appropriate, that are indicative of the diversity and health of the state's wildlife."

# Species Included in the Iowa Wildlife Action Plan

The DNR is the sole agency given the responsibility to manage lowa's fish and wildlife resources, preserve their habitats (Code of Iowa, Chapter 455A), and establish and protect state-listed endangered or threatened species (chapter 481B.4 and Iowa Administrative Code Chapter 571-77(481B)). Iowa law recognizes that *wildlife* includes any species of wild mammal, fish, bird, reptile, amphibian, mollusk, crustacean, arthropod, or other invertebrate (Code of Iowa sections 456A.24, 481A.1, 481A.38, 481A.39, 481A.48, 481B.1). In addition to taxonomic groups designated as *wildlife* in Iowa law, this Plan is intended to guide conservation of all Iowa's native fauna for which an adequate level of information is available to assess the conservation status and needs. The first edition of the Plan included all the vertebrate taxa as well as butterflies, land snails, fresh water mussels, dragonflies, and damselflies. For the 2015 version, crayfish were added. This version adds consideration of bumble bees, a small subset of the moth fauna, and plants. A total of 1,601 species were evaluated by subcommittees. Subcommittees considered all species which have been documented in Iowa, including some species which may be occasional visitors, expanding their range, have been introduced, or have already been extirpated (Table 3-1).

# **Determining the Species of Greatest Conservation Need**

Taxonomic subcommittees of the IWAP Wildlife Working Group evaluated the status of all species considered for their focal group. The same status assessment criteria were used for all species which are native to lowa, not already extirpated from the state, not vagrant or accidental in their occurrence within lowa, and for which there is adequate information to assess conservation status. Until the implementation of the Wildlife Action Plan, lowa had long lacked a systematic survey to document the distribution and abundance of most wildlife species. Therefore, varying amounts of information were available for subcommittee members to use when assessing taxonomic groups, as a whole, as well as individual species.

Table 3-1. Number of species evaluated by the IWAP.

IWAP taxonomic subcommittees evaluated all species with validated occurrence records for lowa (includes vagrant species, exotic/introduced species, and those which are now presumed extirpated).

Phyla	Class	Taxonomic Group	Species	List location
Chordata	Amphibia	Amphibians	25	Appendix 3
Chordata	Reptilia	Reptiles	47	Appendix 4
Chordata	Aves	Breeding birds	197	Appendix 5
Chordata	Aves	Non-breeding birds <sup>1</sup>	210	Appendix 6
Chordata	Mammalia	Mammals	81	Appendix 7
Chordata	Actinopterygii, (Ray-finned fishes), Cephalaspidomorphi (lampreys), & Chondrichthyes (cartilaginous fishes)	Fishes	156	Appendix 8
Mollusca	Bivalvia	Mussels	54	Appendix 9
Mollusca	Gastropoda	Terrestrial snails	90	Appendix 10
Arthropoda	Insecta, Order Hymenoptera	Bumble Bees	15	Appendix 11
Arthropoda	Insecta, Order Lepidoptera	Butterflies	127	Appendix 12
Arthropoda	Insecta, Order Lepidoptera	Moths	32	Appendix 13
Arthropoda	Insecta, Order Odonata	Dragonflies and Damselflies	120	Appendix 14
Arthropoda	Malacostraca	Crayfishes	8	Appendix 15

Phyla	Class	Taxonomic Group	Species	List location
Kingdom Plantae	All classes of plants in Iowa	Plants	439	Table 3-16
		Total species evaluated	1,601	

<sup>&</sup>lt;sup>1</sup>Species that do not nest in Iowa but migrate through the state.

## **Development of Species Conservation Status Assessment Criteria**

We utilized 8 criteria to assess the conservation status of all native, extant Iowa wildlife species. For the 2015 revision, an ad hoc working group of the Wildlife Working Group considered a variety of conservation status assessment schemes, from the published literature, before ultimately developing a set of criteria that could reasonably be utilized by each taxonomic subcommittee for assessing wildlife in Iowa. These included a species assessment methodology described by Partners in Flight as well as NatureServe's ranking system. For the 2025 revision, the full Wildlife Working Group decided to utilize the same 8 criteria, to allow comparisons between 2015 and 2025 results.

The system described in the PIF Handbook on Species Assessment (Panjabi et al. 2012) ranks each species of North American breeding bird based upon seven measures of conservation status:

- 1. Population Size (PS) indicates vulnerability due to the total number of adult individuals in the global population.
- 2. *Breeding Distribution* (BD) indicates vulnerability due to the geographic extent of a species' breeding range on a global scale.
- 3. *Non-breeding Distribution* (ND) indicates vulnerability due to the geographic extent of a species' non-breeding range on a global scale.
- 4. Threats to Breeding (TB) indicates vulnerability due to the effects of current and probable future extrinsic conditions that threaten the ability of populations to survive and successfully reproduce in breeding areas within North America.
- 5. Threats to Non-breeding (TN) indicates vulnerability due to the effects of current and probable future extrinsic conditions that threaten the ability of North American breeding populations to survive over the non-breeding season.
- 6. *Population Trend* (PT) indicates vulnerability due to the direction and magnitude of changes in population size within North America since the mid-1960s.

NatureServe's Ranking System (Faber-Langendoen et al. 2012), which is used by some state Natural Heritage Programs, also served as a partial basis for the approach used in this assessment. Factors included in NatureServe's Ranking System include:

## Rarity

- 1. Range Extent defined as the area contained within an imaginary boundary encompassing all known, inferred, or projected sites of present occurrence of a taxon, excluding vagrancy.
- 2. Area of Occupancy area within its "extent of occurrence" which is occupied by a taxon, excluding vagrancy.
- 3. Population estimated current total of the species within the area of interest (IA)
- 4. Number of Occurrences each occurrence is an area of land or water in which a species is or was present
- 5. Number of Occurrences or % Area with Good Viability if current conditions prevail, the occurrence is likely to persist for the foreseeable future in its current condition or better
- 6. Environmental Specificity degree to which a species depends upon a relatively scarce set of habitats, substrates, food types, or other biotic/abiotic factors within its overall range (this is to be used mostly when the # of occurrences, range extent or area of occupancy are largely unknown)

# **Trends**

- 1. Long-term Trend degree of change over ~200 years (for area of interest) in population size, range extent, # of occurrences, and/or % area with good viability.
- 2. Short-term Trend same as above, for 10 years or 3 generations, whichever is longer.

# Threats

- 1. Threats incorporates information on severity, scope, impact and timing
- 2. Intrinsic Vulnerability to be used when threats unknown

After discussing these assessment systems, the working group decided on 8 criteria that would be used to assess the species included in Iowa's Wildlife Action Plan (See Appendix 17 for a detailed description of the ranks associated with each of the following 8 criteria):

- 1. Global Range Extent (all other criteria are for Iowa only)
- 2. Area of Occupancy
- 3. Long-term Trend
- 4. Short-term Trend
- 5. Ecological Specialization (Population Concentration)
- 6. Dietary Specialization
- 7. General Ecological Specialization
- 8. Threat Not Addressed Above

## **The Scoring Process**

The Wildlife Working Group developed a scoring process in which each criterion was weighted according to our understanding of the relative contribution of each factor to a species' overall conservation status. The theoretical potential score for an individual species ranges from 0 - 3.75. Calculated scores ranged from 0.57 (for the Snuffbox mussel) to 3.75 (for several species of low conservation concern that have been expanding their range within lowa). See Appendix 17 for a detailed explanation of the criteria used to score each wildlife species.

Not all criteria were expected or intended to have normal distributions. For example, the *Range Extent* criterion exists to significantly reduce the score for the small number of lowa species which have a global range of less than 40,000 square miles. This is because threats within the lowa portion of a species' range, with a small overall range, pose greater risk to the species as a whole. Very few species scored a three or lower for this criterion.

Similarly, the *Ecological Specialization - Population Concentration* criterion is intended to highlight those species that aggregate at a small number of locations, and therefore could be at risk of extirpation given one disastrous event during the time period when the population is aggregated. This criterion was not relevant for most lowa species. Rather, it served to reduce the scores for a small number of species which face this high-risk situation, regardless of their current trend and distribution. Thus, a hypothetical example of an 'average' SGCN species would have a restricted geographic range, occupy only a portion of its former range, be suffering moderate long- and short-term population declines, and be specialized with respect to population concentration, diet, or some other factor. Species with 2 or more fields that are unknown went into a separate "Data Deficient" (DD) category of species - for which information needs are high. These species will be SGCN-DD until such time as there is adequate information to allow assessment of their conservation status. If a species has been extirpated from the state, it was also put into a separate category for further discussion. Examples include the Starhead Topminnow and the Pondmussel. This SGCN-E category was created because some extirpated species are better candidates for conservation efforts than others, depending on whether lowa remains an important part of their range and whether their conservation status in other areas is stable.

A variety of data resources were utilized by taxonomic subcommittees as they considered which species should be listed as Species of Greatest Conservation Need. In general, the following types of resources were used:

- Published historic and scientific literature;
- Unpublished reports, scientific surveys and databases maintained by the DNR fisheries, wildlife and water
  quality bureaus (e.g., Natural Areas Inventory, Multiple Species Inventory and Monitoring Program, Statewide
  Mussel Survey, etc.);
- Personal research and survey data supplied by wildlife ecologists at lowa educational institutions;
- Museum and personal specimen collections;
- State and regional databases maintained by other conservation organizations (e.g. NatureServe, Partners In Flight, Partners for Amphibian and Reptile Conservation, US Fish and Wildlife Service, US Geological Survey, Iowa Ornithologist's Union, etc.);
- Personal expertise of working group members and consultants.

To determine the list of SGCN from the scores created through the assessments, we combined the wildlife species into one dataset, with the exception of the moth and terrestrial snail species. (The expertise and capacity to address moths and terrestrial snails is limited, so these two subcommittees each selected a relatively small number species to assess. Therefore, including these taxa in the full analysis would have biased the results.) We combined the scores for analysis because separating the data into individual taxa resulted in several groups with non-normal score distributions. Combining these into one group, the dataset was still skewed (more scores with 3+ values) but did have a more normal distribution.

Given the skewedness, we elected to use the Quartiles and Interquartile Range as the methodology for determining where to set the SGCN value (as opposed to the standard deviation), because the Interquartile Range and Median Absolute Deviation method is less impacted by outliers than the Median Standard Deviation. Species with a score that was at or below the 0.5 Median Absolute Deviation from Quartile 2 were considered to be those of Greatest Conservation Need. First, we found the three Quartiles (Q2 is the median of the dataset while Q1 and Q3 are the medians of the remaining data below and above the median, respectively). The Interquartile Range (IQR) is the difference between Q3 and Q1. The Median Absolute Deviation (MAD) is half of the IQR. This methodology resulted in a SGCN list of wildlife species with scores less than or equal to 2.844.

Plants, however, followed a different methodology to determine SGCN status. A working group of plant experts considered records of plants from multiple sources and decided that all native species with fewer than 40 records since 1980, as well as a subset with unknown status, would be considered SGCN.

Table 3-2. Proportion of Iowa Species Designated as SGCN.

	2012 2015 2025						
	2012	2015		20	J25	1	
Taxonomic Group	# of SGCN in 2012	# of SGCN in 2015	# of SGCN in 2025	# Species Evaluated (Valid Iowa Records)	# of Species Assessed (Native Species)	% SGCN of Species Assessed	
Amphibians	9	16	8	25	21	38%	
Reptiles	23	40	36	47	46	78%	
Birds - Breeding	67	78	48	197	190	25%	
Birds - Non-breeding	18	34	39	210	190	19%	
Mammals	19	22	18	81	53	34%	
Fish	74	79	65	156	144	45%	
Mussels	29	43	45	54	52	87%	
Terrestrial Snails*	8	5	3	90	3	N/A	
Bumble Bees	N/A	N/A	12	15	15	80%	
Butterflies	38	51	31	127	108	29%	
Moths*	N/A	N/A	32	32	32	N/A	
Dragonflies & Damselflies	28	30	19	120	107	18%	
Crayfish*	N/A	7	4	8	7	57%	
Total Fauna	313	405	360	1162	988	36%*	
Plants*	N/A	N/A	439	439	439	N/A	
Total Fauna and Flora	313	405	799	1601	1427	N/A	

<sup>\*</sup>The entirety of the taxonomic groups of native Terrestrial Snails, Moths, and Plants were not assessed for SGCN status due to lack of sufficient information; a subset of species were assessed. This somewhat inflates the percentage of species that were determined to be SGCN of those that were assessed.

The status assessment process resulted in lists of SCGN for each taxonomic group included in the Plan. These lists are displayed in Tables 3-3 through 3-16.

# **Future Changes to List of SGCN**

As research and monitoring progress, Iowa may find that the conservation status scores assigned to each species during the 2025 Comprehensive Review and Revision have changed. Also, Iowa may be able to complete the status assessment for species that were rated Data Deficient in 2025. This section outlines the process that would be undertaken to evaluate changes to the list of SGCN within taxonomic groups already included in the Plan prior to the next Comprehensive Review and Revision, scheduled for 2035.

# **Step 1: Taxonomic Subcommittee Completes Status Assessment**

The taxonomic subcommittee for the relevant taxon would use the approved criteria to re-do the Species Status Assessment for the species in question (see Appendix 17).

## Step 2: Wildlife Working Group Review and Notification to Fish and Wildlife Service

Once the Species Status Assessment process is completed, the results will be reviewed for approval by the Wildlife Working Group. If approved by the Wildlife Working Group, then the potential changes to the list of SGCN would be compiled for submission to the US Fish and Wildlife Service (USFWS). The Director of DNR would send a letter of intent to make minor revisions to the Plan to the USFWS Region 3 Coordinator of Conservation Investment (CI) Programs.

# Step 3: Public Review and Submittal of Changes to Fish and Wildlife Service

Once the USFWS has been informed of lowa's intent to complete a minor revision to the Plan, the list of species to be added to the SGCN category will be made available for public review and comment. After public input is considered and integrated, then the proposed changes to the list of SGCN will be submitted to the USFWS for review and approval.

# **Evaluation of Additional Taxonomic Groups**

As additional information about Iowa wildlife becomes available through biological surveys and research, Iowa may consider evaluating other taxonomic groups for inclusion in the Plan. This section outlines the process that would be undertaken to evaluate any potential additional taxa prior to the Plan's next Comprehensive Review and Revision, scheduled for 2035.

# **Step 1: Completion of Nomination Form by Sponsor**

The evaluation process begins when an interested party (hereafter, "sponsor") submits a form to the Wildlife Working Group of the Implementation Committee. The preferred taxonomic level for inclusion in the Plan is an entire order or sub-order of species known to occur within Iowa, but we will consider groups as small as complete genera occurring within Iowa. For that entire taxon, the form requests information such as the list of species with documented occurrences in Iowa, how long the taxon has been studied in Iowa and what portions of the state have been surveyed, a list of publications resulting from the work (if any), and a list of the primary people studying the taxon within Iowa.

# **Step 2: Wildlife Working Group-Sponsor Consultation**

Once a completed nomination form has been received, members of the Wildlife Working Group will work with the sponsor to determine the feasibility of adding the taxon. Feasibility will depend on several issues: whether there are an adequate number of experts knowledgeable about the taxon to develop a taxon-specific subcommittee, whether there are potential sources of funding for research and conservation projects for the taxon, and whether established monitoring protocols for the taxon can be integrated into the Multiple Species Inventory and Monitoring (MSIM) program.

## **Step 3: Species Status Assessment**

If the sponsor and the Wildlife Working Group determine that inclusion of the taxon is feasible, then a taxon-specific subcommittee will be formed. The subcommittee will complete a Species Status Assessment process. To be included in the Plan, all Iowa species within the taxonomic group will need to have the Species Status Assessment Scoring Criteria completed (see Appendix 17.) This forms the basis for determining which species would be listed as SGCN, as discussed above. If two or more criteria are unknown for a given species, that species will be placed in the "Data Deficient" category of SGCN.

# Step 4: Wildlife Working Group Review and Notification to Fish and Wildlife Service

Once the Species Status Assessment process is completed, the results will be reviewed for approval by the Wildlife Working Group. If approved by the Wildlife Working Group, then the potential changes to the list of SGCN would be compiled for submittal to the US Fish and Wildlife Service (USFWS). The Director of DNR would send a letter of intent to make minor revisions to the Plan to the USFWS Region 3 Coordinator of Conservation Investment (CI) Programs.

# Step 5: Public Review and Submittal of Changes to Fish and Wildlife Service

Once the USFWS has been informed of Iowa's intent to complete a minor revision to the Plan, the list of species to be added to the SGCN category will be made available for public review and comment. After public input is considered and integrated, then the proposed changes to the list of SGCN will be submitted to the USFWS for review and approval.

# **Tables of Species of Greatest Conservation Need**

The lowa Department of Natural Resources (DNR) is currently in the process of revising the Iowa Administrative Code (IAC) 571—Chapter 77, which lists the state's Threatened and Endangered (T&E) plants and animals. The proposed rule was not finalized at the time of this update to the Wildlife Action Plan. A list detailing the species with their current and proposed status is available in Appendix 16. The final rule will be officially published and available for public review on the DNR website once the entire revision process is complete and the rule becomes effective.

Each of the following tables of SGCN is intended to display a similar suite of information for each taxonomic group included in this plan; including common and scientific names, whether the species is considered data deficient, whether the species is listed as Endangered or Threatened at either the state or federal level, and whether the species is included in the Midwest list of Regional Species of Greatest Conservation Need (RSGCN). For some taxa groups, there may be more information included if relevant, or less included (e.g., some taxa were not included in the RSGCN list).

# Table 3-3. Amphibians of Greatest Conservation Need

**Taxonomic order and scientific names derived from:** The <u>Society for the Study of Amphibians and Reptiles Standard</u> English and Scientific Names Document.

Nicholson, KE. (ed.). 2025. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. Ninth Edition. Society for the Study of Amphibians and Reptiles. 87pp.

**SGCN** refers to Species of Greatest Conservation Need (SGCN) status as determined through IWAP species conservation status assessments. Y: Yes, species is SGCN. Blank: No, species is not SGCN. **Rows shaded in gray**: indicate data deficient SGCN for which information needed to assess conservation status is lacking.

**T/E Status:** Refers to whether a species is federally listed as Endangered, Threatened, or Proposed for listing at the time of this plan's publication. It also refers to those species proposed for Endangered or Threatened status at the state level. For up-to-date state of Iowa listing information, please see the Threatened and Endangered Species Program page on the DNR website.

- I-PE: Proposed Endangered in Iowa
- I-PT: Proposed Threatened in Iowa
- I-SC: Special Concern in Iowa
- F-E: Federally listed as Endangered in the United States
- F-T: Federally listed as Threatened in the United States
- F-P: Proposed for federal listing as an Endangered or Threatened species

Regional SGCN: To access more information about this effort and for the updated list of Regional SGCN.

- R: Species is considered a Regional Species of Greatest Conservation Need in the Midwest.
- W: Watchlist. This is a list of species for which there was concern but insufficient information or differing trends across the region (WA: Watchlist Assessment Priority). For some species this is because there is a different region of the country that is more important to the species than the Midwest (WD: Watchlist Defer to adjacent region).
- PR: R: Species is proposed as a Regional Species of Greatest Conservation Need in the Midwest, if a Midwest state lists the species as SGCN.

Assessments of species conservation status undertaken as part of the IWAP are used to determine <u>SGCN status only</u>. Other information is provided as a reference. Updates to State Wildlife Action Plans, NatureServe National Ranks, Federal T&E Status, and State T&E Status are each independent processes, undertaken by different entities with differing timeframes. As such, the various listings or status ranks for a given species at a given point in time may not always appear to be in accord.

	Common Name	Scientific Name	T/E Status	Regional SGCN
1	Great Plains Toad	Anaxyrus cognatus		
2	Crawfish Frog*	Lithobates areolatus		
3	Plains Spadefoot	Spea bombifrons	I-SC	
4	Blue-spotted Salamander	Ambystoma laterale	I-PE	R
5	Smallmouth Salamander	Ambystoma texanum	I-SC	
6	Tiger Salamander	Ambystoma tigrinum		
7	Mudpuppy	Necturus maculosus	I-PT	R
8	Eastern Newt	Notophthalmus viridescens	I-PT	WA

<sup>\*</sup>Extirpated from Iowa, but reintroduction is a possibility.

# **Table 3-4. Reptiles of Greatest Conservation Need**

**Taxonomic order and scientific names derived from:** The <u>Society for the Study of Amphibians and Reptiles Standard</u> English and Scientific Names Document.

Nicholson, KE. (ed.). 2025. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. Ninth Edition. Society for the Study of Amphibians and Reptiles. 87pp.

**SGCN** refers to Species of Greatest Conservation Need (SGCN) status as determined through IWAP species conservation status assessments. Y: Yes, species is SGCN. Blank: No, species is not SGCN. **Rows shaded in gray**: indicate data deficient SGCN for which information needed to assess conservation status is lacking.

**T/E Status** refers to whether a species is listed as either state or federally Endangered or Threatened, at the time of this plan's publication. It also refers to those species proposed for Endangered or Threatened status at the state level. For up-to-date state listing information, please see the Threatened and Endangered Species Program page on the <a href="DNR">DNR</a> website.

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- I-PT: Proposed Threatened in Iowa
- I-SC: Special Concern in Iowa
- F-E: Federally listed as Endangered in the United States
- F-T: Federally listed as Threatened in the United States
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Regional SGCN: To access more information about this effort and for the updated list of Regional SGCN.

- R: Species is considered a Regional Species of Greatest Conservation Need in the Midwest.
- W: Watchlist. This is a list of species for which there was concern but insufficient information or differing trends across the region (WA: Watchlist Assessment Priority). For some species this is because there is a different region of the country that is more important to the species than the Midwest (WD: Watchlist Defer to adjacent region).

Assessments of species conservation status undertaken as part of the IWAP are used to determine <u>SGCN status only</u>. Other information is provided as a reference. Updates to State Wildlife Action Plans, NatureServe National Ranks, Federal T&E Status, and State T&E Status are each independent processes, undertaken by different entities with differing timeframes. As such, the various listings or status ranks for a given species at a given point in time may not always appear to be in accord.

	Common Name	Scientific Name	T/E Status	RSGCN
1	Slender Glass Lizard	Ophisaurus attenuatus	I-PT	WA
2	Common Five-lined Skink	Plestiodon fasciatus		
3	Great Plains Skink	Plestiodon obsoletus	I-PE	
4	Prairie Skink	Plestiodon septentrionalis		WA
5	Six-Lined Racerunner	Aspidocelis sexlineatus		
6	Western Worm Snake	Carphophis vermis	I-PT	
7	North American Racer	Coluber constrictor		
8	Ring-necked Snake	Diadophis punctatus		
9	Western Hog-nosed Snake	Heterodon nasicus	I-PE	R
10	Eastern Hog-nosed Snake	Heterodon platirhinos		WA
11	Prairie Kingsnake	Lampropeltis calligaster	I-SC	
12	Speckled Kingsnake	Lampropeltis holbrooki	I-PT	

	Common Name	Scientific Name	T/E Status	RSGCN
13	*Plain-bellied Watersnake	Nerodia erythrogaster	I-PT	R
14	Diamond-backed Watersnake	Nerodia rhombifer	I-PT	
15	Smooth Greensnake	Opheodrys vernalis	I-SC	R
16	Gophersnake (Bullsnake)	Pituophis catenifer	P-T	
17	Western Ratsnake	Pantherophus obsoletus		
18	Graham's Crayfish Snake	Regina grahamii	I-PT	
19	Western Ribbonsnake	Thamnophis proximus		
20	Lined snake	Tropidoclonion lineatum		
21	Smooth Earthsnake	Virginia valeriae		
22	Eastern Copperhead	Agkistrodon contortrix	I-PE	
23	Timber Rattlesnake	Crotalus horridus	I-SC	R
24	Prairie Rattlesnake	Crotalus viridis	I-PE	
25	Eastern Massasauga	Sistrurus catenatus	I-PE, F-T	R
26	Prairie (Western) Massasauga	Sistrurus turgeminus	I-PE	R
27	North American Snapping Turtle	Chelydra serpentina		
28	Blanding's Turtle	Emydoidea blandingii	I-PT	R
29	Wood Turtle	Glyptemys insculpta	I-PE	R
30	Northern Map Turtle	Graptemys geographica	I-SC	
31	Ouachita Map Turtle	Graptemys ouachitensis	I-SC	
32	False Map Turtle	Graptemys pseudogeographica	I-SC	
33	Ornate Box Turtle	Terrapene ornata	I-PT	WA
34	Yellow Mud Turtle	Kinosternon flavescens	I-PE	R
35	Eastern Musk Turtle	Sternotherus odoratus	I-PT	
36	Smooth Softshell	Apalone mutica	I-SC	

<sup>\*</sup>The Copperbelly Watersnake (*Nerodia erythrogaster neglecta*) was renamed Plain-bellied Watersnake (*Nerodia erythrogaster*) after the subspecies designation was removed. However, the northern Distinct Population Segment (DPS) of the Copperbelly Water Snake (*Nerodia erythrogaster neglecta*) is still federally listed as threatened (status not yet updated to show taxonomic name change). This DPS includes northern Indiana, Michigan, and Ohio, and does not include lowa populations.

# Table 3-5. Breeding Birds of Greatest Conservation Need

**Taxonomic order and nomenclature derived from:** The <u>American Ornithological Society Check-List of North American</u> Birds.

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- I-PE: Proposed Endangered in Iowa
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- F-E: Federally listed as Endangered in the United States
- F-T: Federally listed as Threatened in the United States
- F-P: Proposed for federal listing as an Endangered or Threatened species

Regional SGCN: To access more information about this effort and for the updated list of Regional SGCN.

- R: Species is considered a Regional Species of Greatest Conservation Need in the Midwest.
- W: Watchlist. This is a list of species for which there was concern but insufficient information or differing trends across the region (WA: Watchlist Assessment Priority). For some species this is because there is a different region of the country that is more important to the species than the Midwest (WD: Watchlist Defer to adjacent region).
- PR: R: Species is proposed as a Regional Species of Greatest Conservation Need in the Midwest, if a Midwest state lists the species as SGCN.

**R2R** Refers to Road to Recovery Tipping Point Species List.

- Red Alert Species: Very High Urgency (perilously low population size, steeply declining or unknown population trend)
- Orange Alert Species: (large population loss, continued or accelerated decline, conservation reliant)
- Yellow Alert List: Moderate Urgency (large population loss, but now relatively stable, still conservation reliant)

	Common Name	Scientific Name	T/E Status	Regional SGCN	R2R
1	American Wigeon	Mareca americana			
2	American Black Duck	Anas rubripes			
3	Northern Pintail	Anas acuta	I-SC		Yellow
4	Canvasback	Aythya valisineria			
5	Lesser Scaup	Aythya affinis			
6	Northern Bobwhite	Colinus virginianus		R	
7	Ruffed Grouse	Bonasa umbellus	I-SC		
8	Greater Prairie-Chicken	Tympanuchus cupido		R	Red
9	Red-necked Grebe	Podiceps grisegena	I-SC		

	Common Name	Scientific Name	T/E Status	Regional SGCN	R2R
10	Western Grebe	Aechmophorus occidentalis	I-SC		
11	Black-billed Cuckoo	Coccyzus erythropthalmus		R	
12	Common Nighthawk	Chordeiles minor			
13	Chuck-will's-widow	Antrostomus carolinensis	I-PT		
14	Eastern Whip-poor-will	Antrostomus vociferus	I-SC	R	Yellow
15	Chimney Swift	Chaetura pelagica	I-SC	R	Orange
16	King Rail	Rallus elegans	I-PT	WA	Orange
17	Black-necked Stilt	Himantopus mexicanus			
18	Piping Plover	Charadrius melodus	I-PE, F-E	R	Orange
19	Wilson's Snipe	Gallinago delicata	I-SC		
20	Wilson's Phalarope	Phalaropus tricolor			
21	Franklin's Gull	Leucophaeus pipixcan	I-SC		
22	Least Tern	Sternula antillarum	I-PT, F-E*	R	Orange
23	Black Tern	Chlidonias niger	I-PT	R	
24	Forster's Tern	Sterna forsteri	I-PT		
25	American White Pelican	Pelecanus erythrorhynchos			
26	American Bittern	Botaurus lentiginosus			
27	Yellow-crowned Night Heron	Nyctanassa violacea			
28	Black-crowned Night Heron	Nycticorax nycticorax			
29	White-faced Ibis	Plegadis chihi			
30	Swainson's Hawk	Buteo swainsoni			
31	American Barn Owl	Tyto furcata	I-SC		
32	Eastern Screech-Owl	Megascops asio			
33	Burrowing Owl	Athene cunicularia			
34	Long-eared Owl	Asio otus	I-PT		
35	Short-eared Owl	Asio flammeus	I-PT	R	
36	American Kestrel	Falco calumbarius			
37	Scissor-tailed Flycatcher	Tyrannus forficatus	I-SC		
38	Say's Phoebe	Sayornis saya			
39	Loggerhead Shrike	Lanius ludovicianus	I-SC	R	
40	Bank Swallow	Riparia riparia		WA	
41	Purple Martin	Progne subis			
42	Bewick's Wren	Thryomanes bewickii			
43	Veery	Catharus fuscescens			
44	Grasshopper Sparrow	Ammodramus savannarum		R	
45	Bobolink	Dolichonyx oryzivorus	I-SC	R	Orange
46	Western Meadowlark	Sturnella neglecta	I-SC	R	
47	Blue-winged Warbler	Vermivora cyanoptera			
48	Cerulean Warbler	Setophaga cerulea		R	Yellow
_	·	·			

<sup>\*</sup>In 2021, the Interior Least Tern population (including lowa) was delisted. Other populations of Least Terns remain on the list of federally Threatened species.

# Table 3-6. Non-breeding Birds of Greatest Conservation Need

**Taxonomic order and nomenclature derived from:** The <u>American Ornithological Society Check-List of North American</u> Birds.

**SGCN** refers to Species of Greatest Conservation Need (SGCN) status as determined through IWAP species conservation status assessments. Y: Yes, species is SGCN. Blank: No, species is not SGCN. **Rows shaded in gray**: indicate data deficient SGCN for which information needed to assess conservation status is lacking.

**T/E Status** refers to whether a species is listed as either state or federally Endangered or Threatened, at the time of this plan's publication. It also refers to those species proposed for Endangered or Threatened status at the state level. For up-to-date state listing information, please see the Threatened and Endangered Species Program page on the <a href="DNR">DNR</a> website.

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- F-T: Federally listed as Threatened in the United States
- F-P: Proposed for federal listing as an Endangered or Threatened species

Regional SGCN: To access more information about this effort and for the updated list of Regional SGCN.

- R: Species is considered a Regional Species of Greatest Conservation Need in the Midwest.
- W: Watchlist. This is a list of species for which there was concern but insufficient information or differing trends across the region (WA: Watchlist Assessment Priority). For some species this is because there is a different region of the country that is more important to the species than the Midwest (WD: Watchlist Defer to adjacent region).

#### **R2R** Refers to Road to Recovery Tipping Point Species List.

- Red Alert Species: Very High Urgency (perilously low population size, steeply declining or unknown population trend)
- Orange Alert Species: (large population loss, continued or accelerated decline, conservation reliant)
- Yellow Alert List: Moderate Urgency (large population loss, but now relatively stable, still conservation reliant)

	Common Name	Scientific Name	T/E Status	Regional SGCN	R2R
1	Greater scaup	Aythya marila			
2	Horned Grebe	Podiceps auritus			Yellow
3	Yellow Rail	Coturnicops noveboracensis		R	Yellow
4	Black Rail	Laterallus jamaicensis	F-T*		
5	Whooping Crane	Grus americana	F-E	R	Orange
6	Black-bellied Plover	Pluvialis squatarola			Orange
7	American Golden-Plover	Pluvialis dominica			Orange
8	Semipalmated Plover	Charadrius semipalmatus		WA	
9	Whimbrel	Numenius phaeopus			Orange
10	Long-billed Curlew	Numenius americanus			
11	Hudsonian Godwit	Limosa haemastica			Red

	Common Name	Scientific Name	T/E Status	Regional SGCN	R2R
12	Marbled Godwit	Limosa fedoa		R	
13	Ruddy Turnstone	Arenaria interpres			Orange
14	Red Knot	Calidris canutus	F-T**		Orange
15	Stilt Sandpiper	Caladris himantopus			Orange
16	Sanderling	Calidris alba			Orange
17	Dunlin	Calidris alpina			
18	White-rumped Sandpiper	Calidris fuscicollis			
19	Buff-breasted Sandpiper	Calidris subruficollis		R	Orange
20	Pectoral Sandpiper	Calidris melanotos			Orange
21	Short-billed Dowitcher	Limnodromus griseus			Orange
22	Long-billed Dowitcher	Limnodromus scolopaceus			Orange
23	Bonaparte's Gull	Chroicocephalus philadelphia			
24	Herring Gull	Larus argentatus			
25	Common Tern	Sterna hirundo			
26	Common Loon	Gavia immer			
27	Olive-sided Flycatcher	Contopus cooperi			Yellow
28	Yellow-bellied Flycatcher	Empidonax flaviventris			
29	Philadelphia Vireo	Vireo philadelphicus			
30	Northern Shrike	Lanius borealis			
31	Bohemian Waxwing	Bombycilla garrulus			
32	Sprague's Pipit	Anthus spragueii	F-C	R	Orange
33	Redpoll	Acanthis flammea			
34	White-winged Crossbill	Loxia leucoptera			
35	Lapland Longspur	Calcarius Iapponicus			
36	Golden-winged Warbler	Vermivora chrysoptera			Yellow
37	Connecticut Warbler	Oporornis agilis		R	
38	Bay-breasted Warbler	Setophaga castanea			
39	Black-throated Blue Warbler	Setophaga caerulescens			

<sup>\*</sup> Eastern Black Rail - Only the subspecies *Laterallus jamaicensis jamaicensis* is listed as federally threatened; this subspecies is considered an accidental species in Iowa by the Fish & Wildlife Service.

<sup>\*\*</sup> Rufa Red Knot - Only the subspecies *Calidris canutus rufa* is listed as federally threatened; this subspecies does not occur in Iowa.

# Table 3-7. Mammals of Greatest Conservation Need

**Taxonomic order derived from:** The <u>American Society of Mammalogist's Mammal Diversity Database</u>. (2025). Mammal Diversity Database (Version 2.0) [Data set]. <u>Zenodo</u>.

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- PR: R: Species is proposed as a Regional Species of Greatest Conservation Need in the Midwest, if a Midwest state lists the species as SGCN.

	Common Name	Scientific Name	T/E Status	Regional SGCN
1	White-tailed Jackrabbit	Lepus townsendii	I-PT	R
2	Franklin's Ground Squirrel	Spermophilus franklinii		R
3	Plains Pocket Gopher	Geomys bursarius	I-PT	WA
4	Plains Pocket Mouse	Perognathus flavescens	I-PT	WA
5	Woodland Vole	Microtus pinetorum		WA
6	Southern Bog Lemming	Synaptomys cooperi	I-PE	
7	Common Muskrat	Ondrata zibethicus		
8	North American Least Shrew	Cryptotis parvus	I-PT	WA
9	Prairie Shrew	Sorex haydeni		
10	Little Brown Myotis	Myotis lucifigus	I-PT	R
11	Northern Myotis (Northern Long-eared Bat)	Myotis septentrionalis	I-PE, F-E	R
12	Indiana Myotis	Myotis sodalis	I-PE, F-E	R
13	Tricolored Bat	Perimyotis subflavus	I-PT	R

	Common Name	Scientific Name	T/E Status	Regional SGCN
14	Alleghanian Spotted Skunk	Spilogale putorius	I-PE	R
15	Long-tailed Weasel	Mustela frenata		
16	Least Weasel	Mustela nivalis		
17	American Ermine	Mustela ermine		
18	Northern Gray Fox	Urocyon cinereoargenteus	I-SC	WA

## **Table 3-8. Fishes of Greatest Conservation Need**

**Taxonomy and nomenclature from:** American Fisheries Society. 2023. *Common and Scientific Names of Fishes from the United States, Canada, and Mexico*, 8<sup>th</sup> Edition (2023). American Fisheries Society, Special Publication 37, Bethesda, MD. <a href="https://fisheries.org/bookstore/all-titles/special-publications/namesoffishes8/">https://fisheries.org/bookstore/all-titles/special-publications/namesoffishes8/</a>

**SGCN** refers to Species of Greatest Conservation Need (SGCN) status as determined through IWAP species conservation status assessments. Y: Yes, species is SGCN. Blank: No, species is not SGCN. **Rows shaded in gray**: indicate data deficient SGCN for which information needed to assess conservation status is lacking.

**T/E Status:** Refers to whether a species is federally listed as Endangered, Threatened, or Proposed for listing at the time of this plan's publication. It also refers to those species proposed for Endangered or Threatened status at the state level. For up-to-date state of Iowa listing information, please see the Threatened and Endangered Species Program page on the DNR website.

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- F-P: Proposed for federal listing as an Endangered or Threatened species

Regional SGCN: To access more information about this effort and for the updated list of Regional SGCN.

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- PR: R: Species is proposed as a Regional Species of Greatest Conservation Need in the Midwest, if a Midwest state lists the species as SGCN.

	Common Name	Scientific Name	T/E Status	Regional SGCN
1	Chestnut Lamprey	Ichthyomyzon castaneus	I-PT	
2	Lake Sturgeon	Acipenser fulvescens	I-PE	R
3	Pallid Sturgeon	Scaphirhynchus albus	I-PE, F-E	R
4	Paddlefish	Polyodon spathula		
5	Emerald Bowfin	Amia ocellicauda		
6	American Eel	Anguilla rostrata	I-PT	WA
7	Skipjack Herring	Alosa chrysochloris	I-PT	
8	Blue Sucker	Cycleptus elongatus		
9	Lake Chubsucker	Erimyzon sucetta		
10	Black Buffalo	Ictiobus niger		
11	Spotted Sucker	Minytrema melanops		
12	Silver Redhorse	Moxostoma anisurum		
13	River Redhorse	Moxostoma carinatum		_

	Common Name	Scientific Name	T/E Status	Regional SGCN
14	Black Redhorse	Moxostoma duquesnei	I-SC	
15	Golden Redhorse	Moxostoma erythrurum		
16	Pealip Redhorse	Moxostoma pisolabrum		
17	Greater Redhorse	Moxostoma valenciennesi		
18	River Shiner	Alburnops blennius		
19	Weed Shiner	Alburnops texanus	I-PT	
20	Largescale Stoneroller	Campostoma oligolepis		
21	Southern Redbelly Dace	Chrosomus erythrogaster		
22	Gravel Chub	Erimystax x-punctatus		WA
23	Western Silvery Minnow	Hybognathus argyritis	I-PE	R
24	Mississippi Silvery Minnow	Hybognathus nuchalis		
25	Plains Minnow	Hybognathus placitus		WA
26	Pallid Shiner	Hybopsis amnis		
27	Redfin Shiner	Lythrurus umbratilis	I-PT	
28	Sturgeon Chub	Macrhybopsis gelida	I-PE	R
29	Shoal Chub	Macrhybopsis hyostoma		
30	Sicklefin Chub	Macrhybopsis meeki	I-PE	R
31	Northern Pearl Dace	Margariscus nachtriebi	I-PE	WA
32	Pugnose Shiner	Miniellus anogenus	I-PE	R
33	Ozark Minnow	Miniellus nubilus		
34	Topeka Shiner	Miniellus topeka	I-PT, F-E	R
35	Blacknose Shiner	Notropis heterolepis	I-PE	
36	Pugnose Minnow	Opsopoeodus emiliae	I-PT	
37	Ghost Shiner	Paranotropis buchanani	I-PE	
38	Mimic Shiner	Paranotropis volucellus		
39	Suckermouth Minnow	Phenacobius mirabilis		
40	Flathead Chub	Platygobio gracilis		R
41	Longnose Dace	Rhinichthys cataractae		
42	Brown Bullhead	Ameiurus nebulosus		
43	Tadpole Madtom	Noturus gyrinus		
44	Redfin (Grass) Pickerel	Esox americanus	I-PT	
45	Northern Pike	Esox lucius		
46	Central Mudminnow	Umbra limi		
47	Trout-perch	Percopsis omiscomaycus	I-PT	
48	Brook Silverside	Labidesthes sicculus		
49	Banded Killifish	Fundulus diaphanus	I-PT	
50	Starhead Topminnow	Fundulus dispar	I-PE	R
51	Plains Topminnow	Fundulus sciadicus	I-PE	R
52	Warmouth	Lepomis gulosus		
53	Northern Sunfish*	Lepomis peltastes		WA
54	Mottled Sculpin	Cottus bairdii	I-PT	

	Common Name	Scientific Name	T/E Status	Regional SGCN
55	Slimy Sculpin	Cottus cognatus		
56	Western Sand Darter	Ammocrypta clara	I-PT	R
57	Crystal Darter	Crystallaria asprella	I-PE	R
58	Mud Darter	Etheostoma asprigene		
59	Rainbow Darter	Etheostoma caeruleum		
60	Bluntnose Darter	Etheostoma chlorosoma	I-PE	
61	Iowa Darter	Etheostoma exile		
62	Least Darter	Etheostoma microperca	I-PE	WA
63	Orangethroat Darter	Etheostoma spectabile	I-SC	
64	Blackside Darter	Percina maculata		
65	River Darter	Percina shumardi		

<sup>\*</sup>Until the publication of Page et al. (2013), the Northern Sunfish (*Lepomis peltastes*) was called the Longear Sunfish (*L. megalotis*). But, in Page et al. (2013), the name of the form of the Longear Sunfish known to have occurred in Iowa was changed to Northern Sunfish (*L. peltastes*). There are no native occurrences of the Longear Sunfish (*L. megalotis*) in Iowa.

# Table 3-9. Mussels of Greatest Conservation Need

**Taxonomic order derived from:** DD Turgeon, JF Quinn Jr., AE Bogan, EV Coan, FG Hochberg Jr., WG Lyons, PM Mikkelsen, RJ Neves, CFE Roper, G Rosenberg, B Roth, A Scheltema, FG Thompson, M Vecchione & JD Williams. 1998. *Common and scientific names of aquatic invertebrates from the United States and Canada: Mollusks. 2<sup>nd</sup> Edition.* American Fisheries Society, Special Publication 26, Bethesda, Maryland. ix + 526 pp

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	Common Name	Scientific Name	T/E Status	Regional SGCN
1	Mucket	Actinonaias ligamentina	I-PT	
2	Elktoe	Alasmidonta marginata	I-SC	R
3	Slippershell	Alasmidonta viridis	I-PE	WA
4	Three ridge	Amblema plicata		
5	Cylinder (Cylindrical papershell)	Anodontoides ferussacianus	I-SC	
6	Rock pocketbook	Arcidens confragosus		WA
7	Spectaclecase	Cumberlandia monodonta	I-PE, F-E	R
8	Wartyback	Cyclonaias nodulata	I-SC	
9	Pimpleback	Cyclonaias pustulosa		
10	Purple wartyback	Cyclonaias tuberculata	I-PE	R
11	Butterfly	Ellipsaria lineolata	I-SC	R
12	Elephant ear	Elliptio crassidens		R

	Common Name	Scientific Name	T/E Status	Regional SGCN
13	Snuffbox	Epioblasma triquetra		R
14	Spike	Eurynia dilatata	I-PE	
15	Wabash pigtoe	Fusconaia flava		
16	Higgins' eye pearlymussel	Lampsilis higginsi	I-PT F-E	R
17	Canary kingshell	Lampsilis sietmani		PW
18	Fatmucket	Lampsilis siliquoidea		
19	Yellow/Slough sandshell	Lampsilis teres	I-PT	R
20	White heelsplitter	Lasmigona camplanata		
21	Creek heelsplitter	Lasmigona compressa	I-SC	R
22	Flutedshell	Lasmigona costata	I-SC	
23	Black sandshell	Ligumia recta		R
24	Washboard	Megalonaias nervosa		
25	Threehorn wartyback	Obliquaria reflexa		
26	Hickorynut	Obovaria olivaria		
27	Sheepnose	Plethobasus cyphyus	I-PE, F-E	R
28	Round pigtoe	Pleurobema sintoxia	I-PE	WA
29	Pink heelsplitter	Potamilus alatus		
30	Fat pocketbook	Potamilus capax	F-E	
31	Scaleshell	Potamilus leptodon		
32	Lake floater	Pyganodon lacustris		
33	Winged mapleleaf	Quadrula fragosa		
34	Mapleleaf	Quadrula quadrula		
35	Ebonyshell	Reginaia ebena		
36	Pondmussel	Saggitunio subrostratus		
37	Salamander mussel	Simpsonaias ambigua	I-PE	R
38	Monkeyface	Theliderma metanevra	I-PT	
39	Gulf mapleleaf*	Tritogonia nobilis		
40	Pistolgrip (formerly Buckhorn)	Tritogonia verrucosa	I-PT	
41	Fawnsfoot	Truncilla donaciformis	I-SC	WA
42	Deertoe	Truncilla truncata		
43	Pondhorn	Uniomerus tetralasmus		
44	Flat floater	Utterbackiana suborbiculata		
45	Ellipse	Venustaconcha ellipsiformis	I-PT	R

<sup>\*</sup> Presumed extirpated, inclusion is based on relic shells in the Mississippi River.

# Table 3-10. Terrestrial Snails of Greatest Conservation Need

**Taxonomic order and nomenclature derived from:** DD Turgeon, JF Quinn Jr, AE Bogan, EV Coan, FG Hochberg Jr, WG Lyons, PM Mikkelsen, RJ Neves, CFE Roper, G Rosenberg, B Roth, A Scheltema, FG Thompson, M Vecchione and JD Williams. 1998. *Common and scientific names of aquatic invertebrates from the United States and Canada: Mollusks. 2<sup>nd</sup> Edition.* American Fisheries Society, Special Publication 26, Bethesda, Maryland. ix + 526 pp

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- F-P: Proposed for federal listing as an Endangered or Threatened species

	Common Name	Scientific Name	T/E	Regional
	Common Name	Scientific Name	Status	SGCN
1	Midwest Pleistocene Vertigo	Vertigo arthuri	I-PT	
2	Bluff Vertigo	Vertigo meramecensis	I-PE	
3	Iowa Pleistocene Snail	Discus macclintocki	I-PE, F-E	

# Table 3-11. Bumble Bees of Greatest Conservation Need

**Taxonomic order and scientific names derived from:** Williams, PH, RW Thorp, LL Richardson, and SR Colla. (2014). Bumble Bees of North America: An identification guide. Princeton University Press.

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- PR: R: Species is proposed as a Regional Species of Greatest Conservation Need in the Midwest, if a Midwest state lists the species as SGCN.

	Common Name	Scientific Name	T/E Status	Regional SGCN
1	Rusty Patched Bumble Bee	Bombus affinis	I-PE, F-E	R
2	Black and Gold Bumble Bee	Bombus auricomus		PR
3	Ashton's Cuckoo Bumble Bee	Bombus bohemicus*		R
4	Northern Amber Bumble Bee	Bombus borealis		
5	Lemon Cuckoo Bumble Bee	Bombus citrinus		
6	Yellow Bumble Bee	Bombus fervidus		
7	Southern Plains Bumble Bee	Bombus fraternus	F-Under Review	R
8	American Bumble Bee	Bombus pensylvanicus	F-Under Review	R
9	Red-belted Bumble Bee	Bombus rufocinctus		
10	Tri-colored Bumble Bee	Bombus ternarius		
11	Half-black Bumble Bee	Bombus vagans		
12	Variable Cuckoo Bumble Bee	Bombus variabilis	F-Under Review	R

<sup>\*</sup>also referred to as B. ashtonii. Not the same as the B. bohemicus as referred to in Europe.

# Table 3-12. Butterflies of Greatest Conservation Need

**Taxonomic order and scientific names derived from:** Pelham, JP. (2023). <u>A catalogue of the butterflies of the United States and Canada</u>.

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- I-PT: Proposed Threatened in Iowa
- I-SC: Special Concern in Iowa
- F-E: Federally listed as Endangered in the United States
- F-T: Federally listed as Threatened in the United States
- F-P: Proposed for federal listing as an Endangered or Threatened species

**Regional SGCN**: To access more information about this effort and for the updated list of Regional SGCN.

- R: Species is considered a Regional Species of Greatest Conservation Need in the Midwest.
- W: Watchlist. This is a list of species for which there was concern but insufficient information or differing trends across the region (WA: Watchlist Assessment Priority). For some species this is because there is a different region of the country that is more important to the species than the Midwest (WD: Watchlist Defer to adjacent region).
- PR: R: Species is proposed as a Regional Species of Greatest Conservation Need in the Midwest, if a Midwest state lists the species as SGCN.

	Common Name	Scientific Name	T/E Status	Regional SGCN
1	Southern Cloudywing	Cecropterus bathyllus		WA
2	Hayhurst's Scallopwing	Staphylus hayhurstii		
3	Dreamy Duskywing	Erynnis icelus	I-SC	
4	Mottled Duskywing	Gesta martialis	I-PE	R
5	Columbine Duskywing	Gesta lucilius	I-SC	WA
6	Dion Skipper	Euphyes dion		
7	Two-spotted Skipper	Euphyes bimacula	I-PT	R
8	Arogos Skipper	Atrytone arogos	I-PE	R
9	Byssus Skipper	Atrytone byssus	I-SC	WA
10	Crossline Skipper	Limochores origenes	I-PT	
11	Leonard's Skipper	Hesperia leonardus	I-PT	R
11a	Leonard's Skipper	Hesperia leonardus leonardus		R
11b	Leonard's Pawnee Skipper	Hesperia leonardus pawnee		R
12	Ottoe Skipper	Hesperia ottoe	I-PE	R

	Common Name	Scientific Name	T/E Status	Regional SGCN
13	Dakota Skipper*	Hesperia dacotae	F-T	
14	Mulberry Wing	Poanes massasoit	I-PE	
15	Broad-winged Skipper	Poanes viator		
16	Dusted Skipper	Atrytonopsis hianna	I-PE	R
17	Pepper and Salt Skipper	Amblyscirtes hegon	I-SC	
18	Swarthy Skipper	Nastra Iherminier		
19	Poweshiek Skipper	Oarisma poweshiek	I-PE, F-E	R
20	Olympia Marble	Euchloe Olympia	I-PT	
21	Edward's Hairstreak	Satyrium edwardsii		WA
22	Acadian Hairstreak	Satyrium acadica		
23	Silvery Blue	Glaucopsyche lygdamus	I-SC	
24	Monarch	Danaus plexippus	F-PT	R
25	Silver-bordered Fritillary	Boloria myrina	I-SC	
26	Regal Fritillary	Argynnis idalia	I-PT, F-PT	R
27	Aphrodite Fritillary	Argynnis aphrodite	I-SC	WA
28	Milbert's Tortoiseshell	Aglais milberti		
29	Compton Tortoiseshell	Nymphalis l-album		
30	Baltimore Checkerspot	Euphydryas phaeton	I-PT	
30a	Baltimore Checkerspot 'Ozark'	Euphydryas phaeton ozarkae		
31	Eyed Brown	Lethe eurydice		

<sup>\*</sup>Extirpated, not likely to be reintroduced

# Table 3-13. Moths of Greatest Conservation Need

Taxonomic order and scientific names derived from: BugGuide website.

**SGCN** refers to Species of Greatest Conservation Need (SGCN) status as determined through IWAP species conservation status assessments. Y: Yes, species is SGCN. Blank: No, species is not SGCN. **Rows shaded in gray**: indicate data deficient SGCN for which information needed to assess conservation status is lacking.

**T/E Status:** Refers to whether a species is federally listed as Endangered, Threatened, or Proposed for listing at the time of this plan's publication. It also refers to those species proposed for Endangered or Threatened status at the state level. For up-to-date state of Iowa listing information, please see the Threatened and Endangered Species Program page on the DNR website.

- I-PE: Proposed Endangered in Iowa
- I-PT: Proposed Threatened in Iowa
- I-SC: Special Concern in Iowa
- F-E: Federally listed as Endangered in the United States
- F-T: Federally listed as Threatened in the United States
- F-P: Proposed for federal listing as an Endangered or Threatened species

**Regional SGCN**: To access more information about this effort and for the updated list of Regional SGCN.

- R: Species is considered a Regional Species of Greatest Conservation Need in the Midwest.
- W: Watchlist. This is a list of species for which there was concern but insufficient information or differing trends across the region (WA: Watchlist Assessment Priority). For some species this is because there is a different region of the country that is more important to the species than the Midwest (WD: Watchlist Defer to adjacent region).

	Common Name	Scientific Name	T/E Status	Regional SGCN
1	Eastern buckmoth	Hemileuca maia		
2	A grass miner moth	Agonopterix lythrella		WA
3	Early leadplant leaf-twirler moth	Anacampsis wikeri		R
4	Marbleseed leafminer	Acrocercops pnosmodiella		PR
5	Abbreviated underwing	Catocala abbreviatella		R
6	Whitney's underwing	Catocala whitneyi		R
7	A noctuid moth	Bagisara gulnare		R
8	Grote's black-tipped quaker	Dichagyris grotei		
9	Red sedge borer moth	Globia laeta		
10	The starry campion moth	Hadena ectypa		R
11	Fingered lemmeria moth	Lemmeria digitalis		
12	Franclemont's lithophane	Lithophane franclemonti		PR
13	Newman's brocade	Meropleon ambifusca		
14	Blazing star stem borer	Papaipema beeriana		R
15	Golden borer moth	Papaipema cerina		R

	Common Name	Scientific Name	T/E Status	Regional SGCN
16	Rattlesnake-master borer moth	Papaipema eryngii		R
17	Eupatorium borer moth	Papaipema eupatoria		
18	Ash tip borer moth	Papaipema furcata		
19	Turtle head borer moth	Papaipema nepheleptena		WA
20	Culvers root borer moth	Papaipema sciata		R
21	Silphium borer moth	Papaipema silphii		R
22		Plagiomimicus heitzmani		
23	Bina flower moth	Schinia bina		R
24	Leadplant flower moth	Schinia lucens		WA
25	Bleeding flower moth	Schinia sanguinea		
26	Northern flower moth	Schinia septentrionalis		
27	Marked noctuid	Tricholita notata		R
28	A prairie sedge moth	Neodactria murellus		WA
29	Sand dune panic grass moth	Coenochroa bipunctella		WA
30	An aethes moth	Aethes patricia		WA
31	A tortricid moth	Ancylis semiovana		R
32	Two-lined eucosma	Eucosma bilineana		

# Table 3-14. Dragonflies and Damselflies of Greatest Conservation Need

**Taxonomic order and scientific names derived from**: Paulson, DR, SW Dunkle, and JT Johnson eds. 2024. <u>A Checklist of North American Odonata</u>.

**SGCN** refers to Species of Greatest Conservation Need (SGCN) status as determined through IWAP species conservation status assessments. Y: Yes, species is SGCN. Blank: No, species is not SGCN. **Rows shaded in gray**: indicate data deficient SGCN for which information needed to assess conservation status is lacking.

**T/E Status:** Refers to whether a species is federally listed as Endangered, Threatened, or Proposed for listing at the time of this plan's publication. It also refers to those species proposed for Endangered or Threatened status at the state level. For up-to-date state of Iowa listing information, please see the Threatened and Endangered Species Program page on the DNR website.

- I-PE: Proposed Endangered in Iowa
- I-PT: Proposed Threatened in Iowa
- I-SC: Special Concern in Iowa
- F-E: Federally listed as Endangered in the United States
- F-T: Federally listed as Threatened in the United States
- F-P: Proposed for federal listing as an Endangered or Threatened species

**Regional SGCN**: To access more information about this effort and for the updated list of Regional SGCN.

- R: Species is considered a Regional Species of Greatest Conservation Need in the Midwest.
- W: Watchlist. This is a list of species for which there was concern but insufficient information or differing trends across the region (WA: Watchlist Assessment Priority). For some species this is because there is a different region of the country that is more important to the species than the Midwest (WD: Watchlist Defer to adjacent region).
- PR: R: Species is proposed as a Regional Species of Greatest Conservation Need in the Midwest, if a Midwest state lists the species as SGCN.

	Common Name	Scientific Name	T/E Status	Regional SGCN
1	Sweetflag Spreadwing	Lestes forcipatus	I-SC	30011
2	Eastern Red Damsel	Amphiagrion saucium	I-SC	
3	Paiute Dancer	Argia alberta	I-SC	
4	Prairie Bluet	Coenagrion angulatum	I-PE	
5	Taiga Bluet	Coenagrion resolutum	I-PT	
6	Boreal Bluet	Enallagma boreale		
7	Alkali Bluet	Enallagma clausum		
8	Western Forktail	Ischnura perparva		
9	Skillet Clubtail	Gomphurus ventricosus		R
10	Sioux Snaketail	Ophiogomphus smithi	I-PT	R
11	Westfall's Snaketail	Ophiogomphus westfalli	I-PT	WA
12	Rapids Clubtail	Phanogomphus quadricolor	I-SC	
13	Brimstone Clubtail	Stylurus intricatus	I-SC	
14	Arrow Clubtail	Stylurus spiniceps		

	Common Name	Scientific Name	T/E Status	Regional SGCN
15	Racket-tailed Emerald	Dorocordulia libera		
16	Stygian Shadowdragon	Neurocordulia yamaskanensis		
17	Plains Emerald	Somatochlora ensigera	I-PT	R
18	Mocha Emerald	Somatochlora linearis		
19	Carolina Saddlebags	Tramea carolina		

# Table 3-15. Crayfish of Greatest Conservation Need

Taxonomic order and scientific names derived from: NatureServe Explorer.

**SGCN** refers to Species of Greatest Conservation Need (SGCN) status as determined through IWAP species conservation status assessments. Y: Yes, species is SGCN. Blank: No, species is not SGCN. **Rows shaded in gray**: indicate data deficient SGCN for which information needed to assess conservation status is lacking.

**T/E Status:** Refers to whether a species is federally listed as Endangered, Threatened, or Proposed for listing at the time of this plan's publication. It also refers to those species proposed for Endangered or Threatened status at the state level. For up-to-date state of Iowa listing information, please see the Threatened and Endangered Species Program page on the DNR website.

- I-PE: Proposed Endangered in Iowa
- I-PT: Proposed Threatened in Iowa
- I-SC: Special Concern in Iowa
- F-E: Federally listed as Endangered in the United States
- F-T: Federally listed as Threatened in the United States
- F-P: Proposed for federal listing as an Endangered or Threatened species

**Regional SGCN**: To access more information about this effort and for the updated list of Regional SGCN.

- R: Species is considered a Regional Species of Greatest Conservation Need in the Midwest.
- W: Watchlist. This is a list of species for which there was concern but insufficient information or differing trends across the region (WA: Watchlist Assessment Priority). For some species this is because there is a different region of the country that is more important to the species than the Midwest (WD: Watchlist Defer to adjacent region).
- PR: R: Species is proposed as a Regional Species of Greatest Conservation Need in the Midwest, if a Midwest state lists the species as SGCN.

	Common Name	Scientific Name	T/E Status	Regional SGCN
1	Golden Crayfish	Faxonius luteus	I-SC	WA
2	Northern Clearwater Crayfish	Faxonius propinquus		R
3	Great Plains Mudbug	Lacunicambarus nebrascensis		
4	Prairie Crayfish	Procambarus gracilis		

# **Table 3-16. Plants of Greatest Conservation Need**

Taxonomy primarily from the Flora of North America (FNA) with exceptions for the genus *Rubus* (Widrlechner, 1998), and the federally listed species of Northern Wild Monkshood (*Aconitum novaboracense*) and Hall's Bulrush (*Schoenoplectiella hallii*) as presented in the Federal Register.

**T/E Status:** Refers to whether a species is federally listed as Endangered or Threatened at the time of this plan's publication. It also refers to those species proposed for Endangered or Threatened status at the state level. For up-to-date state of Iowa listing information, please see the Threatened and Endangered Species Program page on the <a href="DNR">DNR</a> website. In "IA T/E/SC Proposed" Column:

- E: Proposed for State listing as Endangered in Iowa
- T: Proposed for State listing as Threatened in Iowa
- SC: Special Concern in Iowa
- In "Fed T/E" Column:
- E: Federally listed as Endangered in the United States
- T: Federally listed as Threatened in the United States

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
1	Balsam fir	Abies balsamea	SC	
2	Three-seeded mercury	Acalypha gracilens	Т	
3	Red maple	Acer rubrum	SC	
4	Mountain maple	Acer spicatum	SC	
5	American bird's-foot trefoil	Acmispon americanus	SC	
6	Northern wild monkshood	Aconitum noveboracense	Т	Т
7	Allegheny vine	Adlumia fungosa	S	
8	Round-stemmed false foxglove	Agalinis gattingeri	Т	
9	Pale false foxglove	Agalinis skinneriana	Е	
10	Blue giant hyssop	Agastache foeniculum	SC	
11	Nodding wild onion	Allium cernuum	SC	
12	Saskatoon serviceberry	Amelanchier alnifolia	SC	
13	Low serviceberry	Amelanchier humilis	SC	
14	Inland serviceberry	Amelanchier interior	Т	
15	Allegheny serviceberry	Amelanchier laevis	SC	
16	Roundleaf serviceberry	Amelanchier sanguinea	Е	
17	Fragrant false indigo	Amorpha nana	Т	
18	Raccoon grape	Ampelopsis cordata	Е	
19	Pearly everlasting	Anaphalis margaritacea	Е	
20	Sand bluestem	Andropogon hallii	Е	
21	Round-lobed hepatica	Anemone americana	Е	
22	Carolina anemone	Anemone caroliniana	Е	
23	Bearberry	Arctostaphylos uva-ursi	Е	
24	Virginia snakeroot	Aristolochia serpentaria	E	
25	Black chokeberry	Aronia melanocarpa	Е	
26	Fringed sagewort	Artemisia frigida	E	
27	Woolly milkweed	Asclepias lanuginosa	Т	
28	Mead's milkweed	Asclepias meadii	Е	Т

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
29	Oval-leaved milkweed	Asclepias ovalifolia	Т	
30	Showy milkweed	Asclepias speciosa	Е	
31	Narrow-leaved milkweed	Asclepias stenophylla	Т	
32	Green antelopehorn	Asclepias viridis	Е	
33	Pawpaw	Asimina triloba	Т	
34	Wall-rue	Asplenium ruta-muraria	Е	
35	Field milkvetch	Astragalus agrestis	Е	
36	Bent milkvetch	Astragalus distortus	SC	
37	Slender milkvetch	Astragalus flexuosus	SC	
38	Prairie milkvetch	Astragalus laxmannii	Е	
39	Missouri milkvetch	Astragalus missouriensis	SC	
40	Fern-leaved false foxglove	Aureolaria pedicularia	Е	
41	Mexican mosquito fern	Azolla mexicana	SC	
42	Blue wild indigo	Baptisia australis	SC	
43	Water parsnip	Berula erecta	Т	
44	Kittentails	Besseya bullii	SC	
45	Bog birch	Betula pumila	SC	
46	Water marigold	Bidens beckii	Е	
47	Pagoda plant	Blephilia ciliata	SC	
48	Purple rockcress	Boechera grahamii	SC	
49	Green rockcress	Boechera missouriensis	SC	
50	Prairie bulrush	Bolboschoenus maritimus	SC	
51	Prairie moonwort	Botrychium campestre	SC	
52	Matricary grape fern	Botrychium matricariifolium	E	
53	Little grapefern	Botrychium simplex	E	
54	Swamp moonwort	Botrychium tenebrosum	E	
55	Buffalograss	Bouteloua dactyloides	SC	
56	Watershield	Brasenia schreberi	Т	
57	Satin brome	Bromus nottawayanus	SC	
58	Poppy mallow	Callirhoe alcaeoides	SC	
59	Poppy mallow	Callirhoe triangulata	Т	
60	Water-starwort	Callitriche heterophylla	Т	
61	Vernal water-starwort	Callitriche palustris	SC	
62	Terrestrial water-starwort	Callitriche terrestris	SC	
63	Oklahoma grass-pink	Calopogon oklahomensis	SC	
64	Tuberous grass-pink	Calopogon tuberosus	SC	
65	Low bindweed	Calystegia spithamaea	Т	
66	Prairie hyacinth	Camassia angusta	SC	
67	Wild hyacinth	Camassia scilloides	SC	
68	White-tinged sedge	Carex albicans	Е	
69	Foxtail sedge	Carex alopecoidea	SC	
70	Assiniboine sedge	Carex assininboinensis	Т	

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
71	Back's sedge	Carex backii	E	
72	Carey's sedge	Carex careyana	Т	
73	Cordroot sedge	Carex chordorrhiza	E	
74	Fibrous-root sedge	Carex communis	Т	
75	Field sedge	Carex conoidea	SC	
76	Fringed sedge	Carex crinita	E	
77	Raven's-foot sedge	Carex crus-corvi	Е	
78	Dewey's sedge	Carex deweyana	SC	
79	Lesser tussock sedge	Carex diandra	SC	
80	Needleleaf sedge	Carex duriscula	SC	
81	Star sedge	Carex echinata	E	
82	Fescue sedge	Carex festucacea	SC	
83	Slender sedge	Carex gracilescens	SC	
84	Shoreline sedge	Carex hyalenolepis	E	
85	Bladder sedge	Carex intumescens	SC	
86	Wiregrass sedge	Carex lasiocarpa	SC	
87	Spreading sedge	Carex laxiculmis	Т	
88	Delicate sedge	Carex leptalea	Т	
89	Mud sedge	Carex limosa	SC	
90	Hoplike sedge	Carex lupuliformis	E	
91	Yellow sedge	Carex lurida	Т	
92	Poor sedge	Carex magellanica	SC	
93	Intermediate sedge	Carex media	E	
94	Peck's sedge	Carex peckii	SC	
95	Plantain-leaved sedge	Carex plantaginea	E	
96	Drooping sedge	Carex prasina	E	
97	Cyperus-like sedge	Carex pseudocyperus	E	
98	Reflexed sedge	Carex retroflexa	E	
99	Rocky Mountain sedge	Carex saximontana	E	
100	Dey-spike sedge	Carex siccata	SC	
101	Sterile sedge	Carex sterilis	Т	
102	Swan's sedge	Carex swanii	SC	
103	Quill sedge	Carex tenera	Т	
104	Shaved sedge	Carex tonsa	Т	
105	Tuckerman's sedge	Carex tuckermanii	SC	
106	Wood's sedge	Carex woodii	Т	
107	Pignut hickory	Carya glabra	SC	
108	Fireweed	Chamaenerion angustifolium	Е	
109	Inland oats	Chamaenerion angustifolium	SC	
110	Pink turtlehead	Chelone obliqua	Т	
111	Red goosefoot	Chenopodium rubrum	SC	
112	Pipsissewa	Chimaphila umbellata	Е	

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
113	Iowa golden saxifrage	Chrysosplenium iowense	SC	
114	Drooping woodreed	Cinna latifolia	E	
115	Hill's thistle	Cirsium pumilum	SC	
116	Wavy-leaved thistle	Cirsium undulatum	SC	
117	Purple clematis	Clematis occidentalis	Е	
118	Blue-eyed mary	Collinsia verna	E	
119	Marsh cinquefoil	Comarum palustre	Т	
120	Dayflower	Commelina erecta	Т	
121	Cancer root	Conopholis americana	SC	
122	Spotted coralroot	Corallorhiza maculata	Е	
123	Bunchberry	Cornus canadensis	Т	
124	Golden corydalis	Corydalis aurea	Е	
125	Large-bracted corydalis	Corydalis curvisiliqua	Е	
126	Pale corydalis	Corydalis flavula	Е	
127	Pink corydalis	Corydalis sempervirens	Е	
128	Fireberry hawthorn	Crataegus chrysocarpa	Т	
129	Hillside hawthorn	Crataegus collina	SC	
130	Dodge's hawthorn	Crataegus dodgei	SC	
131	River hawthorn	Crataegus fluviatalis	SC	
132	Large-seeded hawthorn	Crataegus macrosperma	SC	
133	Washington hawthorn	Crataegus phaenopyrum	SC	
134	Waxy-fruited hawthorn	Crataegus pruinosa	Т	
135	Hawksbeard	Crepis runcinata	SC	
136	Prairie tea	Croton monanthogynus	SC	
137	Slender cliff brake	Cryptogramma stelleri	SC	
138	Waxweed	Cuphea viscosissima	SC	
139	Largeseed dodder	Cuscuta indecora	SC	
140	Bigfruit dodder	Cuscuta umbrosa	SC	
141	Small white lady's slipper	Cypripedium candidum	SC	
142	Showy lady's-slipper	Cypripedium reginae	Т	
143	Fragile fern	Cystopteris fragilis	SC	
144	Laurentian fragile fern	Cystopteris laurentiana	SC	
145	Tennessee bladder fern	Cystopteris tennesseensis	SC	
146	Silky prairie-clover	Dalea villosa	Е	
147	Shrubby cinquefoil	Dasiphora fruticosa	Т	
148	Swamp loosestrife	Decodon verticillatus	SC	
149	Tree clubmoss	Dendrolycopodium dendroideum	E	
150	Silvery spleenwort	Deparia acrostichoides	Т	
151	Sessile-leaved tick trefoil	Desmodium sessilifolium	E	
152	Northern panic-grass	Dichanthelium boreale	T	
153	Slim-leaved panic-grass	Dichanthelium linearifolium	T	

154 Fingergrass Digitaria filiformis 155 Persimmon Diospyros virginiana 156 Crowfoot clubmoss Diphasiastrum digitatum 157 Narrow-leaved spleenwort Diplazium pynocarpon 158 Jeweled shooting star Dodecatheon amethystinum 159 Roundleaved sundew Drosera rotundifolia 160 Glandular wood fern Dryopteris intermedia 161 Marginal shield fern Dryopteris marginalis 162 Purple coneflower Echinacea purpurea 163 Waterwort Elatine rubella 164 Purple spikerush Eleocharis atropurpurea 165 Dwarf spikerush Eleocharis coloradoenis 166 Elliptic spikerush Eleocharis flavescens 168 Intermediate spikerush Eleocharis intermedia	SC SC SC T SC E T E SC SC SC SC SC T T E SC SC T E SC SC T E	
156 Crowfoot clubmoss Diphasiastrum digitatum 157 Narrow-leaved spleenwort Diplazium pynocarpon 158 Jeweled shooting star Dodecatheon amethystinum 159 Roundleaved sundew Drosera rotundifolia 160 Glandular wood fern Dryopteris intermedia 161 Marginal shield fern Dryopteris marginalis 162 Purple coneflower Echinacea purpurea 163 Waterwort Elatine rubella 164 Purple spikerush Eleocharis atropurpurea 165 Dwarf spikerush Eleocharis coloradoenis 166 Elliptic spikerush Eleocharis elliptica 167 Green spikerush Eleocharis flavescens 168 Intermediate spikerush Eleocharis intermedia	SC T SC E T E SC SC SC SC SC T	
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158 Jeweled shooting star  159 Roundleaved sundew  160 Glandular wood fern  161 Marginal shield fern  162 Purple coneflower  163 Waterwort  164 Purple spikerush  165 Dwarf spikerush  166 Elliptic spikerush  167 Green spikerush  168 Intermediate spikerush  168 Intermediate spikerush  Dryopteris marginalis  Echinacea purpurea  Echinacea purpurea  Elatine rubella  Eleocharis atropurpurea  Eleocharis coloradoenis  Eleocharis elliptica  Eleocharis flavescens  Eleocharis intermedia	SC E T E SC SC SC SC E SC T	
159 Roundleaved sundew  160 Glandular wood fern  161 Marginal shield fern  162 Purple coneflower  163 Waterwort  164 Purple spikerush  165 Dwarf spikerush  166 Elliptic spikerush  167 Green spikerush  168 Intermediate spikerush  169 Dryopteris marginalis  160 Elvopteris marginalis  160 Elliptic spikerush  161 Eleocharis atropurpurea  162 Eleocharis coloradoenis  163 Eleocharis flavescens  164 Eleocharis intermedia	E T E SC SC SC SC E SC SC T	
160 Glandular wood fern Dryopteris intermedia 161 Marginal shield fern Dryopteris marginalis 162 Purple coneflower Echinacea purpurea 163 Waterwort Elatine rubella 164 Purple spikerush Eleocharis atropurpurea 165 Dwarf spikerush Eleocharis coloradoenis 166 Elliptic spikerush Eleocharis elliptica 167 Green spikerush Eleocharis flavescens 168 Intermediate spikerush Eleocharis intermedia	T E SC SC SC E SC T	
161 Marginal shield fern Dryopteris marginalis 162 Purple coneflower Echinacea purpurea 163 Waterwort Elatine rubella 164 Purple spikerush Eleocharis atropurpurea 165 Dwarf spikerush Eleocharis coloradoenis 166 Elliptic spikerush Eleocharis elliptica 167 Green spikerush Eleocharis flavescens 168 Intermediate spikerush Eleocharis intermedia	E E SC SC SC E SC SC T	
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169 Oval spikerush Eleocharis ovata	Е	
170 Few-flowered spikerush Eleocharis pauciflora		
171 Wolf's spikerush Eleocharis wolfii	Е	
172 Diverseglume wildrye Elymus diversiglumis	SC	
173 Southeastern wildrye Elymus glabriflorus	SC	
174 Wiegand's wildrye Elymus wiegandii	Е	
175 Downy willowherb Epilobium strictum	Е	
176 Meadow horsetail Equisetum pratense	SC	
177 Dwarf scouring rush Equisetum scirpoides	SC	
178 Woodland horsetail Equisetum sylvaticum	Т	
179 Ponygrass Eragrostis reptans	SC	
180 Slender cottongrass Eriophorum gracile	Е	
181 Tawny cottongrass Eriophorum virginicum	Е	
182 Yellow trout lily Erythronium americanum	Т	
183 Midland fawnlily Erythronium mesochoreum	SC	
184 Upland boneset Eupatorium sessilifolium	Т	
185 Wood spurge Euphorbia commutata	Е	
186 Six-angled spurge Euphorbia hexagona	SC	
187 Forked aster Eurybia furcata	Е	
188 Large-leaved aster Eurybia macrophylla	E	
189 Schreber's aster Eurybia schreberi	E	
190 Grass-leaved goldenrod Euthamia graminifolia	SC	
191 Queen of the prairie Filipendula rubra	Е	
192 Slender fimbry Fimbristylis autumnalis	Т	
193 False mermaid Floerkea proserpinacoides	E	
194 Blue ash Fraxinus quadrangulata	Т	
195 Umbrella grass Fuirena simplex	SC	

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
196	Rough bedstraw	Galium asprellum	Е	
197	Bog bedstraw	Galium labradoricum	Т	
198	Three-petal bedstraw	Galium trifidum	SC	
199	Early cudweed	Gamochaeta purpurea	SC	
200	Black Huckleberry	Gaylussacia baccata	Е	
201	Northern cranesbill	Geranium bicknellii	SC	
202	Oak fern	Gymnocarpium dryopteris	Т	
203	Nahanni oak fern	Gymnocarpium jessoense	SC	
204	Limestone oak fern	Gymnocarpium robertianum	SC	
205	Sweet Indian plantain	Hasteola suaveolens	SC	
206	Needle-and-thread grass	Hesperostipa comata	Т	
207	Mud plantain	Heteranthera limosa	SC	
208	Water stargrass	Heteranthera multiflora	SC	
209	Hairy goldenaster	Heterothecia villosa	E	
210	American alumroot	Heuchera americana	SC	
211	Common mare's-tail	Hippuris vulgaris	SC	
212	Povertygrass	Hudsonia tomentosa	E	
213	Shining clubmoss	Huperzia lucidula	SC	
214	Rock clubmoss	Huperzia porophila	E	
215	Green violet	Hybanthus concolor	Т	
216	Canadian St. Johnswort	Hypericum canadense	E	
217	Drummond St. Johnswort	Hypericum drummondii	SC	
218	Pineweed	Hypericum gentianoides	E	
219	Winterberry	Ilex verticillata	Т	
220	Flax-leaved aster	Ionactis linariifolia	E	
221	White morning-glory	Ipomoea lacunosa	E	
222	Black-based quillwort	Isoetes melanopoda	E	
223	Sumpweed	Iva annua	SC	
224	Twinleaf	Jeffersonia diphylla	Т	
225	Butternut	Juglans cinerea	SC	
226	Alpine rush	Juncus alpinoarticulatus	Е	
227	Toad rush	Juncus bufonius	SC	
228	Soft rush	Juncus effusus	SC	
229	Green rush	Juncus greenii	Т	
230	Edged rush	Juncus marginatus	E	
231	Vasey's rush	Juncus vaseyi	E	
232	Creeping juniper	Juniperus horizontalis	Е	
233	Water willow	Justicia americana	SC	
234	Dwarf dandelion	Krigia virginica	Т	
235	Intermediate pinweed	Lechea intermedia	Е	
236	Hairy pinweed	Lechea mucronata	Е	
237	Minute duckweed	Lemna perpusilla	SC	

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
238	Prairie bush clover	Lespedeza leptostachya	Т	Т
239	Creeping bush clover	Lespedeza repens	SC	
240	Cleft conobea	Leucospora multifida	Т	
241	Lanceleaf blazingstar	Liatris lancifolia	SC	
242	Twinflower	Linnaea borealis	Т	
243	Wild flax	Linum medium	SC	
244	Brook lobelia	Lobelia kalmii	SC	
245	Whiskbroom parsley	Lomatium foeniculaceum	Т	
246	Western parsley	Lomatium orientale	Т	
247	Wild lupine	Lupinus perennis	E	
248	Bog clubmoss	Lycopodiella inundata	Е	
249	Running clubmoss	Lycopodium clavatum	Т	
250	Adder's-mouth orchid	Malaxis unifolia	SC	
251	Globe mallow	Malvastrum hispidum	SC	
252	Hairy waterclover	Marsilea vestita	E	
253	Bunchflower	Melanthium virginicum	Т	
254	Ten-petaled blazingstar	Mentzelia decapetala	Т	
255	Bog buckbean	Menyanthes trifoliata	Т	
256	Northern lungwort	Mertensia paniculata	Т	
257	Millet grass	Milium effusum	E	
258	Sensitive briar	Mimosa nuttallii	Е	
259	Yellow monkeyflower	Mimulus glabratus	SC	
260	Rock sandwort	Minuartia michauxii	Т	
261	Partridge berry	Mitchella repens	E	
262	Naked miterwort	Mitella nuda	E	
263	Pinesap	Monotropa hypopithys	Т	
264	Water miner's-lettuce	Montia chamissoi	SC	
265	Scratchgrass	Muhlenbergia asperifolia	SC	
266	Mat muhly	Muhlenbergia richardsonis	Е	
267	Water milfoil	Myriophyllum heterophyllum	SC	
268	Rough water milfoil	Myriophyllum pinnatum	SC	
269	Water milfoil	Myriophyllum verticillatum	SC	
270	Slender lip fern	Myriopteris gracilis	S	
271	Glade mallow	Napaea dioica	SC	
272	Small sundrops	Oenothera perennis	E	
273	Southern adder's-tongue	Ophioglosum vulgatum	Т	
274	Eastern pricklypear	Opuntia cespitosa	SC	
275	Fragile prickly-pear	Opuntia fragilis	Е	
276	Bigroot pricklypear	Opuntia macrorhiza	SC	
277	Frenchgrass	Orbexilum onobrychis	E	
278	Clustered broomrape	Orobanche fasciculata	E	
279	Louisiana broomrape	Orobanche ludoviciana	SC	

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
280	One-sided shinleaf	Orthilia secunda	E	
281	Rough-leaved ricegrass	Oryzopsis asperifolia	E	
282	Royal fern	Osmunda regalis	Т	
283	Cinnamon fern	Osmundastrum cinnamomeum	Е	
284	False golden ragwort	Packera pseudaurea	SC	
285	Philadelphia panic grass	Panicum philadelphicum	E	
286	Purple cliffbrake	Pellaea atropurpurea	Т	
287	Arrow arum	Peltandra virginica	E	
288	White beardtongue	Penstemon albidus	Т	
289	Cobaea beardtongue	Penstemon cobaea	E	
290	Slender beardtongue	Penstemon gracilis	E	
291	Tube beardtongue	Penstemon tubaeflorus	E	
292	Wild dill	Perideridia americana	Е	
293	Long beechfern	Phegopteris connectilis	E	
294	Broad beech fern	Phegopteris hexagonoptera	Т	
295	Fameflower	Phemeranthus parviflorus	E	
296	Rough-seeded fameflower	Phemeranthus rugospermus	E	
297	Cleft phlox	Phlox bifida	SC	
298	Missouri ground-cherry	Physalis missouriensis	SC	
299	Annual ground-cherry	Physalis pubescens	SC	
300	Silvery bladderpod	Physaria ludoviciana	SC	
301	Mountain ricegrass	Piptatherum pungens	Е	
302	Heart-leaved plantain	Plantago cordata	SC	
303	Northern bog orchid	Platanthera aquilonis	Т	
304	Wood orchid	Platanthera clavellata	E	
305	Pale green orchid	Platanthera flava	SC	
306	Hooker's orchid	Platanthera hookeri	E	
307	Green fringed orchid	Platanthera lacera	Е	
308	Eastern prairie fringed orchid	Platanthera leucophaea	E	Т
309	Western prairie fringed orchid	Platanthera praeclara	Т	Т
310	Purple fringed orchid	Platanthera psycodes	Т	
311	Plains bluegrass	Poa arida	SC	
312	Chapman's bluegrass	Poa chapmaniana	SC	
313	Bog bluegrass	Poa paludigena	Т	
314	Woodland Bluegrass	Poa saltuensis	E	
315	Meadow bluegrass	Poa wolfii	SC	
316	Clammyweed	Polansia jamesii	E	
317	Crossleaf milkwort	Polygala cruciata	E	
318	Pink milkwort	Polygala incarnata	E	
319	Purple milkwort	Polygala polygama	E	
320	Hairy Solomon's-seal	Polygonatum pubescens	E	
321	Jointweed	Polygonella articulata	Е	

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
322	Douglas' knotweed	Polygonum douglasii	SC	
323	Large-leaved pondweed	Potamogeton amplifolius	SC	
324	Ribbonleaf pondweed	Potamogeton epihydrus	SC	
325	Blunt-leaved pondweed	Potamogeton friesii	SC	
326	White-stemmed pondweed	Potamogeton praelongus	E	
327	Spiralled pondweed	Potamogeton spirillus	SC	
328	Tussock pondweed	Potamogeton strictifolius	SC	
329	Vasey's pondweed	Potamogeton vaseyi	SC	
330	Silverweed	Potentilla anserina	E	
331	Pennsylvania cinquefoil	Potentilla pensylvanica	E	
332	Brook cinquefoil	Potentilla rivalis	SC	
333	Nodding rattlesnake-root	Prenanthes crepidinea	Т	
334	Bird's-eye primrose	Primula mistassinica	SC	
335	Mermaid-weed	Proserpinaca palustris	SC	
336	Hortulan plum	Prunus hortulana	SC	
337	Mexican plum	Prunus mexicana	SC	
338	Canada plum	Prunus nigra	Т	
339	Sand cherry	Prunus pumila	Т	
340	Lemon scurfpea	Psoralidium lanceolatum	SC	
341	Pink shinleaf	Pyrola asarifolia	Т	
342	Gmelin's crowfoot	Ranunculus gmelinii	SC	
343	Lanceleaf buckthorn	Rhamnus lanceolata	SC	
344	Meadow beauty	Rhexia virginica	Т	
345	Dwarf sumac	Rhus copallinum	SC	
346	Beaked rush	Rhynchospora capillacea	SC	
347	Northern currant	Ribes hudsonianum	Т	
348	Lakecress	Rorippa aquatica	SC	
349	Curvepod yellowcress	Rorippa curvipes	SC	
350	Yellow cress	Rorippa sinuata	SC	
351	Prickly rose	Rosa acicularis	SC	
352	Wood's rose	Rosa woodsii	Т	
353	Tooth cup	Rotala ramosior	SC	
354	Garden dewberry	Rubus aboriginum	Т	
355	Stem flower dewberry	Rubus caulifloris	E	
356	Washington dewberry	Rubus celer	E	
357	Short-stalked dewberry	Rubus curtipes	Т	
358	Southern dewberry	Rubus enslenii	Т	
359	Iron River dewberry	Rubus ferrofluvius	Т	
360	Common dewberry	Rubus flagellaris	Т	
361	Fuller's bristly dewberry	Rubus fulleri	Т	
362	Swamp dewberry	Rubus hispidus	E	
363	Missouri bristle-berry	Rubus missouricus	SC	

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
364	Recurved blackberry	Rubus recurvans	E	
365	Downy dewberry	Rubus satis	Т	
366	New England dewberry	Rubus semisetosus	E	
367	Bottomland dewberry	Rubus serratus	E	
368	Big Horseshoe Lake bristle- berry	Rubus stipulatus	SC	
369	Uniform bristleberry	Rubus uniformis	E	
370	Western dock	Rumex occidentalis	SC	
371	Widgeon grass	Ruppia cirrhosa	Т	
372	Prairie rose gentian	Prairie rose gentian	SC	
373	Crested arrowhead	Crested arrowhead	SC	
374	Shining willow	Salix lucida	E	
375	Bog willow	Salix pedicellaris	Т	
376	Silky willow	Salix sericea	SC	
377	Sassafras	Sassafras albidum	SC	
378	Leathery grapefern	Sceptridium multifidum	Т	
379	Tumblegrass	Schedonnardus paniculatus	SC	
380	Scheuchzeria	Scheuchzeria palustris	SC	
381	Hall's bulrush	Schoenoplectiella hallii	SC	
382	Smith's bulrush	Schoenoplectiella smithii	Е	
383	Torrey's bulrush	Schoenoplectus torreyi	SC	
384	Pedicelled bulrush	Scirpus pedicellatus	SC	
385	Low nutrush	Scleria verticillata	Т	
386	Downy skullcap	Scutellaria incana	Е	
387	Veined skullcap	Scutellaria nervosa	Е	
388	Wild stonecrop	Sedum ternatum	Е	
389	Meadow spikemoss	Selaginella eclipes	Е	
390	Rock spikemoss	Selaginella rupestris	SC	
391	Knotweed bristlegrass	Setaria parviflora	Е	
392	Buffaloberry	Sheperdia argentea	Т	
393	Annual skeletonweed	Shinneroseris rostata	Е	
394	Three-toothed cinquefoil	Sibbaldiopsis tridentata	E	
395	Needle-pointed blue-eyed grass	Sisyrinchium mucronatum	E	
396	Rough-leaved goldenrod	Solidago patula	E	
397	Bog goldenrod	Solidago uliginosa	E	
398	Burreed	Sparganium androcladum	SC	
399	Scarlet globemallow	Sphaeralcea coccinea	Т	
400	Yellow-lipped ladies-tresses	Spiranthes lucida	E	
401	Hooded ladies-tresses	Spiranthes romanzoffiana	E	
402	Little ladies-tresses	Spiranthes tuberosa	Е	
403	Spring ladies-tresses	Spiranthes vernalis	Е	

	Common Name	Scientific Name	IA T/E/SC Proposed	Fed T/E
404	Clandestine dropseed	Sporobolus clandestinus	SC	
405	Rough-leaved hedge-nettle	Stachys aspera	E	
406	Rosy twisted-stalk	Streptopus lanceolatus	SC	
407	Pickering morning-glory	Stylisma pickeringii	E	
408	Snowberry	Symphoricarpos albus	E	
409	Rush aster	Symphyotrichum boreale	Т	
410	Ricebutton aster	Symphyotrichum dumosum	SC	
411	Curved aster	Symphyotrichum falcatum	SC	
412	Prairie aster	Symphyotrichum turbinellum	SC	
413	Waxy meadowrue	Thalictrum amphibolum	Е	
414	Western spiderwort	Tradescantia occidentalis	Е	
415	Spiderwort	Tradescantia virginiana	SC	
416	Buffalo clover	Trifolium reflexum	SC	
417	Large arrowgrass	Triglochin maritima	Т	
418	Small arrowgrass	Triglochin palustris	Т	
419	Humped bladderwort	Utricularia gibba	SC	
420	Flat-leaved bladderwort	Utricularia intermedia	SC	
421	Small bladderwort	Utricularia minor	Е	
422	Sessile-leaf bellwort	Uvularia sessilifolia	E	
423	Low sweet blueberry	Vaccinium angustifolium	E	
424	Velvetleaf blueberry	Vaccinium myrtilloides	E	
425	American brookline	Veronica americana	E	
426	Marsh speedwell	Veronica scutellata	SC	
427	Maple-leaved arrowwood	Viburnum acerifolium	E	
428	Black arrowwood	Viburnum molle	Т	
429	Black haw	Viburnum prunifolium	SC	
430	Spurred violet	Viola adunca	E	
431	Large-leaved violet	Viola blanda	E	
432	Lance-leaved violet	Viola lanceolata	Т	
433	Macloskey's violet	Viola macloskeyi	Т	
434	Kidney-leaved violet	Viola renifolia	Т	
435	Summer grape	Vitis aestivalis	Т	
436	Frost grape	Vitis vulpina	E	
437	Rusty woodsia	Woodsia ilvensis	E	
438	Oregon woodsia	Woodsia oregana	E	
439	Yellow-eyed grass	Xyris torta	Т	

# Specific resources utilized by each taxonomic subcommittee during SGCN assessment:

In addition to the personal and professional survey and research results of individual taxonomic subcommittee members, the following sources of information were consulted in the conservation status assessment process.

# **Amphibians and Reptiles**

References used by the Amphibian and Reptile Subcommittee include:

- The Natural History of the Turtles of Iowa, VanDeWalle & Bernstein (2025);
- The Natural History of the Snakes and Lizards of Iowa, VanDeWalle (2022);
- A Field Guide to the Amphibians and Reptiles of Iowa, LeClere (2013);
- Iowa Multiple Species Inventory and Monitoring Program;
- Christiansen and Bailey (1986, 1988, and 1991);
- Partners for Amphibian and Reptile Conservation;
- <u>Herpmapper</u>.

#### **Birds**

References utilized by the Bird Subcommittee include:

- Birds in Iowa (Kent and Dinsmore 1996);
- Iowa Birds (Dinsmore et al. 1984);
- Dinsmore & Dinsmore (2023);
- Iowa Multiple Species Inventory and Monitoring Program;
- The Iowa Breeding Bird Atlas (Jackson et al. 1996) and The Iowa Breeding Bird Atlas II (Dinsmore et al. 2020);
- Trends in Iowa Wildlife Populations and Harvest;
- USGS Breeding Bird Survey;
- Road to Recovery Saving Our Shared Birds.

#### **Butterflies**

References used by the Butterfly Subcommittee include:

- Insects of lowa webpage;
- The Butterflies of Iowa Schlicht et al. (2007);
- Iowa Multiple Species Inventory and Monitoring Program;
- A catalogue of the butterflies of the United States and Canada, Pelham (2023).

# **Dragonflies and damselflies**

References used by the Dragonfly and Damselfly Subcommittee include:

- <u>Iowa Odonata Survey</u>;
- Odonata Central;
- Iowa Multiple Species Inventory and Monitoring Program;
- Paulson et al. (2024).

#### Fish

References used by the Fish Subcommittee include:

- A review of distribution records in Iowa's Aquatic Gap fish database, Olson (2024);
- Range maps and proposed species status criteria for Iowa's SGCN and threatened/endangered fish species,
   Olson (2024);
- Iowa Biological Stream Monitoring Database (<u>BioNet</u>): the portal for all data collected as part of the state's Biological Monitoring and Assessment programs;
- Iowa DNR Fisheries Bureau survey data;
- Harlan and Speaker (1987);
- Page et al. (2023) (American Fisheries Society).

# **Mammals**

References used by the Mammal Subcommittee include:

- Bowles et al. (1998);
- Iowa Multiple Species Inventory and Monitoring Program;
- Trends in Iowa Wildlife Populations and Harvest.

#### Mussels

References used by the Mussel Subcommittee include:

- Frest (1987a);
- Poole and Downing (2004);
- Statewide Freshwater Mussel Survey (J. Kurth);
- Mississippi River mussel sampling data (S. Gritters);
- Iowa Multiple Species Inventory and Monitoring Program.

## **Terrestrial Snails**

Comparatively little is known about the distribution and status of this group in Iowa. References used by the Terrestrial Snail Subcommittee Include:

- Frest (1987b)
- Nekola and Coles (2010)
- Nekola et al. (2018)
- Turgeon et al. (1998)

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