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Montana Fish,  
Wildlife & Parks

# MONTANA ANIMAL SPECIES OF CONCERN

MAY 2009

## INTRODUCTION

This report is produced jointly by the Montana Natural Heritage Program (MTNHP) and Montana Department of Fish, Wildlife, and Parks (MFWP). *Montana Animal Species of Concern* are native Montana animals that are considered to be “at risk” due to declining population trends, threats to their habitats, and/or restricted distribution. Also included in this report are *Potential Animal Species of Concern* -- animals for which current, often limited, information suggests potential vulnerability or for which additional data are needed before an accurate status assessment can be made. Over the last 200 years, 4 species with historic breeding ranges in Montana have been extirpated from the state; Woodland Caribou (*Rangifer tarandus*), Greater Prairie-Chicken (*Tympanuchus cupido*), Passenger Pigeon (*Ectopistes migratorius*), and Pilose Crayfish (*Pacifastacus gambelii*). Designation as a Montana Animal Species of Concern or Potential Animal Species of Concern is not a statutory or regulatory classification. Instead, these designations provide a basis for resource managers and decision-makers to make proactive decisions regarding species conservation and data collection priorities in order to avoid additional extirpations.

Status determinations are made by MTNHP and MFWP biologists in consultation with representatives of the Montana Chapter of the Wildlife Society, the Montana Chapter of the American Fisheries Society and other experts. The process for evaluating and assigning status designations uses the Natural Heritage Program ranking system, described below, which forms the basis for identifying Montana Species of Concern.

## UPDATES IN THIS REPORT

This report identifies 127 vertebrate and 82 invertebrate Species of Concern (SOC). Another 33 vertebrates and 51 invertebrates are identified as Potential Species of Concern (PSOC). See the animal group summary table below for totals by animal group. The focus of this review was to evaluate 83 bird species that had previously not been reviewed with the NatureServe ranking criteria and were on the previous Species of Concern List, listed as of concern on other conservation lists, or for which a review was requested. Three species included on the 2008 SOC report (Barn Owl (*Tyto alba*), Lark Bunting (*Calamospiza melanocorys*), and Olive-sided Flycatcher (*Contopus cooperi*)) and 4 species included on the 2008 PSOC report (American Three-toed Woodpecker (*Picoides dorsalis*), Baltimore Oriole (*Icterus galbula*), Orchard Oriole (*Icterus spurius*), and Williamson’s Sapsucker (*Sphyrapicus thyroideus*)) have been dropped entirely as a result of increasing or stable trends or a reduction in recognized threats. For similar reasons, 7 species have been downgraded from SOC to PSOC status Black-and-white Warbler (*Mniotilta varia*), Broad-tailed Hummingbird (*Selasphorus platycercus*), Cassin’s Kingbird (*Tyrannus vociferans*), Dickcissel (*Spiza americana*), Eastern Bluebird (*Sialia sialis*), Northern Hawk Owl (*Surnia ulula*), and Northern Leopard Frog (*Rana pipiens*) populations on the Great Plains.

Nine vertebrate and 1 invertebrate species, 6 of which were previously classified as PSOC, were added as new Species of Concern based on declining population trends and/or ongoing threats to habitats that are likely to lead

### SPECIES TOTALS BY ANIMAL GROUP Species of Concern

Mammals.....	30 (29%)
Birds.....	63 (20%)
Reptiles.....	9 (53%)
Amphibians.....	6 (46%)
Fish.....	19 (31%)
Invertebrates.....	82 (unknown%)

### Potential Species of Concern

Mammals.....	7 (7%)
Birds.....	19 (6%)
Fish.....	8 (13%)
Invertebrates.....	51 (unknown%)

### HABITAT ASSOCIATION SUMMARY FOR ALL SPECIES OF CONCERN AND POTENTIAL SPECIES OF CONCERN

Streams/Rivers/Lakes .....	29%
Wetlands.....	20%
Sagebrush/Grassland.....	14%
Conifer Forest .....	13%
Riparian Forest.....	6%
Alpine.....	5%
Other/Generalist.....	5%
Rock Outcrop.....	5%
Caves.....	3%

to population declines; Black-billed Cuckoo (*Coccyz erythrophthalmus*), Black-necked Stilt (*Himantopus mexicanus*), Brown Creeper (*Certhia americana*), Great Blue Heron (*Ardea herodias*), Horned Grebe (*Podiceps auritus*), Northern Goshawk (*Accipiter gentilis*), Pileated Woodpecker (*Dryocopus pileatus*), Veery (*Catharus fuscescens*), Winter Wren (*Troglodytes troglodytes*), and a Northern Rocky Mountain Refugium Stonefly (*Soyedina potteri*). Barrow's Goldeneye (*Bucephala islandica*) and Hooded Merganser (*Lophodytes cucullatus*) were added as Potential Species of Concern due to uncertainty about their population status in the face of declining quality of, and threats to, riparian habitats. A number of invertebrate groups (e.g., earthworms, centipedes, spiders) deserve a focused review of their status, but due to the amount of time required, systematic reviews of the status of these groups will have to be dealt with in future updates.

In addition to these deletions and additions, global or state ranks were downgraded (decreased risk) for 26 species and upgraded (increased risk) for 3 species that remained on the SOC and PSOC report; noted in bold on each list. These changes were largely a result of more consistent scoring with the NatureServe ranking criteria, but also resulted from a better understanding of their state and global status.

In order to make this report more useful, we have added habitat associations for each species. Tables on the front and back pages summarize the percentage of SOC and PSOC animals that depend on major habitat types to assist managers in conserving habitats, rather than individual species.

This report also includes notes indicating whether a species has  $\geq 20\%$  of their current global breeding range in Montana, making their conservation in Montana of global significance, and if a species has a limited breeding distribution in Montana ( $\leq 5\%$  of the state), making conservation efforts in the areas where they do occur more important to their conservation within Montana.

## HERITAGE PROGRAM RANKS

The international network of Natural Heritage Programs employs a standardized ranking system to denote global and state status. Each species is given a global (G) rank, denoting range-wide status, and a state (S) rank for its status in Montana. Status ranks range from 1 (greatest concern) to 5 (least concern). Global ranks are assigned by scientists at NatureServe (the international affiliate organization for the heritage network) in consultation with biologists in the natural heritage programs and other taxonomic experts. State ranks are determined jointly by MTNHP and MFWP biologists, in consultation with the Montana Chapter of the Wildlife Society, the Montana Chapter of the American Fisheries Society and other experts.

Among other things, the combination of global and state ranks often helps describe the proportion of a species' range and/or total population occurring in Montana. For instance, a rank of G3 S3 often indicates that Montana comprises most or a very significant portion of an animal's total population. In contrast, an animal ranked G5 S1 often occurs in Montana at the periphery of its much larger range; thus, the state supports a relatively small portion of its total population.

### **What Species are Included in this Report**

Montana Species of Concern are defined as vertebrate animals with a state rank of S1, S2, or S3. Vertebrate species with a rank indicating uncertainty (SU) or a "range rank" extending below the S3 cutoff (e.g., S3S4) are considered Potential Species of Concern.

Because documentation for invertebrates is typically less complete than for vertebrates, only those ranked S1 or S2 are included as SOC. Invertebrates with a range rank extending below S2 (e.g., S2S3) are included as SOC only if their global ranks are G2G3 or G3, or if experts agree their occurrence in Montana has been adequately documented. Other invertebrates of concern with global ranks other than G1, G2, or G3 and with state ranks below S2 or range ranks extending below S2 (e.g., S3S4) are treated as Potential Species of Concern.

### **How Species are Ranked**

In 2004 we began implementing a more rigorous methodology with more consistent and quantifiable criteria to assign status ranks. The goal is to improve the accuracy of ranks and better document the basis for each rank. A more rigorous and well-documented ranking procedure is important to a variety of agencies with responsibilities to manage wildlife populations.

This approach to assessing species' status is based on methods developed by NatureServe (Regan et al. 2004). These criteria include population size, area of occupancy in Montana, short and long-term trends, threats, inherent vulnerability, and specificity to environment. Based on these factors, a preliminary rank is calculated and is reviewed by key experts.

It is important to note that while the ranking process has changed, the definitions and the fundamental criteria remain the same. The principle difference is that criteria are now being applied in a more rigorous and consistent manner. Detailed documentation of the criteria and assessment process are available on the MTNHP website at [http://mtnhp.org/animal/2004\\_SOC\\_Criteria.pdf](http://mtnhp.org/animal/2004_SOC_Criteria.pdf).

### **Definitions of Ranks used in this Report**

- G1 / S1 At high risk because of extremely limited and/or rapidly declining numbers, range, and/or habitat, making it highly vulnerable to global extinction or extirpation in the state.
- G2 / S2 At risk because of very limited and/or declining numbers, range, and/or habitat, making it vulnerable to global extinction or extirpation in the state.
- G3 / S3 Potentially at risk because of limited and/or declining numbers, range, and/or habitat, even though it may be abundant in some areas.
- G4 / S4 Uncommon but not rare (although it may be rare in parts of its range), and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern.
- G5 / S5 Common, widespread, and abundant (although it may be rare in parts of its range). Not vulnerable in most of its range.
- GU / SU Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- GH / SH Historically occurred; may be rediscovered.
- GX / SX Presumed to be extinct or extirpated from Montana; historical records only.

### **Other codes and rank modifiers:**

- B State rank modifier indicating breeding for a migratory species: B = Breeding
- HYB A global rank denoting a hybrid.
- M A state rank modifier indicating migratory stop over status for a species.
- N A state rank modifier referring to a non-breeding population of the species. N = Non-breeding
- Q A global rank modifier indicating there are taxonomic questions or problems.
- T Denotes the rank for a subspecific taxon (subspecies or population); appended to the global rank for the full species. The S Rank following applies to the subspecific taxon.

### **HOW TO READ THIS REPORT**

Species are listed alphabetically by common name within major groups, which are organized in taxonomic order from mammals to invertebrates. Species with names **bolded and underlined** are new additions to the Species of Concern or

Potential Species of Concern report. Species downgraded from Concern to Potential Concern are not shown as new. Global or state ranks are **bolded and underlined** if they have changed from the previous report.

Current federal agency status designations are also provided, including legal status under the U.S. Endangered Species Act, and administrative designations of the U.S. Forest Service and Bureau of Land Management. Conservation and inventory status of species in Montana's Comprehensive Fish and Wildlife Conservation Strategy (MFWP 2005) are also provided.

### **Federal Status Designations**

#### **FISH AND WILDLIFE SERVICE**

This column indicates status under the federal Endangered Species Act of 1973 based on categories defined by the U.S. Fish and Wildlife Service (16 U.S.C.A. §1531-1543 (Supp. 1996)).

E	Listed Endangered
T	Listed Threatened
PE	Proposed Endangered
PT	Proposed Threatened
XN	Experimental Nonessential
C	Candidate (species for which the U.S. Fish and Wildlife Service has sufficient information on biological status and threats to propose listing as threatened or endangered)
DM	Recovered, delisted, and now being monitored

#### **FOREST SERVICE**

The U.S. Forest Service Manual (2670.22) defines Sensitive species on Forest Service lands as those for which population viability is a concern as evidenced by significant downward trend in population or a significant downward trend in habitat capacity. The Regional Forester (Northern Region) designates Sensitive species on National Forests in Montana. These designations were last updated in 2004 and they apply only on USFS-administered lands.

Note: The U.S. Forest Service is implementing new planning regulations (2005) which will lead to changes in the identification of "special status" species on National Forest lands. For the time being, Sensitive species will continue to be recognized for Region 1 under existing agency policy, but in addition many of the newly revised Forest Plans may also identify USFS Species of Concern and USFS Species of Interest as outlined below. During this transition period, a "USFS" designation in the federal status column refers to the status under the existing Sensitive Species policy.

USFS Species-of-Concern (FSH 1909.12, 43.22b) are species for which the Responsible Official determines management actions may be necessary to prevent listing under the Endangered Species Act (ESA). The Responsible

Official, as appropriate, may identify the following plant and animal species, including macro-lichens, as species-of-concern:

1. Species identified as proposed and candidate species under the ESA.
2. Species with ranks of G-1 through G-3 on the NatureServe ranking system.
3. Intraspecific (subspecific) taxa with ranks of T-1 through T-3 on the NatureServe ranking system.
4. Species that have been petitioned for federal listing and for which a positive “90-day finding” has been made (a 90-day finding is a preliminary finding that substantive information was provided indicating that the petition listing may be warranted and a full status review will be conducted).
5. Species that have been recently delisted (these include species delisted within the past five years and other delisted species for which regulatory agency monitoring is still considered necessary).

USFS Species-of-Interest (FSH 1909.12, 43.22c) are species for which the Responsible Official determines that management actions may be necessary or desirable to achieve ecological or other multiple-use objectives. The Responsible Official may review the following sources for potential species-of-interest:

1. Species with ranks of S-1, S-2, N1, or N2 on the NatureServe ranking system.
2. State listed threatened and endangered species that do not meet the criteria as species-of-concern.
3. Species identified as species of conservation concern in State Comprehensive Wildlife Strategies.
4. Bird species on the U.S. Fish and Wildlife Service Birds of Conservation Concern National Priority list (for the U.S. portion of the northern Rockies that occur in National Forest system lands).
5. Additional species that valid existing information indicates are of regional or local conservation concern (this includes all Forest Service Northern Region sensitive species) due to factors that may include:
  - a. Significant threats to populations or habitat.
  - b. Declining trends in populations or habitat.
  - c. Rarity
  - d. Restricted ranges (for example, narrow endemics, disjunct populations, or species at the edge of their range).
6. Species that are hunted or fished and other species of public interest. Invasive species may also be considered.

#### **BUREAU OF LAND MANAGEMENT**

BLM Sensitive Species are defined by the BLM 6840 Manual as those that normally occur on Bureau

administered lands for which BLM has the capability to significantly affect the conservation status of the species through management. Such species should be managed to the level of protection required by State laws or under the BLM policy for candidate species, whichever would provide better opportunity for its conservation. The State Director may designate additional categories of special status species as appropriate and applicable to his or her state’s needs. The sensitive species designation, for species other than federally listed, proposed, or candidate species, may include such native species as those that:

1. could become endangered in or extirpated from a state, or within a significant portion of its distribution in the foreseeable future,
2. are under status review by the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service,
3. are undergoing significant current or predicted downward trends in habitat capability that would reduce a species’ existing distribution,
4. are undergoing significant current or predicted downward trends in population or density such that federally listed, proposed, candidate, or State listed status may become necessary,
5. have typically small and widely dispersed populations,
6. are inhabiting ecological refugia, specialized or unique habitats, or
7. are State listed but which may be better conserved through application of BLM sensitive species status.

#### **MONTANA FISH, WILDLIFE, AND PARKS CFWCS TIER**

Montana’s Comprehensive Fish and Wildlife Conservation Strategy (MFWP 2005) identifies fish and wildlife species that are in greatest need of conservation as follows:

- Tier I: Greatest conservation need. Montana Fish, Wildlife & Parks has a clear obligation to use its resources to implement conservation actions that provide direct benefit to these species, communities, and focus areas.
- Tier II: Moderate conservation need. Montana Fish, Wildlife & Parks could use its resources to implement conservation actions that provide direct benefit to these species, communities, and focus areas.
- Tier III: Lower conservation need. Although important to Montana’s wildlife diversity, these species, communities, and focus areas are either abundant and widespread or are believed to have adequate conservation already in place.
- Tier IV: Species that are non-native, incidental, or on the periphery of their range and are either expanding or very common in adjacent states.

The Comprehensive Fish and Wildlife Conservation Strategy (MFWP 2005) also identifies individual species and taxonomic groups that are in need of inventory.

Each species' conservation and inventory tiering status is indicated in roman numerals before and after a dash, respectively.

### **ADDITIONAL INFORMATION**

Our internet-based *Montana Field Guide* provides information on over 700 vertebrate and 1,100 invertebrate animal species, including Species of Concern and Potential Species of Concern. The Field Guide offers a broad range of information, including species identification, range, habitat, reproduction, food habits, ecology, management, and references. For many Species of Concern, the Field Guide provides extensive detailed information from the databases of MTNHP. For other species, we are still in the process of compiling such information. Photos and call recordings are provided where available. The Field Guide can be accessed at <http://fieldguide.mt.gov/> or through the Natural Heritage Program or Montana Fish, Wildlife, and Parks home pages.

Information on the over 710,000 animal observations in the Montana Natural Heritage Program's statewide databases can be accessed in the context of various statewide map layers via the Natural Heritage Program's **TRACKER** website at: <http://nhp.nris.state.mt.us/Tracker/NHTMap.aspx> We also encourage the submission of new animal observations via this website.

The NatureServe Explorer website provides information on the status of species throughout North America. It can be found at <http://natureserve.org/explorer> or from a link on the MTNHP website. This application includes status maps showing the state/provincial ranks across each species' range, assembled from the network of natural heritage programs. Note that updated ranks for Montana animals will not be immediately reflected in NatureServe Explorer since this information is only exchanged on an annual basis.

More detailed data on the occurrence of Montana Species of Concern are available on request from MTNHP, using the "Request Data" link on the website or by contacting appropriate staff.

This report is available in printable electronic format on the MTNHP website under "Reports." Hard copies are available on request from MTNHP or from MFWP (see contact information on back cover).

### **Comments and Feedback**

We welcome comments and suggestions, including recommendations for changes in species' status and new observation data. All comments and information should be directed to the MTNHP Senior Zoologist, Bryce Maxell, at

[bmaxell@mt.gov](mailto:bmaxell@mt.gov) or at the address below. Please submit animal observations via the TRACKER website at: <http://nhp.nris.state.mt.us/Tracker/NHTMap.aspx>

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# SPECIES OF CONCERN

## Vertebrates

Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Mammals</b>							
American Bison (free-ranging herds)	<i>Bos bison</i>	G4	S2		I - III	≤ 5% state	grasslands
Arctic Shrew	<i>Sorex arcticus</i>	G5	S1S3		II - I	≤ 5% state	wetlands
Black-footed Ferret	<i>Mustela nigripes</i>	G1	S1	USFWS - E, XN	I - III	≤ 5% state	grasslands
Black-tailed Jack Rabbit	<i>Lepus californicus</i>	G5	S2		II - I	≤ 5% state	sagebrush/grasslands
Black-tailed Prairie Dog	<i>Cynomys ludovicianus</i>	G4	S3	USFS, BLM	I - III		grasslands
Canada Lynx	<i>Lynx canadensis</i>	G5	S3	USFWS - T	I - III		subalpine conifer forests
Dwarf Shrew	<i>Sorex nanus</i>	G4	S2S3		II - II		rocky habitats
Eastern Red Bat	<i>Lasiurus borealis</i>	G5	S2S3		II - I		riparian cottonwoods
Fisher	<i>Martes pennanti</i>	G5	S3	USFS, BLM	II - II		mixed conifer forests
Fringed Myotis	<i>Myotis thysanodes</i>	G4G5	S3	BLM	II - II		riparian & dry mixed conifer forests
Gray Wolf	<i>Canis lupus</i>	G4	S3	USFWS - DM	I - III		generalist
Great Basin Pocket Mouse	<i>Perognathus parvus</i>	G5	S2S3	USFS, BLM	I - II	≤ 5% state	sagebrush/grasslands
Grizzly Bear	<i>Ursus arctos</i>	G4	S2S3	USFWS - T (N), DM (S)	I - III		generalist
Hispid Pocket Mouse	<i>Chaetodipus hispidus</i>	G5	S1S3		II - I	≤ 5% state	grasslands
Hoary Bat	<i>Lasiurus cinereus</i>	G5	S3		II - II		riparian and forest habitats
Meadow Jumping Mouse	<i>Zapus hudsonius</i>	G5	S2	BLM	I - I		wetlands
Merriam's Shrew	<i>Sorex merriami</i>	G5	S3		II - II		sagebrush/grasslands
Northern Bog Lemming	<i>Synaptomys borealis</i>	G4	S2	USFS, BLM	I - I		wetlands
Northern Myotis	<i>Myotis septentrionalis</i>	G4	S2S3	BLM	II - I		riparian & mixed forest types
Northern Short-tailed Shrew	<i>Blarina brevicauda</i>	G5	S1S3		IV - III	≤ 5% state	wetlands
Pallid Bat	<i>Antrozous pallidus</i>	G5	S2	USFS, BLM	I - I		arid land rock outcrops
Preble's Shrew	<i>Sorex preblei</i>	G4	S3	BLM	II - II	≥ 20% global	sagebrush/grasslands
Pygmy Rabbit	<i>Brachylagus idahoensis</i>	G4	S3	USFS, BLM	I - II	≤ 5% state	sagebrush
Spotted Bat	<i>Euderma maculatum</i>	G4	S2	USFS, BLM	I - I		arid land rock outcrops
Swift Fox	<i>Vulpes velox</i>	G3	S3	BLM	II - II		grasslands
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	G4	S2	USFS, BLM	I - I		caves in forested habitats
Uinta Chipmunk	<i>Tamias umbrinus</i>	G5	S3		II - I		high elevation conifer forests
Western Spotted Skunk	<i>Spilogale gracilis</i>	G5	S1S3		II - I		rock outcrops, shrublands/woodlands
White-tailed Prairie Dog	<i>Cynomys leucurus</i>	G4	S1	USFS, BLM	I - III	≤ 5% state	sagebrush/grasslands
Wolverine	<i>Gulo gulo</i>	G4	S3	USFS, BLM	II - III		conifer forests
<b>Birds</b>							
Alder Flycatcher	<i>Empidonax alnorum</i>	G5	<b>S3B</b>		II - I	≤ 5% state	wetlands/shrublands
American Bittern	<i>Botaurus lentiginosus</i>	G4	S3B		II - I		wetlands

<sup>1</sup> Conservation Tier - Inventory Tier    <sup>2</sup> ≤ 5% state = species' current breeding range occupies ≤ 5% of Montana; and ≥ 20% global = ≥ 20% of species' current global breeding range is in Montana

Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Birds (continued)</b>							
American White Pelican	<i>Pelecanus erythrorhynchos</i>	<b>G4</b>	S3B			III - III	lakes
Baird's Sparrow	<i>Ammodramus bairdii</i>	G4	<b>S3B</b>	BLM		II - III	grasslands
Bald Eagle	<i>Haliaeetus leucocephalus</i>	G5	S3	USFWS - DM		I - III	riparian forest
Black Rosy-Finch	<i>Leucosticte atrata</i>	G4	S2			II - I	alpine
Black Swift	<i>Cypseloides niger</i>	G4	<b>S1B</b>			II - I	cliffs/waterfalls
Black Tern	<i>Chlidonias niger</i>	G4	S3B	BLM		I - II	wetlands
Black-backed Woodpecker	<i>Picoides arcticus</i>	G5	<b>S3</b>	USFS, BLM		I - III	conifer forest burns
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	G5	<b>S3B</b>			II - I	prairie riparian forests
Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	G5	S3B			II - I	wetland/lake w/ emergent vegetation
Black-necked Stilt	<i>Himantopus mexicanus</i>	G5	<b>S3B</b>			III - II	wetlands
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	G5	<b>S2B</b>	USFS, BLM		II - I	≤ 5% state utah juniper
Bobolink	<i>Dolichonyx oryzivorus</i>	G5	<b>S3B</b>			III - III	moist grasslands
Boreal Chickadee	<i>Poecile hudsonica</i>	G5	<b>S3</b>			II - II	spruce fir forests
Brewer's Sparrow	<i>Spizella breweri</i>	G5	<b>S3B</b>	BLM		II - III	sagebrush
<b>Brown Creeper</b>	<i>Certhia americana</i>	G5	S3			II - II	mixed conifer forests
Burrowing Owl	<i>Athene cunicularia</i>	G4	<b>S3B</b>	USFS, BLM		I - III	grasslands
Caspian Tern	<i>Hydroprogne caspia</i>	G5	S2B			II - II	≤ 5% state large rivers and lakes
Cassin's Finch	<i>Carpodacus cassinii</i>	G5	S3			II - III	conifer forest
Chestnut-collared Longspur	<i>Calcarius ornatus</i>	G5	<b>S2B</b>			III - III	≥ 20% global grasslands
Clark's Grebe	<i>Aechmophorus clarkii</i>	G5	S3B			III - II	≤ 5% state large lakes
Clark's Nutcracker	<i>Nucifraga columbiana</i>	G5	S3			III - III	conifer forest
Common Loon	<i>Gavia immer</i>	G5	<b>S3B</b>	USFS, BLM		I - III	mountain lakes w/ emergent veg.
Common Tern	<i>Sterna hirundo</i>	G5	S3B			II - II	large rivers and lakes
Ferruginous Hawk	<i>Buteo regalis</i>	G4	S3B	BLM		II - III	sagebrush/grasslands
Flammulated Owl	<i>Otus flammeolus</i>	G4	S3B	USFS, BLM		I - III	conifer forest
Forster's Tern	<i>Sterna forsteri</i>	G5	<b>S3B</b>			II - II	wetlands
Franklin's Gull	<i>Larus pipixcan</i>	G4G5	S3B	BLM		II - II	wetland/lake w/ emergent vegetation
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	G5	S3B			II - III	grasslands
Gray-crowned Rosy-Finch	<i>Leucosticte tephrocotis</i>	G5	S2B, S5N <sup>3</sup>			II - II	alpine
Great Blue Heron	<i>Ardea herodias</i>	G5	<b>S3</b>			III - III	riparian woodlands
Great Gray Owl	<i>Strix nebulosa</i>	G5	S3	BLM		II - III	conifer forest
Greater Sage-Grouse	<i>Centrocercus urophasianus</i>	G4	<b>S2</b>	USFS, BLM		I - III	sagebrush
Harlequin Duck	<i>Histrionicus histrionicus</i>	G4	S2B	USFS, BLM		I - III	mountain streams
Horned Grebe	<i>Podiceps auritus</i>	G5	<b>S3B</b>			II - II	Lakes and wetlands
Least Tern (Interior population)	<i>Sternula antillarum</i>	G4	S1B	USFWS - E		I - III	large prairie rivers
Le Conte's Sparrow	<i>Ammodramus leconteii</i>	G4	S3B	BLM		II - I	prairie wetlands

<sup>1</sup> Conservation Tier - Inventory Tier    <sup>2</sup> ≤ 5% state = species' current breeding range occupies ≤ 5% of Montana; and ≥ 20% global = ≥ 20% of species' current global breeding range is in Montana    <sup>3</sup> = S2B - *L.t. tephrocotis*; S5N - *L.t. littoralis*

Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Birds (continued)</b>							
Lewis's Woodpecker	<i>Melanerpes lewis</i>	G4	S2B		II - II		riparian forest
Loggerhead Shrike	<i>Lanius ludovicianus</i>	G4	S3B	BLM	II - II		shrublands
Long-billed Curlew	<i>Numenius americanus</i>	G5	<b>S3B</b>	BLM	I - II		grasslands
McCown's Longspur	<i>Calcarius mccownii</i>	G4	<b>S3B</b>	BLM	II - III	≥ 20% global	grasslands
Mountain Plover	<i>Charadrius montanus</i>	<b>G3</b>	S2B	BLM	I - III	≥ 20% global	grasslands
Nelson's Sharp-tailed Sparrow	<i>Ammodramus nelsoni</i>	G5	S3B		I - I	≤ 5% state	prairie wetlands
Northern Goshawk	<i>Accipiter gentilis</i>	G5	<b>S3</b>	USFS, BLM	II - I		mixed conifer forest
Peregrine Falcon	<i>Falco peregrinus</i>	G4	<b>S3</b>	USFWS - DM, USFS, BLM	II - III		cliffs
<b>Pileated Woodpecker</b>	<i>Dryocopus pileatus</i>	G5	S3		II - III		conifer forests with large trees
Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>	G5	S3		II - III		pinyon pine-juniper woodlands
Piping Plover	<i>Charadrius melodus</i>	G3	S2B	USFWS - T	I - III		prairie lake and river shorelines
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	G5	S3B		II - II		riparian forest
Sage Sparrow	<i>Amphispiza belli</i>	G5	<b>S3B</b>	BLM	III - III		sagebrush
Sage Thrasher	<i>Oreoscoptes montanus</i>	G5	S3B	BLM	III - III		sagebrush
Sedge Wren	<i>Cistothorus platensis</i>	G5	<b>S3B</b>	BLM	I - I	≤ 5% state	prairie wetlands
Sharp-tailed Grouse (Columbian)	<i>Tympanuchus phasianellus columbianus</i>	G4T3	S1		I - I		grasslands
Sprague's Pipit	<i>Anthus spragueii</i>	G4	<b>S3B</b>	BLM	II - III		grasslands
Trumpeter Swan	<i>Cygnus buccinator</i>	G4	<b>S3</b>	BLM	I - III		shallow lakes and wetlands
<b>Veery</b>	<i>Catharus fuscescens</i>	G5	S3B		II - III		riparian forests / shrubby habitats
White-faced Ibis	<i>Plegadis chihi</i>	G5	<b>S3B</b>	BLM	II - I		wetland/lake w/ emergent vegetation
White-tailed Ptarmigan	<i>Lagopus leucurus</i>	G5	S3		II - III		alpine
Whooping Crane	<i>Grus americana</i>	G1	S1M	USFWS - E	I - III		wetlands
<b>Winter Wren</b>	<i>Troglodytes troglodytes</i>	G5	S3		II - III		conifer / riparian forests
Yellow Rail	<i>Coturnicops noveboracensis</i>	G4	<b>S3B</b>	BLM	I - I	≤ 5% state	wetlands
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	G5	S3B	USFWS - C (w. pop.)	II - I		prairie riparian forests
<b>Reptiles</b>							
Common Sagebrush Lizard	<i>Sceloporus graciosus</i>	G5	S3		II - II		rock outcrops
Greater Short-horned Lizard	<i>Phrynosoma hernandesi</i>	G5	S3	USFS, BLM	II - II		sandy/gravelly soils
Milksnake	<i>Lampropeltis triangulum</i>	G5	S2	USFS, BLM	I - I		rock outcrops
Northern Alligator Lizard	<i>Elgaria coerulea</i>	G5	S3		II - I		talus/rock outcrops
Smooth Green Snake	<i>Opheodrys vernalis</i>	G5	S2		I - I	≤ 5% state	wetlands
Snapping Turtle	<i>Chelydra serpentina</i>	G5	S3	BLM	I - I		prairie streams and rivers
Spiny Softshell	<i>Apalone spinifera</i>	G5	S3	BLM	I - I		prairie rivers & larger streams
Western Hognose Snake	<i>Heterodon nasicus</i>	G5	S2	USFS, BLM	I - I		floodplain friable soils
Western Skink	<i>Eumeces skiltonianus</i>	G5	S3		II - I		grasslands / open conifer forest

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Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Amphibians</b>							
Coeur d'Alene Salamander	<i>Plethodon idahoensis</i>	G4	S2	USFS, BLM	I - I	*	spring/seep, waterfall, fractured rock
Great Plains Toad	<i>Bufo cognatus</i>	G5	S2	USFS, BLM	II - I		wetlands, floodplain pools
Idaho Giant Salamander	<i>Dicamptodon aterrimus</i>	G3	S2	USFS	IV - III	≤ 5% state	mountain streams/moist conifer forest
Northern Leopard Frog	<i>Rana pipiens</i> (Intermountain valleys)	G5	S1	USFS, BLM	I - I		wetlands, floodplain pools
Plains Spadefoot	<i>Spea bombifrons</i>	G5	S3	USFS, BLM	II - I		wetlands, floodplain pools
Western Toad	<i>Bufo boreas</i>	G4	S2	USFS, BLM	I - I		wetlands, lakes, floodplain pools
<b>Fish</b>							
Arctic Grayling	<i>Thymallus arcticus</i>	G5	S1		I - III	≤ 5% state	mountain rivers, lakes
Blue Sucker	<i>Cyprinus elongatus</i>	G3G4	S2S3	BLM	I - III		large prairie rivers
Bull Trout	<i>Salvelinus confluentus</i>	G3	S2	USFWS - T	I - III		mountain streams, rivers, lakes
Columbia River Redband Trout	<i>Oncorhynchus mykiss gairdneri</i>	G5T4	S1	USFS	I - III	≤ 5% state	mountain streams, rivers
Lake Trout (Native)	<i>Salvelinus namaycush</i>	G5	S2		I - I	≤ 5% state	deep mountain lakes
Northern Redbelly X Finescale Dace	<i>Phoxinus eos x Phoxinus neogaeus</i>	HYB	S3	BLM	II - II		small prairie streams
Paddlefish	<i>Polyodon spathula</i>	G4	S1S2	BLM	I - III	≤ 5% state	large prairie rivers
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	G2	S1	USFWS - E	I - II	≤ 5% state	large prairie rivers
Pearl Dace	<i>Margariscus margarita</i>	G5	S2	BLM	I - I	≤ 5% state	small prairie streams
Sauger	<i>Sander canadensis</i>	G5	S2	BLM	I - III		large prairie rivers
Shortnose Gar	<i>Lepisosteus platostomus</i>	G5	S1	BLM	I - I	≤ 5% state	large prairie rivers
Sicklefin Chub	<i>Macrhybopsis meeki</i>	G3	S1	BLM	I - II	≤ 5% state	large prairie rivers
Spoonhead Sculpin	<i>Cottus ricei</i>	G5	S3		II - I	≤ 5% state	mountain streams, rivers, lakes
Sturgeon Chub	<i>Macrhybopsis gelida</i>	G3	<b>S2S3</b>	USFS, BLM	I - II		large prairie rivers
Torrent Sculpin	<i>Cottus rhotheus</i>	G5	S3		II - I	≤ 5% state	mountain streams
Trout-perch	<i>Percopsis omiscomaycus</i>	G5	S2		I - I		deep lakes, mountain streams
Westslope Cutthroat Trout	<i>Oncorhynchus clarki lewisi</i>	G4T3	S2	USFS, BLM	I - III		mountain streams, rivers, lakes
White Sturgeon	<i>Acipenser transmontanus</i>	G4	S1	USFWS - E	I - III	≤ 5% state	large mountain rivers
Yellowstone Cutthroat Trout	<i>Oncorhynchus clarki bouvieri</i>	G4T2	S2	USFS, BLM	I - III		mountain streams, rivers, lakes
<b>Invertebrates</b>							
<b>Mollusks</b>							
A Spring Snail	<i>Pyrgulopsis bedfordensis</i>	G1	S1		-	*	springs
Alpine Mountainsnail	<i>Oreohelix alpina</i>	G1	S1		-	≤ 5% state	limestone talus, alpine
Berry's Mountainsnail	<i>Oreohelix strigosa berryi</i>	G5T2	S1S2		-	≤ 5% state	limestone talus
Bitterroot Mountainsnail	<i>Oreohelix amariradix</i>	G1G2	S1S2		-	≤ 5% state	talus, dry conifer forests
Carinate Mountainsnail	<i>Oreohelix elrodi</i>	G1	S1		-	≤ 5% state	talus, mixed mesic conifer forests
Gallatin Mountainsnail	<i>Oreohelix yavapai mariae</i>	G4T1	S1		-	≤ 5% state	limestone talus
Humped Coin	<i>Polygyrella polygyrella</i>	G3	S1S2		-	≤ 5% state	moist conifer forests

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<b>Mollusks (continued)</b>							
Keeled Mountainsnail	<i>Oreohelix carinifera</i>	G1	S1		-	≤ 5% state	limestone, dry conifer forests
Lake Disc	<i>Discus brunsoni</i>	G1	S1		-	≤ 5% state	talus, mesic conifer forests
Large-mantle Physa	<i>Physa megalochlamys</i>	G3	S1		-	*	wetland/lake w/ emergent vegetation
Lyre Mantleslug	<i>Udosarx lyrata</i>	G2	S1		-	≤ 5% state	moist conifer forests
Magnum Mantleslug	<i>Magnipelta mycophaga</i>	G3	S2S3		-		moist conifer forests
Marbled Jumping-slug	<i>Hemphillia danielsi</i>	G2G3	S1S2		-	≤ 5% state	mesic/moist conifer forests
Pale Jumping-slug	<i>Hemphillia camelus</i>	G4	S1S2		-	≤ 5% state	mesic/moist conifer forests
Pygmy Slug	<i>Kootenaia burkei</i>	G2	S1S2		-	≤ 5% state	moist conifer forests
Reticulate Taildropper	<i>Prophysaon andersoni</i>	G5	S1S2		-	≤ 5% state	moist conifer forests
Robust Lancetooth	<i>Haplotrema vancouverense</i>	G5	S1S2		-	≤ 5% state	moist conifer forests
Rocky Mountain Capshell	<i>Acroloxus coloradensis</i>	G3	S1		-	*	lakes
Rocky Mountain Dusksnail	<i>Colligyruus greggi</i>	G4	S1		-	*	springs, cold mountain streams
Sheathed Slug	<i>Zacoleus idahoensis</i>	G3G4	S2S3		-		mesic/moist conifer forests
Shortface Lanx	<i>Fisherola nuttalli</i>	G2	SH		-		lakes
Smoky Taildropper	<i>Prophysaon humile</i>	G3	S2S3		-		moist conifer forests
Striate Disc	<i>Discus shimekii</i>	G5	S1		-		aspen
Western Pearshell	<i>Margaritifera falcata</i>	G4G5	S2		-		mountain streams/rivers
<b>Crustaceans</b>							
A cave obligate Amphipod	<i>Stygobromus montanensis</i>	G1G2	S1S2		-	*	cave springs
A cave obligate Amphipod	<i>Stygobromus obscurus</i>	G1G2	S1S2		-	*	cave springs
A cave obligate Amphipod	<i>Stygobromus puteanus</i>	G1G2	S1S2		-	*	cave springs
A cave obligate Amphipod	<i>Stygobromus tritus</i>	G1G2	S1S2		-	*	cave springs
A cave obligate Isopod	<i>Salmasellus steganothrix</i>	G2G3	S1S2		-	*	cave springs
Glacier Amphipod	<i>Stygobromus glacialis</i>	G1G3	S1S2		-	*	cave springs
<b>Insects</b>							
<b>Beetles</b>							
Brown's Microcylloepus Riffle Beetle	<i>Microcylloepus browni</i>	G1	S1		-	*	springs
Warm Spring Zaitzevian Riffle Beetle	<i>Zaitzevia thermae</i>	G1	S1		-	*	springs
<b>Butterflies</b>							
Alberta Fritillary	<i>Boloria alberta</i>	G3	S2S3		-	≤ 5% state	alpine
Frigga Fritillary	<i>Boloria frigga</i>	G5	S1S2		-		montane wetlands
Gillett's Checkerspot	<i>Euphydryas gillettii</i>	G2G3	S2		-		wet meadows
Gray Comma	<i>Polygonia progne</i>	G4G5	S2		-		parklands
Magdalena Alpine	<i>Erebia magdalena</i>	G5	S2		-	≤ 5% state	alpine
Ottoe Skipper	<i>Hesperia ottoe</i>	G3G4	S2S3		-		grasslands

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Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Insects</b> (continued)							
<b>Caddisflies</b>							
A Rhyacophilan Caddisfly	<i>Rhyacophila ebria</i>	G2G3	S1		-	*	alpine mountain streams
A Rhyacophilan Caddisfly	<i>Rhyacophila gemona</i>	G2G3	S2		-	*	forested mountain springs
A Rhyacophilan Caddisfly	<i>Rhyacophila rickeri</i>	G2G3	S2		-	*	forested mountain springs
A Rhyacophilan Caddisfly	<i>Rhyacophila glaciera</i>	G3	S1		-	*	alpine mountain streams
A Rhyacophilan Caddisfly	<i>Rhyacophila newelli</i>	G2	S2		-	*	alpine mountain streams
A Rhyacophilan Caddisfly	<i>Rhyacophila potteri</i>	G1G2	S2		-	*	forested mountain springs
Alexander's Rhyacophilan Caddisfly	<i>Rhyacophila alexanderi</i>	G2	S2		-	*	mountain/alpine streams
NRMR Caddisfly <sup>3</sup>	<i>Goereilla baumanni</i>	<b>G2</b>	S2		-	*	forested mountain springs
NRMR Caddisfly <sup>3</sup>	<i>Rossiana montana</i>	G2G3	S2		-	*	forested mountain springs
<b>Damselflies</b>							
Last Best Place Damselfly	<i>Enallagma optimolocus</i>	G1G3Q	S1S3		-	*	wetlands
Subarctic Bluet	<i>Coenagrion interrogatum</i>	G5	S1S2		-	≤ 5% state	wetlands
<b>Dragonflies</b>							
Boreal Whiteface	<i>Leucorrhinia borealis</i>	G5	S1		-		wetlands
Brimstone Clubtail	<i>Stylurus intricatus</i>	G4	S1		-		large prairie rivers
Brush-tipped Emerald	<i>Somatochlora walshii</i>	G5	S1S2		-		wetlands
Eastern Ringtail	<i>Erpetogomphus designatus</i>	G5	S1		-	≤ 5% state	large prairie rivers
Subarctic Darner	<i>Aeshna subarctica</i>	G5	S1S2		-		wetlands
Western Pondhawk	<i>Erythemis collocata</i>	G5	S1S2		-		wetlands
<b>Mayflies</b>							
A Mayfly	<i>Caenis youngi</i>	G4	S2		-		sloughs/backwaters
A Mayfly	<i>Lachlania saskatchewanensis</i>	G4	S1		-	*	large prairie rivers
A Mayfly	<i>Raptoheptagenia cruentata</i>	G4	S2		-	*	large prairie rivers
A Sand-dwelling Mayfly	<i>Anepeorus rusticus</i>	G2	S1		-	*	large prairie rivers
A Sand-dwelling Mayfly	<i>Homoeoneuria alleni</i>	G4	S2		-	*	large prairie rivers
A Sand-dwelling Mayfly	<i>Macdunnoa nipawinia</i>	G2G3	S2		-	*	large prairie rivers
Lolo Mayfly	<i>Caurinella idahoensis</i>	G3	S2		-	*	small forested mountain streams
<b>Springtails</b>							
A Springtail	<i>Oncopodura cruciata</i>	G1G2	S1S2		-	≤ 5% state	caves
<b>Stoneflies</b>							
A Stonefly	<i>Isocapnia crinita</i>	G4	S2		-	*	alpine mountain streams
A Stonefly	<i>Isocapnia integra</i>	G4	S2		-	*	alpine mountain streams
A Stonefly	<i>Isoperla petersoni</i>	G5	S2		-	≤ 5% state	alpine mountain streams

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<sup>3</sup> NRMR = Northern Rocky Mountain Refugium

Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Insects (continued)</b>							
<b>Stoneflies (continued)</b>							
A Stonefly	<i>Utacapnia columbiana</i>	G4	S2		-	*	alpine mountain streams
A Stonefly	<i>Zapada cordillera</i>	G3	S2		-	*	alpine mountain streams
Clearwater Roachfly	<i>Soliperla salish</i>	G2	S2		-	*	small forested mountain streams
Meltwater Lednian Stonefly	<i>Lednia tumana</i>	G1	S1		-	*	alpine streams
NRMR Stonefly <sup>3</sup>	<i>Soyedina potteri</i>	<u>G2</u>	<u>S2</u>		-	*	small forested mountain streams
Western Glacier Stonefly	<i>Zapada glacier</i>	G2	S1		-	*	alpine streams
<b>Other - Spiders, Sponges, Millipedes</b>							
A cave obligate Harvestman	<i>Cryptobunus cavicolus</i>	G1G2	S1S2		-	≤ 5% state	caves
A Freshwater Sponge	<i>Ephydatia cooperensis</i>	G1G3	S1S3		-	*	lakes
A Millipede	<i>Adrietyla cucullata</i>	G1G3	S1S3		-		dry mixed conifer forest clearings
A Millipede	<i>Austrotyla montani</i>	G1G3	S1S3		-		mixed conifer forests
A Millipede	<i>Corypus cochlearis</i>	G1G3	S1S3		-		mixed conifer forests
A Millipede	<i>Endopus parvipes</i>	G1G3	S1S3		-		subalpine mixed conifer forests
A Millipede	<i>Lophomus laxus</i>	G1G3	S1S3		-		mixed conifer forests
A Millipede	<i>Orophe cabinetus</i>	G1G3	S1S3		-		moist mixed conifer forests
A Millipede	<i>Orthogmus oculatus</i>	G1G3	S1S3		-		mixed conifer forests
A Millipede	<i>Taiyutyla curvata</i>	G1G3	S1S3		-		moist mixed conifer forests

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# POTENTIAL SPECIES OF CONCERN

## Vertebrates

Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Mammals</b>							
Hayden's Shrew	<i>Sorex haydeni</i>	G4	S3S4		II - II		sagebrush/grasslands
Hoary Marmot	<i>Marmota calagata</i>	G5	S3S4		I - I		alpine/subalpine meadow/rock outcrop
Idaho Pocket Gopher	<i>Thomomys idahoensis</i>	G4	S2S4		II - I	≥ 20% global	sagebrush/grasslands in deep soils
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	G5	<b>S4</b>		II - II		riparian and forest habitats
Uinta Ground Squirrel	<i>Spermophilus armatus</i>	G5	S3S4		II - I		subalpine meadows
Wyoming Ground Squirrel	<i>Spermophilus elegans</i>	G5	S3S4		II - I	≥ 20% global	sagebrush/grasslands, rock outcrops
Yuma Myotis	<i>Myotis yumanensis</i>	G5	S3S4		II - II		riparian and mixed forest habitats
<b>Birds</b>							
<b>Barrow's Goldeneye</b>	<i>Bucephala islandica</i>	G5	S4		III - III		riparian forests
Black-and-white Warbler	<i>Mniotilta varia</i>	G5	<b>S4B</b>		II - I		deciduous forests
Broad-tailed Hummingbird	<i>Selasphorus platycercus</i>	G5	<b>S4B</b>		II - II	≤ 5% state	montane shrublands/woodlands
Cassin's Kingbird	<i>Tyrannus vociferans</i>	G5	<b>S4B</b>		II - II		grasslands
Chimney Swift	<i>Chaetura pelagica</i>	G5	S3S4B		III - I		human habitation
Common Poorwill	<i>Phalaenoptilus nuttallii</i>	G5	<b>S4B</b>		III - I		open conifer woodlands
Dickcissel	<i>Spiza americana</i>	G5	<b>S4B</b>	BLM	II - II		tall grasslands
Eastern Bluebird	<i>Sialia sialis</i>	G5	<b>S4B</b>		II - I		prairie woodlands
Eastern Screech-Owl	<i>Megascops asio</i>	G5	S3S4		III - II		prairie riparian forests
Golden Eagle	<i>Aquila chrysaetos</i>	G5	S4		II - III		generalist
<b>Hooded Merganser</b>	<i>Lophodytes cucullatus</i>	G5	S4		II - III		riparian forests
Northern Hawk Owl	<i>Surnia ulula</i>	G5	<b>S4</b>		III - I	≤ 5% state	conifer forest
Ovenbird	<i>Seiurus aurocapilla</i>	G5	<b>S4B</b>		III - III		mixed conifer forests
Plumbeous Vireo	<i>Vireo plumbeus</i>	G5	S3S4B		-		conifer forest and riparian
Rufous Hummingbird	<i>Selasphorus rufus</i>	G5	S4B		III - II		open and brushy forests
Short-eared Owl	<i>Asio flammeus</i>	G5	<b>S4</b>		III - II		grasslands
Swainson's Hawk	<i>Buteo swainsoni</i>	G5	<b>S4B</b>	BLM	II - II		sage/grassland w/ woody vegetation
Tennessee Warbler	<i>Vermivora peregrina</i>	G5	<b>S3S4B</b>		III - III		mixed conifer forests
Western Screech-Owl	<i>Megascops kennicottii</i>	G5	S3S4		III - III		western riparian forest
<b>Amphians</b>							
Northern Leopard Frog	<i>Rana pipiens</i> (Great Plains)	G5	<b>S4</b>	USFS, BLM	I - I		wetlands, floodplain pools
<b>Fish</b>							
Brassy Minnow	<i>Hybognathus hankinsoni</i>	G5	SU		III - I		small prairie rivers
Brook Stickleback	<i>Culaea inconstans</i>	G5	SU		III - III		small prairie rivers
Burbot	<i>Lota lota</i>	G5	SU		I - II		large rivers/lakes

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Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Fish (continued)</b>							
Creek Chub	<i>Semotilus atromaculatus</i>	G5	SU		III - II		small prairie rivers
Iowa Darter	<i>Etheostoma exile</i>	G5	SU		III - I		small prairie rivers
Northern Redbelly Dace	<i>Phoxinus eos</i>	G5	SU		III - II		small prairie rivers
Plains Minnow	<i>Hybognathus placitus</i>	G4	SU		III - I		small & large prairie rivers
Pygmy Whitefish	<i>Prosopium coulteri</i>	G5	SU		III - III	≤ 5% state	lakes
<b>Invertebrates</b>							
<b>Mollusks</b>							
Fir Pinwheel	<i>Radiodiscus abietum</i>	G4	S3S4		-		moist conifer forests
Threeridge Valvata	<i>Valvata tricarnata</i>	G5	S2S3		-	≤ 5% state	large coldwater rivers
<b>Insects</b>							
<b>Beetles</b>							
Coppery Tiger Beetle	<i>Cicindela cuprascens</i>	G5	S3		-		sandy beaches
Sandy Tiger Beetle	<i>Cicindela limbata</i>	<b>G4</b>	S3		-		sandy sagebrush/grasslands
<b>Butterflies</b>							
Astarte Fritillary	<i>Boloria astarte</i>	G5	S2S3		-	≤ 5% state	alpine
Colorado Alpine	<i>Erebia callias</i>	G5	S2S3		-	≤ 5% state	alpine
Eyed Brown	<i>Satyroides eurydice</i>	G4	S2S3		-		wetlands
Freija Fritillary	<i>Boloria freija</i>	G5	S3S5		-		subalpine willows
Giant Sulphur	<i>Colias gigantea</i>	G5	S3		-		montane willows
Indra Swallowtail	<i>Papilio indra</i>	G5	S2S3		-		grasslands/rock outcrops
Labrador Sulphur	<i>Colias nastes</i>	G5	S2S3		-		alpine
Melissa Arctic	<i>Oeneis melissa</i>	G5	S2S3		-		alpine
Mormon Metalmark	<i>Apodemia mormo</i>	G5	S3S5		-		sagebrush/grasslands
Northern Marble	<i>Euchloe creusa</i>	G5	S1S3		-	≤ 5% state	subalpine forest openings
Red-disked Alpine	<i>Erebia discoidalis</i>	G5	S3S5		-		grasslands
Rockslide Checkerspot	<i>Chlosyne whitneyi</i>	G4G5	S3S5		-		alpine
Tawny Crescent	<i>Phyciodes batesii</i>	G4	S2S3		-		grasslands
White Admiral	<i>Limenitis arthemis</i>	G5	S2S3		-		riparian forest
White-veined Arctic	<i>Oeneis bore</i>	G5	S2S3		-	≤ 5% state	alpine
<b>Caddisflies</b>							
An Agapetus Caddisfly	<i>Agapetus montanus</i>	G3	S3		-	≥ 20% global	valley/mountain forested streams
NRMR Caddisfly <sup>3</sup>	<i>Sericostriata surdickae</i>	G2G3	S3		-	*	small forested mountain streams
<b>Damselflies</b>							
Alkali Bluet	<i>Enallagma clausum</i>	G5	S2S4		-		wetland/lake w/ emergent vegetation

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Common Name	Scientific Name	Global Rank	State Rank	Federal Status	CFWCS Status <sup>1</sup>	Range Note <sup>2</sup>	Habitat
<b>Insects</b> (continued)							
<b>Damselflies</b> (continued)							
Arroyo Bluet	<i>Enallagma praevarum</i>	G5	S3S5		-		wetland/lake w/ emergent vegetation
Emma's Dancer	<i>Argia emma</i>	G5	S3S5		-		wetland/lake w/ emergent vegetation
Familiar Bluet	<i>Enallagma civile</i>	G5	S2S4		-		wetland/lake w/ emergent vegetation
Paiute Dancer	<i>Argia alberta</i>	G4	S2S3		-		wetland/lake w/ emergent vegetation
Prairie Bluet	<i>Coenagrion angulatum</i>	G5	S1S3		-		small prairie streams/wetlands
Vivid Dancer	<i>Argia vivida</i>	G5	S3S5		-		wetland/lake w/ emergent vegetation
<b>Dragonflies</b>							
Black-tipped Darner	<i>Aeshna tuberculifera</i>	G4	S2S4		-		wetland/lake w/ emergent vegetation
Blue-eyed Darner	<i>Rhionaeshna multicolor</i>	G5	S2S4		-		wetland/lake w/ emergent vegetation
California Darner	<i>Rhionaeshna californica</i>	G5	S3S5		-		wetland/lake w/ emergent vegetation
Chalk-fronted Corporal	<i>Ladona julia</i>	G5	S3S4		-		wetland/lake w/ emergent vegetation
Crimson-ringed Whiteface	<i>Leucorrhinia glacialis</i>	G5	S3		-		wetland/lake w/ emergent vegetation
Flame Skimmer	<i>Libellula saturata</i>	G5	S2S4		-		wetland/lake w/ emergent vegetation
Horned Clubtail	<i>Argomphus cornutus</i>	G4	S2S4		-		large prairie rivers
Hudsonian Emerald	<i>Somatochlora hudsonica</i>	G5	S2S4		-		wetland/lake w/ emergent vegetation
Lake Darner	<i>Aeshna eremita</i>	G5	S3S4		-		wetland/lake w/ emergent vegetation
Lance-tipped Darner	<i>Aeshna constricta</i>	G5	S1S3		-		wetland/lake w/ emergent vegetation
Mountain Emerald	<i>Somatochlora semicircularis</i>	G5	S3S5		-		wetlands
Ocellated Emerald	<i>Somatochlora minor</i>	G5	S2S4		-		wetland/lake w/ emergent vegetation
Plains Clubtail	<i>Gomphus externus</i>	G5	S2S4		-		large prairie rivers
Pronghorn Clubtail	<i>Gomphus graslinellus</i>	G5	S3S5		-		large prairie rivers
Red-veined Meadowhawk	<i>Sympetrum madidum</i>	G4	S2S3		-		wetland/lake w/ emergent vegetation
Ringed Emerald	<i>Somatochlora albicincta</i>	G5	S1S3		-		wetlands
Sedge Darner	<i>Aeshna juncea</i>	G5	S3S5		-		wetlands
Sinuuous Snaketail	<i>Ophiogomphus occidentis</i>	G4	S2S4		-		large cold rivers
Spiny Baskettail	<i>Epitheca spinigera</i>	G5	S3S5		-		wetland/lake w/ emergent vegetation
Zigzag Darner	<i>Aeshna sitchensis</i>	G5	S2S3		-		large prairie rivers
<b>Mayflies</b>							
A Sand-dwelling Mayfly	<i>Anaetris eximia</i>	G3	S3		-		large prairie rivers
NRMR Mayfly <sup>3</sup>	<i>Caudatella edmundsi</i>	G3	S3		-	≥ 20% global	small forested mountain streams
<b>Sponges</b>							
A Freshwater Sponge	<i>Heteromeyenia baileyi</i>	G5	S1S3		-		lakes

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# HABITAT ASSOCIATION SUMMARIES BY ANIMAL GROUP FOR SPECIES OF CONCERN AND POTENTIAL SPECIES OF CONCERN

## Mammals

Sagebrush/Grassland.....	38%
Riparian Forest.....	16%
Conifer Forest.....	11%
Rock Outcrop.....	11%
Wetlands.....	11%
Alpine.....	5%
Other/Generalist.....	5%
Caves.....	3%

## Birds

Sagebrush/Grassland.....	23%
Conifer Forest.....	21%
Wetlands.....	16%
Riparian Forest.....	13%
Streams/Rivers/Lakes.....	12%
Other/Generalist.....	11%
Alpine.....	4%

## Reptiles

Rock Outcrop.....	33%
Streams/Rivers/Lakes.....	33%
Other/Generalist.....	11%
Sagebrush/Grassland.....	11%
Wetlands.....	11%

## Amphibians

Wetlands.....	83%
Streams/Rivers/Lakes.....	17%

## Fish

Mountain Streams/Rivers/Lakes.....	37%
Prairie Streams/Rivers/Lakes.....	56%
Large Rivers/Lakes.....	7%

## Invertebrates

Streams/Rivers/Lakes.....	34%
Wetlands.....	26%
Conifer Forest.....	14%
Alpine.....	8%
Caves.....	6%
Rock Outcrop.....	5%
Sagebrush/Grassland.....	5%
Other/Generalist.....	2%
Riparian Forest.....	1%

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