Idaho BLM Special Status Species Ranking Protocols 2003

Introduction

Conservation management for native special status species is becoming increasingly important for public land management agencies in order to avoid the need to list species under the Endangered Species Act (ESA). Early management efforts to conserve habitats important for candidate and BLM sensitive species prior to formal listing are now common interagency efforts (e.g., Bonneville cutthroat trout and Townsend=s big-eared bat conservation strategies). In the past Idaho BLM has not attempted to rank or categorize special status species based on extinction risks. However, today we need this information to help establish conservation priorities for special status species and associated habitats. A protocol for classifying special status species based on their potential for extinction was clearly needed. With this new protocol we hope to have a system that:

- Can be applied consistently and objectively by a variety of people.
- Is consistent with State, National and Global ranking systems.
- Provides guidance for determining rarity and degree of endangerment.
- Provides better understanding of how Idaho BLM special status species are determined.
- Complements the Idaho Species of Special Concern list.
- Complements the criteria used by the Fish and Wildlife Service (FWS) for listing priorities.

BLM Special Status Species

BLM includes the following as special status species:

1. Species officially listed or proposed for listing as threatened or endangered under the ESA or candidates for listing as threatened or endangered under the ESA.

2. Species listed by a State in a category such as threatened or endangered implying potential endangerment or extinction.

3. Species designated by the BLM State Director as sensitive.

National policy directs State Directors to designate BLM sensitive species in cooperation with the State fish and wildlife agency (BLM Manual 6840). As such, Idaho BLM includes appropriate Idaho Species of Special Concern addressed in Item 2 as BLM sensitive species. The sensitive species designation is normally used for species that occur on BLM public lands and for which BLM has the capability to significantly affect the conservation status of the species through management. Generally a native species may be listed as sensitive when it:

1. Could become endangered or extirpated from a state, or within a significant portion of its range in the foreseeable future,

2. Is under status review by the FWS and/or National Marine Fisheries Service (NMFS),

3. Is undergoing significant current or predicted downward trends in habitat capabilility that would reduce a species=existing distribution,

4. Has typically small and widely dispersed populations,

5. Inhabits ecological refugia, specialized or unique habitats or

6. Is listed by the State and a sensitive species designation by BLM would help in conservation efforts.

Rarity and Endangerment

All special status species lists, whether they are global or local lists attempt to identify and rank species based on risk of extinction through all or a portion of their range (Master 1991, IUCN 1994, Idaho CDC 1994, U.S. Forest Service 1999, Ginsberg 2002). Extinction risks for a species of concern are associated with two primary factors: species rarity and species endangerment (Morse 1996). Rarity is an expression of the intrinsic pattern of distribution and abundance of a species at a given time. Endangerment refers to factors (typically anthropogenic) that may make a species more susceptible to decline or extinction (Morse 1996). Habitat loss or degradation and population exploitation (e.g., hunting, trapping and collecting) are common anthropogenic factors although disease and predation, exclusive of human interference, may also be endangerment factors.

Rarity and endangerment must be evaluated for species of concern using consistent criteria designed to accommodate the differences between species. There are some endemic species that are naturally rare, occupying small, unique habitats. In many cases these species are not threatened by habitat loss or other endangerment factors. However, even with low endangerment risks there is a certain amount of extinction risk due soley to the extreme natural rarity of these species. Conversely, there are wide-ranging species whose habitats are becoming more constricted, fragmented and isolated - they may not be as Arare@ as the above endemic species but they are highly endangered based on habitat trends. Thus, rarity and endangerment are important concepts for ranking special status species but these concepts must be applied on a species-specific basis acknowledging the vast distribution and habitat scale differences between species.

Ranking Protocols

We tried to use the same protocol for plants and animals as much as possible. However, most of the special status plants are locally endemic and globally rare, unlike many of the animals. In addition., the Idaho Native Plant Society (INPS) has extinction risk categories for plants that provide greater detail than information available for animals and they annually reviews threats to sensitive species using the criteria developed by the FWS for determining listing priorities. In order to effectively use this status information for plants some differences between the ranking categories for plants and animals had to be acknowledged. Therefore, two protocols were developed, one for plants and one for animals.

These protocols provide a framework for identifying species that are at risk of extinction over all or a significant portion of their range and occur on BLM-administered public lands in Idaho. They are modeled after a similar protocol developed by Region 1 of the U.S. Forest Service, and rely on an international system for ranking species imperilment originally set up by the Nature Conservancy for the Natural Heritage Programs and Conservation Data Centers in North and South America (we will refer to this system as the CDC Network). State and provincial government agencies continue to use the CDC Network to assess species status and extinction risks. Other sources of information used to determine and categorize Idaho BLM special status species included:

- 2001 IUCN Red List of Threatened Species.
- Idaho Department of Fish and Game Species of Special Concern List.
- The Idaho Native Plant Society=s rankings and list.

- Partner=s In Flight national and state rankings for birds.
- Association for Biodiversity Information website (NatureServe.org)
- Idaho Conservation Data Center
- Species experts in Idaho

Terms and Definitions Referenced in Protocols

CDC Network Categories

- \mathbf{G} = Global rank indicator; denotes rank based on rangewide status.
- \mathbf{T} = Trinomial rank indicator; denotes range wide status of variety or subspecies.
- $\mathbf{S} = \mathbf{S}$ State rank indicator; denotes rank based on status within Idaho.
- **1** = Critically imperiled because of extreme rarity or because of some factor of its biology making it especially vulnerable to extinction.
- 2 = Imperiled because of rarity or because of other factors demonstrably making it very vulnerable to extinction.
- $\mathbf{3}$ = Rare or uncommon, but not imperiled.
- 4 = Not rare and apparently secure, but with cause for long-term concern.
- 5 = Demonstrably widespread, abundant, and secure.

INPS Categories

State Priority 1 (S1) = Taxa in danger of becoming extinct or extirpated from Idaho in the foreseeable future if identifiable factors contributing to their decline continue to operate; these are taxa whose populations are present only at critically low levels or whose habitats have been degraded or depleted to a significant degree.

State Priority 2 (S2) = Taxa likely to be classified as Priority 1 within the foreseeable future in Idaho, if factors contributing to their population decline or habitat degradation or loss continue.

Sensitive (S) = Taxa with small populations or localized distributions within Idaho that presently do not meet the criteria for classifications as Priority 1 or 2 but whose populations and habitats might be jeopardized without active management or removal of threats.

Monitor (\mathbf{M}) = Taxa common within a limited range as well as those taxa which are uncommon but have no identifiable threats.

Review (\mathbf{R}) = Taxa which may be of conservation concern in Idaho, but lack sufficient data to base a recommendation regarding their appropriate classification.

Animal Special Status Species Protocol

Type 1. Threatened, Endangered, Proposed and Candidate Species

Species are listed by the FWS or NMFS as threatened or endangered, or they are proposed or candidates for listing under the Endangered Species Act.

Type 2. Rangewide / Globally Imperiled Species

These are species that are experiencing significant declines throughout their range with a high likelihood of being listed in the foreseeable future due to their rarity and/or significant endangerment factors.

This includes species ranked by the CDC Network with global ratings of G1-G3 or T1-T3 or recent data indicate species is at significant rangewide risk and this is not currently reflected by CDC Network global rankings.

Type 3. Regional/ State Imperiled Species

These are species that are experiencing significant declines in population or habitat and are in danger of regional or local extinctions in Idaho in the foreseeable future if factors contributing to their decline continues.

This includes Idaho BLM sensitive species that (a) are not in Type 2, (b) have an S1 or S2 State ranking (exception being a peripheral or disjunct species), or (c) score high (18 or greater) using the Criteria for Evaluating Animals for Sensitive Species Status (Table 1) or (d) other regional/national status evaluations (e.g., Partners-in-Flight scores) indicate significant declines.

Type 4. Peripheral Species

These are species that are generally rare in Idaho with the majority of the breeding range largely outside the state (Idaho CDC 1994).

This includes sensitive species that have an S1 or S2 state ranking but are peripheral species to Idaho.

Type 5. Watch List

Watch list species are not considered BLM sensitive species and associated sensitive species policy guidance does not apply. Watch list species include species that may be added to the sensitive species list depending on new information concerning threats, species biology or statewide trends.

The Watch List include species with insufficient data on population or habitat trends or the threats are poorly understood. However, there are indications that these species may warrant special status species designation and appropriate inventory or research efforts should be a management priority.

I. Abundance (refer to CDC Network rankings)	Score (circle)
Extremely Rare (G1-G2, T1-T2, S1-S2)	9
Rare (G3, T3, S3)	6
Uncommon (G4, T4, S4)	3
Common (G5, T5, S5)	0
II. Distribution	
Endemic: Idaho represents at least 75% of the species distribution.	6
Disjunct: Population in Idaho is outside of primary range of species.	4
Peripheral: Population in Idaho is on the edge of its primary range.	2
Widespread: None of the above	0
III. Degree of Threat of Habitat Loss	
High: Habitat substantially threatened by human or natural disturbances.	9
Moderate: Habitat moderately threatened by human or natural disturbances.	6
None: Habitat not threatened.	0
IV. Population Impacts	
Species potentially impacted significantly by extrinsic factors such as predation, disease or direct exploitation.	3
Species potentially moderately impacted by extrinsic factors such as predation, disease or direct exploitation.	2
Species not affected or only slightly by predation, disease or direct exploitation.	0
V. Specialized Habitat / Ecological Amplitude	
Narrow: Species is restricted to a unique or limited habitat or combination of habitats, and/or species has a high degree of habitat specificity.	3
Intermediate: Species is restricted to a relatively unique habitat or combination of habitats, and/or species has a moderate degree of habitat specificity.	1
No Specialization: Species is not restricted to unique habitats.	0
VI. Population Trends	
Known Downward Trend: Known or strongly suspected that species has had serious population declines.	6
Possible: Information is lacking, but downward trend a possibility.	3
Static: No indication that species has had population declines.	0
Species Overall Score	

Table 1. Criteria for evaluating animals for special status species designation.

Plant Special Status Species Protocol

Type 1. Threatened, Endangered, Proposed and Candidate Species

These species are listed by theFWS as threatened or endangered, or they are proposed or candidates for listing under the Endangered Species Act.

Type 2.Rangewide / Globally Imperiled Species - High Endangerment

These are species that have a high likelihood of being listed in the foreseeable future due to their global rarity and significant endangerment factors.

Species ranked by the CDC Network with global ratings of G1-G3 or T1-T3 with a threat priority of 1-9 using the FWS Listing Priority Criteria (Table 2).

Type 3.Rangewide / Globally Imperiled Species - Moderate Endangerment

These are species that are globally rare with moderate endangerment factors. Their global rarity and inherent risks associated with rarity make them imperiled species.

Idaho BLM sensitive species that (a) are ranked by the CDC Network with global ratings of G1-G3 or T1-T3 with (a) a threat priority of 10-12 using the FWS Listing Priority Criteria or (b) an INPS ranking of Priority 1-2 or Sensitive (INPS sensitive species with the majority of the population on BLM-administered lands).

Type 4. Species of Concern

These are species that are generally rare in Idaho with small populations or localized distribution and currently have low threat levels. However, due to the small populations and habitat area, certain future land uses in close proximity could significantly jeopardized these species.

INPS sensitive species that are not Type 3.

Type 5. Watch List

Watch list species are not considered BLM sensitive species and associated sensitive species policy guidance does not apply. Watch list species include species that may be added to the sensitive species list depending on new information concerning threats and species biology or statewide trends.

This includes (a) INPS Monitor and Review species and (b) INPS Sensitive species (Types 2, 3, or 4) that are only suspected to occur in a resource area.

Listing Priority	Taxonomic Status	Extinction Threats	
		Magnitude	Immediacy
1	Monotypic genus	HIGH	Imminent
2	Species		
3	Subspecies/Variety		
4	Monotypic genus		Non-imminent
5	Species		
6	Subspecies/Variety		
7	Monotypic genus	LOW	
8	Species		Imminent
9	Subspecies/Variety		
10	Monotypic genus		
11	Species	Non-imminent	Non-imminent
12	Subspecies/Variety		

Table 2. Threatened and endangered species listing priority criteria used by the FWS.

References

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