

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Canadian toad (<i>Bufo hemiophrys</i>)			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	<p>The Canadian toad is virtually non-existent in the US Rocky Mountains and is unlikely to occur on any Forest Service land in Region 2. The range of this species only borders Region 2 in the extreme northeastern corner of South Dakota. The Wyoming toad (<i>B. baxteri</i>) was previously thought to be an extremely disjunct relict population of Canadian toad (<i>B. h. baxteri</i>) but is now considered its own species, which currently occurs in an extremely isolated range in the Laramie Basin of southeastern Wyoming. Where it does occur, the Canadian toad is usually found in permanent prairie wetlands (e.g., lakes, ponds, streams, marshes), which often separated by vast expanses of prairie, so the population is somewhat fragmented.</p> <p>Confidence in rank HIGH</p>	<ul style="list-style-type: none"> 7, 11
2 Distribution outside R2	B	<p>As its name implies, the range of the Canadian toad occurs mostly in Canada and is restricted to the Midwestern provinces. The main range of the toad covers the eastern half of Alberta, most of Saskatchewan, and the southwest corner of Manitoba (south and west of Lake Winnipeg). From there it extends into northeastern North Dakota, northwestern Minnesota, and extreme northeastern South Dakota. There are no recognized subspecies of the Canadian toad.</p> <p>Confidence in rank HIGH.</p>	<ul style="list-style-type: none"> 7
3 Dispersal Capability	B	<p>Little information exists regarding dispersal of Canadian toads. As with most other anuran amphibians, the Canadian toad is capable of terrestrial dispersal of up to several kilometers, but this is an infrequent occurrence in species that are otherwise linked closely with wetland habitats. Since intervening habitat is generally extensive dry prairie, dispersal of these toads may be more limited than most.</p> <p>Confidence in rank LOW.</p>	<ul style="list-style-type: none"> 5, 10
4 Abundance in R2	NA	<p>Canadian toads can be locally abundance in northeastern South Dakota, but there are no abundance estimates, particularly for Forest Service land in Region 2, since there are no known populations there.</p> <p>Confidence in rank LOW</p>	<ul style="list-style-type: none"> 6

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5 Population Trend in R2	AB	There are no estimates of population trend for Region 2. Elsewhere in their range, they seem to be absent from much historical range, possibly suggesting long-term declines. The Natural Heritage Programs list them as: Critically imperiled in Montana, secure in Canada, and they are unranked in North and South Dakota and Minnesota. Confidence in rank LOW	<ul style="list-style-type: none"> 1, 10
6 Habitat Trend in R2	D	The habitat trend in the United States is uncertain. Confidence in rank HIGH	<ul style="list-style-type: none"> NA
7 Habitat Vulnerability or Modification	D	The Vulnerability of Canadian toad habitat is not clearly understood. It can be impacted by fluctuations in precipitation that affect both the level and salinity of prairie wetlands. Irrigation practices can also affect toads, by altering the natural hydrologic cycle in areas of where it is employed extensively for rangeland and cropland management. Pesticide spraying (e.g., for agriculture or for mosquito control) could have direct and indirect impacts on toad populations, but these effects have not been extensively studied and are therefore unclear. Confidence in rank MEDIUM	<ul style="list-style-type: none"> 10
8 Life History and Demographics	AB	Canadian toads are particularly susceptible to habitat disturbance because they occur in naturally isolated prairie wetlands. A close relative of the Canadian toad, the Wyoming toad (<i>B. baxteri</i>), has exhibited dramatic population declines; partly do to susceptibility to a pathogenic chytrid fungus. This fungus has impacted numerous amphibian populations around the world, so it is likely that it could impact Canadian toads as well. Confidence in rank MEDIUM .	<ul style="list-style-type: none"> 10
Initial Evaluator(s): Douglas A. Keinath, Heritage Zoologist, Wyoming Natural Diversity Database			Date: 10/18/2001

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National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)¹ to occur:

<u>Colorado NF/NG</u>	Known	Likely	<u>Kansas NF/NG</u>	Known	Likely	<u>Nebraska NF/NG</u>	Known	Likely	<u>South Dakota NF/NG</u>	Known	Likely	<u>Wyoming NF/NG</u>	Known	Likely
Arapaho-Roosevelt NF	-	-	Cimmaron NG	-	-	Samuel R. McKelvie NF	-	-	Black Hills NF	-	-	Shoshone NF	-	-
White River NF	-	-				Halsey NF	-	-	Buffalo Gap NG	-	-	Bighorn NF	-	-
Routt NF	-	-				Nebraska NF	-	-	Ft. Pierre NG	-	-	Black Hills NF	-	-
Grand Mesa, Uncompahgre, Gunnison NF	-	-				Ogalala NG	-	-				Medicine Bow NF	-	-
San Juan NF	-	-										Thunder Basin NG	-	-
Rio Grande NF	-	-												
Pike-San Isabel NF	-	-												
Comanche NG	-	-												
Pawnee NG	-	-												

Footnotes

- ? The species is known or likely to occur in this unit, but the information on which this designation is made is indirect, insufficient, or uncertain, making it somewhat questionable without further input from local experts.
- A dash indicates that no information was found suggesting that species in question is known or likely to occur in the given management unit.
- # Numbers represent the main source from which the known or likely occurrence data was derived (see attached list of references).

¹ Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

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REFERENCES

1. Alberta Natural Heritage Information Centre. 2001. Online information on sensitive elements in alberta (<http://www3.gov.ab.ca/env/parks/anhic/anhic.html>). Alberta Natural Heritage Information Centre, Alberta Community Development, Edmonton, Alberta.
2. Baxter, George T. and Michael D. Stone. 1980. Amphibians and Reptiles of Wyoming, Second Edition. Wyoming Game and Fish Department, Cheyenne, Wyoming.
3. CNHP Database. 2001. Unpublished distribution information for sensitive species in Colorado from the Biological and Conservation Data System of the Colorado Natural Heritage Program, Colorado State University, Fort Collins, Colorado.
4. Colorado Gap Analysis Program (CO GAP). 2001. Online predictive species distribution maps generated by the Colorado Gap Analysis Program (<http://ndis.nrel.colostate.edu/cogap/cogaphome.html>), Colorado Division of Wildlife, Denver, Colorado.
5. Hammerson, Geoffrey A. 1999. Amphibians and Reptiles in Colorado, Second Edition. University Press of Colorado, Niwor, Colorado.
6. South Dakota Gap Analysis Program (SO GAP). 2001. Online information on species distribution models generated by the South Dakota Gap Analysis Program (<http://wfs.sdstate.edu/sdgap/sdgap.htm>), Department of Wildlife and Fisheries Sciences and South Dakota Cooperative Fish and Wildlife Research Unit, South Dakota State University, Brookings, South Dakota.
7. Stebbins, Robert C. 1985. A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company, Boston, Massachusetts.
8. Welp L., W.F. Gertig, G.P. Jones, G.P. Beauvais, and S.M. Ogle. 2000. Fine Filter Analysis of Bighorn, Medicine Bow and Shoshone National Forests in Wyoming. Report prepared for the U.S. Forest Service Region 2, Denver, Colorado by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, Wyoming.
9. WYNDD Database. 2001. Unpublished distribution information in Wyoming from the Biological and Conservation Data System of the Wyoming Natural Diversity Database, University of Wyoming, Laramie, Wyoming.
10. Wyoming Gap Analysis Program (Wyoming GAP). 1996. Terrestrial Vertebrate Species Map Atlas Volume 1: Amphibians, Reptiles, and Mammals. Wyoming Gap Analysis Program, University of Wyoming, Laramie, Wyoming.
11. Wyoming Game and Fish Department (WYGF). 1999. Atlas of Birds, Mammals, Reptiles and Amphibians in Wyoming. Wyoming Game and Fish Department, Wildlife Division, Lander, Wyoming.