

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Sorex haydeni</i> / Hayden's shrew (prairie shrew)			
Criteria	Rank	Rationale	Literature Citations
<p>1 Distribution within R2</p>	<p>B</p>	<p>Global range is centered on and encompasses most of the northern Great Plains. The western edge of this distribution captures the Big Horn Mountain Range in north-central Wyoming (occurrence data on file at the Wyoming Natural Diversity Database - University of Wyoming). The southern edge of the distribution extends into extreme north-central Kansas. Occurrence in the Rocky Mountain Region is restricted to units east of and including the Bighorn NF, and possibly Douglas District of the Medicine Bow National Forest. The "B" ranking is based on the fact that the taxon does not occur in the bulk of the mountainous portion of the region. Also, limited dispersal abilities probably increase the insularity of local population segments.</p> <p>Confidence in Rank Medium</p>	<p>Clark, T. W. and M. R. Stromberg. 1987. Mammals in Wyoming. University Press of Kansas. Lawrence, Kansas.</p> <p>George, S. B. 1999. Prairie shrew (<i>Sorex haydeni</i>). Pages 24-25 IN: D.E. Wilson and S. Ruff, editors. The Smithsonian book of North American mammals. Smithsonian Institution Press, Washington, D.C., in association with the American Society of Mammalogists.</p> <p>Hall, E. R. 1981. The mammals of North America. Second edition. John Wiley and Sons, New York, New York.</p> <p>Long, C.A. 1965. The mammals of Wyoming. University of Kansas Museum of Natural History Publication 14: 493-758.</p>
<p>2 Distribution outside R2</p>	<p>C</p>	<p>As outlined above, <i>S. haydeni</i> is widely distributed outside of the Rocky Mountain Region in the northern Great Plains. Probably only about 20% of its global distribution falls inside of regional boundaries, and most of that is in South Dakota and Nebraska where national forest units are rare.</p> <p>Confidence in Rank High</p>	<p>(see citations for criteria 1)</p>

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<p>3 Dispersal Capability</p>	A	<p>Dispersal is not well-understood, but small size (hence limited mobility) and short life span almost guarantee poor dispersal capabilities. Medium-to-large streams and large roads are likely dispersal barriers.</p> <p>Confidence in Rank Medium</p>	<p>Clark, T. W. and M. R. Stromberg. 1987. Mammals in Wyoming. University Press of Kansas. Lawrence, Kansas.</p> <p>George, S. B. 1999. Prairie shrew (<i>Sorex haydeni</i>). Pages 24-25 IN: D.E. Wilson and S. Ruff, editors. The Smithsonian book of North American mammals. Smithsonian Institution Press, Washington, D.C., in association with the American Society of Mammalogists.</p>
<p>4 Abundance in R2</p>	B	<p>As with most shrews, abundance patterns are not well known, but as more occurrence data has been collected the status of <i>S. haydeni</i> has generally improved from rare to uncommon (note occurrence data on file at the Wyoming Natural Diversity Database - University of Wyoming). Based on distribution and general habitat use, most <i>S. haydeni</i> in the Rocky Mountain Region probably occur off of national forest units in the Great Plains.</p> <p>Confidence in Rank Low</p>	
<p>5 Population Trend in R2</p>	D	<p>This evaluator (G. Beauvais) is unaware of any data with which to estimate population trends for this taxon. Shrew populations are generally cryptic and understudied. Good estimates of current population levels and fluctuations are rare; historical population sizes and fluctuations are essentially unknown.</p> <p>Confidence in Rank Medium</p>	

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6 Habitat Trend in R2	D	<p>This evaluator (G. Beauvais) is unaware of any data with which to estimate habitat trends for this taxon. Habitat use is understood only on a very general level; occurrence has been documented in true grassland as well as montane forest. Habitat quality may vary with fine-scale variables such as local humidity, insolation, and invertebrate density; the spatial and temporal variation of such variables is not well-known. Based on distribution and general habitat use, most habitat for this species probably occurs off of national forest units in the Great Plains.</p> <p>Confidence in Rank Medium</p>	(see citations for criteria 1)
7 Habitat Vulnerability or Modification	D	<p>As outlined above, habitat use and habitat quality for shrews are poorly understood, precluding reliable conclusions as to habitat vulnerability.</p> <p>Confidence in Rank Medium</p>	
8 Life History and Demographics	C	<p>In general, this taxon is not known to be especially susceptible to any specific environmental pressure. Small size, small areal requirements, association with fine-scale (rather than patch or landscape-scale) habitat features, and general feeding habits allow occupation of multiple life zones. Although individuals are short-lived, reproductive output is likely adequate for populations to quickly rebound from temporary declines.</p> <p>Confidence in Rank Low</p>	(see citations for criteria 3)
Initial Evaluator(s): Dr. Gary P. Beauvais, Director, Wyoming Natural Diversity Database - University of Wyoming.			Date: 30 July 2001

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

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

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<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	X		Black Hills NF	X		Shoshone NF		
White River NF						Halsey NF	X		Buffalo Gap NG	X		Bighorn NF	X	
Routt NF						Nebraska NF	X		Ft. Pierre NG	X		Black Hills NF	X	
Grand Mesa, Uncompahgre, Gunnison NF						Ogalala NG	X					Medicine Bow NF		?
San Juan NF												Thunder Basin NG		X
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG														

Pawnee NG - ?

NOTE: “?” refers to National Forest units where presence is suspected, but with a certainty of less than 50%.

appearing on NFS lands.