

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Least weasel (<i>Mustela nivalis</i>)			
Criteria	Rank	Rationale	Literature Citations
<p>1 Distribution within R2</p>	B	<p>Region 2 is on the southwestern periphery of the Least Weasel's published range. There have been a few disparate reports of least weasels in Region 2, but the extent to which they occur in the region is largely unknown. After small mammal abundance, the use of habitat seems to favor cover from avian predators, but plant species composition does not seem to greatly affect the weasels. They have been found in: open forests, farmlands, cultivated fields, meadows, riparian woodlands, in alpine and subalpine meadows and forests, scrub, sagebrush, semi-desert and sand dunes. Overall, they seem to be more common in grassland-shrub communities than forests. On the periphery of their range, least weasels use riparian corridors more heavily and these may serve as dispersal corridors. Least weasels may be expanding their range to the south and west (i.e., into Region 2 territory).</p> <p>Confidence in Rank: Medium</p>	<ul style="list-style-type: none"> • WYNDD Database, 2001 • South Dakota Gap, 2001 • Colorado Gap, 2001 • Sheffield and King, 1994 • Clark and Stromberg, 1987 • Bee et al., 1981 • Jones et al., 1985
<p>2 Distribution outside R2</p>	C	<p>Least weasels have a holarctic distribution, being found in throughout northern Asia, Europe, and much of northern North America. The North American distribution includes all of Alaska and the Yukon territories east to the St. Lawrence River. In the east it extends south through the Midwestern states to and then to North Carolina along the Appalachian Mountains, while in the west it extends to southern Montana and the Dakotas, possibly ranging as far south as Wyoming. Sub-specific taxonomy is contentious, but the current thinking seems to identify 4 sub-species in North America, of which Region 2 animals are likely <i>M. n. capestris</i>, with possible <i>M. n. rixosa</i> in northern Wyoming.</p> <p>Confidence in Rank: High</p>	<ul style="list-style-type: none"> • Wilson and Ruff, 1999 • Sheffield and King, 1994
<p>3 Dispersal Capability</p>	B	<p>As noted above, on the periphery of their range least weasel forage in riparian corridors, which may also serve as dispersal corridors. When local populations disappear it has been suggested the weasels readily recolonize once sufficient rodents are present. Foraging individuals are reluctant to cross open spaces, so it is likely that they require suitable habitat in order to disperse long distance.</p> <p>Confidence in Rank: Medium</p>	<ul style="list-style-type: none"> • Sheffield and King, 1994

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4 Abundance in R2	B	Throughout their range, Least Weasel abundance seems to be determined by the availability of small mammals on which they prey (primarily microtine rodents and other mice). In productive locations, they can be common, but it seems that they are more typically uncommon. Least weasels are likely to occur in even lower numbers in Region 2, since it is at the periphery of their range rather than core. Also, the abundance of populations fluctuates seasonally and annually, often with high amplitudes. In all areas, abundance is closely tied to prey availability. Confidence in Rank: Medium	<ul style="list-style-type: none"> • Wilson and Ruff, 1999 • Clark and Stromberg, 1987 • Sheffield and King, 1994
5 Population Trend in R2	D	Virtually no information exists on long term population trends in Region 2 or elsewhere. Confidence in Rank: High	<ul style="list-style-type: none"> • Na
6 Habitat Trend in R2	B	Given that least weasels are somewhat habitat generalists, habitat is not likely a limiting factor for their presence. The main requirements are that there be vertical cover and adequate prey. They have been known to disperse along riparian corridors, so maintenance of good stream-side vegetation might help maintain connectivity, among weasel populations, particularly in the lowlands of Region 2. Confidence in Rank: Low	<ul style="list-style-type: none"> • WYNDD Database, 2001 • Sheffield and King, 1994
7 Habitat Vulnerability or Modification	C	Given that least weasels seem to use a wide range of habitat types it is difficult to come up with an overall vulnerability trend. Managers must evaluate habitat on a local level, considering a suite of habitat types. It is safe to say any disturbance that eliminates protective cover (e.g., trees, shrubs, or tall herbaceous plants) and/or reduces the abundance of small mammal prey will also reduce the abundance of least weasels. In Region 2, actions that modify riparian corridors could affect weasel dispersal capability, and thus their ability to disperse when conditions are poor. Confidence in Rank: Medium	<ul style="list-style-type: none"> • Sheffield and King, 1994

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<p>8 Life History and Demographics</p>	<p>B</p>	<p>Least weasels respond rapidly to changes in abundance of rodent prey, causing radical population fluctuations from year to year. Given time, this greatly increases the likelihood that any given population will go extinct. Least weasels have a high reproductive rate and so are able to recover quickly from conditions that reduce population numbers. Females produce one litter of 4 -5 young per year and can bear young in their first summer. On the other hand, survival rates have been shown to be quite low, with perhaps only 20% of adults surviving annually. The lifespan of a Least Weasel is often one year or less.</p> <p>Confidence in Rank: High</p>	<ul style="list-style-type: none"> • Wilson and Ruff, 1999 • Sheffield and King, 1994
Initial Evaluator(s): Doug Keinath, Zoologist, Wyoming Natural Diversity Database			Date: 7/20/2001

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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>			<u>Kansas NF/NG</u>			<u>Nebraska NF/NG</u>			<u>South Dakota NF/NG</u>			<u>Wyoming NF/NG</u>		
	Known	Likely		Known	Likely		Known	Likely		Known	Likely		Known	Likely
Arapaho-Roosevelt NF	-	-	Cimmaron NG	-	-	Samuel R. McKelvie NF	-	7	Black Hills NF	5	-	Shoshone NF	-	3
White River NF	-	-				Halsey NF	-	7	Buffalo Gap NG	5	7	Bighorn NF	-	3,8
Routt NF	-	-				Nebraska NF	-	-	Ft. Pierre NG	-	5,7	Black Hills NF	-	-
Grand Mesa, Uncompahgre, Gunnison NF	-	-				Ogalala NG	-	-				Medicine Bow NF	-	-
San Juan NF	-	-										Thunder Basin NG	-	8
Rio Grande NF	-	-												
Pike-San Isabel NF	-	-												
Comanche NG	-	-												
Pawnee NG														

Comments:

? 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.

Primary Sources:

1. Wyoming Natural Diversity Database , 2001 (including Clark and Stromberg, 1987)
2. Wyoming Gap, 1996
3. WYGF, 1999
4. CNHP Database, 2001
5. South Dakota Gap, 2001
6. Colorado GAP, 2001
7. Jones et al., 1985
8. If the least weasel is extending its range south and west, as some have reported, Thunder Basin GN and the foothills riparian corridors of the Bighorn NF are likely places for it to show u in region 2. These management units are currently at the periphery of the recorded range of the least weasel.

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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