

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: (Martes pennantia / Fisher)			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	<p>Fishers are thought to prefer extensive coniferous forests (mature to late-successional) with a high degree of continuous overhead cover. There have been rumors of fishers in Colorado, but this claim is clearly unsubstantiated and many feel that the Noble marten (Ice age species) influenced the southern distribution of fisher along the Rocky Mountain chain. The influence this species had on fisher distribution left the southern most distribution of fisher along the Wyoming portion of the Rocky Mountain chain, most notably along the Yellowstone Ecosystem. Many felt that fisher did not occupy extensive areas in Wyoming and information suggests they occasionally are found in the Big Horn mountains, due east of the Yellowstone area</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> • Powell, 1993 • Warren, 1942 • Durrant, 1952 • Warren, 1910 • Ruggerio et al., 1994 • Jones and Heinemeyer, 1994
2 Distribution outside R2	B	<p>The distribution of fisher south of the Canada- United States border tend to follow the peninsular Cascade and Sierra Nevada mountain chains (Pacific coast side) and down peninsular Rocky mountain chain in the central portion of the United States. Recent evidence suggests a remnant population of fisher located in the southern most portion of the Sierra Nevada chain of mountains, and a successful reintroduction along the southern Oregon Cascade Mountain Range in southwestern Oregon. Evidence suggests that fishers still occur along many of the states bordering the Canada border, but they appear to be a patchy and less abundant then they were historically. Effort has been undertaken to reintroduce in some of the states and this effort has not been as successful as hoped. Our Canadian neighbors (British Columbia) have been vigorously reintroducing fishers to area they once occurred in greater numbers. To date this effort has met with mixed results.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> • Powell, 1993 • Aubry and Raley, 1995 • Center for Biological Diversity. 2000. • Aubry and Huston, 1992 • Jones and Garton, 1994

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<p>3 Dispersal Capability</p>	B	<p><i>Martes pennantia</i> has been studied mostly in the northeastern hardwood forests, northern California coastal range southern Sierra Nevada and southwestern Oregon. Outside of these areas our knowledge is rudimentary to many of the factors that influence adult and juvenile dispersal (within and outside the homerange). Early indication from the scientific investigation in southwestern Oregon work indicates that adult male fishers have fairly large homeranges and movement patterns over their female counterparts. This was also found to be the case in the southern Sierra study as well. Very little in the west is know about the dispersal capabilities of juveniles and what factors from a dispersing juvenile may influence a positive or negative response in survivorship. There is more information in the east related to dispersal of adults and juveniles, and it is unclear how much of this information applies to fisher populations in the western forests. Fragmentation has been recently investigated and three different studies indicate that patch size and distribution as a result of harvest activities may have an effect on how fishers (adults or juveniles) utilize the landscape.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> Center for Biological Diversity. 2000. Powell, 1993
<p>4 Abundance in R2</p>	A	<p>Based on limited sampling, unsolicited sighting reports (reliable and unreliable) and historic records it appears that Martes pennantia still exists within the Yellowstone Ecosystem. There are occasional reports of fisher in the Big Horn Mountains, but it is unclear if these accounts represent a small remnant population of dispersers from the Yellowstone area.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> Warren, 1910 Durrant, 1952 Powell, 1993 Ruggerio, et al., 1994 Allen, 1942 BLF, petition, 1994
<p>5 Population Trend in R2</p>	D	<p>Information on fisher abundance in Wyoming are not available from the historic or current records. Unsolicited sighting reports occur but they provide little evidence of how abundant fisher might be today. Our ability to detect change (downward, increase or stable) in the Wyoming of fisher population is severely hampered by our lack of this type of information. Due to the scarcity of information, our confidence that this species is declining in northwest Wyoming is unknown. We have a high degree of confidence that we do not know enough about this species in northwest Wyoming to assess population trend.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> Warren, 1910 Durrant, 1952 Powell, 1993 Ruggerio, et al., 1994 Allen, 1942 BLF, petition, 1994

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6 Habitat Trend in R2	D	<p>The quantity and quality of habitat within R2 (northwest Wyoming) is a complex picture. National Parks and wilderness most likely contain a fair amount of the habitat available for this species in northwestern Wyoming. Little effort has been placed on the identification of the various habitat conditions for this species. Outside of congressional or administratively withdrawn areas, timber harvest, oil and gas development and associated road building activities may have the strongest influence on habitat quality for fisher in this area. Due to the scarcity of information, our confidence that this is indicative of a persistent, long-term trend is moderate.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> •
7 Habitat Vulnerability or Modification	D	<p>Modification of large tracks of coniferous forests, effects to resting habitat, reduction in snag and downwood abundance may have a strong influence on habitat quality and therefore, the distribution of fisher in northwestern Wyoming</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> • Powell, 1993 • Center for Biological Diversity. 2000.
8 Life History and Demographics	B	<p><i>Martes pennanti</i> use a specialized obligate delayed implantation reproductive strategy with 2.7 to 3.9 corpora lutea reported for females. Some feel the number of corpora lutea and implanted embryos are nearly the same. Fewer than 95% of female fisher greater than 2 years of age and older produce kits each spring. Therefore, relatively low reproductive rates and fairly high mortality on kits influence fisher population or meta-populations and therefore fisher demography and viability within a given geographic area.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> • Powell, 1993 • Center for Biological Diversity. 2000.
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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 appearing on NFS lands.

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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			Black Hills NF			Shoshone NF	x	
White River NF						Halsey NF			Buffalo Gap NG			Bighorn NF		x
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														

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