ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Astragalus barrii* / Barr's Milkvetch

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	AB	Barr's Milkvetch is a regional endemic of northeastern Wyoming, western South Dakota, and northwestern Nebraska, as well as southeastern Montana. In Wyoming, Barr's milkvetch lies entirely within the Region 2 perimeter in Campbell, Converse, Johnson, Natrona, Niobrara, Sheridan, and Washakie counties however its elevation range and habitat are only in Thunder Basin National Grassland. Additional information is needed from South Dakota where it occurs on Buffalo Gap National Grassland, and Nebraska. Barr's Milkvetch is found primarily on dry, rocky prairie knolls, hillsides, and barren areas. In Wyoming, populations occur most frequently on sparsely vegetated badlands and breaks, often on whitish, sandy-silty (often calcareous) or sandy soils at elevations of 3700-5700 feet. Confidence in Rank High	• Dorn 2001 • Fertig 2001 • Hartman and Nelson 1994, 1995 • Marriott 1992 • Ode 1988, 1990 • Roderick et al. 1999 • Taylor 2000 • University of Wyoming 1998
2 Distribution outside R2	B	Barr's Millkvetch is a regional endemic of the Great Plains only found outside Region 2 in southeastern Montana and northwestern South Dakota. Confidence in Rank High	• Barneby 1964 • Great Plains Flora Association 1986 • Heidel and Marriott 1996 • Iseley 1998
3 Dispersal Capability	D	Not known. Confidence in Rank High	• -
4 Abundance in R2	B	In Wyoming, Barr's Milkvetch is currently known from 34-40 extant populations and one additional historical record in Wyoming, about a third of which occur on Thunder Basin National Grassland. Populations surveyed by Marriott (1992) ranged in size from several hundred to over 10,000 individuals. While the total number of plants in Wyoming is high, the occupied habitat covers limited aerial extent. Confidence in Rank High	• Fertig 2001

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5 Population Trend in R2	BA	Most populations appeared to be stable, although more recent trends in the decade since the coal bed methane boom are not known. It may be susceptible to prolonged drought in at least the most exposed habitats (Schassberger 1990). Confidence in Rank High	• Fertig 2001 • Marriott 1992
6 Habitat Trend in R2	B	The sparsely-vegetated habitat is a low-competition setting that has been stable and not diminished or degraded by vegetation succession and noxious weeds. Confidence in Rank High	• -
7 Habitat Vulnerability or Modification	AB	Marriott (1992) reported few threats to most Wyoming populations, although at least one population has been lost due to expansion of a surface coal mine, and another has been reduced due to bentonite mining. In South Dakota, zeolite mining and off-road vehicle recreation have been cited as threats. Oil and gas development was cited as a potential future threat by Marriott (1992), but was not considered a problem in the early 1990s. The marked expansion of coal bed methane, oil, and gas development since the late 1990s has increased the threats to many populations through increased road development (often associated with increased spread of competing weeds) and loss of habitat to industrial siting. Occurrences are found on lands managed for multiple-use by the BLM Buffalo, Casper, and Newcastle Field Offices and Thunder Basin National Grassland. Confidence in Rank Low	• Fertig 2001 • Marriott 1992
8 Life History and Demographics	D	Barr's Milkvetch is a tufted long-lived perennial with a woody taproot. It flowers more than once in its life cycle, but produces few or no flowers in some years (Locklear 1986). Additional information on the species, including life history stages, population structure, longevity, mortality, pollination biology and seed biology, are not available. Confidence in Rank High	• Locklear 1986 • Schassberger 1990

Initial Evaluator(s):	Date: 16 February 2002
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National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)[1] to occur:

Colorado NF/NG	**Known**	**Likely**	**Kansas NF/NG**	**Known**	**Likely**	**Nebraska NF/NG**	**Known**	**Likely**	**South Dakota NF/NG**	**Known**	**Likely**	**Wyoming NF/NG**	**Known**	**Likely**
Arapaho-Roosevelt NF			Cimmaron NG			Samuel R.McKelvie NF			Black Hills NF			Shoshone NF		
White River NF						Halsey NF			Buffalo Gap NG	X		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	X	
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG														

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[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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