

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Asclepias uncialis*/Dwarf Milkweed (USDA common name: Wheel Milkweed)

Criteria	Rank	Rationale	Literature Citations
<p>1 Distribution within R2</p>	<p>A</p>	<p><i>A. uncialis</i> is a very small milkweed (1-2 ½ inches) that is found only in grama-buffalo grass communities in the shortgrass prairie of Colorado in R2. It is one of the few endemic or near-endemic plants of the Great Plains and may be the smallest member of the milkweed family. It occurs on sloping sites with shallow depth to bedrock and on soils with small stone chips or gravel. No particular soil type has been identified for this plant's habitat. In eastern Colorado, this species is known from 4 extant and less than 20 historical occurrences in ten counties. These occurrences appear to be scattered throughout the eastern half of Colorado. There is one historic, isolated occurrence in Wyoming. However, this early collection is unconfirmed taxonomically with no information available on current status. <i>A. uncialis</i> is ranked S1 in Colorado and SH (possibly extirpated) in WY. Of the known extant populations, one is on the Timpas Unit of the CNG. It is also known to occur on Fort Carson at the Pinon Canyon Maneuver Site. One of the largest populations occurs on state land, near the State of Colorado's Pueblo Reservoir. Other populations occur on private lands. A number of surveys of historic population sites and other suitable habitats were conducted in the 1990s and several new populations were identified. However, it should be noted that this plant is very small and easily overlooked. In addition, there is no evidence that suitable habitats have been extensively explored for this species. It appears to occur in discrete habitats separated by widely distributed suitable habitat in R2.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • CNHP • USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA 70874-4490 USA. (Accessed September 22, 2002) • NatureServe Explorer: An online encyclopedia of life [web application]. 2001. Version 1.6 . Arlington, Virginia, USA: http://www.natureserve.org/explorer. (Accessed: September 22, 2002) • Locklear, 1996, The biology, ecology and conservation needs of <i>Asclepias uncialis</i> in Colorado. CNAP Status Report. • Locklear, 1991, The Status of <i>Asclepias uncialis</i> in Eastern Colorado and Northeastern New Mexico • Rocky Mountain Herbarium, University of Wyoming: Atlas of the Vascular Plants of Wyoming. 2002. Available: http://www.rmh.uwyo.edu. (Accessed September 22, 2002)

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Criteria	Rank	Rationale	Literature Citations
2 Distribution outside R2	B	<i>A. uncialis</i> has been reported in scattered locations in southeastern UT, northeast NM; northeastern AZ, and possibly NV. This species appears to occur in two geographic areas; in the western Great Plains, in CO and northeast NM; and scattered occurrences in southwestern NM and eastern AZ. It is ranked as S1 in AZ and OK, S? in UT, and SR in NV. Distribution outside R2 appears to be restricted to a few scattered locations. Confidence in Rank: High	<ul style="list-style-type: none"> • IBID
3 Dispersal Capability	A	<i>A. uncialis</i> can reproduce locally through rhizomes, but disperses over significant distances through hairy, windblown seeds. However, in recent years, studies have confirmed that this plant has very low fruit production and low reproductive success. Studies have found very few fruits in relation to the number of flowers. <i>A. uncialis</i> has highly modified, fragrant flowers that are likely pollinated by generalized pollinators, such as bees and wasps. Since populations are widely scattered, gene flow among populations through insect pollination may be limited. It has been suggested that lack of reproductive success may be the main factor contributing to <i>A. uncialis</i> ' rarity. It appears that this species has very limited dispersal ability. Confidence in Rank: High	<ul style="list-style-type: none"> • IBID
4 Abundance in R2	A	<i>A. uncialis</i> is characterized by few populations and extremely small population size; 5-10 plants. Small clusters of plants can be grouped within a one square meter area. This plant is considered rare in R2 and has very low population numbers. Confidence in Rank High	<ul style="list-style-type: none"> • IBID
5 Population Trend in R2	A	In 1995, surveys for historic populations of <i>A. uncialis</i> were conducted. Surveys found no evidence of previously reported populations at several sites. These sites still consisted of native plant species and there appeared to be no habitat degradation. Although there has been no monitoring of <i>A. uncialis</i> populations, information suggests that this plant may be declining in R2. Confidence in Rank Medium	<ul style="list-style-type: none"> • IBID
6 Habitat Trend in R2	D	Although the trend in native shortgrass prairie has been downward, no specific information is available on the sparsely described habitats suitable for <i>A. uncialis</i> . Confidence in Rank Medium	<ul style="list-style-type: none"> • IBID

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7 Habitat Vulnerability or Modification	D	This plant occurs in areas that have been historically, and continue to be, managed as rangeland for domestic cattle. However, during recent plant surveys, no impact from cattle grazing or wildlife was observed. Potential threats may also include recreational use, agricultural use, and military tank traffic on the US Army maneuvering site. However, the author does not believe there is specific information is available to determine the vulnerability of the habitat or the populations in R2. Confidence in Rank Medium	<ul style="list-style-type: none"> IBID
8 Life History and Demographics	D	There is no known published or unpublished information about the population biology, ecology, or demography of <i>A uncialis</i> Confidence in Rank Medium	<ul style="list-style-type: none"> IBID
Initial Evaluator(s): Janice P. McKee, Botanist			Date: 09/22/02

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>		<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
		Cimmaron NG		Samuel R. McKelvie NF		Black Hills NF		Shoshone NF	
				Halsey NF		Buffalo Gap NG		Bighorn NF	
				Nebraska NF		Ft. Pierre NG		Black Hills NF	
				Ogalala NG				Medicine Bow NF	
								Thunder Basin NG	
	X								