

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Astragalus leptaleus Gray / Park milkvetch / ASLE9			
Criteria	Rank	Rationale	Literature Citations
<p><b>1</b> Distribution within R2</p>	<p><b>A</b></p>	<p>Colorado's populations of <i>A. leptaleus</i> are in widely scattered locations: North Park (Jackson Co.) near the Wyoming border, in Summit County on the Blue River below Green Mountain Reservoir, the Powderhorn Valley in Gunnison County, and two stations in Park County in the center of the state.</p> <p>Only two records are known from Wyoming, both located along the east side of the Sierra Madre in the Big Creek Area just north of the Colorado state line. the last reported sighting of <i>A. leptaleus</i> in this area was in 1951.</p> <p>Confidence in Rank <b>High</b></p>	<ul style="list-style-type: none"> <li>• Barrell, Flora of the Gunnison Basin (1969)</li> <li>• WYNDD database</li> <li>• Barneby R.C., Atlas of North American Astragalus (1964)</li> <li>• Rocky Mountain Herbarium</li> <li>• University of Colorado herbarium</li> </ul>
<p><b>2</b> Distribution outside R2</p>	<p><b>B</b></p>	<p>Park milkvetch is a regional endemic of the Rocky Mountains, where it occurs sporadically and apparently never in abundance. It has been reported outside of R2 in Colorado from east-central Idaho (14 occurrences), a few stations in western Montana and possibly Alberta, it is of conservation concern only in Montana and Idaho. The Montana populations have not been confirmed since they were first collected 70 years ago.</p> <p>Park milkvetch is considered rare and sensitive in Idaho and Montana.</p> <p>Confidence in Rank <b>High</b></p>	<ul style="list-style-type: none"> <li>• PLANTS database</li> <li>• R1 Sensitive Plant Field Guide (1989)</li> <li>• Moseley, R.K. A Field Investigation of Park Milkvetch (<i>Astragalus leptaleus</i>) in Idaho. Report to ID Fish and Game (1991).</li> <li>• MT Natural Heritage Program Species of Concern (2002)</li> <li>• Barneby R.C., Atlas of North American Astragalus (1964)</li> </ul>
<p><b>3</b> Dispersal Capability</p>	<p><b>B</b></p>	<p>Unknown, but probably low. ASLE9 produces few seeds, and once established, spreads vegetatively. Although R2 contains a great deal of potential habitat, the known populations are widely scattered and it is possible that this species has either been eliminated from most of its range or there are other factors limiting its distribution.</p> <p>Confidence in Rank <b>Medium</b></p>	<ul style="list-style-type: none"> <li>• University of Colorado herbarium</li> <li>• Rocky Mountain Herbarium</li> </ul>

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<p><b>4</b> Abundance in R2</p>	<p><b>B</b></p>	<p>Park milkvetch is described by Weber as “uncommon or inconspicuous, wet meadows and aspen”. It is a low-growing plant, and quite possibly overlooked in its lush habitats. Individuals are often impossible to determine, as the species tends to form small, scattered colonies, sometimes running together into extensive mats.</p> <p>Five widely scattered populations have been reported from Colorado, and two from Wyoming very close to the Colorado border.</p> <p>Few collections indicate the species’ abundance, but one record from South Park in Colorado and another from the Powderhorn Valley indicate the species is frequent to abundant at those locations. Barneby reports that park milkvetch “sometimes is so plentiful locally as to afford a palatable forage”.</p> <p>Confidence in Rank <b>Medium</b></p>	<ul style="list-style-type: none"> <li>• Weber, W.A., Colorado Flora (3<sup>rd</sup> ed.)</li> <li>• Rocky Mountain Herbarium</li> <li>• Barneby R.C., Atlas of North American Astragalus (1964)</li> <li>• University of Colorado herbarium</li> <li>• Rocky Mountain Herbarium</li> </ul>
<p><b>5</b> Population Trend in R2</p>	<p><b>D</b></p>	<p>Unknown. It is possible that the species declined historically under heavy grazing regimes and the conversion of wet meadows to hay fields during the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. While conversion of native meadows to hayfields likely caused a direct decline in populations of park milkvetch, the response of this species to grazing of any intensity is unknown. One population in Colorado is noted as occurring within a few feet of a cattle pen, presumably a heavily impacted area. Because of its colonial growth habit, presumably this species would be able to survive at least moderate disturbance.</p> <p>It is possible that additional inventory will turn up more populations.</p> <p>Confidence in Rank <b>Medium</b></p>	<ul style="list-style-type: none"> <li>• University of Colorado herbarium</li> </ul>

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<p><b>6</b> Habitat Trend in R2</p>	<p><b>A</b></p>	<p>Unknown, but park milkvetch habitats certainly experienced historic declines and may still be declining somewhat. That habitat consists of moist, sedgy meadows, swales, and turfy hummocks on the edge of meandering brooks. In Idaho, the habitat of park milkvetch was characterized as the mesic ecotone between saturated riparian communities and upland sagebrush-steppe. Elevations in R2 range from 6600 feet to 9500 feet, with most populations found around 8000 feet.</p> <p>This habitat was historically and continues to be very heavily used for grazing and for hay production. Many wet meadows were converted to exotic pasture grasses such as timothy, Kentucky bluegrass and smooth brome, and have been mowed annually for nearly a hundred years. In general, wet meadows often represent the major source of forage in many grazing allotments in arid Colorado, and as such have been grazed steadily and in some cases heavily for many decades. Exotic weedy species such as Canada thistle (<i>Cirsium arvense</i>), wild chamomile (<i>Matricaria</i> spp.), leafy spurge (<i>Euphorbia esula</i>) and yellow toadflax (<i>Linaria vulgaris</i>) have invaded many meadows, further compromising their integrity and ability to support viable populations of native species.</p> <p>Confidence in Rank <b>High</b></p>	<ul style="list-style-type: none"> <li>• R1 Sensitive Plant Field Guide (1989)</li> <li>• Barrell, Flora of the Gunnison Basin (1969)</li> <li>• Moseley, R.K. A Field Investigation of Park Milkvetch (<i>Astragalus leptaleus</i>) in Idaho (1991). Report to ID Fish and Game.</li> </ul>
<p><b>7</b> Habitat Vulnerability or Modification</p>	<p><b>A</b></p>	<p>Because of their desirable locations near streams, nearly all known populations of ASLE9 in R2 occur on land in private ownership. The few populations in public ownership occur on BLM and USDA-Forest Service lands that are managed for multiple uses, especially grazing.</p> <p>Confidence in Rank <b>High</b></p>	<ul style="list-style-type: none"> <li>• Moseley, R.K. A Field Investigation of Park Milkvetch (<i>Astragalus leptaleus</i>) in Idaho (1991). Report to ID Fish and Game.</li> </ul>
<p><b>8</b> Life History and Demographics</p>	<p><b>D</b></p>	<p>Little is known of the life history and demographic of park milkvetch. ASLE9 is an inconspicuous perennial with a deeply buried taproot and widely creeping underground stems. It sometimes grows with and in a similar habit (large patches) to <i>A. agrestis</i>. It produces few flowers and fruit compared with most <i>Astragali</i>, and spreads vegetatively once established. This habit may help it weather moderate disturbance.</p> <p>Confidence in Rank <b>Medium</b></p>	<ul style="list-style-type: none"> <li>• R1 Sensitive Plant Field Guide (1989)</li> <li>• Barneby R.C., Atlas of North American <i>Astragalus</i> (1964)</li> </ul>

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Evaluator(s): Janet J. Coles			Date: September 28, 2002

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

Species Name:									
<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
	X	Cimarron NG		Samuel R. McKelvie NF		Black Hills NF		Shoshone NF	
				Halsey NF		Buffalo Gap NG		Bighorn NF	
	X			Nebraska NF		Ft. Pierre NG		Black Hills NF	
	X			Ogalala NG				Medicine Bow NF	X
								Thunder Basin NG	

<sup>1</sup> 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.