

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Primula egalikensis</i> Wormsk. Ex Hornem. / Greenland primrose / PREG			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	Greenland primrose is disjunct in R2 from its main range. In Colorado it is restricted to calcareous fens in the center of the state (Park County). It wasn't discovered in Wyoming until 1984, and is now known from one site in the Absaroka Range (Park County, northwestern Wyoming). Confidence in Rank High	<ul style="list-style-type: none"> • PLANTS database • Wyoming Rare Plant Field Guide (1994) • Dorn, Vascular Plants of Wyoming (3rd ed.) • University of Colorado herbarium
2 Distribution outside R2	C	Greenland primrose has a circumboreal distribution: NE Asia; AK and Yukon east to Labrador and Greenland, south to British Columbia. The second known population in Wyoming is in R4 (Wind River Range, Bridger-Teton NF, Sublette County). Confidence in Rank High	<ul style="list-style-type: none"> • Colorado Rare Plant Field Guide (1997) • Rocky Mountain Herbarium
3 Dispersal Capability	A	Poor. Greenland primrose occurs in isolated wetlands and the species has no mechanisms for medium or long-distance dispersal. Within Colorado, the habitat the primrose prefers (calcareous fens) is restricted to Park County. The nearest other known population is hundreds of miles away in northern Wyoming. Confidence in Rank High	<ul style="list-style-type: none"> • University of Colorado herbarium
4 Abundance in R2	A	Described by Weber as "rare in the calcareous fens of South Park". Greenland primrose is known from six wetlands on the floor of South Park in central Colorado and one wetland in northwestern Wyoming. The potential for additional populations in Colorado is practically nonexistent; there may be a few other potential sites in Wyoming. The total population of plants in R2 is almost certainly less than 5000 and may be less than 1000. Confidence in Rank High	<ul style="list-style-type: none"> • Weber, W.A.. Colorado Flora (3rd edition) • University of Colorado Herbarium • Rocky Mountain Herbarium
5 Population Trend in R2	A	Currently stable, although Colorado's populations are almost certainly fewer and smaller than they were historically, due to the loss of habitat to peat mining. Confidence in Rank High	<ul style="list-style-type: none"> • Colorado Natural Area Program files

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Criteria	Rank	Rationale	Literature Citations
6 Habitat Trend in R2	A	Greenland primrose's preferred habitat is the hummocks within calcareous montane fens between 6600-9800 feet. In Colorado, most of the fens in South Park were partially mined for peat, a practice that continues to this day, albeit at a reduced rate. At least one of the populations occurs in a willow carr on State of Colorado land that is very heavily grazed, with resulting degradation of habitat. Confidence in Rank High	<ul style="list-style-type: none"> • WY Rare Plant Field Guide (1994) • CO Rare Plant Field Guide (1997) • Colorado Natural Area Program files
7 Habitat Vulnerability or Modification	A	One large population is within the High Creek Fen Natural Area/Preserve. Most of the other populations occur on State-owned or private lands that were mined for peat. At least two peat mines are still active in Greenland primrose habitat. One of the mined areas has been reclaimed to a peat surface, but in ten years no primroses have re-occupied the reclaimed habitat. Confidence in Rank High	<ul style="list-style-type: none"> • Colorado Natural Heritage Program files • Nature Conservancy, Colorado Field Office
8 Life History and Demographics	D	Little is known of the specific life history or demographics of Greenland primrose. Primroses have two types of flower. The 'pin' type has a pin-head like stigma (female part) close to the mouth of the corolla while the stamens (male part) are hidden at the base of the tube. In the 'thrum' type flowers the process is reversed. The design of the flowers aids pollination by long-tongued insects, and enforces outcrossing. The genetic recombination made possible through outcrossing may help Greenland primrose persist under changing environmental conditions. Confidence in Rank Medium	<ul style="list-style-type: none"> • Weber, W.A. Colorado Flora 3rd ed)
Evaluator(s): Janet J. Coles			Date: September 28, 2002

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	Known	Likely
		Cimarron NG		Samuel R.McKelvie NF		Black Hills NF		Shoshone NF		X	
				Halsey NF		Buffalo Gap NG		Bighorn NF			
				Nebraska NF		Ft. Pierre NG		Black Hills NF			
				Ogalala NG				Medicine Bow NF			
								Thunder Basin NG			
	X										