

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Salix serissima</i> (Bailey) Fern. / Autumn willow / SASE2			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	<i>Salix serissima</i> is currently reported in one Forest Service location in Wyoming, two locations in South Dakota and four locations in Colorado. Additional occurrence locations on private land have been indicated, but there is no survey documentation (E. Grimm ((Paleocologist Illinois State Museum)), pers. comm. with D. Reyher, 1994). Confidence in Rank High	<ul style="list-style-type: none"> • Spackman et al., 1997 • Fertig, 2000 • BHNH Monitoring data, 2000, 2001, 2002 • Dorn, 1997
2 Distribution outside R2	B	Widely scattered but uncommon in the northern states except Washington and Idaho. More common in Canada. Despite its widespread occurrence in North America, it is listed as vulnerable, imperiled or critically imperiled in most states, so it is given a rank of B. Confidence in Rank High	<ul style="list-style-type: none"> • PLANTS, NRCS, 2001 • NatureServe, 2001
3 Dispersal Capability	B	<i>Salix</i> spp. are colonizer species that produce large quantities of small, short-lived seed covered in long hairs for wind dispersal. Seeds have the potential to travel long distances but due to limited habitat and the geographic isolation of the Black Hills populations, interbreeding from other locations is not likely. There is no evidence of specialized pollinators for this species. Confidence in Rank Medium	<ul style="list-style-type: none"> • Gleason and Cronquist, 1991 • Hornbeck et al., 2002 • Sacchi and Price, 1988 • Argus, 1999
4 Abundance in R2	A	The Wyoming population had 80 – 100 individuals in 1995. The South Dakota populations had >450 individuals at one site (2001) and 16 at another (this site was rediscovered in 2002). Population sizes for Colorado are unknown. Only seven known populations are located on Forest Service administered land in Region 2. Confidence in Rank High	<ul style="list-style-type: none"> • Spackman et al., 1997 • Fertig, 2000 • BHNH monitoring data, 2000, 2001, 2002
5 Population Trend in R2	D	Population trends are unknown. The current upward trend of the population located in McIntosh Fen could be the result of initial restoration of the local hydrology, high precipitation years since 1993 or a combination of these and other favorable environmental conditions. Confidence in Rank High	<ul style="list-style-type: none"> • Hornbeck et al., 2002

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6 Habitat Trend in R2	B	In the Black Hills, one location occurs at McIntosh Fen, a rare, calcareous fen meadow. McIntosh Fen and the surrounding area have been significantly altered by landscape scale ecological change since non-native settlement of the region beginning in the late 1800's. While under private ownership from 1930-1980 the fen was ditched to facilitate use as a hay field and livestock pasture. Also the extirpation of beaver from the castle creek drainage has contributed to the lowered water table and altered the vegetative species composition of the fen. In addition, fire suppression has resulted in an increased density of conifers, a decline in aspen and other hardwoods, and has likely reduced groundwater flow into the fen. Several small active beaver dams were noted in the McIntosh Fen Botanical Area by Rob Hoelscher (Wildlife Biologist, BHNF) in June 2002, no main lodge was noted so it is unknown if this is just a transitory occurrence. If the habitat in Colorado and Wyoming is in decline, then the rank should be raised to an A. Confidence in Rank Medium	<ul style="list-style-type: none"> • Parrish et al., 1996 • Hornbeck et al., 2002 • E-Mail from Deanna Reyher, June, 2002
7 Habitat Vulnerability or Modification	B	Climatic change or activities that impact wetland hydrology, or that reduce or eliminate flooding, beaver activity, and fire, may have negative effects on autumn willow's habitat (McIntosh Fen) in the Black Hills. McIntosh Fen was designated a Botanical Area in 1997, therefore limiting disturbances from road or highway construction, mining or off road vehicle use. Invasion by purple loosestrife and other noxious weeds are a risk for <i>Salix serissima</i> and its habitat. Confidence in Rank Medium	<ul style="list-style-type: none"> • Parrish et al., 1996 • Williams, 1990 thru FEIS database, 2001 • Glisson 2002
8 Life History and Demographics	B	The presence of light, wind dispersed seeds and the ability to sprout from suckers should allow <i>Salix serissima</i> to recover from moderate disturbances, in fact <i>Salix</i> spp. often generally require soil disturbance for seed germination and plant establishment to occur and soil disturbance produced by flooding, snowmelt or fire is particularly favorable. Changes in hydrology may be more detrimental. Confidence in Rank Medium	<ul style="list-style-type: none"> • Price et al., 1996
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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>		<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
Arapaho-Roosevelt NF	X	Cimarron NG		Samuel R.McKelvie NF		Black Hills NF	X	Shoshone NF			
White River NF				Halsey NF		Buffalo Gap NG		Bighorn NF			
Routt NF	X			Nebraska NF		Ft. Pierre NG		Black Hills NF			
Grand Mesa, Uncompahgre, Gunnison NF	X			Ogalala NG				Medicine Bow NF	X		
San Juan NF	X							Thunder Basin NG			
Rio Grande NF											
Pike-San Isabel NF	X										
Comanche NG											
Pawnee NG											

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