

SPECIES EVALUATION

*Salix myrtilifolia* var. *myrtilifolia*, Priority 1. *Salix myrtilifolia* Andersson (SAMY). low blueberry willow. CNHP G5 / S1, Track A  
 FS: R2. -- G5T5 N?. CO SR, WY S1. WY Disjunct, 1 SNF.

Criteria	Rank	Confidence	Rationale	Sources of Information
1 Distribution within R2	<b>A</b>	<b>M</b>	Two occurrences in R2. Ranked S1 in Wyoming and S1 in Colorado, not ranked in Montana, Idaho, or Alaska.	CNHP records, Fertig 2000, Handley and others 2002, Weber and Wittmann 2001b.
2 Distribution outside R2	<b>C</b>	<b>H</b>	Widespread in Alaska and the Yukon, and across northern Canada.	Hultén 1968.
3 Dispersal Capability	<b>C</b>	<b>L</b>	Transported by wind, allowing it to disperse readily across unsuitable habitat. It is uncertain where these data come from, for the authors (Handley and others 2002) are looking at one, entirely staminate population.	Handley and others 2002.
4 Abundance in R2	<b>A</b>	<b>M</b>	“Known from a single population in Wyoming, on the Shoshone National Forest. It was last surveyed in 1992. The population is extremely small and limited to an area of less than 5 acres. Only pistillate individuals have been found at the site, indicating that the colony may not be capable of sexual reproduction (without pollen-producing staminate plants in the colony, no fruits or seeds can be produced)” (Fertig 2000). Also known from a single population in Colorado, in a rich calcareous fen, where only a few were seen when the population was discovered in 1995. Apparently no one has searched for more populations, but there aren’t very many rich calcareous fens around. Also, we seem to have no population counts.	Fertig 2000, CNHP records, Handley and others 2002.
5 Population Trend in R2	<b>A</b>	<b>L</b>	Downward population trend is hypothesized by Fertig (2000) and Handley and others (2002) based on the entirely-staminate unique population in Wyoming. However, many <i>Salix</i> species are known to reproduce vegetatively, and so this population may have been small for some decades – and Fertig (2000) suggests this population may be a glacial relict.	Handley and others 2002.
6 Habitat Trend in R2	<b>B</b>	<b>L</b>	“Lake and stream banks, floodplain thickets, muskegs, bogs, and moist white spruce forests” (Fertig 2000). “In a calcareous fen ... to be expected in fens fed by waters from limestone mountains” (Weber and Wittmann 2001a). The Wyoming site is protected, large, and apparently relictual, so habitat is stable there; habitat trend is unknown at the Colorado site. Difficult to discuss habitat trend with little data from only two sites.	Fertig 2000, Weber and Wittmann 2001ab.
7 Habitat Vulnerability or Modification	<b>B</b>	<b>H</b>	Calcareous fens – and fens in general – are vulnerable to dewatering, livestock grazing, and changes in water caused by management in the watershed above. We can assume these fens are also vulnerable, even though we have no data on the response of <i>Salix myrtilifolia</i> to disturbance or other environmental factors. The Wyoming site is protected within a designated Botanical Area.	My observations, Mitsch and Gosselink 1993.
8 Life History and Demographics	<b>D</b>	<b>H</b>	Details of life history and demographics unknown.	

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National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY (L)\* to occur:

\* 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.

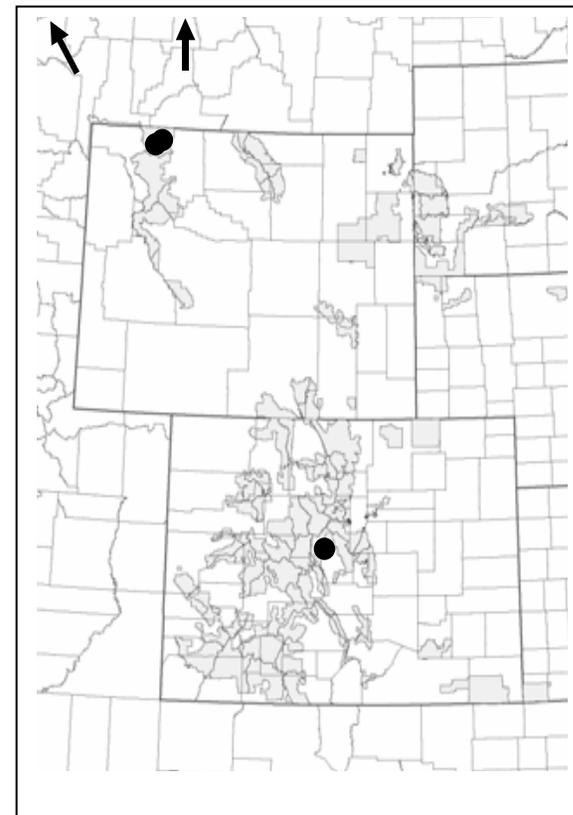
COLORADO NF/NG		K	L	NEBRASKA NF/NG		K	L	WYOMING NF/NG		K	L
Arapaho-Roosevelt NF				Samuel R. McKelvie NF				Shoshone NF	K		
White River NF				Halsey NF				Bighorn NF			
Routt NF				Nebraska NF				Black Hills NF			
Grand Mesa Uncompahgre Gunnison NF				Ogalala NG				Medicine Bow NF			
San Juan NF				SOUTH DAKOTA NF/NG				Thunder Basin NG			
Rio Grande NF				Black Hills NF				KANSAS NF/NG			
Pike-San Isabel NF	K			Buffalo Gap NG				Cimarron NG			
Comanche NG				Ft. Pierre NG							
Pawnee NG											

**Taxonomy.** All botanists recognize this as a species, *Salix myrtillifolia* Andersson. The Central and Southern Rocky Mountain populations are var. *myrtillus*.

**Discussion.** With only two small, widely separated occurrences in R2, and vulnerable habitat, *Salix myrtillifolia* does seem to have viability concerns in R2. However, we would need a great deal more data about the existing populations, and searches for others, in order to effectively manage this species for its conservation. I suggest a considerably improved inventory of wetlands on National Forests, to include a complete species list and preliminary ecological studies at each site.

### References

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