ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: ***Spiranthes magnicamporum*** **Sheviak Great Plains lady's-tresses**

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	B	e ¾ SD, s through e ¾ NE and e ½ KS. [Vouchers at KANU from Barber, Bourbon, Brown, Butler, Cherokee, Coffey, Harper, Johnson, Kingman, Marshall, Pottawatomie, and Stafford Cos, KS; Antelope, Blaine, Dawson, Garden, Holt, Keya Paha, Lancaster, Lincoln, Madison, Merrick, Morrill, and Rock Cos, NE; and Davison, Hamlin, and Todd Cos, SD.] Status: G4; SD SU Confidence in Rank **High** or Medium or Low	• Freeman in prep. • Sheviak 1982
2 Distribution outside R2	B	Broadly distributed in the central US, from e ½ ND, s through e ¾ SD, e ¾ NE, e ½ KS and OK (excluding panhandle); thence n and e through ne-most AR, s ¾ MO, n-central KY, and s-central OH, to se MI; thence w through WI, MN. Disjunct populations in n-central NM, s TX, w-central GA, and se PA. **Note:** Despite its rather broad geographic distribution, evaluator has assigned species rank B because it appears that the greatest concentration of both herbarium specimens and remaining habitat are found within the e ¼ of R2. Confidence in Rank **High** or Medium or Low	• Freeman in prep. • Niemann 1986 • Sheviak 1982
3 Dispersal Capability	B	Evaluator was unable to find any direct information about species' dispersal capability. Species produces tiny, wind-borne seeds and may be a good colonizer of suitable habitat from some distance. Confidence in Rank High or **Medium** or Low	
4 Abundance in R2	B	Species is frequent in upland tallgrass prairie remnants throughout the e ¼ of R2. However, most of these occur as small, isolated fragments and it is not know whether existing populations are large enough to remain viable over a long period. Certainly, individual populations are subject to local extinction, due to some management practices, such as cultivation or grazing by livestock. Confidence in Rank **High** or Medium or Low	
5 Population Trend in R2	D	Evaluator was unable to find any information about population trends within R2. Species is frequent in upland tallgrass prairie remnants throughout the e ¼ of R2. However, most of these occur as small, highly isolated fragments. It is not known whether existing populations are large enough to remain viable or whether current management practices serve to creat new habitat [see sect 6]. Confidence in Rank High or Medium or **Low**	
6 Habitat Trend in R2	A/B	[Habitat description adapted from Sheviak.] Essentially restricted to regions of tallgrass prairie, on xeric (in e part of range), to mesic (in c part of range), to wet-mesic (in w part of range), uniformly calcareous to subalkaline, loamy or sandy soils. Sheviak characterizes the complex to which species belongs as essentially a group of heliophilic, early successional species, with populations colonizing disturbed areas, persisting for a number of years, and then gradually declining. Some management practices, such as annual mowing or haying, serve to enhance habitat and lengthen the life of individual populations. The fact that species is common in annually mowed, upland, tallgrass prairies in e KS would seem to bear Sheviak's description out, although evaluator has not noticed species to be an effective colonizer of highly disturbed grasslands (eg, CRP fields and restored prairies). Ostlie et al. report that, throughout the Great Plains, 96% of the native tallgrass prairies have been destroyed; what remains is mostly as small, highly isolated fragments. Current habitat trends are unknown to evaluator. Confidence in Rank **High** or Medium or Low	• Ostlie et al. 1997 • Sheviak 1982

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7 Habitat Vulnerability or Modification	B	See habitat description and comments in sect 6. Species is reported to benefit from low levels of disturbance, but likely does not benefit from severe disturbance, such conversion of habitat to cropland or heavy grazing by livestock. Confidence in Rank **High** or Medium or Low	
8 Life History and Demographics	B	Perennial forb. Flowering and fruiting late August through late October. Members of the complex to which species belongs are reported pollinated by bumble-bees (*Bombus*). Species' success in any given locality may depend on availability of habitat for pollinator, but further study is required. Confidence in Rank **High** or Medium or Low	• Sheviak 1982

Evaluator:
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National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY (L)[1] to occur:

Colorado NF/NG	Known	Likely	Kansas NF/NG	Known	Likely	Nebraska NF/NG	Known	Likely	South Dakota NF/NG	Known	Likely	Wyoming NF/NG	Known	Likely
Arapaho-Roosevelt NF			Cimmaron NG			Samuel R.McKelvie NF		X	Black Hills NF			Shoshone NF		
White River NF						Halsey NF		X	Buffalo Gap NG			Bighorn NF		
Routt NF						Nebraska NF			Ft. Pierre NG			Black Hills NF		
Grand Mesa, Uncompahgre, Gunnison NF						Ogalala NG						Medicine Bow NF		
San Juan NF												Thunder Basin NG		
Rio Grande NF														
Pawnee NG														
Pike-San Isabel NF														
Comanche NG														

REFERENCES

Freeman, C.C. (in prep.) Checklist of the Vascular Plants of the Grassland Biome of Central North America.

[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.

Niemann, D. 1986. The distribution of orchids in Iowa. *Proc. Iowa Acad. Sci.* 93: 24–34.
Ostlie, W.R., R.E. Schneider, J.M. Aldrich, T.M. Faust, R.L.B. McKim and S.J. Chaplin. 1997. *The Status of Biodiversity in the Great Plains*. The Nature Conservancy. Arlington, Virginia. xii + 326 pp.
Sheviak, C.J. 1982. Biosystematic study of the *Spiranthes cernua* complex. *New York State Mus. Bull.* 448: vi + 48 pp.