

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Pellaea glabella* Mett. ex Kuhn var. *simplex* Butters/smooth cliffbrake/PEGLS2 Global status: **G5T4?**

[Synonyms: *Pellaea glabella* Mett. ex Kuhn ssp. *simplex* (Buters) A.&D. Love; *Pellaea suksdorfiana* (Butters); *Pellaea occidentalis* (E. Nels.) Rydb, ssp. *simplex* (Butters) Gastony; *Pellaea atropurpurea* (L.) Link var. *simplex* (Butters) Morton

Taxonomic discussion: Flora of N America describes *Pellaea glabella* as including 4 geographically and genetically isolated taxa that they treat as subspecies. The few morphologic features that distinguish these taxa are subtle and environmentally plastic (spore count in sporangia necessary in overlapping geographic locations, which do not occur over a large area)

| Criteria | Rank | Rationale | Literature Citations |
|------------------------------|------|---|--|
| 1 Distribution within R2 | A | S1 in WY, S2 in CO 4 documented locations in CO; 3 locations in WY (Black Hills and Teton Range) Confidence in Rank High | <ul style="list-style-type: none"> • NatureServe, 2001 • CO NHP records • State Species Abstract, WYNDD, 2000 |
| 2 Distribution outside R2 | B | Reported from WA, ID, MT, NV, UT, AZ, NM In Canada: S2 in AB, reported for BC Distribution is discontinuous, occurring in southern British Columbia to southern WA, and in northern UT to central AZ, northern NM, southern WY, and northwestern CO – with a gap in the intervening states Confidence in Rank Medium | <ul style="list-style-type: none"> • NatureServe, 2001 • Tryon, 1957 |
| 3 Dispersal Capability | B | PEGLS2 is a perennial fern with crowded fronds that reproduces by spores (alternating generations characteristic of ferns). Little is known about this taxa's dispersal capability, but its current unusual (discontinuous) range is thought to be a result of independent hybrid origins in the two isolated regions where the parent taxa were contiguous Confidence in Rank Medium | <ul style="list-style-type: none"> • State Species Abstract, WYNDD, 2000 • Tryon, 1957 |
| 4 Abundance in R2 | A | PEGLS2 is described in WYNDD List of Species of Special Concern as being rare in abundance in WY. Records from CO are also very limited. Confidence in Rank High | <ul style="list-style-type: none"> • WYNDD, List of Species of Special Concern, 1999 • CO NHP records |
| 5 Population Trend in R2 | D | Population trend described by WYNDD as unknown; no information from other areas Confidence in Rank High | <ul style="list-style-type: none"> • WYNDD, List of Species of Special Concern, 1999 |

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| 6 Habitat Trend in R2 | D | Habitat described as cliffs and ledges, usually on limestone. Elevation range: 900-3000m Habitat trend unknown Confidence in Rank High | <ul style="list-style-type: none"> • WYNDD, List of Species of Special Concern, 1999 • State Species Abstract, WYNDD, 2000 |
| 7 Habitat Vulnerability or Modification | D | WYNDD describes Intrinsic Vulnerability as "Moderate" Confidence in Rank High | <ul style="list-style-type: none"> • WYNDD, List of Species of Special Concern, 1999 |
| 8 Life History and Demographics | D | There is insufficient research available to determine the reasons for the rarity of this taxon's known presence - life history issues or edge of range issues or ??? and in what combination of impacts? Confidence in Rank High | |
| Initial Evaluator(s): Beth A. Burkhardt, Botanist – Species Conservation Project/Black Hills NF | | | Date: 09/13/2002 |

References:

Tryon, A.F.1957. A revision of the fern genus *Pellaea* section *Pellaea*. Ann. Missouri Bot. Gard. 44:125-193.

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

| <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 |
| | | Cimmaron NG | | Samuel R.McKelvie NF | | Black Hills NF | | Shoshone NF | |
| | | | | Halsey NF | | Buffalo Gap NG | | Bighorn NF | |
| | | | | Nebraska NF | | Ft. Pierre NG | | Black Hills NF | K |
| | | | | Ogalala NG | | | | Medicine Bow NF | |
| | | | | | | | | Thunder Basin NG | |
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NOTE: ALSO known from Targhee NF

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.