

CANDIDATE ASSESSMENT AND LISTING PRIORITY ASSIGNMENT FORM

SCIENTIFIC NAME: *Aliciella cespitosa* (spelling correction), *Gilia caespitosa*

COMMON NAME: Rabbit Valley gilia, Wonderland alice-flower (preferred common name)

LEAD REGION: Region 6

INFORMATION CURRENT AS OF: February 11, 2003

STATUS/ACTION:

New candidate

Continuing candidate

Non-petitioned

Petitioned - Date petition received: ____

90-day positive - FR date: ____

12-month warranted but precluded - FR date: ____

Listing priority change

 Former LP: ____

 New LP: ____

Latest date species first became a Candidate: 1975

Candidate removal: Former LP: ____ (Check only one reason)

A - Taxon more abundant or widespread than previously believed or not subject to a degree of threats sufficient to warrant issuance of a proposed listing or continuance of candidate status.

F - Range is no longer a U.S. territory.

M - Taxon mistakenly included in past notice of review.

N - Taxon may not meet the Act's definition of *A*species.@

X - Taxon believed to be extinct.

ANIMAL/PLANT GROUP AND FAMILY: Flowering plant - *Polemoniaceae*

HISTORICAL STATES/TERRITORIES/COUNTRIES OF OCCURRENCE: Utah

CURRENT STATES/COUNTIES/TERRITORIES/COUNTRIES OF OCCURRENCE: Utah - Wayne County

LEAD REGION CONTACT: Chuck Davis, (303) 236-7400, extension 235

LEAD FIELD OFFICE CONTACT: Larry England, Salt Lake City, Utah, (801) 975-3330, extension 138.

BIOLOGICAL INFORMATION: *Aliciella cespitosa* is known from 15 populations scattered over a distance of about 30 km (20 miles) near the Fremont River from the northern portion of the Water Pocket Fold westward to Rabbit Valley in Wayne County, Utah, an area locally known as Wayne Wonderland. The species is most commonly found on fine to course textured,

easily eroded, light colored, sandy geological formations. The species populations can be grouped into two meta-populations. The western 6 populations in the vicinity of Teasdale, Utah, comprise the Rabbit Valley meta-population numbering about 5,000 individuals. The eastern 9 populations near Fruita, Utah, comprise the Capitol Reef meta-population numbering about 1,000 individuals.

THREATS:

A. The present or threatened destruction, modification, or curtailment of its habitat or range.

Some populations are near frequently traveled roads and trails and are subject to human and off-road vehicle trampling. All populations are associated with sandstone outcrops with the potential for sand and sandstone quarrying. Some sites are near road, trail and utility corridors and are vulnerable to habitat disturbance associated with the use and maintenance of these facilities. Mining and mining claim assessment work for gypsum threatens the species largest population near Teasdale.

B. Overutilization for commercial, recreational, scientific, or educational purposes.

Collection of plants and seeds is a significant threat due to the desire of rock-garden enthusiasts to obtain this very attractive cushion plant. The seeds of *A. caespitosa* are advertised for sale in rock-gardening catalogs for the price of one dollar per seed. Few seeds are produced by wild plants (see factor E below). Should their locations become commonly known their populations could become devastated from excessive collection.

C. Disease or predation.

Some populations occur within active grazing allotments and along stock driveways. The species may be subject to trampling. It is not generally grazed.

D. The inadequacy of existing regulatory mechanisms.

No Federal or State laws or regulations specifically protect *A. caespitosa*. The Forest Service and the Bureau of Land Management administratively recognize this species for special management consideration, but do not have the legal authority to require Federal mineral lease holders to modify their mineral recovery plans and on-the-ground actions solely to protect this species. The Park Service provides protection of all natural resources within National Parks and has the authority to protect the species from all of its human caused threats. However, the National Park populations in Capitol Reef comprise about 1/6 of the Species total population. The Rabbit Valley populations on Bureau of Land Management managed public are more robust but have less protection from threats to the species habitat and to the species directly. The Forest Service has minimal populations, about 100 individuals, on its public lands. The FWS, NPS, BLM and Forest Service have signed a conservation agreement. The FWS will monitor the agreement over the next 2 years before removing candidate status.

E. Other natural or manmade factors affecting its continued existence.

Aliciella cespitosa is reproductively depressed. The entire population has very low natural recruitment. Low seed production, germination rate, and high seedling mortality threatens to decrease the species' overall range and abundance (C. Dawson, 1995, pers. comm., Denver Botanical Garden, Denver, Colorado; M. Porter, 1995, pers. comm., Rancho Santa Ana Botanical Garden, Claremont, California). Pesticide use in fields near Torrey, Teasdale, and Bicknell and in pioneer era orchards within Capitol Reef National Park may impact pollination by adversely affecting the species pollinator(s), which remains unknown.

FOR RECYCLED PETITIONS: N/A

LAND OWNERSHIP: More than 80 percent of the species population is found on lands managed by the Bureau of Land Management. About 15 percent is found within Capitol Reef National Park. Less than 5 percent is found on U.S. Forest Service and private lands.

PRELISTING: The Service and Federal land managing agencies have developed a conservation agreement for this species.

REFERENCES:

- Gray, A. 1876. Revision of North American Polemoniaceae. Proc. of the Amer. Acad. of Arts and Sciences. 8:247-282.
- Porter, J.M. 1993. Phylogenetic Relationships within *Gilia* section *Giliandra*. Ph.D. Dissertation. University of Arizona.
- Porter, J.M. 1998. *Aliciella*, A Recircumscribed Genus of Polemoniaceae. *Alisio*, 17(1), pp. 23-46
- Porter, J.M., and K.D. Heil. 1994. Status of *Gilia Caespitosa*. Unpublished Report on file with the Bureau of Land Management, Richfield, Utah. 31 pp. + xv
- Porter, J.M., K.D. Heil, and W.H. Romme. 1989. Patterns of endemism at Capitol Reef National Park. Unpublished report on file with National Park Service, Torrey, Utah.
- Shultz, L., and J. Shultz. 1984. Status Report Recommendations for *Gilia Caespitosa* A. Gray (Polemoniaceae). Unpublished report on file with the U.S. Fish and Wildlife Service, Denver, Colorado. 14 + iii pp.
- Wilken, D.H. 1979. The Taxonomic Status of *Gilia caespitosa*. *Madrono* 26. 91-95.

LISTING PRIORITY (place * after number)

THREAT

Magnitude	Immediacy	Taxonomy	Priority
High	Imminent	Monotypic genus	1
		Species	2
		Subspecies/population	3
	Non-imminent	Monotypic genus	4
		Species	5
		Subspecies/population	6
Moderate to Low	Imminent	Monotypic genus	7
		Species	8
		Subspecies/population	9
	Non-imminent	Monotypic genus	10
		Species	11*
		Subspecies/population	12

Rationale for listing priority number:

Magnitude: The threats to this highly endemic species are moderate and are being managed by the BLM and NPS. The NPS populations are considered secure due the inherent nature of National Park status of that portion of its habitat. The BLM populations are inherently more vulnerable due to the multiple use nature of Federal lands managed by BLM. An interagency Conservation Agreement is in place for this species.

Imminence: The most severe potential threats are habitat degradation of its none National Park Habitat. This threat is currently being monitored and precluded by proactive management by the BLM.

APPROVAL/CONCURRENCE: Lead Regions must obtain written concurrence from all other Regions within the range of the species before recommending changes to the candidate list, including listing priority changes; the Regional Director must approve all such recommendations. The Director must concur on all additions of species to the candidate list, removal of candidates, and listing priority changes.

Approve: Ralph O. Morgenweck April 1, 2003
Regional Director, Fish and Wildlife Service Date

Concur: _____
Director, Fish and Wildlife Service Date

Do not concur: _____
Director, Fish and Wildlife Service Date

Director's Remarks:

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Date of annual review: April 11, 2003

Conducted by: Larry England

Comments:

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