

CANDIDATE ASSESSMENT AND LISTING PRIORITY ASSIGNMENT FORM

SCIENTIFIC NAME: *Phacelia submutica*

COMMON NAME: DeBeque phacelia

LEAD REGION: 6

INFORMATION CURRENT AS OF: March 27, 2002

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: _____

Candidate removal: Former LP: ____

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 ESA=s definition of "species."

X - Taxon believed to be extinct.

ANIMAL/PLANT GROUP AND FAMILY: *Hydrophyllaceae*

HISTORICAL STATES/TERRITORIES/COUNTRIES OF OCCURRENCE: Colorado.

CURRENT STATES/COUNTIES/TERRITORIES/COUNTRIES OF OCCURRENCE:
Colorado.

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

LEAD FIELD OFFICE CONTACT: Terry Ireland, (970) 243-2778, Grand Junction, Colorado

BIOLOGICAL INFORMATION: DeBeque phacelia is a low growing annual plant with light yellow or cream-colored tube-shaped flowers, often with a purple tinge, in crowded racemes. Stems are often deep red and more or less hairy with straight and fairly stiff hairs. The elliptic-oblong, obtuse, and cuneate leaves typically become reddish at maturity and occur in a small rosette 2 to 5 centimeters (0.8 to 2 inches) across and tall (O'Kane 1987).

DeBeque phacelia occurs on moderately steep exposures of clay derived from the Atwell Gulch and shire members of the Wasatch Formation (O'Kane 1987). The species is limited to soils with a high clay content. The plant is a narrow endemic, with populations known only from suitable clay (adobe) soils in Mesa and Garfield Counties, Colorado. The species sometimes grows on what appears to be very steep slopes; however, individuals are found on small benches and on ridge tops where the slope is less.

There are about 50 populations of this species. In a given year, a population may produce no individual plants, or it may produce thousands. Populations of the species are small, and all known populations are less than 5 acres. Most of the known populations occur on lands managed by the Bureau of Land Management. A few populations occur on Forest Service lands, and some populations are on private land.

THREATS:

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

This plant has a very narrow distribution, occurring in just two Counties in Colorado. Domestic livestock grazing, OHV use, reservoir development, and weed invasion are potential threats.

This species is limited to a very small area and occurs on a specialized substrate. The occurrence of the species' habitat coincides with high quality oil and gas reserves, especially in Coon Hollow and Sulphur Gulch. Some populations may have already been impacted.

Although plants apparently are not eaten by herbivores, the presence of herbivores is detrimental in that the species cannot tolerate habitat trampling. Trampling probably increases site compaction and erosion and alters the microhabitat the species prefers. Trampled sites do not exhibit the cracked soil surface seen at other sites.

Populations above the Dry Fork of Roan Creek will be impacted by the proposed Roan Creek Reservoir (this reservoir is now being considered as a source of water for Las Vegas, Nevada). Road improvements needed to handle increased recreational traffic associated with Roan Creek Reservoir could affect several populations.

The OHV use is a potential impact to the species. The OHV use occurs on BLM lands in the area now and could increase in the future. Tire tracks were located within the habitat. Weed invasion also is a potential threat.

Individual populations are susceptible to extirpation from stochastic variations in population demographics because--(1) the species is an annual, (2) its population size (number of individuals) varies widely from year to year, and (3) population size in acres is small.

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

Overutilization does not appear to be a threat; however, small populations could be adversely affected by scientific collection, especially in years when few individuals germinate and grow.

Collection in a poor year could have an irreversible adverse affect on demographics.

C. Disease or predation.

None known.

D. The inadequacy of existing regulatory mechanisms.

Because the species is not listed as either Threatened or Endangered by the Fish and Wildlife Service, it receives no legal protection from federal statutes. Colorado has no rare plant protection legislation. Currently no habitat protection exists.

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

Populations along county roads could be sprayed with herbicides.

BRIEF SUMMARY OF REASONS FOR REMOVAL OR LISTING PRIORITY CHANGE:
NA

FOR RECYCLED PETITIONS: NA

- a. Is listing still warranted? __
- b. To date, has publication of a proposal to list been precluded by other higher priority listing actions? __
- c. Is a proposal to list the species as threatened or endangered in preparation? ____
- d. If the answer to c. above is no, provide an explanation of why the action is still precluded.

LAND OWNERSHIP: Most of the plant population occur on Federal land, but some are on private land.

PRELISTING: The status of and threats to this species have changed since publication of the 1987 status report, and its designation as a category 1. Nearly twice the number of populations are now known, and oil shale development is not expected to occur without a significant increase in the price of crude oil. The Colorado Rare Plant Technical Committee should review the status of this species immediately.

There was no monitoring, research, or other prelisting conservation activities conducted for the DeBeque phacelia in 2001. Consequently, there=s no information to suggest or refute removing the species from the candidate list nor changing the listing priority. Therefore, the DeBeque phacelia should be retained at a listing priority of 11.

REFERENCES:

Status Report. 1987: Coordination with the Bureau of Land Management, Grand Junction, Colorado; Dr. Lucy Jordan, Ecological Services, Salt Lake City, Utah.

LISTING PRIORITY

THREAT

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

Rationale for listing priority number:

Magnitude:

Imminence:

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
Regional Director, Fish and Wildlife Service

April 1, 2003
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: March 27, 2002

Conducted by: Terry Ireland

(Rev. 7/02)