

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDPGN082P8

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

- NAME:** *Eriogonum heermannii* var. *argense* (M. E. Jones) Munz
- COMMON NAME:** Heermann's wild buckwheat, Heermann's rough wild buckwheat
- SYNONYMS:** *E. sulcatum* S. Watson var. *argense* M. E. Jones. Lectotype: *E. howellii* S. Stokes var. *argense* (M. E. Jones) S. Stokes. *E. heermannii* subsp. *argense* (M. E. Jones) Munz; *E. apachense* Reveal; *E. howellii* S. Stokes; *E. howellii* var. *subracemosum* S. Stokes; *E. heermannii* Durand & Hilg. var. *subracemosum* (S. Stokes) Reveal.
- FAMILY:** Polygonaceae (Eriogonoideae = Subfam.)
- AUTHOR, PLACE OF PUBLICATION:** (M. E. Jones) Munz, *Aliso* 4: 89. 1958. (*E. sulcatum* S. Watson var. *argense* M.E. Jones, *Contr. W. Bot.* 11: 15. 1903).
- TYPE LOCALITY:** LT: Argus Mountains, Inyo Co., California, 5 May 1898, M. E. Jones (s.n.).
- TYPE SPECIMEN:** Lectotype: POM, M. E. Jones (s.n.) 5 May 1898, designated by Reveal in L. W. Lenz, Marcus E. Jones: 437. 1896.
- TAXONOMIC UNIQUENESS:** A very large genus, with 54 species recognized by Lehr (1979) as occurring in Arizona. According to NatureServe (2003), this plant is considered a variety of *E. heermannii* (Kartez); formerly treated as a distinct species (Kartesz 1994; Reveal 1989, checklist).
- DESCRIPTION:** Low spreading to rounded perennial shrub, with sparse to dense branches, measuring 1-10 x 2-10(-12) dm. Leaf blades are linear to linear-lanceolate or oblanceolate, to elliptic or oblong, measuring 0.5-1.2(-1.5) x 0.1-0.6 cm. They are tomentose or glabrous abaxially. The inflorescences typically measure (1-)3-20 x (1-)3-25 cm; branches diffuse with racemously arranged involucre at tips, are slender to stout, round, smooth, glabrous, scabrelous, or infrequently papillate-scabrous, infrequently somewhat spinose. Involucres are narrowly turbinate to campanulate, 0.9-1.8 x 0.7-1.3 mm long. The flowers perianth are white to yellowish white or reddish, 1.5-4 mm. (FNA, eFloras.org, 2007).
- AIDS TO IDENTIFICATION:** "The scabrelous condition of the inflorescence branches of this variety can be obscure, occasionally leading to its mididentification as var. *heermannii*. The flowering stems and inflorescence branches are always rounded, not angled or ribbed as

in var. *sulcatum*, but the latter condition is sometimes difficult to see, resulting in plants of that variety being misidentified as var. *argense*. Specimens from above the Little Colorado River, and along the Colorado River near the mouth of the Little Colorado, with stout, often pointed branches have been distinguished as var. *subracemosum*. They are low, spreading, and usually sparsely branched, unlike the typical expressions of var. *argense* on the cliff faces above the Colorado River on and to the east of the Kaibab Plateau. The disjunct *Eriogonum apachense* of gypsophilous outcrops northwest of Bylas in Graham County, Arizona, differs little from plants found on limestone ledges and slopes in the White Hills of Yavapai County. By and large, the involucre of typical *E. apachense* are narrowly turbinate, the leaf blades remain tomentose on the abaxial surface, and the inflorescence branches are decidedly more slender. The reduction of *E. apachense* seems justified, resulting in a var. *argense* that is highly variable but nonetheless easy to distinguish.”

ILLUSTRATIONS:

Color Photos (J. Anderson, M. Baker, in JL Reveal Slides, <http://life.umd.edu/emeritus/reveal/pbio/revealslides/> accessed 2007)

General Aspect Drawings (Reveal 1969: 223-224)

Line drawing and color photo of syn. *E. apachense* (In Falk et al. 2001)

Color photo (Dean Wm. Taylor, 1980, in CalPhotos, <http://calphotos.berkeley.edu>)

Color photos of plant and habitat by K. Warren (in A Field Guide to the Special Status Plants of the Grand Canyon, <http://www.nps.gov/grca/>, 2003)

TOTAL RANGE: A widespread variety, found in the Mohave Desert from Inyon County south through San Bernardino County to northern Riverside County, California, eastward across Nevada in northern Clark, Esmeralda, Lincoln, Nye, and White Pine counties, into Coconino, Mohave, and Navajo counties in Arizona. In addition, it just enters the Sonoran Desert in Yavapai County, Arizona, and is disjunct farther to the east in Graham and Gila counties.

RANGE WITHIN ARIZONA: Coconino, Mohave, Navajo counties, and just into Yavapai County and in disjunct populations in Graham and Gila counties farther to the east. According to FNA (eFloras.org, 2007), “A population near Vail (Gila County) sampled by M. E. Jones in 1903 (DS, POM, US) has not been rediscovered, although the variety is known from pueblo Canyon in the Sierra Ancha (Wagner 320, DUKE).”

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Herbaceous perennial shrub.

PHENOLOGY: Flowers April to November.

BIOLOGY:

HABITAT: Throughout its range, they can be found on limestone (rarely volcanic) cliffs, outcrops, and washes, or on gypsophilous outcrops, saltbush, blackbrush, sagebrush, and mountain mahogany communities, pinyon-pine and montane conifer woodlands. (FNA, eFloras.org, 2007).

ELEVATION: Throughout its range, they are found at elevations from 800-2800 m (2,625-9,186 ft). (FNA, eFloras.org, 2007).

EXPOSURE: Various.

SUBSTRATE: Limestone, or gypsophilous outcrops

PLANT COMMUNITY:

POPULATION TRENDS: Throughout its range, var. argense is widespread and occasionally locally common. Trends are unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: [syn. *E. apachense* - None (USDI, FWS 1996)]
[syn. *E. apachense* - C2 USDI, FWS 1993]
[syn. *E. apachense* - C2 USDI, FWS 1992 Region 2 List]
[syn. *E. apachense* - C2 USDI, FWS 1985, 1990]
[syn. *E. apachense* - C1 USDI, FWS 1980]

STATE STATUS: [syn. *E. apachense* - Salvage Restricted (ARS, ANPL 1999)]
[syn. *E. apachense* - Salvage Restricted (ARS, ANPL 1993)]

OTHER STATUS: [syn. *E. apachense* - Not Forest Service Sensitive (USDA, FS Region 3 1999)]
[syn. *E. apachense* - Forest Service Sensitive (USDA, FS Region 3 1990)]

MANAGEMENT FACTORS:

CONSERVATION MEASURES TAKEN:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: BIA - San Carlos Apache Reservation; USFS - Coconino National Forest. Unverified collection from Pueblo Canyon, Sierra Ancha Mountains on the Tonto National Forest.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

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Dr. Barbara G. Phillips - USFS Zone Botanist, Coconino National Forest, Flagstaff, Arizona.

ADDITIONAL INFORMATION:

Eriogonum is from a Greek word meaning wooly knees, from the hairy nodes on some species. *heermannii* honors Adolphus Lewis Heermann, 1827-1865, an ornithologist and surgeon-naturalist who collected plants in California.

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