

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

Plant Abstract

Element Code: PDPGN08230

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Eriogonum ericifolium* Torr. & A. Gray
COMMON NAME: Yavapai County buckwheat, Heather-leaf wildbuckwheat, Heathleaf wild buckwheat, Yavapai buckwheat, Yavapai County buckwheat
SYNONYMS: *Eriogonum mearnsii* Parry, *E. microthecum* Nuttall subsp. *ericifolium* (Torrey & A. Gray) S. Stokes, *E. fasciculatum* Benth. var. *ericifolium* (Torr. & Gray) M.E. Jones
FAMILY: Polygonaceae

AUTHOR, PLACE OF PUBLICATION: *Eriogonum ericifolium* Torr. & A. Gray, Proc. Amer. Acad. Arts Sci. 8: 170. 1870. (as ericaefolium).

TYPE LOCALITY: USA, Arizona, Fort Whipple.

TYPE SPECIMEN: HT: GH. Coues & Palmer 581, 25 Sep 1865. IT: MO.

TAXONOMIC UNIQUENESS: In 2004, Reveal elevated both *E. ericifolium* and *E. pulchrum* to species level, following Shultz' designation of *E. thornei* to species status (Shultz 1998, FNA 1993+). Previously, these were all varieties of *E. ericifolium*. *E. ericifolium* is 1 of roughly 250 species in the genus.

DESCRIPTION: A low spreading and matted subshrub, not scapose, 0.5-1.5 x 0.8-2.5(-3) dm [2-6 x 3-10(-12) in], very leafy throughout, mostly floccose or glabrous, greenish. Spreading stems with persistent leaf bases, up to ¼ height of plant; caudex stems absent or compact; aerial flowering stems spreading to erect, slender, solid, not fistulose, 3-10 mm, floccose to thinly tomentose. Leaves cauline, 1 per node or fasciculate; petiole 1-1.5 mm, tomentose; blade linear, 6-10 x 1-2 mm, densely white-tomentose below, glabrous and green above, margins revolute. The inflorescence is umbellate-cymose to cymose and compact, 5-10 x 5-20 mm; branches usually dichotomous proximally; bracts 3, scale-like, linear, 0.5-1.5 mm. Peduncles absent. Involucres 1 per node, turbinate, 1.5-3 x 1-2 mm, floccose; teeth 5, erect. Flowers are white to pink or rose, glabrous, 2-3 mm long; the outer tepals obovate, 2 mm wide, the inner oblanceolate, 0.8-1 mm; stamens slightly exerted, 2-3 mm; filaments pilose proximally. Achenes light brown, 2-2.5 mm, glabrous except for papillate beak. (Reveal, 1976; FNA 1993+).

AIDS TO IDENTIFICATION: In *Eriogonum pulchrum*, the upper surfaces of the leaves, the young twigs, and the involucres are whitish and floccose-pubescent (McDougall, 1973). "The

species is distinctive, yet some plants appear to approach *E. microthecum* var. *simpsonii*.” (FNA 1993+).

ILLUSTRATIONS:

TOTAL RANGE: Endemic to a small area of central Arizona.

RANGE WITHIN ARIZONA: Known only from the Verde Valley in Yavapai County. In 2002, R.B. Duncan reported and collected this plant (ARIZ s.n.) from Pima County, Cienega Creek (Duncan and Reveal 2003). However, these plants were later found to represent a new species, *Eriogonum terrenatum*.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial subshrub.

PHENOLOGY: Flowers from August – October (November).

BIOLOGY:

HABITAT: Dry, gravelly to rocky slopes of lacustrine, in mixed grasslands, chaparral and oak-woodlands.

ELEVATION: 2,950 – 3,470 ft (900-1058 m)

EXPOSURE: All

SUBSTRATE: Limestone and gypsum; lacustrine silt. Verde formation.

PLANT COMMUNITY: Mixed grasslands, chaparral and oak-woodlands (FNA 1993+). Creosotebush desertscrub up to pinyon-juniper woodland. Associated species include: *Acacia greggii* (catclaw acacia), *Aristida* (three-awn grass), *Aristida purpurea* (purple three-awn grass), *Berberis* (barberry), *Bouteloua curtipendula* (side-oats grama), *Canotia holacantha* (crucifixion-thorn), *Castilleja integra* (whole-leaf Indian-paintbrush), *Coryphantha* (= *Escobaria*) *vivipara* (foxtail pincushion cactus), *Dalea* (prairie-clover), *Eriogonum microthecum* (slender buckwheat), *Gutierrezia* (snakeweed), *Juniperus* (juniper), *Krameria erecta* (littleleaf ratany), *Larrea tridentata* (creosote bush), *Opuntia leptocaulis* (Desert Christmas cactus), *Purshia stansburiana* (Stansbury cliff-rose), *Salvia dorrii* (gray ball sage), and *Stipa neomexicana* (New Mexico needlegrass).

POPULATION HISTORY AND TRENDS: Rare and locally common, in the Verde River Valley of Yavapai County, Arizona.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS: Forest Service Sensitive
(USDA, FS Region 3 1999)

MANAGEMENT FACTORS: *Eriogonum ericifolium* may suffer from development in the Verde Valley, which has experienced an 82% population growth between 1990 and 2015 (Cottonwood Chamber of Commerce 2020). Open land has been reduced in the Cottonwood area, which led to the designation of the Verde Valley Botanical Area, intended to preserve habitat for *Purshia subintegra* and US Forest Service sensitive species.

PROTECTIVE MEASURES TAKEN: In 2019, surveys for *E. ericifolium* were conducted in the Burro Creek, Horseshoe Lake, and Chalk Mountain areas, as these areas support plants and geology features associated with *E. ericifolium* in the Verde Valley. Although no new populations were found, these surveys support the idea that this taxon is a narrow edaphic endemic to the Verde Valley (Rink and Embrey 2020).

SUGGESTED PROJECTS: Monitor known populations in the Verde Valley if development continues at the current rate.

LAND MANAGEMENT/OWNERSHIP: BIA – Camp Verde Reservation; NPS – Montezuma Castle National Monument; USFS – Apache-Sitgreaves, Coconino, and Prescott National Forests; State Land Department; Private.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

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ADDITIONAL INFORMATION:

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