

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDPGN086U6

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Eriogonum umbellatum* var. *juniporinum*

COMMON NAME: Juniper Buckwheat, Juniper sulphur flower

SYNONYMS:

FAMILY: Polygonaceae

AUTHOR, PLACE OF PUBLICATION: Reveal, James Lauritz. Great Basin Naturalist 45(2): 279-280. 1985.

TYPE LOCALITY: Nevada, White Pine Co., along Hwy 50-6 at Sacramento Pass, north of the Snake Range, about 11 miles northwest of Baker. On sandy soil, associated with pinyon-juniper and *Artemisia*.

TYPE SPECIMEN: The New York Botanical Garden: NY323627. J.L. Reveal (3925). August 13, 1975.

TAXONOMIC UNIQUENESS: *Eriogonum* is a very large genus with more than 470 species and varieties reported by NatureServe. *E. umbellatum* itself has 19 varieties, two of which, *juniporinum* and *cognatum*, occur in Arizona.

DESCRIPTION:

Subshrubs or shrubs, mostly spreading to erect, 4-8 × 5-10 dm. **Aerial flowering stems** erect, 1-2.5 dm, floccose or glabrous, without one or more leaflike bracts ca. midlength. **Leaves** in loose rosettes; blade elliptic, (0.7-)1-2 × (0.3-)0.5-1(-1.2) cm, floccose or glabrous on both surfaces, margins plane. **Inflorescences** compound-umbellate, branched 2-5 times; branches floccose or glabrous, without a whorl of bracts ca. midlength; involucre tubes (2.5-)3-3.5 mm, lobes 1-2.5 mm. **Flowers** (4-)5-6 mm; perianth cream, whitish, or pale yellow to greenish yellow, without large reddish spot on midrib. (Flora of N. America 2013).

AIDS TO IDENTIFICATION: Variety *juniporinum* is most closely related to var. *subaridum*, but immature plants (or specimens without habit information) may be confused with var. *versicolor*. These plants most frequently are seen in San Bernardino County, California, and in White Pine County, Nevada.

ILLUSTRATIONS:

Herbarium Mount: <http://swbiodiversity.org/imglib/seinet/DES/DES00061/DES00061991.jpg>

TOTAL RANGE: Variety *juniporinum* is widespread and infrequent in widely scattered and disjunct populations in isolated desert mountain ranges from southern Utah (Navajo Mountains, San Juan County and Beaverdam Mountains, Washington County) and northwestern Arizona (Kaibab Plateau, Coconino County and Arizona Strip, Mohave County) westward across southern Nevada (Spring Range of Clark County, Mt. Irish and Mormon Range in Lincoln County, and Schell Creek and Snake ranges in White Pine County) to California (southeastern Inyo and northeastern San Bernardino counties, mainly Clark Mountain, Kingston, New York, and Providence ranges, and in the Mid Hills). A collection supposedly from the San Bernardino Mountains of California (*Meebold 20381*, M) surely is mislabeled. (Flora of N America 2013).

RANGE WITHIN ARIZONA: Known from three collections, all since 2008. One from the Kaibab Plateau (south of Jacob Lake), Coconino County, and the other two from the Shivwits Plateau, Lake Mead NRA near Mt Dellenbaugh, Mohave County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Shrub or subshrub, perennial.

PHENOLOGY: Flowering: June to October.

BIOLOGY:

HABITAT: Sandy to gravelly flats and slopes in saltbush and sagebrush communities, pinyon-juniper, and occasionally montane conifer woodlands.

ELEVATION: 4265 – 8200 feet (1300 – 2500m). Arizona collections were made at 5900, 6120 and 8560 feet (1800, 1866, and 2610m, respectively), with the latter exceeding the highest elevation reported in the literature.

EXPOSURE: Not specified.

SUBSTRATE: Sandy to gravelly.

PLANT COMMUNITY: Rangewide, *E. u. juniporinum* occurs in saltbush and sagebrush communities, pinyon-juniper, and occasionally montane conifer woodlands. Collections made in Arizona reported the following associated species: *Juniperus osteosperma*, *Bouteloua gracilis*, *Artemisia tridentata*, *Pinus ponderosa*, *Pinus monophylla*, *Psoralidium tenuiflorum* and *Hymenoxys cooperi*.

POPULATION HISTORY AND TRENDS: Unknown. The species has only been collected from three localities in Arizona, and only since 2008. No population data was

reported for collections. Due to the minimal known locations to date in Arizona, the species is considered critically imperiled.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None.
OTHER STATUS: None.

MANAGEMENT FACTORS: Unknown.

PROTECTIVE MEASURES TAKEN: None. Note that two of three collection localities are with the Lake Mead National Recreation Area.

SUGGESTED PROJECTS: Continue surveys to better ascertain species distribution, and collected information on abundance to better define population attributes.

LAND MANAGEMENT/OWNERSHIP: USNPS (Lake Mead NRA) and USFS (Kaibab NF).

SOURCES OF FURTHER INFORMATION

REFERENCES:

Flora of N. America, accessed 9/10/2013,
http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250060557.
New York Botanical Garden, accessed 9/10/2013,
<http://sweetgum.nybg.org/vh/specimen.php?irn=145182>.
Tropicos, accessed 9/10/2013, <http://www.tropicos.org/Name/26001593>.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION: Plant would make an attractive addition to a garden (Flora of N. America 2013).

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