

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDONA031C0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Camissonia pusilla*
COMMON NAME: Washoe Suncup, Little Wiry Suncup
SYNONYMS: *Oenothera contorta* var. *flexuosa*
FAMILY: Onagraceae

AUTHOR, PLACE OF PUBLICATION: Raven, Peter Hamilton. Contributions from the U.S. National Herbarium 37(5): 312-316. 1969.

TYPE LOCALITY: Nevada. Washoe Co. On sagebrush covered slopes 2.5 miles west of U.S. Hwy 395 on U.S. Hwy 50, 5100 feet. [Label has "Washoe County", Tiehm (1983) states, "This is actually Ormsby Co." which was a pre-1969 county in Nevada.]

TYPE SPECIMEN: Calif. Acad. Sci. CAS 32354 (holotype). P.H. Raven, #17867. May 28, 1962.

TAXONOMIC UNIQUENESS: There are 59 species of *Camissonia* found in the U.S. and Canada, and another 42 subspecies. In Arizona, 25 of these species are found, and 17 of the subspecies. Two species, *C. confertiflora* and *C. specuicola*, are only found in the State.

DESCRIPTION: Slender; hairs glandular, generally also spreading. Stem: erect, 2–22 cm. Leaf: 10–30 mm, linear, minutely serrate. Flower: hypanthium 0.8–1.6 mm; sepals 1.2–2 mm, free; petals 1.8–3.1 mm, yellow fading ± red, basal spots 2. Fruit: 18–32 mm, 0.6–0.9 mm wide, ± swollen by seeds, straight or wavy; pedicel ± 0–2 mm. Seed: 0.7–0.8 mm. (Jepson eFlora, 2015).

AIDS TO IDENTIFICATION: This diploid species is closely similar to the tetraploids *C. parvula* and *C. pubens*, differing from the former in its long, spreading trichomes and well developed basal rosette, and from the latter in its more slender habit, narrower leaves, and smaller flowers and seeds (Raven 1969, p. 316).

ILLUSTRATIONS:

Photos and Herbarium Mounts: <http://eol.org/pages/582829/media>.

Line Drawing: Raven 1969, p. 313.

TOTAL RANGE: California (Cactus Flats, Mohave Desert and Great Basin); Washington State; scattered throughout Nevada; Utah (Beaver, Iron, Washington and Piute Counties); and Arizona.

RANGE WITHIN ARIZONA: There are single collections from Mohave, Coconino, Maricopa and Pinal Counties.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Annual herbaceous plant.

PHENOLOGY: Flowers: May-June, in California (Jepson eFlora 2015), but two Arizona collections also noted flowers in mid- to end of March.

BIOLOGY:

HABITAT: Dry, open to branchy slopes, flats, and roadsides on sandy soil with *Artemisia* to pinyon-juniper. Commonly found growing sympatrically with *Camissonia parvula* and *Camissonia pubens*. Mixed desert shrub, sagebrush, and mountain brush communities (Welsh, 1993).

ELEVATION: 4000 – 6000 feet (1220 to 1830 m) in Utah, Welsh et al 1993. Arizona collections range from 1600 – 4600 feet (490-1400m).

EXPOSURE: Not specified.

SUBSTRATE: Sandy soils. One collection noted the plant was restricted to depressions in soft sandstone where rain water collected.

PLANT COMMUNITY: Mixed desert shrub, sagebrush, and mountain brush communities. One Arizona collection was from the Arizona Upland Sonoran Desert with the following associated species: *Celtis pallida*, *Acacia greggii*, *Ziziphus obtusifolius canescens*, *Cercidium microphyllum*, *Carnegiea gigantea*, *Prosopis velutina*, *Larrea tridentata*, *Acacia*, *Simmondsia chinensis*, *Ericameria laricifolia*, *Fouquieria splendens*, *Calliandra eriophylla*, *Celtis pallida*, *Lycium*, *Sphaeralcea*, *Eriogonum fasciculatum*, *Gutierrezia sarothrae*, *Yucca baccata*, *Echinocereus fasciculatus*, *Opuntia engelmannii*, *Cylindropuntia fulgida*, *C. leptocaulis*, *C. acanthocarpa*, *Ambrosia deltoidea*, *Encelia farinosa*, *Pectocarya*, *Viguiera deltoidea*, *Salvia columbariae*, *Dichelostemma pulchellum*, *Rafinesquia neomexicanum*, *Plantago*, *Eschscholtzia californica mexicana*, *Erodium cicutarium*, *Lupinus sparsiflorus*. Another was from a Chaparral community, with these associated species: *Quercus turbinella*, *Dasyllirion wheeleri*, *Yucca baccata*, *Nolina microcarpa*, *Coryphantha vivipara*, *Opuntia engelmannii*, *Cylindropuntia acanthocarpa*, *Ceanothus greggii*, *Eriodictyon californica*, *Rhus trilobata*, *Agave chrysantha*, *Rhamnus crocea*, *Arctostaphylos*, *Acacia greggii*, *Berberis haematocarpa*,

Juniperus, *Rumex hymenosepalus*, *Eriogonum wrightii*, *Cryptantha*, *Gutierrezia*, *Dichelostemma capitata*, *Erodium cicutarium*, *Lupinus concinnus*, *L. sparsiflorus*, *Castilleja exserta*, *Lotus rigidus*, *Penstemon subulatus*, *Salvia columbariae*.

POPULATION HISTORY AND TRENDS: Unknown for Arizona. There are only four known collection sites. NatureServe considers the plant to be critically imperiled in both Arizona and Utah because of the very few known sites (four and three, respectively). Elsewhere, the plant has a G3 (vulnerable) status, although no abundance data is available.

SPECIES PROTECTION AND CONSERVATION

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

MANAGEMENT FACTORS: None specified.

PROTECTIVE MEASURES TAKEN: None noted. The species has no protected status. Two of the known collection sites within the State occur within a National Park or Wilderness Area.

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: USDI National Park Service – Grand Canyon NP; USDI Bureau of Land Management – Arizona Strip FO (and Paiute Wilderness Area); USDA Forest Service – Tonto National Forest; and Arizona State Trust Land.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Encyclopedia of Life (EOL), accessed 10/22/2015, <http://eol.org/pages/582829/details>.
Jepson eFlora, accessed 10/22/2015, http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=16940.
JStor| Global Plants, accessed 10/22/2015, <http://plants.jstor.org/stable/10.5555/al.ap.specimen.cas0032354>.
NatureServe Explorer, accessed 10/22/2015, <http://explorer.natureserve.org/>.
Raven, Peter H. 1969. A revision of the genus *Camissonia* (Onagraceae). Contributions from the U.S. National Herbarium. 37(5): 161-396.
Tropicos, accessed 10/22/2015, <http://www.tropicos.org/Name/23200693>.
Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins. (Eds.) 1993. A Utah flora. 2nd edition. Brigham Young Univ., Provo, Utah. 986 pp.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

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