

Added to California Rare Plant Rank 2.3 on August 9, 2011**Rare Plant Status Review: *Sarcobatus baileyi*****Proposed New Add to Rank 2.3, G4G5 / S1**

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Changes made to the original document appear in blue text.

Background

Sarcobatus baileyi is a deciduous shrub in the Sarcobataceae (formerly included in the Chenopodiaceae) known from Mono and Inyo counties in California and from western Nevada, where it is common. It was included in the *Flora of North America*, Vol 4, and will be included in *The Jepson Manual, Second Edition* (available online at:

<http://ucjeps.berkeley.edu/tjm2/review/treatments/sarcobataceae.html#43229>). *Sarcobatus baileyi* is distinguished from the only other species in this family and genus, *S. vermiculatus*, by its shorter, pubescent, dull to gray-green leaf blades, clustered leaf arrangement on older twigs, few, minute internodes on short branches containing flowers, shorter staminate spikes, smaller fruits, and wider wings on fruits (*The Jepson Manual, Second Edition*). Originally described as its own species from a Nevada collection (Coville 1892), it was subsequently treated as *S. vermiculatus* var. *baileyi* in Jepson (1914), followed by most regional floras (Behnke 1997). *The Jepson Manual, First Edition* did not include *S. baileyi*. Hybridization can occur, but individuals displaying hybrid characteristics are usually *S. vermiculatus* individuals growing in harsh conditions, or *S. baileyi* individuals growing in very favorable conditions. True hybrids are uncommon and apparently sterile, as the two species are at different ploidy levels (James Morefield pers. comm. 2011, *Flora of North America*, Vol. 4). Since treated as a distinct species in the *Flora of North America*, Vol 4, *S. baileyi* was thought to be a Nevada endemic, however, it was first collected in California in 1945 by Maguire and Holmgren along the "California-Nevada State Line north of Oasis" (#25274, NY541187; Dean Taylor and Jim Morefield pers. comm. 2011). It was re-discovered in California in 2008 (James D. Morefield 5816). *Sarcobatus baileyi* is known to flower in California from April to July.

Flora of North America, Vol. 4, notes that *S. baileyi* occurs on alkaline soils on flats or slopes, in mixed shrublands throughout Nevada. In California it occurs in chenopod scrub, on flat to moderately-sloped sandy-silty alluvium, from 1500 to 1600 meters.

In California, *S. baileyi* is known from only two occurrences in California. One occurrence is in Fish Lake Valley, Mono County along the Nevada border (James D. Morefield 5816). The plant was also recently discovered in the north foothills of the Coso Range in Inyo County (J. Morefield pers. comm. 2011).

The only threat currently known to *S. baileyi* is fire, due to high biomass of native desert annuals in recent years (James Morefield pers. comm. 2011). Despite minimal threats, this species should be considered of conservation concern, with only two confirmed occurrences in California.

Recommended Actions

CNPS: Add to CNPS 2.3

CNDDDB: Add to CNDDDB G4G5 / S1

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDDB, and provide any edits/comments. If responding No, please provide supporting information.

Draft CNPS Inventory Record

Sarcobatus baileyi Coville

Bailey's greasewood

Sarcobataceae

Rank 2.3

Mono, Inyo

Nevada

Indian Garden Creek (430C) 3711758

Chenopod scrub; Alkaline, dry lakes, washes, roadsides; elevation 1500-1600 meters.

Perennial deciduous shrub. Blooms Mar-Apr.

Known in CA from fewer than 5 occurrences. A synonym of *S. vermiculatus* in *The Jepson Manual* (1993). See *Proceedings of the Biological Society of Washington* 7:77-78 (1892) for original description and *Taxon* 46(3):495-507 (1997) for taxonomic treatment.