Rare Plant Status Review: *Erigeron conditii*Proposed Addition to California Rare Plant Rank 1B.1, G1/S1

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This status review is being expedited through an agreement between the California Native Plant Society and the Center for Plant Conservation (CPC), with contributions from the state of California, CPC, and the California Plant Rescue initiative. Aside from being advanced as part of this agreement, the process, content, and information provided herein is not altered, modified, or developed differently in any way or form compared to other status reviews developed by CNPS.

Background and Taxonomy

Erigeron conditii D. J. Keil is a perennial herb in the Asteraceae known from the border of Monterey and San Luis Obispo counties in the central Santa Lucia range of coastal California. It was first described in 2018 (Keil 2018). It is not included in *The Jepson Manual* (Nesom 1993), *Jepson eFlora* (Keil and Nesom 2012) or *Flora of North America* (Nesom 2006). Morphologically it is most similar to the varieties of the *E. foliosus* complex. The only member of this complex that occurs in the central Santa Lucia Range is *E. foliosus* var. *foliosus*. *Erigeron foliosus* var. *foliosus* differs from *E. conditii* in having an inflorescence that usually has more numerous heads, shorter involucres (3.2–4.5 vs. ± 6 mm), more strongly graduated phyllaries, and shorter ray corollas (6–10 vs. 9–12.5 mm) (Keil 2018). This species is named for Ira J. Condit, collector of the holotype specimen and instructor in botany and horticulture between 1907 and 1912 at Cal Poly, San Luis Obispo (Keil 2018).

Ecology

Erigeron conditii grows in the canyons formed by the San Carpoforo Creek watershed. Along some parts of San Carpoforo Creek Canyon, there is well-developed riparian forest. In other areas, the canyon cuts through exposed bedrock, and vegetation along the channel is sparse (Keil 2018). Specimen labels for the two known collections of Erigeron conditii (Condit s.n. and Unganst 901) lack habitat data. Access to San Carpoforo Canyon for Condit and Unganst would likely have been via the road to the Polar Star Mine, a complex of nine now-inactive mercury mines located about three miles up San Carpoforo Creek from the coast (Keil 2018). Mining activities in the early 20th century would likely have resulted in considerable disturbance to the vegetation of the canyon (Keil 2018). In May 2004, a population of this species was observed upstream of the mine in San Luis Obispo County (Keil 2022 pers. comm.). Plants were growing in the canyon wall in the cracks of a steep sandstone outcrop in the partial shade of riparian forest at about 60 m elevation (Keil 2018). Associated species included Eriophyllum confertiflorum, Toxicodendron diversilobum, and Rubus ursinus (Keil 2018). In Monterey County, this species may have been collected in the canyon at a somewhat higher elevation; upper San Carpoforo Creek reaches an elevation of about 340 m (Keil 2018). This species has been collected and observed in flower May through July (Keil 2018, CCH2 2022, Keil 2022 pers. comm.).

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Distribution and Abundance

Erigeron conditii is known from only two occurrences. Both are within the San Carpoforo Creek watershed, which originates in the Santa Lucia Range of southwestern Monterey County and flows into the Pacific Ocean in northwestern San Luis Obispo County, just to the north of the coastal prominence called Ragged Point (Keil 2018). Within that watershed, Erigeron conditii is documented by just two historical collections and the observation made in 2004 (Keil 2018, Keil 2022 pers. comm.). The plants observed in 2004 in San Luis Obispo County very likely represent the same population visited in 1908 by Unganst (Keil 2018, Keil 2022 pers. comm.). Therefore, there are currently just two estimated occurrences of this species. When observed in 2004, the population was not fully assessed, and only a few scattered individuals were seen (Keil 2018, Keil 2022 pers. comm.). Additional populations are to be sought in similar habitats within the San Carpoforo Creek Canyon or nearby canyons (Keil 2018).

Status and Threats

The topography in the area where this species occurs is rugged and in large part inaccessible. Although portions of the San Carpoforo Canyon in Monterey County are within the Los Padres National Forest, much of the canyon area is in private ownership with limited or no access (Keil 2018). The San Luis Obispo County site for *E. conditii* is located along the portion of San Carpoforo Creek that traverses the northern portion of the Hearst Ranch (Keil 2018). The Monterey County population sampled by Condit has not been observed for 110 years; therefore, its location and status are unknown. Although it is likely that additional populations may be present along San Carpoforo Creek or in nearby canyons, the limited geographic range of this species means that it has a high risk of extinction (Keil 2018). Currently, this species does not have a global rank (NatureServe 2022).

Summary

Based on the available information, CNPS and CNDDB recommend adding *Erigeron conditii* to California Rare Plant Rank 1B.1 of the CNPS Inventory. If knowledge on the distribution, threats, and rarity status of *E. conditii* changes in the future, we will re-evaluate its status at that time.

Recommended Actions

CNPS: Add *Erigeron conditii* to CRPR 1B.1 CNDDB: Add *Erigeron conditii* to G1/ S1

Draft CNPS Inventory Record

Erigeron conditii D. J. Keil Condit's fleabane daisy

Asteraceae

USDA Plants Symbol: none Synonym(s)/Other Name(s): none

CRPR 1B.1

Counties: Monterey, San Luis Obispo

States: CA

Quad name (code): Burro Mountain (3512173)

General Habitat: Riparian forest

Micro Habitat Details: Canyon walls; sometimes in crevices of sandstone outcrops

Micro Habitat: Openings

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Erigeron conditii

Elevation: elevation 60-215 meters

Life form: Perennial herb Blooms: May to July

Notes: Similar to varieties of Erigeron foliosus

Threats: Potentially threatened by small population size and small geographic range.

Selected References:

- Original Description: Phytoneuron 2018-79: 1–6 (2018)

Literature Cited

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Personal Communications

Keil, David. 2022. Professor emeritus, Cal Poly, San Luis Obispo. Email about location and date of observation of *Erigeron conditii*. Personal communication 3 October 2022.

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