

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDASTE10G0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Erigeron hodgsoniae*

COMMON NAME: Hodgson's Fleabane

SYNONYMS:

FAMILY: Asteraceae

AUTHOR, PLACE OF PUBLICATION: Nesom, Guy L. Phytoneuron 2015(37): 1–6,

TYPE LOCALITY: USA: Arizona: Gila Co., Sierra Ancha Mts., along Cherry Creek ca. 75 yards N of waterfalls on S side of creek, just below (S of) Cold Water Canyon, T6N R14E Sect 3 center of NE 1/4, 110°53'56"W 33°53'28"N, partially shaded, steep part of NE-facing quartzite (?) cliff above bouldery creek, 3800 ft.

TYPE SPECIMEN: HT: DES 37855. Liz Ecker and Wendy Hodgson, #7124. May 2, 1993.

TAXONOMIC UNIQUENESS: One of at least 29 species of *Erigeron* occurring in Arizona, and about one-third of these, including *E. hodgsoniae*, are endemic to the state.

According to the author (Nesom 2015) *E. hodgsoniae* is the fifth member of the *E. pringlei* group (with *E. anchana*, *E. heliographis*, *E. pringlei*, and *E. saxatilis*) and is from a locality within the geographic range of *E. anchana*. All five species are perennials in rocky habitats and endemic to Arizona.

DESCRIPTION: For the *E. pringlei* group: Perennial herbs, taprooted, producing thick caudex branches 1–5 cm long and roughened with persistent, old petiole bases. Stems 7–25 cm long, decumbent-ascending to sprawling-pendent, distally ascending, unbranched, moderately villous with irregularly spreading but generally retrorsely oriented, multicellular, acicular hairs 0.4–0.8 mm long, eglandular. Leaves villous to hirsute-villous, eglandular, basal 3–5.5 cm long, blades elliptic to obovate or oblanceolate-obovate, 15–20 mm long, 4–11 mm wide, attenuate to a petiole 20–35 mm long and ca. 2–3 times longer than the blade, apices acute-apiculate, margins entire, cauline quickly becoming epetiolate distally but blades slightly or not at all reduced in size upward. Heads solitary, 8–10 mm wide (pressed) on minutely bracteates peduncles 3–4 cm long; phyllaries elliptic-oblanceolate, sparsely hirsute in the midregion, without a prominent oil duct, eglandular, in 2–3 series weakly graduate or even in length, innermost 3.5–4 mm long, margins shallowly lacerate. Ray flowers 40–50 in a single series, corollas 8–9 mm long, reflexing at maturity at the tube-lamina junction, lamina white, drying pink to light purplish, without a midstripe, 0.6–1 mm wide. Disc corollas

narrowly tubular-funnelform, 2–2.4 mm long. Achenes ca. 1.4 mm long, sparsely strigose; pappus of 10–14 persistent bristles ca. 2.5 mm long, with a few minute squamellae 0.2–0.3 mm long (Nesom 2015).

AIDS TO IDENTIFICATION: Of the five species in the *E. pringlei* group (*E. anchana*, *E. heliographis*, *E. pringlei*, *E. saxatilis* and *E. hodgsoniae*), *Erigeron hodgsoniae* is only one with prominently hairy stems and leaves. All leaves of *E. hodgsoniae* are entire-margined.

Erigeron hodgsoniae is sympatric in the Sierra Ancha with *E. anchana*. Nesom (2015) provides the following key to distinguish the two species:

Stems villous, leaves villous to hirsute-villous on both surfaces, hairs 0.4–0.8 mm long; leaf apices acute-apiculate; heads 8–10 mm wide (pressed); phyllaries barely or not at all graduate in length, sparsely hirsute, midregion without a prominent oil duct; ray florets 40–50; pappus bristles 10–14..... *Erigeron hodgsoniae*

Stems glabrous to sparsely strigose, leaves glabrous or sparsely and minutely strigose adaxially (glabrous abaxially), hairs 0.1–0.2 mm long; leaf apices acute with a sharp mucro but not apiculate; heads 5–7 mm wide (pressed); phyllaries strongly graduate in length, glabrous, midregion with a conspicuous oil duct; ray florets 24–36; pappus bristles 19–26 *Erigeron anchana*

ILLUSTRATIONS:

Herbarium Mounts: Nesom 2015, p. 3.

TOTAL RANGE: Arizona, Gila County, Sierra Ancha Mountains. Known only from an extended population in Cold Water Canyon, and close vicinity along Cherry Creek. A narrow endemic.

RANGE WITHIN ARIZONA: See: “Total Range.”

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial herb

PHENOLOGY: Flowering (Apr–)May–Jun.

BIOLOGY:

HABITAT: Cliff faces and steep canyon walls.

ELEVATION: 3,800 – 4,000 feet (1160-1220 m.)

EXPOSURE: Type locality is a NE facing cliff, and described as partially shaded.

SUBSTRATE: Type locality is a quartzite cliff.

PLANT COMMUNITY: Associated species noted at type locality: *Quercus turbinella*, *Q. emoryi*, *Juniper*, *Arctostaphylos*, *Agave chrysantha*, *Cercocarpus*, *Pinus edulis* and *Sphaeralcea*.

POPULATION HISTORY AND TRENDS: Unknown. This species was first collected in 1993, and identified as a new species in 2015. There is essentially an extended population that defines a single occurrence. The plant was described as locally frequent at the type locality. No information is available to define a population trend. NatureServe ranks the species as critically imperiled because there is only a single occurrence.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.

STATE STATUS: None.

OTHER STATUS: None.

MANAGEMENT FACTORS: None specified. The species is found on cliff faces and steep canyon walls. There is only a single known occurrence.

PROTECTIVE MEASURES TAKEN: *E. hodgsoniae* is on a proposed list of Species of Conservation Concern for the Tonto National Forest (USDA 2017).

SUGGESTED PROJECTS: Given that there is only a single known occurrence, efforts should be made to monitor this species to try and determine the trend of the population. Surveys in the vicinity and habitat type to identify any additional populations (occurrences) should be undertaken.

LAND MANAGEMENT/OWNERSHIP: USDA Forest Service (Tonto National Forest).

SOURCES OF FURTHER INFORMATION

REFERENCES:

- NatureServe. 2019. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>. (Accessed: November 18, 2019).
- Nesom, Guy L. 2015. *Erigeron hodgsoniae* (Asteraceae), a new species from Central Arizona. *Phytoneuron* 2015-37: 1–6.

Tropicos, <http://www.tropicos.org/Name/100436809>, accessed November 15, 2019.
USDA. 2017. Proposed list of Species of Conservation Concern for the Tonto National Forest.
Accessed November 18, 2019,
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd604374.pdf.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

Guy Nesom, Fort Worth, Texas. www.guynesom.com

ADDITIONAL INFORMATION:

Named in honor of Wendy Hodgson, Senior
Research Botanist at the Desert Botanical Garden in Phoenix, AZ.

Revised: 2019-11-18 (BDT)

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Arizona Game and Fish Department. 20XX (= **year of last revision as indicated at end of abstract**). X...X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.