

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Plant Abstract**

**Element Code:** PDAST3M4X0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Erigeron piscaticus*  
**COMMON NAME:** Fish Creek Fleabane  
**SYNONYMS:** *Erigeron lemmoni* Gray (in part)  
**FAMILY:** Asteraceae

**AUTHOR, PLACE OF PUBLICATION:** Nesom, G.L. 1989. *Phytologia* 67(4):304-306.

**TYPE LOCALITY:** Fish Creek Canyon, Maricopa County, Arizona.

**TYPE SPECIMEN:** US. Peebles, R.H. and E.D. Eaton (7953). 16 July 1931.

**TAXONOMIC UNIQUENESS:** One of at least 29 species of *Erigeron* occurring in Arizona. *E. piscaticus* was originally considered as part of *E. lemmoni* Gray.

**DESCRIPTION:** **Annual**, up to 40 cm (16 in.) tall from slender tap root with numerous branches. Entire plant minutely but densely stipitate-glandular. **Sparsely but evenly pilose (soft hairs) with stiffly spreading trichomes.** Leaves obovate, sessile or with a short petiolar region, not clasping; mostly 10.0-22.0 mm (0.4-0.88 in.) long, 2.0-7.0 mm (0.08-0.28 in.) wide; **leaves entire or rarely with single tooth**; apex apiculate (small, broad point). Ray flowers 4-58 in 1-2 series (layers), corollas white. Disc corollas 1.5-1.8 mm (0.06-0.07 in.) long, inflated and white-indurated just above the tube. Achenes 0.8-1.0 mm (0.03-0.04 in.) long, tan, sparsely strigose to glabrate; pappus of 8-11 bristles about two-thirds as long as disc corollas, with a few but prominent outer setae, 0.1-0.2 mm (0.004-0.008 in.) long. **Rays typically blue when dried. Phyllaries (toothed bracts surrounding heads) in 2-3 series of nearly equal length**, other species unequal.

**AIDS TO IDENTIFICATION:** *E. piscaticus* lacks lobed leaves, has only sparse hairs on the upper stem. Heads (disc area) 4.0-5.0 mm (0.16-0.20 in.) wide. All of co-occurring species (*E. divergens*, *E. lobatus*, *E. lemmonii* and *E. piscaticus*) have much larger heads. For comparison of these species, see chart, page 3 of abstract (Gori 1994).

**ILLUSTRATIONS:** Line drawing (USFWS)

**TOTAL RANGE:** Central Arizona, Graham County, Galiuro Mountains, Oak Grove Canyon, Aravaipa Canyon Preserve. Historically from Fish Creek Canyon, Superstition Mountains, Maricopa County; Turkey Creek, also in the Aravaipa Canyon Preserve, Graham County; and Box Canyon, Santa Catalina Mountains, Pima County.

According to Dave Gori (1999), surveys have been conducted since 1989, including a 1998 survey of Aravaipa Creek, and to his knowledge there are no other extant locations for this plant except Oak Grove Canyon.

**RANGE WITHIN ARIZONA:** See "Total Range."

## **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Annual

**PHENOLOGY:** Flowers and fruits May - August, probably continuing until October.

**BIOLOGY:** Environmental cues to initiate germination are unknown. As an annual, this species may not emerge in some years.

**HABITAT:** Moist, sandy canyon bottoms associated with perennial streams.

**ELEVATION:** 2,250 to 3,500 feet (686-1068 m).

**EXPOSURE:** Level

**SUBSTRATE:** Sandy alluvium

**PLANT COMMUNITY:** Southwest riparian plant community

**POPULATION TRENDS:** 1993 and 1994 surveys showed 79 plants both years. Population stable. In July, 1994, 30 plants with an increase in September to 79 plants. Greater germination after summer rains is evidence that plant can germinate and flower later in season (previously believed to be only after winter rains).

Five collections known: two from Fish Creek in 1929 and 1931, two from Turkey Creek and vicinity in 1976 and 1979, and one from Box Canyon Santa Catalina Mts in 1962 (originally collected under *E. lemmonii*). A survey on July 15-16 and August 11-14, 1990, from the historic Turkey Creek location, and the Oak Grove Canyon location (a tributary of Turkey Creek), failed to relocate any plants, and no new collections were made in nearby areas (Gori and Malusa, 1991). A similar survey of the Galiuro Mountains located 87 plants in Oak Grove Canyon in 1992, part of the TNC (The Nature Conservancy) Aravaipa Canyon Preserve.

Per Gori (1999), plants have been found and annually monitored in Oak Grove Canyon since 1992, with no other extant locations found for this plant, except in Oak Grove Canyon.

Unknown if Box Canyon population is still extant in the Santa Catalina Mountains.

**SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None (USDI, FWS 1996)  
[Category 2 USDI, FWS 1993]

**STATE STATUS:** Salvage Restricted (ARS, ANPL 1993,  
2010, accessed 2011)

**OTHER STATUS:** Forest Service Sensitive (USDA, FS Region  
3 1990, 1999, 2007)  
Bureau of Land Management Sensitive  
(USDI, BLM AZ 2000, 2005, 2008,  
2010)

**MANAGEMENT FACTORS:** Small range and population size of this species make it susceptible to natural and man-caused disturbances. Other factors that could affect the species include poor watershed conditions; Oak Grove Canyon hiking traffic; flooding; and recreation (casual camp sites). Greatest problem: only one population known with 80+ plants. Light grazing does **not** seem to affect plant.

**CONSERVATION MEASURES TAKEN:** The possible historical Fish Creek site is located in the Superstition Mountains within Superstition Wilderness Area. The possible historic Turkey Creek, and extant Oak Grove Canyon sites are located within the Aravaipa Canyon Preserve.

**SUGGESTED PROJECTS:** Regularly survey Fish Creek over the course of many years and changing environmental conditions; timing of plant observance and flowering possibly tied to moisture. When plants are present at Fish Creek, expand survey into other potential streams in the Superstition Mountains, and possibly Aravaipa Canyon in the Galiuro Mountains, and Box Canyon in the Santa Catalina Mountains. Survey is greatest management need throughout Aravaipa Canyon watershed as well as the Superstition Mountains. July or August good time for survey.

**LAND MANAGEMENT/OWNERSHIP:** USFS - Tonto National Forest; TNC - Aravaipa Canyon Preserve; Possibly BLM - Safford District.

**SOURCES OF FURTHER INFORMATION****REFERENCES:**

- Arizona Revised Statutes, Chapter 7. 1993. Arizona Native Plant Law. Appendix A:3.  
Arizona Revised Statutes, Chapter 7. 2010. Arizona Native Plant Law. Appendix A:3.  
Arizona Revised Statutes, Chapter 7. Arizona Native Plant Law. Accessed 2011, AZDA.  
<http://www.azda.gov/ESD/protplants.htm>.
- Gori, D.F., P.L. Warren, and L.S. Anderson (TNC). 1990. Population studies of sensitive plants of the Huachuca, Patagonia, and Atascosa mountains, Arizona. Prepared for the Coronado National Forest, Tucson, Arizona.

- Gori, D. and J. Malusa (TNC). 1991. A survey of *Erigeron piscaticus* in the regions of Aravaipa Canyon, Galiuro Mountains and Fish Creek Canyon, Superstition Mountains, Arizona. Prepared for U.S. Fish and Wildlife Service, Phoenix, Arizona.
- Gori, D. 1994. Bureau of Land Management, Safford District, Rare Plant Workshop. November 14-16. Tucson, Arizona.
- Gori, D. 1999. Personal notes pertaining to *Erigeron piscaticus*, *Limosella pubiflora*, *Salvia amissa*, *Tralimum marginatum*. Notes sent to D. Godec (AGFD).
- Gori, D. 1999. *Erigeron piscaticus* (Fish Creek Fleabane), Asreraceae. Draft abstract from Arizona Rare Plant Book.
- Nesom, G.L. 1989. A new species of *Erigeron* (Asteraceae: Astereae) from Arizona. *Phytologia* 67(4):304-306.
- USDA, Forest Service Region 3. 1990. Sensitive Plant List. p. 16.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.
- USDA, Forest Service Region 3. 2007. Regional Forester's List of Sensitive Plants.
- USDI, Bureau of Land Management. 2000. Arizona BLM Sensitive Species List. Instruction Memorandum No. AZ-2000-018.
- USDI, Bureau of Land Management. 2005. Arizona BLM Sensitive Species List.
- USDI, Bureau of Land Management Region 2. 2008. Arizona BLM Sensitive Species List.
- USDI, Bureau of Land Management Region 2. 2010. Arizona BLM Sensitive Species List.
- USDI, Fish and Wildlife Service. 1993. Plant Taxa for Listing as Endangered or Threatened Species; Notice of Review. *Federal Register* 58(188):51163.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

- Dave Gori - The Nature Conservancy, Tucson, Arizona.
- Jim Malusa - The Nature Conservancy, Tucson, Arizona.
- Guy L. Nesom - University of Texas, Austin.

**ADDITIONAL INFORMATION:**

*Erigeron piscaticus* incorrectly included in the flora of the Pinaleño Mountains (W.T. Johnson, M.S. thesis, Arizona State University, 1986?), but this misidentification was corrected in Johnson, 1988. *Flora of the Pinaleno Mountains*. *Desert Plants* 8:147-191.

**Revised:** 1990-01-23 (SST)  
 1990-12-04 (SR)  
 1992-09-16 (BKP)  
 1994-09-08 (PLW)  
 1994-03-28 (DBI)  
 2001-12-18 (SMS)

*E. divergens*

Canyon bottoms  
(can be wider)

*E. lobatus*

Canyon bottoms  
(can be wider)

*E. lemmoni*

Next to cliffs,  
(only 1 population)

*E. piscaticus*

Shady canyon bottoms.

Leaves mostly entire (base of plant may be lobed)	All lobed	Lobed and entire	All entire
Heads: 8.0-10.0 mm. (0.32-0.4 in.) Erect, taller plant	Heads: 8.0-10.0 mm (0.32-0.4 in.)	Heads: 6.0-10.0 mm (0.24-0.40 in.)	Heads: 4.0-5.0 mm (0.16-0.20 in.) Low growing with very small flowers

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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.