ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract **Element Code:** PDAST3M3C0
Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Erigeron pringlei*
COMMON NAME: Pringle's Fleabane
SYNONYMS:
FAMILY: Asteraceae (Compositae)

AUTHOR, PLACE OF PUBLICATION: A. Gray, Proc. Amer. Acad. Arts. 17: 210. 1882.

TYPE LOCALITY: Mt. Wrightson, Santa Rita Mountains, Santa Cruz County, Arizona. Clefts of ledges and cliffs, 8,500 - 9,400 feet.

TYPE SPECIMEN: HT: US 15162. C.G. Pringle, 6 June 1881. IT: NY 168512.

TAXONOMIC UNIQUENESS: A 1990 revision of the *E. pringlei* by Guy Nesom at the University of Texas at Austin split the species into four taxa: *E. pringlei, E. heliographis, E. saxatilis*, and *E. anchana*. All are restricted to mountains within Arizona. Each species is morphologically as well as geographically distinct. "The four species of the *E. pringlei* group might be treated as geographic entities within a single species, where they would be given formal status as varieties. The differences among them however, are consistent with the degree of difference found among other groups of similar, closely related species of North American *Erigeron* traditionally recognized as distinct" (Nesom 1990).

The populations of *E. pringlei* found in central Arizona are somewhat larger than the plants from the Santa Rita Mountains. There appears to be no other morphological features that would clearly distinguish these populations, although these disjunct populations probably have been isolated for long periods of time and some accumulated differences might be expected. The long branches of the central Arizona plants show strong similarity to *E. anchana*. However, the exact pattern of relationship between them or any species of the *E. pringlei* group is not clear. (Nesom 1990).

DESCRIPTION: Herbaceous perennial with a thick taproot with several thick, nearly woody caudex branches 1-2(-7) cm long. The persistent petioles (leaf bases) from the growth of the previous year and the caudex branches give the plant a very "rough" appearance. **Stems usually unbranched**, 4-16 cm (1.6-6.3 in) long, sparsely to moderately short strigose (with stiff, straight, appressed hairs). Basal leaves are spatulate and long petiolate, 2-6 cm long, the **leaf blades apically 3-lobed to pinnatifid**, 4-10 mm wide. Flower heads single, at top of leafy stem, small, 5-6 mm wide, with white petals (lavender before open, and then fade) and yellow disk. Phyllaries (bract segments) in 3-4 strongly graduated series, often

purplish. Ray flowers 20-35, ligules white to pinkish, sometimes with a midstripe beneath, reflexing. **Pappus of the achene of 11-16 bristles**, about 2 mm long. (Nesom 1990).

AIDS TO IDENTIFICATION: The small size (mostly less than 15 cm tall), persistent petioles (leaf bases) from the growth of the previous year and stout, nearly woody caudex identify the *E. pringlei* group. The lobed basal leaves and rose- to purple-tinged phyllaries and ligules of *E. pringlei* are distinct from the entire leaves and white ray flowers of *E. kuschei*. The petiole of *E. anchana* is longer than *E. pringlei*, being twice as long as the length of the leaf; the pappus bristles are more numerous in *E. anchana* (19-26); and orange resinous veins are present on the phyllaries and disc corollas of *E. anchana*.

ILLUSTRATIONS: Line drawing (USFWS)
Color photo of specimen (NYBG *in* http://scisun.nybg.org:8890/searchdb/owa/wwwcatalog.detail_list?this_id=4386088)

TOTAL RANGE: Central and Southern Arizona, including the Santa Rita Mountains in Santa Cruz County, the Mescal and Mazatzal mountains in Gila County, the Pinaleno Mountains in Cochise County, and in areas of Graham and Yavapai counties.

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

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Herbaceous perennial.

PHENOLOGY: Flowers May - August (-September).

BIOLOGY: Probably a fairly long-lived plant able to deal with drought conditions.

HABITAT: Rock crevices or ledges on boulders and vertical rock faces, in mesic situations near springs and in shaded canyons.

ELEVATION: Santa Rita Mountains: 7,300 - 9,250 feet (2227 - 2821 m). Mescal, Mazatzal, and Sierra Ancha mountains, and Black Mesa: 3,800 - 6,640 feet (1159 - 2025 m).
Pinaleno Mountains: 9,320 feet (2843 m).

EXPOSURE: Various.

SUBSTRATE: Igneous or metamorphic granites, along with Limestone (including travertine), Quartzite, and Rhyolite.

PLANT COMMUNITY: Ponderosa pine community. Associates include not only ferns, lichens and mosses, but: Cottonwood Mtn - *Fraxinus velutina* (velvet ash), *Quercus gambelii*

(Gambel Oak), and *Pinus ponderosa* (Ponderosa Pine); Santa Rita Mountains – *Draba* sp., *Heuchera* sp. (alumroot), *Petrophytum caespitosum* (rock spiraea), and *Thalictrum fendleri* (Fendler meadowrue); Mescal Mountains – *Arabis* sp. (rockcress), *Heuchera* sp., *Perityle ciliata* (fringed rockdaisy), and on adjacent slopes *Holodiscus dumosus* (bush oceanspray), *Ptelea trifoliata* ssp. *angustifolia* (common hoptree), *Quercus chrysolepis* (canyon live oak), *Q. gambelii* (Gambel oak), and *Thalictrum fendleri*. (Phillips 1991).

POPULATION TRENDS: Bingham (1979) reported that an *E. pringlei* population in the Mescal Mountains (still considered *E. pringlei*) was "...the most common perennial on the cliff faces and minor ledges in this area. Hundreds of individual plants were observed..." He also noted that threats were relatively non-existent and the plants appeared to be reproducing.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None (USDI, FWS 1996)
[3C (USFWS Region 2 List, 1992)]
[C2 (USDI, FWS 1990)]
[C2 (USDI, FWS 1985)].

STATE STATUS: None

OTHER STATUS: Not Forest Service Sensitive (USDA, FS Region 3 1999)
[Forest Service Sensitive, USDA, FS Region 3 1990]

MANAGEMENT FACTORS: Few if any threats. Populations, including some, which are rather large, are mostly inaccessible. Possible impacts are from recreation, road construction, and collection from botanists (at sites near trails).

CONSERVATION MEASURES TAKEN:

SUGGESTED PROJECTS: Map occupied and potential habitat (definitive habitat, easily recognized); monitor numbers of plants at known sites.

LAND MANAGEMENT/OWNERSHIP: BIA - San Carlos Reservation; BLM - Tucson Field Office; USFS - Coconino National Forest (Sierra Ancha Experimental Forest), and Coronado and Tonto National Forests.

SOURCES OF FURTHER INFORMATION

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

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Dr. Guy Nesom - University of Texas, Austin.

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ADDITIONAL INFORMATION:

There are about one-half dozen known sites where *E. pringlei* is currently found in the Santa Rita Mountains and more are expected to be found; however, access is very difficult and the plants are considered to be "uncommon" within appropriate habitat (Steve McLaughlin, Coronado Plant Workshop, 1991).

Revised: 1990-11-26 (SR)
1991-10-19 (BKP)
1992-09-22 (BKP)
1998-01-08 (SSS)
2004-08-20 (AMS)
2004-10-01 (SMS)