

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

**Plant Abstract**

**Element Code:** PDRAN0LOS0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Ranunculus eschscholtzii*  
**COMMON NAME:** Eschscholtz Buttercup  
**SYNONYMS:** *Ranunculus pauperculus*  
**FAMILY:** Ranunculaceae

**AUTHOR, PLACE OF PUBLICATION:** Schlechtendal, Diederich Franz Leonhard von. *Animadversiones Botanicae in Ranunculeas Candollii* 2: 16. Pl 1. 1820.

**TYPE LOCALITY:** United States.

**TYPE SPECIMEN:** National Botanic Garden of Belgium, BR 5503988. J.F.G. Eschscholtzii (#SN). 1816. Note: from the collection of Martius.

**TAXONOMIC UNIQUENESS:** There are over 150 species and varieties of the genus *Ranunculus* found in the U.S. and Canada. Arizona has 10 species and another six varieties (NatureServe 2015).

**DESCRIPTION:** Stems erect or decumbent from short or long caudices, 4-27 cm, glabrous, each with 1-3 flowers. Roots slender, 0.4-1.6 mm thick. Basal leaves persistent, blades reniform or cordate to obovate or broadly oblong, lobed or 3-parted, 0.5-4.1 × 0.8-3.7 cm, segments again 1(-2)×-lobed, base obtuse to cordate, apices of segments rounded in outline. Flowers: pedicels glabrous; receptacle glabrous or sparsely pilose; sepals 4-8 × 2-6 mm, abaxially glabrous or pilose; petals 5-8, 6-16 × 4-16 mm; nectary scale glabrous. Heads of achenes cylindric or ovoid, 5-10 × 4-7 mm; achenes 1.4-2 × 1-1.6 mm, glabrous or sparsely pubescent; beak lanceolate or subulate, straight (sometimes curved when immature), 0.6-1.8 mm. (Flora of North America 1997)

**AIDS TO IDENTIFICATION:** A perennial herb producing one or more erect stems up to 20 or 25 centimeters tall. The lower leaves have somewhat rounded blades each divided into a few lobes and borne on long petioles. Any upper leaves are smaller and not borne on petioles. The herbage is hairless and sometimes waxy in texture. The inflorescence is made up of one to three flowers on narrow pedicels. The flower has five to eight oval or rounded shiny yellow petals up to 1.5 centimeters long each around a central nectary with many stamens and pistils. The fruit is an achene borne in a cluster of 17 or more. (EOL 2015.)

**ILLUSTRATIONS:**

Photos, Herbarium Mounts:

<http://swbiodiversity.org/seinet/taxa/index.php?taxon=Rubus%20leucodermis>.

<http://eol.org/pages/473730/media>.

**TOTAL RANGE:** Western North America: from the southern boundary states New Mexico, Arizona and California north to the Northwest Territories and Alaska.

**RANGE WITHIN ARIZONA:** Known only from the San Francisco Mountain, Coconino County.

**SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Perennial herb.

**PHENOLOGY:** From Arizona collections, flowers noted from July and August dates; fruits noted from a September 17 collection.

**BIOLOGY:**

**HABITAT:** Meadows and talus on high mountain slopes, and other rocky habitat, sometimes riparian.

**ELEVATION:** In Arizona, 10500 – 11400 feet (3200-3475m).

**EXPOSURE:** Prefers shade. Collected from north, east and southwest facing slopes.

**SUBSTRATE:** Not specified, other than usually moist.

**PLANT COMMUNITY:** Meadows, woodlands and riparian settings. Other plants associated with Arizona collections: *Mimulus guttatus*, *Primula parryi*, *Cystopteris fragilis*, *Epilobium saximontanum*, *Ceanothus fendleri*, *Pyrola virens*, *Polemonium delicatum*, *Oxyria digyna*, *Lonivera involucrata*, *Loelera macrantha*, *Penstemon barbatus*, *Erigeron speciosus*, *Amelanchier utahensis*, *Osmorhiza depauperata*, *Lonicera arizonica*, *Lithospermum multiflorum*, *Potentilla anserina*, *Castilleja integra*, *Luzula parviflora*.

**POPULATION HISTORY AND TRENDS:** Unknown for Arizona. The species is only known from a half dozen collections (actually, only 2 element occurrences, one with multiple source features in close proximity) at the upper elevations of San Francisco Mountain near Flagstaff. Although collections dates span nearly 70 years, no information pertaining to the abundance of the species was noted. The facts that the *R. eschscholtzii* has persisted in the locality for decades, and is well adapted to the subalpine habitat which has protection as a wilderness area, suggest that the trend may be reasonably stable.

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None.  
**STATE STATUS:** None.  
**OTHER STATUS:** None.

**MANAGEMENT FACTORS:** None specified.

**PROTECTIVE MEASURES TAKEN:** None. However, all known collection sites are on US Forest Service lands and the Kachina Peaks Wilderness Area, which offers some protection. The species is not listed as Forest Service Sensitive.

**SUGGESTED PROJECTS:** Because all but one of the collections are historical, it is recommended to re-visit the known source features to determine if the species is still extant.

**LAND MANAGEMENT/OWNERSHIP:** USDA Forest Service, Coconino National Forest and the Kachina Peaks Wilderness Area.

## **SOURCES OF FURTHER INFORMATION**

### **REFERENCES:**

- Encyclopedia of Life (EOL), accessed 7/15/2015, <http://eol.org/pages/473730/details>.  
Flora of North America. 1997. Vol. 3. Ranunculaceae. Alan Whittemore and Bruce Parfitt. Oxford University Press. New York. p. 109.  
JStor| Global Plants, accessed 07/15/2015, <http://plants.jstor.org/stable/10.5555/al.ap.specimen.br0000005503988>.  
NatureServe Explorer: An Online Encyclopedia of Life, accessed 07/15/2015, <http://explorer.natureserve.org/index.htm>.  
Tropicos, accessed 07/15/2015, <http://www.tropicos.org/Name/27100753>.

### **MAJOR KNOWLEDGEABLE INDIVIDUALS:**

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### **ADDITIONAL INFORMATION:**

**Revised:** 2015-07-16 (BDT)

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