

ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM

**Plant Abstract**

**Element Code:** PDRAN0L1C3

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Ranunculus inamoenus* var. *subaffinis*

**COMMON NAME:**

**SYNONYMS:** *R. arizonicus* var. *subaffinis*, *R. subsagittatus* var. *subaffinis*, *R. inamoenus* ssp. *subaffinis*

**FAMILY:** Ranunculaceae

**AUTHOR, PLACE OF PUBLICATION:** Benson, L. D. 1940. Amer. J. Bot. 27(3):187.

**TYPE LOCALITY:** Mt. Agassiz, San Francisco Peaks, Coconino Co., Arizona

**TYPE SPECIMEN:** GH. Lemmon, J. G. (4152). September 1884.

**TAXONOMIC UNIQUENESS:** There are about 19 species of *Ranunculus* in Arizona (Lehr 1978).

**DESCRIPTION:** Plants perennial; Stems erect, 10-30 cm tall, sometimes glabrate, but more often hirsute; Basal leaves entire, varying from crenate to lobed or deeply divided, ovate to orbicular; blades 1-4 cm wide and about as long, the petioles are much longer than the blades; cauline leaves sessile, once or twice ternate into linear to oblanceolate segments. Flowers from terminal buds, 3-7 (-11) flowers per stem; flower stalks 0.9-7.5 cm long; sepals 5, 5-7 mm long, greenish-yellow, obovate, usually shorter than the petals; petals 5, 6-9 mm long, 2.5-7 mm wide, yellow; stamens 30-50. Achenes about 2 mm long and 1.5-1.7 mm thick dorso-ventrally; achene beaks 1.4-2.0 mm long, not curved, hooked at tip. Roots slender (Phillips et al. 1980, Whittemore and Parfitt 1997).

**AIDS TO IDENTIFICATION:** This taxon, *Ranunculus inamoenus* var. *subaffinis*, differs from the typical variety of the species by having longer and wider achenes (2 mm long and 1.6 mm wide), a longer (1.4-2.0 mm long) and straighter achene beak which is hooked at the tip, longer petals (6-9 mm long), and longer stipular leaf bases (2.5-3 cm long). ( Phillips et al. 1980, Whittemore and Parfitt 1997).

**ILLUSTRATIONS:** Photo of flowers (USFS, Coconino NF files)

**TOTAL RANGE:** San Francisco Peaks vicinity, Coconino Co., Arizona.

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

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Herbaceous perennial

**PHENOLOGY:** Flowering June-September (Phillips et al. 1980).

**BIOLOGY:** As many as 50-60 achenes per flower head have been observed. In 1980, Phillips et al. noted a large proportion of seedlings (50%+), indicating a high reproductive rate. Benson (1948) noted no evidence of asexual reproduction. Pollinators unknown, although many bees were observed in one population (Phillips et al. 1980).

**HABITAT:** Moist soil near timberline, usually in Rocky Mountain Subalpine Conifer Forest communities, but also in Alpine Tundra communities (Phillips et al. 1982, Whittemore and Parfitt 1997).

**ELEVATION:** Approximately 9540-12100 ft. (Phillips et al. 1982, Paulik 1979)

**EXPOSURE:** All

**SUBSTRATE:** Cobbly to stony, fine sandy loam of the Sponseller-Baldy-Sizer soil association (Phillips et al. 1980).

**PLANT COMMUNITY:** Rocky Mountain Subalpine Conifer Forest (usually) and Alpine Tundra communities. The understory vegetation varies between scattered low shrubs to alpine meadows with grasses, mat-forming perennials, and shrubs. Overstory vegetation often consists of *Picea Engelmannii*, *Pinus aristata*, *Geum turbinatum*, *Mertensia franciscana*, *Helenium hoopsii*, and *Senecio franciscanus* (Phillip et al. 1980).

**POPULATION TRENDS:** This taxon is endemic to a small range. Populations are scattered and infrequent, but appear healthy and reproducing. There are approximately 12 different populations, with the total number of plants estimated to be very large (Phillips et al. 1980).

### **SPECIES PROTECTION AND PRESERVATION**

**ENDANGERED SPECIES ACT STATUS:** None (USDI, FWS 1996)  
[3C USDI, FWS 1985]  
[PE USDI, FWS 1976]

**STATE LIST STATUS:** None

**OTHER STATUS:**

**MANAGEMENT FACTORS:** Some portions of one population are susceptible to trampling during summer periods of heavy hiker densities (Phillips et al. 1980).

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:**

**LAND MANAGEMENT/OWNERSHIP:** Peaks Ranger District, Coconino National Forest, United States Forest Service.

### **SOURCES OF FURTHER INFORMATION**

#### **LITERATURE CITATIONS:**

- Lehr, J.H. 1978. A catalogue of the flora of Arizona. Desert Botanical Garden. Phoenix, Arizona. p.55.
- Kearney, T.H. and R.H. Peebles. 1960. Arizona flora. University of California Press. Berkeley. pp. 314-318.
- Paulik, L. A. 1979. A Vascular Flora of the Subalpine Spruce-Fir Forest of the San Francisco Peaks, Arizona. M. S. Thesis, Northern Arizona University. p.26.
- Phillips, A. M. III., E. M. Peterson, B. G. Phillips, J. Mazzoni, and L. T. Green III. Unpublished status report:*Ranunculus inamoenus* ssp. *subaffinis*. Submitted to U.S. Fish and Wildlife Service, Phoenix, Arizona. 13 pp.
- USDI, Fish and Wildlife Service. 1976. Endangered and Threatened Species: Plants; Proposed Endangered Status for Some 1700 U. S. Vascular Plant Taxa. Proposed Rule. Federal Register 41(117):24561.
- USDI, Fish and Wildlife Service. 1985. Endangered and Threatened Wildlife and Plants; Review of Plant Taxa for Listing as Endangered or Threatened Species. Notice of Review. Federal Register 50(188):00048.
- USDI, Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants; Review of Plant and Animal Taxa that are Candidates for Listing as Endangered or Threatened Species; Notice of Review, Proposed Rule. Federal Register 61(40):7596-7613.
- Whittemore, A. T., and B. D. Parfitt. 1997. Flora of North America, North of Mexico: Ranunculaceae. Volume 3. Oxford University Press, New York, NY. p. 112.

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**ADDITIONAL INFORMATION:**

This species seems to respond favorably to disturbances such as drainages, ski runs, and developed springs (Phillips et al. 1980).

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