

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

**Plant Abstract**

**Element Code:** PDCAC0J060

**Data Sensitivity:** Yes

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Sclerocactus pubispinus*  
**COMMON NAME:** Great Basin Fishhook Cactus, Engelmann fish-hook cactus, Basin Fishhook  
**SYNONYMS:** *Echinocactus pubispinus*, *Echinocactus whipplei* var. *spiniosior*  
**FAMILY:** Cactaceae

**AUTHOR, PLACE OF PUBLICATION:** *Echinocactus whipplei* var. *spiniosior* Engelm. and Bigel. 1863, Trans. Acad. Sci. St Louis, 2:199. *Echinocactus pubispinus* Engelm, 1863, Trans. Acad. Sci. St Louis, 2:199. *Sclerocactus pubispinus* L. D. Benson, 1966, Cactus and Succulent Journal, 38(3): 103.

**TYPE LOCALITY:** Engelmann, Pleasant Valley near Salt Lake Desert, Goshute Range, White Pine County, Nevada.

**TYPE SPECIMEN:** MO 1859, without fruit or flower (juvenile plant with pubescent spines).

**TAXONOMIC UNIQUENESS:** There are 24 species in *Sclerocactus*.

**DESCRIPTION:** Plants are solitary or sometimes colonial, 1-10 cm (0.4-4 in) high, 2-15 cm (0.8-6 in) wide, ribs 6-13 cm (2.4-5 in) in diameter. The stems are depressed hemispheric, 1/3-1/2 subterranean. Mature stems grayish-green, depressed globose to ovoid or obovoid, juvenile spines are white pubescent. Central spine solitary, hooked; lateral spines radiating and not hooked. The lower central spine hooked, usually tan through brown to nearly black, the lateral 2 centrals similar in color but paler, the upper central and the radial spines tan to white. Areoles circular to elliptic. Tubercles spirally arranged, not marked by a groove above. Tubercles about as high as the rib beneath spines not obscuring the stem. Flowers are solitary and 2.5-3.5 cm (1-1.4 in) long, sepaloids bronze to brownish; petaloids are yellow, bronze, pink or violet to rose purple. Or petaloids with margins off-white to cream or to yellow to greenish or pale pink, and the middles yellow to greenish to pale pink; sepaloids with the margins the color of the petaloids but the median bands yellowish-brown to reddish-brown, apically rounded or angled, sometimes mucronate. Perianth 2-3 cm (0.8-1.2 in) long. Fruit is dry, and green or pink becoming tan to brownish, ellipsoid to obovoid, opening by vertical slits and is persistent at maturity. The seeds are 2.8-3.4 mm long, papillate, black.

**AIDS TO IDENTIFICATION:**

**ILLUSTRATIONS:**

Color photo (Hochstaetter *in*

[http://www2.labs.agilent.com/botany/cacti\\_etc/images/cacti/Sclerocactus/pubispinus.html](http://www2.labs.agilent.com/botany/cacti_etc/images/cacti/Sclerocactus/pubispinus.html))

Black and white photo (Benson 1982)

**TOTAL RANGE:** Along the eastern edges of Elko and White Pine counties, Nevada and from Box Elder to Beaver counties, Utah. Possibly ranges into Arizona.

**RANGE WITHIN ARIZONA:** Unknown.

**SPECIES BIOLOGY AND POPULATION TRENDS****GROWTH FORM:**

**PHENOLOGY:** Flowering and fruiting are done in May and June.

**BIOLOGY:**

**HABITAT:** Grows on rocky hillsides of woodland and upper desert mountains.

**ELEVATION:** 5,905 - 6,890 ft (1800-2100 m).

**EXPOSURE:** Various

**SUBSTRATE:** Calcareous gravel and silty calcareous gravel.

**PLANT COMMUNITY:** Sagebrush-shadscale and sagebrush-juniper-wheatgrass community.  
Dominant plants: *Bromus tectorum*, *Atriplex confertifolia*, *Sporobolus cryptandrus*, *Artemisia tridentate*, *Artemisia nova*, *Oryzopsis hymenoides*.

**POPULATION HISTORY AND TRENDS:****SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None (USDI, FWS 1990)  
[3C in NV & UT, USDI, FWS 1985]

**STATE STATUS:** Salvage Restricted (ARS, ANPL 1999)

**OTHER STATUS:**

**MANAGEMENT FACTORS:** *Sclerocactus pubispinus* is of interest to cactus collectors and is traded as plants and seeds.

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:** Populations should be surveyed to determine extent and numbers. Certain habitats should be treated as natural areas, and the populations monitored and protected. Also this plant should be brought into cultivation, seedling propagated, and these transplanted back to habitat areas.

**LAND MANAGEMENT/OWNERSHIP:**

**SOURCES OF FURTHER INFORMATION**

**LITERATURE CITATIONS:**

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**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

John Kartesz, North Carolina.

**ADDITIONAL INFORMATION:**

In 1994-1997, all *S. pubispinus* plants and seeds exported from the United States were artificially propagated. The main importers were European countries and Japan.

**Revised:** 2003-02-21 (AMS)

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