

SILER'S PINCUSHION CACTUS

Sclerocactus sileri (L.D.
Benson) K.D. Heil & J.M.
Porter

Plant Symbol = SCSI3

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Materials Program



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Figure 1. Siler pincushion (*Sclerocactus sileri*). Photo from
Jane Villa-Lobos @ USDA-NRCS PLANTS Database

Alternate Names

Gypsum cactus
Echinocactus sileri
Pediocactus sileri
Utahia sileri

Uses

There are no known human uses associated with
Siler's pincushion cactus.

Status

Siler's pincushion cactus was listed as an endangered
species in 1979 (USDI FWS 1979) and later
reclassified as threatened in 1993 (USDI FWS 1993)
when it was no longer considered to be in imminent
danger of extinction throughout significant portions
of its range. Critical habitat was not designated with
either ruling.

Consult the PLANTS Web site and your State
Department of Natural Resources for this plant's
current status (e.g., threatened or endangered species,
state noxious status, and wetland indicator
values).Description

General: Cactus family (Cactaceae). Siler's
pincushion is a small, globose cactus which grows
solitary or in clusters. Individuals grow about 25 cm
(9.8 in) tall and 12 cm (4.7 in) wide. Central spines
are blackish brown, 15 to 30 mm (0.6 to 1.2 in) long,
and radial spines are 10 to 20 mm (0.4 to 0.8 in) long
and white. Flowers are about 20 mm (0.8 in) in
diameter with yellow petals which may have purplish
veins. Flowering occurs in the spring (Welsh et al
2003).

Distribution: All known populations of this species
occur in Kane and Washington counties, Utah and in
Mohave and Coconino counties, Arizona. The
majority of the habitat occurs on USDI BLM land.
Small portions of the species range occur on lands
managed by the Kaibab-Paiute Indian Tribe, Arizona
and Utah State trust lands and private holdings.

Habitat: This species inhabits a variety of plant
communities including Great Basin desert shrub,
Mohave Desert scrub, pinyon-juniper forestlands and
grasslands (USDI FWS 1993). Plants occur from 850
to 1,650 meters (5400 feet).

Adaptation

Siler's pincushion is found on gypsiferous clay and
sandy soils derived from the Moenkopi Formation.
Most of the populations are found on the Shnabkaib
Member of the formation, while others occur on the
Middle Red member.

Management

Threats to the species include offroad vehicle use,
trampling by cattle, soil erosion and mineral
exploration. Many plants in plots monitored by the
BLM died of natural causes including drought, insect
and small mammal herbivory. A relatively new
potential threat to Siler's pincushion is the proposed
development of a pipeline from Lake Powell to St.
George, Utah.

A Siler's pincushion Cactus recovery plan was
developed in 1986. Management goals include
continued monitoring, providing conservation
assistance to the Kaibab-Paiute Indian Tribe, closing
areas with dense Siler's pincushion to ORV use, and
conducting research on insect predators (USDI FWS
1986).

Pests and Potential Problems

Cactus borer beetles (*Moneilema* spp) are known to
parasitize close relatives of Siler's pincushion, but

they have not yet been documented on this species (USDI FWS 2008).

Environmental Concerns

There are no known environmental concerns associated with this species.

Seed and Plant Production

This species is difficult to grow under cultivation. Seed germinates readily, but plants quickly die due to the species' restricted soil adaptation. Transplanting and grafting have not been successful (USDI FWS 1993).

References

- USDI Fish and Wildlife Service. 1986. Siler pincushion cactus (*Pediocactus sileri*) recovery plan. 57 p.
- USDI Fish and Wildlife Service. 1993. Endangered and threatened wildlife and plants; reclassification of the plant *Pediocactus sileri* (Siler pincushion cactus) from endangered to threatened status). Federal Register. 58 (246): 68476-68480.
- USDI Fish and Wildlife Service. 2008. Siler pincushion cactus (*Pediocactus sileri*) 5-year review: summary and evaluation. Phoenix, AZ.
- Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins. 2003. A Utah Flora. Third Edition, revised. Brigham Young University, Provo, UT.

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Citation

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