



SPECIES FACT SHEET

Cactaceae (Cactus family)

Peebles Navajo Cactus

Pediocactus peeblesianus var. *peeblesianus*

Habitat and ecology

Peebles Navajo cactus (*Pediocactus peeblesianus* var. *peeblesianus*) occurs in two core populations near Holbrook and Joseph City, Arizona. It only grows on the gravelly soils of old channels of the Little Colorado River. These soils are well-drained and occur on the gentle slopes of low hills. The vegetation on these soils is open and sparse. Peebles Navajo cactus grows at elevations between 5,100 and 5,650 feet. At the time of its listing, the cactus only occurred on 80-85% of its potential habitat, suggesting that it may have even more specific habitat requirements than are currently known.

Description

Peebles Navajo cactus is a very small succulent with two to four round, unbranched stems. It grows up to 2.5 cm tall, but often only the tops of the stems protrude above the ground. Each stem has spongy, white spines that form a twisted cross. Four, but sometimes three or five, of these spines cluster together. In late April, yellow-green flowers bloom. The flowers are often larger than the cactus stem. The small fruits become reddish-brown at maturity and contain dark brown to black seeds.



Counties where Peebles Navajo cactus occurs (from <http://www.fws.gov/species/>).

RARE PLANT



JEFF SERVOS / US FISH AND WILDLIFE SERVICE

Peebles Navajo cactus is a tiny cactus with white spines that form twisted crosses.

Conservation status and threats

The U.S. Fish and Wildlife Service has listed Peebles Navajo cactus as an endangered species since November 28, 1979. Arizona lists it as critically imperiled.

Over twenty years of monitoring, the populations of Peebles Navajo cactus have shrunk. Monitoring has also shown that the populations tend to increase during wet years and decrease during dry ones. During dry years, the plants die from water stress and may be eaten by rabbits and other rodents, who only eat cacti when more palatable plants are not available. Peebles Navajo cactus is also threatened by human activity, including livestock grazing and off-road vehicle use. In addition, gravel quarrying has destroyed possibly as much as one-fourth of the potential habitat for the cactus.

Related species

The closest relative of Peebles Navajo cactus is Fickeisen plains cactus (*Pediocactus peeblesianus* var. *fickeiseniae*). Unlike Fickeisen plains cactus, Peebles Navajo cactus lacks a central spine, has fewer spines in the spine clusters, and has stems that are always unbranched.



References

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- NatureServe. 2009. *Pediocactus peeblesianus* var. *peeblesianus*. NatureServe explorer: An online encyclopedia of life. Version 7.1. NatureServe, Arlington, VA. Available at <http://www.natureserve.org/explorer/> (accessed 17 June 2010).
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- U.S. Fish and Wildlife Service. 2008. Peebles Navajo cactus (*Pediocactus peeblesianus* var. *peeblesianus*). 5-year review: summary and evaluation. Arizona Ecological Services Office, U.S. Fish and Wildlife Service, Phoenix, AZ.