

***Carex specuicola* J.T. Howell**
Navajo Sedge

Family: Cyperaceae

Synonyms: None

NESL: G3

Federal Status: Listed Threatened (50 FR 19370 19374)

Plant Description: Perennial grass-like plants with a dried persistent leaf base; leaves narrow, 1-3 mm wide, 12 – 30 cm long. Flowers inconspicuous with female flowers located above the male flowers; flowers grouped into 2-4 short spikelets 8- 20 mm long, clustered at the end of a long thin stalk, 2-3 times the length of the leaves. Pistillate scales pale brown with broad hyaline margins and a conspicuous green midvein. Flowering and fruit set occur from spring to summer, but most of the reproduction appears to be vegetative.

Similar Species: *Carex specuicola* is unusual in having both two-branched stigmas with lenticular achenes, and three-branched stigmas with trigonous achenes (predominantly two-branched). *C. specuicola* often grows with *Carex aurea* or *C. hassei* from which it can be distinguished by its strongly flattened perigynia and by having the female flowers located above the male flowers. *C. utahensis* (*C. parryana* sensu Goodrich) has stiff, erect culms and the pistillate scales are deep purple-brown with narrow inconspicuous hyaline margins (predominantly 3 stigmas).

Habitat: Typically found in seeps and hanging gardens, on vertical sandstone cliffs and alcoves. Known populations occur from 4600ft to 7200ft.

General Distribution: Northern Arizona, San Juan Co, Utah.

Navajo Nation Distribution: From the Navajo Creek drainage in Coconino Co, east to the Tsegi Canyon Watershed in Navajo Co, south to the Rock Point/Mexican Water & Canyon de Chelly National Monument, Apache Co, AZ area. Also known from Chinle Creek, San Juan Co, UT.

Potential Navajo Nation Distribution: Northern Arizona and southeastern Utah, especially in hanging gardens of the San Juan River drainage and Lake Powell.

Survey Period: Positive identification is only possible during flowering/fruitlet season from late June through September. Suitable habitat can be identified year round.

Avoidance: A 200 ft buffer zone is recommended to avoid disturbance; may be more, depending on size and nature of the project. Any activity affecting groundwater will need special consideration.

References:

- Arizona Rare Plant Committee. 2001. Arizona rare plant field guide: a collaboration of agencies and organizations. Washington: U.S. Government Printing Office. <http://aznps.org/rareplants.html>
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- House, D.E. 1987. Recovery Plan for Navajo Sedge, *Carex specuicola* J.T. Howell. Prepared for the U.S. Fish & Wildlife Service, Region 2, Albuquerque, NM.
- Kearney, T. H., R. H. Peebles, and collaborators. 1960. Arizona Flora. Second edition with supplement by J. T. Howell, E. McClintock, and collaborators. University of California Press, Berkeley, 1085 pp.
- Kelly, K. and J. McGinnis. 1994. Highly Safeguarded Protected Native Plants of Arizona. Arizona Department of Agriculture, Phoenix, AZ.
- Roth, D. 2004. *Carex specuicola* (Navajo Sedge) Status Report. Unpublished report prepared for the USFWS. Navajo Natural Heritage Program, Window Rock, AZ.
http://nnhp.nndfw.org/docs_reps.htm



Carex specuicola

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Carex specuicola habitat

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