<u>T O C</u>

Carex specuicola J.T. Howell Navajo Sedge

Family: Cyperaceae

Synonyms: None

<u>NESL</u>: 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).

<u>Habitat</u>: 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.

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

<u>Survey Period</u>: Positive identification is only possible during flowering/fruiting 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. <u>http://aznps.org/rareplants.html</u>

- Atwood, D.N., et al. 1991. Utah Threatened, Endangered, and Sensitive Plant Field Guide. U.S. Forest Service Intermountain Region, National Park Service, Bureau of Land Management, Utah Natural Heritage Program, U.S. Fish & Wildlife Service, Environmental Protection Agency, Navajo Nation, and Skull Valley Goshute Tribe.
- 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.

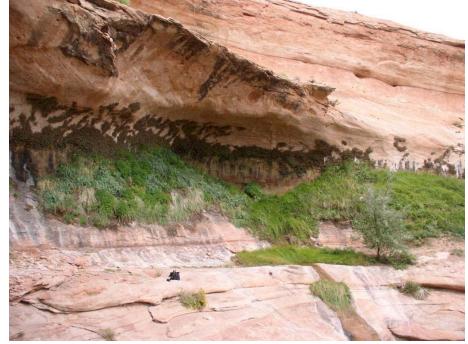
Kelly, K. and J. McGinnis. 1994. Highly Safeguarded Protected Native Plants of Arizona. Arizona Department of Agriculture, Phoenix, AZ.

Roth, D. 2004. Carex specuicola (Navajo Sedge) Status Report. Unpublished report prepared for the USFWS. Navajo Natural Heritage Program, Window Rock, AZ. <u>http://nnhp.nndfw.org/docs_reps.htm</u>



Carex specuicola

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Carex specuicola habitat

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