<u>T O C</u> P a g e | 33

Astragalus cremnophylax Barneby var. hevronii Barneby Marble Canyon Milkvetch

Family: Fabaceae Synonyms: None

NESL Status: G3 Federal Status: None

Plant Description: Dwarf, evergreen, perennial herb, forming a mat less than 1.5 cm high, 2.5-16 cm in diameter. Short creeping stems 1.2 cm long with 5-9 compound leaflets with dolabriform hairs; leaf bases produced in the fall disjoint readily when dry, leaving the rachis as a stiff, upright spinescent structure; flowers are pale purplish-lilac and usually held slightly above the mat, banners 7-8 mm by 4.4-6 mm, the keel 5.2-5.4 mm. Fruits unilocular, obliquely egg-shaped, and densely hairy. Seeds orange. Flowering April to May, fruiting May to June

<u>Similar Species:</u> two varieties of the taxon are similar: *A. c. cremnophylax* and *A. c. myriorrhaphis*; along with A. *humillimus*, from New Mexico. All of these are considered rare and are geographically isolated from one another.

<u>Habitat:</u> crevices and depressions with shallow soils on Kaibab Limestone on rim-rock benches at the Marble Canyon edge in Great Basin Desertscrub communities, at ca. 5000ft elevation.

General Distribution: Rims of Marble Canyon near Shinumo Wash, Coconino Co.

Known Distribution on the Navajo Nation: East rim Marble Canyon, south of Shinumo Wash, north to Sheep Springs Wash.

Potential Navajo Nation Distribution: Marble Canyon, from the Little Colorado River Gorge to Navajo Bridge where habitat is suitable.

Survey Period: Best from April to May, but can be identified year-round by an experienced individual. Suitable habitat can be identified year round.

Avoidance: A 200 ft buffer zone is recommended to avoid disturbance; may be more or less, depending on size and nature of the project

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 Barneby, R. C. 1992. Centennial beans: a miscellany of American Fabales. Brittonia 44:238. Cronquist, A. et al., eds. 1989. Intermountain Flora, vol. 3 part B. New York Botanical Garden, Bronx, NY. p. 66-67.

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.

Roth, D. 2007. The Marble Canyon milk-vetch (*Astragalus cremnophylax var. hevronii*). A 10-year monitoring update – Redwall Site, Coconino Co., AZ. Unpublished report prepared for the Navajo Natural Heritage Program, Window Rock, AZ. http://nnhp.nndfw.org/docs_reps.htm

<u>T O C</u> P a g e | 34



Astragalus cremnophylax var. hevronii

©Daniela Roth, NNHP



Astragalus cremnophylax var. hevronii habitat

©Daniela Roth, NNHP