

Astragalus phoenix Barneby (1970)**ASH MEADOWS MILKVETCH**

FAMILY: *Fabaceae*, the legume family.

STATUS: **Heritage Program SENSITIVE LIST, ranks: G2 S2**

USFWS/ESA: LISTED THREATENED. **STATE OF NEVADA:** FULLY PROTECTED. **BLM:** Special Status Species. **USFS:** none. **NNNPS:** THREATENED. **IUCN:** endangered.

POPULATION CENSUS: **10 occurrences mapped** at 1.0 km (0.6 mi) separation, **OR 13 occurrences mapped** at 0.16 km (0.1 mi) separation; total estimated **individuals 1943+**, total estimated **area 3.7+ ha (9.1+ ac)**. **TREND:** unknown.

IMPACTS AND MAJOR THREATS: Development, mitigated by TNC acquisition of major tract. Also rabbit grazing, horses, dust from disturbed soil.

INVENTORY EFFORT: Surveys substantially complete. Most recent entered survey 1986, average year of last survey 1976. **Years since last entered survey** (percent of mapped records at various survey ages): **11-20 yrs:** 30.8%; **21-30 yrs:** 30.8%; **31-50 yrs:** 38.5%.

LAND MANAGEMENT in decreasing predominance: U. S. Fish and Wildlife Service, private lands, U. S. Bureau of Land Management.

RANGE: Nye County, Nevada. Endemic to the Ash Meadows area. Maximum **range dimension 11.5 km (7.1 mi)** excluding most disjunct record.

ELEVATIONS RECORDED: 2200-2350 feet (671-716 meters).

HABITAT: Dry, hard, seasonally moist, white, barren flats, washes, and knolls of calcareous alkaline soils with *Distichlis spicata*, *Atriplex confertifolia*, *Mentzelia leucophylla*, *Haplopappus acradenius*, and *Enceliopsis nudicaulis corrugata*.

PHENOLOGY: flowering spring. Range of most frequent **survey months:** April-August.

LIFE-FORM AND HABIT: small long-lived perennial cushion.

DESCRIPTION: A low, mat-forming perennial herb; mats up to 5 dm in diameter. Purple flowers are borne on tiny erect stems from April to early May.

PHOTOGRAPHS: Nevada Natural Heritage Program images web page (1998-present), slide collection (1986-present), and files.

ILLUSTRATIONS: Mozingo and Williams (1980).

OTHER GENERAL REFERENCES (listed separately): Barneby (1964), Beatley (1976), U. S. Fish and Wildlife Service (1983).

SPECIFIC REFERENCES:

Barneby, R. C. 1970. A new *Astragalus* (Fabaceae) from Nevada. *Madroño* 20: 395-398.

Kruckeberg, A. R., and D. Rabinowitz. 1985. Biological aspects of endemism in higher plants. *Ecological Systems* 16: 447-479.

Reveal, J. L. 1978. Status report on *Astragalus phoenix*. Portland, Oregon: U. S. Fish and Wildlife Service.
