

HOLMGREN MILK-VETCH
(Astragalus holmgrenorium)

STATUS: Endangered (66 FR 49560, September 28, 2001) with critical habitat (77 FR 77972, December 27, 2006).

SPECIES DESCRIPTION: A member of the pea family (Fabaceae), it is a herbaceous perennial that produces small purple flowers in the spring, and dies back to its root crown (base of the stalk where roots begin) after the flowering season. The leaves are pinnately compound (arranged on opposite sides of the stem in a row) and arise directly from the root crown. Leaves are pressed close to the ground; leaflets are long 0.8 to 1.6 cm (0.3 to 0.6 in), and oval-shaped with the narrow end towards the base of the leaf. Fruits are pods 3.0 to 5.0 cm (1.0 to 2.0 in) long and 0.6 to 0.9 cm (0.2 to 0.4 in) across. Pods are curved, elliptic and have a beak at the tip. Stem height may range from 20.0 to 40.0 cm (8.0 to 20.0 in) in areas with livestock grazing to 1.0 m (40.0 in) in ungrazed areas.

HABITAT: Shallow, sparsely vegetated soils derived primarily from the Virgin limestone member of the Moenkopi Formation. Holmgren milk-vetch is a principal member of a warm-desert shrub vegetative community at 823 to 854 m (2,700 to 2,800 ft) elevation. The species is found under limestone ridges and along draws in gravelly clay hills.

RANGE: Historical: Mohave Desert endemic in Southwestern Utah and Northwestern Arizona.

Current: Only three populations are known: the primary population exists on the Arizona (Mohave County) and Utah (Washington County) border, and the other two occur in Washington County, Utah. All populations are within 15 km (9 miles) of St. George, Utah.

REASONS FOR DECLINE/VULNERABILITY: Urban expansion and development, road/highway construction, off-road vehicle use, displacement by exotic weeds, mining, and mineral exploration. The small number of populations and restricted habitat of this species make it vulnerable to human-caused and natural environmental disturbances.

LAND MANAGEMENT/OWNERSHIP: In Arizona, species occurs only on Bureau of Land Management (BLM) and State land.

NOTES: Species also commonly called Paradox milk-vetch. Critical habitat occurs in Arizona and Utah on BLM, State, County, and privately-owned lands. For specific locations of critical habitat, see 77 FR 77972 ([AESO Holmgren milk-vetch species information](#)).