

## Mulford's milkvetch (*Astragalus mulfordiae*)



### ENDANGERED



Flowers and fruit (left), habit (center), and habitat (right) of Mulford's milkvetch. Photos by Andrea Thorpe (left) and Nancy Fredricks (center and right). If downloading images from this website, please credit the photographer.

### Family

Fabaceae

### Plant description

Mulford's milkvetch is a perennial species with a long taproot and clustered, slender, wiry, thinly strigose stems, 3–20 cm long, arising from a woody, many-branched caudex. Leaves are 4–10 cm long including the petiole, with a flattened rachis and 11–23 linear to elliptic leaflets, 0.3–0.8 cm long and nearly glabrous. Flowers are scattered, 5–20, in loose racemes on peduncles 5–8 cm long. The calyx is 0.28–0.5 cm long, strigose, with narrow triangular-subulate teeth slightly shorter than the tube. The corolla is whitish, drying yellow, the banner often bluish to purple lined or tinged, 0.5–0.9 cm long. Pods are horizontally spreading, papery, inflated, 0.8–1.5 cm long, beaked, and almost triangular in cross-section. Valves are strigose and finely cross-veined, the ventral suture straight or curved slightly, the dorsal suture strongly curved. The slender stipe is 0.2–0.3 cm long.

### Distinguishing characteristics

Mulford's milkvetch is distinguished from the other *Astragalus* species with which it occurs by its small whitish flowers, its connate, sheath-forming lower stipules, and its pendulous, stipitate, three-faced pods.

### When to survey

Surveys for Mulford's milkvetch should be performed from May through June when the species is flowering and/or fruiting. Flowering begins in April, depending on site conditions.

### Habitat

Mulford's milkvetch inhabits sandy substrates including old river deposits, sandy areas near rivers, sandy bluffs, and dune-like talus in foothills at approximately 670–850 m (2200–2790 ft) in elevation. It is found mainly in shrub-steppe and desert shrub communities.

Associated native species include *Hesperostipa comata*, *Achnatherum hymenoides*, *Ericameria viscidiflora*, *Penstemon acuminatus*, *Poa secunda*, *Balsamorhiza sagittata*, and *Artemisia* spp. Non-native competitors include *Agropyron desertorum*, *Chondrilla juncea*, and *Bromus tectorum*.

### **Range**

Mulford's milkvetch is limited to a region approximately 160 kilometers by 160 kilometers (100 miles by 100 miles) in area in the western Snake River Plain of eastern Oregon and adjacent southwestern Idaho. It occurs from the Owyhee Uplands in Malheur County in Oregon, east to the Owyhee Front and Boise Foothills in Idaho. There are 14 occurrences of the species reported from Oregon and 34 extant occurrences known from Idaho.

### **Oregon counties**

Malheur

### **Federal status**

Species of Concern

### **Threats**

Primary threats to Mulford's milkvetch include habitat loss due to urbanization and habitat degradation due to exotic weed invasions, fires, livestock grazing, mining, and off-road vehicle use.

### **Did you know?**

Although the species was described in 1898, Mulford's milkvetch wasn't collected from Oregon until decades later in 1942 by Morton Peck.

### **References**

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