

Calochortus nitidus Douglas

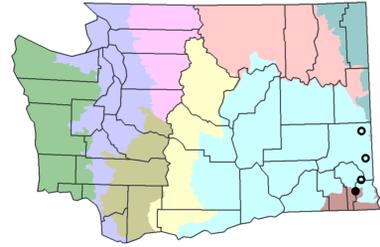
broad-fruit mariposa-lily

Liliaceae - lily family

status: State Endangered, Federal Species of Concern,

BLM sensitive, USFS sensitive

rank: G3 / S1



General Description: Perennial herb from a deep-seated bulb; stem erect, 2-4 dm tall. Basal leaf flat, 1-3 dm x 10-25 mm, margins becoming inrolled. Stem leaf solitary, located about midway up the stem.

Floral Characteristics: Bracts 2 or more, unequal, 2-10 cm long. Sepals shorter than the petals. Flowers 1-4, erect, showy, purplish lavender. Petals with a deep purple crescent on the basal inner surface above a triangular to crescent-shaped gland, obovate to oblanceolate, ciliate on lateral margins and sparsely hairy above the gland. Anthers oblong, 6-10 mm long, shorter than the filaments. Ovary 3-winged.

Fruits: Capsules elliptic to nearly circular in outline, 3-winged, erect. Seeds straw-colored. Flowers and fruits July to August.

Identification Tips: Look for the 3-winged ovaries and 3-winged, erect fruits. *Calochortus macrocarpus* var. *macrocarpus* also has lavender flowers, but its fruits are linear and not winged. *C. eurycarpus* has a central purple blotch rather than a crescent on the petals. *C. longebarbatus* has a stem leaf near the ground, often with a bulblet in the axil.

Range: Endemic to southeastern WA and adjacent ID and OR.

Habitat/Ecology: Grasslands and the moist swales between adjacent hills. Soils are primarily loess and alluvium; slopes vary from flat to moderately steep. Elevations in WA: 900-1040 m (3000-3400 ft). Historical vegetation was dominated by perennial bunchgrasses and deciduous shrubs. Associates include Idaho fescue (*Festuca idahoensis*), bluebunch wheatgrass (*Pseudoroegneria spicata*), prairie Junegrass (*Koeleria macrantha*), and prairie smoke (*Geum triflorum*). In ID, *C. nitidus* is also known from open woodlands bordering grasslands. It prefers sites in good ecological condition and is at a competitive disadvantage with annual grasses and other weedy species.

Comments: There is 1 known extant population in WA; attempts to relocate historical sites have been unsuccessful. This species is rare throughout its range. Conversion of Palouse grasslands to agricultural use has resulted in significant habitat loss, and livestock grazing has degraded much of the untilled habitat.

References: Flora of North America 1993+, vol. 26.



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