

Spalding's Milk-vetch (*Astragalus spaldingii*) Fabaceae (Pea Family)

Status: Red / Not Assessed

Best Survey Time: May to Jul

General Habitat: Upland

RANGE

- Narrow distribution in North America from British Columbia south to Washington, Oregon and Idaho
- In B.C., this species is currently only known from one location south of Richter Pass, close to the USA border



Figure 1 B.C. distribution of Astragalus spaldingii (BC CDC 2014)

HABITAT

- In the Okanagan, occurs on south-facing grassland and shrubland steppe in the Bunchgrass Biogeoclimatic Zone
- Associates include thread-leaved sedge (Carex filifolia), umber pussytoes (Antennaria umbrinella), white pussytoes (Antennaria microphylla), grey horsebrush (Tetradymia canescens) and thread-leaved fleabane (Erigeron filifolius)



Figure 2 Robust plants in healthy grassland setting



Figure 3 Typical individual in flower

LIFE HISTORY

- Long-lived perennial species that blooms from May into June
- Fruit maturity and seed release occur through the late summer and autumn
- Reproduces only from seed and not vegetatively

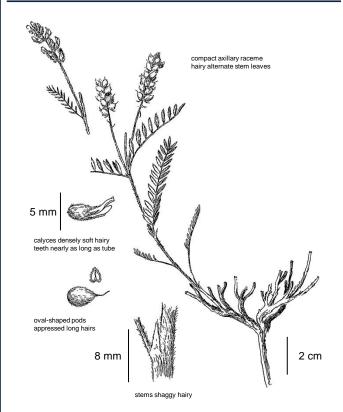


Figure 4 Illustration of Astragalus spaldingii by Jeanne R. Janish (Hitchcock et al. 1969)

Astragalus spaldingii (continued)

DESCRIPTION

General

- Perennial milk-vetch from a taproot and branching stem-base
- Stems mostly ascending, 20 to 50 cm tall, shaggy with grey, woolly hairs

Leaves

- Alternate, pinnately compound, 5 to 12 cm long
- Leaflets 15 to 27, narrowly elliptic to lance-oblong, 5 to 18 mm long, grey-hairy
- Stipules linear and 4 to 8 mm long

Flowers

- Compact axillary raceme of 15 to 60 pea-like flowers, racemes 1.5 to 2.5 cm long, scarcely surpassing the subtending leaf
- Corollas whitish, often marked in purple or blue, 8 to 14 mm long, banner about as long as wings, calyces densely soft hairy, with teeth nearly as long as tube

Fruits

 Oval-shaped pods, leathery and 2-chambered, more or less sessile, 4 to 7 cm long with appressed long hairs



Figure 5 A more mature inflorescence with purple marked flowers

IDENTIFICATION TIPS

- Canada and hillside milk-vetch (A. canadensis and A. collinus) are usually taller and have short, more or less triangular calvx teeth
- Standing and timber milk-vetch (A. laxmanii and A. miser) have pink flowers and are not shaggy
- Okanagan locoweed (Oxytropis) spp. in sagebrush steppe have leaves all basal
- A. caricinus is closely related and occurs nearby in Washington; it prefers sandy soil and has smaller, descending flowers in looser racemes



Figure 6 Close-up of inflorescence at initial stage of flowering

GENERAL THREATS AND GUIDANCE

- Avoid development in the area with a known occurrence of Astragalus spaldingii through project relocation or redesign
- Protect the existing site and nearby similar habitats from disturbance and development, including exclusion of livestock and ATVs through fencing and/or signage, and consider restoration (including invasive plant removal) following professional advice
- Invasive species are spread primarily through disturbance, including overgrazing; consider current land use regimes to minimize impacts
- Follow provincial methods for when and how to conduct plant species at risk surveys
- Follow provincial policy and guidance on how to avoid, minimize, restore and offset impacts to plant species at risk and their habitats
- Report any sightings to the B.C. Conservation Data Centre (<u>cdcdata@gov.bc.ca</u>) and FLNR Ecosystems Section (josie.symonds@gov.bc.ca)

REFERENCES

B.C. Conservation Data Centre. 2013. http://a100.gov.bc.ca/pub/eswp/

Douglas et al. (editors). 1999. *Illustrated Flora of British Columbia*. Vol. 3. B.C. Min. Environ., Lands and Parks, and Min. For., Victoria, B.C.

Hitchcock et al.. 1969. Vascular Plants of the Pacific Northwest. Univ. Washington Press, Seattle, W.A.

Klinkenberg, Brian (editor). 2013. E-Flora BC http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname="http://linnet.geog.ubc.ca/Atlas.aspx">http://linnet.geog.ubc.ca/Atlas.aspx

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