

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

- Status: Blue / Not Assessed
- Best Survey Time: May to July
- 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

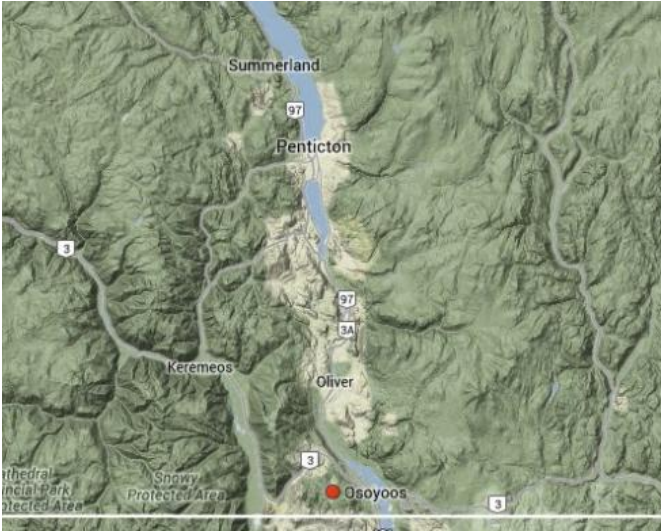


Figure 1 B.C. distribution of *Astragalus spaldingii* (BC CDC 2014)

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

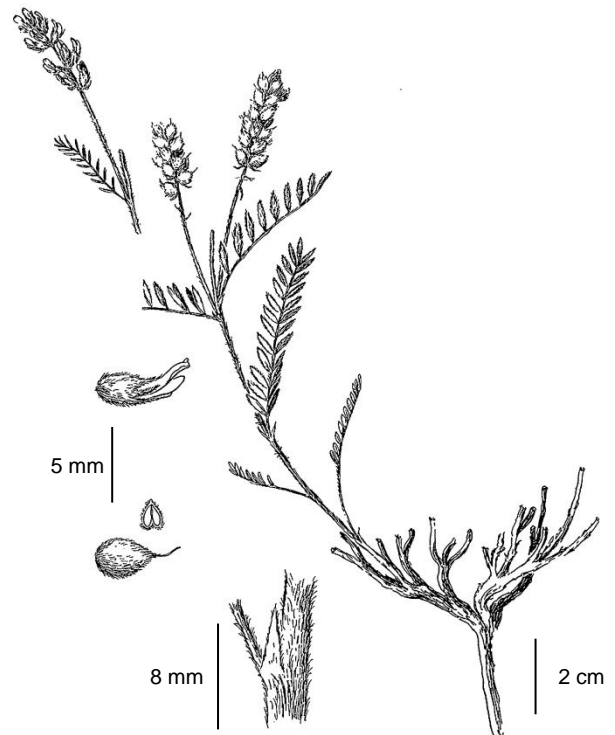


Figure 4 Illustration of *Astragalus spaldingii* by Jeanne R. Janish (Hitchcock et al. 1969)

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 calyx 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; *Astragalus spaldingii* may not continue to exist for the long-term in B.C. under current land use regimes
- Provincial methods for when and how to conduct rare plant surveys, as well as guidance on mitigation measures should be followed
- Report any sightings to the BC Conservation Data Centre (cdccdata@gov.bc.ca) and MFLNRO Ecosystems Section (josie.symonds@gov.bc.ca)

REFERENCES

- BC Conservation Data Centre. 2013. <http://a100.gov.bc.ca/pub/eswp/>
- Douglas et al. (editors). 1999. *Illustrated Flora of British Columbia*. Vol. 3. BC 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=Astragalus%20spaldingii>

ACKNOWLEDGEMENTS

Astragalus spaldingii Plant Species at Risk Fact Sheet developed by Josie Symonds based on content produced under contract by Enlivened Consulting Ltd.