



Medium Risk in North Okanagan

Limited distribution with potential to spread further.

High Risk in South and Central Okanagan

Limited population with significant potential to spread in the region.

AKA: wolf's milk, leafy Euphorbia

DESCRIPTION

- Perennial; grows to 1.0 m tall
- Vertical and horizontal creeping roots
- Leaves are alternate except for those located immediately under the flower which are spirally arranged on stem
- Inconspicuous, greenish – yellow flowers
- All parts of leafy spurge contain a milky latex sap

Leafy spurge reproduces by seed and vegetatively through root buds. A single stem may produce up to 250 seeds; each capsule contains approximately 10-50 of those seeds. When temperatures are hot enough, the capsules explode, launching individual seeds up to 15 metres. Wildlife, livestock, humans and machinery also disperse seeds. The seeds may remain viable in the soil for up to 8 years. Spurge populations also expand due to persistent vertical and horizontal underground root systems. The aggressive roots have a large nutrient reserve and numerous buds, each capable of producing new plants.

HABITAT

In British Columbia, leafy spurge grows at low- to mid-elevations on dry roadsides, fields, grasslands, open forests and disturbed habitats. It is considered a major concern in the Okanagan, Thompson, Kootenay, Cariboo and Omineca areas. In the Okanagan, spurge is most prolific in the North Okanagan, with isolated pockets in the Central Okanagan and one historical site near Penticton. Leafy spurge has a wide range of ecological tolerances from very dry to very wet but appears best adapted to semi-arid areas. It grows on a range of soil types but is most abundant in coarse textured soils.

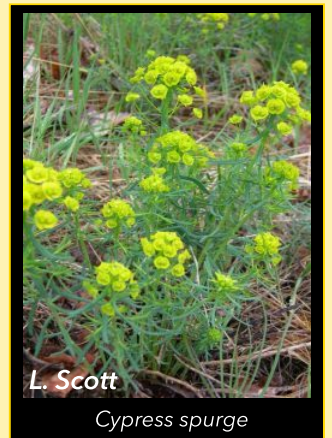
Leafy Spurge

Euphorbia esula



LOOK-A-LIKE

Cypress spurge, a similar looking non-native spurge, can be distinguished from leafy spurge due to its numerous small, slender leaves and typical height of less than 0.5 m.



IMPACT AND RISKS

- Leafy spurge displaces native vegetation and degrades grazing lands. Research in the United States suggests that spurge reduces cattle carrying capacity by 50-75% by decreasing forage production and available range, as cattle tend to avoid spurge-infested areas.
- Leafy spurge is a toxic weed. The entire plant contains a milky-coloured latex juice that is used to heal damaged plant tissue. The latex can cause a skin rash in humans and severe irritation to the mouth and digestive tract in cattle. It can result in death when ingested in large amounts by cattle. Sheep and goats, however, can graze infested areas without injury and may be useful in controlling spurge population.

PREVENTION AND MITIGATION

The most effective way to ensure that your lands do not become infested with leafy spurge is by prevention. Here are some recommendations to prevent invasion on your property:

- Maintain your crops and natural lands in a healthy, vigorous condition to ensure a competitive plant community; competitive perennial grasses and forbs utilize water and nutrients that would otherwise be readily available to spurge.
- Follow a well-designed grazing management plan; excessive livestock grazing reduces competition and favours invasive plants.
- Regularly patrol your property for spurge plants and immediately control or remove infestations before seed set.
- Cooperate with adjacent landowners and encourage them to prevent leafy spurge spread.
- Immediately re-vegetate disturbed, bare soils with a suitable seed mixture that provides dense, early colonization to prevent weed invasion.
- Clean your vehicles and machinery of plant material and soil before leaving a spurge infestation, or any other invasive plant infestation.
- Do not move contaminated soils to a new area.

TREATMENT AND DISPOSAL

- Mowing and burning have a very limited effect on leafy spurge as the root system may re-sprout. Although burning does make spurge more vulnerable to follow-up herbicide treatment, there is still little benefit.
- Hand-pulling, digging and tilling are generally ineffective, as small parts of the root system can re-sprout. These actions may also increase soil disturbance, which in-turn reduces spurge competition and allows the weed population to increase.
- Chemical control is also an option. Before applying herbicides, read the label for full use and precautionary instructions.
- For further information on the selection and application of chemicals to protect your crop, contact AgriService BC at 1-888-221-7141 or email AgriServiceBC@gov.bc.ca.
- Goats have also been used successfully at controlling leafy spurge. Unfortunately, once animals are removed, spurge is likely to return.
- Biological control of leafy spurge has proven to be effective in some locations. Several *Aphthona* (flea beetle) species have been released on leafy spurge. The choice of species depends on the microhabitat of the spurge infestation. For example, *A. nigricutis* has successfully resulted in spurge reductions on hot, dry open sites as opposed to shady, moister sites.



Project funding and support provided by:

