INVASIVE PLANTS OF THE OKANAGAN-SIMILKAMEEN

Blueweed

(Echium vulgare)

INTRODUCTION

Blueweed, also known as Viper's bugloss, is native to Eurasia and is part of the Borage family. In British Columbia, blueweed grows along dry roadsides, in disturbed habitats, in rocky pastures and on rangelands at low- to mid-elevations. Blueweed has also been purposefully planted in gardens and is often pollinated by bees and butterflies. It thrives in warmer temperatures and does not tolerate shade. This species is a major concern in the Kootenay, Okanagan, Thompson, and Cariboo regions. In the Okanagan-Similkameen region, infestations occur near Green Lake, south of Okanagan Falls, and in isolated patches around Princeton. With such limited blueweed infestations in our region, it is imperative that all infestations be contained and eradicated wherever possible.

BIOLOGY

Blueweed is a tap-rooted biennial but can also behave as a short-lived perennial. Plants begin as basal rosettes in the first year and bolt into one or many hairy stem(s) in the second year. Plants contain a toxic alkaloid that is unpalatable; therefore, livestock should not graze on them at any stage of plant growth. Blueweed reproduces only by seed and each blue-purpled flower bears four greyish seeds called nutlets. Each plant on average produces 500 to 2,000 seeds. A large portion of the seeds fall to the base of the plant, while some fall off as the stems break at the base and tumble in the wind. The rough seeds can also stick to clothing, animal fur and feathers and hitch-hike to new locations.

THIS IS AN ALERT SPECIES: report all sightings of this plant to your regional Invasive Plant Program Coordinator at www.sosips.ca or call 250-404-0115.

IDENTIFICATION

- Biennial to short-lived perennial reaching heights of up to 1 metre
- Flowers are pink-purple to blue and produce 4 nutlets (seeds)
- The 'fiddleneck' flower stem uncoils as each bud opens
- Stem is covered in stiff hairs with swollen reddish to black bases where attached to stem
- Plants may have one to many stems
- First year plants are formed close to the ground in a rosette (cluster of basal leaves)
- Leaves are lance-shaped and the basal ones are narrow with stocks
- Leaves alternate and are covered in stiff hairs and the underside appears flecked
- Leaves get progressively smaller up the stem





This plant is commonly confused with common bugloss (*Anchusa officinalis*) - a species with a similar coloured-flower.

INTEGRATED MANAGEMENT

The best overall method of control for blueweed is an integrated program using a combination of control methods. Most infestations can effectively be controlled when pairing cutting or digging with a follow-up herbicide application. If using herbicide, ensure a certified applicator or dispenser has been consulted prior to application to ensure the appropriate herbicide and application method has been chosen in relation to the plant, treatment location, weather and local bylaws. Always follow all label instructions.



PREVENTION

The most effective way to ensure that your lands do not become infested with blueweed is by prevention. Here are some recommendations to prevent blueweed from invading your property:

- Learn to identify blueweed and prevent seed production.
- 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 blueweed.
- Clean footwear, vehicles and equipment prior to leaving areas infested with blueweed.
- Cooperate with adjacent landowners and encourage them to prevent blueweed spread.
- Immediately re-vegetate disturbed, bare soils with a suitable seed mixture that provides dense, early colonization to prevent weed invasion.
- Ensure soil, gravel and other fill material are not contaminated with blueweed or other invasive plants.

Due to its limited distribution in our region, this plant should be reported and removed immediately if found.

PHYSICAL CONTROL

Mowing or weed-whacking at the base of the plant can deplete root reserves and prevent seed production. Cut stems encourage more sprouting; therefore, repeated mowing or weed-whacking within a growing season will be necessary. In loose soils, hand-pulling or digging is considered to be very effective as the whole tap-root can be removed.

If soils are hard-packed, the root can be sliced 2-3 inches below the surface with a narrow-bladed shovel. Regardless of the control method chosen, long sleeves and pants should always be worn as the plant causes itching and rashes.

BIOLOGICAL CONTROL

There are no known biological control agents at this time.

For further information on invasive plants in the Okanagan-Similkameen, go to: www.sosips.ca To learn about invasive plants elsewhere in BC, go to: www.weedsbc.ca or www.bcinvasives.ca

For more information about the Okanagan-Similkameen Invasive Plant Program please contact the Regional District at 250-492-0237 or toll free at 1-877-610-3737.



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