

Common Valerian *Valeriana officinalis*



What are invasive species?

Invasive species are species that may be invasive when introduced to an area outside of their native range. They can be introduced intentionally or unintentionally.

Why are invasive species a problem?

Once they establish, invasive plants can reproduce quickly because they have no natural predators or pathogens to keep them in check, and they often become the dominant species in an ecosystem. This can have devastating effects on the environment. Invasive species can displace native plants by monopolizing space, light, water and other resources needed for growth. They can completely alter native plant communities and drastically lower biodiversity. Invasive species can also adversely affect the economy and human health, and interfere with recreational activities.

HISTORY

Common Valerian is a native of Eurasia. It has been present in North America since at least 1890 and has likely benefitted from repeated introduction to the continent. It is known as a favorite herbal medicine dating back to the father of modern medicine, Hippocrates, who prescribed it as a sleep aid. Common Valerian has been used to treat insomnia, anxiety, depression, headaches, and more. During both world wars, it was used in treating victims of shell shock. Valerian remains a popular commodity today, with several million dollars generated each year in sales in the United States. Care should be taken when using herbal remedies, as side effects are numerous and can vary between patients.

IDENTIFICATION

- Grows to 1.5 – 5ft tall
- Leaves are compound and pinnately divided; leaflets are long with serrated edges, hairy underneath, with 5-25 leaflets per leaf
- Stems are thick, fleshy, and ridged
- Flowers are white or pale pink, forming in tight clusters at the top of the plant in 2-5 umbrella-shaped umbels, and are fragrant (very sweet smelling)
- Blooms June – August
- Fruit are lance-shaped, small (0.1 inch), and contain many powdery seeds
- Roots are fibrous; small, white, fleshy rhizomes that have a pungent odour
- Common Valerian spreads vigorously by self-seeding and aerial stolons
- Look-alikes include: bulbous water hemlock (native), and woodland angelica (invasive)



Leaf attachment.



Roots.

CONCERN

Common Valerian is a prolific invader of many diverse ecosystems such as woodland swamps, meadows, and newly disturbed areas. In all of these ecosystems, Valerian is a ready competitor and can spread quickly due to its early emergence and self-seeding capability. Common Valerian can reproduce by several different means, including by seed, stolon (runner), bulbil, and rhizome (underground stem). These qualities may allow Valerian to gradually dominate an ecosystem, reducing local biodiversity and degrading the habitats of native wildlife. Its vegetative reproduction allows the plant to form dense clumps that gradually expand outwards. Although this plant has been used medicinally in humans, it is toxic to cattle. This means that the spread of Valerian could lead to the reduced value of pastureland.



PREVENTION AND CONTROL

Before selecting a control method, consider the size of the infestation, your available resources, and the amount of effort you are willing to expend. Often, multiple control methods are used simultaneously. Consider also the local ecosystem and what other organisms or ecological processes may be affected by management.

Controlling a Common Valerian infestation is relatively easy compared to many invasive species, as its seeds do not remain dormant in the soil over long periods. Because the plant can spread by seed, control should be undertaken before the plant goes to seed. If management happens after seeds appear, carefully clip and bag seed heads before beginning to prevent dispersal. Small infestations of Common Valerian can be controlled by hand-pulling, as the roots are fairly shallow. Care should be taken to ensure that the entire root is pulled up with the plant, as Common Valerian may regrow from roots left behind. This plant is fairly delicate, and so pulling should be done very carefully to avoid breaking off the belowground portion.

For larger infestations, mowing is an option that prevents seed formation but does not kill the plants or reduce their numbers. Seedlings may be too low to mow and will be unaffected by this treatment. Chemical control methods exist, but the PEIISC does not offer advice on chemical control measures at this time. Please be aware it is unlawful to use herbicides when close to watercourses on PEI. As Common Valerian commonly grows in moist areas, in many cases chemical control will not be a viable option. If using chemical controls, it is imperative that all local legislation and manufacturer's instructions be followed during application. When managing invasive species by any method nearby a watercourse, you must obtain a Watercourse, Wetland and Buffer Zone Activity Permit from the department of Environment, Energy, and Climate Action. Apply for this permit at least six weeks before beginning control efforts.

When control efforts are complete, it is crucial that all equipment used be fully cleaned of all plant parts before moving on to prevent inadvertent spread. All plant parts should be bagged in clear bags and properly disposed of. As a bonus, one can collect the roots to be used later in a Valerian root tea.

DISPOSAL

Place invasive plants in a clear plastic bag and secure. Write plant name (or "invasive plant") on the bag. Place in waste cart (you can also have up to 2 excess bags beside your cart) OR bring them to any Waste Watch Drop-Off Center and pay applicable waste disposal fee.

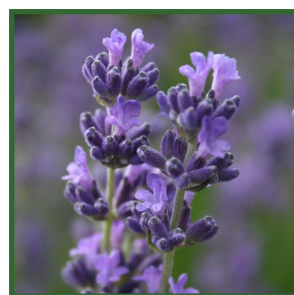
For information on plants that are considered invasive, visit the PEI Invasive Species Council website at <https://peiinvasives.com/invasive-species/>. Businesses and residents disposing of loads greater than what would fit in a half-tonne truck require a permit from the Department of Environment (1-866-368-5044). After receiving the permit, businesses and residents will be directed to an appropriate final disposal facility. Please note that only loads for which permits have been issued will be accepted at these facilities. Please check the IWMC sorting guide www.iwmc.pe.ca/sort (type Invasive Species in the search window) to ensure these instructions are up to date.

MEDICINAL ALTERNATIVES

Blue Vervain



Lavender



Partridgeberry



How can you help?

Here are a few things you can do to help stop the introduction and spread of alien invasive species:

- Learn more about invasive species in PEI, including how to identify species of concern
- Choose native species whenever possible
- Carefully inspect and clean clothing, gear, animals, and vehicles before visiting a new natural area
- Never dump garden or pond waste in a natural area
- Report a sighting

How to report:

Record any invasive species sightings at:

<https://www.eddmaps.org/report/>

OR <https://www.inaturalist.org/>

OR contact

peiinvasives@gmail.com

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