

A close-up photograph of the white, umbrella-shaped flower clusters of a Poison Hemlock plant. The flowers are small and numerous, creating a dense, textured appearance. The green stems and leaves are visible in the background.

TACKLING Poison Hemlock

(*Conium maculatum*)

Invasive species have significant impacts on the environment, human health, infrastructure and the economy in the Metro Vancouver region.

Poison hemlock is one of the world's most poisonous plants. Originally from Europe and North Africa, it is thought to be the plant that killed Socrates in 399 B.C. It is commonly found along streams, ditches, roadsides, trails, forest edges, fields, and other previously-disturbed areas.

IMPACTS

As the name suggests, **poison hemlock plants are poisonous**. Eating, touching, or even inhaling close to this plant can cause various symptoms in humans, pets and livestock, including death in the most severe cases. Even dead plants can remain toxic for up to three years. Poison hemlock also competes with native plants and crops.

IDENTIFICATION

Poison hemlock can easily be mistaken for many other plants, including edible plants in the same family. Identification should be confirmed by an expert.

- **Lifecycle:** Lives for two years; stemless, ground-level clusters of leaves (rosettes) form in the first year, and flowering stems appear in the second year; **stems die back in winter but remain toxic**
- **Stems:** Hollow and hairless with distinct purple spots and many branches, flowering stems 0.5-3 metres tall
- **Leaves:** Bright green, triangular-shaped; resemble fern leaves; strong, musty odour
- **Flowers:** Clusters of small, white flowers at the ends of stems



Stem with purple spots

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Leaves

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Flowers

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- **Seeds:** Contained in brown, ridged capsules, 2-3 millimetres long; a mature plant can spread 1,000 seeds in a year
- **Roots:** Long, fleshy, pale-yellow taproot

CONTROL METHODS

Effective invasive plant management typically involves a variety of control methods. The following table summarizes the recommended techniques for controlling poison hemlock on private property or where permission has been granted by the land owner or manager. Other methods may be used by professionals. **It is best to hire a professional to manage poison hemlock infestations. Protective gear (rubber gloves, goggles or a face shield, a suit, boots and possibly a respirator) should be used, as this plant is extremely toxic.**

CONTROL METHOD	TECHNIQUES	SUITABLE SITES	NOTES
Manual (with protective gear)	Pull	Young plants (small rosettes) when the soil is moist	<ul style="list-style-type: none">• Pull as much of the roots as possible
	Dig the taproot	Mature plants (larger rosettes and flowering stalks)	<ul style="list-style-type: none">• Remove the entire taproot and as much of the root system as possible• Minimize soil disturbance
	Cut the root 3 centimetres below the ground	Plants that cannot be dug or pulled	<ul style="list-style-type: none">• Dig as much of the remaining root as possible• Re-growth can occur from the base of the plant
	Cut off the flowers	Individual plants that are too large to control using other methods	<ul style="list-style-type: none">• Will not kill the plant or eliminate the safety hazard• Flowers may still form seeds after cutting

Remove plants offsite to eliminate the safety hazard. Areas where humans, pets or livestock are present or where food is grown/harvested should be top priorities for removal. New seedlings may grow from seeds in the soil for several years.

How Can You Help?

- Do not purchase, trade or grow poison hemlock seeds or plants.
- Avoid touching suspected poison hemlock plants with bare skin.
- Download the '[Report Invasives BC](#)' app to identify and report invasive species.
- Control invasive plants and replace them with a non-invasive alternative. Check out [growgreenguide.ca](#) for suggestions.
- Do not place poison hemlock in your backyard composter due to the risk of exposure. The temperature will also not become hot enough to completely destroy the seeds and roots.
- To reduce the spread of invasive species, dispose of yard waste and soil appropriately. Visit your municipality's website for more information.

For the complete set of best management practices for poison hemlock and other key invasive species, visit [MetroVancouver.org](#) and search 'Invasive Species'.



Professionals wear personal protective gear when tackling poison hemlock
CREDIT: N. BERGUNDER