Poison Hemlock

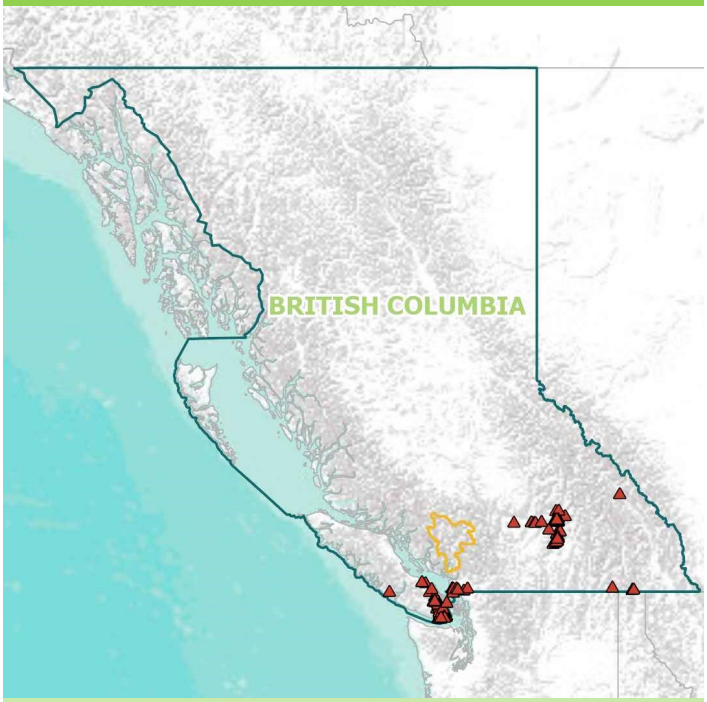
Conium maculatum

(AKA Hemlock, Deadly hemlock, Poison parsley, Poison fool's parsley)

FACT SHEET

Squamish: Prevent | Whistler: Prevent | Pemberton: Prevent

DISTRIBUTION



Origin: Poison Hemlock originates from Europe, and was introduced in North America as a garden ornamental.

Habitat: Poison Hemlock thrives in wet ditches and moist disturbed sites, but it can also withstand dry soils. It is often found near roadsides, field borders, hiking trails, railroad tracks, stream banks, irrigation ditches, waste areas, riparian woodlands and open floodplains.

Reproduction: Spreads by seed. Poison Hemlock is a biennial plant; it forms a short leafy rosette the first year, and develops a tall hollow stem and several clusters of flowers the following season.

One plant can produce over 1,000 seeds, which remain viable in the soil for 3 - 5 years, leading to the rapid formation of a seed bank.

CAUTION: Every part of the plant, especially the fresh leaves and fruit, contain a volatile, oily compound which is so poisonous that a few drops can prove fatal to small animals.

IDENTIFICATION


D. Hare

Flowers: Flowers are small, white, and grow into umbrella-shaped clusters (called umbels) that are about 7 - 8 cm across, starting in early summer.

Stems: Stems are hollow, thick, hairless and ridged with purple spots. They are extensively branching and grow 0.5 - 3 m tall.

Leaves: Are triangular, shiny green and finely divided, giving them a fern-like appearance. Leaves are 3 to 4 times pinnately compound, and emit an unpleasant, parsnip-like odour when crushed.

Roots: Poison Hemlock has a long, thick, pale yellow or white taproot.

Fruits: Seeds are ridged and flattened, 2 - 2.5 mm long, with two seeds borne together.

Similar Species:

- **Native: Water Hemlock** (*Cicuta maculata*), **but the leaf veins end in notches between the teeth of the leaflets, whereas in Poison Hemlock they end at the tips of the teeth.**
- **Invasive: Wild Carrot** (*Daucus carota*), **but this plant has one densely-packed, umbrella-shaped flower cluster on a narrow, hairy stem. Wild Carrot also flowers later in the summer.**

Young Poison Hemlock plants somewhat resemble carrot plants, but can be distinguished by the purple-reddish blotches on the stems.

Updated September 2021

Vectors of Spread: Poison Hemlock seeds are spread on machinery, on clothing, or in transported soil. To a lesser extent, they disperse by water and wind.

WHAT CAN I DO?

Poison Hemlock is not yet found in communities of the Sea to Sky Region, so PREVENTION of further spread is key:

- Regularly monitor properties for weed infestations.
- Ensure soil and gravel are uncontaminated before transport.
- Don't unload, park, or store equipment or vehicles in infested areas; remove plant material from any equipment, vehicles, or clothing used in such areas and wash equipment and vehicles at designated cleaning sites before leaving infested areas.
- Minimize soil disturbances (e.g. use grazing plans that prevent soil exposure from overgrazing), and use seed mixes with dense, early colonization (e.g. alfalfa or barley) to re-vegetate exposed soil and resist invasion.
- Ensure plants (particularly flowering heads or root fragments) are bagged or covered to prevent spread during transport to designated disposal sites (e.g. landfill). **Do NOT compost.**

Poison Hemlock can be controlled by:

- **Mechanical Control:** **Please exercise extreme caution when working near Poison Hemlock.** Minimize exposure by wearing gloves and taking frequent breaks when pulling or mowing large amounts of plants. Mowing or hand-pulling before seed set will eventually deplete the seed bank.
- **Chemical Control:** Since Poison Hemlock tends to grow in wet areas, the use of herbicides may be restricted or impossible. Where possible, foliar applications at the rosette stage (before the plant flowers) of dicamba, 2,4-D and glyphosate have proven effective for chemical control of Poison Hemlock. Herbicide treatment may need to be repeated for several years until the seed bank is depleted. We recommend that any herbicide application is carried out by a person holding a valid BC Pesticide Applicator Certificate. Before selecting and applying herbicides, you must review and follow herbicide labels and application rates; municipal, regional, provincial and federal laws and regulations; species-specific treatment recommendations, and site-specific goals and objectives.
- **Biological Control:** There are no biocontrol agents currently available in BC. However, *Agonopterix alstroemeriana* (moth) is used in several US states as it feeds exclusively on Poison Hemlock. While the moth has not yet been found in BC, the species may offer possibilities for future biological control.

If you suspect you have found Poison Hemlock anywhere in the Sea to Sky region:

Contact the Sea to Sky Invasive Species Council to report and for the most recent, up to date control methods. All reports will be kept confidential.

References: Capital Regional District, Coastal Invasive Species Committee, Creston Valley, CTV News, District of Saanich, Electronic Atlas of the Flora of BC, Fraser Valley Invasive Species Society, Government of BC, Invasive Plant Atlas of the United States, King County Noxious Weeds Program, Lillooet Regional Invasive Species Society, Southern Indiana Cooperative Weed Management Area, USDA Forest Service.

IMPACTS

Health:

- **POISONOUS: The volatile, oily compounds found in every part of the plant (especially the fresh leaves and fruit) are so poisonous that a few drops can kill a small animal.**
- **Human deaths have occurred from harvesting and consuming the roots, having been mistaken for wild carrots or parsnips. Lesser exposures cause skin irritation.**
- **For animals, symptoms include nervous trembling, salivation, lack of coordination, pupil dilation, rapid weak pulse, respiratory paralysis, coma and sometimes death.**

Ecological:

- **Reduces biodiversity; acts as a pioneer species, quickly colonizing disturbed sites and displacing native species.**

REPORT SIGHTINGS

Visit ssisc.ca/report