

Invasive Plants in Pennsylvania

Poison Hemlock

Conium maculatum



Pedro Tenorio-Lezama
www.forestryimages.org

Background:

In the 1800s, poison hemlock was brought to the United States from Europe as an ornamental. In ancient times, it was probably used to poison Socrates, a famous Greek philosopher.

Range:

Poison hemlock is native to Europe, western Asia and North Africa. It is now widespread throughout much of North America. It has also been introduced to other continents, such as South America and Australia.

Description:

Poison hemlock is a biennial herb with hollow, purple-spotted stems that can reach eight feet in height. Its finely dissected leaves emit a foul, parsnip-like odor when crushed. Plants begin as a rosette of leaves and flower in the second year of growth. The small, white flowers are borne in umbrella-shaped clusters.



Eric Coombs, Oregon Dept. of Ag.
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Habitat:

This plant commonly occurs in dense stands along roadsides, field margins, irrigation ditches and waste areas. It also invades native plant communities in riparian woodlands, open floodplains and along stream banks.

Biology and Spread:

A single poison hemlock plant can produce over 30,000 seeds. These seeds can adhere to farm machinery, vehicles, fur and clothing, as well as be carried by water, and to a limited extent, wind. Poison hemlock is capable of rapid establishment, particularly in disturbed sites.

Ecological Threat:

Poison hemlock can be a tenacious weed, particularly in moist sites. As a pioneer species, it quickly colonizes disturbed sites, displacing natives. All parts of the plant, especially the seeds, are extremely poisonous to humans and livestock.



John D. Byrd, Mississippi State U.
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How to Control this Species:

Physical

Hand-pulling works best for wet soils with small infestations. Because poison hemlock is not a perennial, removal of the entire root system is not necessary.

Mowing or cutting the plant close to the ground just before flowering is often effective, but may require retreatment if new growth is produced at the base.

Poison hemlock remains toxic for several years after being pulled. Ensure that the material is kept out of reach of children and wildlife.

Look-A-Likes:

Poison hemlock is sometimes confused with the invasive giant hogweed (*Heracleum mantegazzianum*) and our native water hemlock (*Cicuta maculata*). Deaths have occurred from mistaking the roots for wild carrots.



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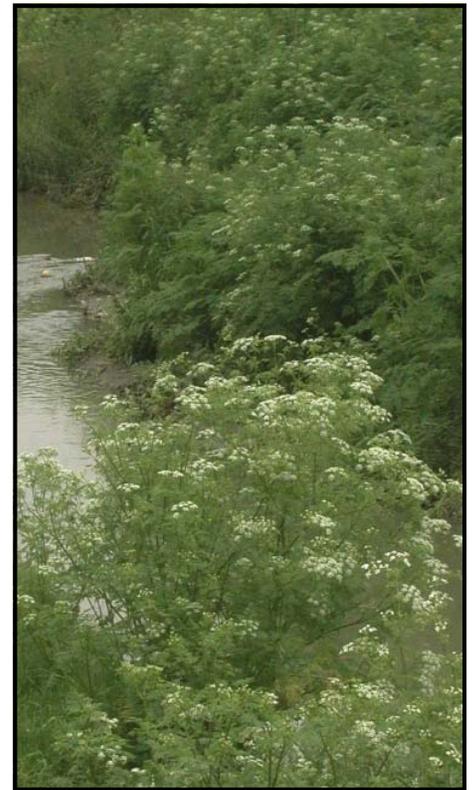
Chemical

The application of herbicides, such as glyphosate and 2,4-D can effectively control large infestations.

Complete eradication may be difficult if a viable seedbank is present.



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References:

Center for Invasive Species and Ecosystem Health:

<http://www.invasive.org/browse/subinfo.cfm?sub=4365#maps>

USDA Forest Service: <http://www.invasive.org/weedcd/pdfs/wow/poison-hemlock.pdf>

For More Information:

DCNR Invasive Species Site: <http://www.dcnr.state.pa.us/conservationscience/invasivespecies/index.htm>

DCNR Invasive Exotic Plant Tutorial for Natural Lands Managers:
http://www.dcnr.state.pa.us/forestry/invasivetutorial/poison_hemlock.htm