

## Garden Update

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### Poison Hemlock

Poison hemlock should be handled with extreme caution because of the poisonous alkaloids found in all parts of the plant, including the seeds, flowers, and roots. While not native to the North American continent, poison hemlock has spread beyond its European origin to much of the Central Great Plains. Historically, poison hemlock is infamous as the plant thought to have killed Socrates.

Poison hemlock, *Conium maculatum*, is a biennial and a member of the parsley family. Umbels of white flowers, similar to Queen Anne's lace, sit atop cutleaf pinnate foliage. Blooming begins in May and extends into July. What sets poison hemlock apart from plants with similar flowers and foliage, such as dill and parsley, are the stems, which are dappled with purplish-maroon blotches. Left uncut, plants can reach a height of 10 feet. Poison hemlock grows in moist soils, preferring low-lying ditches, roadsides, creek banks, and disturbed sites. It is found in Saskatchewan and Manitoba, extending south throughout the upper and lower Midwest regions.

Human and livestock ingestion of the poisonous alkaloids found in poison hemlock will cause respiratory failure. Humans have inadvertently poisoned themselves when mistaking it for wild parsnip or parsley. Historically, children have been poisoned when using the hollow stems as whistles. A recent news story chronicles the near-death of a man who, when cleaning out a weedy patch in his backyard, inadvertently aerosolized poison hemlock while using his chainsaw. Breathing in the particulates, he came close to dying from respiratory failure. Likewise, poison hemlock should not be burned as the smoke can carry the alkaloids, causing respiratory difficulty and/or triggering an asthmatic reaction. There is no antidote for accidental poisoning, confining medical intervention to treatment of symptoms.

Poison hemlock that has been growing at a site for any length of time will develop a copious seed bank harbored in the soil. Because it is a biennial, the plant won't flower and produce seed until the second year of growth, with a hard freeze killing off two-year old plants. Persistently removing flower heads before seed set will eventually exhaust the number of seeds in an area. Be sure to wear gloves, long sleeves, and long pants when working directly with poison hemlock or doing any work in a mixed area of brush and weeds. As mentioned, using a chainsaw or mower will aerosolize bits of the plant, increasing the likelihood of breathing in poison hemlock. Instead, hand-pull or chop down plants, placing them in a trash bag for removal from the site. If using herbicides, it's best to target first year seedlings with a herbicide containing a combination of triclopyr and 2,4-D.

#### Sources

*Weeds of the Great Plains* by the Nebraska Department of Agriculture, ISBN 0939870-00-5

"Poison Hemlock", Purdue University Extension,

<https://extension.entm.purdue.edu/newsletters/pestandcrop/article/poison-hemlock/>

"Hiding in Plain Site", Good Housekeeping, April 2022