

Keep livestock away from Poison Hemlock

The carrot family, which boasts a variety of familiar edibles such as parsley, celery, carrots, anise, fennel and cilantro, also contains a highly poisonous plant that many people confuse for its nontoxic counterparts.

[Stan Smith](#), an Ohio State University Extension program assistant in agriculture and natural resources, said people should learn to recognize poison hemlock. The noxious weed looks similar to and smells like other plants in the carrot family (Apiaceae, formerly known as Umbelliferae). Poison hemlock (*Conium maculatum*) originated in Europe, but is now commonly found in Ohio, growing in wet, wooded areas and open fields, and along roadsides and railroad tracks.

"The population of poison hemlock along field edges, in fence rows, around barn lots, and now even growing throughout hay fields seems to have reached new proportions this year," said Smith. "Producers should be especially mindful of poison hemlock growing in proximity to their livestock herds."

Poison hemlock, most famous as the plant that was used to execute the Greek philosopher Socrates, can be fatal if ingested. The plant was used through the 19th century as a narcotic, an anticoagulant and to treat inflammatory diseases, but was discontinued because of the uncertainty of dosage required. Coniine, the active ingredient in the plant, is also a poison that causes paralysis of the muscles, including those used for breathing. There is no known antidote.

"All parts of the plant are poisonous including the leaves, stems, seeds and roots. Simply handling the plant can cause toxic reactions in humans," said Smith. "Thankfully, the taste of leaves and seeds to livestock is unpleasant, so toxic quantities are seldom consumed when ample desirable feed is available for the animals."

Smith said that cattle can usually survive poison hemlock if consumed in amounts less than 0.4 percent of their body weight, although abortions are possible at lower rates.

The main feature that distinguishes poison hemlock from other carrot family members is its tall size, growing upwards of 10 to 12 feet in moist conditions. The plant produces small white flowers that are typical of the carrot family, and has a smooth, purple-spotted stem and dark, glossy-green and fern-like triangular leaves. It has a fleshy white taproot. Both the leaves and roots have a disagreeable parsnip-like odor.

Smith said that herbicides are the best way to control poison hemlock.

"Crossbow and Banvel are fairly effective on small poison hemlock. Taller plants may need to be controlled with glyphosate," said Smith. "Mowing after the plants have bolted and before setting seed will prevent seed production."

Smith said that poison hemlock is often confused with giant hogweed, a plant exhibiting many similarities and one that is also spreading rapidly across Ohio.

For more information on poison hemlock, consult OSU Extension Bulletin 762-00, "Poisonous Plants," at http://ohioline.osu.edu/b762/b762_24.html and Bulletin 866-98, "Identifying Noxious Weeds of Ohio," at http://ohioline.osu.edu/b866/b866_6.html.