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Watch Out For Water Hemlock

If you are a farmer it is a sure sign of spring when you see irrigation water in the canals. It is the time of year when irrigation systems are started and livestock are eagerly looking for green grass after the long winter. Green grass typically emerges early in the spring along irrigation ditch banks due to easy access to water. Unfortunately, water hemlock is also one of the first plants to emerge early in the spring and grows amongst the grasses on the banks of central Oregon irrigation ditches and canals.

Often described as the most deadly plant in North America, water hemlock is a member of the parsley/carrot family and can be mistaken for the edible water parsnip. The dark green, lance shaped leaves of water hemlock are easily identifiable, along with the bulb like white rootstalk that contains hollow chambers and a very poisonous liquid that has a strong carrot-like odor. This deadly liquid is found principally in the tubers or roots but is also present in the leaves, stems, and immature seeds. If the tuber is cut or broken, it exudes a highly poisonous brown or straw-colored liquid. This liquid is deadly as animals have been poisoned when water hemlock roots were trampled in the water releasing the toxic liquid and killing animals that drank the contaminated water. All parts of the plant, including the seeds, are toxic with the roots being the most deadly part of the plant. Typically, when livestock graze water hemlock the whole plant is pulled out of the soil due to the wet conditions along the ditch banks and it is eaten root and all, especially with cattle. This is always fatal. Most livestock deaths are cattle, but all livestock species and humans are vulnerable. It only takes a piece the size of a walnut to kill a 1,200 pound cow. Symptoms typically appear in as little as 15 minutes or up to six hours after the plant is ingested, depending on how much of the plant and what part is eaten. Death can occur at any time. Fortunately, animals tend to avoid this plant when other forage is available, but they will consume it when pastures grasses are short and grazing is poor. Consumption and poisoning may also occur when hemlock is present in green chop, silage, or hay. Even when it is mature and dried out it still possesses toxins.

The best way to avoid livestock losses from water hemlock poisoning is to eliminate it. If eradication is not complete, then areas known to be infested with water hemlock, especially in the early spring, need to be strictly avoided by using fencing or by moving livestock to other pastures. Similarly, it is critical when cleaning ditches or clearing land to avoid exposing the toxic roots of water hemlock, which then can be more easily ingested by livestock. To eliminate water hemlock, pulling by hand is very effective when the soil is moist. Be careful to pull the entire plant including all roots and dispose in a garbage bag and haul to the proper waste management facility. Burning hemlock that has been pulled may be hazardous, as the smoke may contain toxins that could cause severe illness and even death. Water hemlock plants require caution when handling. Be sure to wear appropriate gloves as contact dermatitis is possible. If

you contact the plant (especially the root) with your hand and then touch your eyes or mouth you can become ill. For more information contact your local weed control authority or OSU Extension for specific recommendations.

*This article is condensed. For the entire article and literature cited please contact: Scott Duggan, Deschutes County Extension office at 541-548-6088 or by email: scott.duggan@oregonstate.edu

