

News Article

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Does Your Pasture Contain Toxic Plants?

Livestock producers: how long has it been since you walked your pastures? Have you kept an eye out for starts of toxic plants? Do you know what toxic plants to look for?

One way to classify potential dangers to grazing livestock is to look for toxic weeds, toxic trees or shrubs, and toxic clippings from home landscapes. I cannot cover every potential toxic plant in this article, but we'll cover a few. At the end, I'll direct you to a Purdue Extension resource that offers much more detail.

There are many potential toxic weeds in pastures. Fortunately, many of them don't taste very good and livestock generally avoid them until they have no other choice. Additionally, the level of toxicity and symptoms they produce will vary from plant to plant and from one livestock or animal species to another.

Some of the toxic weeds to look for in Indiana include: cress-leaf groundsel, white snakeroot, Carolina horsenettle, climbing nightshade, perilla mint, horsetail, jimsonweed, common milkweed, hemp dogbane, common pokeweed, common burdock, cocklebur, stinging nettle, star of Bethlehem, buttercup, and poison hemlock.

Poison hemlock has become more common in recent years. It is a biennial weed that exists as a low growing herb in the first year, and bolts to three to eight feet tall in the second year and produces flowers and seed. It is often not noticed until the bolting and reproductive stages of the second year. Poison hemlock is often confused with wild carrot, but poison hemlock can be distinguished by its purple blotches and lack of hairs on the stems.

Poison hemlock contains five alkaloids that are toxic to humans and livestock if ingested, and it can be lethal. All parts of the plants contain the toxic alkaloids with levels being variable throughout the year. Symptoms of toxicity include nervousness, trembling, and loss of coordination, followed by depression, coma, and/or death. Initial symptoms will occur within a few hours of ingestion.

Some trees and shrubs to wary of include cherry, Ohio buckeye, azalea/rhododendron, black walnut, black locust, Ohio buckeye, red oak and yews. Although there are a few exceptions, in general it is best to fence out livestock from wooded areas. These trees and shrubs, along with some woodland flora can pose potential dangers.

Fallen or damaged limbs or leaves from wild cherry, for example, can be fatal to grazing and browsing livestock. Purdue Animal Disease Diagnostic Lab (ADDL) has reported, “Wild cherry toxicosis can affect all animals, but ruminants are at the greatest risk. All parts of the plant are potentially toxic, however, damaged leaves of the plant are the most toxic. Clinical signs include anxiety, breathing difficulties, staggering, convulsions, collapse, and death. Signs usually develop rapidly. Wild cherry contains cyanogenic precursors that release cyanide when leaves are damaged (maceration, frost, drought, wilting). As little as 2 ounces of ingested, damaged leaves can kill an animal.”

In a 2017 Equine Report, ADDL also addressed cherry in relation to horses: “Cherry (*Prunus* spp.) trees, including chokecherry, wild and black cherry, can be toxic to horses. The leaves of these trees are the most toxic, especially when they are wilted, but the fruit also contains toxic compounds. Wilted cherry leaves and cherries produce cyanide when they are stressed or damaged.”

Some have unknowingly introduced dangers to grazing livestock by throwing cuttings from landscape plants over the fence into a pasture area. Yews are shrubs that get pruned nearly every year in home landscapes, and clippings can be fatal if ingested by livestock.

ADDL reported in 2011, “Yews (*Taxus* spp.) are evergreen plants commonly used for ornamental landscaping throughout the Midwest. The most common varieties of this plant that are found in Indiana include English yew (*Taxus baccata*), Japanese Yew (*Taxus cuspidata*) and Canada Yew (*Taxus canadensis*). These plants can be highly toxic and have been implicated in numerous animal and livestock poisonings. In the majority of the clinical cases reported, yew poisoning is frequently due to accidental exposure as a result of animals being unwittingly fed clippings from yew bushes. In a 500-pound animal, it may take as little as 0.5 pounds of yew clippings to be potentially fatal.”

For more information, find publication WS-37, “Guide to Toxic Plants in Forages,” at Purdue Extension’s Education Store, www.edustore.purdue.edu.

Reviewed and edited by Purdue Forage specialist, Dr. Keith Johnson