



5 plants poisonous to horses in WYOMING

By Emily Eschbacher

Owning horses can be one of the great joys of rural living in Wyoming. Horses can ease chores involving livestock and provide recreation for landowners, but, for the horse lover, they can become part of a family and hold a very special place in hearts.

While Wyoming provides a beautiful backdrop for raising and riding horses, be aware certain plants can threaten horses' health. Plant poisonings are relatively rare in horses; however, they are possible when certain conditions exist. Horses usually only eat poisonous plants when other good forages are unavailable. Stressed or overgrazed pastures often lead to conditions where these unfriendly plants pop up.

Here are five plants horse owners should watch for along with the effects they can have on their animals.

Two-grooved milkvetch (*Astragalus bisulcatus*) is common in dry soils. Two-grooved milkvetch has leafy stems and purple, pink, blue, or white flowers that grow in cone-like clumps. The flowers leave behind seed pods with two visible grooves running along each pod. The plant soaks up selenium from the soil, which

is toxic to horses when they eat a green two-grooved milkvetch plant. Selenium poisoning can lead to confusion, weakness, clumsiness, loss of appetite, hoof problems, hair loss, and blindness in horses. This plant can also poison cattle and sheep.

Houndstongue (*Cynoglossum officinale*) is commonly found in fields and roadsides. During its first year, houndstongue is simply a group of large leaves that grow in a circular rosette pattern. The leaves are rough and resemble a hound's tongue. The second year, the plant grows stalks up to 4 feet tall and blooms with reddish-purple flowers. Each flower produces four spikey, green-yellow nutlets that stick easily to clothing or an animal's coat. Houndstongue is poisonous to horses because it contains concentrations of harmful alkaloids, which can seriously affect the liver. Dried houndstongue is tastier to horses than fresh houndstongue and poses a risk baled in hay. A horse can consume as little as 7-10 grams of houndstongue a day for two weeks and develop liver disease (that is the equivalent of about two dried plants per day). Continual grazing on houndstongue can be deadly for horses.

Death camas



Dave Powell, USDA Forest Service, Bugwood.org

Silky locoweed



Russian knapweed



Death camas (*Zigadenus venenosus*) can be found in a variety of locations, often alongside wild onions. It has a central stalk with a cluster of white or cream-colored flowers, flat grass-like leaves at its base, and an underground bulb. All parts of the plant contain toxic alkaloids highly poisonous to both livestock and humans, so be careful not to mistake it for wild onion. An onion will *smell* like an onion, and death camas does not. Symptoms of horse poisoning by death camas include increased or irregular pulse, weakness, stumbling, excess frothy saliva, and difficulty breathing. The effects of the toxins can take place quickly, so poisoned animals are often found dead before owners notice the warning signs.

Silky locoweed (*Oxytropis sericea*) is one of several “crazy weed” varieties found in the foothills and

plains of Wyoming. The stems and leaves are covered in silvery hairs, and clumps of white or purple flowers grow on leafless stalks. Locoweed contains a dangerous alkaloid that can cause nerve damage, severe weight loss, and reproductive problems after a few weeks of grazing on the plant. Horses can also begin to prefer locoweed after grazing on it initially. Watch for nervousness, depression, irregular gait, problems with eating or drinking, dull coat, and staring. Locoweed is rarely fatal, but most animals will never fully recover from poisoning.

Russian knapweed (*Centaurea repens*) is found in many soil types. It stands up to 3 feet tall with cream-colored buds and purple flowers that resemble thistle blooms. Its buds have scales around the base, and

its leaves and stems are covered with stiff hairs. Russian knapweed contains a toxic lactone that causes chewing disease in horses. Affected horses may stop grazing, hold food in their mouths, or develop frothy saliva. Russian knapweed poisoning occurs when toxins accumulate in a horse’s system over time, so horses must continuously graze on about 60 percent of their body weight before signs of poisoning will occur. Because it takes so much of the plant to poison a horse, only pastures over-run with Russian knapweed are of serious concern to the horse owner.

These are only a few examples. A helpful resource for identifying poisonous plants is *A Guide to Plant Poisoning of Animals in North America* by Anthony P. Knight and Richard G. Walter. It provides pictures and more in-



Two-grooved milkvetch



Houndstongue



depth information about the plants and their effects on livestock.

Landowners can also prevent and control poisonous plants through better pasture management practices. There are articles on pasture management and horse health that ran in previous issues of *Barnyards&Backyards* available online at barnyardsandbackyards.com under the Archives link on the left side of the Web page. From Summer 2005, there is "The Basics of Stocking Rate Calculations," from Spring 2005, "Race for the Green," and from Summer 2008, "Healthy Pastures Mean Healthy Horses." These articles will provide additional information on managing your small acreage with horses in mind.

Plant Identification for Landowners

For additional information on poisonous plants, visit the U.S. Department of Agriculture (USDA) Agricultural Research Service's (ARS) Poisonous Plant Research Laboratory Web site: www.ars.usda.gov/Main/site_main.htm?modecode=54-28-20-00

For help identifying poisonous plants on your property, contact your local weed and pest control district (www.wyoweed.org/addresses.html) or your local University of Wyoming Cooperative Extension Service (CES) office (<http://ces.uwyo.edu/Counties.asp>)

For pasture management information and assistance, contact your local Natural Resources Conservation Service (NRCS) field office (www.wy.nrcs.usda.gov), or call (307) 233-6750 or a CES office.

Sources:

A Guide to Plant Poisoning of Animals in North America by Anthony Knight and Richard Walter.

The USDA ARS's Poisonous Plant Research Laboratory, UMC 6300, Logan, UT 84322
www.ars.usda.gov/Main/site_main.htm?modecode=54-28-20-00

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