



# PASTURE FORBS

## your horses should avoid

By Brian Sebade

Pastures take on a bold new look each spring and summer with fresh green plants that horses readily seek. These succulent plants are a nice treat after a long, cold winter.

Unfortunately, some of these new plants can harm or even cause death in horses. Horses generally do not consume forb plant species (non-grasses) as the main portion of their diets but instead use grass species as the main component. Forbs may be consumed at a greater rate during spring when palatability is higher or fewer grass species are available within a pasture.

### Overgrazing Opens Door to Undesirable Plants

Proper grazing and weed management can reduce the risk of poisoning. Overgrazing pastures and rangelands allows undesirable plants to become more competitive and abundant. Limit horse exposure or completely avoid problem plant areas.

Native poisonous plants play a role in Wyoming's ecosystems. Many probably developed their toxic qualities to defend themselves from being eaten by herbivores (animals or insects – think about deer eating your shrubs to see how this might be a handy trait for survival). Weed management strategies are effective

when targeting poisonous plants or non-native weeds for reduction or elimination. Physically remove plants, spray with chemicals, use other livestock species to eat undesirables, or mechanically control problem plants.

### Other Strategies

Other strategies to avoid poisoning include removing potentially harmful forbs from cut hay, avoiding or greatly limiting animal exposure to poisonous forbs when changing pastures or moving animals into new areas, and contacting a local veterinarian or University of Wyoming Extension office for identification of problem forbs in your area.

Here are a few examples:

#### ***Equisetum spp.*, field horsetail**

– A native plant found in wet or moist areas of pastures and rangelands. Poisoning occurs from thiaminase toxins in the plant that affect the central nervous system of horses. Symptoms include weakness, staggering, and labored breathing. Horses are the most common livestock species poisoned by horsetail. Treatment is by eliminating horsetail in the diet at the first signs of sickness and supplementing thiamine.

#### ***Acroptilon repens (L.) DC.*, Russian knapweed**

– A noxious, non-native perennial weed found in waste areas, pastures, and many



Chokecherry



Tansy mustard



Waterhemlock



Brackenfern

rangeland sites. Known as chewing disease, poisoning occurs most often in horses and leads to brain damage. Symptoms include inability to properly chew or use the mouth. The poisoning agent and effective treatment are not well understood and removal from the plant source is the best management practice.

***Cicuta maculate L., waterhemlock*** – A native perennial plant found in many pastures and rangeland sites in or near water. Waterhemlock is extremely toxic to not only horses but to humans. Sudden death may occur depending upon the amount ingested. Symptoms affect the central nervous system and include lack of coordination, rapid pulse, and weakness. Treatments for waterhemlock

poisoning include use of barbiturates or activated charcoal.

***Prunus virginina, chokecherry*** – A native plant common near riparian or wet areas and on or near pastures and rangelands. Poisoning occurs from cyanide accumulations within wilting and distressed leaves. Cyanide reacts with iron in horse blood and slows cellular respiration. Affected horses will show signs of labored breathing, trembling, and lack of coordination. Sodium nitrate IV or sodium thiosulfates are two possible treatment options.

***Descurainia pinnata (Walter) Britton, tansy mustard*** – A native annual found in disturbed or waste areas with adequate moisture. Partial blindness and the inability to

swallow or use the tongue can occur. Treatment includes removing horses from the plant source and providing adequate food and water. In some cases, treatment with ethanol IV is needed and should be performed by a professional.

***Pteridium aquilinum (L.) Kuhn, brackenfern*** – A native plant found in shaded, wet areas on coarse soils. Brackenfern causes thiamine deficiency in horses that can be treated with thiamine supplements if diagnosed quickly. Symptoms include weakness, lack of coordination, and loss of appetite. Plant parts are poisonous dry or fresh and can cause poisoning in amounts equal to or less than 20 percent of the total diet.

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