

Poisonous Plants: Cherry, Apple, and other Members of the Rose Family

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The cherry tree is a member of the rose family and is found throughout the US. Cherry trees and their closely related allies, apples, apricots, and peaches, each contain, in various amounts, a toxic chemical that is classified as a cyanic-glycoside (hydrocyanic acid). Hydrocyanic acid is a long chain hydrocarbon (a sugar) that, when grazed by livestock, produces a very undesirable byproduct: cyanide. Black cherry is a common colonizing plant species on the east coast and very common in and along fence lines. I have found that livestock readily grazes it even when good pasture is available. John M. Kingsbury, a renowned phytotoxicologist and author of the highly regarded book “Poisonous Plants of the United States and Canada”, calls the black cherry “...one of the most dangerous plants to livestock in the East”. Kingsbury also noted that ruminants seem to be susceptible to even small amounts of foliage: as little as 1/4lb. of ingested leaves have proven lethal to a 100lb. animal.

Although not as toxic as black cherry, the apple fruit, seeds, and leaves all contain small amounts of hydrocyanic acid and have caused poisoning in cattle and sheep in the US. Unfortunately, livestock readily graze apple leaves, even when good pasture is available. Kingsbury has noted that apple poisoning has occurred sporadically in cattle, horses and mules, particularly if animals are allowed access to an orchard after ripe apples have fallen in the autumn.

While I don't expect to see an alpaca or llama ingest “large quantities” of fallen apples, Kingsbury also noted: “In some case poisoning may have been the result of cyanogenetic *foliage*.” [Italics mine]. Therefore, poisoning by grazing on the foliage is a

possibility. So, even though I know of no alpacas or llamas that have been poisoned by apple or peach leaves, seeds or fruits, I do believe a modicum of caution should be exercised, particularly if you have crias around. I have found that crias will chew on anything they find! That includes fallen leaves and twigs from plants that the moms would generally snub.

Signs of Poisoning: Cyanide poisoning will cause stimulation of respiration after ingestion, quickly followed by shortness of breath and overall difficulty breathing, a strong bitter odor to the breath, gasping, staggering, prostration, and, eventually, coma and possibly death.

Management: I recommend removing all cherry trees from fields and along fencerows where they may be accessible to animals (actually, I suggest that any member of the Rose family be removed from a pasture). It is important to note that *Prunus* has been shown to be most toxic when about 25% of water has been lost from the leaves or when young suckers grow from the stump of trees that have been previously cut down. Therefore, old clippings and trimmings can be extremely dangerous and should be kept from the reach of your animals. When removing a tree, make sure to either pull the remaining roots or treat them with a glyphosate herbicide (ask your agricultural extension agent which one is recommended for your area, note that it will probably require several treatments). If herbicides are used, be sure to follow the directions carefully and keep your animals away from the treated areas for the recommended time listed on the label. Alternately, you could simply cut new “sucker” shoots back bi-weekly; the roots will eventually die, but it may take a year or two.

(This article has been extracted and modified from "Managing Your Ranch for Poisonous Plants" by J.E. Perry, Camelid Quarterly, December 2003, pages1-6 and "Friend or Foe: North American trees and Camelids", by J.E. Perry, Camelid Quarterly, June 2004, pages 7-13.)