

Hungry Cattle Turn To Acorns, Face Poisoning

FAYETTEVILLE, ARK.

A lack of good forage has cattle searching for alternative food sources, including acorns, which can be deadly, said Shane Gadberry, associate professor-ruminant nutrition for the University of Arkansas Division of Agriculture.

“Many pastures across Arkansas have little forage remaining to graze due to the excessively dry weather pattern. Fall pasture condition has worsened across the state and many pastures are no longer capable of keeping hungry cows satisfied,” he said. “These cattle may start seeking out plants and fruits that could ultimately lead to a deadly consequence.”

Oaks contain high levels of tannins. Tannic acid, while it protects trees and helps winemakers, is poisonous to cattle and sheep, but it can also cause problems

Acorns can cause potentially fatal poisoning in cattle. As drought continues to make forage dwindle, hungry cattle may resort to acorns to fill their stomachs.

University of Arkansas Division of Agriculture photo by Mary Hightower



in rabbits, chickens, goats and horses, said Jeremy Powell, associate professor and veterinarian for the University of Arkansas Division of Agriculture.

Symptoms are costly and occasionally fatal.

Early signs associated with acorn poisoning include anorexia, depression, emaciation, abdominal pain, poor appetite, black or bloody diarrhea and occasional constipation. As the disease progresses, the kidneys will begin to fail. Affected cattle will exhibit dehydration – a dry, crusty muzzle and rough hair coat – along with increased thirst, general weakness, weight loss, frequent urination and a rapid, weak pulse.

Edema, or swelling due to fluid that has settled out into tissue, may also be noted in the lower parts of the cow’s body, such as the chest, legs and ventral abdomen. Some body cavities may also become filled with fluid, Powell said.

Since there is no antidote for acorn poisoning, the best options are prevention and treatment.

One treatment option involves giving cattle activated charcoal to aid in absorption of the toxic tannins the acorns produce. Another is the use of a mild laxative, such as one gallon of mineral oil or a saline cathartic, administered orally.

“Emphasis should be placed on prevention,” Powell said. “The best way to prevent acorn poisoning is to keep cattle from coming in contact with the culprit.”

Fencing off areas where oaks are prevalent is

the best way to prevent exposure.

“If removing cattle from this condition is not practical, supplementing cattle with calcium hydroxide – hydrated lime – can be used as a preventative measure,” Gadberry said. “Feeding a highly palatable form at the rate of 2 to 2.5 pounds per cow of a supplement fortified with 10-15 percent calcium hydroxide is recommended.”

“The goal is to get cows to consume around 0.4 pounds of hydrated lime per day,” Gadberry

said. “Molasses or vegetable oil can be added to the supplement to keep the hydrated lime from settling out of the ration and to increase palatability.”

If cattle are exhibiting signs of acorn poisoning, contact your veterinarian. Cattle can be treated with a purgative if the course of the disease is caught early. Cattle may recover within 60 days if kidney damage is not severe.

If cattle are seeking out acorns because of hunger, the simplest way to prevent acorn poisoning is to provide cattle with high quality hay.

Perhaps the simplest way to prevent acorn poisoning is to provide cattle with additional food sources along with forage. This will make them less likely to seek out acorns, Gadberry said.

With colder weather rolling in, there may be a dose of luck involved.

“There are fewer problems with acorn poisoning after a few hard freezes,” he said. Although freezing does not decrease the toxic tannin levels in acorns, the additional weathering does appear to make them less palatable, which reduces the risk of cattle ingesting them.

To learn more, see our fact sheet on acorn poisoning, FSA3104, “Acorn Poisoning in Cattle,” online at www.uaex.edu/Other_Areas/publications/PDF/FSA-3104.pdf or ask your county extension office. Δ