



## News from your County Extension Agent

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### Acorn Poisoning in Cattle

Acorns are a popular winter treat for squirrels, but for cattle, acorns can be deadly. Cattle graze and occasionally pick up an acorn or two, which is not a concern. However, cattle like the taste of acorns, so when forage and feed are scarce, they will seek them out. Overconsumption of acorns will lead to gastrointestinal upset including constipation, diarrhea, dehydration, emaciation (longer term) and death if not treated.

#### Why are acorns toxic?

Acorns contain tannin, a long chain molecule that belongs to a group of compounds which contain a phenol group (there's your chemistry lesson for today). Tannins act like lignin, another member of this group of compounds. Lignin is the material inside plant cell walls responsible for the plant's rigidity and strength. As a plant matures, it contains more lignin, making the plant tougher and less palatable to cattle. (This is why over-mature hay is lower in protein content and often less palatable to cattle). Tannins serve the same purpose. In fact, many un-ripe fruits contain higher levels of tannin to prevent being snacked on until the seeds and fruit are mature. For some reason, the tannin in acorns has a taste that some cattle prefer; even though what we just read tells us it should be less palatable.

#### Prevention

Prevention is your best bet against acorn poisoning. If the area can be avoided when immature green acorns are falling, that is best. If not, it is recommended to feed a mixed ration somewhat higher in protein and containing hydrated lime. Hydrated lime, calcium hydroxide, will lessen the hazard of acorn poisoning. The vegetable oil or molasses is important to keep the hydrated lime from settling out of the ration and to increase palatability. Having other feed or hay sources available will keep cattle from snacking on the acorns. An example of the ration is below:

#### Texas A&M AgriLife Extension Service Recommendation:

- 52% Cottonseed or soybean meal
- 30% Dehydrated alfalfa meal or corn or cottonseed hulls
- 8% Vegetable oil or molasses
- 10% Hydrated lime

#### Treatment

One treatment option is to administer one gallon of mineral oil orally via drench to serve as a mild laxative. Saline cathartic is an optional laxative as well. Activated charcoal may be given to aid in absorption of the toxic agent, however you should always consult your local veterinarian for advice on your specific case. My family veterinarian suggested administering an anti-inflammatory as well. He noted that recovery could take a few days to a few weeks.

**Upcoming:** Camp County Cattlemen's meeting February 21 and a Tri-County Cattlemen's Conference on March 10, tentatively. For more information or how to get registered for any of these programs, please contact the office.

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