Stop grazing early to avert toxicosis

By **DUANE DAILEY**

WHEN cattle start slobbering, standing in ponds and urinating frequently, producers are seeing signs to stop grazing tall-fescue pastures. In July and August, when symptoms of fescue toxicosis show up, it is too late to solve the problem, says Craig Roberts, forage agronomist at the University of Missouri. Ergovaline, one of the toxins produced by the endophyte fungus in fescue, was consumed back in May.

"Cattle should be removed from fescue pastures ahead of full exposure of the seed heads," Roberts says. "Maximum production of the toxins occurs during seed head filling."

July is too late

By late July, when symptoms occur, the cattle are already carrying a full dose of the toxins that will continue to affect them for the rest of the summer. According to new studies from the University of Georgia, toxins from fescue endophyte have been found in the internal fat of animals grazed on fescue in May.

"That is not in the back fat, but the fat around the animals' organs," Roberts says. The theory is the fat-soluble toxins are absorbed by the animals and then slowly released later in the year.

"It is like a timed-release capsule," he explains. "The effects of the toxin will show up, even after the cattle are moved to warm-season pastures."

It is important to remove cattle early. Fescue in early spring has low toxins, even in heavily infected pastures, Roberts says. The endophyte fungus starts growing later than the grass and requires a higher temperature.

The early spring flush of grass provides reliable forage for livestock production. However, by the time the seed head moves up in the inner sheath of the stem, the fungus is growing. During the cool season, the endophyte resides at ground level in the crown of the plant.

As the season warms and seed starts developing, the fungus moves up the plant, primarily in the seed stem. When the seed head emerges, the fescue plant is most toxic. That is when cattle should be off of the pastures, Roberts says.

Control of fescue toxicosis starts with the adoption of any two-pasture system. Move cattle to warm-season grass. In south Missouri, that can be bermudagrass or Caucasian bluestem. In north Missouri, the alternative might be switchgrass or alfalfa.

This early move reduces exposure to fescue toxins and also makes better use of the warm-season grasses when they are most nutritious.

This will require new thinking for most producers. With the heavy spring growth of fescue, producers will want to have cattle finish grazing what is there. That forces cattle to eat low-quality forage while higher-quality grass awaits in the warm-season grass fields.

The uneaten fescue can be harvested as hay. The hay will not be prime quality, but a lot of it is harvested that way every year, Roberts points out. He suggests a way for making better use of that over-mature hay. "It is only good for ammoniating," he says. The bales should be stacked, covered with plastic and treated with anhydrous ammonia.

Ammoniation breaks down the fiber in the cell walls, releasing the nutrients. It also helps reduce the endophyte toxins.

Foraging Ahead

Key Points

- Specialist advises removing cattle from high-endophyte fescue pastures early.
- Fescue plant is most toxic when seed head emerges in late spring.
- Graze spring growth intensively; harvest uneaten fescue for hay.

Silent symptoms of fescue toxins

MANY beef producers say, "I don't have a fescue problem. I never see a case of fescue foot."

"When cattle are lame and can't walk or lose a foot, that is extreme fescue toxicosis," says Craig Roberts, forage agronomist at the University of Missouri.

The big losses are unseen losses. For example, average daily gains on calves in herds on infected tall fescue are about half of gains from herds on endophyte-free pastures.

Toxins reduce animal gains, milk production and reproduction efficiency. Most producers never see these losses.