Dallisgrass Staggers

Lew Strickland, Extension Veterinarian

John Goddard, Loudon County Extension Director

Department of Animal Science

University of Tennessee

Thankfully, we have had plenty of moisture this summer, but a downside to all of the moist warm weather is that it favors the growth of a fungus, named *Claviceps paspali*. This fungus contains a toxin and typically grows in the seed head of Dallisgrass. Due to the increased growth of warm season grasses; there is a potential more seed heads are present in pastures and hayfields this year. Cows eating infected seed heads become in coordinated/shaking and may appear drunk, stumbling around the pasture, or down and not able to rise. Removing cows from infected pastures usually results in uneventful recovery in three to five days.

*C. paspali* commonly infects the seed head of Dallisgrass and Bahia grass. Typically in the fall (but not limited to), an infected fungal mass, called an ergot body, has replaced the seed. This ergot body is light tan to orange or brown in color. Eventually, the ergot body will become shrunken and black. These ergot bodies contain the toxic agent, which is responsible for clinical signs. Some cattle may show a preference for grazing these seed heads.

Normally, cattle is the most commonly affected species by the clinical signs of Dallisgrass Staggers, but may also occur in sheep and horses. Suckling calves are not generally affected. Signs may occur as early as three days after animals consume the seed heads in an infected pasture. Hay baled from infected pastures/hayfields is not completely safe to feed either. The ergot fungus survives drying and animals eating this hay will present with clinical signs as well. Up to half of the herd may show signs but deaths are rare except in cases of injury associated with incoordination in affected animals.

Dallisgrass Staggers involve the animal’s nervous system. In the very early stages of the disease, the only sign seen may be trembling of various muscles while standing still. As the disease progresses, muscle tremors worsen so that the animal may show continuous shaking of the limbs and nodding of the head. When forced to move, this severely affected animal may stagger, walk sideways, and display a “goose-stepping” gait. Incoordination can be severe enough that the animal will fall down when she attempts to walk. In severe cases, animals will be down and unable to stand.

There is no specific treatment for Dallisgrass Staggers, though oral administration of activated charcoal and laxatives may hasten recovery. Relocation of the affected group to an uninfected pasture or the clipping the pasture to remove just the seed heads is another management strategy to prevent further cases. Affected animals should be moved slowly and carefully to avoid injury. Complete recovery should occur in three to five days for most animals but occasionally may require up to three weeks.

Pasture rotation, intermittent grazing or mowing the seed heads off the plant and allowing the seeds time to work their way to the ground where they are unlikely to be grazed is a major component of
prevention of Dallisgrass staggers. Early recognition of the problem and moving cows to a safe pasture should result in elimination of signs in a few days. If you have any questions, contact your county Extension agent, or Lew Strickland. lstrick5@utk.edu, or 865-974-3538.

Dallisgrass seed heads containing *C. paspali* (brown areas)