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Diagnosing Lameness in Pasture Cattle

Dr. A.J. Tarpoff, Extension Beef Veterinarian, shared in Beef Tips an article related to an issue that seems to creep up every summer during the grazing season - Lameness. Rather than recreating the wheel, it seems timely to share excerpts from this article today. Hopefully, everyone can avoid lame cattle, but if not, it is important to observe what might be going on.

The effects of lameness may show themselves by decreased fertility and performance, weight loss, and increased labor and medicine costs. It has been estimated that 88% to 92% of lameness in cattle stems from the foot. Below is a review of some of the common causes of such problems and the key differences between the clinical signs. It is a good idea to contact a local veterinarian to create a treatment plan for these conditions prior to the grazing season.

Lameness with swelling. The first way to determine the cause of lameness is to observe obvious swelling. The swelling most commonly affects the lower limb, indicating the area of inflammation just above the hoof. It is important to distinguish if the swelling is symmetrical (equal on both sides of the foot) or asymmetrical (only affecting one side). Swelling also may affect single or multiple joints in both calves and cows. Footrot is a common disease that occurs in pasture cattle. It is a bacterial infection of the foot that manifests itself with symmetric swelling encompassing the lower limb just above the hooves. Upon closer inspection, producers will notice a crack in the skin between the hooves and a foul pungent odor. Chapping and cracked skin in the interdigital space often occurs during drought conditions.

Single-sided or asymmetric swelling of the foot often indicates a more serious condition in cattle. This type of clinical sign often is the result of deep structural issues. Puncture wounds, sole abscesses, stone bruises or chronic infections can cause single-sided joint, bone or tendon infections. Extensive footwork on a tilt table or under sedation often is needed in these cases. Single or multiple joint swelling with lameness also can be observed in pasture settings. In calves, this is often the result of septic arthritis, which is a bacterial infection of the joints. In very young calves, it can be the aftereffect of navel ill or from bacteria that get into the bloodstream. It is not uncommon to see this condition a week to 10 days following a bout of respiratory disease with some pathogens as well.

Obvious lameness to one or more limbs with no noticeable swelling often can be challenging to diagnose. One of these conditions is called hairy heel warts, also known as digital dermatitis or strawberry footrot. These animals often display obvious lameness and will attempt to walk on the “tippy toe” of the foot. Upon closer observation, wart like growths or bright red scab lesions can be seen below the dewclaws and above the heel bulbs of the foot. The last condition, toe tip necrosis, is seen more commonly in newly arrived stocker calves, especially in those sourced from high-moisture environments that cause soft soles. These animals often appear with shifting lameness of the back legs. They usually will stand in strange orientations to protect and get pressure off the damaged toe. The rear, outside hooves are most often affected.

Lameness can be challenging to diagnose in field situations, but understanding the subtle differences will help with proper and timely treatment. Producers should consult a veterinarian for potential treatment or course of action if these situations occur. Each type of lameness has different protocol for treatment. It is especially important to discuss with your veterinarian any non-responsive lameness issues following treatment. Further diagnostics and treatment may be needed in these situations.