

Preventing Lameness

Experts share how and why cattle become lame.

Story & photos by
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A discussion of the causes and costs of lameness in cattle drew producers representing the cow-calf, stocker and cattle-feeding segments to the 18th Annual Cattlemen's College® Zinpro nutrition researcher Connie Larson and Nebraska-based feedlot veterinarian Tom Edwards talked about how and why cattle become lame and shared treatment and prevention recommendations.

Results of the non-fed (market cow and bull) beef quality audit indicate that delivery of non-ambulatory or "downer" cattle to slaughter facilities has been nearly eliminated, Larson said. However, about 16% of cows and 31% of bulls going to slaughter exhibit lameness at delivery and may be discounted as a consequence. Producers suffer additional economic loss when breeding animals on the ranch exhibit reduced reproductive performance and longevity.

Larson said diminished performance and even death among growing calves, as a result of lameness, also rob producers of profits, but lameness issues can also jeopardize the industry's image from the standpoint of animal welfare.

"It only takes one animal captured on video to give the industry a black eye," warned Larson.

Edwards, of Midwest Feedlot Services Inc., cited data showing that of all Nebraska feedlot cattle requiring veterinary treatment, 16% are treated for lameness. From losses attributed to

overhead, chronics and treatment expense, direct costs can exceed \$126 per head. Edwards said lameness can reduce average

daily gains by 0.70 pound (lb.) and result in the need for an additional five days on feed. Lameness issues consistently result in

a feedlot mortality rate of about 3%.

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footrot or toe abscesses. Footrot, he said, results from infection between the toes, when ubiquitous bacterial organisms in the soil enter through a break in the skin. Toe abscesses, which Edwards referred to as “concrete toxicity,” generally result from toe abrasions caused by rough or sharp surfaces. Another foot malady known as hairy heel wart is a digital dermatitis or lesion on the back of the foot most often promoted by

wet, muddy pen conditions. Other causes of lameness are joint infections stemming from injury and laminitis (founder) resulting from digestive upset.

Edwards noted that the choice of proper treatment depends on an accurate diagnosis of foot ailments. However, some signs may not be visible. Edwards advised producers to watch a lame animal in motion to first determine which foot is

affected and needs to be examined.

“Watch the head bob,” he said. “If the head bobs up, it’s an indication of lameness in a front foot, as the animal tries to take weight off the painful foot. If the head bobs down, [the animal] is trying to take weight off a rear foot. That’s a real simple way to tell, but one that’s not always understood.”

Edwards offered recommendations for treatment, with respect to various



diagnoses, but urged prevention through animal husbandry. He urged producers to pay attention to pen maintenance and facilities, and particularly to the footing in cattle loading and processing areas. He also said the common practice of spreading sand to improve traction in concrete alleys or in truck beds often contributes to lameness issues, especially toe abscesses.

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Larson agreed that good management practices, including pen maintenance and low-stress handling methods, can reduce the incidence of lameness. She also stressed the importance of balanced nutrition, noting how trace minerals, including zinc, manganese and selenium (in balance with vitamin E) are important to maintaining hoof health.



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