RESEARCH for beef health

Producers should be wary of purchased hay as a carrier of liver flukes

By Laurie Potter, Staff Editor

BEEF INSIDER

HAY DELIVERED TO DROUGHT-STRICKEN AREAS COULD CARRY DISEASE

If you're in a drought-stricken area and are planning to purchase hay from out of state, beware. You may need to take extra precautions when it comes to controlling parasites.

"It is possible to move liver flukes in hay that is taken from an area known to have flukes," says James Hawkins, Merial Veterinary Professional Services associate director. "Under ideal conditions, liver fluke cysts can survive on hay for a period of several months. Cattle can ingest those cysts and become infected with liver flukes."

Unfortunately for producers, this health problem is not easy to spot in a herd. Liver flukes often go unnoticed and can cause significant damage to the host animal and a producer's bottom line.

"Diagnosing liver flukes can be difficult," Hawkins says. "The fecal egg-count method used for identifying most parasites won't work for liver flukes. You have to use a sedimentation process or a special technique called Flukefinder to find fluke eggs. But by the time you have fluke eggs in the feces, the damage has been done to the host's bile ducts."

PRODUCERS ROBBED OF DOLLARS

According to a report in *Veterinary Parasitology*, when liver flukes strike, producers lose money in the form of reduced weaning weights, pregnancy rates, rate of gain, and in some cases, even death.

"Mississippi, Alabama, Georgia, and Tennessee are in a severe drought," says Christine Navarre, Louisiana State University Extension veterinarian. "Producers are downsizing herds and bringing in hay from surrounding areas known for liver flukes. At this point, feeding hay is about the only thing producers can do if they want to keep their cattle."

However, if proper precautions aren't taken and liver flukes are introduced to new areas through hay or purchased cattle, producers could face even greater losses.

"When liver fluke-infected cattle are combined with cattle naive to the parasite, the naive cattle are more likely to develop clinical disease instead of the subclinical disease normally seen in fluke-endemic regions," says Navarre. "And that means greater production losses. Also, liver flukes can become established in the area, and then producers will have an ongoing problem."

HEALTHY CATTLE WARD OFF DISEASE

Cattle that are already nutritionally compromised are at an increased risk when exposed to liver flukes or other internal parasite loads.

"If cattle are nutritionally deprived and have parasites, health and development problems can compound other health issues," says Navarre. "The overall health of the cattle will continue to decline, and they will likely not recover as quickly when conditions return to normal. The bottom line is that producers will sacrifice profits if parasites aren't controlled."

Hawkins says producers should continue to treat cattle for parasites during and after drought. Plus, he says, producers purchasing hay or cattle from liver fluke-endemic regions should be sure to include liver fluke control as part of a strategic parasite control program.

BE WARY OF OTHER PARASITES

According to Navarre, liver flukes aren't the only economically important parasite that drought-stricken areas should be leery of. Ostertagia ostertagi is a brown stomach worm that is also capable of surviving drought conditions.

A plot in one study (conducted by Barger, Lewis, and Brown and cited in *Veterinary Parasitology*) showed that parasite larvae survived for 18 months in dung pats, including a period of prolonged drought. It also showed that the larvae levels on pastures were extremely high once the rains returned. ■

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