



PHOTO BY SHELBY METTLER

Anaplasmosis:

The Seedstock Perspective

A look at managing anaplasmosis in purebred cow herds.

by *Shelby Mettlen*, assistant editor

Anaplasmosis continues to plague cattle operations across the country, and, as it appears to spread, producers find themselves with a growing list of questions regarding the silent killer. Kansas State University Veterinary Diagnostic Laboratory (KSVDL) veterinarian Gregg Hanzlicek helps answer some of the purebred producer's most pressing questions.

Where is it?

Beef practitioners and veterinarians have been fighting anaplasmosis for 100 years or more, Hanzlicek says. The disease is considered to be endemic in the southeastern United States and the western-central states like Montana and Idaho, as well as the southeastern corner of Kansas.

A few years ago, KSVDL started tracking positive diagnostic samples back to their origins in Kansas. In 2013, the pattern indicated anaplasmosis was prevalent on the eastern side of the state.

"We didn't have many positives coming from the central or western part of Kansas, but in 2015 I think just about every county in the eastern two-thirds has had at least one positive herd," Hanzlicek says.

He noted there's no certainty the disease is spreading.

"It may be, and we certainly import a lot of cattle from Oklahoma and other areas that have had a lot of anaplasmosis, but it may just be that people are looking for it harder," he says. "People are testing for it more intensely."

What about testing?

Hanzlicek urges producers to test purchased animals, no matter the cost to them.

"The tests we have are very sensitive, so regardless of the age of animals, if I'm bringing an animal onto my place that's negative for anaplasmosis, I'm going to test every one of those animals before I bring them on my place," he says.

KSVDL offers enzyme-linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) tests that test for both the antibody and the live organism. The use of these tests has "increased tremendously" during the last couple of years, Hanzlicek says.

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purebred operations that, regardless of what breed they are, are testing their animals before selling," he says. "Just like BVD (bovine viral diarrhea) testing, it's gone up in the last couple of years. If you take an animal to the sale and it's negative for anaplasmosis or BVD, that's a pretty good selling point."

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Both the ELISA and PCR tests are available for about \$7 per animal.

My herd tested positive. Now what?

Purebred herds that become positive are in a tight spot. If you're a registered seedstock producer, you don't want to sell infected animals. When an animal becomes infected, it's a persistently infected carrier of anaplasmosis for the rest of its life. So, how do you clean up your herd?

Hanzlicek says the only proven method for cleaning up cows is a combination

of injectable tetracycline and feed-grade tetracycline that can, unfortunately, be a little complicated to administer. Producers must consult with their veterinarians to consider use of the combination, and should be aware that only a certain percentage of the animals treated at any one time will become disease-free.

"For purebred producers, the main key is to keep it out," he says.



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► "If I'm bringing an animal on to my place that's negative for anaplasmosis, I'm going to test every one of those animals before I bring them on my place," says Gregg Hanzlicek.

Hanzlicek says the first step in managing the disease is to test a representative group of animals to determine prevalence. If prevalence is low, producers can sell positive animals or isolate them from the herd. If it's high, management for purebred breeders will be much more difficult.

Treating cattle for anaplasmosis infection can be tricky due to usage instructions, Hanzlicek says. Feed-grade antibiotics for anaplasmosis are available "for the aid in treatment of active infection," but "none of them say anything about chemosterilization, and that's what we're trying to do with positive herds," he says. That boils down to the veterinarian's judgment and communication with the Food and Drug Administration (FDA).

The best advice Hanzlicek has for purebred producers is to sit down with your veterinarian and devise a plan that fits your operation and situation.

What else can I do?

Management of flies and ticks is key to minimizing disease spread in all cattle operations, particularly for purebred producers stuck in endemic areas or who have neighbors with anaplasmosis. Flies and ticks are tough to control, Hanzlicek notes, but investing in fly tags, dust bags and insect sprays, and practicing good pen and pasture management can aid in efforts.

What's the bottom line?

Purebred producers shouldn't bring any cattle into their herds unless those cattle have tested negative for anaplasmosis in the last month or so, Hanzlicek says. "We've had too many cases where purebred producers became positive because of purchased animals." Monitor fly control, tick control, be sure to change needles between animals, and don't bring untested animals into the herd.

Stay tuned for more research on anaplasmosis from KSVDL and its partners. Later this year, the lab will begin conducting a prevalence study looking at risk factors for positive herds vs. negative herds. For more information, contact Hanzlicek at gahanz@vet.k-state.edu or 785-532-4853.

