



## CHESAPEAKE BAY FOUNDATION

### *Saving a National Treasure*

## FACT SHEET

May 2016

### AGRICULTURE: WE'RE HALF WAY THERE

*Dr. Scott Nordstrom, DVM*



MIDDLEBROOK, VA—On his first week on the job as a veterinarian back in 1993, Scott Nordstrom treated a case that would stick with him the rest of his life.

Shockingly, half of a herd of cattle he examined had died. It turned out that they had been struck by Bovine Viral Disease (BVD), a fatal condition transmitted from the intestines of one animal to the mouth of another.

So Nordstrom set about finding out how they got the disease. The next week, he was called to a farm just upstream with another case of BVD. He traced the source of the outbreak to that operation. “The stream carried the pathogens downstream, spreading it from one farm to the next,” according to Nordstrom.

Since then, he’s found time and again that as long as cattle are allowed into waterways they are at risk of catching diseases from farms upstream. “The bio-security program for your cattle herd is no better than the worst farm upstream,” says Nordstrom, who is Director of Cattle Technical Services for an animal health company. “If there is a disease outbreak in the herd upstream or even if they are just carriers of infectious organisms and they defecate in the stream, your animals are at risk if they drink from that stream.”

Nordstrom travels all over the country to test vaccines for his animal health company. “In the large operations I have been on they would never, ever, consider having their animals exposed to a stream or any other body of water,” he says. “It’s just too risky—for both livestock and people.”

“Clearly, at least fifty percent of all cattle diseases in the Chesapeake Bay watershed are transmitted through the fecal-oral pathway,” stresses Nordstrom. “Several of the big diseases in cattle are carried by water. These include BVD, E.coli, salmonella, leptospirosis, and mastitis.” Symptoms of these diseases include fever, lethargy, dehydration, abortion, and death.

Vaccinating animals is a first line of defense against many diseases. But Nordstrom stresses that “the second line of defense is to fence livestock out of potentially infected waters.”

There are many programs that include funding and technical assistance to help producers fence waterways and provide alternative sources of water for drinking. Nordstrom participated in the Conservation Reserve Enhancement Program on his own farm. “We did it for herd health reasons and besides I feel good that the water leaving our farm is not going to infect animals downstream,” he says.

Keeping livestock out of streams has proven herd health benefits. It is also a clear sign to downstream neighbors and other community members of your ethics and environmental stewardship.

Try these options to keep cattle healthy by keeping them out of streams:

- Off-stream watering systems
- Stream fencing
- Stream crossings
- Buffer strips
- Rotational Grazing

The Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), and the state agricultural best management cost-share programs can help cover expenses for certain livestock stream exclusion projects that are built to specification.

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*This is one in a series of articles about farmers who have implemented conservation practices to improve farm operations and water quality in nearby streams, demonstrating how agriculture has achieved half of the nutrient reductions necessary to clean up local streams and the Chesapeake Bay.*

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