Livestock Production

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Dealing with a Mysterious Death

As an extension veterinarian I present numerous health programs throughout the northeastern United States. It seems that after each program a question is raised about the cause of death of an animal that died three to four months ago.

I have a set of questions I routinely ask that may provide some insight; however, I can rarely ascertain the cause of death. Veterinarians are driven by curiosity, and it is frustrating to admit, "I don't know and I'm unable to find the answer after three to four months."

Determining the cause of death is important because it may help reduce future deaths and increase production. Lowering the mortality rate is a very important part of a profitable beef enterprise.

Here are some guidelines to help determine the cause of an unexpected death.

Recognize that any chance at a diagnosis will be lost if immediate action is not taken when discovering a dead animal. Cattle carcasses deteriorate quickly if they are not cooled. Cover the animal and place ice under the cover. When temperatures are below freezing, less effort is needed to preserve the carcass for a post-mortem examination or autopsy. Nevertheless, a decision must be made within a few minutes after death to allow the veterinarian time to respond to the call.

When you call the veterinarian, he or she will ask you a variety of questions to determine if an autopsy is necessary. Before you call, try to write down everything that has happened that may be related to the cause of death. Was the animal sick or off feed in the recent past? What were the signs of illness? Did the animal have a fever, diarrhea, or difficulty breathing? Are any other animals sick? What are the animals eating? Are the animals exposed to any potentially toxic substances?

Occasionally, a veterinarian can make a diagnosis over the phone without performing an autopsy. Only a clear and accurate description will allow the veterinarian and the farmer this luxury.

If more than one animal is sick, or there is no clue as to the cause of death, an autopsy should be performed. The question becomes, "Does this animal have a problem that can become a herd problem?" An autopsy may save other cattle in your herd, saving you thousands of dollars.

What can you learn from the autopsy? If the carcass is well preserved, a veterinarian can
often determine the cause of death without lab work. However, occasionally lab work becomes necessary. Your veterinarian can advise you on which tests to run and their approximate cost.

The following principles may help you decide how much money to spend:

1. If you have vaccinated for a disease, blood tests for that disease on the dead animal are usually confusing and unrewarding. If the blood tests are interpreted to be positive, the recommendation will be to revaccinate the herd. If that disease is suspected, it may be cheaper just to vaccinate and forget the blood test.

2. If ingestion of a toxic material is suspected, try to help your veterinarian narrow the possibilities. Lab tests for poisons are very expensive.

3. If the carcass is bloated and badly decomposed, save your money and your stomach. Veterinary pathology is reliant on fresh tissue specimens.

4. If you have been treating an animal that was staggering, straining to defecate and braying before death, always request an autopsy. The animal may have rabies. Many other diseases have these signs but will generally not pose a risk to humans. Don't take a chance on this one; rabies can be fatal.

5. If a single animal dies with no history of prior illness and no clues, a successful diagnosis is difficult. Have a simple autopsy performed to provide a possible answer. Protect your herd health by investigating the cause of deaths on your farm. You are the key person in maximizing the ability to achieve a successful diagnosis in a case of sudden death. The decision for an autopsy must be made quickly and an effort made to keep the carcass cool. The veterinarian will only be successful if the farmer provides a good history and a fresh specimen.