

**Cattle Business in Mississippi – January 2006**  
**“Stocker Cents” article**

**The Value of Necropsies for Stocker Operations**

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After taking several phone calls this week from stocker operators concerning problem pens of calves, I thought it would be a good time to discuss the value of necropsies. In short, a necropsy is the examination of a dead animal (both inside and out) to determine why it died. During these phone calls, the producer and I will discuss the processing schedule, how the calves are handled at arrival, and some aspects of the nutritional management of the calves. We then address the clinical signs that the animals are showing, how many have been treated, and what the response to treatment has been. Then we get around to finding out the number of “chronics”, the size of the “dead pile”, and whether or not any necropsies have been done. Normally, I get dead silence on the question of necropsies. However, one of my favorite producer quotes is “Doc, I spent too much money on this calf when he was alive to spend any more on him now that he’s dead!”

Believe me; I understand your reluctance to spend money on a calf that is already dead. However, a proper diagnosis from the necropsy may help form a specific treatment plan for the rest of the pen or a change in the processing schedule for future pens. It may also impact how we build our treatment protocols or use feed additives. While it is true that the majority of death loss in stocker operations ultimately results from respiratory disease, it is very common that we have other underlying disease problems in pens having high pull rates and treatment costs. Necropsies will give us an indication as to these underlying problems and how long a disease process has been going on in relation to when you actually received the cattle. Therefore, the value of the necropsy resides in our ability to use diagnostic information to prevent further deaths or chronics.

When deciding on which animals to necropsy, there are some factors to keep in mind. The fresher the animal, the better the results will be. As you lengthen the time between when the animal died and when the necropsy was performed, the diagnosis becomes more difficult. This is especially true in hot weather as the animal begins to decay. Necropsies should be performed anytime you have a pasture or pen dead that has never been treated. These calves will give you a truer picture of the disease process since they will not have had antibiotics. Pen deads should also be used to evaluate how effective the pen checking skills are on your operation. Calves that die with clinical signs that are uncommon or unfamiliar to you should also be necropsied. Chronic calves that have been treated several times for respiratory disease may not yield as much useful information as fresher calves. However, necropsies on chronic calves are very useful when the results can be compared to the treatment history and treatment response of the rest of the calves in the pen.

There is additional testing on animal tissues and organs that can go hand in hand with examination of the carcass. Some of these tests may be run in your veterinarian's clinic, but many will require samples to be sent off to a state diagnostic lab. Histopathology can be used to give us an idea as to the type of infection we are dealing with and how severe it is. It will also tell us what organs are involved in the disease process. It is common to use a lung culture to try and determine which bacteria are responsible for cases of pneumonia. Another test involves using an antibiotic sensitivity on lung cultures to give you an idea as to which antibiotics might be effective. However, culture and sensitivity tests should be used with caution since the results may change if the calf has been treated with multiple antibiotics. There are other tests that can be run to determine if a virus or mycoplasma is present in the calf and what role it has played in the disease process. These tests have progressed markedly in their accuracy over the past several years, but there are added costs associated with them. I would encourage you to work with your veterinarian to determine which tests are warranted and how they should be interpreted.

Using necropsies to diagnose the cause of death in calves is an important part of animal health programs for stocker and backgrounding operations. Being able to judge the cause of death and determine if there are any underlying disease complications is critical to limiting further losses in problems pens and preventing losses in new arrivals. Necropsy findings help us classify the illness and further diagnostics can identify specific pathogens involved. Deciding if the disease is acute or chronic helps us properly allocate resources to the pen of origin. If we are faced with an acute disease process, we want to concentrate efforts on this pen to prevent further illness based on our findings. The information that we gain can be used to evaluate our processing programs, treatment protocols, and source of the calves. Having your veterinarian perform necropsies is a very valuable tool for specifically identifying disease agents and further classifying the reason the calf was pulled. While there is no value in "beating a dead horse", there is much to be gained when you necropsy that dead calf. For more information on stocker cattle production, contact your local Extension office or veterinarian.