Field Necropsy as a Tool for Dairy Herd Health Management

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Over the last couple of decades improvements in nutrition, genetics, and management have dramatically increased dairy cow productivity. Along with these changes have also come advancements in monitoring systems and processes for tracking cow productivity and performance. Aware of the close links between cattle health, productivity, and management, veterinarians and producers have focused on measuring and managing metabolic, nutritional, and other production-related diseases and production inefficiencies. Little attention has been paid to the monitoring of infectious disease problems. Dairy infectious disease control efforts have relied heavily on vaccination protocols with very limited application of other management strategies. In contrast, the National Animal Health Monitoring System Dairy '96 study showed that infectious diseases still represent a tremendous area of concern. Clinical mastitis occurs in 13.4% of all dairy cows, diarrhea in 3.4% and respiratory problems in 2.5%, while 85% of all dairy calf deaths are due to scours, diarrhea, or respiratory problems.

Effective cattle health programs must be based on accurate assessment of the herd disease status. Various cattle diseases can have markedly similar clinical signs so that it is impossible to accurately assess disease problems based on clinical signs alone. One of the most underutilized diagnostic tools available to the dairy producer and the veterinarian is the field necropsy. Although a dead cow is considered a loss to the operation, she can provide valuable information to the producer and veterinarian about the overall health of the herd. After educational programs for dairy producers have informed them of the importance of disease monitoring, numerous producers have recognized the potential benefit to be gained from routine necropsy evaluations and requested more information about the procedure. Our goal this past summer was to create an easy to follow necropsy manual that could be available to all dairy managers. We have created an addition to the ILM website that includes digital pictures and small video clips to aid in the explanation of necropsy procedures. We felt that more producers could have access to the manual in this format and that they would benefit by having the videos incorporated into the manual. The website includes information about euthanasia, how to perform a necropsy, when and where the necropsy should take place, and common lesions found in the different organ systems. In the future we will add sections about calf necropsy examination, investigation of diarrhea outbreaks and abortion storms.

It is our hope that the information in this manual will enable the dairy producer to work more closely with the herd veterinarian to develop cattle health programs. Our intention is to aid producers in collecting samples correctly so that the veterinarian and the diagnostic laboratory can analyze and diagnose problems more accurately. The Dairy Necropsy Manual can be viewed on the Integrated Livestock Management web page at http://www.cvmbs.colostate.edu/ilm