

# DROVERS

## Parasites prevalent, not always controlled

By John Maday (12/4/2009)

New data from the USDA's National Animal Health Monitoring System (NAHMS) show widespread prevalence of internal parasites in cow-calf operations, and suggest control measures fall short on many operations. Bert Stromberg, PhD, a professor of veterinary pathobiology and associate dean at the University of Minnesota presented the NAHMS results today to the Academy of Veterinary Consultants in Denver.

Parasite control is one of the most cost-effective investments a rancher can make. Research from [Iowa State University](#), for example, shows that eliminating dewormers in a cow-calf operation impacts breakeven prices by 34 percent, at an added cost of \$165 per head, due primarily to lower weaning rates and weaning weights. The new NAHMS study shows, however, that many producers are missing some of the benefits of a good parasite-control program.

The NAHMS researchers surveyed producers from 24 states representing 88 percent of U.S. beef cows regarding their parasite-control practices, and asked them to voluntarily collect fecal samples from their herds.

The study shows that for operations with unweaned calves or weaned stocker calves, over half dewormed these animals at least once per year. About 70 percent deworm replacement heifers once or more per year and just over 80 percent deworm cows at least once per year. Of those who deworm their cattle, 85 percent use a regular schedule to determine when the treatments take place.

In this study, only 5.7 percent of producers had performed fecal testing to evaluate parasite burdens during the past three years.

For Phase 1 of the study, participants send fecal samples from 20 randomly selected weaned beef calves six to 18 months of age, that were on pasture for at least four weeks and had not been dewormed for at least 45 days. Laboratory testing of samples from 99 operations showed 85.6 percent positive for strongyle-type eggs, 18 percent positive for nematodirus, and 60 percent positive for coccidia oocytes.

For Phase 2, the researchers asked participants to deworm their calves with whatever product they typically use, according to label directions, then submit a second set of fecal samples. Laboratories conducted "fecal egg count reduction" (FECR) tests to determine the efficacy of the deworming treatments.

Among participating operations, Stromberg says, 31 percent achieved efficacy rates below 80 percent for strongyle-type egg counts, and 44 percent had efficacy rates below 90 percent. Results below 90 percent efficacy, he adds, indicate the presence of anthelmintic resistance among parasite populations. For nematodirus, 62 percent of the operations had less than 90 percent reduction and 57 percent had less than 80 percent efficacy.

Stromberg says improper or incomplete treatment probably accounts for some lack of treatment success, such as when producers miss some cattle or misjudge their weights and apply the wrong dose. The data also suggest, however, that worm populations are developing resistance to some dewormers, resulting in a decline in efficacy.

The researchers acknowledge that more study will be needed to determine the extent of resistance to anthelmintics among parasite populations and to develop recommendations for ensuring the continued effectiveness of these products. In the meantime, Stromberg reminds producers to work with their veterinarians to develop strategic deworming programs to treat parasites in their animals and reduce shedding of parasite eggs that contaminate pastures.