

# Caregiver Contribution to Cattle Well-Being

Tom Noffsinger, DVM

Cattle caregivers have exciting obligations, responsibilities, and opportunities to contribute to cattle well-being. Shifting caregiver priorities from disease detection to performance enhancement results in new levels of cattle welfare.

Webster defines welfare as health, happiness and general well-being. We have a responsibility to provide cattle with physical comfort, disease protection, nutritional needs and emotional stability. Veterinarians understand that physical and psychological stress play important roles in cattle disease resistance and performance levels. Caretakers can be trained to realize that all human contact with cattle impacts animal well-being. Human contact can either create a very positive impact or an impact that can devastate cattle health, performance and cattle and human safety.

Veterinarians must improve their abilities to train caretakers to encourage cattle to communicate their true state of health. Understanding predator-prey relationships is the foundation for successful cattle handling and the development of communication with cattle - which enables early detection of disease.

Cattle exhibit very strong prey-animal instincts. Prey animals have survived in nature aware that predators select the lame, depressed, and weak to harvest. If caretakers behave like predators, cattle will hide signs of depression and disease from these people as long as

possible. Understanding more about the visual, auditory and sensory abilities of cattle encourages handlers to override their predator tendencies, such as to chase and yell.

Handlers that reward cattle motion with release of pressure can quickly train cattle – and in doing so, create mutual respect and develop trust between themselves and the cattle. Understanding that cattle like to see what is pressuring them and like to see where they can go is fundamental to low-stress handling. Cattle that trust handlers, volunteer to move away from handlers and will walk straight away and move as directed. This attitude of willingness has a positive effect on herd social interaction. Sensitive cattle are more content and timid cattle are more willing to compete for feed and water. Handling opportunities become positive to cattle health and performance instead of a stress.

Caretakers can have a positive impact on cattle health and performance. Cattle are easily trained to respond to the release of pressure and become more willing to communicate their true state of health when they realize that handlers are not predators. Caretakers that concentrate on low-stress handling skills increase their powers of observation, recognize abnormal behavior and attitude and develop the confidence and skill to manipulate behavior to improve levels of animal welfare.



DOCTOR,  
this ad  
is appearing  
in leading  
producer  
publications.

# Parasite Control Primer Resistance: Put your dewormer to the test.



Bill Clymer, Ph.D.  
Fort Dodge Animal Health

Parasite resistance occurs when small numbers of parasites survive a deworming treatment and pass on their genes to the next generation. As repeated treatments kill off vulnerable worms, resistant worms eventually come to dominate in the animal's digestive system – and in the pasture. Maybe you've seen the warning signs yourself: Lower than expected weight gain, diarrhea, rough hair coat, delayed conception or increased disease incidence.

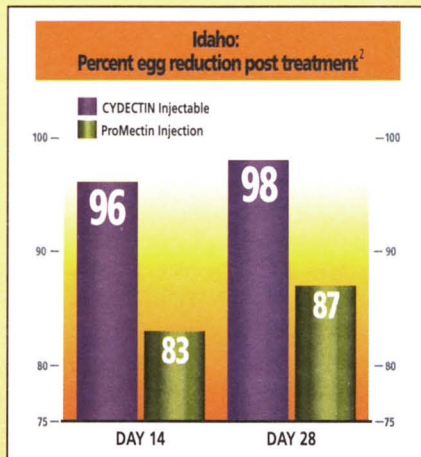
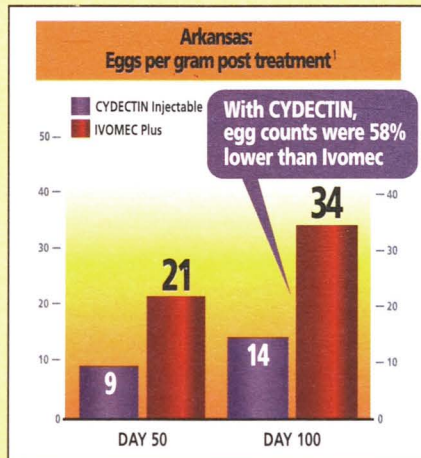
Why is resistance happening more often? "Ivermectin has been around since 1981," says Tom Yazwinski, Ph.D., of the Department of Animal Science at the University of Arkansas. "Many studies have found injectable ivermectin failed to reduce fecal egg counts with 90% or greater efficacy. This low efficacy, combined with product underdosing, misuse and overuse, is contributing to the growing anthelmintic resistance problem."

## New studies confirm resistance is an issue.

**Arkansas:** In a university study of stocker calves, animals treated with CYDECTIN® 1% Injectable (moxidectin) had significantly lower strongyle eggs per gram (EPG) than calves treated with IVOMEC Plus (ivermectin).<sup>1</sup> Due to the efficacy of CYDECTIN at the time of treatment, significantly fewer eggs were shed at both 50 and 100 days post-treatment.

As Dr. Yazwinski noted, "These differences in egg count likely reflect greater persistence of moxidectin as compared to ivermectin, and the apparent emergence of resistance to ivermectin in cattle nematode populations in the U.S."

**Idaho:** In a study of feedlot steers, animals treated with ProMectin® Injection (ivermectin), never achieved 90 percent efficacy in reducing strongyle EPG.<sup>2</sup> However, cattle treated with CYDECTIN® 1% Injectable had significantly lower EPG and virtually no *Ostertagia* infection, compared to animals treated with the generic ivermectin.



## The importance of testing – and timing.

If you suspect you have a parasite resistance problem, ask your veterinarian to conduct a Fecal Egg Count Reduction Test (FECRT). Samples must be taken immediately prior to treatment and no sooner than 14 days after to give surviving worms some time to start producing eggs again.

If FECRT indicates you have a resistance problem, what is your next step? Implement these best management practices to reduce the future risk of parasite resistance.

- Choose a dewormer with proven effectiveness.
- Use the most potent active ingredient within a chemical family.
- Select the best spectrum of activity for the parasites that need to be controlled.
- Follow label directions to prevent underdosing.
- Use other strategic control measures, such as good hygiene and rotation of pastures and animal species, to reduce parasite larvae contamination.
- Consider periodic rotation of chemical families, i.e., CYDECTIN (moxidectin) and SYNANTHIC® (oxfendazole).



**CYDECTIN**  
(moxidectin)

*You've got the power.*

1. T.A. Yazwinski, et al. A Field Study Comparing Fecal Egg Count Reduction, Weight Gain and Product Safety in Stocker Cattle Treated with either Moxidectin or Ivermectin with Closulon. *The Bovine Practitioner Journal*, Vol. 41, No. 2, 2007.

2. E.G. Johnson, J. Edmonds, M. Edmonds, 2007. Comparison of CYDECTIN Injectable and ProMectin Injection to a negative control for parasite control and feedlot performance. Fort Dodge Animal Health Technical Bulletin (FDP #L0427T).

All product names are trademarks or registered trademarks of their respective owners.

©2008 Fort Dodge Animal Health, a division of Wyeth.



Fort Dodge Animal Health