Handle on HEALTH

Effective Deworming Starts Now

Test, rather than assume treatment effectiveness.

*by **Kevin Johnson, MPS veterinary parasitology***

CATTLE HEALTH

While successful deworming programs vary by operation and region, it is generally recommended to deworm mature cows in the spring when native grass greens up if they weren't treated in the fall, six to eight weeks after turnout and in the fall after cattle come off pasture or following a frost. Deworming now sets the foundation for the cow herd's performance in the spring. It also positively impacts weaned calf health and performance.[1]

As grazing season winds down, parasite burdens often peak. By fall, cattle have spent the summer grazing season exposed to any larvae present in the pasture. Cattle that host low levels of internal parasites can have reduced feed intake, average daily gain and overall herd performance, long before clinical signs appear.

A strategic fall deworming treatment after a freeze reduces parasite burden in the cow prior to winter, when parasite infection on pasture is greatly reduced. This allows cows to better utilize nutrients for fetal development and maintain good body condition over tough winter months, which impacts their ability to raise a healthy calf and rebreed.[1]

True cost of internal parasites

Internal parasites may be silently dragging down herd performance. In fact, parasites may be costing more than many producers realize.

In cow-calf and stocker operations, an Iowa State University study reported that deworming delivered the greatest economic impact among animal health technologies, such as implants, pharmaceuticals and feed additives. The 2007 analysis estimated that animal health interventions added $274 per head in value for cow-calf producers, with $201 of that benefit attributed to deworming alone. In stocker cattle, deworming accounted for $24 of the $95 per-head value generated by animal health technologies.[2] Given today's higher-value cattle market, protecting animal health remains an important economic consideration.

That's why it pays to know whether your parasite control program is working. You can't manage what you don't measure — especially when it comes to internal parasites.

Test, don't guess

Diagnostic fecal testing can help you understand if parasites are impacting your herd and evaluate the effectiveness of your current deworming program. However, not all fecal tests deliver the same insights. There are two common diagnostic approaches used to assess parasite burdens in cattle herds: composite fecal egg count (FEC) and fecal egg count reduction test (FECRT).

The FEC diagnostic test provides a snapshot of the current parasite load within a herd. To conduct the test, approximately 20 fresh, randomly collected fecal samples from the same class of cattle (i.e. calves, cows, feeders, etc.) are gathered from the ground and submitted to a laboratory, where they are analyzed for fecal egg counts to assess overall parasite pressure.

Results indicate the herd's parasite burden and can guide informed decisions about deworming treatment. Composite sampling effectively reflects herd-level parasite burden, achieving approximately 94.8% accuracy compared to individual sampling results.[3] This approach supports more judicious use of dewormers — an important practice for preserving their long-term effectiveness.

A FECRT helps determine deworming treatment effectiveness. Twenty fecal samples are collected before deworming treatment and an additional 20 samples are collected 14 days post-treatment from the same group of cattle. The pre- and post-treatment fecal egg counts are compared to determine the effectiveness of the deworming treatment.

FECRTs are the most effective tool to assess if a dewormer is working in your herd. Following treatment, successful deworming should show a 90% or greater reduction in fecal egg counts. If results fall below that threshold, work with your veterinarian to determine if improper dosing or resistance has affected the outcome and to develop a plan to stay ahead of parasite challenges in your herd.

Field-proven fall deworming

With growing concerns about parasite resistance, treatment effectiveness should never be assumed. Field studies continue to demonstrate varying levels of efficacy among deworming products, underscoring the importance of selecting a treatment that delivers reliable parasite control.

Merck Animal Health maintains the largest database of FECRT results and actively monitors the field efficacy of cattle deworming products in the U.S. The database includes results from all major dewormer forms — oral, feed products, pour-ons and injectables. Results from the database show pour-on and injectable dewormers (macrocyclic lactones) average 60.7% and 66.1% efficacy respectively, while oral and feed product dewormers (benzimidazoles), including fenbendazole, average approximately 98% effectiveness.[4]

For instance, SAFE-GUARD® (fenbendazole) is a trusted deworming solution that provides producers with flexible options for effective parasite control. Available in multiple formulations, including oral suspension, paste, pellets, blocks and cubes, SAFE-GUARD offers convenient administration to fit each unique operation (see Sidebar). As a broad-spectrum dewormer, it goes straight to the gut and gets absorbed. It accumulates in the fat tissue of parasites[5] to provide control of economically important internal parasites, including brown stomach worms (Ostertagia ostertagi), Cooperia species, lungworms and other gastrointestinal nematodes.

Administered orally, SAFE-GUARD Suspension is dosed to cattle according to body weight and can be conveniently incorporated into routine fall handling events such as pregnancy checks, weaning or vaccination.

Accessible testing for better decisions

Effective parasite management relies on more than treatment alone. It requires understanding parasite challenges over time and using the information to guide management decisions.

For decades, Merck Animal Health has offered complimentary parasite diagnostic testing to help producers and their veterinarians monitor parasite challenges, evaluate treatment outcomes and make more informed management decisions. As the needs of the U.S. cattle industry continue to evolve, Merck Animal Health remains committed to advancing diagnostic solutions that deliver practical, trackable insights from the field.

Now is the time to plan for fall deworming to ensure your cattle head into winter with every opportunity to perform at their best. Work with your veterinarian or nutritionist to strengthen your parasite management strategy. Learn more about parasite management from Merck Animal Health by scanning the QR code. **BA**

Editor's Note: Kevin Johnson, MPS veterinary parasitology, is with Merck Animal Health Beef Cattle Technical Services.

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TABLE 1. **FECAL EGG COUNT REDUCTION TEST DATABASE* EFFICACY SUMMARY**

Treatment	Percent Efficacy
Endectocide Pour-On	60.7%
Endectocide Injectable	66.1%
All formulations of Fenbendazole	**98.7%**
Fenbendazole Drench with Various Forms of Endectocides	**99.1%**

*Merck Animal Health maintains the world's largest FECRT database to monitor field use efficacy of anthelmintic classes.

SAFE-GUARD® Important Safety Information:

Do not use in beef calves less than 2 months old, dairy calves and veal calves. A withdrawal period has not been established for this product in pre-ruminating calves. Additionally, the following meat withdrawal and milk discard times apply:

Safe-Guard Paste: Cattle must not be slaughtered for 8 days. For dairy cattle, the milk discard time is 96 hours.

Safe-Guard Suspension: Cattle must not be slaughtered for 8 days. For dairy cattle, the milk discard time is 48 hours.

Safe-Guard EnProAl Type C Medicated Block: Cattle must not be slaughtered for 11 days. For use in beef cattle only.

Safe-Guard 20% Protein Type C Medicated Block: Cattle must not be slaughtered for 16 days. For use in beef cattle only.

Safe-Guard Type A and other medicated feed products (pellets, cubes, free-choice mineral, or free-choice liquid): Cattle must not be slaughtered for 13 days. For dairy cattle, the milk discard time is 60 hours. **BA**