

Protect Your Grazing Cattle All Summer with Extended-Release Deworming

The longer cattle are on green grass, the higher their susceptibility to parasitic infections.

Deworming is often seen as the herd management practice that can yield the greatest return on investment. For operations that turn out cattle for several months of grazing, an extended-release dewormer might be the right tool to control parasitic infections.

“One thing producers might not realize is that the peak level of larvae in the pasture is reached toward the middle to end of summer, months after cattle have been turned out,” explained David Shirbroun, DVM, Boehringer Ingelheim.

“With a traditional dewormer that lasts maybe one month, the product has already worn off when we hit that peak infestation level, so cattle will be reinfected if they don’t receive another dose of dewormer,” he added. “But with an extended-release product, parasites are controlled for up to 150 days after administration.”

When devising a deworming protocol, a veterinarian can help evaluate your herd for existing or future parasitic infections, assess risks associated with future grazing and/or herd-expansion plans, and match your goals to the right deworming program.

Evaluate existing threats

Cattle are most susceptible to picking up worms and internal parasites when they are on green grass. Many producers think once weather turns cold and animals aren’t grazing, the threat of parasitic infections fades.

“Quite the contrary,” Dr. Shirbroun said. “Some of these worms have developed a mechanism by which they essentially hibernate, called inhibition. When the weather turns unfavorable for their survival, they hide in the lining of the stomach. Once the weather starts to warm up and cattle are back on green grass, then those worms erupt again. Treating those animals is important to break the cycle.”

To understand which worm species are present in a herd, veterinarians can perform a coproculture. This test grows up the eggs found in fecal material to hatch the larvae and identify which worm species are present. “Some worm eggs look very similar, so we’re starting to see more coproculture tests, which is making it easier to identify the type of worm species we’re working with,” Dr. Shirbroun noted.

Assess potential risks

In addition to understanding current parasitic issues, it's important to talk with your veterinarian about future risks associated with your herd-expansion and grazing plans. If you plan to introduce animals from other operations, there is a chance those animals could carry parasites that they can pass to your existing herd through eggs in their manure.

Proper pasture management is also key to minimizing potential worm infections. Plan to move your cattle often enough to keep grasses taller. Overgrazing leads to short grass, and most worms reside on grass within the first few inches of the soil line. If you keep cattle on a pasture too long, they're more likely to ingest worm larvae as they bite off grass close to the ground. In addition, the longer cattle graze during the season, the more opportunity they have to be exposed to worms.

Create a strategic deworming protocol

Taking into consideration current threats and future risks helps your veterinarian build a deworming protocol aligned to the needs of your operation. They would also be aware of any resistance concerns in your area. "We're starting to see issues with resistance in certain worms in some pockets geographically, but it's not a widespread issue, so a local veterinarian would be aware of which products to recommend in those situations," Dr. Shirbroun said.

There are three categories of deworming products:

1. **Benzimidazoles** (oral dewormers) are effective on current infestations of adult and some juvenile parasites. "These are known as purge dewormers, and offer no residual activity," Dr. Shirbroun pointed out.
2. **Macrocyclic lactones** (endectocides) are available in different formulations that control existing populations and provide different levels of residual activity:
 - a. Pour-on and injectable formulations typically provide residual activity of a few days to about 30 days.
 - b. Extended-release formulations can control parasite infections for up to 150 days, which is traditionally considered season-long control.
3. **Imidazothiazoles** are known for being quickly absorbed and distributed throughout the body but only control internal parasites. They can be delivered orally, topically and by injection.

"Oral dewormers and pour-ons are great for feedlot cattle because those animals aren't on grass and susceptible to reinfection," Dr. Shirbroun explained. "They're also a good option for a producer who has cattle on grass for a short amount of time."

He continued, "For cattle with a longer grazing period, an extended-release dewormer is ideal. You get up to 150 days versus the more traditional 30 days,

so five times the control of a traditional dewormer. While there's an added cost to the product, you'll potentially have a monetary and time gain in terms of labor, since you only have to administer the extended deworming product once, compared to maybe two or three times for the traditional product to get the same duration of control."

Here's how extended-release technology is able to last all season:

4. After the initial subcutaneous injection, the drug concentration reaches a high peak to control parasites right away.
5. Extended-release technology enables the remaining drug concentration to encapsulate into a gel matrix. This matrix continues to release the dewormer above therapeutic levels in the animal.
6. The matrix breaks down approximately 70 to 100 days after the initial treatment and releases a second peak. After 150 days, the drug is eliminated from the body.

"The vast majority of worm infections are subclinical, which means we're not seeing outward signs of infection, but they're robbing cattle of performance," Dr. Shirbroun said. "Extended-release technology is a proven investment, especially when aligned to the right situations. It can help animals grow better by decreasing the parasite strain on their system.

"If you can control parasites, cattle can put on weight faster, keep their immune system stronger, and develop more efficiently. If you're developing heifers for breeding purposes, they can potentially be bred earlier and have higher conception rates, which means they're likely to stay in the cow herd longer," he elaborated.

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