

Deworming Program is a Balancing Act

Deworming, like other management practices, should be carried out only if it makes you money. If it doesn't make money, you're just doing it for the exercise.

With that thought in mind, let's examine some factors to see where deworming fits in your program.

Environment is the first important factor. If you ranch in the desert Southwest and run 10 cows per section, internal parasites may not be a major problem. However, if your operation is in the humid Southeast, where stocking rates go above a cow-calf pair per acre, internal parasites can rob profits.

The type of cattle—cow-calf, stockers, bulls— affect the frequency of deworming. If you are a cow-calf producer, you have control of your management and can adjust deworming according to need. If you buy stockers, you're buying someone else's management, or lack of it. Deworming will have a higher priority here.

As a seedstock producer you may feel the need to produce a more attractive, top-of-the line product. Consequently, an additional deworming of yearling sale bulls may be justified.

When should you deworm? That's a little easier to determine but still not carved in stone. Here in north Arkansas, a lot of my clients follow the "sign" (reading the Farmer's Almanac and moon phase). The sign is deemed right for deworming when cattle are in the lot and sons-in-law are available to help.

More seriously, in most areas, twice a year deworming is recommended. According to Dr. T.A. Yazwinski of the University of Arkansas, effective worm control may be achieved when anthelmintics are used on a herd basis in both the spring (late March to early April) and fall (one month after onset of fall rains and cooler temperatures).

Spring treatment removes worms in the active egg-laying stage. This greatly reduces subsequent pasture contamination.

Fall treatment removes worms acquired as a result of fall rains. These are worms that would otherwise contaminate pastures with eggs destined to start the next year's cycle of parasitism.

Recent research in Arkansas suggests a variation of this schedule might be more effective. Extension specialists and University scientists have tested a January 1 and a July 4 schedule. This may be best

when *Osterga*, a species of nematode, is present in cattle herds.

What Product is Best? You have determined that you need to worm and are ready to do it. Now, what product to use?

The first thing to remember is that cheaper isn't always better. Return on investment is what counts. Choice of dewormer should be based on several factors:

1. **Cost:** This is the least important of factors, in my opinion. If a dewormer costs \$5 per head and you're selling \$1 per pound stockers, a few extra pounds of gain covers your cost.
2. **Efficacy:** That's a 25-cent word for how well does it work. Basically, the newer compounds are more expensive and more effective. Ivomec (Merck), Panacur (Hoechst) and Valbazen (Nordén) are examples of new, effective products that provide a good return on investment.
3. **Parasite Resistance:** As a general rule, the more a product is used in a herd or locale, the less effective it becomes. Don't lock into only one product.
4. **Route of Administration:** A product that requires oral administration isn't practical if you don't have a working corral and chutes. (My wife says if you don't have a corral, you don't need cattle. Build a corral, buy a trailer to haul them to the vet's, and then get cattle is her plan.)

Today, producers can choose between drench, bolus, injectable, topical, sustained release bolus intra-ruminal injection and feed formulations. Some of these may not be available everywhere.

A Summary for Producers:

- When deworming treat ALL animals in a particular group. Treating only those that look "wormy" is a waste of time, money and effort.
- Rotate. If you use Ivomec this spring, use Valbazen this fall. Repeated use of the same product leads to parasite resistance and diminishing effectiveness.
- Adjust your deworming program to your operation, your cattle, your climate and your pocketbook.
- If you have a specific question, call your veterinarian. They are the best source of information. I'm not knocking the fellow at the co-op, but your vet can do more. For example, he can do fecals. That's a microscopic exam of a stool specimen for parasite eggs. By taking a few random samples of fresh manure, you can

find out the severity and type of parasites, and product needed to correct the problem.

Totally worm-free cattle are difficult, if not impossible, to obtain. You should strive for the best balance between economics and good health in your cow herd.

This month's Vet Call column was contributed by Joe Melton, DVM, Harrison Animal Clinic, Harrison, Ark.

Drug Use Guidelines

Failure to observe pre-slaughter withdrawal times for animal drugs is one of the major causes of violative drug tissue residues in food-animal production.

Any illegal residues found in a marketed product may result in marketing delays for producers, lead to condemnation of a shipment, and result in regulatory actions under the Federal Food, Drug and Cosmetic Act. Planning proper drug use can help avoid these costly problems. Most importantly, it helps maintain consumer confidence in food products.

Each withdrawal day is a full 24 hours starting with the last time an animal receives the drug. For example, a drug with a five-day pre-slaughter time is withdrawn from the animals at 9 a.m. on Friday. At 9 a.m. on Saturday, the treated animals have completed their first withdrawal day. The fifth withdrawal day will end at 9 a.m. on Wednesday.

If the drug in use has a withdrawal time, it will be found on the label, the package insert or the feed tag. Other drug use information can also be found on the drug product label.

Drug Use Tips

1. Bead the label carefully — labeling directions change frequently.
2. Use drugs only in animal species listed on the label. Drugs used in other species may cause adverse reactions or illegal residues and possible animal deaths.
3. Use the proper dose for the species and size of animal to be treated. Overdosing can cause illegal residues.
4. Calculate pre-slaughter drug withdrawal and milk discard times accurately.
5. Use the correct route of administration. Giving drugs incorrectly can lead to drug ineffectiveness, adverse reactions, illegal residues and possible animal deaths.

