Spring Deworming

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The warm weather and green grass that are finally appearing across the southern US means that we should be thinking about protecting our cattle on pasture. Deworming cattle has consistently been proven to have health and growth benefits in cattle when done properly. However, many factors should be considered when implementing an internal parasite control program such as type of cattle and pasture management. The timing of deworming can also affect the effectiveness of our program. Given the cost of many available deworming products, we have to be sure that we are deworming our cattle most effectively and not wasting our money. Below are a few factors to consider when developing your spring deworming program:

Parasites of concern will vary depending on where you live and how you manage your cattle.

- The major groups of internal parasites affecting cattle are intestinal roundworms, lungworms, liver flukes and coccidia. While liver flukes are seen commonly seen in the low-lying areas of gulf coast states, inland areas may not have quite as big of a problem. External parasites (ectoparasites) include lice, horn flies and ticks. For most of us in the southeast, fly control at this time of year will be critical and necessary to prevent later growth losses and diseases such as pinkeye, anaplasmosis and BLV.
- The lifecycle of the parasite will determine which products you use, and when. In the southern US, some stages of parasites become dormant in the hot summer. Therefore we often see high parasite contamination of pastures in the winter and spring, which is why our spring deworming is so critical. In the north, parasites can "overwinter" and become dormant in the colder months. Consult your veterinarian for assistance in determining your operation's biggest parasite risks.
- Animals are susceptible to different parasites at different stages of life. Younger cattle are
 particularly susceptible to intestinal roundworms and coccidia. Adult cattle develop an immunity
 to many of the common parasites, however, proper deworming is necessary keep to the internal
 worm burden low and to prevent pasture contamination. Adult cows can pass some of this
 immunity to their calves through colostrum, but the immunity is not long-lasting.
- Most of a parasite's lifecycle is spent on pasture rather than inside the animal itself. Therefore, cattle grazing forages are continuously exposed to parasites. Likewise, cattle shouldn't be allowed to graze pastures too short since the parasite eggs are maintained close to the ground. The amount of grazing and the number of times cattle are moved to new pastures may affect the type and frequency of deworming. For this reason, one of the major goals of a good spring deworming program should be to reduce pasture contamination. Deworming should be timed to coincide with the moving of animals in order to help keep the new pasture clean from parasites and reduce parasite buildup.
- Deworming at weaning when animals are moved to new pastures can not only reduce pasture contamination, but may affect the calf's immunity. Heavily parasitized calves will not get the proper nutrition necessary to develop good immunity. Recent studies have shown that parasitized calves may also have a reduced immune response to vaccination.

Not all dewormers are the same.

Dewormers contain anti-parasitic drugs which have variable activity. Some products are very
specific, such as the anti-parasiticides used against liver flukes and coccidia. Others are broadspectrum, such as the ones used to treat intestinal roundworms, lungworms, lice, horn flies and

- ticks. Furthermore, products will vary in their ability to kill immature and mature stages of the parasite.
- Efficacy should be the major consideration in choosing a dewormer. Has research shown the product to be effective in your class of cattle at the indicated times? Generic formulations of a product may not have the same quality ingredients as the name brand product, which can affect the product's efficacy. Your veterinarian can help you sort out the efficacy of the various products.
- In addition to the spectrum of activity, know the persistence of the dewormer that you are using. Some products continue protecting against parasites days to weeks after administration, while others have a one-time, immediate anti-parasitic effect. A new dewormer on the market has a label claim for up to 150 days of parasite control. Spectrum of activity can be important when looking at pasture decontamination strategies.
- Deworming products have different routes of administration, each with benefits and drawbacks.
 Products are available as injections, pour-ons, feed additives, feed blocks, oral boluses, liquids and pastes. While many producers like the convenience of the pour-ons and feed blocks, other formulations may be more precise and effective in particular situations. Likewise, injectable or oral dewormers may be difficult to administer when good restraint isn't possible.
- Different formulations require different dosages. Be sure to deworm your cattle according to their weight. Under dosing cattle will affect the product's efficacy and can lead to parasite resistance. This is one reason why many prefer injectable or oral formulations over pour-ons and feed additives.
- The safety of deworming products will vary. Don't forget about the safety of the workers and consider the ability to restrain cattle to properly and safely administer a product. Some deworming formulations require the use of gloves or other protective equipment because contact with the skin may be harmful. Furthermore, follow the slaughter withdrawal time on the product label to avoid residues.
- Given the different types of parasites and their variable mechanisms of action, the type of dewormer used should be rotated by season or by year, depending on your pasture management system. This may also reduce the potential for parasite resistance when done properly.

Finally, cost should always be considered when making dewormer choices, but it shouldn't be the deciding factor. Remember that a proper deworming program will result in increased gains and heavier calves – and will usually pays for itself in the long run. You want a product that is efficacious, convenient or easy to administer, and at a competitive price. As you are preparing to put your cattle through the chute this spring, talk to your veterinarian or extension livestock specialist about the parasites most important for your cattle and value of spring deworming in your herd.



The main goal of spring deworming is to reduce parasite contamination of pastures. Use the right product at the right time in the right animal.