

Internal & External Parasite Control

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A planned, systematic internal (worms) and external (grubs, lice, flies and ticks) parasite control program is an essential part of any comprehensive herd health program for all classes of beef cattle. These parasites cost the US cattle industry hundreds of millions of dollars every year by reducing animal performance, milking ability, fertility and market value. Producers should consult with their veterinarian to customize a herd health program for their operation, including an internal and external parasite control program.

Internal Parasites

In general, beef cattle in South Carolina should be dewormed twice a year - in the spring and in late summer or early fall. Animals should also be treated for grub and lice control at the same time in early fall. Usually, they will need to be retreated for lice control in January or February. Fly control needs to begin in mid-March to mid-April depending on the weather.

There are many good dewormers on the market for internal parasite control and are available in several forms - bolus, paste, drench, pour-on, injectable, range cubes and feed blocks. All are very effective when administered at the proper time and at the recommended dosage levels. Some products control not only internal but also external parasites at the same time. Others need to be used in conjunction with external parasite insecticides. It is important for producers to remember all of these products are effective for only 4- 8 weeks depending of the product and the form of the product. No internal or external parasite control product lasts for 5 months.

Deworming frequency may be increased by intensive grazing programs or drought conditions resulting in overgrazing conditions. Animals gradually become reinfected with worms just by grazing because these worms and their eggs are found on the lower part of plants near ground level. Therefore, forage availability can directly affect internal parasite levels. The closer to the ground pastures are grazed the more worms and worm eggs are ingested by animals. In drought years, pastures may be grazed down to the ground right into the highest concentrations of these parasites and their eggs. Producers with intensive, rotational grazing programs need to be acutely aware of internal parasite control because their animals graze forage lower than in conventional grazing systems.

External Parasites

External parasites can be controlled by a wide variety and form of products - ear tags, sprays, pour-ons, dusts, back rubbers and mineral additive. Ear tags impregnated with organophosphate or synthetic pyrethroid insecticides which controlled flies and ticks were introduced in the early 1980's. Fly tags were the greatest thing since slice bread the first two years they were on the market. The results of putting in the tags was very quick and dramatic. In demonstration after demonstration, 15 minutes after putting in the fly tags there were no flies on the cows and clouds of flies hovered above them. They were very effective the first two years most producers used them. However, many cattle producers found them to be complete failures the third year. The fly tags were ineffective they were not used according to label instructions. Their improper use resulted in a build up of resistance in the fly population on farms to the insecticide in the tags. Many producers used only one fly tag per cow and bull rather than the recommended two tags - one in each ear. As a result of using only a single tag per animal, flies and ticks were controlled on just that one side of an animal's body. Calves were not tagged at all. Fly tags were frequently put in too early in the spring so they ran out of a lethal dose of the insecticide before fly season was over. However, the single biggest contributor to fly tags becoming ineffective was producers not removing them at the end of the fly season each fall as recommended. Late season flies in the fall and early season flies in the spring were then subjected to

sublethal doses of insecticide so they and subsequent generations of flies acquired resistance to the chemicals. This resistance problem was compounded by producers using the same brand of tag or tags with very similar types of insecticide compounds year after year.

In contrast, producers who used the following management scheme have had and are still getting excellent fly and tick control with fly tags:

- put fly tag in both ears of all animals including calves so both sides of animal receive insecticide
- put fly tags in around the May 15th so they will last until October 1st (5 months)
- rotated types of fly tags (tags with an organophosphate insecticide one year and tags with an synthetic pyrethroid insecticide the next year)
- removed fly tags in the fall when deworming and giving grub and lice control

This scheme prevents the fly populations from building up resistance to the fly tags so they continue to be effective controls. There are many external parasite control products on the market which are very effective unless it rains within 2-4 hours after which washes the product off. Depending on the product and method of application, the insecticide will be lethal to the fly population for 2-6 weeks. The more it rains the shorter the time the insecticides seem to work.

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