Preventing Internal Parasites Through Pasture Management Principles

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As we all know, managing our sheep to control internal parasites can be quite challenging at times. Many of the products we use to deworm have lost their effectiveness and so we need to turn to other methods to prevent infections from internal parasites. Here are a few things to consider from a pasture management perspective to prevent internal parasites.

Divide your pastures into sections for rotational grazing. Most parasite larvae will be found in the first two to three inches of the pasture plants. By rotating sheep out of a pasture before the grass reaches three inches in height, we can prevent many of those parasites from being ingested by the sheep. A good rule of thumb is to have about 10 sections in your pasture. These sections should be grazed off in about four to five days at the maximum. (However, this can be longer during hot and dry weather.) The reasoning behind this is that once a parasite egg has been passed in the feces, it will take about four to five days for that egg to mature and hatch into a larva that can infect a sheep.

Another point is to allow each section to rest at least 30 days before re-grazing. This allows time for any larvae that are present in the field to use up their energy reserves and die. Keep in mind that this time frame can change depending on the density of the pasture plants and the moisture levels on the grasses from rain, humidity and/or dew.

Co-grazing sheep with beef cattle can help to break the life cycle of internal parasites on pastures. Follow one species with the other species through a rotational grazing system.

Allowing pastures to grow for 30 days or more in the spring can result in forage that will become too mature for grazing. Harvesting this forage for hay can decrease parasite larvae present on pastures. Once the hay is harvested, the remaining larvae are subjected to drying out from the sun, which will help to kill the larvae.

Another option is to seed your pastures with plants that contain tannins. According to Dr. Steve Hart form Langston University, the tannins interfere with parasite egg hatching and the development of larvae to an infectious stage. Two common plants that contain tannins include birdsfoot trefoil and sericea lespedeza. Check with your local Cooperative Extension Office for more information on adaptation of these species to your local area. In some areas sericea lespedeza can be very invasive, so you may need to be careful with where it is planted!

A final option to consider is to graze sheep with other animal species that will break the life cycle of the parasite. Cattle and horses are excellent for co-grazing because parasites that infect sheep will not be able to complete their life cycle in cattle or horses. Co-grazing works well by grazing sheep either before or after the cattle or horses. This allows one species to clean up the parasites left behind by the first species to graze the pasture. Co-grazing with goats will not work however because sheep and goats share some of the same parasites.

Using more than one method for preventing internal parasites will help to increase the success of your results. One last comment I might make is to pay close attention to the internal parasite treatments on the sheep in your flock. Maintain treatment records for all sheep in the flock. For any sheep that need treated more often than others, you should consider culling them from the flock. There is a good chance that these sheep are carrying a majority of the parasites and are the culprits for re-infecting the flock. Over time, culling these
carrier sheep will help to build genetic resistance to internal parasites in the remaining sheep and decrease the need for deworming.