

Sheep and Goats Beware

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We are now in July and we are on the verge of having problems with internal parasites in sheep and goats. Internal parasites or “worms” as most of us call them are a problem in the summer months of late June, July, August, and September. The high temperatures and humidity in Tennessee are an ideal growing and breeding environment for these pests of small ruminant production. In fact of all the health problems associated with sheep and goats, internal parasites are the number one reason for lost production. Symptoms associated with internal parasites is bottle jaw, pale pink or white lower eyelid, lose of weight, and rough appearance of hair coat.

In Tennessee, there are considerable number of internal parasites that affect sheep and goats but the parasite that carries the leading role is *Haemonchus contortus* or the barberpole worm. As the name suggests, this worm when it has filled itself on a blood meal will look similar to a barber pole. The female of this species will embed herself into the lining of the small intestine where she will pull protein out of the blood to use during reproduction. She may lay over 5000 eggs in a day! These eggs will be excreted in the feces where they will hatch if environmental conditions are correct to develop their lifecycle. The worm goes through five molts to adulthood. The first three are a larvae stage, juvenile and then adult. The first two stages do not infect the sheep or goat but the third stage is infective. The larvae climb grass in dew from the evaporation process where it will be consumed by the animal. The lifecycle of this worm may take as little as three weeks during the summer.

To combat this problem, a producer needs to take a systems approach using many techniques. There are no silver bullets when controlling internal parasites. Consider the following tips in your internal parasite control program:

1. Firstly understand the grazing behavior of sheep and goats. They enjoy a buffet of forages including broadleaf weeds and shrubs. These forages are high in protein and may contain

natural dewormers, such as tannins, that can help combat worms. Control the grazing height of the animals by using rotational grazing. Worms travel up grass no farther than 2-3 inches. If you have the ability to rotate fields, this is a practice that can help.

2. Do not feed grain or hay on the ground! Use feeders that allow animals to feed with their heads up. Keep water troughs clean and provide the appropriate mineral. Sheep are sensitive to copper so should not be fed a cattle mineral.
3. Cull your animals harshly. If you have an animal, with the exception of a young growing lamb or kid, requiring constant deworming with a chemical dewormer that animal should be culled. That animal is costing you money and time.
4. Check the lower eyelid. There is a system known as FAMACHA© that uses a colored card of the lower eye lid that can help determine when an animal needs to be dewormed before it becomes a problem. If the lower eyelid is a dark red then the animal does not have an issue but if it is pale pink or white then the animal is anemic.
5. Use chemical dewormers strategically. There has been some resistance to chemical dewormers by internal parasites in recent years so it is advisable to rotate chemical families every couple of years. Ask your veterinarian for help when choosing a chemical dewormer.
6. Graze a different species with your goats or sheep. Cattle (with the exception of one minor internal parasite species) do not share internal parasites with goats or sheep. Same goes for horses.

There are no silver bullets when managing “worms” in sheep and goats but these practices should reduce the problems that you may see.