

MEAT GOAT NOTES**No.1 – 2013****Relatively low-cost, easy "fixes" to decrease gastrointestinal parasite loads on the farm****Jean-Marie Luginbuhl**

Decreasing parasite loads is every producer's challenge. Nonetheless, relatively low-cost, easy "fixes" as described below can be readily implemented on every farm.

Repair water trough leaks

The concentration of feces is likely to be high around water troughs as animals will defecate when coming to drink water. In addition, forage will grow well around leaky water troughs due to the additional moisture.

The combination of moisture and a high concentration of feces will most likely result in an area highly contaminated by gastrointestinal tract larvae waiting to be ingested when the lush forage is consumed by the goats or sheep. Such a scenario may potentially affect the entire herd or flock even when gastrointestinal tract larvae concentrations are low in the rest of the pasture.



Repair water leaks

Fence off moist areas

Low-lying wet areas, marshes, and stream banks will favor the growth of lush forage and the survival of gastrointestinal tract larvae, and thus will likely be highly contaminated.

Avoid grassy pens

Pens used for sorting small ruminants and to protect them from theft and predation will contain a high concentration of feces. Following a few days of rain, forage will grow readily due to the high concentration of nutrients and, at the same time, gastrointestinal tract larvae will hatch and will soon be ready to be ingested by the penned animals grazing the forage.

Separate animals into groups

Different classes of animals vary in their nutritional requirements and their susceptibility to gastrointestinal parasites and their effects. Therefore, goats or sheep should be separated into distinct groups to be managed separately

according to their specific nutritional requirements and susceptibility to gastrointestinal parasites.



Goats grazing mixed sward

As healthy, well nourished animals can resist gastrointestinal tract infection better, match the nutritional requirements of the animal groups to the pasture resources of your farm. The animals with the highest nutritional requirements are young, weanlings, and late pregnant and lactating animals. These same animals are most susceptible to gastrointestinal tract parasite infection.

Subdivide your pastures

Divide pastures into sub-paddocks using temporary electric fences and always move animals before the pasture becomes shorter than 3 inches. In a grazing program consisting of only one pasture, all animals (most susceptible and less susceptible) will be exposed to the same load of gastrointestinal parasite larvae and will keep re-infecting themselves.

Other benefits of pasture subdivision include the ability to strictly ration pasture feed according to animal nutritional requirements and the need to provide recovery periods for pasture plants. In addition, pasture rest is an effective tool to decrease gastrointestinal parasite larvae on pasture. The length of pasture will vary with climate, season, and rainfall. A good rule of thumb is at least 3 months of rest.

Decrease stocking rates

The primary cause of internal parasitism is overstocking, therefore it is important to match animal numbers to pasture size and amount of forage.

Graze multiple species of livestock

Use cattle or horses to graze pastures after goats or sheep. The benefits are three-fold: (1) Cattle or horses will act as vacuum-cleaners and will ingest many gastrointestinal tract parasite larvae that goats and sheep share; in turn, these larvae will die in gastrointestinal tract of the cattle or horses; (2) Goats and sheep will be able to select and graze the pasture of the highest quality to meet their nutritional requirements; and (3)



Mixed species grazing

Goats, sheep, cattle and horses differ in the types of forage they prefer, thus leading to a better pasture utilization.

Keep recently purchased goats or sheep off pasture

Do not add anthelmintic-resistant worm larvae to your pastures. Recently

purchased goats or sheep should first be quarantined on a dry dirt or concrete pen and dewormed aggressively using multiple dewormers before being grazed with the rest of the herd or flock.

Keep good records and cull aggressively

Recording the health status of animals through the use of FAMACHA© scores and deworming frequency will allow producers to readily find out which animals are re-infecting their pastures and therefore the rest of their herd or flock.

As a general rule, 20% of animals will shed approximately 80% of gastrointestinal parasite eggs. Culling those worm-susceptible animals is the most important factor that can be used to increase herd or flock resistance and reduce pasture contamination.