

Illinois Grazing Manual Fact Sheet

ANIMAL HEALTH

Control of Internal Parasites in Sheep

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Internal parasites of sheep are one of the most-costly diseases that sheep producers have to contend with. Parasite damage may range from reduced productivity to death losses. Most internal parasites either suck blood or destroy tissue. The resultant damage may cause the animal to remain unthrifty for life.

Most midwestern universities involved with sheep have done extensive research in internal sheep parasites and their control.

Control is based on a combination of drug treatment and management to reduce reinfestation. Preventing animals from being reinfested can eliminate parasites over a period of time. This is not feasible under most production conditions except by using expanded metal flooring. Work at Dixon Springs Agricultural Research Center several years ago showed the value of expanded metal floors for controlling parasites and foot rot.

Sheep have a number of characteristics that make them more susceptible to parasites than other livestock.

1. Sheep parasites are mostly blood-suckers.
2. Sheep tend to be very close grazers therefore contacting large numbers of larvae.
3. Unlike other animals, sheep have little aversion to grazing amidst heavy fecal contamination.
4. Their strong flocking instinct encourages them to graze close together.
5. Sheep parasites are prolific egg producers.
6. Sheep develop very little immunity to protect them against parasites.

Parasites may produce obvious symptoms to almost no symptoms, depending on the severity or "parasite load." Poor doing animals may exhibit diarrhea, weight loss, sudden paleness of mucous membranes, weakness and even death. Severe damage has usually occurred by the time symptoms appear.

A veterinarian should conduct a physical exam. A fecal egg count and even an autopsy may be needed to evaluate the problem. It is important to determine which parasites are present and at what level of infestation.

Pasture is the most risky management method for spreading parasites. Infective larvae develop on the grass stems protected by shade and moisture. Every mouthful of grass carries infective larvae into the sheep.

Heat and dryness are most effective in controlling parasite larvae. Midwest winters have relatively little effect against infective larvae.

Control programs using dewormers vary in how they are used. Some elect to deworm on a regular schedule, every 6-8 weeks. Others deworm strategically at specific times in the production cycle while others deworm based on increasing fecal egg counts. The most effective ones have a veterinarian involved who monitors the program and checks the results of treatment.

Fecal egg counts before treatment identify the kinds of parasites and the level of infection. Samples checked following treatment should be 7-10 days after treatment. Samples should be fresh and represent at least 20% of each group of sheep.

Following treatment, sheep should be moved to clean pasture or a clean environment to reduce reinfestation.

Treatment is only one aspect of parasite control.

For treatment to be effective, the following considerations are important:

1. Use the correct medication.
2. Must be used at the correct dosage.
3. Appropriate timing/interval.
4. Fecal examination 7-10 days following treatment.

A number of medications are available for treating parasitized sheep. There are basically four families of dewormers.

1. Ivermectin
2. Pyrantel
3. Benzimidazoles
4. Levamisole

This does not include inophores or other medications for the treatment of coccidiosis. Use of medication depends on:

1. Type of parasite being treated, i.e., ivermectin does not kill tapeworms or flukes.
2. Correct route of administration: all have an oral drench formulation that is effective.
3. Proper dosage based on weight so determine correct weight.
4. Be sure dose is swallowed. Many small producers use horse paste wormers that sheep frequently spit out.

It is important to work with a veterinarian to monitor the program to be sure it is effective.

Unnecessary treatments, use of an inappropriate drug or using the wrong dosage are all expensive and inappropriate.

Each program should be designed for the individual circumstances. Two neighbors may need to have quite different programs depending on their individual circumstances.

One possible scenario based on management would be:

1. Deworm ewes - 2 weeks before breeding as part of the flushing process.
2. Deworm ewes - 30 days prior to lambing.
3. Deworm ewes - at lambing time.
4. Deworm ewes - at weaning.

If fecal egg counts warrant, deworm or check whenever animals appear not to be doing well. This program would be for ewes lambing in confinement and lambs weaned before going to pasture. Other management systems would require different parasite control strategies.

Additional Fact Sheets:

- Control of Equine Parasites — R.D. Scoggins, DVM, University of Illinois
- Control of Parasites in Dairy Cattle — Dick Wallace, DVM, MS, University of Illinois
- Control of Parasites in Grazing Beef Cattle - G. L. Meerdink, DVM, University of Illinois

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