1967

Electric Fencing for Sheep

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A major fixed cost for sheepmen is the expense of fencing sheep. The rising cost of conventional fencing materials and limited availability of farm labor have caused sheepmen to evaluate alternative fencing methods.

Electric fencing is not commonly used by sheepmen, although many producers have been fencing sheep with electricity for several years. The fact that wool is a poor conductor of electricity, individual conservatism, and unsuccessful experiences appear to be the major reasons why electric fencing is not commonly used by sheepmen. Questions frequently asked about the value of electricity for fencing sheep receive inconsistent answers. Some farmers state they have tried electric fencing for sheep without success.

Because of these circumstances, researchers at the Ohio Agricultural Research and Development Center initiated studies to evaluate the potential of electricity for fencing sheep. The results have been favorable. They indicate that sheep producers should now evaluate their operations to determine if electric fencing could make their unit more efficient.

The initial exposure of sheep to the electric fence is important in properly acclimating the animals. This first association with the fence will largely determine the success of electric fencing for sheep.

For the first exposure, the flock should be slowly moved into the fenced area. If sheep are frightened, they may crowd through the fence and perhaps break the electric fence wires. Special attempts to attract the attention of sheep to the electric wires have proved worthwhile. Small aluminum pans attached to the wires help attract the sheep to the fence, where they receive the initial shock.

Wool is a poor conductor of electricity, so the areas without wool on the face and ears of unshorn sheep receive the electrical shock. Conditions are ideal if the wool is wet when the sheep are first exposed to the fence. However, experiences at the Research Center have been highly successful with sheep which have not had damp fleeces when first exposed to the fence.

Sheep can be successfully fenced with electricity by using 2 strands of smooth wire attached to metal or wooden stakes located approximately 25 feet apart. Heavy gauge wire is recommended because of the additional strength and ease of handling. The bottom wire should be from 12 to 15 inches above the ground, with the top wire approximately 12 inches higher. Proper grounding of the fencing unit is very important, particularly during dry seasons.

A commercially available high intensity pulse output fencer was used in this study. Differences among various types of fencers were not studied.

Some sheepmen report using light-weight barbed wire along with a smooth wire, with both electrically charged. Others have used 3 wires to provide additional insurance against the sheep jumping or putting their heads between the wires.

The most apparent advantages of electric fencing for sheep are the low cost of materials and the ease of constructing the fence. In this study, two 15-gauge wires were used with metal stakes spaced 25 feet apart, plus insulators. The fencing cost was 57 cents per rod. The fencer cost $39.50 and has a capacity of electrically charging 8 miles of fence.

A price range of 40 to 60 cents per rod can be used for estimating the cost of electric fencing materials. Two men can easily build 1 mile of fence in 6 hours.

Other advantages of electric fencing may be more important in specific situations. One of these is where sheepmen have encountered problems with stray dogs entering the flock. A number of producers have stated that electric fencing has eliminated their dog problems. Corn fields, meadows, and other unfenced areas can be temporarily fenced with electricity and utilized for grazing sheep.

Electric fencing gives more flexibility in pasture use. The grazing habits of the sheep can be altered and pasture utilization improved.

Sheep can be heavily concentrated more economically by interfencing large pastures into smaller pastures with electricity. An experimental group of 274 dry ewes at the Research Center was grazed on 15.4 acres of bunch-type grass-legume pasture from early May until late June by subdividing the pasture into smaller pastures. This type of management forced the sheep to graze coarse grasses not commonly preferred and eliminated the necessity of mowing the pastures during the summer.

Where numbers are less concentrated, sheep tend to be selective in their grazing and bedding areas. Frequently these habits lead to inefficient use of pasture and increase the problem of internal parasites.

The ewes in this study were rotated every 10 to 14 days, allowing rapid plant regrowth and preventing completion of the life cycle of the common internal parasites. The ewes maintained a healthy and uniform condition throughout the study.

Indications are that an electrically fenced grazing program can be managed to prevent ewes from becoming excessively fat during the summer months. This has been a common problem to sheep producers in improved pasture areas.

The information to date indicates that electric fencing can be extremely useful in improving the efficiency of a sheep operation. The low fencing costs, ease of construction, prevention of dog problems, reduction of internal parasite infestation, and more complete utilization of temporary and permanent pastures indicate that electric fencing can be used to increase the net return from sheep farms. (Ohio Report)

SILAGE PROTEIN WARNING

Corn silage has been growing in popularity for feeding pregnant ewes. Iowa State's Tom Wickersham issues this warning: This high-roughage corn product is notably deficient in protein. A shortage of protein in the pregnant ewe's ration results in the inefficient use of other ration ingredients, lighter, less vigorous lambs at birth, and poor milking ability.

The easiest and cheapest way to raise the progein level of corn silage to meet the ewe's requirements is to add urea. Urea, a readily available chemical compound, is not a protein, and contains no protein, but the bacteria in the stomachs of ruminant animals have the ability to convert it into protein.

Throughout pregnancy the ewe should consume .36 lb. of protein daily. The amount varies from .30 early in pregnancy to .40 lb. toward the end of gestation. Without urea, corn silage contains only about 2.3% protein. Thus, there is about 46 lbs. of protein in a ton of silage. Adding 10 lbs.of urea per ton of silage adds the equivalent of 26 lbs. of protein to the mixture, making a total of 72 lbs. or 3.6% protein.

It still is necessary to provide the ewe with a small amount of vegetable protein supplement, because of other needed nutritional factors in the natural product. This is especially true during late pregnancy and lactation when the ewe's protein requirements are greatest. The added supplement may be soybean meal or linseed meal fed along with the urea-supplemented corn silage.