

# UNIVERSITY OF KENTUCKY

## COLLEGE OF AGRICULTURE

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### CIRCULAR No. 64.

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## Hints to the Beginner in Sheep Raising

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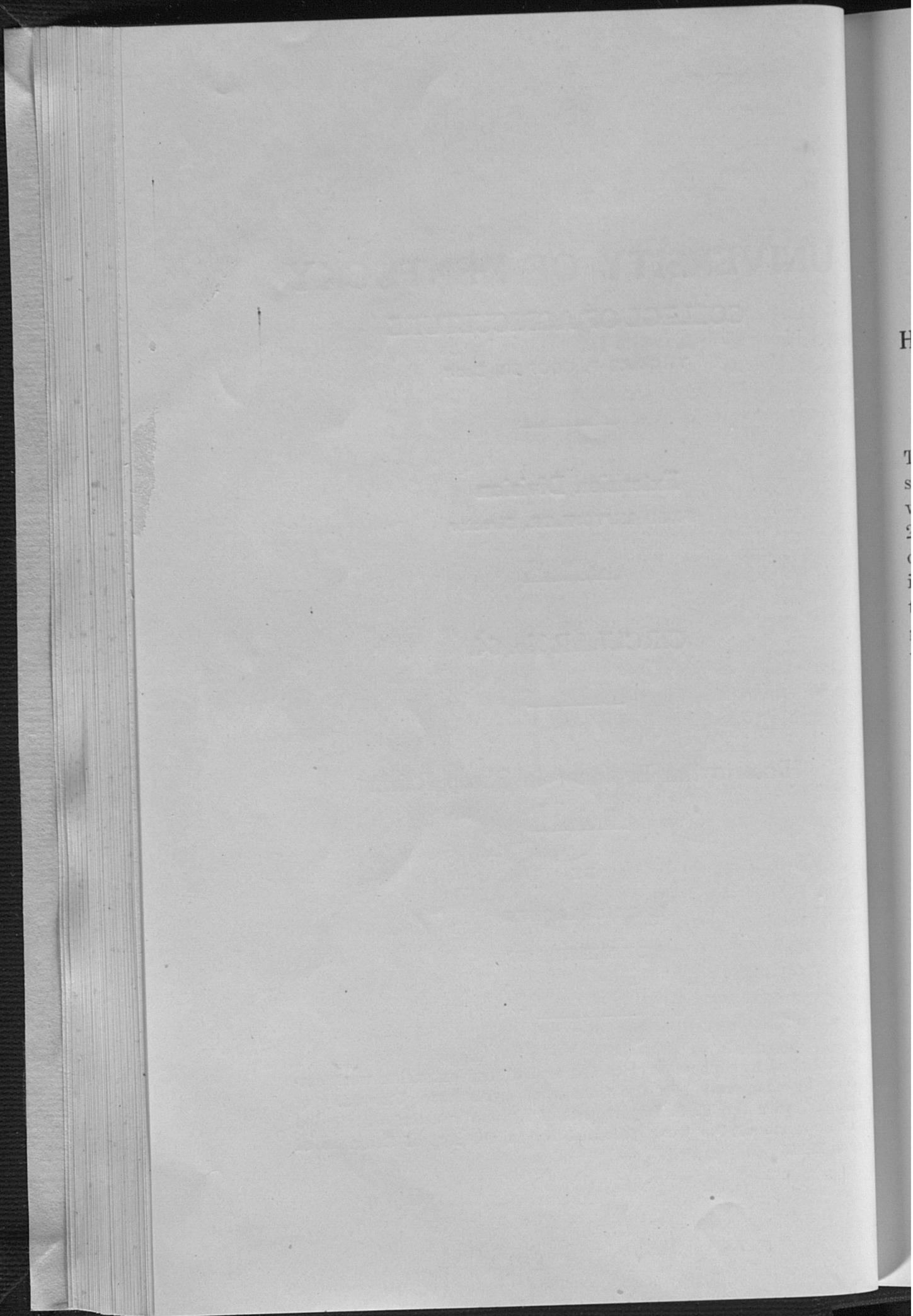
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### HINTS TO THE BEGINNER IN SHEEP RAISING

BY L. J. HORLACHER

Our rapidly increasing army is demanding more wool. The 1917 wool clip has been estimated at 289,000,000 lbs., the smallest clip since 1890. The average fleece weight for 1917 was 7 lbs. It has been estimated that the wool from about 20 sheep is required to equip a soldier. Hence the domestic clip is sufficient to equip an army of only two million, even if it were all suitable for military use. The yearly importations are only slightly greater than the domestic clip, which gives enough wool for 4,000,000 soldiers and leaves the civilian without any.

It is not only a patriotic duty to raise sheep, but it is also very profitable. Sheep require a great deal of care and attention, but if they are handled right they will return a good profit, both in mutton and wool. Most Kentucky farms are admirably adapted to the raising of sheep.

#### Size of Flock

The flock should not be too large. It is a great mistake to have more ewes than can be handled properly. The average farm of 150 to 200 acres needs from 25 to 40 ewes, and where general farming is practised, this number is sufficient.

#### Selection of Ewes

For the beginner, the old ewe, if she has a full mouth of good teeth, is generally much more profitable than the younger one. The old ewe is a better mother to the lamb than is the young one. On an average, old ewes of this kind and two-year-old ewes will raise from 25 to 50 per cent more lambs than will yearling ewes.

#### When To Have Lambs Dropt

The experience of the southern and western end of Kentucky is that January and February lambs are the most profitable. To have the lambs dropt then, the ewes must be mated about the first of August, the period of gestation being approximately 145 days. Grade ewes should be mated to a pure-bred mutton ram—Southdown, Hampshire, Shropshire, Oxford—using one ram for 25 to 35 ewes. In the eastern and northern parts of the State, March is the best time for lambing.

The ewes should be in good, thrifty condition and should be gaining when bred. During the breeding season they should be kept on a fresh, rich pasture. This process of getting ewes into good breeding condition is known as "flushing." It insures a short lambing season and a good percentage of lambs.

#### Winter Care

Some shelter is necessary for sheep in Kentucky, but close, badly ventilated barns are very detrimental, especially for ewes in lamb. The first requisite is to have good yard accommodation and plenty of room to exercise. The fleece affords sufficient warmth when it is dry, and for this reason the main need for a shed or sheep barn is protection from storms. Such a building should have plenty of ventilation, without drafts. If the quarters are airy and comfortable, the sheep will resort to them when necessary. On most dry nights they will prefer to be out-of-doors but should have access to shelter when they desire it. It is usually best to have the feed racks inside, altho some roughage should always be fed out-of-doors. This makes it necessary for the ewes to get outside and exercise, and is particularly valuable for that reason.

During lambing time the ewes should be housed at night and watched carefully during the day so as to save the lambs. A good warm place in which to have the lambs dropt is absolutely essential. For this purpose a room that is entirely enclosed should be used. This prevents the winter storms from sweeping in and freezing the young lambs. If it is thought

necessary, one side can be enclosed by a large hanging or swinging door, which can be either partially or entirely opened in favorable weather. During the first few days the lambs are tender and are easily hurt by cold, and during that time no efforts should be spared to give them all protection possible.

#### Exercise

Exercise during the winter months is very important. Ewes that are kept closely housed all winter will come thru in a run-down condition and will produce weak lambs. Various methods may be used to force the sheep to take exercise. The hay or other roughage which is fed may be scattered over a considerable area so that they will be compelled to move about a great deal in getting it, or the hay may be fed at a convenient place some distance from the barn and the sheep driven to it each day. If it is necessary to feed everything inside, then the sheep should be driven out some little distance from the barn daily, and back again.

#### Feed During Winter

Rye sown in September will be ready to be pastured during the winter and spring months. If the fall grass is wet and washy, it is good economy to start with some dry feed before the ewes are taken from pasture. Well-cured hay is best for this purpose.

Sheep that enter the winter in good health and flesh should be carried nearly to lambing time without grain feeding. This necessitates an abundant supply of good roughages, such as clover or alfalfa hay. Corn fodder can be used, but it should be well cured. Silage is an excellent succulent feed to be given with these roughages, but care should be taken that no spoiled silage is fed. Spoiled silage is likely to cause losses and a great deal of trouble. When silage is fed an account must be taken of the grain in the silage because the ewes are likely to become over-fat if the rest of the ration is of a fattening nature. Feeding too much silage also causes a weak lamb. Constipation is one of the

most common ailments in sheep when they are first removed from pasture or when the grass is covered with snow. The grass has kept the digestive tract in good order, but in the usual method of feeding there is nothing to take the place of grass as a laxative. Good silage is excellent for this purpose. It should be fed at the rate of 1 to 2 lbs. per head, daily. If silage cannot be fed at such a time, give a small allowance of linseed oil meal— $\frac{1}{8}$  lb. per head, with  $\frac{3}{4}$  lb. of grain. Linseed oil meal is laxative in its effect.

Oats are a staple feed for sheep. Oats and bran supply the elements demanded by the fetus near lambing time. They also favor a good milk flow. Barley is a feed used a great deal in Kentucky, and can be fed very successfully. It is a carbohydrate feed and should be supplemented with either a protein concentrate or roughage. Like oats and bran, barley stimulates the flow of milk. Linseed oil meal and cottonseed cake are valuable as part of the ration, altho they should be fed in very small amounts, not more than  $\frac{1}{8}$  to  $\frac{1}{4}$  lb. per head, daily. Whatever grain or grain mixture is fed, it is usually not necessary to feed more than 1 to  $1\frac{1}{2}$  lbs. daily to each mature ewe. If the ewes are given one-half of an ear of corn a day and clover or alfalfa hay, they will do well. It is always well to feed succulent material, such as silage or roots, to prevent constipation.

#### Care at Lambing Time

The lambs must be given very close attention. If a lamb gets chilled it should be taken to the fire and put into warm water, after which it should be rubbed dry and placed by the fire. Many a lamb which was thought dead from cold has been revived by this method. If the lamb is not extremely weak, it may be necessary to give it only a little of its dam's milk with a teaspoon. In extreme cases, about a teaspoon of whisky in milk will be a good stimulant. Many have tried to revive these lambs by putting them near the fire, but they could not save them that way. However, the method of putting them into warm water and afterwards keeping them for

some little time near the fire is usually successful. At lambing time one should go to the barn and examine the sheep just before going to bed, and again the first thing in the morning. While the loss of one or two lambs may appear rather insignificant at the time, yet a little later this lamb would return a good profit. With lambs selling higher than ever before, every one possible must be saved. Thirty minutes' time will save a lamb worth \$15.00.

#### Feeding Lambs

When the lambs are three weeks old they usually begin to eat. A place should be provided with a creep so that they can get feed by themselves. They should have some choice clover or alfalfa hay. A lamb ten days old will begin to pick at alfalfa. The trough should be provided with a cover, otherwise the lamb will crawl into it and thus waste a great deal of feed. In this trough should be placed a grain mixture of bran 5 parts, coarse ground corn 5 parts, linseed oil meal 1 part. At first the lambs will eat only a small quantity of grain. The best guide as to the quantity of feed is the judgment of the feeder. When the lambs have reached the age of one month they will eat and use to advantage  $\frac{1}{4}$  pound per head daily. After the lambs are weaned, oats is an excellent feed.

Pasture is necessary. The rye which was seeded in the preceding fall can be used until it is exhausted, after which a pasture of crimson clover or red clover is excellent. Red clover, when in bloom, is an ideal sheep pasture. When red clover pasture is available, not more than half a pound of grain per head daily is necessary, and very good results can be obtained without feeding any. Alfalfa, in the spring of the year, is a dangerous pasture, due to the fact that it causes bloat.

Lambs for the market should be castrated and docked. Castration is best performed when the lamb is one or two weeks old. Docking is best done as soon as the lambs have recovered from castration, or, in the case of ewe lambs, when they are about one week old. The tail is cut off one inch or

less from the body, with a sharp knife or the docking iron. If the lambs are young when castrated and docked, the loss of blood will be very small and scarcely any setback will be noted.

Lambs coming in January or February ought to weigh 75 to 85 pounds by the middle or the last of June, and ought to be at their best. Lambs coming in March are ready for market about the middle of July. If they are marketed by the middle of July, the lambs will escape the ravages of the stomach worm.

#### Changes of Pasture

“Instead of giving the flock the run of a very large pasture, better results can be obtained by limiting them to a small acreage at different times. They like a change, and by arranging the pasture into fields of fair size the pasturage may be better maintained.” (Craig: “Sheep Farming.”) In a large pasture the sheep form the habit of grazing in a certain place, and they will eat the grass at such a place very close, while neglecting the rest of the pasture. Where permanent pasture is the sole reliance, there is danger, in all the central and eastern states, from the stomach worm. The eggs are left on the ground by the infected sheep and are taken in by the lambs when grazing. The infection is seldom troublesome to ewes. Some enclosures which have been continuously pastured have been known to remain infected for a period of seven months after the sheep have been removed. Infection in lambs which are kept for breeding can be avoided by allowing them to graze only on ground that has been cultivated since being passed over by infected animals.

#### Remedies for Stomach Worms

Gasoline treatment: The night before treatment the sheep should be kept off feed and water. The dose is one tablespoonful of gasoline with two tablespoonfuls of linseed oil in a cup of sweet milk. Give as a drench by means of a long-necked bottle, taking care not to strangle the sheep.

Dr. Craig and Dr. Law (Craig: "Common Diseases of Farm Animals") advocate the following treatment:

Arsenous acid 1 dram, sulfate of iron 5 drams, powdered areca nut 2 ounces, common salt 4 ounces. This is sufficient for one dose for thirty sheep. It may be given with the salt or in ground feed. If the flock apparently is healthy, four doses, given at intervals of three days, are sufficient. If symptoms of stomach worms are very evident, the animals should be dosed daily until they have received from 5 to 10 doses, depending on the condition of the animal.

A remedy advocated by the U. S. Department of Agriculture (Circular No. 102, Bureau of Animal Industry) is copper sulfate, commonly known as "bluestone":

Keep the sheep off of feed and water overnight and give as a drench 50 to 100 cc. of 1 per cent. copper sulfate solution. For a lamb, 50 to 75 cc., or 3 to 5 tablespoonfuls, is sufficient, while old ewes require from 75 to 100 cc., or 5 to 7 tablespoonfuls, for results. For mixing up the proper solution, dissolve  $2\frac{1}{2}$  level tablespoonfuls of pulverized "bluestone" in 1 gallon of water, which amount is sufficient to treat about 75 lambs. The following morning give each a dose of Epsom salts in a little dry feed, the amounts being 1 to 2 ozs. for lambs and 2 to 4 ozs. for mature sheep.

#### Gad Fly

The grub of the gad fly is one of the bugbears of many flock owners during the summer months. The flies dart into the nostrils of the sheep and deposit their eggs. The eggs hatch and the minute grubs crawl up the nostril to the end of the passages and attach themselves to the mucous membrane. As soon as the grubs reach the stage where they begin to move about, they set up an irritation which causes the sheep to sneeze violently, rear on its hind legs, and appear in great distress. However, no permanent injury is done by the grub, except, perhaps, to hinder the maximum development of the sheep. The best means of prevention is the practise of smearing pine tar in the nostrils, the smell of

which prevents the gadfly from laying its eggs. The most convenient practis is to bore a number of two-inch holes in a plank or log, place salt in these holes, and smear pine tar around the edges. In this way the sheep will automatically smear their noses when reaching for salt.

#### Dipping

Do not allow your sheep to become affected with ticks, lice or scab, as either will so annoy a sheep as to make it unthrifty, to say nothing of the blood taken from the animal.

Ticks, lice and scab are prevented and eradicated by dipping. Soon after shearing, in May or June, is the best time for dipping, while some practis dipping also in August or September. The same dip will destroy all of these parasites. It is necessary to dip twice, at ten-day intervals, to destroy those that were in the egg stage at the time of the first dipping. Any nicotine or standard coal-tar dip is effective. Directions for use are given on the container. Lambs can be easily dipt in a barrel. At least two minutes in the dip is necessary so that it may reach all parts of the body, with the head ducked for only an instant. For the small flock, a vat 10 to 12 feet long, 4 feet deep and 16 to 18 inches wide is suitable. It should be perpendicular at one end, while the other end should have a cleated incline so that the animals can climb out. The ordinary hog-dipping tank is very good.

#### Salting

Salt should be before the sheep at all times. For this purpose a trough should be provided either in the pasture or under shelter. If salt is given only at rare intervals, sheep are likely to eat so much as to kill them. Accustom the sheep to a full feed of salt gradually by first giving a very small amount and increasing the salt a little each day. Plenty of fresh water should be available.

**Care of Wool**

Formerly, in the central and eastern states, wool was considered a side issue and no great item in the profits of sheep raising, but at the present price the wool from a good ewe is worth \$4 to \$6, if of good quality and handled right.

About the middle of May is the time to shear sheep in Kentucky. They should not be shorn when the wool is wet or even damp. If possible, the sheep should be kept away from burs. The loss in Kentucky due to burs and burry wools runs from 50c to \$1.50 per head. If the sheep should get burs, or even a small amount of burs into the wool, it will pay well to take them out before shearing. It is not a hard job, and when the burs are light two men can clip or pick them out of from ten to twenty sheep in a day. The best way is to take a pair of shears and clip them out. This should always be done before the sheep are shorn, as picking burs after shearing injures the wool. A fleece from which the burs have been removed after shearing is called a "broken fleece." In tying a fleece a hard twine should always be used, or the fleece can be tied by the wool itself, but binder or sisal twine should never be used. Pieces of the binder twine will cling to the wool and injure its quality so greatly that it cannot be used for certain cloths. The wool should be kept free from trash of all kinds.

All fleeces should be tied before being marketed. Buck, lamb, ewe, black and burry fleeces and tags should each be sacked separately. If the black fleeces are sacked with the other fleeces, black fibers will adhere to the white fibers and thus make it impossible to use those fleeces in the manufacture of white cloth.

**Dog Law**

Kentucky has one of the most effective dog laws in the United States, to take effect January 1st, 1919.

According to this law, all dogs must be licensed and tagged before January 1, 1919, and of each year following, and a complete record must be kept by each county clerk. It

is the duty of the sheriff or his deputy to seize and impound any dog running at large, if unaccompanied by its keeper or if not bearing the proper license tag. "Any person may kill any dog which he sees in the act of pursuing, worrying or wounding any live stock, or attacking human beings, whether or not the dog bears the license tag required by the provisions of this Act. There shall be no liability on such person in damages or otherwise for such killing. Any dog that enters any field unaccompanied by its owner shall constitute a private nuisance, and the owner or tenant of such field, or their agent or servant, may kill such dog while it is in the field, without liability or responsibility of any nature for such killing." Sec. 21, House Bill No. 349, Kentucky.

Any dog found off the premises of the owner between sunset and sunrise, not accompanied by the owner, is considered as an unlicensed dog and may be killed by the person finding it. Any one who sustains any loss or damage to live stock by dogs may complain in writing to the county judge or any justice of the peace, under whose direction a thoro search will be made to ascertain the extent of the damage and to locate the owner of the dog. The owner is liable to the county, and the county, in turn, must reimburse the owner of live stock who suffers loss. Payment made by the county cannot exceed \$15 for each head of grade sheep, \$10 for each grade lamb, \$25 for each registered sheep, or \$15 for each registered lamb, or lamb which is eligible to be registered. The Commissioner of Agriculture is charged with the general enforcement of this Act.

One way to afford protection against dogs is by the use of plenty of bells. A safe way, but one not commonly available, is to yard the sheep each night inside of a dog-proof fence.

During the present shortage of sheep and wool, and the necessity of each farmer raising sheep, it is absolutely necessary to get rid of the wandering cur and the sheep-killing dog. The dog eats much and returns nothing. In some districts of Kentucky in a day's journey very few sheep will be

seen, while many worthless dogs can be seen wandering around at will.

There have been a number of small flocks in Kentucky this year that have made the owner a gross profit of \$20 per head. With such prospects as that, no community can afford to allow these small flocks to be ruined by dogs. We need the sheep; we need the wool; a strict enforcement of the dog law will aid greatly in increasing production.

More detailed information in regard to the care and management of sheep can be secured by referring to Bulletin No. 215 of the Kentucky Agricultural Experiment Station.

