

84  
151-175

# UNIVERSITY OF KENTUCKY

## COLLEGE OF AGRICULTURE

### Extension Division

THOMAS P. COOPER, Dean and Director

NE 30, 1922  
894.80  
894.80  
009.50  
829.10

ry	Animal Husb.
78.51	\$4,702.89
49.99	9,413.32
28.50	\$14,121.21

---

### CIRCULAR NO. 151

---

## CARE AND MANAGEMENT OF THE EWE AND LAMB

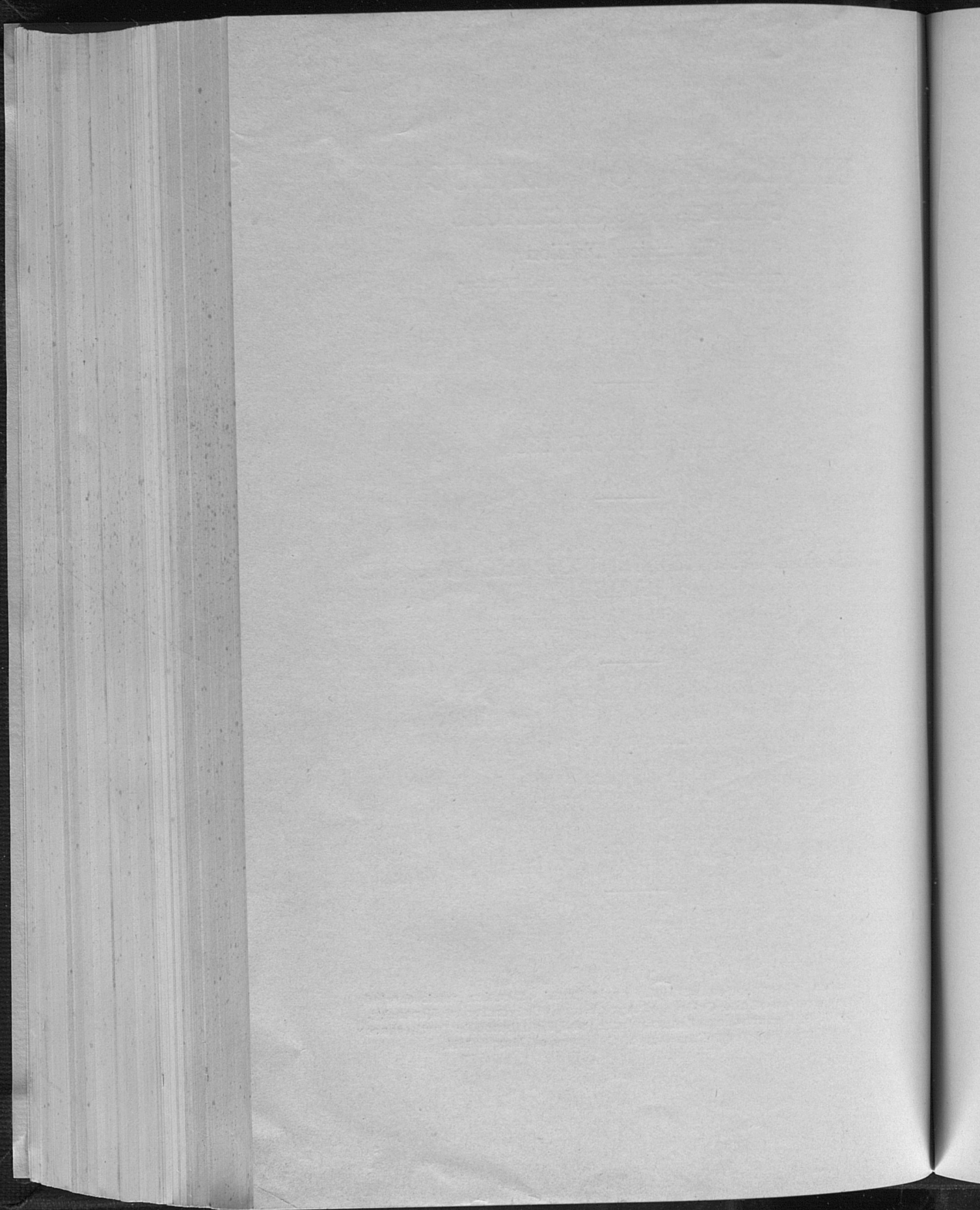
ca.	Totals
63	\$134,894.80
	124,894.80
	52,009.50
2.63	\$311,829.10

Lexington, Ky.

April, 1923.

---

Published in connection with the agricultural extension work carried on by co-operation of the College of Agriculture, University of Kentucky, with the U. S. Department of Agriculture, and distributed in furtherance of the work provided for in the Act of Congress of May 8, 1914.



## CIRCULAR NO. 151

---

### Care and Management of the Ewe and Lamb

By L. J. HORLACHER

---

Kentucky is admirably adapted to the raising of sheep and the production of spring lambs. Yet on January 1, 1923, Kentucky ranked 18th in the number of sheep farms, with 675,000 head.

Sheep require a great deal of care and attention, but if they are handled right they return a good profit, both in mutton and wool.

#### · 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 50 to 75 or 100 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.

The ewes should be: (a) Well grown and rugged; (b) feminine; (c) straight in body lines and showing capacity for feed; (d) sound in mouths and udders; (e) covered with dense, heavy fleeces; (f) from one to four years old; (g) uniform in size and breeding.

**SELECTION OF THE RAM**

The ram should be: (a) A purebred of pronounced breed type and characteristics; (b) strong, active, vigorous and massive, with bold features; (c) from one to three years old; (d) symmetrical and evenly developed; (e) covered with firm flesh and a dense fleece; (f) strong and straight in his legs. For further information see Extension Circular 96 and Experiment Station Bulletin 243.

**BREEDS**

There is no best breed. The Southdown and the Hampshire are the two most popular breeds in Kentucky at present and both are well adapted to the State. Other good mutton breeds are the Shropshire, the Cheviot, the Oxford and the Dorset Horn. For increasing wool production and establishing a flock of heavy-shearing ewes the Rambouillet is sometimes used. A purebred ram of good type and quality is much superior to a scrub and will return 38 per cent more net profit than will the scrub.

**WHEN TO HAVE LAMBS DROPT**

In Kentucky January and February lambs are the most profitable. Altho a little extra care may be required at lambing time, these early lambs grow rapidly and are ready for market in time to escape the ravages of the stomach worm during the hot summer months. To have the lambs dropt then, the ewes must be mated about the first of August, the period of gestation being approximately 148 days. For the production of market lambs grade ewes should be mated to a purebred mutton ram, using one ram for 25 to 35 ewes.

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 inclosed 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 inclosed 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 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 or barley sown in September will be ready to be pastured during the winter and spring months. If the fall grass is wet and washy it does not have much feeding value and some dry feed should be fed before the ewes are taken from pasture. Well-cured clover 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. 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 for this purpose. Silage should be fed at the rate of 1 to 2 pounds per head, daily. If silage cannot be fed at such a time, give a small allowance of linseed oil meal— $\frac{1}{8}$  pound per head, with  $\frac{3}{4}$  pound 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 carbonaceous 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  $\frac{1}{4}$  pound per head, daily. Whatever grain or grain mixture is fed, it is usually not

necessary to feed more than 1 to 1½ pounds daily to each mature ewe. If the ewes are given ½ 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.

*Timothy hay should never be fed to sheep.* It is constipating and may cause death. Also, timothy hay works into the wool and lowers its market value. However, if for some reason it should be necessary to feed timothy hay always feed with it a laxative feed such as linseed meal or bran.

VALUE OF CLOVER HAY

Clover, alfalfa or other legume hay is essential for the pregnant ewe. These hays provide plenty of calcium and phosphorus, two minerals which are absolutely essential for growth and development. At the Kentucky Experiment Station six lots of ten ewes each were fed in dry lots for a period of fifty days before lambing. The following table gives the rations fed each lot, the gains of the ewes, and the effect of each ration upon the lambs produced.

TABLE I

	Lot I. Silage, Straw, C. S. M.	Lot. II. Silage, Straw, Clover Hay.	Lot III. Silage, Straw, Oats.	Lot IV. Silage, Straw.	Lot V. Straw, Oats.	Lot VI. Straw, Oats, Bran.
Gain or loss (-) per ewe.....	lbs. 1.5	lbs. -4.6	lbs. 0	lbs. -10.	lbs. -3	lbs. 0
Average daily ration						
Silage .....	2	2	1.9	1.9	.....	.....
Wheat straw .....	1.5	.....	1.4	1.3	1.6	1.4
Clover hay .....	.....	.5	.....	.....	.....	.....
Cottonseed meal .....	.2	.....	.....	.....	.....	.....
Oats .....	.....	.....	.5	.....	.8	.6
Bran .....	.....	.....	.....	.....	.....	.6
Percentage of strong lambs.....	50	100	72.7	37.5	66.6	90
Percentage of weak lambs .....	33.3	.....	9.1	25	16.7	10
Percentage of dead lambs .....	16.6	.....	18.2	37.5	16.7	.....
Rank in lamb production .....	5th	1st	3rd	6th	4th	2nd

This table shows that clover hay, silage and straw gave the best results at lambing time, in spite of the fact that the ewes lost slightly in weight. It should not be concluded from these figures, however, that it is not necessary to feed any grain with such a ration. Experimental work in the future will be planned to determine this point.

These figures show clearly the necessity of properly balancing the ration for the pregnant ewe and of feeding plenty of mineral matter, such as is found in legume hay. The proper development of the unborn lamb is dependent upon the presence of calcium and phosphorus in the ration. Next to legume hay oats and bran are the best feeds to supply these elements. Bran contains a very high percentage of phosphorus, but is low in calcium. Wheat straw and silage alone are not satisfactory feeds. In this experiment the addition of cottonseed meal caused the ewes to gain in weight, but it caused a few of the ewes to go off feed during the first part of the experiment and resulted in a poor lamb crop. The real value of cottonseed meal should be determined by additional experiments.

#### 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 water as warm as the elbow can bear, 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 only to give it a little of its dam's milk with a teaspoon. Many have tried to revive such 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 at high prices every one possible must be saved. Thirty minutes' time will save a lamb worth \$12.00.

#### LAMBING PENS

The lambing pen is a small inclosure about four feet square into which the ewe can be put when she is due to lamb. This pen can be made out of light material and should be at least thirty inches high, with the slats close enough together to prevent the young lamb from crawling thru and straying from its mother. The ewe in the lambing pen is much less apt to be disturbed and there is less chance that the lamb will be trampled. A row of lambing pens can be constructed along the side of the barn at very little expense.

#### THE DISOWNED LAMB

Frequently a ewe will refuse to own her lamb. Methods that will cause one ewe to own her lamb may not work with another. During the first few days the ewe identifies her lamb by smell. Smearing some of her milk over the body of the lamb and on her nose may get results. Rubbing the lamb on the nose of the ewe is another method.

The lambing pen is a great help in a case of this kind. Sometimes if the ewe and lamb are kept together in this pen for several days she will own it. Hold the ewe while the lamb nurses and as it becomes stronger and more eager for food it may be able to break down the stubbornness of the ewe. Sometimes it may be necessary to tie her, or to place her in such a narrow pen that she cannot turn around, or to place a support under her to keep her from lying down.

#### THE ORPHAN LAMB

Sometimes there is an orphan lamb. If a ewe loses her lamb it should be skinned and the pelt placed on the orphan for a few days. This usually is sufficient to cause the ewe to adopt the lamb.

Lambs for which there are no ewes must be fed by hand on cow's milk. Cow's milk need not be diluted with water for lambs. If possible, the lamb should have ewe's milk for the first week. This may be provided by permitting the lamb to nurse a ewe whose lamb is not old enough to take all the milk. One tablespoonful of milk is sufficient for the lamb the first day of its life. Feed every two hours, and do not give a large amount at one time until the lamb is three weeks old. By that time three feedings daily are sufficient. The lamb may be fed from a bottle, or may be taught to drink out of a pan. Allow the lamb to suck on one finger, and at the same time place its mouth in a pan of milk. In this way the lamb will soon learn to drink.

#### COMMON AILMENTS AND DISEASES OF LAMBS

*Pinning.* This is the collection of feces at the anus, plugging it. Scrape away the collection and wash with warm water.

*Indigestion and constipation.* Give a teaspoonful to a tablespoonful of castor oil.

*Scours.* This is usually due to mistakes in feeding the ewes. Scours does not occur if the ewes are given good feed and the feed is not changed too abruptly. A half to a tablespoonful of milk of magnesia will help.

*Sore eyes.* Purchase half an ounce of ten per cent Argrol. With a medicine dropper place one drop in each eye twice a day. This should be continued for three or four days.

*Sore mouths.* Rub off the scabs and open the sores. A thoro application of sheep dip (half strength) will soon bring about a cure.

#### 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 coarse ground corn 2 parts, crushed oats 2 parts, linseed oil meal 1 part, and wheat bran 1 part. At first the lambs 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 may 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 grain. Alfalfa, in the spring of the year, is a dangerous pasture because 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 may be done at the same time. The tail is cut off one inch and a half from the body, with a sharp knife, a chisel or the docking pincers. If the lambs are young when castrated and docked, the loss of blood will be very small and scarcely any setback will be noted. For further information refer to Extension Circular 85.

Lambs coming in January or February ought to weigh 75 to 85 pounds by the middle or 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. If possible, they should be allowed to nurse until they are ready for market.

**CHANGES IN 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. Sheep like a change, and by arranging the pasture into fields of fair size the grass may be better maintained. 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. They hatch and the larvae are taken in by the lambs when grazing. The infection is seldom troublesome to ewes. Some inclosures which have been pastured continuously have been known to remain infected for 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. For information concerning the treatment for stomach worms refer to Extension Circular 152.

**GRUB IN THE HEAD**

The grub of the gadfly 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 passage 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. Loss of weight and lack of thrift always occur and in severe cases the sheep may die. The best means of prevention is smearing pine tar in the nostrils, the smell of which prevents the gadfly from laying its eggs. The most convenient method is to construct a long, narrow trough not over four inches wide and three inches deep, place salt in the trough, and smear pine tar on

the inside of the trough. In this way the sheep will automatically smear their noses when reaching for salt. For small flocks, a dark shed should be provided for animals to run into during the heat of the day. Strips of gunny sacks sprinkled with any coal tar dip may be used as curtains. Treatment after infection is practically hopeless.

#### 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 practise dipping also in August or September. 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 nicotin or standard coal-tar dip is effective in controlling ticks and lice. For scab it is best to use a nicotin dip. Directions for use are given on the container. Lambs can be easily dipped 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 only for an instant. For the average flock, a vat 20 feet long, 5 feet deep, 2 feet wide at the top and 1 foot wide at the bottom 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. Plans for constructing a vat can be obtained by writing to the Farm Engineering Section, College of Agriculture, Lexington, Ky.

#### FOOT TROUBLE

This is common during wet weather. With a knife pare away the excess hoof and clean out all dirt. If there is any soreness or pus use a twelve per cent solution of copper sulfate. Dissolve one pound of bluestone in a gallon of water and treat

by holding the foot in the solution two or three minutes. Repeat every other day until cured. For large flocks sprinkling lime on the floor and driving the sheep thru it proves very effective.

#### 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

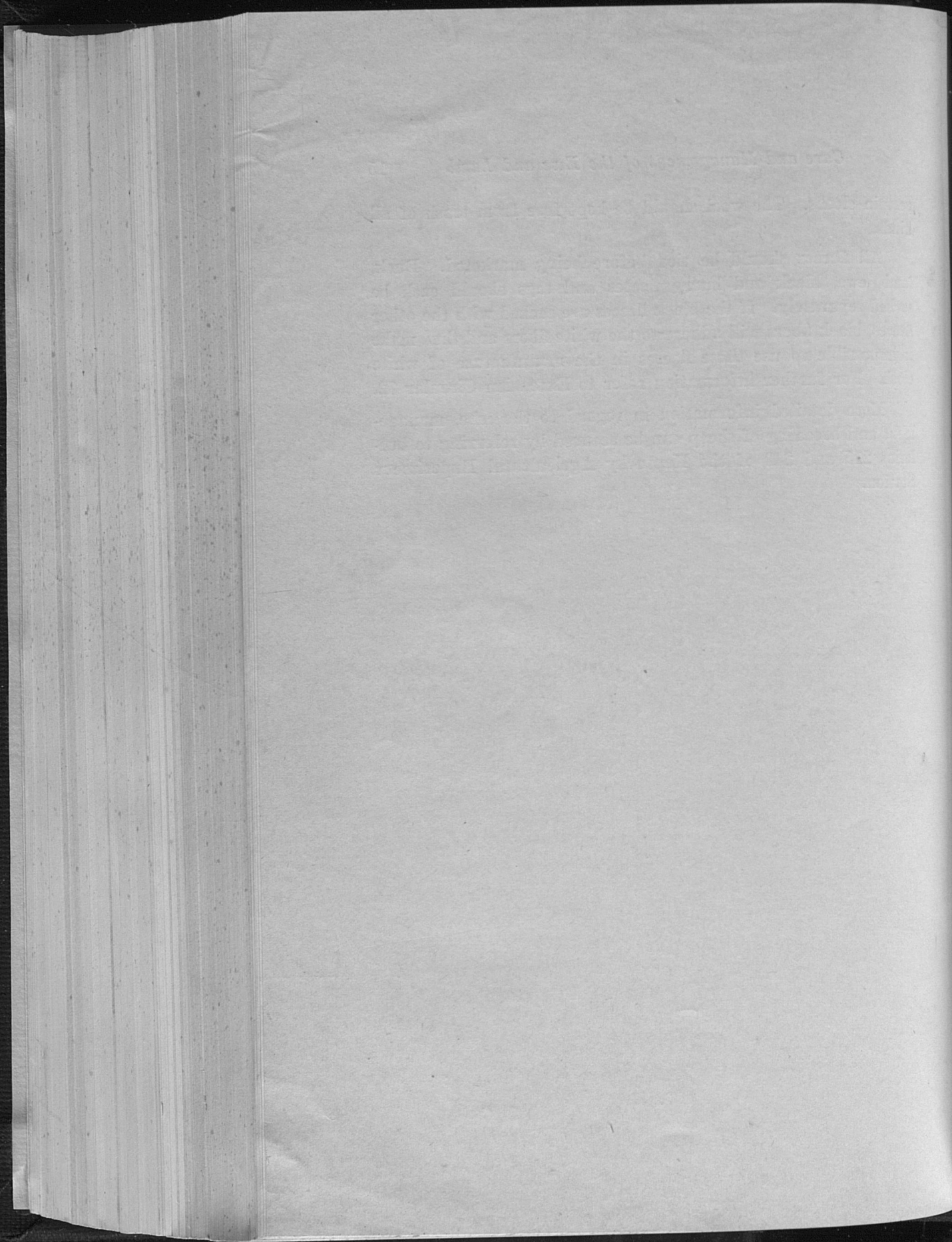
Formerly, in the central and eastern states, wool was considered a side issue and no great item in the profits of sheep raising, but at the present price the wool from a good ewe is worth \$2 to \$3, if of good quality and handled right.

From the middle of April to 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 50 cents 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 clip them out with a pair of shears. 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. For further information refer to Extension Circular 72.

More detailed information in regard to the care, management and breeding of sheep can be secured by referring to bulletins 215 and 243 of the Kentucky Agricultural Experiment Station.



of  
cul  
Me