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## EWES FOR COMMERCIAL FLOCKS



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Fig. 2. A flock of Western ewes and their lambs in a Kentucky pasture. Note quality of the lambs in foreground.

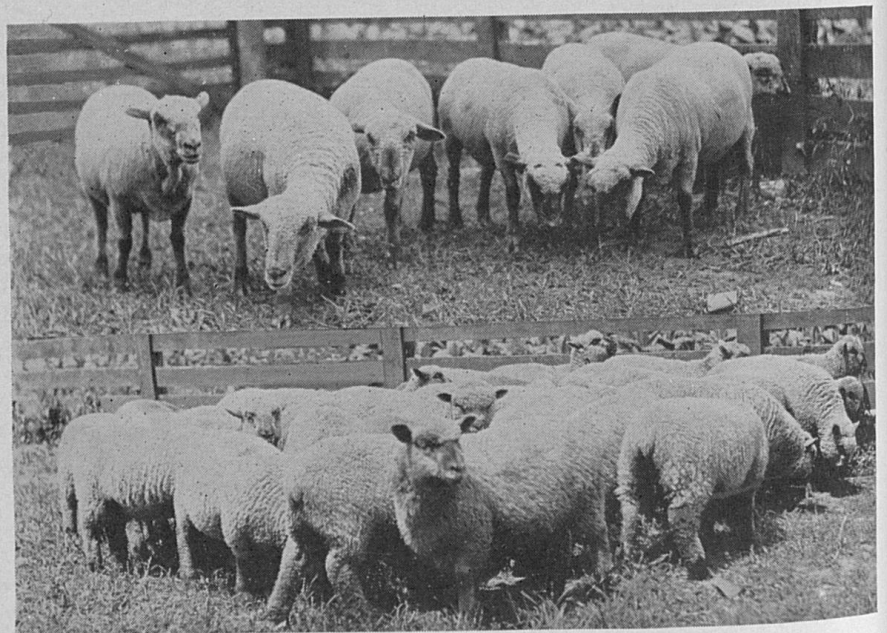


Fig. 3. The Western ewes at the top are from the flock which produced the lambs at bottom.

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## CIRCULAR NO. 286

### Ewes for Commercial Flocks

By **RICHARD C. MILLER**

The ideal ewe flock for commercial lamb production in Kentucky should be composed of ewes that, when bred to good, purebred rams, will produce lambs that can be made ready in 100 to 120 days, for an early market. These ewes should also yield at least 8 pounds of good, marketable wool per head. Such ewes should possess those qualities of hardiness and fleeciness that adapt them to Kentucky conditions. They should have early-breeding tendencies, good milking qualities and enuf size, constitution and frame to do well the job for which they are intended. They should be sound in mouth and udder, thrifty, and free from foot trouble or other disease or unsoundness. There are two ways to get the kind of ewes that will prove most profitable under Kentucky conditions; one is to save early ewe lambs sired by rams of the larger, heavier-fleeced breeds and, preferably, out of close, heavy-fleeced ewes; the other, and usually the more practical, is to buy western range ewes of a desirable type.

#### **RANGE EWES**

These are ewes produced under western range conditions, often referred to as "westerns." They are of several different types, but the principal foundation blood of all western range sheep is Rambouillet. Merino blood is used to some extent, principally in a few counties of the eastern range section of Texas. The breeding of range ewes varies from purebred Rambouillet to as high as seven-eighths mutton breeding. Outside of the few Texas counties and the Navajo Indian Reservation in Arizona, New Mexico and Utah, the sheep of Texas and the southwest are practically purebred Rambouillet. Range sheep strong in mutton blood are found mostly in the northern range states.

*Rambouillet Type.* Many range ewes of the Rambouillet type have been used by farmers in Kentucky and other native-lamb states where they have usually given a good account of themselves. They are very hardy, are comparatively free from parasites when brought direct from the range, the early-breeding instinct is strong-

ly pronounced and the milking qualities are fair; but these ewes do not produce so high a percentage of lambs as do ewes strong in mutton blood. About one lamb a ewe for the first year is all that can be expected; later, it is possible to average 110 to 125 lambs to 100 ewes and, by careful culling, to get a flock that produces almost as many lambs, on the average, as some flocks of native ewes. These ewes should shear from 8 to 10 pounds of wool of half-blood grade or better. The range Rambouillet ewes of the large, comparatively smooth-bodied type, when crossed on the right type of purebred rams of the mutton breeds, produce satisfactory market lambs. This type of ewe is preferred by many farmers who make replacements by keeping ewe lambs.

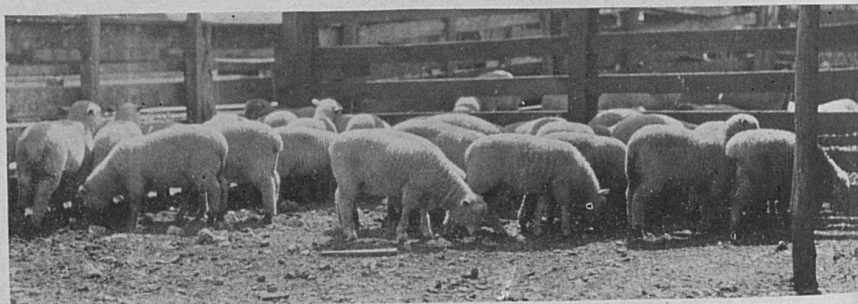


Fig. 4. Lambs by Southdown rams, out of Rambouillet range ewes.

It is important that the feet of these sheep be trimmed two or three times during the year. While on the range, the feet are kept worn down. Under farm conditions, the hoof has a tendency to grow and accumulate filth which sometimes results in foot trouble.

*Medium-wool Rambouillet Type.* Ewes from the northern range states are popular with many Kentucky sheepmen. The type that comes to this state in largest numbers is a dark brown or motley-faced ewe, resulting from crossing mutton rams, largely Hampshires, on the Rambouillet range ewes. Suffolk rams are used to some extent and these ewes run from one-half to as high as seven-eighths mutton blood. Ewes of this type usually weigh around 100 pounds as yearlings, in July or August, but develop into a rather large sheep. They are more prolific and are somewhat better milkers than the ewes that have a larger amount of Rambouillet blood. They have enough Rambouillet, however, to make them fairly early breeders. These sheep do not shear so much wool and are not so hardy or so long lived as ewes of the Rambouillet

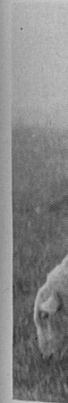


Fig. 5. Similar to the



Fig. 6. Similar to the





Fig. 5. Rambouillet range ewes.

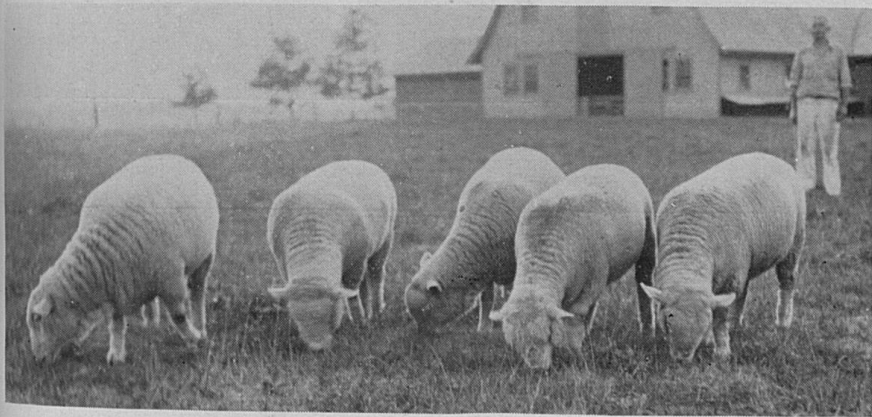


Fig. 6. First cross ewes by a Ryeland ram, and out of Rambouillet range ewes similar to those shown in Fig. 5.

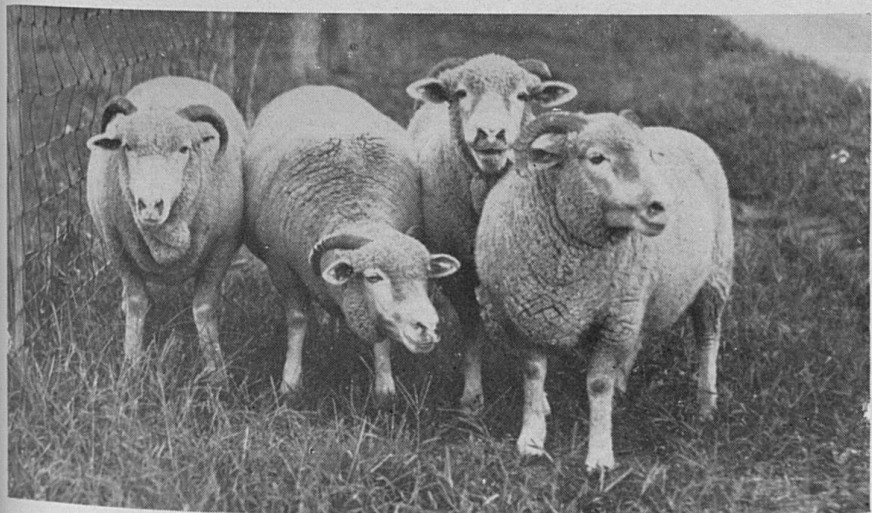


Fig. 7. First cross ewes by a Dorset ram, and out of Rambouillet range ewes similar to those shown in Fig. 5.

type but are very good in these respects; much better, in fact, than most types of natives.

*Long-wool Rambouillet Type.* The second general type of northern range ewe is that having long-wool mutton blood instead of Hampshire or Suffolk. These ewes are the result of crossing Lincoln or Cotswold and, in some cases, Romney rams on the



Fig. 8. Four-year-old Western ewes similar in breeding to the yearlings shown in Fig. 11.

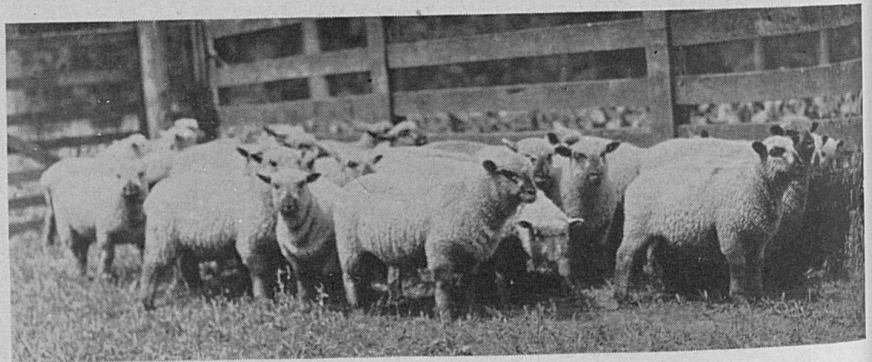


Fig. 9. Lambs out of Western ewes similar to those shown in Fig. 8 and by South-down rams.

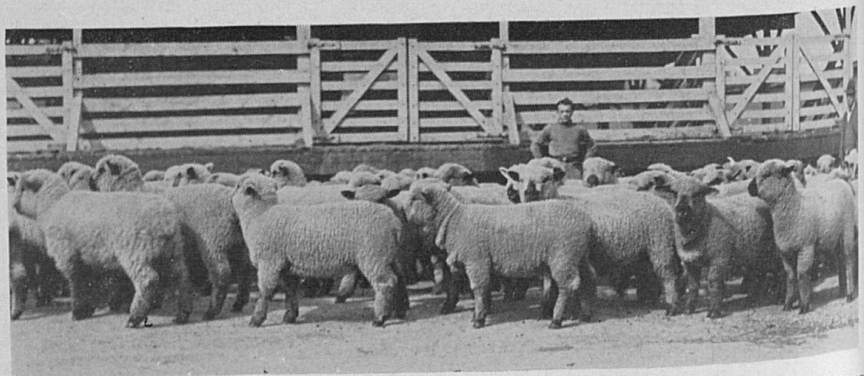


Fig. 10. Lambs out of Western ewes similar to those shown in Fig. 8 and by Hampshire rams.



Rambouillet range ewe. Crossbred rams of the Corriedale, Columbia, Panama and Romeldale types are also used. These ewes are more open fleeced than those of the dark-faced type and usually a little larger, but not so compactly built, tho there are exceptions.



Fig. 11. Medium-wool Rambouillet type yearlings high in Hampshire blood. Part of a flock of 3000 purchased by a Kentucky farmer in Montana.

When bred to good purebred rams of the small, more compact type, however, they produce very desirable market lambs. The wool yield of these white-faced ewes averages considerably heavier than that of ewes of the medium-wool Rambouillet type.



Fig. 12. Yearling, long-wool Rambouillet type ewes. Part of a flock of 1700 purchased by a Kentucky farmer in Washington.

### HARDINESS

Range ewes are much hardier than most types of "native" sheep. When brought direct from the range they are usually comparatively free from stomach worms and other internal parasites, they last from one to three years longer than our native ewes and there are fewer losses among them. These western ewes usually stand adverse conditions better than "native" sheep, breed earlier than most "natives," cause less trouble in lambing and yield three to four pounds more wool than the average Kentucky clip. When such ewes can be had for little more than the price of choice 80-pound lambs, it seems more profitable, in the end, to sell all the ewe lambs and buy westerns. While some farmers may not like them at first because they do not present the well-rounded, deep-bodied appearance of some "natives," most of those who have tried range ewes prefer them to any other kind, for commercial lamb production.

### NATIVE EWES

Sheep produced in this country outside of the range area are known as "natives." The intermingling of breeds and types in many sections has resulted in numerous types of "native" ewes which make classification impractical except in a general way.

*Dark-Faced Natives.* Dark-faced native ewes with Shropshire, Hampshire and Oxford blood predominating are more numerous than any other kind. Such natives, when thrifty and free from parasites, make desirable breeding ewes for market lamb production in Kentucky. Most of these ewes are more prolific than the range ewes and are good milkers tho they are not such early breeders, lack the hardiness of range ewes, wear out from one to three years earlier and there will be heavier death losses among them. There is much difference in the shearing qualities of these ewes. They do not, as a rule, yield so much wool as the western range ewes or cross-bred natives.

*Crossbred Natives.* Certain types of native crossbred ewes are sometimes available in small numbers. The crossbred ewe in most demand in the native-lamb states is the result of mating rams of the mutton breeds on fine-wool ewes of Delaine or Rambouillet blood. The Dorset cross is especially popular. These crossbred ewes yield heavier fleeces than ewes of the dark-faced native type,



breed earlier, are good milkers, and usually are hardier and longer lived.

Ewes resulting from crossing mutton rams on Dorset fine-wool crossbred ewes are popular with many farmers. There are many variations of these ewes, depending on the breed of the ram. These ewes, as a rule, are not quite so hardy as the first cross and may not breed so early, but are usually larger and often more prolific. The wool, while just as valuable per pound usually, is a little coarser and the clip is not so heavy.

The majority of these crossbred ewes are developed in sections of the country where there are large numbers of Merino or Rambouillet ewes. Sections of Ohio, Pennsylvania, West Virginia, Michigan and Indiana are the principal sources of supply. Seldom do these ewes come on Kentucky markets but some farmers make a practice of buying such ewes, particularly Dorset crossbreds, in Ohio and occasionally from other states. When thrifty and well-developed, these ewes often command a little higher price than western range ewes.

*Native Kentucky Ewes.* These are mainly of two types and are largely the result of saving late ewe lambs. The ewes most generally found in the Central or Bluegrass Area are sired by grade or purebred Southdowns. They are inclined to be small in bone but of fairly good body conformation, yield a light fleece, are only fair milkers and tend to be late breeders.

In the native ewes most numerous in the western portion of the State Hampshire blood predominates. Tho usually developed from late lambs which were not good enuf to be sold to the packer during the regular marketing season, these ewes are better for lamb production than the Central Kentucky type. They are larger framed, bigger boned, heavier milkers and yield a somewhat heavier fleece. Ewes of this type are also found in the Central area.

*The Mountain Ewe.* Kentucky mountain ewes or those of similar type from Tennessee and Virginia, years ago played an important part in lamb production in Central Kentucky. Despite their small bone, ill-shaped body and light-shearing quality, these sheep were good lamb producers when bred to the right kind of purebred rams. They were good milkers, prolific and hardy, and when brought down from the hills and grazed for a few months on good bluegrass pastures, they presented a greatly improved appear-

ance. As a type, these sheep have largely disappeared. Only in the more remote sections are typical mountain ewes still found, and the number now available is too small to be of much consequence as a source of supply for stocker ewes. Variations of the mountain ewe resulting from the use of dark-faced rams can be obtained in some sections. They are prolific and heavy milkers and produce fairly good lambs when bred to the right kind of purebred rams. The wool clip, however, is light and the supply of these sheep is very limited.

*Piney Woods Ewes.* Southern ewes largely of the piney woods type are sometimes brought into Kentucky. They are small, ill-shaped, seldom shear more than three pounds of wool and are almost invariably heavily infested with parasites, especially stomach worms. While probably well suited to the conditions under which they were developed, these ewes have no place in sheep production in this state.

#### LATE EWE LAMBS BAD FOR REPLACEMENT

The practice in this State of acquiring ewe flocks by saving late and unthrifty ewe lambs has seriously affected the general quality of our lambs, as well as the average wool clip per sheep. These late lambs develop into ewes that embody most of the undesirable and few of the good characteristics wanted in a breeding ewe. Late-born lambs also tend to transmit the late-breeding character; not only do they become ewes that usually breed late thruout life, but their offspring also tend to be late breeders. Furthermore, most late lambs lack constitution, a prime essential in any breeding animal.

Even if these late, parasite-infested lambs could be developed into satisfactory breeding ewes for lamb production, the cost of carrying them for a year before they should be bred would be too great to make the practice profitable. Some farmers attempt to raise lambs from these ewes the first year. While a good percentage of them can be bred some time during the fall, the lambs will be late and the ewes will be further stunted. By keeping parasites under control, the late lambs which are not in condition for summer marketing could be retained on the farm and grown out to profitable weight and condition later at very little cost. They



could then be marketed profitably during the fall. See Kentucky Extension Circular No. 152.

While late, poorly developed, or unthrifty ewe lambs should never be saved for replacement, a high-producing flock of ewes can be acquired by retaining select ewe lambs for replacement, though this seldom is the most economical plan under Kentucky conditions. In making replacements in this way, only early-maturing ewe lambs sired by rams of the larger breeds and out of heavy-milking ewes with dense, close fleeces should be selected. These lambs should be about the same age so they will be likely to breed about the same time.

#### **PRECAUTIONS TO BE OBSERVED IN BUYING EWES**

A desirable type of young native ewe is difficult to obtain. Such ewes, when they can be had, usually command a better price than range ewes, mainly because the majority of our farmers are not sufficiently acquainted with the range ewe. In buying native ewes older than yearlings, extreme caution must be taken as most of the older native ewes that come to this state have been culled on account of unsoundness or because they have proved unprofitable as breeders.

Regardless of whether westerns or natives are selected, the ewes should be well-grown and thrifty. They should be deep-bodied, wide-chested, active and alert. The narrow-chested, upstanding ewe should be avoided whenever possible. Femininity is just as important in the ewe as is masculinity in the ram. Ewes with coarse, ram-like features in head and neck should be rejected, as such are usually poor producers, often fail to breed, and are generally poor milkers and lacking in maternal instinct. The fleece should be close and even and, where possible, of at least 2½ inches in length. Coarse, open-fleeced sheep are not suitable to our climate.

The buyer should examine each ewe individually and reject any that show unsoundnesses which would affect their usefulness as breeders. Careful attention to select only sound ewes may save much trouble later. This individual examination of yearlings is also important for detecting wethers that frequently get into shipments of range ewes. He should pay particular attention to mouth and udder. Broken-mouth ewes, "gummers" and "spreaders,"

while they may be low in price, will prove unprofitable in the end. An ewe older than yearling should be well-developed, showing that she has suckled a lamb. The size of the udder should be uniform, and it should be soft and spongy. Ewes with lumpy or caked udders should be rejected. Yearling ewes sometimes have clipped or mutilated teats, a result of carelessness in shearing, which would render them unsuitable for breeding.

Ewes with undershot or overshot jaws are occasionally found among both western and native sheep. Such should be rejected as they have difficulty in grazing, particularly when the grass is short. Ewes older than yearling, when in better condition than the average, should be looked on with suspicion. The chances are they are barren or did not suckle a lamb.

Ewes selected should be of similar type and as uniform as possible in size, conformation and color markings. When there is a diversity of type in the ewes, it is impossible to get an even, uniform crop of lambs, regardless of the kind of rams used. There is also an advantage in having the ewes all of the same age; this, however, is not always practical, especially if replacements are made by saving ewe lambs.

#### **YOUNG EWES MOST PROFITABLE**

Western ewes sent to market at five or six years of age because they are no longer useful on the range sometimes prove profitable for a number of years on farms where feed is plentiful. As a general rule, however, it is better to buy yearlings than to take chances on older ewes. The younger the ewe the longer her period of productive activity. Annually thousands of ewes that have been culled from flocks in the native-lamb states are offered for sale in Kentucky. These usually prove very disappointing as breeders notwithstanding that they often look good. Even a two-year-old ewe must be looked on with suspicion unless it is known that she raised a lamb. Such ewes are often on the market because they did not breed as yearlings.

#### **CULLING**

The farmer with a small flock of sheep should become so familiar with them that he knows each ewe and her record as a producer. If the flock is too large for him to know them individ-



ually, ear labels should be used and a careful record kept of each ewe. It is just as important to exercise care in culling as in selection. Nonbreeding ewes, tho they may look to be the best in the flock, should be culled, as should late lambers, poor milkers and unthrifty ewes. Ewes unprofitable for any reason or ewes that on account of their age are not likely to prove profitable for another year should also be culled and replaced with new sheep. In making replacements it is important to get ewes similar in type to those in the flock so there will be no break in the uniformity of the lamb crop.

#### **BREEDING EWE LAMBS**

It is not advisable to breed ewe lambs unless they are early and well-developed; even then the practice is of doubtful value. They will require special care and feed during both the gestation and nursing periods, will experience more trouble at lambing time than will older ewes and the drain of raising a lamb may weaken the constitution of the immature ewe and make her an easy prey to internal parasites and disease. Ewe lambs, when bred at all, should never be bred for late lambing. The late lamb may not be profitable and the ewe must have time to make sufficient recovery to raise a lamb the next season. As a rule, it is better to wait until the lambs are yearlings before breeding. Lambs of the slow-maturing breeds certainly should never be bred until they are 16 to 18 months old.

#### **TO ASCERTAIN THE AGE OF SHEEP BY THE TEETH**

It is a simple matter to determine fairly accurately the age of sheep by their teeth. A lamb has eight temporary front teeth; four on each side of the lower jaw. These are smaller and whiter than the permanent teeth. At about 14 months of age, the center pair are replaced by two larger permanent teeth. Two more temporary teeth, one on each side of the center pair, are replaced with permanent teeth at about two years of age; a third pair at about three, and the fourth and last pair at about four years. The teeth usually show some wear at five and begin to spread or break by the time the ewe is seven. Sheep of the slower-maturing breeds, like the Merino and Rambouillet, hold their teeth longer than the early-maturing kinds.

### WHEN TO PURCHASE EWES

Ewes for Kentucky flocks are generally purchased in late summer, tho many are bought after September 1 and rams are turned with them immediately. Better results are obtained if the ewes are on the farm at least a month before breeding begins, so as to overcome the ill effects of shipment or holding in stockyards, and to condition them for breeding. See Kentucky Extension Circular, "The Breeding Season."

### HOW EWES MAY BE OBTAINED

Many Kentucky sheepmen buy their breeding ewes thru local dealers. Some large operators buy direct from the range or thru agents for range outfits; others thru commission men on the central markets, some thru auction markets and a few thru special sheep auction sales. Regardless of the agencies thru which the sheep are purchased, it is important that the buyer get the kind of ewes that will prove most profitable under his system of farming. Too often farmers in the market for sheep look for something cheap without considering that the cheap ewe is seldom the most profitable in the end. The man who buys sheep that have been carried from stock yard to stock yard during the sale season or that are kept under crowded conditions on farms where they become heavily infested with parasites, does so at the risk of getting a diseased or parasite-infested flock. Likewise he should guard against the purchase of sheep from an unthrifty flock regardless of how good some individuals in the flock may look.

The farmer who is inexperienced in the selection of breeding ewes would do well to get some capable man to assist him in selections. It may save him trouble later.

### SANITATION

The health of the flock is a matter of great importance. It behooves farmers who buy sheep to use every possible precaution to avoid introducing disease into their flocks thru purchased sheep. A Federal regulation requires that all sheep sold thru public stockyards, except for slaughter, shall be dipped, as a preventive measure for the control of scab, but makes no provision as to foot rot. Sheep that have been in a stockyard or any place where there was a possibility of picking up foot rot, should be given a preventive



treatment at the time they leave the yards or when being unloaded at the farm. Standing sheep for several minutes in a 30 percent bluestone solution ( $2\frac{1}{2}$  pounds of bluestone per gallon of water) is often recommended. The remedy preferred by some farmers is a salve made of 1 pound of pulverized bluestone, 1 quart of pine tar, 1 pint of linseed oil, and  $\frac{1}{2}$  pound of verdigris. This is applied with a stiff brush after the feet have been trimmed and thoroughly cleaned. This mixture is effective for treating foot rot and should prove very beneficial as a preventive treatment.

Sheep infested with ticks or lice should be dipped before being placed with other sheep. Whether or not one or two dippings will be required depends on the kind of dip used. The directions on the container should be followed carefully.

Most sheep from the native-lamb states are affected with stomach worms to some extent. As a precautionary measure it would be well to treat all purchased sheep, except possibly those brought directly from the ranges of the West, with a reliable vermifuge before they are turned on pasture. See Kentucky Extension Circular No. 152 for directions.

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