No. 572

OKLAHOMA COOPERATIVE EXTENSION SERVICE
4-H Youth Development

Feeding and Managing Market Lambs and Replacement Ewe Lambs

Oklahoma Cooperative Extension Service • Division of Agricultural Sciences and Natural Resources

Under most management situations, market lambs and replacement ewe lambs can be fed and handled together until the lambs reach 100 to 110 pounds in weight. In this guide, when we refer to lambs, the instructions will apply to both market lambs and replacement ewe lambs, unless otherwise designated. The finishing rations and recommendations for market lambs apply to lambs which will be slaughtered at 5 to 6 months of age and will have an average daily gain of approximately 0.5 to 0.8 pounds during the finishing period. If you plan to show yearling wethers, which will have less average daily gain, then you will have to make adjustments in the rations and the amounts fed.

It is highly recommended that lambs be creep fed starting at an early age. A creep is a feeding area constructed with openings that permit only the lambs to enter. It is recommended that lambs have feed available to them as early as 10 days of age. The lambs will not consume larger amounts of feed until they are 20 to 30 days old, but the sooner you can get them eating, the better off they will be. There are several good reasons for using creep feeding in your management program. An ewe feeding twins or triplets will not provide the milk supply needed for maximum growth. Therefore, a creep feeding area is provided to give the lambs that extra energy that will keep them growing. Also, when lambs are young, they make more efficient gains and will convert pounds of grain to pounds of meat at a better rate than when they are older. Creep feeding takes advantage of this situation. Furthermore, you never know when an ewe will get sick and stop milking or just die. Getting the lambs to eat a creep ration will make them less dependent on the ewe for survival. If the ewe has health problems, the lamb can keep on growing.

Creep rations are not difficult to make. As long as the lambs are nursing the ewe, protein will be provided through the milk. Therefore, additional energy is the element provided in the creep ration. This can be obtained by feeding grains. Creep rations are often all grain rations. Corn, milo, oats, barley, and wheat are examples of grains that can be used. The ewe will train the lambs to eat. Therefore, it would be wise to put the same grain that is fed to the ewe into the lambs' creep. It should be noted that young lambs like the cracked or crimped grains, while older sheep like coarse or whole grains best. With this in mind, a creep ration will be more palatable to the lambs if the grain is cracked or crimped.

Figure 1. Good management, nutrition, and health programs are important in the production of market lambs and replacement ewe lambs.

Prior to weaning, the ration should be changed to include protein. A weaning ration should be highly palatable, high in energy, and contain at least 16 to 18% protein. The grains in most weaning rations are crimped or cracked and molasses may be used to increase palatability. Antibiotics in the feed may be useful at this age. Weaning rations are used when a lamb reaches 30 to 40 pounds in weight.

A growing ration is still high in energy, but the protein requirement decreases. Lambs weighing 50 to 60 pounds are placed on this ration. The protein content will be about 14% to 16%.

The finishing ration is fed to lambs weighing approximately 70 pounds and up. A 12% protein ration is sufficient for finishing lambs. In all three of the above rations, high energy or high grain content will produce the fastest grains. It is common in feedlots today to see rations that are 80% concentrate and 20% roughage. When lambs are fed these high concentrate rations, they should be vaccinated with clostridium perfringens type D vaccine to prevent overeating disease or enterotoxemia. There are producers who are

Table 1. Sample Rations for Different Stages of Lamb Growth

Stage	Creep	Weaning	Growing	Finishing
Body Wt. (lbs.)	Birth-30	30-50	50-70	70-up
Crude Protein (%)	18	16	14	12
Ingredient (%)				
Corn	54.5	59.5	69.5	74.5
Alfalfa	25.0	25.0	20.0	20.0
Soybean Meal	20.0	15.0	10.0	5.0
Limestone	0.5	0.5	0.5	0.5

1. Add 15 pounds of salt per ton of feed for all rations.
2. All rations are above 70% TDN and have a calcium-phosphorus ration of approximately 2 to 1.

feeding 100% concentrate rations to get maximum gains. In this type of ration, the grain should be left in the whole form. Also, a pelleted protein supplement can be used to carry calcium (ground limestone) amounting to 1.5% (1/2 of 1%) of the total ration. Since grain is high in phosphorus, calcium will have to be added to keep the calcium-phosphorus ratio at 2:1, which will prevent urinary calculi or water belly. Salt could also be added to the pellets at a rate of .5% (1/2 of 1%) of the total ration. You can use rations containing more roughage when grain prices are too high, but it should be remembered that slower gains will be achieved using rations with high to medium levels of roughage.

Toward the end of the finishing period, we start a different management system for our replacement ewe lambs. During the last few years, we have found that if we push an ewe lamb hard by feeding her to get maximum gains, we can get her to breed at 6 or 7 months of age and lamb at 12 months of age. Getting replacement ewe lambs to lamb at 12 months of age should be the goal of all sheep producers. Those ewes that lamb at that age will have a higher lifetime production record than other ewes. This is a way of selecting the more productive ewes. The nutritional trick is to grow them out fast, but not let them get too fat. Replacement ewe lambs that are too fat have difficulty in breeding and also have problems during lambing. Therefore, an effort should be made to grow out the ewe lambs along with the market lambs; but when the ewe lambs are big enough to breed, they should be pulled off the finishing ration and put on a 50% concentrate - 50% roughage ration. This will allow the ewe lambs to continue to grow, but at a slower rate. Hopefully, it will prevent the ewes from becoming too fat. Small breeds like the Dorset will reach breeding size by the time they are 95 to 100 pounds, while large breeds like the Suffolk may need to be taken to 110 to 120 pounds to get them to breed well at 7 months of age. The medium size breeds will be somewhere between 95 and 120 pounds. Nevertheless, nutrition is the key to getting ewe lambs to breed at 6 or 7 months of age. This will result in lambs being born by the time the ewes turn yearlings.

There are some alternatives to using high concentrate rations in a feedlot for getting lambs to market. Many producers run feeder lambs on wheat pasture or other types of lush pastures. This too, is an excellent method for growing out lambs. If a producer has this type of pasture available, he should use it. Many of our producers buy feeder lambs in October, November, or December and graze them on wheat pasture through the fall, winter, and spring. When the lambs reach 95 pounds, they are put into the feedlot on high concentrate diets for 30 to 45 days to finish them. The producer will then be able to market a choice grade lamb and get top market price. Lambs on wheat pasture will gain 0.25 to 0.35 pounds per day, depending on the quality of the pasture. It should be remembered that pasture gains would be much slower than feedlot gains. However, the cost of the pasture gains will be much less than high concentrate feeding costs. For those who have access to pasture, this is the most economical system for feeding market lambs. You can handle replacement ewe lambs this way also, but you will not get them big enough to lamb by the time they are 12 months of age.

There are some management techniques that should be discussed concerning feeding lambs. First, more lambs are lost from founder than any other cause. Changing feeds too quickly can cause founder. An example would be increasing the grain level in a ration too fast. If a producer is hand-feeding his sheep, he can feed 1/4 pound of grain per animal the first 3 days, then add another 1/4 pound, equaling 1/2 pound, the next 3 days, and so on. He can increase the feed at 1/4-pound intervals every 3 days until he gets the sheep on full feed. This will prevent founder. If a producer uses a self-feeder, he can fill the bottom of the feeder with a 40% concentrate - 60% roughage type ration, then put a 50-50 or a 60% roughage concentrate - 40% roughage on top of that. When the ration feeds down half way, put in an 80% concentrate - 20% roughage type ration to fill the feeder. Allow the animals to be on each ration 5 to 10 days between ration changes. These management techniques will help prevent founder from occurring in feeder lambs.

Researchers have found that only 1/2-inch feeder space per lamb is needed when self-feeding. When hand feeding, however, as much as 9 to 12 inches of feeder space per lamb will be needed. To get maximum gain on all lambs, feeder space is important. If there is not enough space, the bigger lambs will get the feed, and the smaller lambs will be pushed back.

Management during hot weather feeding of lambs is critical to keep lambs gaining. It has always been a goal for Oklahoma sheep producers to get their lambs to market before hot weather arrives. It is true that it's harder to get lambs to make efficient gains during July and August in Oklahoma. Nevertheless, for those producers that either lamb later or choose to feed out lambs during this period of time, there are some management techniques that can be used to keep those lambs growing.

First, any lambs that will not be ready for market by June should be sheared. Keeping the lambs cool is of great importance. Take the wool off, provide plenty of shade, and always have a close source of cool, clean water. If the lambs are sheared and have shade on high ground where the wind can blow over them, they can stay relatively cool and keep gaining. You may want to put lights over your feeders so the lambs can eat at night. When it really gets hot, the lambs will do most of their feeding through the night. When you're in a feedlot situation, a "mister" similar to those used in hog

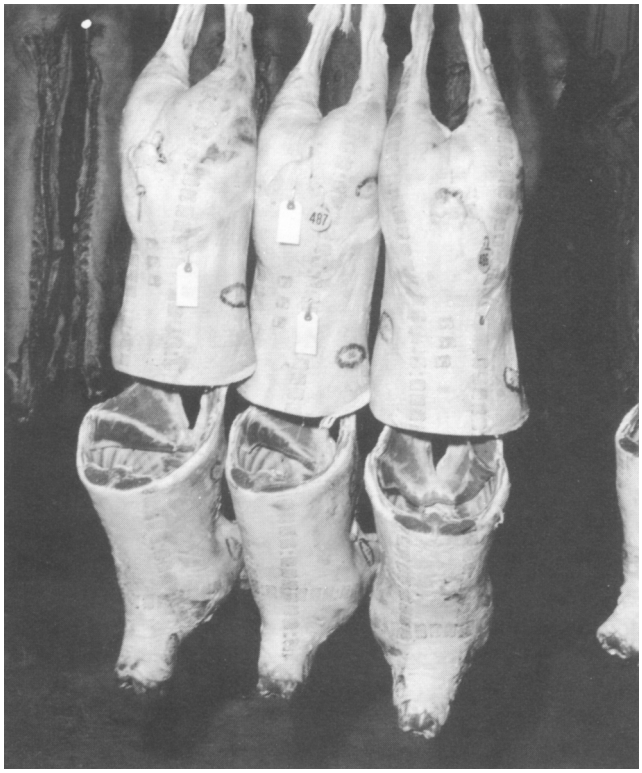

Figure 2. One of our goals is to produce a desirable end product.

operations could be of benefit. However, the sheep should not get wet since pneumonia problems may occur. The important thing to remember is that with proper management, lambs can keep growing during the Oklahoma heat of July and August.

Learning to properly feed and mange market lambs and replacement ewe lambs is a must for the successful sheep producer. Experience can help you develop knowledge and skills; however, expensive mistakes can be made. Therefore, we encourage all producers to learn all they can about feeding and managing lambs prior to any expansion in this type of operation.

The Oklahoma Cooperative Extension Service
Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Samuel E. Curl, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of $.20 per copy. 0404.