

# FATTENING LAMBS

B-129



## FOREWORD

Texas has a big sheep and wool industry. It is operated principally on a ewe and lamb basis. Most of the sheep are of fine wool breeding. Numbers within the past ten years have figured from seven and one-half to ten and one-half million head. Some three and one-half to five million lambs are produced annually. Many of the ewe lambs are kept for replacements. With a seasonable spring, thousands are marketed directly from pasturage as "grass fat" spring lambs. In recent years a great many have been carried over for shearing and fattening on spring pasturage as yearlings. Thousands move to High Plains wheat pasturage when it is available. Others reach the slaughter market through the feedlots of Western and Northern states.

There are not a great many lambs fattened in drylot in Texas, but an increase in feeding for fattening is believed to be economically sound. Texas livestock markets, principally at Fort Worth and San Antonio, will welcome with good prices a greater volume of fed lambs. Texas feeder lambs are capable of making good and economical gains and of producing choice grade carcasses. Lambs can compete favorably with other kinds of livestock for the feed and labor many farmers have at hand.

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# Fattening Lambs

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## BUYING FEEDER LAMBS

One of the major factors contributing to successful lamb feeding is that of reaching the feedlot with the right kind of lambs. Nearness to the source of supply offers Texas farmers some advantages in buying the feeders.

Though range lambs are thought of as being produced in large numbers, actually there are more small flocks than large ones. There is a great deal of variation in feeder lambs with respect to age, weight, type, thrift, fill and exposure to parasites. The buyer should be able to recognize such differences as they affect the value of the feeders, and in this connection may often use livestock commission agencies to good advantage in getting the right kind of feeders.

The spread in price between feeder and fat lambs, the price of wool and pelt credits and the kind of available feeds and their cost, must be considered in the selection of the feeders. However, there is generally a going price for the feeders which are available and because of this the feeder-buyer can expect to pay the going market price. The buyer must know what he wants, and in paying the market price he should be sure of getting lambs that meet his requirements.

Most of the lambs available as feeders in Texas are of fine wool breeding. A desirable fine wool feeder lamb is fairly free of neck folds, short legged, open faced, and has a smooth compact body. The desirable weight range is between 50 and 65 pounds for dry lot fattening on average good rations. Lambs weighing less than 50 pounds or more than 70 pounds are less desirable for general feeding. The heavy lambs are often coarse and may not finish at the desirable weight of 85 to 95 pounds while the light lambs, although making good gains if thrifty and if fed quality feeds, require a long feeding period to fatten to the desirable market weight. Thrifty lambs are strong, have pink skin, clean noses, free from scours, and are alert. Unthrifty lambs must be properly conditioned before being placed on fattening ration.

### *First Care*

When the feeder lambs are first received, give them two to three days rest in the pens with access to clean water, granulated salt and a good dry hay, before they are worked. The feeder should know whether or not the lambs have been vaccinated for sore mouth, and whether they are comparatively free of parasites. If they have not been vaccinated and if they are not free of stomach worms, then during or following the rest period, vaccinate for sore mouth and treat for intestinal parasites. Paleness inside of lips indicates presence of intestinal parasites. If sore mouth appears during the rest period or is already present, vaccination should be hurried up and those with sore mouths should be penned separately. The mouth sores may be kept soft with a non-irritant grease such as vaseline and a good leafy hay should be fed. Also before getting underway with the feeding of concentrates, most large groups of lambs should be sorted according to thrift and flesh, into about three lots: Heavy, fleshy lambs; medium lambs, and culls, involving the undersized and crippled. This sorting will save subsequent handling when the heavier lambs are ready for market ahead of the lighter ones. Too, lambs of near equal size and weight have equal opportunity to consume the required amount of feed. It is obvious that the wool blinded ones need the wool sheared from their faces and that any sick or crippled lambs need individual attention.

It is good insurance to vaccinate all lambs for "over-eating", or pulpy kidney disease. This will practically eliminate losses from such cause. Commercial serums and bacterins are available for this purpose.

### *Feed Lots and Equipment*

In all but the far western and the Panhandle sections of the state it is desirable that lambs be fed in barns or under sheds. When fed under favorable conditions with respect to sheds, it is advisable to shear them before placing them on feed. Lambs out of the wool make more economical use of barn room and feed trough space. The investment in the lambs is materially reduced through the early sale of the wool. The average person can tell more about the condition of lambs with the wool off and a feeder cannot know too much about the degree of finish his lambs are attaining.

It requires a minimum of one linear foot of trough room for each shorn lamb. If feeding operations are carried on under shed the minimum floor space required per lamb is approximately four square feet.

A few inches of straw bedding spread over the floor at the beginning of the feeding period and supplemented daily by the refuse from the hay will maintain good floor conditions.

Feeding lambs under shed with good bedding preserves the maximum percent of the fertilizer produced.

A tip to those who might use an open shed: If lambs are permitted to pass in and out of the shed during wet weather, they will carry sufficient moisture and mud into the shed to develop a bad situation. Once wet, the shed floor is slow to dry.

When feeding in the open, give some thought to the location of the feed lot. Sandy, south slopes with some natural or made protection from rain and high wind are desirable.

Cleanliness of feed and water troughs are of utmost importance. Build something that can be easily kept clean.

The combination grain and hay trough or feed box plan given in this bulletin meets that requirement. Hay tends to keep the box dry, and that coupled with the use of a broom ahead of each grain feeding gets the cleaning job done.

A water trough 12 feet long, 12 inches wide, and 10 inches deep is an ideal size. A larger trough might cause some people to hesitate to empty and scrub it as often as desirable. Lambs consume approximately a half gallon of water per head daily; no great volume, but it is important that they have every encouragement to drink their fill regularly.

### *Methods of Feeding*

Feeding methods and practices are developed through experience, and are calculated to meet common feed-lot problems. Lambs, at the start, have a small capacity to handle feed and the feeder must meet the problem of developing that limited capacity to the maximum. Most feeders do that by starting the lambs on an abundance of high quality roughage and a very limited amount of concentrates. Lambs should have all of the roughage they will eat. As the grain portion of the ration is increased, the lambs naturally consume less roughage. Too much grain or irregularity in feeding grain may result in loss of appetite, scours, stiffness, or death.

There are two methods of feeding lambs: hand feeding and self-feeding. The feeding of definite amounts of grain and protein supplement twice daily with hay free choice is called hand feeding. The feeding of the complete ration, concentrates and forages ground together, free choice is called self-feeding. This method is suitable for large scale feeding.

Hand feeding is recommended for farm feeding of small numbers. Grain and hay require no grinding for lambs. This method lends itself to making necessary changes in the ration consistent with the

daily build-up of the concentrates in the ration. Also it enables one to meet emergency needs for reducing the grain consumption.

On many farms where bundle grain sorghum is the source of all the roughage and part of the grain, grinding seems necessary and self-feeding advisable. The feed is prepared by grinding and mixing the whole ration together and supplying it in a feed trough or self-feeder. It is very important that the mixture be perfect, that the grinding of grain be uniformly fine, and that the proper balance between the grain and roughage be maintained.

In feeding ground grain sorghum bundles it is necessary to know how much grain is in the bundles. If over-estimated, the ration will be low in grain and finishing delayed. If under-estimated, the lambs may receive too much grain.

### **SCHEDULE FOR STARTING LAMBS ON FEED--- HAND FEEDING**

When feeding whole grains and pea-sized cottonseed cake or screenings with sorghum roughages, the following may be used as a guide for feeding the cake and grain. Roughage is to be full fed but not wasted; however, lambs must be allowed to leave the coarse parts.

*Pounds of grain and cottonseed cake to feed per 100 lambs—  
after rest period of 1 to 7 days. Roughage is to be full fed  
after each feed of grain and cake.*

		Grain (shelled or threshed)	Cottonseed Cake (43 percent protein)
1st day	PM	5 lbs.	5 lbs.
2nd and	AM	5 lbs.	5 lbs.
3rd days	PM	5 lbs.	10 lbs.
4th and	AM	10 lbs.	10 lbs.
5th days	PM	10 lbs.	10 lbs.
6th and	AM	10 lbs.	10 lbs.
7th days	PM	10 lbs.	15 lbs.
8th and	AM	10 lbs.	15 lbs.
9th days	PM	15 lbs.	15 lbs.
10th and	AM	15 lbs.	15 lbs.
11th days	PM	15 lbs.	17 lbs.
12th and	AM	15 lbs.	17 lbs.
13th days	PM	15 lbs.	17 lbs.

At the end of about two weeks the lambs will be eating one-third pound daily of cottonseed cake which is a full feed and is fed at this



rate throughout the entire feeding period. The hay being fed free choice, the only further adjustments in ration will be with the grain. For most lots of lambs the ration given for the twelfth day should be continued without change for one or two weeks to further develop feed capacity. Increases in grain may then be made according to the feeder's judgment, these increases not to exceed five pounds of grain per 100 lambs or 1/20 pound per lamb per day. Following this system the lambs can be made to consume 2/3 pound of grain at 30 days, 1 pound at 40 days, and 1 1/4 pounds at 50 days, and further increase may carry them up to 1 3/4 pounds per day.

If alfalfa hay is used as the roughage, the cottonseed cake or meal may be reduced one-half.

If ground grain sorghum heads or ground ear corn are used, feed 1/4 more than when shelled grains are fed. In this case cottonseed meal should be used and mixed thoroughly with the other ground feeds.

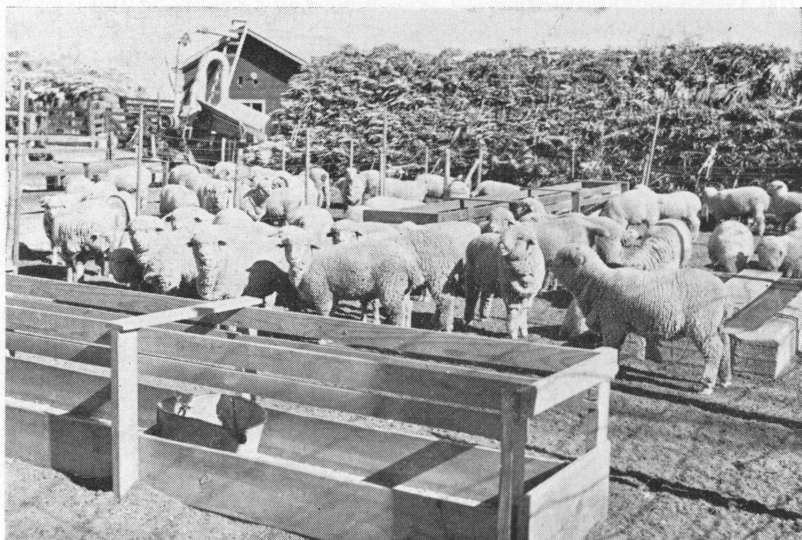
**SCHEDULE FOR STARTING LAMBS ON FEED--USING  
MIXTURES OF GROUND FEEDS AFTER ALL PRE-  
LIMINARY HANDLING HAS BEEN DONE**

Whole ground mixed rations may consist of bundle feeds, hays, cottonseed hulls, various grains, and cottonseed meal. The principle of feeding is the same as previously stated, but cottonseed meal is fed instead of peasized cottonseed cake. The following table may be taken as a guide:

Time	Percent Grains	Percent Cottonseed Meal	Percent Roughage
1st 3 days	10	5	75
2nd 3 days	15	7 1/2	72 1/2
2nd week	20	10	70
3rd week	25	12 1/2	62 1/2
4th week	30	12 1/2	57 1/2
5th week	35	12 1/2	52 1/2
6th week	40	12 1/2	47 1/2
7th week	45	12 1/2	42 1/2
8th week	50	12 1/2	37 1/2

The bundle feeds should be of good quality and free of mold and dirt. Grinding should be fine enough to crack most of the grains. Average grain sorghum bundles contain slightly too much grain (20 to 28 percent) for initial fill. If hay is available, it should be fed with the ground bundles and cottonseed meal mixture for about 10

days. If hay is not available the mixture should be hand fed twice per day until lambs can take the whole ground bundle. If the mixture is made on a unit basis, as grain is increased, roughage is decreased, and the amount of cottonseed meal remains constant.



Lambs fed ground grain sorghum bundles, cottonseed meal and ground grain. Salt was fed in the tub. This type of feed trough is recommended for hand feeding or self-feeding any kind of lamb fattening ration.

### **CHECK-UP ON FEEDING IMPORTANT**

The feeder can tell how his lambs are doing by the amounts of feed they eat. Lambs should eat about three pounds per head per day, less waste, after they are going good. Early in the period, they can handle a concentrate allowance of  $\frac{1}{3}$  the whole ration, and on full feed  $\frac{2}{3}$  of the whole ration. The feeder's problem is to make these changes in feed without injury to the lambs. It is important to keep a check on all feeds. The cottonseed meal should be held around  $\frac{1}{3}$  pound to 2-5 pound per head per day, or  $12\frac{1}{2}$  to 15 percent of the total ration. The droppings indicate how the lambs are handling their grain. The least show of soiled lambs is a sign of trouble. Droppings should be formed but soft. If looseness appears, decrease the grain by amounts surely sufficient to correct the trouble and then build up the grain again. Lambs that are doing well will be hungry and anxious for their feed. It is a bad sign when a substantial number hang back and refuse to eat.



## AMOUNTS OF FEED REQUIRED

In estimating total feed required to fatten a bunch of lambs, allowance must be made for mistakes in feeding and waste. Average amounts required are 110 pounds of shelled grain, 160 to 180 pounds of roughage, and 30 to 35 pounds cottonseed meal with sorghum hay or 15 to 20 pounds cottonseed meal with alfalfa hay.

## TIME REQUIRED TO FATTEN

Ninety to 105 days are average feeding periods required to fatten lambs. Variation in number of days required will depend in the main upon amount of flesh and size of feeders and the ability of the feeder. Thrifty lambs fed a balanced ration, with good management, may be expected to gain  $1/3$  pound per head per day. Twenty-five to 30 pounds of gain put on 55 to 60 pound lambs in 90 days will mean fat lambs. Lambs should be sold as they become fat. The top lambs will often fatten 15 days ahead of the main group. Fatness can only be determined accurately by handling. A lamb is fat when it is difficult to feel the backbone and ribs with the fingers. The back will be firm and the dock large.

## FEEDS

*Grain Sorghums and Corn* — These have about the same feeding value although corn is preferred and are the chief lamb fattening grains. Threshed or shelled sorghum grains make on the average larger daily gains than heads either ground or whole. Milo heads rank highest among the grain sorghums heads followed by feterita and kaffir.

*Wheat* — Is the best of the small grains and practically equal to corn. It should not be ground for lambs when hand fed.

*Barley* — Is better used by mixing with corn, wheat or threshed grain sorghums in proportions of three to five, or half and half.

*Oats* — May be fed whole but not as the sole fattening grain for they fail to produce a good finish. They are valuable in starting lambs on feed because of their bulk, palatability and conditioning value.

*Grain Sorghum Gluten Feed* — May be fed with alfalfa hay and grain. A mixture of 7 parts grain and 3 parts grain sorghum gluten feed has given good results.

*Protein Supplements* — Cottonseed meal or cottonseed cake (sheep size) are usually more available and are recommended as protein supplements. Other oilseed meals or cakes as linseed, soybean, and peanut may be used just as cottonseed meal or cake.

*Cottonseed* — May be fed with alfalfa and grain as a replacement for part of the grain, and also to supply additional needs for protein. Lambs will usually not eat more than about .60 pounds of cottonseed daily per head.

*Grain Sorghum Gluten Meal* — May be fed with alfalfa hay and grain just as cottonseed meal is fed. The gluten meal has the same approximate content of crude protein as cottonseed meal.

*Cottonseed Hulls* — As a roughage are used to better advantage when fed with an equal amount of alfalfa or other good hays. Mixed with cottonseed meal and ground grain, the hulls give ideal bulk to the ration and are especially valuable at the very start of the feeding period to give good fill.

*Alfalfa* — Is the most desirable hay for lamb feeding and should furnish at least  $\frac{1}{4}$  of the roughage in all lamb fattening rations.

*Sorghum and Grain Sorghum Roughages* — Red top sorghum is ordinarily preferred because of its palatability and quality. Bundled grain sorghums have been ground and fed to lambs with good results. Molds may be present inside the stalks, although the feed is bright on the outside. Such feeds should only be fed as whole bundles.

*Blackstrap Molasses* — While lamb feeders have fed blackstrap molasses in amounts approximating 20 percent of the total ration, about  $12\frac{1}{2}$  percent in the ration will serve the purpose of laying the dust and binding small particles of feed together. It has about 70 percent of the feed value of corn.

*Silage* — High quality silage can be used as the sole source of roughage in fattening lambs. A small amount of high quality hay improves the ration in most instances. Again, when feeding grain sorghum silage, be careful to closely estimate the grain content.

*Feed Mineral Supplement With Silage or Sorghum Roughages* — Limestone flour (finely ground raw limestone or oyster shell flour) increases gains when fed to lambs being fattened on grains and the sorghum roughages and should always be fed. Feed at the rate of .25 ounce to .40 ounce per head per day mixed with the grain or whole ground ration. It is usually not possible to feed the necessary amount of limestone flour by mixing equal parts salt and limestone flour.

*Salt* — Good grade granulated salt should be available at all times in a salt box. Minerals other than salt and limestone are not needed in well-balanced rations.

*Good Roughages* — Are essential to successful lamb fattening. Without alfalfa hay, drylot lamb feeding operations are seldom permanent.

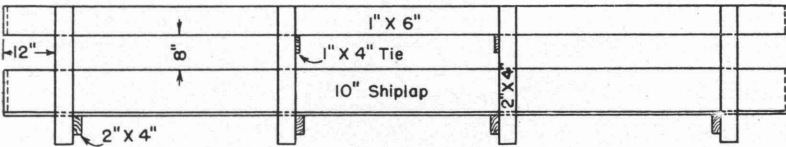
## FATTENING ON PASTURE

Sheep are able to fatten to better advantage and in less time on pasturage alone than any other form of livestock. Most of the lambs or yearlings fattened in Texas are fattened on pasturage. In the Central Texas and the Edwards Plateau, winter or cool season grasses and forbs provide satisfactory fattening in seasonable years.

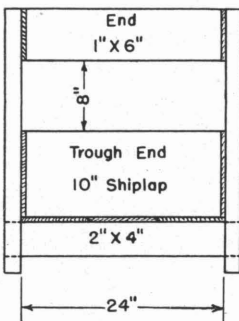
When it is available, many lambs move to wheat pasturage in the Texas Panhandle and may fatten in 7 to 12 weeks. Gains reported range from 5 to 15 pounds per head per month. Bundle feeds in addition to wheat help out but with good pasturage other feeds are not necessary.

Some lambs are turned on grain sorghum fields. Here there is danger of unbalanced grain and roughage consumption. The safest method is to self-feed alfalfa hay in the fields or near the watering place. At first the method is somewhat wasteful and is ordinarily used where harvesting is questionable.

## FEED TROUGH



SIDE VIEW 16' Long  
Scale: 1/2" = 1'



END VIEW  
Scale: 1" = 1'

May be built any convenient length; 10 - 12 - 14 and 16 feet are common lengths.

This combination feeder has a capacity of 30 lambs when hand feeding, and 60 to 80 lambs when self-feeding. This kind of feeder can be used for any kind of grain or whole or chopped roughages and for either hand feeding or modified self-feeding. To clean - the trough is turned upside down.

## WATER TROUGH

The water trough must be small and easily cleaned and located so that waste water drains outside the lot. A guard rail or rails is necessary to keep the lambs out of the trough. There must be dry footing about the trough. It should not be higher than 14 to 16 inches. In scrubbing the troughs use a bit of Kreso dip on the brush to cut the filth, then wash out with clean water. A lamb will drink foul water only when forced by thirst. A thirsty lamb does not eat and so does not gain. If the water supply permits, there should be a small flow of water through the trough.



### AMOUNT OF FEED TO FATTEN A LAMB

130 pounds ground grain sorghum heads

133 pounds alfalfa hay

16 pounds cottonseed cake

1.5 pounds salt

Iowa Park Station — 58 pound feeders fed to 93 pounds in 97 days.

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