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PLANNING FOR LAMB-FEEDING

By H. R. LASCELLES

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PLANNING FOR LAMB-FEEDING

By H. R. LASCELLES*

Every fall the lamb feeder is confronted with the problem of buying the number of lambs that he can reasonably expect will use the feed he has available. If he overbuys, he finds himself short of feed near the end of the feeding period. If he underbuys, he has feed left over, with no livestock on hand to consume it.

This circular is prepared to aid the feeder in matching his feed on hand with the number of lambs he should buy, and to guide him in selecting his most economical ration. For reference purposes it is prepared in table form. These tables are based on the average feed requirements for lambs at the Colorado Experiment Station covering various rations that have been fed over a period of more than 20 years. They should be used as estimates and in no way construed to be the exact amounts of feed required. They will, however, prove to be reliable guides to requirements.

In presenting this guide it is assumed that lambs weigh about 63.4** pounds when arriving at the feedlot and 99.8** pounds when shipped, making a gain of about 36.4 pounds during the feeding period. Further, it is assumed that these lambs are typical of the lambs fed by Colorado feeders. It will be realized that weather conditions, death loss, initial weight, sex, type, breed and many other factors materially influence the feed requirements necessary and therefore the tables are presented simply as guides.

How to Use the Tables

Determine the amount of hay you will have to feed to lambs. The tables are based on 1 ton of alfalfa hay.

Example.—If you have 200 tons of alfalfa available and you are considering the feeding of corn and alfalfa, refer to the first ration listed and you will find that you will need approximately 7.13 lambs and 761 pounds of corn for 1 ton of alfalfa Therefore, for the utilization of 200 tons you will need:

7.13 x 200 = 1,426 lambs required

761 x 200 = 152,256 lbs. of corn required.

By comparing several rations that may be suitable, it is pos-

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**These are actual average figures taken from Colorado Experiment Station feeding trials and are not given as optimum weights.

RULES GOVERNING THE APPLICATION OF THE TABLES

Approximate Initial Weight of Lambs, 63.4 lbs.
Approximate Final Weight at Feedlot, 99.8 lbs.

Grain fed at a maximum of 1 lb. to 1.5 lbs. daily.
Cottonseed and linseed fed at a maximum of .25 lb. daily.
Wet beet pulp fed at a maximum of 5 lbs. daily.
Corn silage fed at a maximum of 2 lbs. to 2.5 lbs. daily.

In estimating the required amount of wet beet pulp, the figures given in the tables refer to the tonnage of wet beet pulp at the farm, **not at the factory.** Allowance should therefore be added for shrinkage, depending upon the distance the pulp is hauled.

(Estimated required amounts of different feeds to be used with 1 ton of alfalfa hay. Read table across the page.)

Ration	Amount of alfalfa (tons) on hand for feeding lambs	*Number of lambs	Shelled corn (lbs.)	Whole barley (lbs.)	Wheat (lbs.)	Dried beet pulp (lbs.)	Beet Molasses (lbs.)	Corn silage (tons)	Potatoes (lbs.)	Wet beet pulp (tons)	Cottonseed cake (lbs.)	Linseed oilmeal (lbs.)	Flaxseed (lbs.)
Corn, alfalfa	1	7.13	761	....	....	....	....	....	....	....	....	....	....
**Corn, cut alfalfa	1	8.15	990	....	....	....	....	....	....	....	....	....	....
Corn, beet molasses, alfalfa	1	9.67	849	....	....	....	443	....	....	....	....	....	....
Corn, dried beet pulp, alfalfa	1	7.69	471	....	....	471	....	....	....	....	....	....	....
½ Corn, ½ dried molasses pulp, alfalfa	1	8.98	510	....	....	510	....	....	....	....	....	....	....
Corn, corn silage, alfalfa	1	12.48	1208	....	....	....	....	.91	....	....	....	.. .	....
Corn, corn silage, linseed oilmeal, alfalfa	1	12.30	1224	....	....	....	....	.73	....	....	....	215	....
Corn, wet beet pulp, alfalfa	1	11.23	971	....	....	....	....	....	....	2	....	....	....
Corn, dried beet pulp, cottonseed cake, alfalfa	1	8.63	483	....	....	483	....	....	....	....	151	....	....
Corn, dried beet pulp, linseed oilmeal, alfalfa	1	9.01	510	....	....	510	...	....	....	....	....	163	....
Barley, alfalfa	1	6.42	....	705	....	....	....	....	....	....	....	....	....
Barley, cottonseed cake, alfalfa	1	7.32	....	642	....	....	....	....	....	....	171	....	....
Barley, linseed oilmeal, alfalfa	1	7.63	....	701	....	....	....	....	....	....	....	193	....
Barley, flaxseed, alfalfa	1	7.54	....	681	....	....	....	....	....	....	....	...	136

**Based on early experimental data at the Colorado Experiment Station.

Barley, cull potatoes, alfalfa	1	7.63	....	710	....	....	....	....	1337	....	....	....	....
Barley, cull potatoes, cottonseed cake, alfalfa	1	8.64	....	783	....	....	....	....	1481	....	195	....	....
Barley, cottonseed cake, corn silage, alfalfa	1	13.29	....	1015	....	....	....	1.68	....	....	306	....	....
Barley, wet beet pulp, alfalfa	1	10.03	....	876	....	....	....	....	....	2.45	....	....	....
Barley, wet beet pulp, cottonseed cake, alfalfa	1	11.90	....	968	....	....	....	....	....	2.65	242	....	....
Barley, linseed oilmeal, wet beet pulp, alfalfa	1	12.71	....	975	....	....	....	....	....	2.64	....	277	....
Barley, ground flaxseed, wet beet pulp, alfalfa	1	10.46	....	792	....	....	....	....	....	2.09	....	....	165
Wheat, alfalfa	1	6.94	....	....	721	....	....	....	....	....	....	....	....
Wheat, cottonseed cake, alfalfa	1	7.67	....	....	~~161~~1665	....	....	....	....	....	161	....	....
Wheat, linseed oilmeal, alfalfa	1	8.90	....	....	788	....	....	....	....	....	....	203	....
Wheat, flaxseed, alfalfa	1	7.37	....	....	687	....	....	....	....	....	....	....	137
Wheat, cottonseed cake, wet beet pulp, alfalfa	1	10.61	....	....	803	....	....	....	....	2.25	208	....	....
Wheat, linseed oilmeal, wet beet pulp, alfalfa	1	13.17	....	....	1045	....	....	....	....	2.91	....	293	....
Wheat, flaxseed, wet beet pulp, alfalfa	1	10.88	....	....	812	....	....	....	....	2.20	....	....	161

* This column gives the estimated number of lambs necessary to purchase to consume 1 ton of alfalfa hay with corresponding concentrates as shown.

sible to arrive at the cheapest ration to feed in line with prevailing prices. For example, there are times when it pays to feed a nitrogenous supplement such as cottonseed cake.

Example.—Supposing we have barley and alfalfa on hand and wish to determine whether it will pay to add cottonseed cake. By referring to the table we find that with 1 ton of alfalfa we will need 705 pounds of barley to fatten 6.42 lambs, assuming that only barley and alfalfa are fed. If barley is worth 50 cents per cwt. and alfalfa $10.00 per ton, the feed cost of fattening 6.42 lambs on barley and alfalfa will approximate the following:

1 ton alfalfa x $10.00 per ton	$10.00
705 lbs. barley x 50c per cwt.	3.52
Total estimated cost of fattening 6.42 lambs	$13.52

Cost of fattening one lamb: $13.52 ÷ 6.42 = $2.11

Referring again to the table, we find that with 1 ton of alfalfa we need 642 pounds of barley and 171 pounds of cottonseed cake to fatten 7.32 lambs. If the same prices prevail for barley and alfalfa and if cottonseed cake is worth $18.00 per ton, the cost of fattening 7.32 lambs on barley, cottonseed cake and alfalfa would be:

1 ton alfalfa x $10.00 per ton	$10.00
642 lbs. of barley x 50c per cwt.	3.21
171 lbs. of cottonseed cake x $18.00 per ton	1.54
Total cost of fattening 7.32 lambs	$14.75

Cost of fattening one lamb: $14.75 ÷ 7.32 = $2.01

It therefore appears that, on the basis of prices given, there is a saving of about 10 cents per lamb by the addition of cottonseed cake in this particular case. It is probable that the type of lambs, weather conditions, and other factors may reduce this feed consumption or enlarge it but the figures indicate what, under average conditions, the feeder can reasonably expect.

Feed alone is not the only thing that has to be planned before launching a lamb-fattening program. The proper space is an exceedingly important factor. Lambs that are allowed too much space at the grain troughs feed unevenly with the result that some lambs get more grain than others. Frequently this results in a large amount of avoidable death loss.

In feeding grain to fattening lambs, an important rule is to allow one running foot of grain troughs to two lambs, the lambs feeding from both sides of the trough.

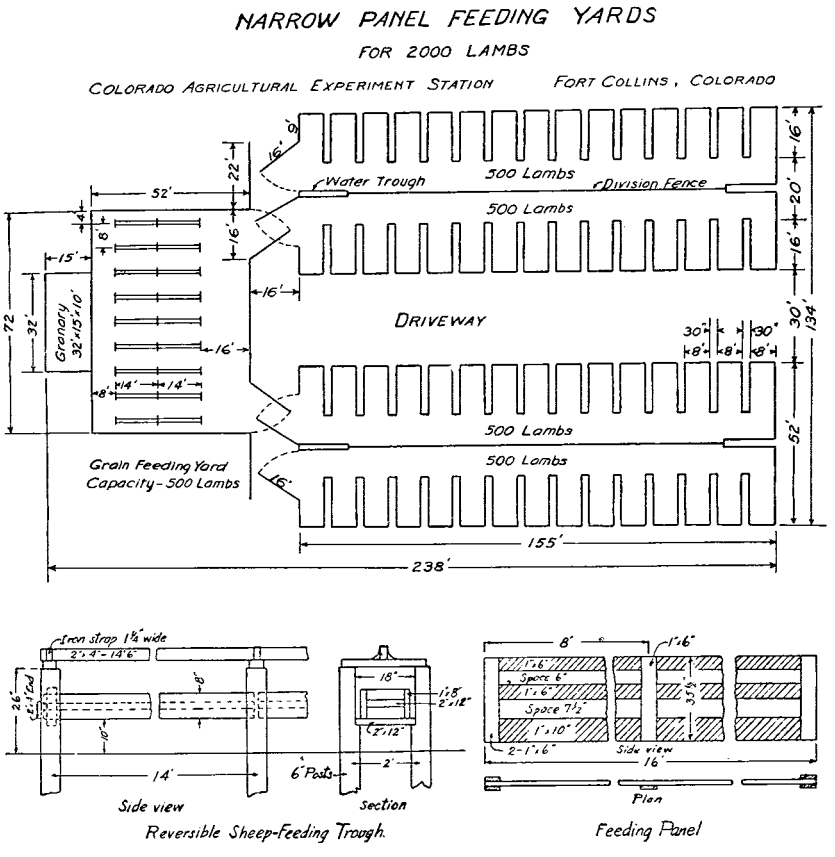

Fig. 1.—Plan for alfalfa-hay feeder, stationary reversible grain trough and hay panel. Figure four lambs per running foot for self-feeder; 1 foot panel space per lamb for hay. Each 14-foot grain trough accommodates 28 lambs.

The diagram of a panel feeding yard for 2000 lambs illustrates the necessity for proper spacing for feeding hay.

The grain feeding yard illustrated as a part of Fig. 1 is built to accommodate 500 lambs at a time and therefore has 250 running feet of grain troughs. These grain troughs should be of the reversible type, thus insuring clean grain. Fig. 2 shows the general construction of the reversible type of grain trough and Fig. 1 gives the detail of construction of these troughs.

The panels used in the construction of the feeding yard may be made as shown in detail in Fig. 1.

Panels constructed in this manner permit lambs to consume hay with a minimum of waste.

While the plans given here are adapted to the feeding of

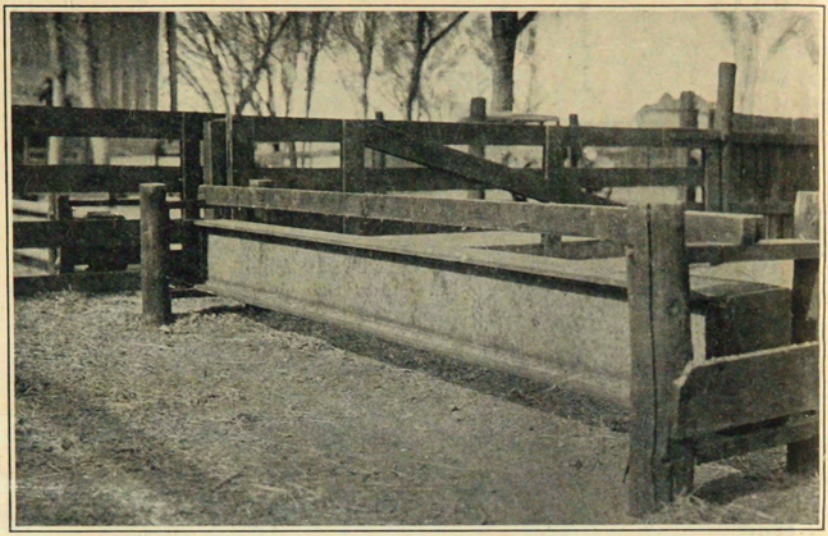

Fig. 2.—The reversible grain trough for lambs facilitates cleaning and protects the troughs from snow when not in use.

2000 head of lambs, the feeder can arrange his yards with the aid of this material to accommodate a smaller or larger number of lambs.