

NEWS TO EWES

PRODUCTION BASICS FOR DIRECT MARKETING LAMBS

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Introduction

In preparing to write this paper, I read several publications in which producers described their experiences about direct marketing lambs. In general, they described direct marketed lambs as “finished lambs.” But, what is a “finished lamb”? How do we know when a lamb is “finished?” On average across breeds, an ideal slaughter lamb may have the characteristics as those shown below:

- Weight at slaughter (harvest): 100 to 120 lb
- Age at slaughter (harvest): Less than 6 mo
- Backfat: 0.15 to 0.25 in
- Loineye area: More than 2.5 sq in/ 50 lb carcass weight
- Boneless retail cuts: 45 to 47% of carcass
- Does this describe a “finished lamb?” Maybe so, maybe not.

Target Slaughter Weight

Dr. David Thomas, Professor Emeritus at the University of Wisconsin, prepared Table 1 depicting the target slaughter weights that will yield carcasses with maximum lean and optimum fat. Weights of lambs in the table are based on weights of mature ewes (**not rams, as would be expected**) that produced the lambs to be slaughtered. Mature ewe weights in Table 1 are based on weights of 3 to 5-year-olds when they are dry and open.

Across the top of Table 1 are the mature weights of ewes of the sire breed. In the left column are the mature weights of ewes of the ewe breed that produced the lambs to be slaughtered. Assume that mature, dry, and open Polypay ewes that weigh 160 lb are mated to Hampshire rams (where mature Hampshire ewes weigh 210 lb). If you read down the left column to 160 and across to the column of 210, you find the ideal slaughter weight of Polypay x Hampshire lambs is 120 lb. (Table 2). The formula used to calculate this weight is shown in Figure 1.

Table 1 – Target Slaughter Weights of Lambs

Ewe Breed Mature Weight, lb	Sire Breed Mature Weight, lb (Weight of Ewes of the Breed)													
	250	240	230	220	210	200	190	180	170	160	150	140	130	120
250	163	159	156	153	150	146	143	140	137	133	130	127	124	120
240	159	156	153	150	146	143	140	137	133	130	127	124	120	117
230	156	153	150	146	143	140	137	133	130	127	124	120	117	114
220	153	150	146	143	140	137	133	130	127	124	120	117	114	111
210	150	146	143	140	137	133	130	127	124	120	117	114	111	107
200	146	143	140	137	133	130	127	124	120	117	114	111	107	104
190	143	140	137	133	130	127	124	120	117	114	111	107	104	101
180	140	137	133	130	127	124	120	117	114	111	107	104	101	98
170	137	133	130	127	124	120	117	114	111	107	104	101	98	94
160	133	130	127	124	120	117	114	111	107	104	101	98	94	91
150	130	127	124	120	117	114	111	107	104	101	98	94	91	88
140	127	124	120	117	114	111	107	104	101	98	94	91	88	85
130	124	120	117	114	111	107	104	101	98	94	91	88	85	81
120	120	117	114	111	107	104	101	98	94	91	88	85	81	78

Table 2 – Target Slaughter Weights of Lambs

Ewe Breed Mature Weight, lb	Sire Breed Mature Weight, lb (Weight of Ewes of the Breed)													
	250	240	230	220	210	200	190	180	170	160	150	140	130	120
250	163	159	156	153	150	146	143	140	137	133	130	127	124	120
240	159	156	153	150	146	143	140	137	133	130	127	124	120	117
230	156	153	150	146	143	140	137	133	130	127	124	120	117	114
220	153	150	146	143	140	137	133	130	127	124	120	117	114	111
210	150	146	143	140	137	133	130	127	124	120	117	114	111	107
200	146	143	140	137	133	130	127	124	120	117	114	111	107	104
190	143	140	137	133	130	127	124	120	117	114	111	107	104	101
180	140	137	133	130	127	124	120	117	114	111	107	104	101	98
170	137	133	130	127	124	120	117	114	111	107	104	101	98	94
160	133	130	127	124	120	117	114	111	107	104	101	98	94	91
150	130	127	124	120	117	114	111	107	104	101	98	94	91	88
140	127	124	120	117	114	111	107	104	101	98	94	91	88	85
130	124	120	117	114	111	107	104	101	98	94	91	88	85	81
120	120	117	114	111	107	104	101	98	94	91	88	85	81	78

Figure 1 – Polypay Ewes Bred to Hampshire Rams



$$\begin{aligned} \text{Target Slaughter Weight} &= \frac{160 \text{ lb} + 210 \text{ lb}}{2} \times 0.65 \\ &= 120 \text{ lb} \end{aligned}$$

Another example might be when White Dorper ewes are mated to Hampshire rams. Read down the left column of Table 3 to 150 lb (average weight of White Dorper ewes) and across to the number under the 210-lb column (average weight of Hampshire ewes). The answer is 117 lb.

Table 3 – Target Slaughter Weights of Lambs

Ewe Breed Mature Weight, lb	Sire Breed Mature Weight, lb (Weight of Ewes of the Breed)													
	250	240	230	220	210	200	190	180	170	160	150	140	130	120
250	163	159	156	153	150	146	143	140	137	133	130	127	124	120
240	159	156	153	150	146	143	140	137	133	130	127	124	120	117
230	156	153	150	146	143	140	137	133	130	127	124	120	117	114
220	153	150	146	143	140	137	133	130	127	124	120	117	114	111
210	150	146	143	140	137	133	130	127	124	120	117	114	111	107
200	146	143	140	137	133	130	127	124	120	117	114	111	107	104
190	143	140	137	133	130	127	124	120	117	114	111	107	104	101
180	140	137	133	130	127	124	120	117	114	111	107	104	101	98
170	137	133	130	127	124	120	117	114	111	107	104	101	98	94
160	133	130	127	124	120	117	114	111	107	104	101	98	94	91
150	130	127	124	120	117	114	111	107	104	101	98	94	91	88
140	127	124	120	117	114	111	107	104	101	98	94	91	88	85
130	124	120	117	114	111	107	104	101	98	94	91	88	85	81
120	120	117	114	111	107	104	101	98	94	91	88	85	81	78

The calculation that was made to arrive at this number is shown in Figure 2. When 210-lb Hampshire ewes are mated to Hampshire rams (again, 210-lb ewes) in Figure 3, the ideal slaughter weight of these lambs is 137 lb. Other examples might be ½ Katahdin (130-lb ewes) x ½ White Dorper (160-lb ewes) lambs that weigh 94 lb (Table 4) whereas target slaughter weights of Katahdin lambs are 85 lb (130-lb ewes x 130-lb ewes) as shown in Figure 4.

Figure 2 – White Dorper Ewes Bred to Hampshire Rams



$$\text{Target Slaughter Weight} = \frac{150 \text{ lb} + 210 \text{ lb}}{2} \times 0.65 = 117 \text{ lb}$$

Figure 3



Table 4 – Target Slaughter Weights of Lambs

Ewe Breed Mature Weight, lb	Sire Breed Mature Weight, lb (Weight of Ewes of the Breed)													
250	163	159	156	153	150	146	143	140	137	133	130	127	124	120
240	159	156	153	150	146	143	140	137	133	130	127	124	120	117
230	156	153	150	146	143	140	137	133	130	127	124	120	117	114
220	153	150	146	143	140	137	133	130	127	124	120	117	114	111
210	150	146	143	140	137	133	130	127	124	120	117	114	111	107
200	146	143	140	137	133	130	127	124	120	117	114	111	107	104
190	143	140	137	133	130	127	124	120	117	114	111	107	104	101
180	140	137	133	130	127	124	120	117	114	111	107	104	101	98
170	137	133	130	127	124	120	117	114	111	107	104	101	98	94
160	133	130	127	124	120	117	114	111	107	104	101	98	94	91
150	130	127	124	120	117	114	111	107	104	101	98	94	91	88
140	127	124	120	117	114	111	107	104	101	98	94	91	88	85
130	124	120	117	114	111	107	104	101	98	94	91	88	85	81
120	120	117	114	111	107	104	101	98	94	91	88	85	81	78

Figure 4



Now, are these the same kind of lambs as “finished lambs” that are direct marketed? Maybe so, maybe not. In general, direct marketed lambs usually weigh more, tend to be fatter, and may be older than ideal slaughter lambs. So, how can 100 to 120-lb lambs, and even up to 150-lb, meet the ideal slaughter lamb requirements when they are direct marketed?

Feeding Lambs for Direct Marketing

Regardless of the weight at which lambs are sold, always creep feed whether raised in confinement or on pasture. The younger the lamb, the more efficient it is in converting dry feed into weight gain. An excellent creep mixture is 90% ground shelled corn 10% soybean meal for the first 28 days after birth. Change the creep diet at 28 days to 90% cracked corn 10% soybean meal pellets. Feed this diet until lambs are weaned at 60 to 90 days of age. Send the ewes to low quality pasture after lambs are weaned. Gradually adjust the lambs to a growing/finishing diet over a two-week period. An example of a post-weaning grain mix is shown in Table 5.

Table 5

A Complete Grain Mix

Ingredient	Percent
Cracked yellow corn*	80.00
Soybean meal, 48% CP	12.67
Distillers dried grains	4.25
Ground limestone	0.88
White salt	0.63
Dicalcium phosphate	0.63
Ammonium chloride	0.50
Sheep premix	0.30
Vitamin E, 20,000 IU/lb	0.10
Vitamin A, 10,000 IU/lb	0.05
Vitamin D ₃ , 15,000 IU/lb	0.05

* Run through hammer mill without screen

All of the ingredients, except corn, are processed into a high protein pellet (40% protein) allowing the complete mix to be 80% cracked corn 20% protein pellet. The protein content of the final mix is 15%. This mix can be fed to all classes of sheep on the farm (even creep-fed lambs), just in different amounts to meet their nutrient requirements. If lambs are raised in confinement, provide ¼ to ½ lb of high-quality grass hay per head per day. If they are on pasture after weaning, the diet in Table 5 can be self-fed or hand-fed once daily at 2% of the average body weight of the group. Hand-fed lambs should gain 7 to 12 lb during each 2-week period. If so, daily intakes can be increased accordingly (2% of new average body weight). Always have available a loose, complete mineral mix and clean, fresh water at 50 to 55 degrees every day of the year whether the sheep are raised in confinement or on pasture.

Generating Direct Marketed Lambs

The following is a January/February lambing system of generating lambs to be marketed directly. Two other systems that can work are April and September/October lambings. The January/February system is a base from which the other systems can be developed. In this base system, allow a ram the opportunity to mate with a group of ewes for a 6-week period in August/September. Vaccinate pregnant ewes with CD/T (enterotoxemia types C and D as well as tetanus) before lambing. Lamb in January/February. Newborns may need a Bo-Se injection if there is a possible selenium deficiency in the soil or feedstuffs. Castrate ram lambs. Wean in March/April. Turn ewes to pasture. Keep lambs in confinement. Vaccinate with CD/T at 5, 8, and 11 weeks of age. Continue to self-feed lambs that are to be marketed first. Limit (hand) feed the same diet to those to be marketed later if they are to be marketed at the same weight as the first group. If

all lambs are to be marketed at the same time and weight, instead of small groups, they can be self-fed or limit-fed. We should remember the best way to regulate lamb gain is by regulating the daily intake of high-quality diets. **But, don't let lambs become too fat or too thin.**

When comparing confinement with pasture production of direct marketed lambs, the following should be considered: Confinement produces faster gains than pasture, which, in turn, promotes earlier marketing of younger lambs. It is easier to regulate gains and market weights in confinement. It is also easier to produce heavier lambs in confinement, but carcasses may be fatter. Higher quality meat may be produced from confinement raised lambs because they are marketed at younger ages. Cost of gain may be higher when lambs are raised in confinement. On the other hand, cost of gain may not be higher in confinement because there is no encounter with stomach worms.

Conclusion

Plan to market the highest quality product possible. If you want return customers, market “finished lambs” at an ideal weight at a young age so carcasses have maximum lean and optimum fat. Develop a grain-mixed diet that can be fed to all the sheep on the farm. Breed in August/September, lamb in January/February, wean in March/April and use management skills to adjust intakes of high-quality diets that will produce a high-quality product.

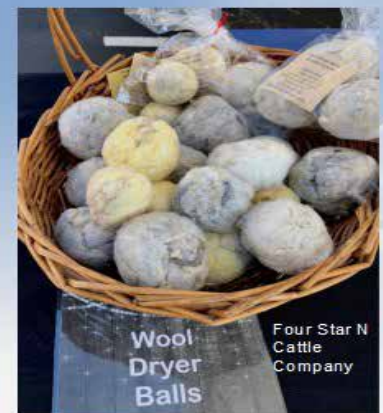
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