

Cost and Return per Lamb - Long Range

Sheep flock owners must either feed out or sell their feeder lambs. Feedlot owners must decide what weight, sex and/or grade feeder lambs to buy. An accurate estimate of feedlot costs is essential to make these decisions.

	<u>Typical Feedlot Costs Per Lamb</u>				<u>My Farm</u>
	<u>Weaning Lambs</u>	<u>Light Feeders</u>	<u>Medium Feeders</u>	<u>Heavy Feeders</u>	
Days in feedlot	120-140	80-100	70-90	60-80	_____
Lamb weight entering feedlot	50#	65#	75#	85#	_____
Lamb weight leaving feedlot	105#	105#	110#	115#	_____
Net lamb selling weight after shrink	100#	100#	105#	110#	_____
Net gain in weight	50#	35#	30#	25#	_____
<u>Cash Expenses</u>					
Feed	\$13.00	\$10.05	\$ 9.40	\$ 8.65	_____
Health	.60	.55	.50	.50	_____
Interest	1.50	1.35	1.35	1.40	_____
Marketing	1.00	1.00	1.05	1.10	_____
Miscellaneous	.50	.40	.40	.40	_____
Total Cash Expense	\$16.60	\$13.35	\$12.70	\$12.05	_____
<u>Other Expenses</u>					
Death loss	\$ 1.80	\$ 1.80	\$ 1.80	\$ 1.80	_____
Building and equipment charge	.40	.40	.40	.40	_____
Family labor and management	3.00	2.60	2.50	2.40	_____
Total Other Expenses	\$ 5.20	\$ 4.80	\$ 4.70	\$ 4.60	_____
TOTAL FEEDLOT COSTS	\$21.80	\$18.15	\$17.40	\$16.65	_____

The difference between the gross sales value for the market lamb and the purchase cost of the feeder is the gross margin a lamb feeder has to cover all his feedlot costs. A lamb feeder should strive for a gross margin large enough to cover all his costs. For example, a lamb feeder wants a gross margin of \$20 on every 75 pound feeder lamb he buys. Feeder lambs are offered to him at a laid in price of \$90 per hundredweight. Looking at our table, below, we note the breakeven market price for 105 pound fat lambs (110 pound lamb with a 5 pound shrink) is \$83.35 per hundredweight. If he expects the market price to be over \$66 per hundredweight or more he will probably buy the feeder lambs.

Breakeven Prices For Typical Lamb Feeding Program

<u>Laid In Feeders</u>	<u>Light Feeders</u>		<u>Medium Feeders</u>		<u>Heavy Feeders</u>	
	65#-100# net wt.		75#-105# net wt.		85#-110# net wt.	
	<u>Gross Margin</u>		<u>Gross Margin</u>		<u>Gross Margin</u>	
<u>Price Per Cwt.</u>	<u>\$15.00</u>	<u>\$20.00</u>	<u>\$15.00</u>	<u>\$20.00</u>	<u>\$14.00</u>	<u>\$18.00</u>
\$75.00	\$63.75	\$68.75	\$67.75	\$72.50	\$71.45	\$74.10
80.00	67.00	72.00	71.35	76.10	74.40	78.05
85.00	70.25	75.25	75.00	79.25	78.35	82.00
90.00	73.50	78.50	78.60	83.35	82.30	85.90
95.00	76.75	81.75	82.15	86.95	86.20	89.85
100.00	80.00	85.00	85.80	90.55	90.15	93.80

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Current information available from University of Minnesota Extension: <http://www.extension.umn.edu>

Cost and Return per Ewe - Long Range

	Average Management		Good Management		My Estimate	
Percent lamb crop weaned .	125%		150%			
Market lamb selling weight	105 lbs.		105 lbs.			
GROSS RETURN PER EWE UNIT						
Source of income:	<u>Amount</u>	<u>Value</u>	<u>Amount</u>	<u>Value</u>	<u>Amount</u>	<u>Value</u>
Market lamb sales @ 66¢ or @ 70¢/lb.	110#	\$72.60	137#	\$95.90		
Wool incentive per lamb 75¢/cwt. lamb		.80		1.05		
Cull ewe sales (16% of flock sold) @ \$18/hd.		2.85		2.85		
Wool sales (include incentive) \$1.15/lb.	8.5#	<u>9.80</u>	8.5#	<u>9.80</u>		
Total Income		\$86.05		\$109.60		
CASH COSTS PER EWE UNIT						
Purchased feed:						
Protein @ \$10/cwt.	13#	1.30	19.5#	1.95		
Mineral and salt @ \$8/cwt.	18#	1.45	22#	1.75		
Health		1.50		1.75		
Breeding (ram replacement)		1.00		1.30		
Power and fuel		.50		.60		
Shearing		1.25		1.25		
Marketing costs @ \$1/cwt.		1.35		1.50		
Repairs		1.65		1.80		
Miscellaneous		<u>1.90</u>		<u>2.10</u>		
Total Cash Costs		\$11.90		\$14.00		
Return Over Cash Costs		\$74.15		\$95.60		
HOME GROWN FEED PER EWE UNIT*						
Corn @ \$2.35 per bushel	6.2 bu**	14.55	7.2 bu**	16.90		
Hay @ \$45 per ton	1180#	26.55	1220#	27.45		
Pasture (breeding flock @ \$1/month)	5 mo.	<u>5.00</u>	5 mo.	<u>5.00</u>		
Total Home Produced Resources		\$46.10		\$49.35		
RETURN TO LABOR AND FACILITIES		\$28.05		\$46.25		

* Feed costs are for 140# ewe and her offspring. Lambs are weaned at 50# and then they are put into a drylot where they are fed out to 105 pounds net selling weight.

** Corn fed assumes about 1 bushel of additional corn gleaned from corn and grain fields.

Planning Information

TOTAL INCOME - Add market lamb, wool sales and incentive payments and cull ewe sales together.

Health - Medicine, sprays, drenches and veterinarian expenses: \$1 - \$2 per ewe unit.

Breeding - The ram depreciation charge is calculated by subtracting the selling price from the ram purchase price (e.g. \$250 - \$100 = \$150 = the amount ram depreciated in value). \$150 depreciation charge + 80 to 120 ewes bred in 2 to 3 years the ram was used = \$1.00 - \$1.30 per ewe unit.

Power and Fuel - The sheep flock share of electricity, fuel and oil: 40¢ - 75¢ per ewe unit. (Excludes manure removal costs since it is assumed that the value of manure is equal to the expense of removal.)

Shearing - Cost of shearing ewe: \$1.00 - \$1.50 per head.

Marketing Costs - Includes trucking, yardage, insurance, commission, weighing and feed: \$1 per cwt.

Repairs - This assumes a \$50 investment per ewe in buildings with an annual repair rate of 1.5 percent. Equipment investment is assumed to be \$30 with a 3 percent repair rate: \$1.65 per ewe unit.

Miscellaneous - Insurance and taxes on buildings and equipment, bedding and other general expenses: \$1 - \$3 per ewe unit.

HOME GROWN FEED - Example assumes a 125 percent and 150 percent lamb crop with 1.05 and 1.3 lambs sold per ewe. Home grown feed can supply most of the grain and forages for sheep. The annual feed requirements per ewe and feeder lamb are set forth in the table below. Assumption: start flushing ewes mid-August, turn rams in with ewes first of September, lamb in February, and sell slaughter lambs in June and July.

Type of Animal	Production and Feeding Systems				<u>Protein</u>
	<u>Pasture (5 Mo. Ewe Flock)</u>		<u>Dry Lot</u>		
	<u>Corn Equiv.</u>	<u>Hay Equiv.</u>	<u>Corn Equiv.</u>	<u>Hay Equiv.</u>	
120 pound ewe	2.5 bu.	820#	2.5 bu.	1165#	
140 pound ewe	2.5 bu.	920#	2.5 bu.	1300#	
50# to 105# fattening lamb - dry lot 115 days			3.6 bu.	165#	13#
65# to 105# fattening lamb - dry lot 80 days			2.9 bu.	120#	9#
75# to 110# fattening lamb - dry lot 70 days			2.9 bu.	95#	8#
85# to 115# fattening lamb - dry lot 60 days			2.8 bu.	75#	7#

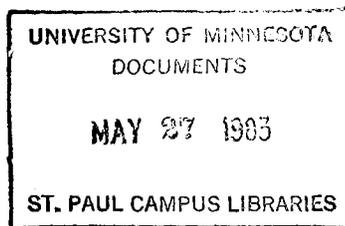
RETURN TO LABOR AND FACILITIES - Farm earnings would drop by this much if the sheep flock were discontinued, if the crops were sold and the labor and capital resources were not used for anything else. This is the amount available to pay off capital investments and/or provide a return to the operator.

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SHEEP FLOCK PLANNING GUIDE



Should I Have a Ewe Flock

The number of Minnesota farms with breeding ewes declined from 37,000 in 1935 to less than 8,000 in 1978. The total number of ewes on Minnesota farms has been cut by 75 percent during the last 20 years. The large decline in U.S. sheep and cattle numbers in recent years coupled with the shift to more productive breeding stock has increased the profitability of the sheep enterprise. These increased profits have, in turn, finally stopped the long-term decline in sheep numbers.

Therefore, we expect that returns per hour from a well-managed sheep flock will probably be equal to or greater than those from beef, dairy or hog enterprises during the next decade. Under the following locational, resource and management conditions, sheep can compete with other Minnesota livestock for farm resources.

- LOCATION**
- On farms where forage is available because of non-tillable land and/or crop residues.
- RESOURCES**
- On farms where forage feed, buildings and labor are available.
 - Where capital is limited and a fast rate of turnover is desired.
 - On farms operated by interested sheep producers where a skilled manager is able to achieve the following management goals on a commercial ewe flock.
- MANAGEMENT**
- Able to wean a 140 percent or better lamb crop each year.
 - Able to limit annual feed cost to about \$45 per ewe unit with a 140 percent lamb crop and selling slaughter lambs.
 - Innovative management that will apply money-saving technology such as using crop residues, controlling parasites and making multiple use of facilities.
 - Market lambs weighing 100 pounds at 145 days of age or 105 pounds at 160 days.
 - On a specialized sheep ranch, one man with some seasonal help should be able to handle 800 to 1,000 ewes. Ewe flocks of 100 to 200 ewes could significantly supplement farm income on many farms if given the management attention they merit.

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