

2016 Sheep Enterprise Budget



The purpose of this enterprise budget is to evaluate the profit potential of a commercial sheep enterprise in which the sale of live lambs is the primary source of income. The budget is suitable for either hair or woolled sheep. It is assumed that ewes lamb annually and that replacements are kept from the flock and bred to lamb as yearlings.

- [1] Assumptions
- [2] Income
- [3] Feed costs
- [4] Veterinary costs
- [5] Other Expenses
- [6] Capital investment
- [7] Summary



This budget was developed by Susan Schoenian, Sheep & Goat Specialist at the University of Maryland's Western Maryland Research & Education Center in Keedysville, Maryland.

The budget is password-protected to protect the formulas and structure of the spreadsheet. To request the password, contact Susan at sschoen@umd.edu.

Download spreadsheet: <https://solargrazing2026.mystagingwebsite.com/wp-content/uploads/2021/07/multipagebudget.xlsx>

2016 Sheep Enterprise Budget

Enter data in the bright yellow cells. The other cells are password-protected. Data in the white cells are automatically calculated from other values that you provide. Hover over the red triangle in the upper right corner of a cell to display useful comments about the cell.

FLOCK COMPOSITION

100	Number of ewes
3	Number of rams
5.0%	Adult death loss
20.0%	Ewe replacement rate
33.0%	Ram replacement rate
162%	PERCENT LAMB CROP RAISED (copied from below)

Percent lamb crop is the most important factor affecting profitability of a sheep enterprise. It is the number of lambs available to sell (or keep for replacement) divided by the number of ewes exposed for breeding. Use the table below to calculate it. Enter values in yellow cells. White cells are automatically calculated.

CALCULATION OF PERCENT LAMB CROP

100	Number of ewes exposed for breeding
97%	Percent ewes lambing
97	Number of ewes lambing
180%	Percent lambs born live (live lambs ÷ # ewes lambing)
175	Number of lambs born live
5.0%	Percent pre-weaning death loss
166	Number of lambs weaned
2.5%	Percent post-weaning death loss
162	Total number lambs produced
142	Number of lambs sold for market
20	Number of ewe lambs kept for replacement
162%	PERCENT LAMB CROP RAISED

2016 Sheep Enterprise Budget

In a commercial sheep enterprise, the majority of income is derived from the sale of market lambs.
For breeding stock, club lamb, fleece, and milk sales, use other budgets in this series.

INCOME CALCULATION

Item	No head	Amount	Total	Unit	Price/unit	Total	Per ewe
Market lambs: male	81	120	9703	pounds	\$ 1.80	\$ 17,466	\$ 174.66
Market lambs: ewe	61	105	6390	pounds	\$ 1.80	\$ 11,503	\$ 115.03
Cull ewes	15	160	2400	pounds	\$ 0.80	\$ 1,920	\$ 19.20
Cull rams	1	220	185	pounds	\$ 0.80	\$ 148	\$ 1.48
Wool	103	7.0	721	pounds	\$ 0.70	\$ 505	\$ 5.05
Wool LDP	103	7.0	721	pounds	\$ -	\$ -	\$ -
Unshorn lamb LDP	142	6.865	973	pounds	\$ -	\$ -	\$ -
Enter other source of income						\$ -	\$ -
Enter other source of income						\$ -	\$ -
Total income						\$ 31,541	\$ 315.41

Enter data in the yellow cells. The other cells are password-protected.
Data in the white cells are automatically calculated from other values in the spreadsheet.
Hover over the red triangle in the upper right corner of the cell to display useful comments.

2016 Sheep Enterprise Budget

Feed accounts for a significant portion of the expense of raising sheep, as much as ~70 percent of the total. As a result, it is very important to enter realistic data and shop around for the best feed costs. There are also different ways to feed sheep, so feed costs can vary considerably among farms and ranches. This worksheet can be used to develop a feed budget for the flock.

FEED COSTS

EWES	Head	Amount	Unit	Cost/unit	Total	Per ewe cost
Legume hay	103	0.15	ton	\$ 160	\$ 2,472	\$ 24.72
Grass hay	103	0.15	ton	\$ 120	\$ 1,854	\$ 18.54
Grain	100	132	pound	\$ 0.075	\$ 990	\$ 9.90
Protein supplement	100	33	pound	\$ 0.18	\$ 594	\$ 5.94
By-product feed	100	0	pound	\$ 0.16	\$ -	\$ -
Silage	100	0	ton	\$ 50.00	\$ -	\$ -
TMR	100	0	pound	\$ 0.10	\$ -	\$ -
Minerals	103	12	pound	\$ 0.50	\$ 618	\$ 6.18
Annual pasture planting		0	acres	\$ 50.00	\$ -	\$ -
Pasture maintenance		20	acres	\$ 50.00	\$ 1,000	\$ 10.00
Pasture rental		0	acres	\$ 75.00	\$ -	\$ -
Protein tubs		0	tubs	\$ 50.00	\$ -	\$ -
Other feed purchase					\$ -	\$ -
Total ewe feed costs					\$ 7,528	\$ 75.28

There are different ways to finish lambs for market and the economics of different feeding systems vary. If lambs are sold at weaning, the only additional cost may be creep feeding.

LAMBS	Head	Amount	Unit	Cost/unit	Total	Per ewe cost
Creep feed (10-60 days)	166	40	pound	\$ 0.16	\$ 1,061.57	\$ 10.62
Finishing ration	166	320	pound	\$ 0.09	\$ 4,777.06	\$ 47.77
By-product feed	166	0	pound	\$ 0.16	\$ -	\$ -
Hay	166	0	ton	\$ 160.00	\$ -	\$ -
Silage	166	0	ton	\$ 32.00	\$ -	\$ -
Minerals	166	0	pound	\$ 0.50	\$ -	\$ -
Annual pasture planting		0	acres	\$ 50.00	\$ -	\$ -
Pasture maintenance		0	acres	\$ 30.00	\$ -	\$ -
Pasture rental		0	acres	\$ 50.00	\$ -	\$ -
Milk replacer		2	bags	\$ 45.00	\$ 90.00	\$ 0.90
Other feed purchase		0			\$ -	\$ -
Total lamb feed cost					\$ 5,838.62	\$ 58.39

TOTAL FEED COSTS	\$ 13,367	\$ 133.67
------------------	-----------	-----------

Enter data in the yellow cells. The other cells are password-protected.
Data in the white cells are automatically calculated from other values in the spreadsheet.
Hover over the red triangle in the upper right corner of the cell to display useful comments.

2016 Sheep Enterprise Budget

While health and veterinary costs should not account for a large percentage of the total expenditures in a commercial sheep enterprise, this worksheet can be useful for planning a whole flock health program.

Expenditure	No head	Amount	Unit	Cost/unit	Total cost	Per ewe cost
Deworming: adults	103	1	doses	\$ 0.75	\$ 77	\$ 0.77
Deworming: lambs	162	1	doses	\$ 0.75	\$ 121	\$ 1.21
Coccidia treatment: lambs	162	1	doses	\$ 1.00	\$ 162	\$ 1.62
Other parasite control					\$ -	\$ -
Clostridial vaccination: adults	103	1	doses	\$ 0.50	\$ 52	\$ 0.52
Clostridial vaccination: lambs	162	2	doses	\$ 0.50	\$ 162	\$ 1.62
Abortion vaccination: ewes	100	1	doses	\$ 0.50	\$ 50	\$ 0.50
Other vaccination	0	0	doses	\$ -	\$ -	\$ -
Other vaccination	0	0	doses	\$ -	\$ -	\$ -
Veterinary medicine					\$ 300	\$ 3.00
Professional veterinary services					\$ 500	\$ 5.00
Other health and veterinary costs					\$ 50	\$ 0.50
Other health and veterinary costs					\$ 50	\$ 0.50
Total health and veterinary costs					\$ 1,523	\$ 15.23

Enter data in the yellow cells. The other cells are password-protected.

Data in the white cells are automatically calculated from other values in the spreadsheet.

Hover over the red triangle in the upper right corner of the cell to display useful comments.

TM

2016 Sheep Enterprise Budget

OTHER EXPENSES

Other costs	Number	Unit	Cost/unit	Total	Per ewe
Supplies	100	head	\$ 5.00	\$ 500	\$ 5.00
Shearing	103	head	\$ 5.00	\$ 515	\$ 5.15
Bedding	100	head	\$ 5.00	\$ 500	\$ 5.00
Ram replacement	1.0	head	\$ 500.00	\$ 495	\$ 4.95
Hauling	158	head	\$ 5.00	\$ 788	\$ 7.88
Marketing	158	head	\$ 5.00	\$ 788	\$ 7.88
American lamb check-off - live animal	18679	pounds	\$ 0.007	\$ 131	\$ 1.31
American lamb check-off - first handler	4	head	\$ 0.420	\$ 2	\$ 0.02
Livestock guardians (feed, veterinary care)				\$ 500	\$ 5.00
Enter other cost				\$ -	\$ -
Enter other cost				\$ -	\$ -
Enter other cost				\$ -	\$ -
Enter other cost				\$ -	\$ -
Enter other cost				\$ -	\$ -
Total other costs				\$ 4,218	\$ 42.18

Enter data in the yellow cells. The other cells are password-protected.

Data in the white cells are automatically calculated from other values in the spreadsheet.

Hover over the red triangle in the upper right corner of the cell to display useful comments.

2016 Sheep Enterprise Budget

CAPITAL PURCHASES

PURCHASE	Number	Cost	Unit	Total	Per ewe cost
Breeding ewes	100	\$ 250	head	\$ 25,000	\$ 250
Breeding ram(s)	3	\$ 500	head	\$ 1,500	\$ 15
Livestock guardian(s)	2	\$ 500	head	\$ 1,000	\$ 10
Pasture establishment, improvement	10.0	\$ 100	acre	\$ 1,000	\$ 10
Fencing				\$ 10,000	\$ 100
Housing, including lots and pens				\$ 20,000	\$ 200
Watering system(s)				\$ 5,000	\$ 50
Handling system				\$ 2,000	\$ 20
Feeders (fenceline, hay, grain, mineral)				\$ 2,000	\$ 20
Feed storage (bulk bin, silo)				\$ 2,500	\$ 25
Farm machinery (tractor, mower, manure spreader)				\$ 1,000	\$ 10
Supplies and small equipment				\$ 200	\$ 2
Enter other investment cost				\$ -	\$ -
Enter other investment cost				\$ -	\$ -
Enter other investment cost				\$ -	\$ -
TOTAL INVESTMENT				\$ 71,200	\$ 712

Enter data in the yellow cells. The other cells are password-protected.

Data in the white cells are automatically calculated from other values in the spreadsheet.

Hover over the red triangle in the upper right corner of the cell to display useful comments.

2016 Sheep Enterprise Budget

BUDGET SUMMARY

Income		Total	Per ewe	%
Market lambs		\$ 28,969	\$ 289.69	91.8%
Cull ewes and rams		\$ 2,068	\$ 20.68	6.6%
Wool		\$ 505	\$ 5.05	1.6%
Other income		\$ -	\$ -	0.0%
Total Income		\$ 31,541	\$ 315.41	
Expenses		Total	Per ewe	%
Feed costs		\$ 13,367	\$ 133.67	70%
Ewe feed cost	\$ 7,528		\$ 75.28	39%
Lamb feed cost	\$ 5,839		\$ 58.39	31%
Veterinary costs		\$ 1,523	\$ 15.23	8%
Other costs		\$ 4,218	\$ 42.18	22%
Total expenses		\$ 19,108	\$ 191.08	
Profit		\$ 12,433	\$ 124.33	
Expense Ratio: Expenses ÷ Income		61%		
Total Investment		\$ 71,200	\$ 712.00	
Years to Repay Investment		5.73		
Rate of Return on Investment (ROI)		17%		