

EBB-SR1-02

Sheep-Range Ewes on Range and Lambs on Drylot

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Background and Assumptions

This budget presents both the average costs and returns per ewe and total costs and returns for a typical 1,000-head sheep range operation. The summer forage source is public range; winter-time feeding is required. Lambs are weaned before ewes are moved out to summer range, fattened in drylot, and sold in June.

Livestock Investment

Livestock investment is 1,000 ewes, 30 rams, 2 horses, and 2 dogs. Ewes have a useful life of 5 years after they are placed in the breeding herd. The culling rate is 15 percent and the ewes have a 5 percent death loss. Ewe replacements are purchased, and 8 percent of them are either culled or die. The ranch also purchases rams and replaces them every 4 years. The weaned lamb crop is 130 percent of ewes wintered and the lamb death-loss rate in drylot is 1 percent.

Machinery and Equipment

Machinery and equipment investment is 60 percent use of a pickup, 30 percent use of a 2-ton water truck, 40 percent use of a tractor and scraper, and 100 percent use of a camp trailer, feed wagon, and miscellaneous equipment and tools. Values on machinery and equipment are calculated at 50 percent of new replacement cost to reflect typically aged, but functional ranch equipment.

Buildings and Improvements

Buildings and improvements are a lambing shed, lambing pens, holding pens, fencing, feed bunks, water troughs, and grain storage facilities. The sheep enterprise uses about 15 percent of the ranch water system.

Shed construction uses treated posts, 1- by 12-inch rough lumber, and a treated canvas exterior. A total of 120 4- by 4-foot jugs are supplied with free-flowing water through notched aluminum pipe. Lighting is also provided.

Pen facilities are 20 16- by 16-foot pens that will house 10 ewes with singles or 6 ewes with twins, 16 16- by 30-foot medium group pens, and four 48- by 120-foot pens for large groups of ewes and lambs. The next step is out to 4- or 5-acre

fields enclosed by moveable woven wire. Each of the group pens is equipped with windbreak fences on three sides (north, east, and west), out-sheds, wood feeders, and creep feeders. Water is provided in large metal tubs. The out-sheds are 2- by 6-inch construction with galvanized metal roofing. Straw in the sheds provides dry bedding for lambs and ewes. Buildings and improvements are valued at 80 percent of new replacement cost.

Management Practices

Lambing begins in late January and continues through February. Lambs are weaned in March and moved into drylot where they are fattened and eventually marketed in June. Lambs are creep fed initially and started on a hay supplement in April. Quantities fed per lamb from March 1 through June average 1.5 pounds of hay and 2 pounds of grain per day. Monthly feed quantities for the herd are listed in Table 3.

Ewes are trailed from the ranch to public range and graze on public range from April 15 to December 31. The ewes are on the ranch from January 1 through April 15 and are fed an average of 6 pounds of hay per day. They are fed an additional 0.75 pound of grain per day during lambing in February and March. Ewes are bred in September. The price on all feed consumed reflects the purchase price plus transportation costs.

Trucking to transport sheep is hired as needed throughout the year. Lambs are transported to market in June, while rams are transported to range in September for breeding. Before breeding, ewe replacements are transported from the place of purchase to where they'll be bred. Trucking is labeled hauling cost in the budget.

Veterinary care is minimal. Ewes receive a vibrio/EAE vaccination just before lambing, while the lambs are given two vaccinations for treatment of enterotoxemia.

Labor is provided by the owner-operator and one herdsman with the support of additional labor during lambing season. The hired labor rate is \$8.50 per hour and includes payroll taxes and employee benefits paid by the producer.

**Table1: Sheep - Range
Ewes on Range and Lambs on Drylot**

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	Weight Each	Unit	Total Number of Head or Units	Price or Cost/Unit	Total Value	Value or Cost/Head	Your Value
1. Gross Receipts							
Fat lambs	130.00	lb	1140	0.76	112,632.00	112.63	_____
Cull ewes	160.00	lb	150	0.29	6960.00	6.96	_____
Cull rams	225.00	lb	5	0.23	258.75	0.26	_____
Cull replacement ewes	140.00	lb	16	0.76	1702.40	1.70	_____
Wool - ewe	10.00	lb	1000	0.60	6000.00	6.00	_____
Wool - ram	11.00	lb	30	0.60	198.00	0.20	_____
Total Receipts					\$127,751.15	\$127.75	_____
2. Operating Costs							
Alfalfa hay		ton	406.35	85.00	34,539.75	34.54	_____
Feed barley		cwt	1839.44	5.50	10,116.92	10.12	_____
Corn		cwt	1454.89	5.60	8147.40	8.15	_____
Salt and minerals		lb	8040.00	0.10	804.00	0.80	_____
Federal range		AUM	1724.00	1.35	2327.40	2.33	_____
Pasture		AUM	30.00	12.00	360.00	0.36	_____
Hauling		head	1000.00	1.24	1240.00	1.24	_____
Marketing		head	1000.00	6.08	6080.00	6.08	_____
Shearing - ewe		head	1000.00	2.50	2500.00	2.50	_____
Shearing - ram		head	30.00	4.50	135.00	0.14	_____
Sheep Commission		head	1000.00	1.03	1030.00	1.03	_____
Western range association		head	1000.00	2.44	2440.00	2.44	_____
Camp supplies		head	1000.00	4.50	4500.00	4.50	_____
Dog food		head	732.00	0.50	366.00	0.37	_____
Veterinary Medicine	\$		3000.00	1.00	3000.00	3.00	_____
Machinery (fuel, lubrication, repair)	\$		328.53	1.00	328.53	0.33	_____
Vehicles (fuel, repair)	\$		1958.70	1.00	1958.70	1.96	_____
Equipment (repair)	\$		225.00	1.00	225.00	0.23	_____
Housing and Improvements (repair)	\$		2172.00	1.00	2172.00	2.17	_____
Hired Labor		hour	2920.00	8.50	24,820.00	24.82	_____
Owner Labor		hour	568.00	8.50	4828.00	4.83	_____
Interest on Operating Capital	\$		29,495.50	0.06	1843.47	1.84	_____
Total Operating Costs					\$113,762.17	\$113.76	_____
3. Income Above Operating Costs					\$13,988.98	\$13.99	_____
4. Ownership Costs							
Capital Recovery:							
Purchased Livestock	\$		8997.16	1.00	8997.16	9.00	_____
Housing and Improvements	\$		4989.25	1.00	4989.25	4.99	_____
Machinery	\$		320.59	1.00	320.59	0.32	_____
Equipment	\$		2433.15	1.00	2433.15	2.43	_____
Vehicles	\$		2033.60	1.00	2033.60	2.03	_____
Interest on Retained Livestock	\$		70,000.00	0.07	4725.00	4.72	_____
Taxes and Insurance	\$		404.76	1.00	404.76	0.40	_____
Overhead	\$		2500.00	1.00	2500.00	2.50	_____
Total Ownership Costs					\$26,403.50	\$26.40	_____
5. Total Costs					\$140,165.67	\$140.17	_____
6. Returns to Risk and Management					-\$12,414.52	-\$12.41	_____

Table 2: Monthly Summary of Returns and Expenses.

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	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Value
Production:													
Fat lambs												112632	112632
Cull ewes										6960			6960
Cull rams										259			259
Cull replacement ewes										1702			1702
Wool - ewe										6000			6000
Wool - ram										198			198
Total Receipts	0	0	0	0	0	0	0	0	0	15119	0	112632	127751
Operating Inputs:													
Alfalfa hay							8313	7548	8313	6005	2180	2180	34540
Feed barley								1420	2489	2069	2069	2069	10117
Corn								967	2009	1724	1724	1724	8147
Salt and minerals	67	67	67	67	67	67	67	67	67	67	67	67	804
Federal range	270	270	278	278	278	278				135	270	270	2327
Pasture	72	72								72	72	72	360
Hauling		62										1178	1240
Marketing												6080	6080
Shearing - ewe										2500			2500
Shearing - ram										135			135
Sheep Commission			1030										1030
Western range association	205	205	205	203	203	203	203	203	203	203	203	205	2440
Camp supplies	450	450	450	450	450	450	135	135	180	450	450	450	4500
Dog food	31	30	31	30	31	30	31	30	31	30	31	30	366
Veterinary Medicine										3000			3000
Machinery (Fuel,Lube,Repair)	27	27	27	27	27	27	27	27	27	27	27	27	329
Vehicles (Fuel and Repair)	163	163	163	163	163	164	163	163	163	163	163	163	1959
Equipment (Repair)	19	19	19	19	19	19	19	19	19	19	19	19	225
Housing, Improvements (Repair)	181	181	181	181	181	182	181	181	181	181	181	181	2172
Taxes and Insurance							405						405
Hired Labor	1615	1615	1615	1615	1615	1615	2975	2975	2295	2295	2295	2295	24820
Total Costs	3100	3161	4066	3033	3034	3035	12518	13735	15977	19075	9751	17010	107495
Net Returns	-3100	-3161	-4066	-3033	-3034	-3035	-12518	-13735	-15977	-3956	-9751	95622	20256

Table 3: Monthly Feed Requirements.

Feed	Units	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Alfalfa hay													
Ewes	ton	0	0	0	0	0	0	93	84	93	45	0	0
Lambs	ton	0	0	0	0	0	0	0	0	0	26	26	26
Rams	ton	0	0	0	0	0	0	4	4	4	0	0	0
Horses	ton	0	0	0	0	0	0	1	1	1	0	0	0
Feed barley													
Ewes	cwt	0	0	0	0	0	0	0	126	76	0	0	0
Lambs	cwt	0	0	0	0	0	0	0	132	376	376	376	376
Corn													
Ewes	cwt	0	0	0	0	0	0	0	84	51	0	0	0
Lambs	cwt	0	0	0	0	0	0	0	89	308	308	308	308
Salt and minerals													
Federal range	lb	670	670	670	670	670	670	670	670	670	670	670	670
Pasture													
Ewes	AUM	200	200	200	200	200	200	0	0	0	100	200	200
Rams	AUM	0	0	6	6	6	6	0	0	0	0	0	0
Hired Labor													
Rams	AUM	6	6	0	0	0	0	0	0	0	6	6	6

Table 4: Investment Summary.**EBB-SR1-02**

	Purchase Price	Salvage/Cull Value	Livestock Share	Useful Life	Annual Taxes and Insurance	Annual Capital Recovery ¹
Buildings, Improvements and Equipment						
Lambing shed	\$38,800.00	\$0.00	100	25	\$116.40	\$3254.81
Water system	\$5700.00	\$0.00	100	20	\$17.10	\$527.63
Grain storage	\$13,400.00	\$1340.00	100	20	\$44.22	\$1206.80
Feed wagon	\$2000.00	\$0.00	100	10	\$6.00	\$281.47
Trailer	\$5000.00	\$0.00	100	20	\$15.00	\$462.83
Miscellaneous	\$12,000.00	\$0.00	100	10	\$36.00	\$1688.84
Total	\$76,900.00				\$234.72	\$7422.39
Purchased Livestock						
Ewe replacements	\$29,160.00	\$10,800.00	100	5		\$5176.90
Rams	\$12,000.00	\$1050.00	100	4		\$3285.40
Dogs	\$700.00	\$0.00	100	8		\$116.09
Horses	\$3600.00	\$1200.00	100	10		\$418.77
Total	\$45,460.00					\$8997.16
Retained Livestock						
Ewes	\$100,000.00	\$40,000.00	100			\$4725.00 ²
Total	\$100,000.00					\$4725.00²
Machinery and Vehicles						
Tractor - 30hp	\$9200.00	\$2000.00	40	20	\$13.44	\$320.59
Pickup 4x4 3/4 ton	\$17,000.00	\$3700.00	60	12	\$93.15	\$1141.20
Truck 2 ton	\$23,200.00	\$5000.00	30	10	\$63.45	\$892.40
Total	\$49,400.00				\$170.04	\$2354.19

¹ Annual capital recovery is the method of calculating depreciation and interest recommended by the National Task Force on Commodity Costs and Returns Measurement Methods.

² Interest on average investment.

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