

Beef Backgrounding Planning Budget

Using this planning budget, beef backgrounders may estimate their costs and returns for 2022. Table 1 presents estimates for steer calves purchased and backgrounded in Missouri. Assumptions were based on price forecasts as of October 2021. Detailed inputs, feed requirements and machinery investments are summarized in Tables 2, 3, 4 and 5. The production practices used to develop these cost estimates are common in Missouri beef farms. Use the “Your estimate” column to plan your operation’s costs and returns for 2022.

Table 1. Missouri beef steer backgrounding planning budget for 2022.

	Winter backgrounding per steer ¹	Pasture backgrounding per steer ¹	Your estimate
Income			
Market steer sales	1,305.47	1,255.50	
Less death loss (1 percent)	13.05	12.56	
Total income	1,292.41	1,242.95	
Operating costs			
Purchased steer	996.45	1,054.21	
Pasture (rental rate)	0.00	38.22	
Feed, mineral and stored forage	145.72	68.93	
Labor	43.75	26.25	
Veterinary, drugs and supplies	18.00	15.00	
Marketing and hauling	32.64	31.39	
Machinery and utilities	58.36	26.34	
Livestock facility repair	3.75	0.75	
Professional fees (legal, accounting, etc.)	1.00	1.00	
Miscellaneous	3.50	3.50	
Operating interest	16.01	16.15	
Total operating costs	1,319.17	1,281.74	
Ownership costs			
Depreciation on livestock facilities	3.87	0.62	
Interest on livestock facilities	2.74	0.44	
Insurance and taxes on capital items	4.03	3.07	
Total ownership costs	10.64	4.12	
Total costs	1,329.81	1,285.86	
Income over operating costs	-26.76	-38.80	
Income over total costs	-37.40	-42.92	
Pounds of gain per steer purchased	216.85	177.25	
Feed cost per pound gain	0.67	0.60	
Breakeven steer price per pound	1.65	1.68	

¹ Totals may not sum due to rounding.

Table 2. Input assumptions used in beef steer winter backgrounding planning budget for 2022.

Selected input quantities	Per unit	Selected input prices	Dollars per unit
Steer purchase weight, pounds	590	Steer purchase price, per hundredweight	168.89
Market steer sale weight, pounds	815	Market steer sale price, per hundredweight	160.18
Labor, hours per head	2.5	Labor cost, per hour	17.50
Feeding period, days	105		
Average daily gain, pounds	2.14		

Table 3. Input assumptions used in beef steer pasture backgrounding planning budget for 2022.

Selected input quantities	Per unit	Selected input prices	Dollars per unit
Steer purchase weight, pounds	590	Steer purchase price, per hundredweight	178.68
Market steer sale weight, pounds	775	Market steer sale price, per hundredweight	162.00
Labor, hours per head	1.5	Labor cost, per hour	17.50
Feeding period, days	105		
Average daily gain, pounds	1.76		

Table 4. Feed and stored forage in beef steer backgrounding planning budgets for 2022, on a per steer basis.

Feed description	Cost per unit	Winter backgrounding ¹		Pasture backgrounding ²	
		Pounds	Dollars	Pounds	Dollars
Mixed hay, per ton	85.00	1,221	51.89		
Corn, per bushel	5.25	754	70.69		
Protein supplement, per ton	220.00	107	11.77	525	57.75
Salt and minerals, per ton	800.00	27	10.80	27	10.80
Limestone, per hundredweight	9.50	6	0.57	4	0.38
Total		2,115	145.72	556	68.93

¹ Winter backgrounding ration assumes 105 days on feed and 2.14 pound average daily gain for a steer.

² Pasture backgrounding ration assumes 105 days on feed and 1.76 pound average daily gain for a steer.

Table 5. Machinery assumptions used in beef steer backgrounding planning budgets for 2022.

Description	Cost per hour	Winter backgrounding ¹		Pasture backgrounding ²	
		Hours	Dollars	Hours	Dollars
Tractor; 105 MFWD	44.88	25	1,122.00		
Truck	30.00	20	600.00	10.0	300.00
Livestock trailer	28.00	8	224.00	8.0	224.00
4-wheeler	10.00	40	400.00	52.5	525.00
Total			2,346.00		1,049.00
Total per steer			55.86		23.84

¹ Machinery needs for winter backgrounding budget are based on 42 steers.

² Machinery needs for pasture backgrounding budget are based on 44 steers.

Abbreviations: MFWD = mechanical front-wheel drive tractor

Farmers can also customize this budget to fit their own operations by using the [Missouri Beef Enterprise Tool](https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/Beef/Docs/MissouriBeefEnterprise.xlsx) (<https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/Beef/Docs/MissouriBeefEnterprise.xlsx>). Download the spreadsheet tool to keep an electronic copy of your cost and return estimates in Missouri.