

Missouri Beef Cow-Calf Planning Budget

Using this planning budget, beef cow-calf farmers may estimate their costs and returns for 2024. Table 1 presents estimates for a cow-calf operation (50-cow herd size and purchased replacements) in Missouri with either a fall or spring calving season. Assumptions were based on price forecasts as of September 2023. Detailed assumptions and feed requirements are summarized in Tables 2, 3 and 4. 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 2024.

Table 1. Missouri beef cow-calf planning budget for 2024.

	Fall calving per cow ¹	Spring calving per cow ¹	Your estimate
Income			
Steer calf sales	791.88	775.29	
Heifer calf sales	675.47	662.14	
Cull cow sales	150.00	175.00	
Total income	1,617.35	1,612.44	
Operating costs			
Pasture (rental rate)	198.36	198.36	
Feed, mineral and stored forage	491.85	414.78	
Labor	141.60	141.60	
Veterinary, drugs and supplies	37.50	37.50	
Marketing	40.43	40.31	
Machinery and utility costs	124.58	115.24	
Livestock facility repairs	8.50	8.50	
Cow replacement	325.00	375.00	
Bull cost	35.00	35.00	
Professional fees (legal, accounting, etc.)	1.00	1.00	
Miscellaneous expense	6.00	6.00	
Operating interest	49.18	45.32	
Total operating costs	1,459.01	1,418.61	
Ownership costs			
Depreciation on facilities and equipment	9.10	9.10	
Interest on breeding stock, facilities and equipment	234.85	239.35	
Insurance/taxes on breeding stock and capital items	48.52	49.02	
Total ownership costs	292.47	297.47	
Total costs	1,751.48	1,716.08	
Income over operating costs	158.35	193.83	
Income over total costs	-134.12	-103.64	

¹ Totals may not sum due to rounding.

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Table 2. Income assumptions used in Missouri beef cow-calf planning budget for 2024.

Category	Percent	Weight (pounds)	Price per cwt	Calf crop (percent weaned)	Dollars per cow
Fall calving					
Steer	50	590	305.04	88	791.88
Heifers	50	550	279.12	88	675.47
Cull cows	12	1,250	100.00		150.00
Spring calving					
Steer	50	590	309.19	85	775.29
Heifers	50	550	283.27	85	662.14
Cull cows	14	1,250	100.00		175.00

Abbreviations: cwt = hundredweight

Table 3. Other assumptions used in Missouri beef cow-calf planning budget for 2024.

Selected input quantities	Per unit	Selected input prices	Dollars per unit
Labor, hours per cow	8	Labor cost, per hour	17.70
Fall calving cows replaced, percent	13	Heifer replacement value, per head	2,500.00
Spring calving cows replaced, percent	15	Bull value, per head	4,000.00

Table 4. Feed requirements in Missouri beef cow-calf planning budget for 2024, on a per cow basis.

	Cost per unit	Cow (units)	Calf (units)	Bull ² (units)	Total units	Total cost per cow ³
Fall calving						
Pasture, per animal unit equivalent	18.00	10.5 ¹		0.5	11.0	198.36
Harvested forage, per pound	0.08	4,392.0	510.0	240.0	5,142.0	411.36
Protein supplement, per pound	0.1375	180.0		7.2	187.2	25.74
Salt and mineral mix, per pound	0.6	91.3			91.3	54.75
					Total	690.21
Spring calving						
Pasture, per animal unit equivalent	18.00	10.5 ¹		0.5	11.0	198.36
Harvested forage, per pound	0.08	4,099.5		240.0	4,339.5	347.16
Protein supplement, per pound	0.1375	90.0		3.6	93.6	12.87
Salt and mineral mix, per pound	0.6	91.3			91.3	54.75
					Total	613.14

¹ Cow and calf requirements are combined for pasture animal unit equivalents.² Bull feed units are based on 4 percent of its total need being allocated to cow-calf enterprise.³ Totals may not sum due to rounding.

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) (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 for a cow-calf (spring or fall calving), heifer or backgrounding (drylot or pasture) operation in Missouri.

The publication revises and replaces MU Extension publications G679, Southern Missouri Beef Cow-Calf Planning Budget, and G680, Northern Missouri Beef Cow-Calf Planning Budget



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