

# Northern Missouri Beef Cow-Calf Planning Budget

This budget presents information useful to beef farmers. Table 1 provides estimates for the 2021 year for a cow-calf operation (50-cow herd size and purchased replacements) in Northern Missouri for a fall and spring calving season. Assumptions were based on price forecasts as of October 2020. Detailed assumptions and feed requirements are summarized in Tables 2, 3 and 4. The production practices used to develop these cost estimates are common for beef farms in Missouri. Farmers are encouraged to modify this budget to fit their operation.

**Table 1. Northern Missouri beef cow-calf planning budget for 2021.**

	Fall calving per cow <sup>1</sup>	Spring calving per cow <sup>1</sup>	Your estimate
<b>Income</b>			
Steer calf sales	387.14	396.13	
Heifer calf sales	320.33	329.80	
Cull cow sales	90.00	105.00	
Total income	797.47	830.93	
<b>Operating costs</b>			
Pasture (rental rate)	147.52	147.52	
Feed and stored forage	236.32	190.98	
Labor	124.00	124.00	
Veterinary, drugs and supplies	38.00	38.00	
Marketing	19.94	20.77	
Machinery and utility costs	101.48	94.29	
Livestock facility repairs	8.00	8.00	
Cow replacement	201.50	232.50	
Bull cost	50.00	50.00	
Professional fees (legal, accounting, etc.)	1.00	1.00	
Miscellaneous	6.00	6.00	
Operating interest	16.79	15.61	
Total operating costs	950.54	928.67	
<b>Ownership costs</b>			
Depreciation on facilities and equipment	7.92	7.92	
Interest on breeding stock, facilities and equipment	82.21	83.60	
Insurance/taxes on breeding stock and capital items	33.73	34.04	
Total ownership costs	123.86	125.56	
Total costs	1,074.40	1,054.23	
<b>Income over operating costs</b>	<b>-153.07</b>	<b>-97.74</b>	
<b>Income over total costs</b>	<b>-276.92</b>	<b>-223.30</b>	

<sup>1</sup> Totals may not sum due to rounding.

**Table 2. Income assumptions used in Northern Missouri beef cow-calf planning budget for 2021.**

Category	Percent	Weight (pounds)	Price per cwt	Calf crop (percent weaned)	Dollars per cow
<b>Fall calving</b>					
Steer	50	580	151.70	88	387.14
Heifers	50	540	134.82	88	320.33
Cull cows	12	1,250	60.00		90.00
<b>Spring calving</b>					
Steer	50	590	157.98	85	396.13
Heifers	50	550	141.09	85	329.80
Cull cows	14	1,250	60.00		105.00

Abbreviations: cwt = hundredweight

**Table 3. Other assumptions used in Northern Missouri beef cow-calf planning budget for 2021.**

Selected input quantities	Per unit	Selected input prices	Dollars per unit
Labor, hours	8	Labor cost, per hour	15.50
Fall calving cows replaced, percent	13	Heifer replacement value, per head	1,550.00
Spring calving cows replaced, percent	15	Bull value, per head	3,500.00

**Table 4. Feed requirements in Northern Missouri beef cow-calf planning budget for 2021, on a per cow basis.**

	Cost per unit	Cow (units)	Calf (units)	Bull <sup>2</sup> (units)	Total units	Total cost per cow <sup>3</sup>
<b>Fall calving</b>						
Pasture, per animal unit equivalent	16.00	8.7 <sup>1</sup>		0.5	9.2	147.52
Harvested forage, per pound	0.04	3,660.0	425.0	200.0	4,285.0	171.40
Protein supplement, per pound	0.0925	300.0		7.2	307.2	28.42
Salt and mineral mix, per pound	0.40	91.3			91.3	36.50
					<b>Total</b>	<b>383.84</b>
<b>Spring calving</b>						
Pasture, per animal unit equivalent	16.00	8.7 <sup>1</sup>		0.5	9.2	147.52
Harvested forage, per pound	0.04	3,445.5		200.0	3,645.5	145.82
Protein supplement, per pound	0.0925	90.0		3.6	93.6	8.66
Salt and mineral mix, per pound	0.40	91.3			91.3	36.50
					<b>Total</b>	<b>338.50</b>

<sup>1</sup> Cow and calf requirements are combined for pasture animal unit equivalents.

<sup>2</sup> Bull feed units are based on 4 percent of its total need being allocated to cow-calf enterprise.

<sup>3</sup> Totals may not sum due to rounding.

Farmers can develop custom enterprise budget by using the Missouri Beef Enterprise Tool (<https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/Beef/Docs/MissouriBeefEnterprise.xlsx>). This spreadsheet tool allows users to make an enterprise budget for a cow-calf (spring or fall calving), heifer or backgrounding (drylot or pasture) operation.



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