

# Dairy Heifer Planning Budget

Using this planning budget, farmers raising dairy heifers may estimate their costs and returns for 2024. Table 1 presents estimates for dairy calves purchased at birth, bred and sold at 24 months in Missouri. Assumptions were based on price forecasts as of September 2023. Detailed inputs, feed requirements and investments are summarized in Tables 2, 3 and 4. The production practices used to develop these cost estimates are common in Missouri. Use the “Your estimate” column to plan your operation’s costs and returns for 2024.

**Table 1. Missouri dairy heifer planning budget for 2024.**

	Per heifer sold <sup>1</sup>	Your estimate
<b>Income</b>		
Springer heifer sales (0.95 head)	1,662.50	
Cull heifer sales (0.025 head)	35.75	
Yearling heifer sales (0.025 head)	19.94	
Less death loss (4 percent) of purchased calves	-2.00	
<b>Total income</b>	<b>1,716.19</b>	
<b>Operating costs</b>		
Purchased heifer calf and interest	59.36	
Feed (birth to 24 months of age)	1,143.30	
Labor	177.00	
Veterinary, drugs and supplies	25.00	
Breeding costs for artificial insemination services	47.50	
Transportation and marketing	20.00	
Utilities, fuel and oil	20.00	
Building and equipment repairs	10.50	
Miscellaneous	18.00	
Operating interest	65.76	
<b>Total operating costs</b>	<b>1,586.41</b>	
<b>Ownership costs</b>		
Depreciation on buildings and equipment	55.80	
Interest on buildings and equipment	51.98	
Insurance and taxes on buildings and equipment	15.53	
<b>Total ownership costs</b>	<b>123.30</b>	
<b>Total costs</b>	<b>1,709.71</b>	
<b>Income over operating costs</b>	<b>129.77</b>	
<b>Income over total costs</b>	<b>6.47</b>	
Total cost per day per heifer sold	2.29	
Total cost per pound of gain per heifer sold	1.38	
Springer heifer breakeven price per head	1,743.19	

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

Written by **Adauto Rocha Jr.** and **Ryan Milhollin**, Agricultural Business and Policy; **Reagan Bluel** and **Chloe Collins**, Field Specialists in Dairy

**Table 2. Input assumptions used in dairy heifer planning budget for 2024.**

Selected input quantities	Quantity	Selected input prices	Dollars per unit
Cull heifer sale weight, pounds	1,300	Cull heifer sale price, per hundredweight	110.00
Yearling heifer sale weight, pounds	725	Yearling heifer sale price, per hundredweight	110.00
Labor, hours	10	Springer heifer sale price, per head	1,750.00
		Labor cost, per hour	17.70
		Heifer purchase price	50.00

**Table 3. Feed requirements for dairy heifer planning budget for 2024.**

Birth to 6 months (90 to 400 pounds)		Pre-weaning ration (90 to 180 pounds)		Transition ration (180 to 235 pounds)		Early growing ration (235 to 400 pounds)	
Feed description	Cost per unit	Units	Dollars <sup>1</sup>	Units	Dollars <sup>1</sup>	Units	Dollars <sup>1</sup>
Milk replacer, per pound	1.4400	50	72.00				
Calf starter, per pound	0.3100	100	31.00	100	31.00		
Alfalfa hay, per pound	0.1600	20	3.20	90	14.40	225	36.00
Calf grower, per pound	0.2900			50	14.50	450	130.50
Grass hay, per pound	0.0825					225	18.56
Pasture, per animal unit month	18.0000					0.4	7.35
<b>Feed cost per period</b>		<b>106.20</b>		<b>59.90</b>		<b>192.41</b>	
<b>Total feed costs<sup>2</sup></b>		<b>358.51</b>					
6 to 12 months (400 to 725 pounds)		Winter ration		Spring/Fall ration		Summer ration	
Feed description	Cost per unit	Units	Dollars <sup>1</sup>	Units	Dollars <sup>1</sup>	Units	Dollars <sup>1</sup>
Corn gluten feed, per pound	0.1150	525	60.38			270	31.05
Corn, cracked, per pound	0.1045	387	40.43	252	26.33	234	24.44
Soybean hulls, per pound	0.1125	263	29.53	360	40.50	270	30.38
Grass hay, per pound	0.0825	1,350	111.38				
Mineral, per pound	0.6000	36	21.60	36	21.60	36	21.60
Pasture, per animal unit month	18.0000			1.1	20.25	1.7	30.38
<b>Feed cost per period</b>		<b>263.31</b>		<b>120.60</b>		<b>1</b>	
<b>Average total feed costs</b>		<b>309.25</b>					
12 to 24 months (725 to 1,380 pounds)		Winter ration		Spring/Fall ration		Summer ration	
Feed description	Cost per unit	Units	Dollars <sup>1</sup>	Units	Dollars <sup>1</sup>	Units	Dollars <sup>1</sup>
Corn gluten feed, per pound	0.1150	225	25.88			207	23.81
Corn, cracked, per pound	0.1045	135	14.10	90	9.40	117	12.22
Soybean hulls, per pound	0.1125	90	10.13	180	20.25	207	23.29
Grass hay, per pound	0.0825	1,710	141.08				
Mineral, per pound	0.6000	18	10.80	18	10.80	18	10.80
Pasture, per animal unit month	18.0000			2.1	37.89	3.2	56.84
<b>Feed cost per period</b>		<b>201.98</b>		<b>78.34</b>		<b>126.95</b>	
<b>Average total feed costs<sup>3</sup></b>		<b>485.61</b>					

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

<sup>2</sup> Feed cost adjusted to account for death loss (4 percent).

<sup>3</sup> Feed cost adjusted to account for sale of yearling heifers (2.5 percent).

Farmers can also customize this budget by using the [Missouri Dairy Enterprise Tool](https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/MODairyBudget.xlsx) (extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/MODairyBudget.xlsx). Download the spreadsheet to keep an electronic copy of your cost and return estimates for dairy production and heifer raising.



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