

Dairy Heifer Planning Budget

Using this planning budget, farmers raising dairy heifers may estimate their costs and returns for 2022. 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 October 2021. 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 2022.

Table 1. Missouri dairy heifer planning budget for 2022.

	Per heifer sold ¹	Your estimate
Income		
Springer heifer sales (0.95 head)	1,140.00	
Cull heifer sales (0.025 head)	27.63	
Yearling heifer sales (0.025 head)	16.31	
Less death loss (4 percent) of purchased calves	-3.00	
Total income	1,180.94	
Operating costs		
Purchased heifer calf and interest	82.18	
Feed (birth to 24 months of age)	860.64	
Labor	175.00	
Veterinary, drugs and supplies	25.00	
Breeding costs for artificial insemination services	45.00	
Transportation and marketing	15.00	
Utilities, fuel and oil	18.75	
Building and equipment repairs	9.68	
Miscellaneous	15.00	
Operating interest	26.77	
Total operating costs	1,273.01	
Ownership costs		
Depreciation on buildings and equipment	52.09	
Interest on buildings and equipment	24.48	
Insurance and taxes on buildings and equipment	14.08	
Total ownership costs	90.65	
Total costs	1,363.66	
Income over operating costs	-92.07	
Income over total costs	-182.72	
Total cost per day per heifer sold	1.78	
Total cost per pound of gain per heifer sold	1.08	
Springer heifer breakeven price per head	1,392.34	

¹ Totals may not sum due to rounding.

Table 2. Input assumptions used in dairy heifer planning budget for 2022.

Selected input quantities	Quantity	Selected input prices	Dollars per unit
Cull heifer sale weight, pounds	1,300	Cull and yearling heifer sale price, per pound	0.90
Yearling heifer sale weight, pounds	725	Springer heifer sale price, per head	1,200.00
Labor, hours	10	Labor cost, per hour	17.50
		Heifer purchase price	75.00

Table 3. Feed requirements for dairy heifer planning budget for 2022.

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 ¹	Units	Dollars ¹	Units	Dollars ¹
Milk replacer, per pound	1.4000	50	70.00				
Calf starter, per pound	0.1550	100	15.50	100	15.50		
Alfalfa hay, per pound	0.1200	20	2.40	90	10.80	225	27.00
Calf grower, per pound	0.1450			50	7.25	450	65.25
Grass hay, per pound	0.0425					225	9.56
Pasture, per animal unit month	16.0000					0.4	6.53
Feed cost per period		87.90		33.55		108.35	
Total feed costs²		231.51					
6 to 12 months (400 to 725 pounds)		Winter ration		Spring/Fall ration		Summer ration	
Feed description	Cost per unit	Units	Dollars ¹	Units	Dollars ¹	Units	Dollars ¹
Corn gluten feed, per pound	0.1150	525	60.38			270	31.05
Corn, cracked, per pound	0.9380	387	36.28	252	23.63	234	21.94
Soybean hulls, per pound	0.0950	263	24.94	360	34.20	270	25.65
Grass hay, per pound	0.0425	1,350	57.38				
Mineral, per pound	0.5375	36	19.35	36	19.35	36	19.35
Pasture, per animal unit month	16.0000			1.1	18.00	1.7	27.00
Feed cost per period		198.32		95.18		124.99	
Average total feed costs		256.83					
12 to 24 months (725 to 1,380 pounds)		Winter ration		Spring/Fall ration		Summer ration	
Feed description	Cost per unit	Units	Dollars ¹	Units	Dollars ¹	Units	Dollars ¹
Corn gluten feed, per pound	0.1150	225	25.88			207	23.81
Corn, cracked, per pound	0.9380	135	12.66	90	8.44	117	10.97
Soybean hulls, per pound	0.0950	90	8.55	180	17.10	207	19.67
Grass hay, per pound	0.0425	1,710	72.68				
Mineral, per pound	0.5375	18	9.68	18	9.68	18	9.68
Pasture, per animal unit month	16.0000			2.1	33.68	3.2	50.52
Feed cost per period		129.43		68.89		114.63	
Average total feed costs³		372.30					

¹ Totals may not sum due to rounding.² Feed cost adjusted to account for death loss (4 percent).³ 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) (<https://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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