

Alfalfa Baleage Planning Budget

Using this planning budget, farmers growing alfalfa for baleage can estimate their costs and returns. Table 1 presents estimates for established conventional alfalfa baleage in Missouri. Assumptions were based on price forecasts as of October 2025. Detailed prices and practices are summarized in Tables 2 and 3. Use the “Your estimate” column to plan your operation’s costs and returns for 2026.

Table 1. Missouri alfalfa baleage planning budget for 2026.

	Dollars per acre	Your estimate
Income		
Baleage sales	837.00	
Other income	0.00	
Total income	837.00	
Operating costs		
Seed	0.00	
Fertilizer and soil amendments	120.50	
Crop protection chemicals	33.71	
Crop supplies, storage, and marketing	10.00	
Crop consulting and insurance	0.00	
Custom hire and rental	170.67	
Operator labor	28.11	
Machinery fuel	18.09	
Machinery repairs and maintenance	44.77	
Management	25.11	
Operating interest	16.35	
Total operating costs¹	467.30	
Ownership costs		
Farm business overhead	20.93	
Machinery ownership	99.16	
Alfalfa establishment (<i>amortized, four years</i>)	85.65	
Real estate charge	130.00	
Total ownership costs	335.73	
Total costs²	803.04	
Income over operating costs	369.70	
Income over total costs	33.96	
Return to land and management	189.07	

Note: Totals may not sum due to rounding.

1. Operating costs per ton, as fed = \$51.92.
2. Total costs per ton, as fed = \$89.23.

Developed by

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Table 2 shows input assumptions for the alfalfa baleage budget. Price estimates reflect harvest time prices. Costs or returns from storage or other marketing methods are not included. No income from government programs is added.

Table 3 details the field activities for this budget and their machinery costs. Machinery costs were estimated using typical life (years), use (hours) and performance (fuel and labor) factors for each power unit and implement used.

Table 2. Input assumptions used in alfalfa baleage planning budget for 2026.

Selected input quantities	Per acre	Selected input prices	Dollars per unit
Yield, tons, as fed	9	Market price, per ton	93.00
Phosphorus rate, pounds P ₂ O ₅	50	Phosphorus, per pound P ₂ O ₅	0.73
Potassium rate, pounds K ₂ O	200	Potassium, per pound K ₂ O	0.42
Operator labor, hours	1.28	Labor wage, per hour	22.00
Operating interest, annual percentage	7.25	Farm diesel, per gallon	2.90

Table 3. Machinery assumptions used in alfalfa baleage planning budget for 2026, on a per acre basis.

Machine activity (including custom fieldwork)	Passes per acre	Fuel (gallons)	Labor (hours)	Operating costs ¹ (dollars)	Ownership costs ² (dollars)	Total costs (dollars)
Boom sprayer, pull type (90 feet), 130 HP MFWD	1	0.13	0.02	1.91	3.49	5.41
Disk mower-conditioner (12 feet), 130 HP MFWD	4	3.03	0.53	37.26	42.41	79.66
Hay rake (30 feet), 75 HP TWD	4	0.53	0.16	6.84	7.25	14.09
Round baler with net wrap, 130 HP MFWD	4	1.80	0.31	32.82	40.93	73.76
Pickup (1 ton), 4WD		0.75	0.25	12.14	5.07	17.21
Dry fertilizer application, custom charge						14.74
Move round bales on farm, custom charge						61.43
Tube wrap round bales on farm, custom charge						94.50
Total		6.24	1.28	90.97	99.16	360.80

Note: Totals may not sum due to rounding.

Abbreviations: 4WD = 4-wheel drive; TWD = 2-wheel drive tractor; MFWD = mechanical front-wheel drive tractor; HP = horsepower.

1. Machinery operating cost is the sum of fuel, repairs, maintenance and the value of labor.
2. Machinery ownership cost is the sum of machinery overhead and depreciation.

Farmers can customize this budget using the [Missouri Forage Budgets workbook \(XLSX\)](https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/forage-budgets.xlsx) (extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/forage-budgets.xlsx).



Check out the complete collection of Missouri crop and livestock enterprise budgets at muext.us/MissouriAgBudgets