

Fescue Seed and Forage Planning Budget

Using this planning budget, farmers growing fescue for seed and forage can estimate their costs and returns for 2023. Table 1 presents estimates for established fescue used for seed, hay and grazing purposes. Assumptions were based on price forecasts as of September 2022. Detailed prices and practices are summarized in Tables 2 and 3. The production practices used to develop these cost estimates are common on Missouri farms. Use the “Your estimate” column to plan your operation’s costs and returns for 2023.

Table 1. Missouri fescue seed and forage planning budget for 2023.

	Dollars per acre ¹	Your estimate
Income		
Fescue hay	304.00	
Fescue seed	450.00	
Grazing	16.00	
Other income	0.00	
Total income	770.00	
Operating costs		
Seed	0.00	
Fertilizer and soil amendments	156.90	
Crop protection chemicals	0.00	
Crop supplies, storage, and marketing	10.00	
Custom hire: fertilizer application	6.50	
Custom hire: combining seed	28.00	
Custom hire: product transport	38.50	
Machinery fuel and irrigation energy	9.20	
Machinery repairs and maintenance	12.83	
Operator and hired labor	14.97	
Operating interest	9.00	
Total operating costs	285.90	
Ownership costs		
Farm business overhead	3.67	
Machinery overhead	9.75	
Machinery depreciation	14.18	
Real estate charge	57.00	
Total ownership costs	84.60	
Total costs	370.49	
Income over operating costs	484.10	
Income over total costs	399.51	

¹ Totals may not sum due to rounding.

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Table 2 shows input assumptions for the fescue seed and forage budget. Price estimates reflect harvest time prices. Costs or returns from storage or other marketing methods are not included. No income from government programs are added. Farm business overhead includes liability insurance, utilities, accounting, etc. Real estate charge is an estimated rental rate for above average land.

Table 2. Input assumptions used in fescue seed and forage planning budget for 2023.

Selected input quantities	Per acre	Selected input prices	Dollars per unit
Hay yield, bales	4	Hay price, per bale	76.00
Seed yield, pounds	300	Seed price, per pound	1.50
Pasture yield, animal unit month	1	Pasture price, per animal unit month	16.00
Nitrogen rate, pounds N	70	Nitrogen, per pound N	0.90
Phosphorus rate, pounds P ₂ O ₅	30	Phosphorus, per pound P ₂ O ₅	0.71
Potassium rate, pounds K ₂ O	80	Potassium, per pound K ₂ O	0.72
Lime rate, tons	0.50	Lime, per ton	30.00
Sum of allocated labor, hours	0.67	Skilled labor, per hour	25.00
		Farm diesel, per gallon	4.05

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 3. Machinery assumptions used in fescue seed and forage planning budget for 2023, on a per acre basis.

Machine activity (not custom fieldwork)	Labor (hours)	Fuel (gallons)	Operating costs ¹ (dollars)	Ownership costs ² (dollars)	Total costs (dollars)	Trips across field
Swather mower-conditioner (9 feet); 130 MFWD	0.23	1.31	14.01	13.78	27.79	1
Wheel rake (2-16'); 105 MFWD	0.04	0.18	1.90	2.23	4.13	1
Round baler, net wrap (1500 pound); 105 MFWD	0.11	0.49	13.37	6.06	19.43	1
Pickup truck		0.28	1.86	1.87	3.73	
Total³	0.37	2.26	31.15	23.93	55.08	3

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.

³ Totals may not sum due to rounding.

Abbreviations: MFWD = mechanical front-wheel drive tractor

Farmers can also customize this budget to fit their own operations by using the [Missouri Forage Budget Generator](https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/ForageBudgets.xlsx) (extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/ForageBudgets.xlsx). Download the spreadsheet tool to create an electronic copy of your cost and return estimates for forages in Missouri.