

Fescue Seed and Forage Planning Budget for 2019

This budget presents information useful to farmers planning the production, financing, grazing and marketing of fescue. Table 1 presents estimates for the 2019 crop year for established fescue used for seed, hay and grazing purposes in northern, central and southwest Missouri. Assumptions were based on price conditions as of October 2018. Detailed prices and practices are summarized in Tables 2 and 3. The production practices used to develop these cost estimates are common in Missouri. Farmers are encouraged to modify this budget based on their circumstances.

Table 1. Missouri fescue seed and forage planning budget for 2019.

	Dollars per acre ¹	Your estimate
Income per acre		
Fescue hay	336.00	
Fescue seed	69.00	
Grazing	15.00	
Other income	0.00	
Total income per acre	420.00	
Operating costs per acre		
Seed	0.00	
Fertilizer and soil amendments	76.00	
Crop protection chemicals	0.00	
Crop supplies, storage, and marketing	6.00	
Custom hire and rental	38.00	
Machinery fuel and irrigation energy	7.34	
Machinery repairs and maintenance	8.81	
Operator and hired labor	13.29	
Operating interest	4.48	
Total operating costs per acre	153.93	
Ownership costs per acre		
Farm business overhead	3.00	
Machinery overhead	7.45	
Machinery depreciation	11.99	
Real estate charge	39.90	
Total ownership costs per acre	62.33	
Total costs per acre	216.26	
Income over operating costs per acre	266.07	
Income over total costs per acre	203.74	

¹ Totals may not sum due to rounding.

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Table 2 shows input assumptions used to estimate 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 2019.

Selected input quantities	Per acre	Selected input prices	Dollars per unit
Hay yield, tons	2.80	Hay price, per ton	120.00
Seed yield, pounds	300	Seed price, per pound	0.23
Pasture yield, animal unit month	1	Pasture price, per animal unit month	15.00
Nitrogen rate, pounds N	70	Nitrogen, per pound N	0.42
Phosphorus rate, pounds P ₂ O ₅	30	Phosphorus, per pound P ₂ O ₅	0.42
Potassium rate, pounds K ₂ O	80	Potassium, per pound K ₂ O	0.30
Lime rate, tons	0.5	Lime, per ton	20.00
Sum of allocated labor, hours	0.82	Skilled labor, per hour	18.00
		Farm diesel, per gallon	2.86

Table 3 details the field activities assumed in this budget and their machinery costs. Machinery costs were estimated using an economic engineering approach.

Table 3. Machinery assumptions used in fescue seed and forage planning budget for 2019, 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); 105 MFWD	0.23	1.06	9.12	6.51	18.63	1
Wheel rake (2-16'); 60 2WD	0.04	0.10	1.21	2.32	3.53	1
Round baler, net wrap (1500 pound); 105 MFWD	0.11	0.49	7.41	3.06	10.47	1
Combine, fixed grain head (15 feet); 100 horsepower	0.15	0.66	6.44	2.78	9.21	1
Pickup truck		0.28	1.22	1.76	2.98	
Total³	0.52	2.59	25.39	19.43	44.82	4

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: 2WD = 2-wheel drive tractor; MFWD = modified front-wheel drive tractor

Farmers can also develop their own custom budget by using the Missouri Forage Budget Generator Tool (<http://crops.missouri.edu/economics/budgets/FBG.xlsm>). This spreadsheet tool allows users to develop a custom estimate for their costs and returns for fescue and other forage crops in Missouri.