

Corn Silage Planning Budget

Using this planning budget, farmers growing corn silage can estimate their costs and returns for 2025. Table 1 presents estimates for corn silage production in Missouri. Assumptions were based on price forecasts as of October 2024. 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 2025.

Table 1. Missouri corn silage planning budget for 2025.

	Dollars per acre ¹	Your estimate
Income		
Silage sales	960.00	
Other income	0.00	
Total income	960.00	
Operating costs		
Seed	104.00	
Fertilizer and soil amendments	195.48	
Crop protection chemicals	101.00	
Crop supplies, storage, and marketing	10.00	
Crop consulting and insurance	19.00	
Custom hire and rental	207.02	
Machinery fuel	8.23	
Machinery repairs and maintenance	14.28	
Operator and hired labor	18.96	
Operating interest	26.27	
Total operating costs	704.23	
Ownership costs		
Farm business overhead	35.21	
Machinery ownership	49.84	
Real estate charge	160.00	
Total ownership costs	245.05	
Total costs	949.28	
Income over operating costs	255.77	
Income over total costs	10.72	
Operating costs per ton, as-fed basis	35.21	
Ownership costs per ton, as-fed basis	12.25	
Total costs per ton, as-fed basis	47.46	

1. Totals may not sum due to rounding.

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Table 2 shows input assumptions for the corn silage 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.

Farmers can customize this budget using the Missouri Forage Budgets spreadsheet, which can be downloaded from the forages section of the [Missouri Crop and Livestock Enterprise Budgets webpage](http://extension.missouri.edu/programs/agricultural-business-and-policy-extension/missouri-crop-and-livestock-enterprise-budgets) (extension.missouri.edu/programs/agricultural-business-and-policy-extension/missouri-crop-and-livestock-enterprise-budgets).

Table 2. Input assumptions used in corn silage planning budget for 2025.

Selected input quantities	Per acre	Selected input prices	Dollars per unit
Forage yield, tons, as-fed basis	20	Corn silage market price, per ton	48.00
Seeding rate, corn	32,000	Seed, per 80,000 seed bag	260.00
Nitrogen rate, pounds	180	Nitrogen, per pound N	0.45
Phosphorus rate, pounds P ₂ O ₅	80	Phosphorus, per pound P ₂ O ₅	0.55
Potassium rate, pounds K ₂ O	146	Potassium, per pound K ₂ O	0.38
Lime rate, tons	0.5	Lime, per ton	30.00
Labor, hours	1.02	Labor wage, per hour	18.50
Operating interest, annual percentage	7.75	Farm diesel, per gallon	3.25

Table 3. Machinery assumptions used in corn silage planning budget for 2025, on a per acre basis.

Machine activity (including custom fieldwork)	Trips across field	Labor (hours)	Fuel (gallons)	Operating costs ¹ (dollars)	Ownership costs ² (dollars)	Total costs (dollars)
Boom sprayer, pull type (90 feet), 130 HP MFWD	2	0.04	0.25	2.52	13.14	15.66
Anhydrous applicator (21 feet), 160 HP MFWD	1	0.10	0.72	8.62	11.11	19.72
Field cultivator (24 feet), 160 HP MFWD	1	0.06	0.41	4.02	7.15	11.17
Row crop planter (30 feet), 130 HP MFWD	1	0.07	0.41	7.37	14.21	21.57
Pickup (1 ton), 4WD				9.69	4.24	13.92
Dry fertilizer application, custom charge						7.02
Silage chopping, custom charge						200.00
Total³		0.52	2.53	32.21	49.84	289.08

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: 4WD = 4-wheel drive; MFWD = mechanical front-wheel drive tractor; HP = horsepower