

Blueberry Planning Budget

Using this budget, farmers can estimate the costs and returns for growing and marketing blueberries in a u-pick commercial operation for an average price of \$5.50 per pound. Table 1 presents estimates for Missouri based on assumptions and prices in March 2026. The budget assumes a 3-acre enterprise and models expenses per acre. Detailed assumptions are summarized in Tables 2, 3 and 4. Assumptions in this budget can be modified for your situation. Use the “Your estimate” column to plan your blueberry operation’s costs and returns.

Table 1. Missouri u-pick blueberry planning budget per acre.

	Preparation Year 1	Planting Year 2	No harvest Year 3	Yield curve Year 4–7	Full production Year 8–16	Your estimate
Income						
Fresh berry sales				18,408	37,913	
Other income						
Total income				18,408	37,913	
Operating costs						
Plants		4,989	154	154	154	
Establishment costs	66	2,911				
Fertilizer and soil amendments	588	5,470	152	642	647	
Fungicide			211	211	211	
Insecticide			38	38	38	
Herbicide			5	5	5	
Labor	29	2,365	1,036	4,229	7,172	
Pruners				594		
Bee rental				75	100	
Plastic bags				335	689	
Machinery fuel	10	72	86	129	129	
Tractor and machinery repairs	6	45	59	91	91	
Infrastructure maintenance		196	196	245	245	
Marketing		500	1,500	2,000	1,250	
Interest on operating capital	27	641	62	339	416	
Total operating costs	726	17,189	3,499	9,088	11,148	
Ownership costs						
Depreciation on infrastructure	277	277	277	409	409	
Interest on infrastructure	198	198	198	262	262	
Machinery ownership	19	109	139	197	197	
Cash rent equivalent	50	50	50	50	50	
Other overhead, taxes, insurance	500	500	500	1,500	1,500	
Total ownership costs	1,044	1,134	1,164	2,418	2,418	
Total costs	1,770	18,322	4,663	11,506	13,566	
Return over operating costs	–726	–17,189	–3,499	9,320	26,765	
Return over total costs	–1,770	–18,322	–4,663	6,902	24,347	

Developed by

Mallory Rahe, Associate Extension Professor, Agricultural Business and Policy; and **Clare Staley**, Student Research Intern, Agricultural Business and Policy

Table 2 provides details on the assumed establishment costs shown in aggregate in Table 1. Blueberries are not native to Missouri, and the state's soils require significant amendment to support yields. This budget assumes growers begin amending the soil one year before planting bushes. Landscape ground cover is recommended for weed control in the early growing years; alternatively, growers can omit this expense and increase their mulch. This budget also assumes capital investments to install drip fertigation system, a deer fence and bird deterrents.

Table 3 provides selected inputs for this budget by year. Annual soil tests are recommended so growers can monitor soil pH and make adjustments as necessary. Annual plant tissue tests are also recommended beginning in Year 3 to assess plant health for this high-value crop. The cash rent equivalent charge is an estimated rental rate for mixed hay cropland.

Labor costs represent a large percentage of total operating expenses. Significant hours are budgeted to plant 2-year-old plants in 1 gallon pots and establish a drip fertigation system. Ongoing labor hours for spraying and for spreading mulch are included in

machinery. Pruning hours are based on an assumption that young plants can be pruned in one to two minutes per plant whereas older plants are expected to take two minutes on average. Some varieties are larger and your choice of cultivars may require more pruning time. Growers can [learn more about how to prune a blueberry bush from this MU Extension video explaining the process](https://www.youtube.com/watch?v=mqw5YEr0dL4) (youtube.com/watch?v=mqw5YEr0dL4).

While this enterprise is saving harvest labor by operating as a u-pick operation, the farm should still budget time to prepare the field for pickers, assist pickers, and clean-up and close down the field after picking. The number of hours your farm will need will be determined by the length of your picking season and the degree of customer service you wish to offer visitors. The assumptions used to estimate the harvest hours are included on the harvest labor sheet. The budget includes mowing hours under the assumption that the grass will be kept short during the harvest season but allowed to grow longer during the off-season. It also assumes farms are custom hiring the cost of installing landscape fabric with a bed shaper.

Table 2. Establishment assumptions used in the blueberry planning budget.

Selected inputs	Unit	Dollars per unit	Quantity Year 1	Quantity Year 2	Total (dollars)
Oats seed (cover crop)	pound	8.47	3		25
Annual ryegrass (cover crop)	pound	1.34	30		40
Fescue seed	pound	3.00		10	30
Peat moss	gallon	0.74		1,814	1,342
Barrier installation (custom hire)	hour	32.00		12	384
Landscape ground cover	each	76.96		15	1,154

Table 3. Fertilizer and soil amendment input assumptions used in the blueberry planning budget.

Selected inputs	Unit	Dollars per unit	Year 1 units	Year 2 units	Year 3 units	Year 4–7 units	Year 8–16 units
Soil test	each	15.00	2	1	1	1	1
Plant tissue test	each	40.00			1	1	1
Wood mulch	cubic yard	49.00		100		10	10
Nitrogen	pound	0.45		10	105	105	105
Phosphate	pound	0.55	14				
Potash	pound	0.38					
Sulfur	pound	0.55	1,000	1,000	90	90	100
Labor - Planting	hour	18.50		50			
Labor - Machinery	hour	18.50	2	9	7.3	12.1	8.8
Labor - Irrigation	hour	18.50		45	20	20	20
Labor - Pruning	hour	18.50			22.7	30.2	37.8
Labor - Harvest	hour	18.50				158	309.5
Labor - Mowing	hour	18.50		2	6	8.3	11.6
Labor - Custom hire	hour	32.00		13			

Table 4. Blueberry yields and economic outcomes per acre by year in a long-term model.

Year	Average yield (pounds per plant)	Revenue	Expenses	Net income	Cumulative returns
1			1,770	(1,770)	(1,770)
2			18,322	(18,322)	(20,093)
3	0.96		4,663	(4,663)	(24,756)
4	2.02	10,092	11,506	(1,414)	(26,170)
5	4.61	23,012	11,506	11,506	(14,663)
6	5.78	28,809	11,506	17,303	2,639
7	6.70	33,423	11,506	21,917	24,557
8	7.63	38,062	13,566	24,496	49,053
9	7.63	38,062	13,566	24,496	73,549
10	7.63	38,062	13,566	24,496	98,045
11	7.63	38,062	13,566	24,496	122,542
12	7.63	38,062	13,566	24,496	147,038
13	7.63	38,062	13,566	24,496	171,534
14	6.93	34,570	13,566	21,004	192,539
15	6.23	31,078	13,566	17,512	210,051
16	5.53	27,586	13,566	14,020	224,072

Note: Model assumes all costs and prices per pound are constant; only yields vary.

Table 4 provides a summarized estimate of modeled yields, revenue, expenses and income from Year 1, site preparation, to the final year of production, Year 16. Annual net income (revenue minus expenses) is estimated to be negative in Years 1 through 4, the latter of which is the first year the orchard bears fruit. In the second harvest year, five years after site preparation begins, annual net income is positive. Based on available yield trial data from Missouri State University, the orchard is expected to reach full yield potential in Year 8, and yields are expected to start declining in Year 14, leading a grower to rip out the orchard after Year 16.

While reaching full yield, the orchard is expected to accumulate a deficit of \$14,663 per acre from the cost of establishing and maintaining the enterprise. As yield increases, so do revenues, and the enterprise is expected to have a positive cumulative return around Year 6. Note

that these assumptions are based on 2026 input costs, labor costs and retail prices as well as the structure of the current economy. These estimates are provided for planning purposes only.

The budget presented here aggregates costs for some inputs. Farmers can find additional details and customize this budget to match their own operation by using the [Blueberry Budget workbook \(XLSX\)](https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/Ag/xlsx/blueberry-budget.xlsx) (extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/Ag/xlsx/blueberry-budget.xlsx).

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