

Alfalfa Small Bales

Prepared October 2016 for 2017 Growing Season by Ray Massey

	Yield	Price	Business unit total
Income per acre			
Hay	60 lb bales 166.66666	6.00	1000.00
Other income			0.00
Total income per acre			\$1,000.00
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Operating costs per acre			
Seed			0.00
Fertilizer			75.90
Nitrogen		0.00	
Phosphorus		25.90	
Potassium		50.00	
Other amendments		0.00	
Crop protection			7.50
Herbicide		0.00	
Insecticide-fungicide		7.50	
Crop supplies, storage			10.00
Crop consulting			0.00
Custom hire and rental			119.00
Machinery fuel and irrigation energy			19.08
Machinery repairs and maintenance			13.56
Operator and hired labor			41.40
Other expense			0.00
Operating interest			7.88
Operating costs per acre			\$294.32
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Ownership costs per acre ¹			
Farm business overhead			6.13
Machinery overhead			9.15
Machinery depreciation			31.48
Real estate charge			79.20
Ownership costs per acre			\$125.96
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Total costs per acre			\$420.28
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Income over operating costs per acre			\$705.68
Income over total costs per acre			\$579.72
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	Operating costs per ton, air-dry basis		\$58.86
	Ownership costs per ton, air-dry basis		\$25.19
	Total costs per ton, air-dry basis		\$84.06

Detailed Report

Production 2017 Alfalfa Small Bales

10/24/16

Selected input quantities	per acre	Selected input prices	\$ per unit
Forage yield, tons	5.00	Farm diesel, per gallon	2.35
Seeding rate, lbs	0	Operating interest, %	5.50
Nitrogen rate, lbs	0	Nitrogen, per lb	0.00
Phosphorus rate, lbs	70	Phosphorus, per lb	0.37
Potassium rate, lbs	200	Potassium, per lb	0.25
Lime rate, tons	0	Lime, per ton	0.00
Sum of allocated labor, hours	2.53	Skilled labor, per hour	18.00
Irrigation, inches	0	Land value, per acre	2,400

Machine activity (not custom)	Labor Hours per acre	Fuel Gallons per acre	Operating Costs ² \$ per acre	Ownership Costs ³ \$ per acre	Total Costs \$ per acre	Trips per acre
Boom sprayer (50 ft); 75 HP	0.04	0.13	1.42	1.27	2.70	1
Swather (haybine) mower-conditioner (9 ft); 1	0.76	3.53	27.22	16.34	43.56	4
Hay tedder (8.5 ft); 60 HP	0.21	0.55	4.55	2.66	7.20	2
Wheel rake, V hitch (8 wheel); 60 HP	0.20	0.53	4.51	3.54	8.05	4
Small square baler; 75 HP	0.81	2.69	27.22	14.00	41.22	4
Pickup truck		0.72	2.37	2.83	5.19	
Total	2.03	8.15	67.29	40.64	107.93	15

¹ Farm business overhead includes liability insurance, utilities, accounting, etc. Machinery overhead is the sum of opportunity interest, property taxes, insurance, and housing. Machinery depreciation is a market value decline due to aging and usage. Thus, a portion of depreciation should be considered an operating costs for some decisions. Real estate charge includes land, improvements, taxes.

Economic costs may differ from rental rates.

² Machinery operating cost is the sum of fuel, repairs, maintenance, and the value of labor.

³ Machinery ownership cost is the sum of machinery overhead and depreciation (see page 1).