

**Alfalfa, Hay Crop Silage
Estimated Expenses per Acre**

Item	Description	Unit	Quantity	Price	Amount (\$/acre)	Your Farm
Variable Expenses						
Fertilizer	P2O5	lb	60.00	\$ 0.34	\$ 20.40	_____
	K2O	lb	190.00	\$ 0.23	\$ 43.70	_____
	Boron	lb	2.00	\$ 2.38	\$ 4.76	_____
	Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
Lime ¹	Custom Application	ton	0.67	\$ 21.00	\$ 14.07	_____
Insect Control ²	Furadan 4F	pt	2.00	\$ 9.23	\$ 18.46	_____
Weed Control Post-Emerge	Poast Plus ³	pt	1.50	\$ 6.50	\$ 9.75	_____
	Crop Oil	pt	2.00	\$ 1.73	\$ 3.46	_____
	Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
	2,4-DB ⁴	pt	1.00	\$ 4.26	\$ 4.26	_____
	Custom Application	acre	0.25	\$ 5.00	\$ 1.25	_____
Dormant Spray	Gramoxone Max	pt	1.00	\$ 4.91	\$ 4.91	_____
	Surfactant	pt	0.50	\$ 1.63	\$ 0.82	_____
	Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
Machinery						
Fuel		acre	1.00	\$ 45.01	\$ 45.01	_____
Oil & Filter		acre	1.00	\$ 6.75	\$ 6.75	_____
Repairs & Maintenance		acre	1.00	\$ 47.54	\$ 47.54	_____
Interest on Operating Capital	6 months	acre	\$ 240.13	8.0%	\$ 9.61	_____
Total Variable Expenses					\$ 249.74	_____
Fixed Expenses						
Establishment Cost	Prorated over 4 years	acre	1.00	\$ 50.31	\$ 50.31	_____
Machinery						
Depreciation		acre	1.00	\$ 39.93	\$ 39.93	_____
Interest		acre	1.00	\$ 32.17	\$ 32.17	_____
Housing & Insurance		acre	1.00	\$ 4.11	\$ 4.11	_____
Total Fixed Expenses					\$ 126.51	_____
Labor Expenses						
Labor ⁵		hour	7.54	\$ 8.50	\$ 64.05	_____
Total Budgeted Expenses					\$ 440.30	_____

Footnotes:

¹Lime is applied at the rate of 2 tons every 3 years.

²Other materials may be used at slightly less cost, but do not appear as effective.

³Poast Plus is included for control of crabgrass, which is a common problem. If johnsongrass is a problem, Select may be used.

⁴Applied once every four years.

⁵Labor expense is \$8.50 per hour, including wages, Social Security and Medicaid taxes and payroll administration costs.

Alfalfa, Hay Crop Silage
Estimated Machinery and Labor Requirements per Acre

Month	Operation	Power Unit	Implement	Hours per Acre	
				Machine	Labor
Feb	Fertilize	Custom	Custom	---	---
Mar	Insect Control	Tractor, 70 hp	Boom Sprayer, 20'	0.07	0.08
Apr	Post-Emerge (2-4,DB)	Custom	Custom	---	---
May	Post-Emerge (Poast Plus)	Custom	Custom	---	---
May	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
May	Chop	Tractor, 100 hp	Forage Chopper Windrow Header Forage Wagon #1	0.56	0.70
May	Haul	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
May	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
Jun	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
Jun	Chop	Tractor, 100 hp	Forage Chopper Windrow Header Forage Wagon #1	0.56	0.70
Jun	Haul	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
Jun	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
Jul	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
Jul	Chop	Tractor, 100 hp	Forage Chopper Windrow Header Forage Wagon #1	0.56	0.70
Jul	Haul	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
Jul	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
Sep	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
Sep	Chop	Tractor, 100 hp	Forage Chopper Windrow Header Forage Wagon #1	0.56	0.70
Sep	Haul	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
Sep	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
				Total	7.54

Estimated Machinery Expenses per Acre

Machine	Hours per Acre	Variable Cost			Total Variable Costs	Fixed Cost			Total Fixed Costs
		Fuel	Oil & Filter	Repairs		Depreciation	Interest	Housing & Insurance	
Tractor, 100 hp	2.24	20.65	3.10	8.30	32.05	7.54	0.09	0.31	7.95
Tractor, 70 hp	3.78	24.36	3.65	8.02	36.04	5.77	0.14	0.00	5.91
Boom Sprayer, 20'	0.07	0.00	0.00	0.05	0.05	0.06	0.07	0.01	0.14
Mower-Conditioner, 9'	1.47	0.00	0.00	7.53	7.53	4.07	6.62	0.55	11.23
Forage Chopper	2.24	0.00	0.00	12.10	12.10	6.00	6.87	0.66	13.53
Windrow Header	2.24	0.00	0.00	1.46	1.46	1.77	2.02	0.66	4.45
Forage Wagon #1	2.24	0.00	0.00	6.09	6.09	9.08	10.09	1.20	20.38
Forage Wagon #2	1.12	0.00	0.00	3.04	3.04	4.54	5.05	0.60	10.19
Forage Blower	1.12	0.00	0.00	0.94	0.94	1.09	1.21	0.13	2.43
Total		\$ 45.01	\$ 6.75	\$ 47.54	\$ 99.30	\$ 39.93	\$ 32.17	\$ 4.11	\$ 76.21
Total Machinery Cost									\$ 175.50

Break-even Analysis

		<u>Yield/Acre</u>		<u>Break-even Price/Ton</u>
Break-even Price over Total Variable Expenses:	Below-Average Yield	5.6	tons	\$ 44.60
	Average Yield	9.0	tons	\$ 27.75
	Above-Average Yield	12.4	tons	\$ 20.14
Break-even Price over Total Budgeted Expenses:	Below-Average Yield	5.6	tons	\$ 78.62
	Average Yield	9.0	tons	\$ 48.92
	Above-Average Yield	12.4	tons	\$ 35.51