

**Winter Annuals, Hay Crop Silage, Traditional Establishment
Estimated Expenses per Acre**

Item	Description	Unit	Quantity	Price	Amount (\$/acre)	Your Farm
Variable Expenses						
Seed ¹	Wheat	bu	1.50	\$ 9.60	\$ 14.40	_____
	Crimson Clover	lb	10.00	\$ 0.95	\$ 9.50	_____
Fertilizer ²	N	lb	60.00	\$ 0.48	\$ 28.80	_____
	P2O5	lb	40.00	\$ 0.34	\$ 13.60	_____
	K2O	lb	40.00	\$ 0.23	\$ 9.20	_____
	Custom Application	acre	2.00	\$ 5.00	\$ 10.00	_____
Lime ³	Custom Application	ton	0.50	\$ 21.00	\$ 10.50	_____
Machinery						
Fuel		acre	1.00	\$ 15.83	\$ 15.83	_____
Oil & Filter		acre	1.00	\$ 2.37	\$ 2.37	_____
Repairs & Maintenance		acre	1.00	\$ 14.57	\$ 14.57	_____
Interest on Operating Capital	6 months	acre	\$ 128.78	8.0%	\$ 5.15	_____
Total Variable Expenses					\$ 133.93	_____
Fixed Expenses						
Machinery						
Depreciation		acre	1.00	\$ 11.52	\$ 11.52	_____
Interest		acre	1.00	\$ 13.92	\$ 13.92	_____
Housing & Insurance		acre	1.00	\$ 2.12	\$ 2.12	_____
Total Fixed Expenses					\$ 27.56	_____
Labor Expenses						
Labor ⁴		hour	1.80	\$ 8.50	\$ 15.32	_____
Total Budgeted Expenses					\$ 176.81	_____

Footnotes:

¹Rye may also be used for wilted silage. Oats and barley may be considered, but have been lost to freezes in some years.

²60 lbs of nitrogen applied at seeding. Remainder applied in the Spring.

³Lime is applied at the rate of 2 tons per acre every 4 years.

⁴Labor expense is \$8.50 per hour, including wages, Social Security and Medicaid taxes and payroll administration costs.

**Winter Annuals, Hay Crop Silage, Traditional Establishment
Estimated Machinery and Labor Requirements per Acre**

Month	Operation	Power Unit	Implement	Hours per Acre	
				Machine	Labor
Sep	Chisel	Tractor, 70 hp	Chisel Plow, 9'	0.22	---
Oct	Prepare Seedbed, 2X	Tractor, 70 hp	Disk, 12' Harrow, 10'	0.34	0.43
Oct	Fertilize & Lime	Custom	Custom	---	---
Oct	Plant	Tractor, 70 hp	Grain Drill, 10'	0.17	0.21
Mar	Fertilize	Custom	Custom	---	---
May	Mow & Condition	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	Stack & Move	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
May	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
				Total	1.80

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	0.56	5.16	0.77	2.07	8.01	1.50	1.89	0.10	3.49
Tractor, 70 hp	1.66	10.67	1.60	3.52	15.79	2.13	2.53	0.19	4.85
Mower-Conditioner, 9'	0.37	0.00	0.00	1.88	1.88	1.02	1.66	0.13	2.80
Forage Chopper	0.56	0.00	0.00	3.03	3.03	1.50	1.72	0.11	3.33
Windrow Header	0.56	0.00	0.00	0.36	0.36	0.44	0.51	0.24	1.19
Forage Wagon #1	0.56	0.00	0.00	1.52	1.52	2.27	2.52	0.35	5.14
Forage Wagon #2	0.28	0.00	0.00	0.76	0.76	1.14	1.26	0.35	2.74
Forage Blower	0.28	0.00	0.00	0.24	0.24	0.27	0.30	0.07	0.65
Disk, 12'	0.34	0.00	0.00	0.64	0.64	0.84	0.87	0.28	1.98
Chisel Plow, 9'	0.22	0.00	0.00	0.21	0.21	0.09	0.19	0.03	0.32
Grain Drill, 10'	0.17	0.00	0.00	0.21	0.21	0.21	0.34	0.24	0.80
Harrow, 10'	0.34	0.00	0.00	0.13	0.13	0.12	0.13	0.02	0.27
Total		\$ 15.83	\$ 2.37	\$ 14.57	\$ 32.78	\$ 11.52	\$ 13.92	\$ 2.12	\$ 27.56
Total Machinery Cost									\$ 60.34

Break-even Analysis

		<u>Yield/Acre</u>		<u>Break-even Price/Ton</u>
Break-even Price over Total Variable Expenses:	Below-Average Yield	2.8	tons	\$ 47.83
	Average Yield	5.0	tons	\$ 26.79
	Above-Average Yield	7.2	tons	\$ 18.60
Break-even Price over Total Budgeted Expenses:	Below-Average Yield	2.8	tons	\$ 63.15
	Average Yield	5.0	tons	\$ 35.36
	Above-Average Yield	7.2	tons	\$ 24.56