

Winter Annuals, Hay Crop Silage, No-Till 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	_____
Weed Control Burndown	Gramoxone Max	pt	1.50	\$ 4.91	\$ 7.37	_____
	Surfactant	pt	0.50	\$ 1.63	\$ 0.82	_____
	Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
Machinery	Fuel	acre	1.00	\$ 14.17	\$ 14.17	_____
	Oil & Filter	acre	1.00	\$ 2.13	\$ 2.13	_____
	Repairs & Maintenance	acre	1.00	\$ 17.88	\$ 17.88	_____
	Interest on Operating Capital 6 months	acre	\$ 143.36	8.0%	\$ 5.73	_____
Total Variable Expenses					\$ 149.10	_____
Fixed Expenses						
Machinery	Depreciation	acre	1.00	\$ 11.85	\$ 11.85	_____
	Interest	acre	1.00	\$ 15.14	\$ 15.14	_____
	Housing & Insurance	acre	1.00	\$ 1.75	\$ 1.75	_____
Total Fixed Expenses					\$ 28.74	_____
Labor Expenses						
Labor ⁴		hour	2.45	\$ 8.50	\$ 20.83	_____
Total Budgeted Expenses					\$ 198.67	_____

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, No-Till Establishment
Estimated Machinery and Labor Requirements per Acre**

Month	Operation	Power Unit	Implement	Hours per Acre	
				Machine	Labor
Oct	Burndown (Gramoxone)	Custom	Custom	---	---
Oct	Fertilize & Lime	Custom	Custom	---	---
Oct	Plant	Tractor, 70 hp	No-Till Drill, 10'	0.47	0.59
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	2.45

Estimated Machinery Expenses per Acre

Machine	Hours per Acre	Variable Cost			Total	Fixed Cost			Total
		Fuel	Oil & Filter	Repairs	Variable Costs	Depreciation	Interest	Housing & Insurance	Fixed Costs
Tractor, 100 hp	0.56	5.16	0.77	2.07	8.01	1.50	1.89	0.10	3.49
Tractor, 70 hp	1.40	9.01	1.35	2.97	13.33	1.80	2.14	0.16	4.09
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
No-Till Drill, 10'	0.47	0.00	0.00	5.05	5.05	1.91	3.15	0.24	5.30
Total		\$ 14.17	\$ 2.13	\$ 17.88	\$ 34.18	\$ 11.85	\$ 15.14	\$ 1.75	\$ 28.74
Total Machinery Cost									\$ 62.93

Break-even Analysis

		Yield/Acre		Break-even Price/Ton
Break-even Price over Total Variable Expenses:	Below-Average Yield	2.8	tons	\$ 53.25
	Average Yield	5.0	tons	\$ 29.82
	Above-Average Yield	7.2	tons	\$ 20.71
Break-even Price over Total Budgeted Expenses:	Below-Average Yield	2.8	tons	\$ 70.96
	Average Yield	5.0	tons	\$ 39.73
	Above-Average Yield	7.2	tons	\$ 27.59