

**Winter Annuals, Hay, 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	_____
Fertilizer ²	N	lb	120.00	\$ 0.48	\$ 57.60	_____
	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	_____
Twine		bale	4.00	\$ 0.24	\$ 0.95	_____
Machinery						
Fuel		acre	1.00	\$ 16.13	\$ 16.13	_____
Oil & Filter		acre	1.00	\$ 2.42	\$ 2.42	_____
Repairs & Maintenance		acre	1.00	\$ 14.95	\$ 14.95	_____
Interest on Operating Capital	6 Months	acre	\$ 149.76	8.0%	\$ 5.99	_____
Total Variable Expenses					\$ 155.75	_____
Fixed Expenses						
Machinery						
Depreciation		acre	1.00	\$ 8.59	\$ 8.59	_____
Interest		acre	1.00	\$ 10.64	\$ 10.64	_____
Housing & Insurance		acre	1.00	\$ 1.77	\$ 1.77	_____
Total Fixed Expenses					\$ 21.00	_____
Labor Expenses						
Labor ⁴		hour	2.74	\$ 8.50	\$ 23.31	_____
Total Budgeted Expenses					\$ 200.06	_____

Footnotes:

¹Ryegrass may also be used as a winter annual hay crop.

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, Traditional Establishment
Estimated Machinery and Labor Requirements per Acre**

Month	Operation	Power Unit	Implement	Hours per Acre	
				Machine	Labor
Sep	Chisel	Tractor, 100 hp	Chisel Plow, 9'	0.22	0.27
Oct	Fertilize & Lime	Custom	Custom	---	---
Oct	Prepare Seedbed, 2X	Tractor, 100 hp	Disk, 12' Harrow, 10'	0.34	0.43
Oct	Plant	Tractor, 100 hp	Grain Drill, 10'	0.17	0.21
Mar	Fertilize	Custom	Custom	---	---
May	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
May	Tedder, 10'	Tractor, 70 hp	Tedder, 10'	0.10	0.13
May	Rake	Tractor, 70 hp	Rake, 18'	0.19	0.24
May	Bale	Tractor, 70 hp	Baler, Round, 5 x 4	0.40	0.50
May	Stack & Move	Tractor, 70 hp	Front-End Loader/Spear	0.40	0.50
				Total	2.74

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	0.73	6.69	1.00	2.69	10.39	1.95	2.45	0.06	4.46
Tractor, 70 hp	1.47	9.44	1.42	3.11	13.97	1.88	2.24	0.11	4.22
Chisel Plow, 9'	0.22	0.00	0.00	0.21	0.21	0.09	0.19	0.04	0.33
Grain Drill, 10'	0.17	0.00	0.00	0.21	0.21	0.21	0.34	0.26	0.81
Disk, 12'	0.34	0.00	0.00	0.64	0.64	0.84	0.87	0.32	2.03
Harrow, 10'	0.34	0.00	0.00	0.13	0.13	0.12	0.13	0.03	0.28
Mower-Conditioner, 9'	0.37	0.00	0.00	1.88	1.88	1.02	1.66	0.22	2.89
Rake, 18'	0.19	0.00	0.00	0.13	0.13	0.11	0.13	0.14	0.38
Baler, Round, 5 x 4	0.40	0.00	0.00	5.36	5.36	1.74	1.91	0.33	3.98
Front-End Loader/Spear	0.40	0.00	0.00	0.53	0.53	0.59	0.66	0.09	1.34
Tedder, 10'	0.10	0.00	0.00	0.05	0.05	0.04	0.07	0.18	0.29
Total		\$ 16.13	\$ 2.42	\$ 14.95	\$ 33.51	\$ 8.59	\$ 10.64	\$ 1.77	\$ 21.00
Total Machinery Cost									\$ 54.50

Break-even Analysis

		Yield/Acre		Break-even
				Price/Ton
Break-even Price over Total Variable Expenses:	Below-Average Yield	1.0	tons	\$ 155.75
	Average Yield	2.0	tons	\$ 77.87
	Above-Average Yield	3.0	tons	\$ 51.92
Break-even Price over Total Budgeted Expenses:	Below-Average Yield	1.0	tons	\$ 200.06
	Average Yield	2.0	tons	\$ 100.03
	Above-Average Yield	3.0	tons	\$ 66.69