

**Cool Season Grass/Clover, Hay
Estimated Expenses per Acre**

Item	Description	Unit	Quantity	Price	Amount (\$/acre)	Your Farm
Variable Expenses						
Fertilizer ¹	N	lb	60.00	\$ 0.48	\$ 28.80	_____
	P2O5	lb	30.00	\$ 0.34	\$ 10.20	_____
	K2O	lb	30.00	\$ 0.23	\$ 6.90	_____
	Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
Overseeding ²	Fescue or Orchardgrass	lb	2.00	\$ 1.00	\$ 2.00	_____
	White Clover	lb	0.33	\$ 3.06	\$ 1.01	_____
	Red Clover	lb	0.67	\$ 2.86	\$ 1.92	_____
No-Till Drill, Rental		acre	0.17	\$ 8.00	\$ 1.36	_____
Weed Control ³						
Post-Emerge	2,4-D Ester 4EC	pt	0.33	\$ 2.04	\$ 0.67	_____
	Custom Application	acre	0.33	\$ 5.00	\$ 1.65	_____
Twine		bale	5.00	\$ 0.24	\$ 1.19	_____
Machinery						
Fuel		acre	1.00	\$ 28.94	\$ 28.94	_____
Oil & Filter		acre	1.00	\$ 4.27	\$ 4.27	_____
Repairs & Maintenance		acre	1.00	\$ 33.27	\$ 33.27	_____
Interest on Operating Capital 6 months		acre	\$ 127.18	8.0%	\$ 5.09	_____
				Total Variable Expenses	\$ 132.27	_____
Fixed Expenses						
Establishment Cost		acre	1.00	\$ 36.54	\$ 36.54	_____
Machinery						
Depreciation		acre	1.00	\$ 16.18	\$ 16.18	_____
Interest		acre	1.00	\$ 20.00	\$ 20.00	_____
Housing & Insurance		acre	1.00	\$ 1.81	\$ 1.81	_____
				Total Fixed Expenses	\$ 74.54	_____
Labor Expenses						
Labor ⁴		hour	5.62	\$ 8.50	\$ 47.76	_____
				Total Budgeted Expenses	\$ 254.57	_____

Footnotes:

¹Fall application of nitrogen. Spring nitrogen provided by clover.

²To maintain clover in the pasture it should be overseeded once during the 6-year stand-life, at the rate of 2 lbs of white clover and 4 lbs of red clover per acre. 12 lbs of fescue or orchardgrass also overseeded once. These rates are prorated over the life of the stand.

³Weed spray is done once at a rate of 2 pt/acre, and is prorated over the 6-year stand-life.

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

**Cool Season Grass/Clover, Hay
Estimated Machinery and Labor Requirements per Acre**

Month	Operation	Power Unit	Implement	Hours per Acre	
				Machine	Labor
Feb	Post-Emerge (2-4,D Ester 4EC)	Custom	Custom	---	---
Feb	Overseed Clover	Tractor, 70 hp	Broadcast Spreader	0.02	0.02
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
Jun	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
Jun	Tedder, 10'	Tractor, 70 hp	Tedder, 10'	0.10	0.13
Jun	Rake	Tractor, 70 hp	Rake, 18'	0.19	0.24
Jun	Bale	Tractor, 70 hp	Baler, Round, 5 x 4	0.40	0.50
Jun	Stack & Move	Tractor, 70 hp	Front-End Loader/Spear	0.40	0.50
Sep	Overseed Fescue or Orchardgrass	Tractor, 70 hp	No-Till Drill, Rental	0.08	0.10
Sep	Fertilize & Lime	Custom	Custom	---	---
Oct	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
Oct	Tedder, 10'	Tractor, 70 hp	Tedder, 10'	0.10	0.13
Oct	Rake	Tractor, 70 hp	Rake, 18'	0.19	0.24
Oct	Bale	Tractor, 70 hp	Baler, Round, 5 x 4	0.40	0.50
Oct	Stack & Move	Tractor, 70 hp	Front-End Loader/Spear	0.40	0.50
Total				5.62	5.62

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, 70 hp	4.50	28.94	4.27	9.37	42.58	5.67	6.74	0.51	12.92
Mower-Conditioner, 9'	1.10	0.00	0.00	5.65	5.65	3.05	4.97	0.41	8.42
Tedder, 10'	0.30	0.00	0.00	0.16	0.16	0.12	0.20	0.06	0.39
Rake, 18'	0.57	0.00	0.00	0.40	0.40	0.33	0.38	0.10	0.81
Baler, Round, 5 x 4	1.21	0.00	0.00	16.08	16.08	5.22	5.72	0.57	11.52
Front-End Loader/Spear	1.21	0.00	0.00	1.60	1.60	1.78	1.98	0.15	3.92
Broadcast Spreader	0.02	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.02
Total		\$ 28.94	\$ 4.27	\$ 33.27	\$ 66.48	\$ 16.18	\$ 20.00	\$ 1.81	\$ 38.00
Total Machinery Cost									\$ 104.48

Break-even Analysis

		Yield/Acre		Break-even
				Price/Ton
Break-even Price over Total Variable Expenses:	Below-Average Yield	1.5	tons	\$ 88.18
	Average Yield	2.5	tons	\$ 52.91
	Above-Average Yield	3.5	tons	\$ 37.79
Break-even Price over Total Budgeted Expenses:	Below-Average Yield	1.5	tons	\$ 169.71
	Average Yield	2.5	tons	\$ 101.83
	Above-Average Yield	3.5	tons	\$ 72.73