

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

Item	Description	Unit	Quantity	Price	Amount (\$/acre)	Your Farm
<b>Variable Expenses</b>						
Fertilizer <sup>1</sup>	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 <sup>2</sup>	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 <sup>3</sup>						
Post-Emerge	2,4-D Ester 4EC	pt	0.33	\$ 2.04	\$ 0.67	_____
	Custom Application	acre	0.17	\$ 5.00	\$ 0.85	_____
Machinery						
Fuel		acre	1.00	\$ 34.06	\$ 34.06	_____
Oil & Filter		acre	1.00	\$ 5.11	\$ 5.11	_____
Repairs & Maintenance		acre	1.00	\$ 35.72	\$ 35.72	_____
Interest on Operating Capital 6 months		acre	\$ 133.60	8.0%	\$ 5.34	_____
				<b>Total Variable Expenses</b>	\$ 138.95	_____
<b>Fixed Expenses</b>						
Establishment Cost		acre	1.00	\$ 36.54	\$ 36.54	_____
Machinery						
Depreciation		acre	1.00	\$ 28.13	\$ 28.13	_____
Interest		acre	1.00	\$ 33.96	\$ 33.96	_____
Housing & Insurance		acre	1.00	\$ 1.72	\$ 1.72	_____
				<b>Total Fixed Expenses</b>	\$ 100.35	_____
<b>Labor Expenses</b>						
Labor <sup>4</sup>		hour	5.71	\$ 8.50	\$ 48.54	_____
				<b>Total Budgeted Expenses</b>	\$ 287.84	_____

**Footnotes:**

<sup>1</sup>Fall application of nitrogen. Spring nitrogen provided by clover.

<sup>2</sup>To 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 also overseeded once. These rates are prorated over the life of the stand.

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

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

**Cool Season Grass/Clover, Hay Crop Silage  
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	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
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	Stack & Move	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
Jun	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
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	Chop	Tractor, 100 hp	Forage Chopper Windrow Header Forage Wagon #1	0.56	0.70
Oct	Stack & Move	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
Oct	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
<b>Total</b>				<b>5.71</b>	<b>5.71</b>

**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	1.68	15.49	2.32	6.22	24.03	4.51	5.66	0.14	10.31
Tractor, 70 hp	2.89	18.58	2.79	6.12	27.48	3.70	4.40	0.33	8.44
Mower-Conditioner, 9'	1.10	0.00	0.00	5.65	5.65	3.05	4.97	0.13	8.14
Forage Chopper	1.68	0.00	0.00	9.08	9.08	4.50	5.16	0.11	9.77
Windrow Header	1.68	0.00	0.00	1.09	1.09	1.33	1.52	0.24	3.08
Forage Wagon #1	1.68	0.00	0.00	4.57	4.57	6.81	7.57	0.35	14.73
Forage Wagon #2	0.84	0.00	0.00	2.28	2.28	3.41	3.79	0.35	7.54
Forage Blower	0.84	0.00	0.00	0.71	0.71	0.82	0.91	0.07	1.80
<b>Total</b>		<b>\$ 34.06</b>	<b>\$ 5.11</b>	<b>\$ 35.72</b>	<b>\$ 74.89</b>	<b>\$ 28.13</b>	<b>\$ 33.96</b>	<b>\$ 1.72</b>	<b>\$ 63.81</b>
<b>Total Machinery Cost</b>									<b>\$ 138.70</b>

**Break-even Analysis**

		<u>Yield/Acre</u>		<u>Break-even Price/Ton</u>
Break-even Price over Total Variable Expenses:	Below-Average Yield	2.7	tons	\$ 51.46
	Average Yield	5.0	tons	\$ 27.79
	Above-Average Yield	8.3	tons	\$ 16.74
Break-even Price over Total Budgeted Expenses:	Below-Average Yield	2.7	tons	\$ 106.61
	Average Yield	5.0	tons	\$ 57.57
	Above-Average Yield	8.3	tons	\$ 34.68