



2003 ALFALFA HAYLAGE PRODUCTION BUDGET ¹

Direct Spring Seeding - 4 Year Stand

ITEM	EXPLANATION			PRICE PER UNIT	YIELD/A (ton/A) ²			YOUR BUDGET	
					8.0	10.5	13.0		
RECEIPTS ³									
Alfalfa Haylage				\$39 /ton	\$312	\$410	\$507	_____	
VARIABLE COSTS									
Seed ⁴	15 pounds			4.00 /lb	15	15	15	_____	
Fertilizer ⁵									
N (lbs.)	0	0	0	0.24 /lb	0	0	0	_____	
P ₂ O ₅ (lbs)	40	60	80	0.24 /lb	10	14	22	_____	
K ₂ O(lbs)	95	145	190	0.13 /lb	12	19	25	_____	
Lime(ton)		0.5		12 /ton	6	6	6	_____	
Chemicals ⁶					30	30	30	_____	
Fuel, Oil, Grease ⁷					22	22	22	_____	
Repairs ⁸					24	24	24	_____	
Miscellaneous ⁹					13	14	15	_____	
Int. on Oper. Cap. ¹⁰	6 mo			9.0%	6	6	7	_____	
Hired Labor ¹¹					0	0	0	_____	
TOTAL VARIABLE COSTS									
					-Per Acre	137	151	166	_____
					-Per Ton	17.18	14.36	12.78	_____
FIXED COSTS									
Labor Charge ¹¹	5.5 hours			9.00 /hr	50	50	50	_____	
Mach. And Equip. Charge ¹²					49	49	49	_____	
Seedbed Preparation/Seeding Costs - Custom Hire ¹³					14	14	14	_____	
Land Charge ¹⁴					50	70	90	_____	
Management Charge	5% of gross revenue				16	20	25	_____	
TOTAL FIXED COSTS						178	203	228	_____
TOTAL COSTS									
					-Per Acre	316	354	394	_____
					-Per Ton	39.47	33.72	30.32	_____
RETURN ABOVE VARIABLE COSTS						175	259	341	_____
RETURN ABOVE TOTAL COSTS						(4)	55	113	_____
RETURN TO LABOR AND MANAGEMENT ¹⁵						61	125	188	_____

- ¹ Does not include costs for putting haylage into silo or bunker.
- ² Assumes a 7 ton yield (40% DM) in seeding year; yields of approximately 7, 12, and 16 tons (40% DM), respectively, in the following years; middle yield shown reflects weighted average.
- ³ Based on 86% DM alfalfa hay @ \$84/T; haylage at 40%DM.
- ⁴ Expenses associated with seeding are prorated over the four-year stand life.
- ⁵ Annual application of maintenance fertilizer. 5-10 lb. of N. could be added at seeding.
Soil test values of CEC=20, P=25 ppm, K=150 ppm. Prices were quoted in October, 2002. Fertilizer prices vary over time and by area. Check with local sources for current prices.
- ⁶ Based on use of Baythroid, Poast, and Butyrac.
An additional fall herbicide treatment may be necessary in some areas. Additional insect control may be necessary in some years.
- ⁷ See table below for specific calculations. Lubrication costs are assumed to be 15% of fuel costs.
- ⁸ See table below for specific calculations.
- ⁹ Includes supplies, utilities, soil tests, small tools, crop insurance, etc...
- ¹⁰ Interest charged for 6 months at 9% interest rate.
- ¹¹ Part or all of labor may be a variable cost if paid labor varies with acres farmed.
It's a fixed cost if labor costs do not change with acres farmed.
- ¹² Reflects 500 acres, conservation tillage. See table below for details.
- ¹³ Seedbed preparation and seeding costs are charged at custom hire rates and prorated over 4 years. The following rates are included: Plowing-\$13, Field Cultivate-\$8, Cultimulch-\$9, Spray(3x)-\$5, Seeding-\$12.
- ¹⁴ Average based on 1999 data. Land charges vary throughout the state, check your local rates.
- ¹⁵ Return to labor and management is the revenue less total expenses except operator labor and management.
It is a measure of the returns to the operator's labor and management.

Machinery Inventory

	Number times used	Cost	Acres/ Hr	Fuel* (\$/A)	Repairs (\$/A)
Mower	4	\$16,300	6.55	\$2.00	1.72
Forage Harvester	4	\$25,700	1.4	13.40	13.88
Forage Wagon (2)	4	\$23,400	1.3	1.20	4.00
Hay Rake	4	\$4,600	3.5	2.00	1.40
105 HP Tractor		\$57,300			2.40
60 HP Tractor		\$24,300			0.97
Pickup Truck (1/2)		\$12,500		0.10	0.05
Total per Acre		164,100		18.70	24.42
Fixed Costs Rate	15%				
Mach. And Equip Charge =	\$49		Price of Diesel Fuel	\$1.00 /gal	

Machinery and Equipment charge = Total Machine Inventory Cost x Fixed Costs Rate / 500 acres
 =\$164,100 x 15% / 500 acres = \$49/acre

Machines are all assumed to be new and in the first year of use. Older/used machines will likely have lower machinery costs. Size of operation will also effect cost of machinery per acre. For an analysis on machine costs for different sized operations, see economies of scale budgets in this publication

Fixed costs rate includes depreciation, interest, housing, and insurance.

*Fuel calculations are based on the implement plus tractor.