



Hay Production

Cost, Value and Marketing

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Grass/Clover Hay Production Cost

Variable Cost

• Fertilizer	31.40
• Overseeding	5.21
• Weed Control	1.01
• Twine	1.44
• Fuel & Oil	2.79
• Repairs	26.80
• Operating Interest	<u>3.43</u>
• Total	72.08

Grass/Clover Hay Production Cost

Fixed Cost

Grass/Clover Hay Production Cost Total

• Variable	\$72
• Fixed	74
• Labor (5.95 hrs @\$8)	<u>48</u>
• Total Cost Per Acre	\$193

Hay Production Costs Per Ton

Yield/Acre	Cash/Ton	Fixed/Ton	Labor/Ton	Total/Ton
1.5	\$48.00	\$49.33	\$32.00	\$128.67
2.0	36.00	37.00	24.00	96.50
2.5	28.80	29.60	19.20	77.20
3.0	24.00	24.67	16.00	64.33
3.5	20.57	21.14	13.71	55.14

Grass/Clover Hay

Return Per Acre Cash Cost Only

				Price Per Ton						
		20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
Yield										
1.5		-42	-35	-27	-20	-12	-5	3	11	18
1.75		-37	-28	-20	-11	-2	7	16	24	33
2		-32	-22	-12	-2	8	18	28	38	48
2.25		-27	-16	-5	7	18	29	41	52	63
2.5		-22	-10	3	16	28	41	53	66	78
2.75		-17	-3	11	24	38	52	66	79	93
3		-12	3	18	33	48	63	78	93	108
3.25		-7	9	26	42	58	74	91	107	123
3.5		-2	16	33	51	68	86	103	121	138

Grass/Clover Hay

Return Per Acre Total Cost

		Price Per Ton								
		20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
Yield										
1.5		-163	-156	-148	-141	-133	-126	-118	-111	-103
1.75		-158	-149	-141	-132	-123	-114	-106	-97	-88
2		-153	-143	-133	-123	-113	-103	-93	-83	-73
2.25		-148	-137	-126	-114	-103	-92	-81	-69	-58
2.5		-143	-131	-118	-106	-93	-81	-68	-56	-43
2.75		-138	-124	-111	-97	-83	-69	-56	-42	-28
3		-133	-118	-103	-88	-73	-58	-43	-28	-13
3.25		-128	-112	-96	-79	-63	-47	-31	-14	2
3.5		-123	-106	-88	-71	-53	-36	-18	-1	17

Hay Price/Ton Per Bale Weight

Weight	\$15/Bale	\$20/Bale	\$25/Bale	\$30/Bale	\$35/Bale
800	\$37.50	\$50.00	\$62.50	\$75.00	\$87.50
1,000	30.00	40.00	50.00	60.00	70.00
1,200	25.00	33.33	41.67	50.00	58.33
1,400	21.43	28.57	35.71	42.85	50.00
1,600	18.75	25.00	31.25	37.50	43.75

Nutrition Requirements

1,000 lb. Avg. Milking Cow

- 20.2 pounds dry matter per day
- 22.5 pounds of 90% dry matter hay
- 8.64% protein as fed (1.8 lbs.)
- 50.9% TDN as fed (10.35 lbs.)

Feed Costs

- Hay \$50.00 Ton
- Cottonseed Meal \$12.96 Cwt.
- Corn \$2.75 Bu.

Feed Cost Per Day

	%P	%TDN	#Hay	#CSM	#Corn	Cost/Day
1	6.7	41.7	17.0	1	4.5	\$0.78
2	7.8	45.0	18.0	1	3.5	0.75
3	8.2	47.4	19.5	1	2	0.71
4	9.8	49.6	21.5	0	1	0.59
5	9.4	51.9	22.5	0	0	0.56
6	9.2	53.8	22.5	0	0	0.56
7	9.3	52.3	22.5	0	0	0.56

Requirements:

8.64% P

50.9% TDN

Feed Cost Per Day

	%P	%TDN	#Hay	#CSM	#Corn	Cost/Day
8	10.2	49.5	21.5	0	1	0.58
9	9.5	51.5	22.5	0	0	0.56
10	9.4	53.3	22.5	0	0	0.56
11	9.4	53.0	22.5	0	0	0.56
12	10.5	52.4	22.5	0	0	0.56
13	10.9	51.9	22.5	0	0	0.56
14	13.0	51.6	22.5	0	0	0.56

Requirements:

8.64% P

50.9% TDN

Feed Value Comparison

Ratio Within Group

#1	0.66
#2	0.77
#3	0.90
#4	0.98
#5	1.00
#6	1.01
#7	1.02

#8	1.02
#9	1.03
#10	1.05
#11	1.11
#12	1.11
#13	1.13
#14	1.22

Hay Market Characteristics

- No elevator or auction market
- Many types (alfalfa, fescue, clover, etc.)
- Wide range in quality
- Variety of packages
- No standard grade
- Limited price data in Tennessee

Question ???????

- Would you buy seed, fertilizer, lime, chemicals and fuel without a specified, standardized unit?

Target Sales

- Type
- Quality
- Bale Package
- End Use

Types of End Uses

- Horses, ponies or mules
- Dairy animals
- Beef animals, sheep, goats
- Dealers
- Mulch, industrial and other

Pricing Factors

- Primary hay price determinants
 - Supply within an area
 - Demand for that hay
- Prices are lower at harvest then increase as supplies shrink

Storage Cost Considerations

- Interest or opportunity cost
- Loading, hauling and stacking
- Fire insurance premiums
- Shrinkage
- Barn expense
- Additional advertising

Promotion and Advertising

- Make potential buyers aware
 - Type
 - Package
 - Quality
- Develop reputation for providing desired quality
 - Repeat business is important

Promotion and Advertising

- Select pricing method
 - Bale
 - Ton
- Target specific markets for higher average price

Summary

- Base decisions on **your** cost of production and financial situation.
- Higher yields reduce production cost per acre.
- Cash hay may be unprofitable at average yields, average quality and the going price on the local market.

Summary

- There is a wide variation in hay quality and package size, but is difficult to sell higher quality at a higher price in some markets.
- Higher quality hay reduces feed costs.
- For cash hay to be profitable, must produce higher quality and market to a higher end use.



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