

PROFITABLE DAIRY MANAGEMENT

Work toward the following goals:--

1. High production per cow -

a. Good Quality Stock

Cull out the low production cows when they are no longer profitable or when you have a higher producing heifer to replace them.

Use good bulls or artificial insemination.

b. A succession of feeds which will keep the cows producing at a high rate.

Use of good pasture or other roughage as available.

Feed concentrates according to production and the cow's ability to convert the feed to butterfat.

c. Suppression of diseases and breeding troubles.

d. Keep the cows milking a high percent of the year.

2. Economical methods of production -

a. Economical feed supplies

Pasture is usually the most economical source of feed. The cost per cwt. of TDN for the pasture used in this study was \$1.05 as compared to \$2.04 for hay.

b. Keep labor requirements down. 75 hours of labor per cow per year should be sufficient under most conditions.

c. Keep the investment per cow low. Depreciation can be the difference between profit or loss.

d. Be economical with miscellaneous expenses.

The results of this study are only a small sample of the dairy industry of Solano County and are not presented as averages for the county. They are representative of the industry and present several interesting factors affecting production in this area.

Since pasture is such an important factor in profitable dairy management, study your production methods to increase yields from your pastures.

Fertilization

Irrigation - at the proper time and with the correct amount of water.

Grazing management to get the most production per acre

Seeding of desirable and adapted varieties

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TABLE 1. Production Factors and Analysis of Income and Expense

	Serial Numbers			Average
	3	2	1	
Average Number Cows	.69	117	30	72
Animal Units per Cow	1.4	1.4	1.1	1.3
Pounds Butterfat per Cow	352	299	332	320
Average Test Milk Sold	4.1	4.1	4.3	4.1
Percent of Time Cows Milking	83	78	80	80
Price per Pound Butterfat	111.1¢	111.6	114.1	111.8
Net Cost per Pound Butterfat	80.6	91.1	96.5	88.2
Management Income per Pound	30.5	20.5	17.6	23.6
Income per Cow				
Butterfat Sales	\$ 391.58	332.97	378.24	358.09
Stock Sales	78.64	70.00	33.38	67.64
Miscellaneous	-	2.72	-	1.47
Change Stock Inventory	-30.40	9.85	6.93	- 3.46
Total	439.82	415.54	419.55	423.74
	48.24	58.12	31.89	51.28
Cash and Depreciation Costs per Cow				
Feed	\$ 142.43	182.18	208.33	173.10
Hired Labor	46.03	67.91	-	51.39
Stock Bought	-	21.73	8.42	12.90
Miscellaneous	58.92	33.32	45.23	43.19
Depreciation	9.59	10.83	9.07	10.19
Total	256.97	315.97	271.05	290.77
Farm Income per Cow	\$ 182.85	99.57	147.50	132.97
Family Labor	53.60	17.72	72.08	36.83
Interest	21.64	20.79	17.06	20.54
Management Income per Cow	107.61	61.06	58.36	75.60

A profitable dairy enterprise depends on:

1. A good price for butterfat, and
2. Economical costs of production.

The low profit record in this study received 3 cents more per pound of butterfat than did the high profit record, but the cost of production was 16 cents per pound higher than for the high record.

Similar studies of dairy and other commodities indicate that costs of production are more important than price in determining the profitability of the records in any one year.

Low cost of production results from

1. High production per cow
2. Efficient, economical management practices.

TABLE 2. Analysis of Feed Consumption and Minor Production Factors

	Serial Numbers			Average
	3	2	1	
Feed Cost per Cow				
Hay	\$ 69.21	73.50	76.20	72.50
Concentrate	21.39	70.66	100.12	58.99
Beet Pulp Silage	17.17	-	-	5.50
Pasture	34.66	38.02	32.01	36.11
Total	142.43	182.18	208.33	173.10
Amount of Feed per Cow				
Tons Hay	3.6	3.5	3.6	3.5
Pounds Concentrate	715	1867	2610	1602
Tons Beet Pulp Silage	6.2	-	-	2.0
Animal Unit Months Pasture	8.3	9.7	5.2	8.6
Pounds TDN	9340	8750	7620	8790
Cost of Feed				
Hay per Ton	\$ 19.10	21.20	21.00	20.47
Concentrate per Cwt.	2.99	3.78	3.83	3.68
Beet Pulp per Ton	2.78	-	-	2.78
Pasture per Animal Unit Month	4.16	3.93	6.30	4.20
TDN per Cwt.	1.52	2.08	2.74	1.97
Pounds Concentrate per Cwt. Butterfat	203	626	790	500
Hours Labor per Cow	104**	97	72	96
Investment per Cow	\$433.	416.	341.	410.
Percent of Cows Sold	22	22	10	20
" " " Died	6	2	-	3
" " " Change	- 2	2	3	1

The most important factor in the cost of production is feed. Profitable production calls for ample supplies of good quality, economical feeds.

Concentrate should be fed according to the production of the cows if they are to make most economical use of it.

The high profit record used 203 pounds of concentrate per cwt. of butterfat, while the low profit record used 790 pounds per cwt. of butterfat. The high profit record got 30 pounds more butterfat per cow than the low profit record. This higher production was not caused by the lower rate of feeding concentrate but the 790 pounds was probably not required to get the production obtained by that dairyman.

Feed the cheapest feed available which will get the desired production.

The cost per TDN of the feeds used in this study were:-- beet pulp silage \$.92; pasture \$1.05, hay \$2.04; and concentrate \$4.90. TDN is Total Digestible Nutrients and is that portion of the feed which is digested by and used by the animal.

UC COOPERATIVE EXTENSION

**This cooperator included the time spent irrigating and caring for pasture in accounting for family labor. His comparable labor hours per cow are high for this reason, since about 15 hours per cow were charged to the irrigated pasture.