

Financial Performance of Dairies in Florida and Georgia in 2005

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ABSTRACT

The Dairy Business Analysis Project (DBAP) includes an annual survey of the financial performance of dairies primarily located in Florida and Georgia. Its objective is to document the dairies' financial success using standardized, accrual accounting methods in order to calculate benchmarks and provide feedback on the dairies financial strengths and weaknesses. Twenty-six dairies submitted financial data in 2005. Twenty-one dairies were included in the summary results. Of these, 15 were located in Florida, and 6 in Georgia. The average herd size was 1,045 cows and 538 heifers with 18322 lbs. milk sold per cow. The average culling rate was 36%. There was an average of 19 FTE workers per farm and 0.93 million lbs milk sold per FTE worker. Total revenue per cwt. was \$20.73 / cwt with \$18.24 / cwt milk income. The average total expense was \$20.20 / cwt. The largest expense items were purchased feed (\$7.22 / cwt), labor (\$3.50 / cwt), livestock (\$2.01 / cwt) and milk marketing (\$1.22 / cwt). Net farm income from operations was \$0.53 / cwt and net farm income was \$0.07 / cwt. The debt to asset ratio was 0.39, the rate of return on assets was 0.04, the rate of return on equity was 0.02, the operating profit margin ratio was 0.02. Total expenses decreased and returns increased with herd size in 2005. Herds >670 cows had the middle total revenue (\$20.44 / cwt) and the lowest expenses (\$17.65 / cwt) resulting in the highest net farm income (\$2.79 / cwt). The herds with the highest milk production (>19,500 lbs / cow / year) had the middle total revenue (\$20.29 / cwt) and the lowest expenses (\$18.98 / cwt) resulting in the highest net farm income (\$1.19 / cwt).
Key Words: Dairy, Financial, Management

BUSINESS SIZE AND PRODUCTION EFFICIENCY

	AVERAGE	MEDIAN	STD	FLORIDA	GEORGIA
FARMS	21	21	21	15	6
COWS	1045	575	1157	1155	527
HEIFERS	538	290	720	543	527
MILK SOLD MILLION LB	20.21	10.99	22.96	21.53	16.94
FTE WORKERS	19	12	17	20	16
ACRES	569	320	732	633	410

BUSINESS SIZE AND PRODUCTION EFFICIENCY

	AVERAGE	MEDIAN	STD	FLORIDA	GEORGIA
MILK SOLD/COW	18322	18168	3237	17659	19979
COWS/WORKER	51	52	25	55	40
MILK SOLD /WORKER	0.93	0.94	0.44	0.97	0.82
CULL RATE %	36	32	21	31	47

EXPENSES PER CWT

	AVERAGE	MEDIAN	STD	FLORIDA	GEORGIA
LABOR	3.50	3.08	1.42	3.43	3.69
BUY FEED	7.22	6.81	2.33	7.96	5.36
CROPS	0.41	0.13	0.59	0.34	0.58
EQUIP	1.11	1.00	0.75	1.18	0.94
LIVESTOCK	2.01	1.92	0.90	1.99	2.06
MILK MARKET	1.22	1.30	0.24	1.19	1.32

EXPENSES PER CWT

	AVERAGE	MEDIAN	STD	FLORIDA	GEORGIA
INT	0.67	0.56	0.61	0.69	0.61
DEPRECCOWS	1.11	0.97	1.07	1.11	1.12
DEPRECCROPS	0.81	0.40	0.85	0.76	0.95
DEPRECEQUIP	0.39	0.25	0.42	0.37	0.44
DEPRECLIVESTOCK	1.01	1.03	0.38	1.06	0.89
OTHER	0.20	0.20	0.30	0.20	0.25
TOTAL	20.20	18.73	3.80	20.59	19.25

BUSINESS SIZE BY AVERAGE NUMBER OF COWS AND MILK PER COW

	<446	446-670	>670	<17300	17-19500	>19500
FARMS	7	7	7	7	7	7
COWS	261	562	2312	1117	447	1571
HEIFERS	50	348	1218	363	215	1038
MILK MILLION FTE LABOR	4.24	10.86	45.54	17.84	8.29	34.51
ACRES	142	397	1169	613	298	798

REVENUE BY AVERAGE NUMBER OF COWS AND MILK PER COW

	<446	446-670	>670	<17300	17-19500	>19500
MILK	17.95	18.14	18.63	18.32	18.08	18.32
COWS	1.08	0.96	0.63	1.47	0.37	0.84
HEIFERS	0.38	0.34	0.64	0.37	0.36	0.63
GAIN COWS	0.14	-0.46	-0.07	0.07	-0.43	-0.03
OTHER	2.01	1.22	0.61	2.23	1.08	0.52
TOTAL	21.57	20.20	20.44	22.46	19.46	20.29

EXPENSES BY AVERAGE NUMBER OF COWS AND MILK PER COW

	<460	460-670	>670	<17300	17-19500	>19500
LABOR	4.04	3.63	2.85	3.31	3.96	3.24
BUY FEED	7.31	7.36	6.99	7.92	7.28	6.46
CROPS	0.29	0.72	0.22	0.37	0.32	0.54
EQUIP	0.95	1.53	0.85	0.93	1.04	1.35
CATTLE	2.16	1.92	1.96	2.23	1.91	1.89
MILK MARKET	1.34	1.06	1.27	1.29	1.17	1.22
BLDG LAND	1.37	0.57	0.29	1.00	0.96	0.27

EXPENSES BY AVERAGE NUMBER OF COWS AND MILK PER COW

	<460	460-1000	>670	<17300	17-19500	>19500
INT	0.93	0.52	0.55	0.93	0.65	0.61
DEPRECCOWS	1.67	0.67	0.99	1.70	0.92	0.71
DEPRECCROPS	0.88	1.14	0.42	0.63	0.75	1.05
DEPRECEQUIP	0.23	0.53	0.41	0.41	0.09	0.66
DEPRECLIVESTOCK	1.05	1.12	0.86	1.05	1.00	0.98
TOTAL	22.22	20.75	17.65	21.78	19.86	19.98

REVENUE PER CWT

	AVERAGE	MEDIAN	STD	FLORIDA	GEORGIA
MILK \$	18.24	18.28	0.62	18.38	17.89
COWS	0.89	0.33	1.41	0.60	1.62
HEIFERS	0.45	0.36	0.44	0.50	0.33
PURCHAS COWS	-1.13	-0.06	0.83	-0.37	0.48
OTHER	1.28	0.78	1.45	1.30	1.23
TOTAL	20.73	20.24	2.21	20.41	21.55

EXPENSES AND RETURNS

	AVERAGE	MEDIAN	STD	FLORIDA	GEORGIA
Total Income	20.73	20.24	2.21	20.41	21.55
Total Expenses	20.20	18.73	3.80	20.59	19.25
NET OPERATION	0.53	0.84	3.20	-0.18	2.30
APPRECC	-0.46	0.00	1.37	-0.03	-1.56
Asset Turnover	0.78	0.81	0.37	0.80	0.71

RETURNS BY AVERAGE NUMBER OF COWS AND MILK PER COW

	<460	460-670	>670	<17300	17-19500	>19500
NET OPER	-0.65	-0.55	2.79	0.58	-0.40	1.31
Gain on Asset Sales	-1.23	-0.17	0.00	-0.50	-0.77	-0.12
RETURN ASSETS	-0.01	-0.01	0.15	0.04	0.00	0.09
EQUITY	-0.08	-0.05	0.20	0.02	-0.07	0.12
OPER PROFIT	-1.88	-0.72	2.79	0.18	-1.17	1.19

Results Summary results are presented in Tables 1.1 to 4.4 and Figures 1 to 5. Revenues and expenses may not add up due to rounding. In brief, twenty-one dairy farms were included in the summary results. Of these, 15 were located in Florida and 6 in Georgia. The average herd size of the participating dairies was 1045 cows and 538 heifers with 18,322 lbs. milk sold per cow. The average culling rate was 36%. The average milk price was \$18.24. Average total revenues were \$20.73 per cwt. milk sold. Total expenses averaged \$20.20 per cwt. sold. The largest items were purchased feed, \$7.22, and personnel costs, \$3.50. Net farm income from operations averaged \$0.53 per cwt. sold. Net farm income per cwt. was \$0.07.

The herds were divided into 3 equal groups on size, <446, 446 to 670 and >670 cows. The average number of cows and heifers by group was 261 cows and 50 heifers, 562 cows and 348 heifers and 2,312 cows and 1,218 heifers. Milk sold per cow was 15,777, 19,225 and 19,963 pounds by group. Culling rate was highest (42%) for the smallest herd size and lowest (31%) for the largest herd size. Milk revenue increased with herd size (\$17.95, \$18.14 and \$18.63 per cwt) but total revenue was highest (\$21.57 per cwt) for the smallest herd size. Total expenses decreased with increasing herd size (\$22.22, \$20.75 and \$17.65 per cwt). This resulted in the highest net farm income from operations (\$2.79 per cwt) and net farm income (\$2.79 per cwt) for the largest herd size. The largest expense item was purchased feed for each group but it decreased with increasing herd size. Labor costs were highest for the smallest herd size and decreased with herd size.

The herds were divided into 3 equal groups on pounds of milk sold, <17,300, 17,300 to 19,500 and >19,500. The average pounds of milk sold, cows numbers and heifers numbers for each group was 14,950 pounds of milk, 1,117 cows and 363 heifers; 18,420 pounds of milk, 447 cows and 215 heifers; and 21,594 pounds of milk, 1,571 cows and 1,038 heifers. Culling rate was highest for the lowest production group (44%) and lowest for the highest production group (29%). Milk revenue was nearly equal for each group (\$18.32, \$18.08, and \$18.32 per cwt) but total revenue was highest for the lowest yield group and lowest for the highest yield group. Total expenses decreased with increasing milk sold (\$21.78, \$19.86 and \$18.98 per cwt). This is resulted in the highest net farm income from operations (\$1.31 per cwt) and net farm income (\$1.19 per cwt) for the highest production group.

Figure 1. DBAP 2005 Summary - Milk per cow (lbs / year) by heifers per cows

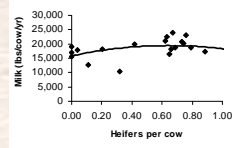


Figure 2. DBAP 2005 Summary - Net farm income per cwt (\$) by heifers per cows

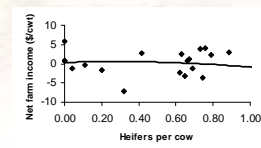


Figure 3. DBAP 2005 Summary - Net farm income per cwt (\$) by total expenses per cwt (\$)

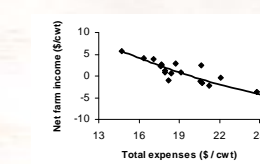


Figure 4. DBAP 2005 Summary - Net farm income per cwt (\$) by milk per cow (lbs / year)

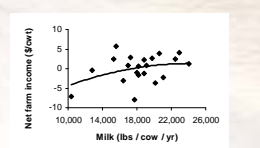
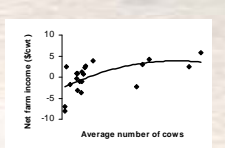


Figure 5. DBAP 2005 Summary - Net farm income per cwt (\$) by average number of cows.



DAIRY BUSINESS ANALYSIS PROJECT: WEB SITE

<http://dairy.ifas.ufl.edu/dbap>