

# AGRAZING@ DAIRIES IN DBAP

R.Giesy, M.Sowerby, P.Miller, T.Seawright, C.Vann & M.Hoekema  
University of Florida Extension Service

## Introduction

The alternative of grazing rather than confining lactating cows in our hot climate has been debated. If Agrazing@ is defined by the New Zealand standard of all forage consumed by cows coming from pasture, we don't have any grazing dairies on our project. It's questionable whether grazing in that sense will work in our environment. The Dairy Business Analysis Program, DBAP, included five Amodified grazing@ dairies in its 1996 summary. These dairies pastured cows as much as possible but provided some supplementary forage, at least seasonally.

### *1. How do modified grazing dairies compare to other dairies?*

The modified grazing dairies are as dissimilar as other dairies. Two grazing dairies milked more than 1,300 cows, and two had less than 225 cows. Milk sold per cow was similar but culling rates varied from 17% to more than 50%. Acres per cow ranged from .36 to 3.4. Assets per cow varied from about \$2,100 to more than \$7,000 and debt per cow ranged from less than \$400 to more than \$2,400.

DBAP data shows modified grazing dairies were, on average, structured differently than other dairies. Data in table 1 indicates that the five modified grazing dairies were smaller, they sold considerably less milk per cow and had a lower culling rate. The modified grazing dairies owned more land and more total assets, on a per cow basis. However, they had less debt, interest expense and depreciation.

**Table 1. A comparison of structural and performance factors.** This is 1996 DBAP data.

<b>Structural &amp; performance factors</b>	<b>Average of 32 DBAP dairies</b>	<b>Average of 5 DBAP modified grazing dairies</b>
Number of cows	1,048	734
Milk sold per cow	15,887	12,914
Acres per cow	.57	1.02
Assets per cow	\$4,069	\$4,344
Debts per cow	\$1,555	\$1,488
Culling rate	33%	29%

## 2. How did the cost of production compare?

There was much variation among the modified grazing dairies. Total accrual costs ranged from \$15 to \$20 per cwt. Data in table 2 shows that the average total cost of modified grazing dairies was about \$.80 lower than the average of other dairies. Thus, there was much more variation among dairies of either system than between the two systems.

Table 2. A comparison of the cost of producing milk.

Expenses per cwt	Average of 32 DBAP dairies	Average of 5 DBAP modified grazing dairies
Personnel	\$2.38	\$2.22
Purchased feed	8.62	7.63
Crops	.24	.43
Machinery	.70	.58
Livestock	2.51	2.90
Marketing	.94	.96
Real estate	.44	.57
Other*	1.22	1.10
Depreciation	.73	.59
Total accrual expense	17.79	16.98

\*Other expenses are insurance, utilities, interest, miscellaneous and other overhead costs of operating. This is 1996 DBAP data.

Modified grazing dairies had lower purchased feed costs, personnel expense, machinery and depreciation expense. They were higher in crop expense and real estate expense, also as expected. Somewhat surprising was the \$.39 disadvantage in livestock expense due to replacement costs. This would be expected to be lower due to lower culling rates, however, four of the five modified grazing dairies purchased all of their replacements at an average cost of \$1.94 per cwt.

## 3. Were modified grazing dairies more or less profitable?

Table 3. Profitability of modified grazing dairies and other dairies.

Profitability factors	Average of 32 DBAP dairies	Average of 5 DBAP modified grazing dairies
Asset turnover rate	.85	.72
Net Farm Income per cwt.	\$2.15	\$2.72
Net Farm Income	\$408,782	\$289,521

This is 1996 DBAP data.

**DBAP data from 1996 shows that modified grazing dairies were profitable. Their net farm income per cwt. was \$.57 higher than other dairies. But fewer cwts were sold and the total bottom line was inferior to DBAP average by about \$120,000. Modified grazing dairies were not as efficient.**

***4. In what types of situations does modified grazing seem most favorable?***

**Analysis, paralysis.**

1. First, its not all economics. Some reasons for considering modified grazing can include lifestyle advantages or a desire to manage grass in pastures more than cows in confinement.
2. Modified grazing dairies probably have more economic advantage during periods when the milk price to feed price ratio is disadvantageous. However, they may have a harder time responding when these price relationships are very favorable (they may miss the extremes of cycles). Similarly, future milk pricing programs which would allow more volatility of mailbox milk price probably would encourage more consideration of grazing systems.
3. Equity development in modified grazing systems will probably be slower, thus employment of this style of dairying is dependant upon the situation and goals.
4. Should a dairy switch to modified grazing system if facing economic problems in its current situation? Perhaps. It's probably not a good idea if the debt load is substantial, especially if currently depreciating cow confinement facilities, feeding systems, etc.

Summary

From the data supplied by these 5 modified grazing dairies, we can conclude that this style of dairying is a viable alternative for some dairy producers. Modified grazing dairies that participated in DBAP in 1996 were profitable. They has a greater margin of profit per cwt. (\$.59) but sold fewer hundredweights so that total net farm income was lower. They owned more assets but used them less efficiently than other dairies.

Will we see more modified grazing dairies? Very possibly. Particularly if policy or cooperative actions do not stabilize milk prices, some producers may opt for grazing to modify costs when prices are volatile. Those with low debt loads/high equity levels will be more likely succeed during this transition.