GREAT LAKES GRAZING NETWORK
Linking Farmers with Knowledge and Resources

Fact Sheet #5 : Grazing vs. Confinement Farms — Year 5

Regional Multi-State Interpretation of Small Farm Financial Data from the Fifth Year Report on 2004 Great Lakes Grazing Network Grazing Dairy Data October 2005

Overview

The data and conclusions of this paper are derived from the report with the above title from a USDA Initiative for Future Agricultural and Food Systems (IFAFS) Grant project #00-52101-9708. Some strengths of this work include standardized data handling and analysis procedures, combined actual farm data of ten states and one province to provide financial benchmarks to help farm families and their communities be successful and sustainable. The main report is also based upon work supported by Smith Lever funds from the Cooperative State Research, Education and Extension Service, U.S. Department of Agriculture. The full report is available at:

http://cdp.wisc.edu/pdf/GLGN%20USDA%202004%20ReportF.pdf

Participating grazing dairy farms must typically obtain 85% or more of gross income from milk sales, or 90% of gross income from dairy livestock sales plus milk sales, harvest over 30% of grazing season forage by grazing and must provide fresh pasture at least once every three days.

Management Intensive Rotational Grazing (MIRG) has become a more common dairy system in the northern U. S. This analysis of actual farm financial data from 101 graziers in 2004, 102 in 2003, 103 in 2002, 126 in 2001, and 92 in 2000 (more than 203 farms supplied at least one year of data), mainly from the Great Lakes region, provides some insight into the economics of grazing as a dairy system in the northern U.S.:

- There is a range of profitability amongst graziers. The ratio between the most profitable half and the least profitable half's Net Farm Income from Operations (NFIFO) per cow and per Hundredweight Equivalent (CWT EQ) was greater in the lower profit years (usually with lower milk prices) than in the higher profit years. For more information, see Fact Sheet #2 of this series.
- The average grazing herd with less than 100 cows had a higher NFIFO per cow and per CWT EQ than the average grazing herd with 100 cows or more. The smallest margin appeared in the 2003 data. For more information, see Fact Sheet #3 of this series.
- Differences between seasonal and non-seasonal calving/milking herds were reviewed. Non-seasonal herds had a large NFIFO per cow and per CWT EQ advantage in 2000 and 2002. The seasonal herds (stop milking at least one day each calendar year) had a large NFIFO per cow and per CWT EQ advantage in 2001 and 2004 and a very small advantage in 2003. **Careful examination of the data suggests that achieving a given level of NFIFO per cow or per CWT EQ is more difficult in a seasonal system.** The seasonal group had a smaller range of financial performance within a year but experienced more variability of financial performance from year to year. Less than 15 percent of the herds in the data were seasonal. For more information, see Fact Sheet #4 of this series.
- The graziers in the study were economically competitive with confinement herds in the states that had comparable data from both groups. For more information, see Fact Sheet #5 of the series.
- While breed of cattle is a minor factor affecting profitability, the Holstein herds in the data had better financial performance in four years of comparisons with other breeds. For more information, see Fact Sheet #6 of this series.
- The ranking of major cost items is remarkably similar between grazing and confinement herds. For more information, see Fact Sheet #7 and #8, of this series.
- Relatively consistent differences in financial performance between states have appeared in all years. These differences must be considered when interpreting the data.

The study also confirms that accounting methodology and financial standards are important both in the accuracy and in the standardization of comparison values across large geographic areas that involve different combinations of production assets and management skills. In comparing the results of this study with other data, it will help to understand the measures used here but not in all places in the country.

Comparing Grazing Herds to Confinement Herds

Most of the available data indicates that the NFIFO per Cow and NFIFO per CWT EQ decreases as herd size increases. That is only one of the many reasons to be very careful when comparing the average financial performance of graziers to the average financial performance of confinement herds. While progress has been made in standardizing data handling procedures and analysis for graziers in some states, this level of uniformity does not yet exist with all confinement data. Consequently, the comments made about the relative financial performance of graziers versus confinement herds focus on data from New York and Wisconsin. These states have collected their confinement data under conditions similar to those used to collect grazier data.

The graziers in both states in all five years had an advantage over their confinement counterparts in NFIFO/CWT EQ and in the allocated and non-basic cost categories. In all years, the Wisconsin graziers also had a NFIFO/CWT EQ advantage in the basic cost category. The New York graziers had an advantage in the basic cost category in two years and a very slight disadvantage in the other two years. Together, this suggests that the graziers in this study spread their NFIFO/CWT EQ advantage among many factors.

2003 is a bit different from the other five years in that Wisconsin graziers had their smallest advantage of the five years over their confinement counterparts. The opposite was true for New York.

A higher percent of total labor used on the larger confinement farms is hired. To better understand the effects of this information on financial performance, it is useful to examine the impact of labor compensation on NFIFO/Cow and NFIFO/CWT EQ. In all years, the grazier advantage would decrease if all labor were unpaid.

*See Chapters IX and X for more information about CWT EQ and cost categories. Because of rounding, some small mathematical differences might be found in the summary tables below.

Comparing the Financial Performance of Graziers to Confinement Dairy Herds in Two States in 2004	Wisconsin		New York	
	Grazier	Confinement	Grazier	Confinement
Number of Herds	38	660	29	151
Number of Cows per Herd	65	134	111	387
Average Lbs. Milk per Cow	16,526	21,277	16,116	22,465
Average Lbs. Milk per Herd	1,078,890	2,855,985	1,789,972	8,693,937
Group Average Mailbox Milk Price	$17.29	$16.72	$17.67	$16.61
U.S. All Milk Price (used to calculate CWT EQ)*	$16.10	$16.10	$16.10	$16.10
Average Basic Cost per CWT EQ	$8.54	$9.57	$10.00	$9.91
Allocated Cost per CWT EQ	$11.66	$13.17	$13.19	$13.80
Non-Basic Cost per CWT EQ (Allocated Minus Basic)	$3.12	$3.60	$3.19	$3.89
NFIFO per Cow (if all labor was unpaid)	$1,076	$1,229	$908	$1,217
NFIFO per CWT EQ (if all labor was unpaid)	$4.95	$4.71	$4.39	$4.60
NFIFO per Farm	$63,091	$102,600	$68,896	$235,396
NFIFO per Cow	**$966**	**$764**	**$602**	**$608**
NFIFO per CWT EQ	**$4.44**	**$2.93**	**$2.91**	**$2.30**

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