



## Fact Sheet #2: Comparing the Top Half with the Bottom Half of Graziers

### 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.

## FACT SHEET #2: COMPARING THE TOP HALF WITH THE BOTTOM HALF OF GRAZIERS

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### Comparing the Top Half to the Bottom Half of Graziers Sorted by NFIFO/CWT EQ Sold

The average “top half” herd in 2004 was smaller, produced slightly less milk per cow, had lower basic, non-basic, allocated and total costs per CWT EQ, and had a little over two times as much NFIFO per CWT EQ and NFIFO per cow than the “bottom half” herds. For every basic cost item, the top group spent less per CWT EQ than the bottom group, except for depreciation of purchased livestock, fertilizer, and lime. *The cost categories in which the top half had their biggest advantage in 2004 were (in order of most to least \$/CWT EQ) paid labor and management (\$0.78), depreciation (\$0.31), feed purchased (\$0.28), other livestock expenses (\$0.28), custom hire (0.21), and interest (\$0.19).*

Overall, the top herds had a \$1.67 advantage in basic cost per CWT EQ and another \$1.28 per CWT EQ advantage in the four non-basic cost categories that are added to the basic cost category to create the allocated cost category. More specifically, the top group spent \$0.19 per CWT EQ less for interest, \$0.78 per CWT EQ less for paid labor, and management (combined), and \$0.31 less per CWT EQ for depreciation. This accounts for the \$2.95 (\$5.22-\$2.27) advantage that the top herds had in NFIFO per CWT EQ.

Because of rounding, some small mathematical differences might be found in the summary tables below.

Comparing the Top Half with the Bottom Half of Graziers Sorted by NFIFO per CWT EQ Sold	Top Half	Bottom Half	2004 Average
Number of Herds	50	50	101
Number of Cows per Herd	89	99	93
Average Lbs. Milk per Cow	14,988	16,273	15,671
Average Lbs. Milk per Herd	1,326,548	1,617,693	1,462,136
Group Average Mailbox Milk Price	\$17.64	\$17.73	\$17.68
U.S. All Milk Price (used to calculate CWT EQ)*	\$16.10	\$16.10	\$16.10
Average Basic Cost per CWT EQ	\$8.44	\$10.11	\$9.32
Allocated Cost per CWT EQ	\$10.88	\$13.83	\$12.44
Non-Basic Cost per CWT EQ (Allocated Minus Basic)	\$2.44	\$3.72	\$3.12
NFIFO per Cow (if all labor was unpaid)	\$1,199	\$780	\$981
NFIFO per CWT EQ (if all labor was unpaid)	\$5.88	\$3.71	\$4.74
NFIFO per Farm	\$94,036	\$47,517	\$70,691
<b>NFIFO per Cow</b>	<b>\$1,062</b>	<b>\$478</b>	<b>\$758</b>
<b>NFIFO per CWT EQ</b>	<b>\$5.22</b>	<b>\$2.27</b>	<b>\$3.66</b>

\*See Chapters IX and X in the full report for more information about CWT EQ and cost categories. <http://cdp.wisc.edu/>

If all labor and management was unpaid, the NFIFO per CWT EQ would increase to \$5.88 for the top half and to \$3.71 for the bottom half.

The year 2004 comparison of the top versus bottom half was more similar to the 2001 comparison, than to the other years. The top half had over four times as much NFIFO per CWT EQ and NFIFO per cow in 2003, 2002, and 2000 and about two and one-half times NFIFO per CWT EQ and per cow in 2004 and 2001. **The ratio between the most profitable half and the least profitable half's NFIFO/CWT EQ and NFIFO/cow was greater in the lower profit years (usually with lower milk price) than in the higher profit years.**

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