



**GREAT LAKES GRAZING NETWORK**  
Linking Farmers with Knowledge and Resources

## **Fact Sheet #2: Comparing the Top Half with the Bottom Half of Graziers — Year 3**

### **Regional Multi-State Interpretation of Small Farm Financial Data from the Third Year Report on 2002 Great Lakes Grazing Network Grazing Dairy Data May 2004**

#### **Summary**

The data and conclusions of this paper are derived from the report with the above title from a USDA Initiative for Future Agriculture and Food Systems (IFAFS) grant project #00-52501-9708. Strengths of this work include standardized data handling and analysis procedures and 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>.

The first enterprise analyzed in this project is dairy grazing. To be considered a dairy farm for the study, 85% or more of gross income must be from milk sales, or 90% of gross income must typically be from dairy livestock sales plus milk sales. Additionally, to be considered a grazer for the study, one must harvest over 30% of grazing season forage needs 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 103 graziers in 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. A comparison of the most profitable half with the least profitable half shows that the top herds had an advantage of \$2.44 in Net Farm Income From Operations per Hundred Weight Equivalent (NFIFO/CWT EQ). This result is similar to 2001 and 2000, but the difference between the higher and lower profit farms was greater in the years with low milk prices.
- 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 smaller herds have a \$0.76 per CWT EQ advantage in the cost of paid labor, which accounts for more than the \$1.07 NFIFO/CWT EQ overall advantage that the smaller herds have. This result is similar to 2001 and 2000. For more information, see Fact Sheet #3 of this series.
- Non-seasonal herds had a higher NFIFO per cow and per CWT EQ than seasonal (stops milking at least one day each calendar year) herds in two out of three years. 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. 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 three consecutive years. This result is similar to 2001 and 2000. For more information on the comparisons between grazing and confinement dairy farming, see Fact Sheet #5 in the series.

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 2002 is smaller, produces slightly more milk per cow, has a lower basic, allocated and total cost per CWT EQ, and has more than four 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 car and truck expenses, supplies, and depreciation on purchased livestock. There were no differences in spending per CWT EQ for breeding, land rent, machinery repairs and seeds purchased.

Overall, the top herds have a \$1.68 advantage in basic cost per CWT EQ and another \$0.76 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 \$0.23 per CWT EQ less for interest, \$0.40 per CWT EQ less for labor and management, and \$0.13 less per CWT EQ for depreciation than the low group.

This accounts for the \$2.44 (\$3.11-\$0.67) advantage that the top herds have 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	2002 Average
Number of Herds	50	50	103
Number of Cows per Herd	75	97	86
Average Lbs. Milk per Cow	15,587	15,282	15,332
Average Lbs. Milk per Herd	1,167,013	1,488,501	1,318,507
Group Average Mailbox Milk Price	\$14.23	\$13.39	\$13.73
U.S. All Milk Price (used to calculate CWT EQ)	\$12.15	\$12.15	\$12.15
Average Basic Cost per CWT EQ	\$6.76	\$8.44	\$7.74
Allocated Cost per CWT EQ	\$9.04	\$11.48	\$10.45
Allocated Minus Basic Cost per CWT EQ (Non-Basic Costs)	\$2.28	\$3.04	\$2.71
NFIFO per Cow (without deducting any labor compensation)	\$971	\$409	620
NFIFO per CWT EQ (without deducting any labor compensation)	\$3.99	\$1.95	\$2.80
NFIFO per Farm	\$56,608	\$13,590	\$32,354
<b>NFIFO per Cow</b>	<b>\$756</b>	<b>\$140</b>	<b>\$376</b>
<b>NFIFO per CWT EQ</b>	<b>\$3.11</b>	<b>\$0.67</b>	<b>\$1.70</b>

If paid labor and management compensation were omitted, the NFIFO per CWT EQ would increase to \$3.99 for the top half and to \$1.95 for the bottom half.

The year 2002 comparison of the top versus bottom half was more similar to the 2000 comparison, than to the 2001 comparison. The top half had over four times as much NFIFO per CWT EQ and NFIFO per cow in 2002 and 2000 and about two and one-half times NFIFO per CWT EQ and per cow in 2001. The more difficult years (such as those with lower milk prices) often show more differences in financial performance between the top and bottom groups when compared to high profit years.

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