

## 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 # 1 : PROJECT OVERVIEW

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Here are a few key terms used and more fully explained in the full report:

**Cost per Hundredweight Equivalent of Milk Sold (CWT EQ)** is an indexing procedure which focuses on the primary product that is sold and standardizes farms in terms of milk price and many other variables for analysis purposes. The Cost of Production calculated for any two farms using the CWT EQ method are directly comparable. The Cost of Production calculated for farms using the cost per product unit (hundredweight) sold method are not directly comparable.

A comprehensive evaluation of the cost of production of any business will examine several levels of cost. AgFA© is the name of the web-based, farm financial analysis and summarization computer program used in this study. The AgFA© Cost of Production report calculates basic, non-basic, allocated and total costs.

**Total Cost is** all cash and non-cash costs including the opportunity cost of unpaid labor, management and capital supplied by the owning family.

**Allocated Cost** equals total cost minus the opportunity cost of unpaid labor, management and capital supplied by the owning family. Allocated cost also equals total income minus NFIFO.

**Non-Basic Costs** include interest, non-livestock depreciation, labor, and management. Allocated cost minus basic cost equals non-basic cost.

**Basic Costs** are all the cash and non-cash costs except the opportunity costs and interest, non-livestock depreciation, labor, and management. Basic cost is a useful measure for comparing one farm to another that differs by: the amount of paid versus unpaid labor; the amount of paid versus unpaid labor; the amount of paid versus unpaid management; the amount of debt; the investment level; and per or the capital consumption claimed (depreciation).

The Average Performance of 101 Grazing Dairy Farms in 2004, 102 in 2003, 103 in 2002, 126 in 2001 and 92 in 2000. The grazing dairy farm families that provided usable data display an average financial performance level that many farm families would be satisfied with. This level of financial performance, along with some other characteristics of grazing systems, suggest that it may be a viable alternative for farm families who want to be financially successful, especially with a dairy farm that relies primarily on family labor.

The measures of profitability calculated in the detailed cost of production and farm earnings reports in the full report are calculated using the historic cost asset valuation method (HC) to provide a better measure of profit levels generated by operating the farm business. Any comparison between the measures in this report and data based on the Current Market Value (CMV) of assets will be misleading.

#### What's Next

The standardization of data handling and analysis procedures in this project relies heavily on the Farm Financial Standards Guidelines (revised December, 1997). This and AgFA© opens the door to standarized multi-state analysis of other enterprises for which data can be collected. Additional data and enterprises are desired for the project.

A small amount of data has been collected from organic dairy farms and from custom heifer raisers.

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