

Wisconsin Grazing Dairy Profitability Analysis

Preliminary Fourth Year Summary

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Is grazing or conventional dairying more profitable? Many are eagerly awaiting the definitive study to prove that one of the systems is clearly superior in most if not all ways. Not only will we wait a long time for that study, but the expectation for it distracts us from the more important question of –“Which system is best for your family and farm?”

There will never be a study to determine for once and for all and for all conditions that grazing is more or less profitable than conventional dairy farming in the humid part of the US. This is because the “state of the art” allows some practitioners of each strategy to be successful. Secondly, management continues to be the single most important factor determining business success in farming (and in many other businesses too). We can see the evidence of the importance of management everyday.

We are all very aware that many variables affect productive performance, and economic performance is subject to all of these variables plus the added uncertainty of price variability.

We know that grazing is the “conventional” system in New Zealand, Ireland and other places.

Even before the Wisconsin Grazing Dairy Profitability Analysis (though we lacked the on farm financial data we desired), we knew that some graziers succeed while others fail. We knew the same was true for conventional operations. There have been more studies addressing the economics of grazing than most people realize but all of these studies have limitations, most of which are due to the scarcity of graziers with several years of good data. Graziers in Wis. with several years of good data are quite scarce relative to conventional dairy farmers. The same is true in most other states.

Still, most of these studies and the Wisconsin Grazing Dairy Analysis confirm the above observations-that Grazing (Management Intensive Rotational Grazing- MIRG) is an economically viable alternative for many Wisconsin farm families.

STUDYING GRAZING PROFITABILITY-METHODS AND DEFINITIONS

The Wisconsin Grazing Dairy Analysis relies on actual farm financial data to help answer the following questions;

- Is grazing economically viable?
- Where does each system work best?
- What practices make each system most viable?
- How can each system be managed for the benefit of the families operating them?

Gathering actual farm financial data is easier said than done. Most of the participants in the Wisconsin Grazing Dairy Farm Profitability Analysis indicated their willingness to participate by answering yes to a question on a 1994 Survey of Wisconsin Grazing Dairy Farmers. Eighty-four graziers said yes on the survey, but only 45 graziers sent data following a direct one-to-one follow up contact. The numbers of participants have narrowed down as follows;

- 45 graziers provided some financial data.
- 26 graziers provided one year of usable financial data for the first year analysis.
- 25 graziers provided two years of usable financial data for the second year analysis.
- 21 graziers provided three years of usable financial data for the third year analysis.
- 19 graziers provided four years of usable financial data for the fourth year analysis.

These are rather small numbers to compare and still obtain results that would be representative of the grazing dairy industry of Wisconsin. Consequently, considerable time and effort was devoted to examining the data for accuracy and consistency.

COMPARING THE THIRD WITH THE FOURTH YEAR REPORT.

The major conclusions in the third year report were strengthened with the addition of a fourth year of data. However, one must be careful in comparing numbers from the tables between the two reports. This is because 21 farms provided three years of usable data for the third year report and 19 farms provided four years of usable data for the fourth year report. In the fourth year report, all group averages for the first three years were recalculated to include data only from the 19 farms.

The third year report added a direct comparison of the financial data from more conventional Wis. dairy farm to different types of grazing operations. Specifically, selected financial performance measures of types of graziers in the study are compared with several selected measures from the 800 plus “conventional” dairy farms, (ranging in size from 19 to 1300 cows) in the Fox Valley and Lakeshore Farm Management Association (FFAMIS) data sets. These Farm Management Associations are cooperatives which provide a variety of farm financial management services to their member/clients. This data has also been used by Dr. Gary Frank of the U. W. Center for Dairy Profitability to do an annual report titled “Milk Production Costs on Selected Wisconsin Dairy Farms”. The final report of the Wisconsin Grazing Dairy Analysis will include a similar milk production cost analysis.

The computer system used by the Fox Valley and Lakeshore Farm Management Associations is known as Farm Financial Analysis and Management Information System (FFAMIS) and the data from these farms will be referred to in this analysis as FFAMIS data or farms.

DEFINITIONS-TYPES OF FARMS

As with conventional farms, “one size does not fit all” in grazing operations. So in addressing the study’s questions, it’s important to define the kinds of farms being analyzed and compared in this study.

Types of Conventional or Confinement Dairy Farms

The terms conventional and confinement are often used loosely and interchangeably and therefore need to be clarified for the purposes of this study. For many years, the typical Wisconsin dairy farm housed and milked cows in two story stanchion barns, raised and mechanically harvested most of the feed (including grain) used on the farm and calved and milked cows all year. Most of these farms were about the size that one family could handle without much hired labor. Because cattle on these type of farms are confined to buildings or paved lots most of the time, the term confinement became a popular term to describe them. Since most Wisconsin dairy farms shared these characteristics for many years, the term conventional also became a popular term to describe them. “Traditional confinement” or simply “traditional” are better terms to use to differentiate them from the other farms often referred to as conventional or confinement farms.

In the 1990s, some Wisconsin farms expanded to much larger sizes and built entirely new facilities including free stall barns, with natural ventilation, milking parlors, etc. They continued to raise and deliver mechanically harvested feed (including grain) to their confined cattle. They continued to calve, and milk year-round.

Most of the labor is hired on such farms and many have 300 or more cows. This type is also often referred to as conventional but is better described as “large modern confinement”.

The FFAMIS farms include all types of Wisconsin dairy farms, including a few graziers and large modern confinement farms, but most of the farms in the FFAMIS system are traditional in type. Most comparisons in this analysis to confinement, conventional, or FFAMIS will be comparisons mainly to “traditional” farms.

Types Of Grazing Dairy Farms

To be included in the study, a dairy farm practicing management intensive rotational grazing (MIRG) had to be big enough to potentially support a family in exchange for family labor (this doesn’t preclude hired help). Dairy and forage (often grass) are the major enterprises and the dairy cows graze about half of the forage they consume. Pastures are rotated daily in most cases. “Winter” forage is likely to be raised

on the farm in a typical year. Grain is likely to be fed in near conventional amounts although grain is less likely to be raised on the farm. Being a low or high input operator alone doesn't eliminate someone being considered a grazier. Young stock are likely to graze on the farm.

Since being able to make the right investment decisions should enhance economic performance, it is useful to categorize graziers in a way to reflect these investment decisions. These categories will be transitional and non- transitional.

A "typical" non- transitional (low capital) grazing operation then is loosely defined for Wisconsin as one in which the assets are more or less ideally suited for grazing and where the livestock harvest about half of the forage consumed in a typical year. The investment (and fixed costs per cow) represented by land, buildings, and equipment is less than in a high capital or transitional grazing operation for several reasons: 1) the decision to graze was probably made simultaneously with the decision to dairy, 2) much of the land may be steeper, stonier or wetter than class I, II or III soil, 3) there is less machinery and/or it's older, 4) there are fewer buildings and are usually older, 5) or if the operation has the land, buildings and equipment that would allow it to be farmed conventionally without much additional investment, the grazier bought it for a discounted price.

Transitional (high capital) graziers

Any farm with enough land, buildings and equipment to farm conventionally, but also has chosen the grazing practices described above recently enough to have the investment structure of a "conventional" farm is considered a high capital or transitional grazier because it has a foot in both systems. Also important to the definition of this category is that the land, buildings and equipment were not obtained at a discounted price.

The high capital or transitional grazier is more likely to raise and feed grain in larger quantities and is less likely to practice seasonal calving.

Categorizing graziers into these categories still relies heavily on judgment. However, the key difference is that the "ideal" low capital grazier has very little invested beyond what is needed for a grazing operation. Therefore their profit potential should be greater than for high capital or transitional graziers.

Seasonal vs. Non-seasonal Calving

The seasonal calving strategy is an independent practice that is used extensively in combination with MIRG in New Zealand and in some other places, but not so extensively in other places, such as Wisconsin and Argentina. In this study, a herd is not considered seasonal unless the dry period of all the cows in the herd overlap enough to shut down the milking facility for more than a day and preferably for at least a few weeks. Defined as

semi-seasonal are those herds that make a serious attempt to "bunch" their calving to one or two times of the year, but don't sacrifice healthy, highly productive animals that don't quite fit that mold. A semi-seasonal calving herd milks at least one cow every day of the year (and many more on most days). Any calving strategy not meeting the preceding seasonal definition is referred to as non-seasonal in this analysis.

Physical Performance Indicators

Appendix one and two provide some physical characteristic information about two (low capital and high capital) groups of graziers in the study. Appendix one uses cow and acreage data from 1995, while appendix two uses cow and acreage data from 1998.

The average low capital grazer averages fewer years of farming experience but more years of grazing experience. However, if two long time graziers were omitted from this group, the remaining low capital graziers would only average 7.9 years of farming and 3.1 years of grazing at the beginning of the study. This is actually a little bit less grazing time than logged by the high capital group.

The average low capital grazer had fewer owned and harvested acres and is less likely to mechanically harvest forage or grow grain.

The low and high capital graziers harvested 3.3 and 2.34 forage acres per cow respectively, in 1998, and most of them buy some if not all of their grain. This compares with the old thumb rule of needing 3 acres per cow in Wisconsin to provide all the feed needed for a cow and her share of the young stock except for mineral and protein supplement. Only one grazer in the study feeds little or no grain. The FFAMIS farms had 3.27 crop and pasture acres per cow in 1998, down from 3.34 in 1997, 3.5 in 1996, and 3.6 in 1995. Most of the FFAMIS farms grew much of the corn consumed on the farm.

The average herd size has increased in all three groups but the FFAMIS herd size average is about twice as large as the low capital graziers with the high capital group fitting almost half way in between.

For pounds of milk sold per cow, the average FFAMIS farm was higher than the high capital graziers, for the last three years. The low capital graziers were consistently lowest by a large margin. Production per cow increased for the average FFAMIS farm for all four years and was lower for all grazer groups in 1998 than in 1995.

Benchmarks

One of the original purposes of the Wisconsin Grazing Dairy Analysis was to provide financial benchmarks for graziers. Developing reliable benchmarks requires much information. It's also very important to understand how to use the benchmarks as it

is to have the benchmarks. Unfortunately that understanding is seldom gained easily or quickly.

To effectively use benchmarks to project the success of any business including a grazing dairy, its important to have a good understanding of enough benchmarks to project and monitor the relationship the three major factors of profitability which are income generation and the control of investment and operating cost.

Benchmarks can be used to summarize the many important underlying details of a part of a farm business financial situation. They can be used individually as indicators of strengths and weaknesses of a business. They can be used together to assess the overall financial performance of a farm business. To do this effectively, one must have at least a decent understanding of the type of business being analyzed. It's not good enough just to know if a key financial measurement deviates significantly from a benchmark value. You need to know why it deviates. Not until one knows why it deviates can one accurately say whether it's a problem or not, and if its a problem, what could or should be done about it.

Never use one benchmark to make important decisions and don't think of benchmarks as absolute values. In other words, no single benchmark will guarantee success or failure. Still, some benchmarks are more important than others are.

Fortunately we have universally reliable values for the two most comprehensive and therefore most important benchmarks, which are the rate of return on assets (ROROA) and rate of return on equity (ROROE).

The benchmark values for ROROA and ROROE are the same for all types of dairy operations--in fact for all businesses. Both should be higher than the rate of inflation and higher than the interest rate one is paying on borrowed money. For those who are debt free, ROROA and ROROE should be higher than inflation and higher than one's opportunity cost.

Two other important features of ROROA and ROROE are that they can be used to compare businesses (farms) of different sizes. Secondly once you calculate one, calculation of the other one is easy.

Performance of High Vs Low Capital Graziers Vs FFAMIS Dairy Farms

ROROA values for the average grazier in the study exceeded the interest rate on borrowed money in all years but 1997. The average ROROA for low capital graziers was higher than the average ROROA for the high capital graziers in 1995 and 1998 but not in the other two years. Despite the importance and usefulness of ROROA and ROROE, they are not printed in this preliminary report. This is because asset values in the grazing data are handled differently than asset values for the FFAMIS farms. Even so, all of the income reported for both sets of farms comes from the operation-not from asset appreciation.

Net farm income from operations per cow (NFIFO/cow) is another benchmark that can be used to make “apples to apples” comparison of financial performance between businesses of different sizes. It also directly measures the impact of two of the three most important components of profitability—operating income and operating expense.

In this comparison, NFIFO/cow for the low capital graziers was higher than the NFIFO/cow for the high capital graziers in 1995 and 1998 but not in 1996 and 1997. The FFAMIS (mainly traditional) farms were lower in all four years. Interestingly enough, the NFIFO/cow trends upward for the high capital graziers and downward for the other two groups from 1995 to 1997, before reaching the study’s high point for all groups in 1998.

The \$3063 range from the lowest (-460) to highest (2593) NFIFO/cow value from grazing is astounding especially from a group as small as 19 farms.

In terms of investment per cow, the high capital graziers had the highest level in two of the first three years and in all years were similar to the FFAMIS farms. The low capital graziers had investment levels that were considerably lower, but not as low as most people expect. The high/low range in this measure for the graziers in the study is also large.

The comments made about investment per cow apply to debt per cow with two additions. In looking at the individual grazer’s data, it’s obvious that the debt level has been influencing profitability much more than investment levels have influenced profitability. The FFAMIS farms consistently had higher debt per cow levels than the high capital graziers. The low capital grazer’s debt per cow levels was lowest of all.

Measuring the Cost of Milk Production in Wisconsin Grazing Dairy Herds

Cost of production is extremely important to any business! But as important as the cost of production is, it must be put into perspective.

Many seem to think the cost of production is the economic bottom line. In fact, the cost of production is at least one step away from the economic bottom line of a business. This becomes a bit easier to understand by examining the three major factors of profitability, which are:

- Control of Investment/Debt
- Control of Operating Expense
- Income Generation

As it is referred to, the cost of production directly deals with operating cost and indirectly deals with investment/debt control. It doesn’t deal with the third factor – income generation.

Graziers tend to over focus on controlling cost and investment while non-graziers tend to over focus on income generation.

The most successful managers optimize the interrelationship of all three.

Because all businesses must cover all costs to succeed in the long run, it's important to calculate "total cost." However there are other cost categories that are useful too. Getting more detailed breakdowns below total cost can help determine why costs are high or low. Dr. Gary Frank of the University of Wisconsin Center For Dairy Profitability in his annual (since 1992) cost of milk production on selected Wisconsin dairy farms report has popularized two other cost groupings called "allocated costs" and "basic costs." He compares all three cost groupings on a per cow and per cwt. of milk equivalent sold basis. To make it easy to compare the grazier's cost of production data with that of conventional farms the following cost measures have been calculated for the study:

1. Total cost per cwt. milk equivalent sold
2. Total cost per cow
3. Allocated cost per cwt. milk equivalent sold
4. Allocated cost per cow
5. Basic cost per cwt. milk equivalent sold
6. Basic cost per cow

All three cost groupings have pluses and minuses. The following definitions will help understand these pluses and minuses.

Total costs include all cash and non-cash costs including the opportunity cost of unpaid labor, management and equity capital. Another way to describe the opportunity cost is that it is a reasonable reward for the unpaid labor, management and capital supplied by the owning family. The total cost concept is needed to determine the minimum cost required to meet all financial obligations of the business, which includes a satisfactorily reward for the owners' unpaid labor, management and equity capital.

Since many business owners are willing to work for less than the opportunity cost of their labor, management and equity, the allocated cost group becomes useful too.

Traditionally, total cost is divide into fixed and variable cost. While these traditional cost breakdowns are still valid, there are some difficulties associated with comparisons of the financial performance of farms of greatly differing size and type that aren't adequately handled by these traditional measures. Therefore, other measures can be useful.

Total allocated cost equals total cost minus the opportunity cost of unpaid labor, management and capital supplied by the owning family. Since opportunity cost isn't consciously calculated by everyone, allocated cost is often used by default in place of total cost.

Caution must be exercised in comparing the allocated costs of graziers versus FFAMIS farms. Included in the expenses of many of the FFAMIS farms are wages and benefits to dependent family members primarily for tax purposes. Wage and benefit payments made to dependent family members were not included in expenses of grazing farms. So far, its not been possible to determine how much this difference inflates allocated costs of the FFAMIS farms.

Basic cost per hundred weight of milk equivalent sold (hereafter referred to simply as basic cost/cwt.) is another useful measure. Allocated cost minus the cost of interest, depreciation, labor, and management equals basic cost. Another way of saying this is that basic costs are all the cash and non-cash costs except interest, depreciation, labor, and management.

Basic cost is a useful measure for comparing one farm to another because it is not influenced by the farm's debt structure, the amount of paid versus unpaid labor, or the capital consumption claimed (depreciation). The fact that some farms have only unpaid labor while others pay family members or non-family hired help makes it difficult to compare farms fairly on only a total cost basis or on the basis of fixed and variable costs. The costs of interest, depreciation and management also have characteristics that make direct comparisons difficult. Basic cost is very similar to the cost of goods concept that is commonly used by many non-farm businesses.

Since basic cost primarily includes day-to-day expenses (those most affected by daily decisions), its use allows a fairly good look at how well the grazing farms control operating costs compared to more conventional farms.

The difference between the allocated cost and the basic cost provides some indication of the impact of investment/debt control on the cost of production.

The average allocated and basic cost is calculated per cwt. for several groups of graziers for the first three years of the study. (Some of the same computer difficulties that delayed the calculations for the first three years have delayed the 1998 calculations.) When all the graziers in the study are compared with the FFAMIS farms, their basic cost was 95 cents/cwt. less in 1995, 75 cents less in 1996, but only seven cents less in 1997.

Among the graziers, those which are non-seasonal, use DHI or are high capital tend to have lower basic costs than their opposites in the study for the first three years. Only the seasonal, and the low capital, non-DHI group of graziers in 1996 and 1997 had higher basic costs than the FFAMIS farms.

Among the graziers, those which are non-seasonal or are low capital tend to have lower allocated costs than their opposites. The low capital users of DHI had lower allocated costs than low capital non-DHI users. When all graziers were divided into users and non-users of DHI, users were lower two out of the first three years. All categories of graziers have lower allocated costs than the FFAMIS farms. When all the graziers in the study are compared with the FFAMIS farms, their allocated cost was \$1.81/cwt. less in 1995, \$2.25 less in 1996, and \$2.05 less in 1997.

When the basic cost margin is subtracted from the allocated cost margin between the average grazer and the FFAMIS farms, the graziers paid \$0.86/cwt. less in 1995, \$1.50 less in 1996, and \$1.98 less in 1997 per cwt. of milk equivalent sold for interest, depreciation, labor and management. Caution must be exercised in comparing the allocated costs of graziers versus FFAMIS farms. Included in the expenses of many of the FFAMIS farms are wages and benefits to dependent family members primarily for tax purposes. Wage and benefit payments made to dependent family members were not included in expenses of grazing farms. So far, its not been possible to determine how much this difference inflates allocated costs of the FFAMIS farms.

It may be surprising to see that the high capital herds had slightly lower basic costs than the low capital herds. This relationship indicates that the amount of investment (while important) may not be as important as what one invests in.

Graziers with higher NFIFO/cow also had lower basic costs. This suggests that there is much more to controlling operating costs than just not spending money. Again this suggests that what money is spent on is more important than the amount that is spent.

More details on the individual expense items will be calculated and reported in the final fourth year report.

Economic Impact of Selected “Low Input” Practices Among Low Capital Graziers

Those who promote seasonal calving and non-use of DHI often describe these strategies as low input. Promoters often predict that these practices will enhance profitability because of their “low input” nature. Unfortunately, low input doesn’t always mean least cost per unit and least cost per unit doesn’t always equal maximum profit.

In addition to having separated all the graziers into low and high capital groups, the 19 graziers were also separated two other ways to calculate the average financial performance of seasonal vs. non-seasonal calving; and DHI use vs. non-DHI use herds in the study.

It's important to recognize that even four years of data from **19 farms still represents a very small number of observations on which to base solid conclusions.** So when dividing an already small number into even smaller numbers, one must be even more cautious about conclusions. Still in the absence of better information, one can make some comparisons knowing that they fit those specific farms in those specific circumstances.

As luck would have it, all of the graziers in the study, who are fully seasonal in calving strategy, are within the low capital category. Four of the nine low capital graziers are fully seasonal. One of the low capital graziers became a certified organic producer during the study. This grazier is also fully seasonal. None of the fully seasonal herds use DHI. This is a long way of saying that in this low capital grazier data set, those graziers which are fully seasonal are unlikely to use DHI and are just slightly more likely to be certified organic. They may be the least conventional (conventional in this case being traditional WI confinement dairy) group among the graziers in the data set.

When the study began, there were three low capital graziers that were anticipating organic production and one that was selling organic certified milk. The grazier that was certified organic at the beginning of the study only participated in the study for two years. That data is not included in the third and fourth-year reports. It turns out that only one of the other graziers did enter the certified organic market since the study began. Early drafts of the third year report contained comments about certified organic producers, which were made with the understanding that three of the herds in the study did become organic certified (in keeping with earlier discussions it would be appropriate to categorize this organic herd as a transitional organic certified herd for the term of the study.) It’s very dangerous to make many conclusions based on one farm, so any comments about organic producers should not be taken as proof of what other organic producers might experience. However, a few comments will follow that are true comparisons between the

one farm in the study which did become organic certified and the 18 that are not even attempting to be organic.

Among the low capital graziers group, those which use DHI, are not fully seasonal, or are not organic certified, have higher NFIFO/Cow than their fellow graziers who follow the alternate practices (Appendix 3 and 4).

The above also holds true when the high capital graziers are brought into all three comparisons, even though the amount of difference decreases in financial performance for the three practices in question.

A careful study of all of these comparisons within the low capital group shows that the fully seasonal, non-DHI herds also tend to have substantially more debt per cow despite having a lower investment per cow. When compared to their opposites among all the graziers in the study, these graziers using the "low input" practices had slightly less investment and debt.

While MIRG has provided economic performance to most of the 19 graziers in the study that was competitive with the FFAMIS farms, the graziers in the study using at least one of the "two low input" strategies were less competitive. Only one seasonal herd in the study generated the amount of dollars available for family living in all four years that would satisfy most Wisconsin dairy families. That seasonal herd had about twice as many cows as some of the non-seasonal herds that generated as many or more dollars available for family living.

Ranking the 19 Graziers by Financial Performance

When ranking the 19 graziers into a high, middle, and low group based on a simple average of the four years NFIFO/cow, the following observations can be made in comparing the high third with the low third. Most of the following statements also hold true when the graziers are ranked by their four year simple average ROROA.

1. All but two or three of the graziers (in the low group) are generating the amount of dollars for family living that would satisfy many Wisconsin farm families.
2. NFIFO, NFIFO/Cow, NFIFO/Acre, cash income per cow, investment per cow, and pounds of milk sold per cow were substantially higher for the high group. Debt per cow was lower.
3. The margin of difference between the high and low group widened substantially from 1995-1997 for the measures of NFIFO/Cow, debt per cow, and pounds of milk sold per cow, but narrowed in terms of investment per cow. The trend continued in 1998 for NFIFO/cow and pounds of milk per cow but not for the other two measures.
4. The milk price was slightly higher for the high group.

5. The low group had a very slight advantage in dollars of cash expense per cow with the middle group being the highest the last three years. This measurement comparison raises some very serious questions about the fairly common belief among many graziers that the “secret to economic success” via grazing is to control operating costs. Among this group of 19 graziers over a four year period, the difference in operating cost per cow represents a much smaller part of the difference in profitability than is represented by income generation and investment control. A closer look at individual cost components shows that a higher percentage of cash (operating) cost as well as income is spent on interest in the low group.
6. The low group had a few more cows in three out of four years.
7. In most of the above comparisons, the middle group was in the middle. The three exceptions occurred in cash expense per cow in which they were usually higher than the other two groups, debt per cow in which their four year average is close to the four year average of the low group and pounds of milk sold per cow in which they were roughly equal to the higher group.
8. In terms of types of graziers, the six graziers in the top group include:
 - Two low capital herds
 - Four high capital herds
 - Five DHI herds
 - No organic herds
 - No seasonal herds
9. In terms of types of graziers, the six graziers in the middle group include:
 - Three low capital herds
 - Three high capital herds
 - Two DHI herds
 - No organic herds
 - No seasonal herds
10. In terms of types of graziers, the seven graziers in the low group include:
 - Four low capital herds
 - Three high capital herds
 - Two DHI herds
 - One organic herd (not organic market all years)
 - Four seasonal herds

General Conclusions Drawn From The Wisconsin Dairy Grazing Profitability Analysis;

1. Management intensive rotational grazing (MIRG) is economically competitive, probably at all sizes. In contrast to large modern confinement systems, grazing systems can provide a

family with a satisfactory amount of dollars for family living with the size of operation that a single family can operate with their own labor and management. About 16 of the 19 graziers in the study are generating the amount of dollars for family living that would satisfy most farm families. Graziers in the study also compare quite favorably with “conventional” Wisconsin dairy farms in the FFAMIS record keeping system when using a variety of financial measures.

2. The MIRG system is more economically flexible than the confinement system. Someone who invests in a well planned grazing operation will likely be able to recover most of their investment, if a few years later they decide to switch to a confinement system or quit farming entirely. In contrast, if you invest “from scratch” into a new confinement system, and decide to change or quit in a few years, you will be lucky to recover half of what you invested in that confinement system.
3. MIRG is a system in which a significant amount of the forage consumed by the cows is harvested by the cows to reduce harvesting costs and enhance forage quality. This is the major difference between grazing farms in this study versus many “confinement” or “conventional” farms in Wisconsin.
4. MIRG can be done with or without other practices and technologies such as seasonal calving, milking parlors, TMRS, etc. Fully seasonal is shutting down milking facilities at least one day each year (hopefully much more than a day to make it worth the effort to be seasonal.)
5. MIRG is not a reduced management system; it’s a different management system.
6. Making the right investment decisions always enhances profitability. Still, a number of graziers have transitioned from “conventional” systems quickly and successfully. A “traditional small Wisconsin dairy farm” with average or better management has a good chance of improving financial performance by judicious adoption of a MIRG system. Many graziers are showing that some of the old infrastructure (barns, silos, etc.) that may be considered obsolete by “large modern confinement standards” can be valuable tools in a MIRG system if acquired at “discounted” prices.
7. Although many graziers are financially competitive at production levels that are lower than often found in other systems, they may be even more competitive if they don’t sacrifice production because cost and investment savings aren’t automatically created when production is reduced. Herds transitioning from another system may not be able to afford much of a production decline.
8. The graziers which are most successful financially are those who focus on optimizing the three factors of profit, more than worrying about whether or not they fit a specific stereotype or system. The three factors of profit are, income generation, operating expense control and investment control.
9. Wisconsin graziers tend to emphasize operating cost and investment control out of proportion with income generation just as traditional Wisconsin dairy farms tend to

emphasize income generation out of proportion with operating cost and investment control. Either tendency can be just a different road to the same dismal place. Spending money carefully helps profitability more than just not spending.

10. The graziers with the best financial performance had just slightly higher operating expenses per cow, more investment per cow and much more income per cow, than the low group. The ability to generate income is the main factor separating the top group of graziers from the bottom group in the study.
11. Low input is not the same as low cost per unit of output. The graziers with the lowest cost per cwt. of milk sold, use large quantities of inputs such as fertilizer and grain as long as the income they generate from those inputs is greater than their cost.
12. Graziers in the study who are fully seasonal, or who don't use DHI have had, (over a four year period), less desirable financial performance than their opposites, whether NFIFO/acre, NFIFO/cow, NFIFO/cwt. equivalent of milk sold, NFIFO/farm, or ROROA is used as the yardstick. To have the same number of dollars available for family living, the herds that practiced seasonal calving needed twice as many cows as needed by the non-seasonal graziers but about the same number of cows required by the traditional confinement herds which the graziers are compared to.
13. There is no single measurement that tells enough about a business to make good important comparisons or decisions without additional information from other measures. Several measures are needed to accurately judge the financial performance of any business, but under Wisconsin conditions, dividing by cows is usually more useful than dividing by acres.

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