

Farming the Dairy Cycles

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Preface

The decade of the '80s was primarily a down cycle for the dairy industry—a sorting out of those who really had the resources and the will to survive. Now, in the '90s, we have a wiser and better group of dairy farm managers. This group is demanding more professional services than ever from agribusiness, especially large animal veterinarians like you in the area of herd management and we in Farm Credit in farm management.

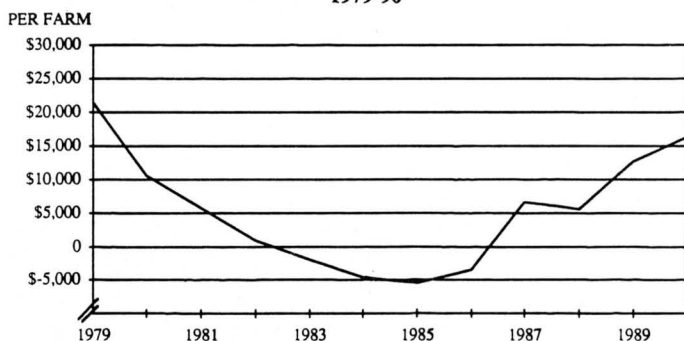
Today, I would like to address where I believe the dairy industry is going and how we can better serve their changing needs.

Dairy Farming in the '90s is Facing Many Critical Challenges

- Competing for farm labor in a shrinking labor pool; especially for middle management.
- Need for intensified management skills.
- Biotechnological adoption pressures.
- Peaceful coexistence with non-farm neighbors.
- Changing market conditions requiring on-going financial adjustments.

The dairy cycles will behave more like a free market—more ups and downs when compared with the stability of the past. The profitability shown in the chart below shows the long depressed dairy economy in the '80s: but as we came out of the 80s', we saw drastic changes in profitability. Yes, some of this is weather related, but note the effect that a sharp change in the cheese market had in 1989. This woke us up to the dynamics of a tight milk supply, but 1991 will show us that it can change abruptly. In the future we will see more ups and downs.

NET EARNINGS
THE AGRIFAX® BENCHMARK FARM
1979-90



Top 25%	59 cows or less	60-89 Cows	90-119 Cows	120 cows or more
Net Earnings:				
Per Farm	\$19,784	\$31,983	\$43,240	\$102,040
Per Cwt.	2.64	2.54	2.35	2.84
Return on Equity	3.2%	7.5%	8.0%	10.1%

The arithmetic of dairy profits is very simple: large, efficient, high-producing dairy farms are in the driver's seat. Many farms are moving fast to position themselves into making milk as cheaply as possible, but only a rare few can do it for \$10/cwt.

How to Serve the Changing Dairy Farms!

We are moving toward two types of dairy operations. I describe the dairy farming trend as one of becoming polarized at two ends with a confused group in the middle. Let me explain.

Megadairies

The Northeast has some very successful large dairies. The pacesetters who survived the '80s have become the model for much of our dairy expansion today. We see milk factories now developing from the 200-cow size and growing rapidly. This group has bottom line managers who are not afraid to modernize facilities and spend top dollar for top-notch employees. They use agribusiness for support and have clout in the marketplace. Their biggest problems are environmental issues and income and estate tax issues, while they still make up only a small number of the dairy farms in the Northeast, they make up a significant share of the milk produced.

One-Family dairy farms

On the other end, we have a very strong group of small dairy farms in the 60- to 100-cow size that are thriving. As long as they accept the characteristics needed to run their size operation, they'll be around for a long time. This group is outspoken, while earning a fair profit. They are very resourceful. Off-farm income and enterprising sidelines will be used to support their desires to stay small.

Confused middle group

Farms too big for just family, and who must rely on outside employees are frustrated. Profits from any small expansion can be eaten up in remodeling facilities and added labor costs. Because of where they are located many will be unable to make the big jump to a megadairy. Some should shrink. Many will get out of farming.

An Emerging Business Manager

From all of this, I see a new and different dairy owner—one who must manage. The results of Cornell's ProDairy extension education program shows vividly that the dairy community knows what has to be done technologically, but they must learn how to execute. This means becoming a true business manager—one who will put organizational skills, personnel management techniques, and financial analysis as top priority.

I have witnessed a shift by dairy owners over the last 5 years toward this style as evidenced in the following areas:

- Closely and regularly monitoring changes; i.e., interest in DHIA's RMS, daily milk weights, bottom-line results.
- Realizing nutrition is critical and either learning it or paying a fee to have someone do it for them.
- Establishing written goals and plans, followed up by job descriptions, training, and responsibility lists.
- Paying to go to in-depth seminars; i.e. herd management conferences, labor seminars, etc.
- Visiting farms in other regions.
- Using Agribusiness more for their farm management needs.
- Paying good compensation for key employees.
- No hesitation to switch service people and demand more.

Our dairy farmers are becoming:

1. More open-minded.
2. Increasingly well-informed.
3. Very goal-oriented.

In the past, agribusinesses have led farmers. Some of our aggressive dairy farmers are now leading us. Our challenge is to push up our intensity to stay ahead.

The following are some important financial priorities that I emphasize while helping the new dairy farm man-

ager manage through the dairy cycles:

How One Can Cope in a Down Cycle

To survive in an economically depressed agricultural industry or economy, a number of ingredients are necessary.

- *Keep accurate and timely records* - Both financial and production. There's no other way to know where you are today and where you've come from. A key lesson from the present financial stress in agriculture is that good management decisions require good records. This is one of the reasons for increased use of on-farm computer programs.
- *Control Costs* - Tightening the expense side of business is usually the first line of defense. If the down cycle is short, this may be all that is necessary. The following lists a number of ways to keep expenses to a minimum:
 - a. Be firm in negotiating major purchases.
 - b. Take advantage of trade discounts.
 - A 1% discount for payment within ten days is the equivalent of an annual interest rate of 18.25%.
 - c. Obtain a line of credit and when cash flow is positive, reduce indebtedness.
 - d. Analyze carefully planting intentions, fertilizer usage, and other crop needs.
 - e. Sell land or equipment not needed in the operation.
 - f. Adjust living standards in accordance with low commodity prices and profits.
- *Develop a capital spending plan* - With tighter profits and the high cost of borrowed money, you will not be able to make all those purchases on one's wish list. Smart managers ask themselves whether a proposed expenditure will save or make money and pay for itself in a short period of time. If the payback isn't there or if it will take too long, the proposed expenditure should not be made unless absolutely necessary. Each farmer should develop a list of capital purchases he would like to make in each of the next few years. This list should include replacement items for equipment wearing out as well as purchases to expand or improve efficiency. An estimate of cost should be placed next to each item and a priority ranking attached to the list.

- *Set financial goals* - Only a small percentage of all farmers establish financial goals on either a short-term (1 year) or long-term (5-10 year) basis, yet many of the most profitable farms establish annual goals to measure performance against. Farmers often will establish production goals but are afraid of “failure” if financial goals are established and not achieved. This is hardly failure as they will no doubt be closer to achieving them than if no goals were established.
- *Make use of comparative data and outlook information* - As profits become tighter, successful managers will constantly search for ways to improve efficiency and control costs. An excellent way to determine where management attention should be focused is to compare your operation to the more profitable ones in your industry. (At the end of this reference is our Northeast Agrifax Dairy Benchmark Top 5%, 1990).

The financial goals one establishes are unique to one's operation. Although no one can tell one what their goals should be, the following lists categorize where goals should be established:

- a. Net worth - both in total dollars and as a percent of assets. In expansion phase — stay over 40%.
- b. Net profit and return on investment. The best dairy farms are fortunate in that they can average 10-15% return-on-assets.
- c. Debt per producing unit - \$2,000 debt/cow is the goal but, can increase towards \$3,000/cow for short periods of changes.
- d. Number of families the business can support, 50 cows/family.

Once established, goals can be expanded or revised as needed. To be most effective the entire management team should be involved in setting and monitoring these goals.

- *Stay abreast of economic changes that affect your operation* - Many farmers did not recognize that the use of financial leverage, which worked well in the 1970s, was inappropriate for the 1980s. In past years, a farmer could borrow at a rate below the inflation rate. As long as a farmer could handle the annual cash flow, his investment was appreciating in value and there was satisfaction in knowing that the investment would eventually be paid off with cheaper dollars. However, inflation has moderated and the value of farm real estate has dropped in many areas. Timing of major changes is much more critical as margins narrow. One must know when to buy commodities. How about the beef market cycle? This requires developing a pipeline and network for information.
- *Analyze your enterprises in detail*. So you know which one needs more attention or revamping. For example what is the cost of the heifer raising enterprise? You might be better off in a down cycle to raise less, or board them out.

- *Budget everything*. Cash flow being tight means you need to constantly juggle income and expenses. A key ingredient of coping when profits have dropped is to prepare a budget for next year and even monthly. The best information on which to base this is good records for your farm for last year. In addition, you will need good data on changes expected during next year in commodity prices, government price support programs, farm inputs, machinery prices, etc.
- *Do the little things right* - This is a combination of those factors listed above and focusing your attention on the details. A very astute farm leader once said that farmers can be grouped in two classes, those who are one day ahead of schedule and those who are one day behind. Often it is no more than that which separates the farmer who harvested his alfalfa before it rained versus his neighbor whose hay got wet. In our Agrifax Benchmark Summaries we find the high profit group had slightly better yields, better efficiency and lower cost control in several key expenses.

In this study, the low profit farmers were farming in the same area, under the same conditions, and supplying the same markets as their more profitable neighbors. The difference was greater attention to detail and focusing management attention where it will generate the highest return.

Five Ways to Manage in an Up Cycle

An UP cycle is that unique period of time when income outlasts expenses by at least 25% and you are faced with paying Uncle Sam some income tax. For some commodities this could be once in five years (potatoes) or only for a few weeks (poultry) or three years (fruit). Sometimes an up cycle has been referenced as that sustained period of time when you could pay all your bills every month.

How you manage during these times is probably more critical than during a down cycle. In a down cycle you know what must be done. You don't like it but it's a matter of survival, whereas in an up cycle, the pressure is off and we tend to let up on those management-style characteristics that got us through the down cycle and thus the slippage begins. Instead, one should look at an up cycle as an opportunity to manage to greater efficiency. Here are some important concepts to use during this time. They represent

an important checklist to maintain discipline in running your business.

First of all, put into practice three needs for every want.

Remember those items you needed during the down cycle but could not afford to implement? Now is the time to re-rank the "needs" list and put them into action. For example, get back to replacing old equipment, clearing new land, adding more drainage tile, and repairing the roof. Then create a "wish" list such as a new car, the farm next door, a computer, and don't buy anything on the "wish" list until you have implemented three changes from the "needs" list.

Second, don't reduce or compromise your business standards.

If your efficiency was improved during the down cycle, don't slack off. The milking parlor should handle 60 cows/worker/hour during an up cycle too. With plenty of cash flow one might rather spend time buying new equipment, talking with the neighbors, etc., instead of keeping the business hopping!

Third, when analyzing improvements to the business, be conservative.

Remember what a variable interest rate can do to monthly payments. When figuring payback on investment, you should use an average of five-year prices, and return on capital that is 3% above the interest rate. This will temper those large positive cash flows that result from wanting something so badly that you can only see the benefits and not the costs.

It is also useful to have someone from inside and outside the business to review your analysis of pending improvements. I use the "suppose if" principle to test the probability of success or failure to get a better handle on the validity of the assumptions. Suppose price is 10% higher or lower; how will this affect the bottom line?

Fourth, you need to work at getting the business back in balance.

Obviously, in surviving a down cycle one had to cut corners. You need to remember what these were and work hard at getting the farm back in balance again. For instance, determine what your limiting resources are and start strengthening them. Such as:

- Your **land** is in poor condition - depleted fertility or in need of drainage. Perhaps you don't have enough land or depend too much on rented land with no long-term leases.
- Your **financial** situation has deteriorated to the point where net worth is below 40%; you must then concentrate on plowing profits into debt reduction or replenishing inventory.

- Your **labor** was thin and could use another person or time for training to build skill levels.
- Your own **management** time was sacrificed and now perhaps you should take the time to do some needed planning.

Fifth, maintain a reserve.

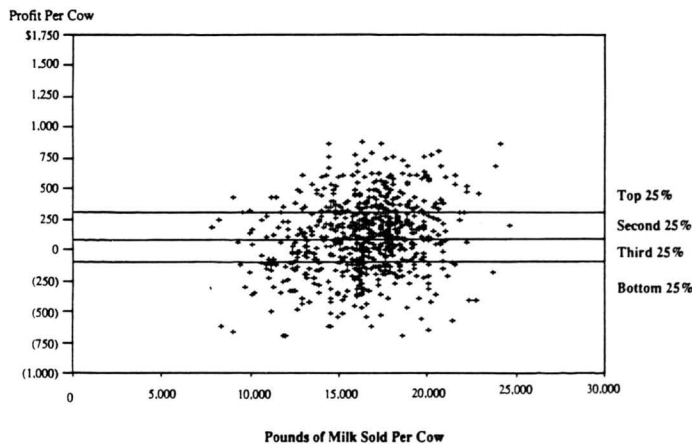
In an up cycle we tend to go overboard in making changes and repairing the ship. We go too far. During the inflationary '70s you could borrow and pay your debt off with cheaper dollars. Being highly leveraged was a good management strategy. Currently, we have low inflation so we must swing back the other way and concentrate on building up a nest egg. It's better to save a little under these conditions. You might even have to pay a little income tax. There will be bad days in your business: either from a down cycle, drought, fire, or something that one must weather through; so one of the essential steps of managing in an up cycle is to salt a few pennies away.

How Can We Help?

We all must become bottom line advisors. To do this, we must keep in focus at all times, that there is more than one way to make a profit.

The graph below illustrates that it is not just milk production per cow that makes the difference.

PROFIT VS. MILK SOLD PER COW



*657 Dairy farms in the Northeast in 1990

Four Key Factors

When a dairy manager puts together several key management resources he is more likely to be more profitable; note the increase profitability when four key factors are combined. Successful dairy farmers have a simple formula. It is doing all the little things right all the time! This can be dull and boring, but once a dairy farmer has the right resources working the profits will be the exciting reward.

**IMPACT OF FARM MANAGEMENT FACTORS*
ON NET EARNINGS**

Number of Factors Above Average	Number of Farms	Average Number of Cows	Net Earnings Per Cow
0	73	69	\$-34
1	221	75	56
2	197	114	142
3	121	158	218
4	45	192	244
All Farms	657	109	141

*Factors are number of cows, milk production per cow, milk per worker and feed/crop expenses per cwt.

4. *Nutrition consulting.* Someone in your dairy farming area should be doing this on a fee basis, preferably more than one person. If you don't have someone, network with those who do.
5. *Herd record analysis* - monitoring for trends with assistance of computer technology.

Summary

Dairy farming today is all business. Fortunately this will help all of us who serve the dairy clients because they will be more demanding and these are the only type of clients to have!

**PACESETTERS IN THE NORTHEAST
Top 5% on earnings/cow**

Herd Size	131
Milk sold/cow	19,520
Milk sold/worker	743,738
Feed & crop exp./Cwt	5.39/Cwt

Five Areas Where You Can Help

Here are five areas in which your clients will appreciate your insights:

1. *Herd management training.* Farmers are not good at explaining why and how. They now will pay to have someone help in training.
2. *Herd management organization.* Establishing daily, weekly, and seasonal routines on dairy herds, i.e., Tuesday, vet day; Wednesday, bedding stalls day; Thursday,
3. *Evaluating*—i.e., their key people involved in cow and barn management duties. More and more, we find that there are two kinds of herdspeople: those who are cow-care people — those who know every cow on the farm and are doers, not supervisors; then we have the herd managers who will handle the barn crew very well. We must fit the right person to the right job.

**FINANCIAL SCORECARD:
THE DAIRY INDUSTRY LEADERS**

Source: Agrifax Benchmark Program
Farm Credit Banks of Springfield

	Top 5% on Net Earnings/Cow 1990	Your Farm
Resources		
• Number of cows	131	_____
• Youngstock % of cows	85%	_____
• Crop acres	361	_____
• Worker equivalent	3.5	_____
Efficiency factors		
• Cows/worker	38	_____
• Milk sold/cow	19,520	_____
• Lbs. of milk sold/worker	742,738	_____
• Crop acres/cow	3	_____
Financial results		
• Total Assets/cow	\$8,662	_____
• Total debt/cow	\$2,822	_____
• % net worth	67%	_____
• Return on equity	11.2%	_____
Cost control		
• Purchased feed costs/cow	\$823	_____
• Crop expenses/cow (seed, fert, chem.)	\$230	_____
• Labor costs/cow	\$305	_____
• Cash costs/cwt	\$13.39	_____
Cash Flow		
• Cash earnings/cow	\$907	_____
• Family living (incl. income taxes)	\$33,636	_____

Look at these standards annually. Also compare to the other dairy businesses of your size and style in your own area.

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