



DAIRY &
ANIMAL
SCIENCE

DAIRY DIGEST

Family and Business: An Uneasy Combination

The term “family business” is usually associated with positive thoughts and meaning. But as anyone with experience working with family businesses knows, there can be times when the “family” part interferes with the “business” part. Even worse, there are times when the “business” part can damage the relationships in the “family” part beyond repair. Clear, open, and honest communication is the first key to avoiding both of these problems and creating conditions for the family business to thrive. Business and human resource planning are activities that will help the business continue to meet the needs of the family.

Let’s consider the family first. The family exists as a social institution in order to provide a loving and nurturing environment for people to live and grow. Family members fill their roles naturally; managers do not select them. A family unit is characterized by words such as growth, nurturing, love, and relationships. Ancestors, values, and tradition are important parts of a family’s identity. Quite significantly, family members grow and develop into individuals with their own interests, skills, and abilities that may or may not meet the needs of a business.

Now consider a business. Fundamentally, a business exists for the purpose of generating profits that will financially support ownership and employees. Businesses achieve this by taking resources such as labor, capital, and raw materials and using them to produce something that can be sold at a profit. Business is characterized by words such as management, profits, control, performance, and compensation. Businesses must have people, both management and labor, possessing interests, skills, and abilities that meet the needs of the business.

When members of the family act out their family roles in the context of the business, problems can develop. Parents with older children involved in their business may find it difficult to switch to the role of business associate. Siblings may carry on rivalries from childhood into their adult roles as business partners. In such cases, the business will suffer because family priorities and problems will not lead to good decision-making in the business context.

More damaging are cases where business issues are carried over into the life of the family. A financially struggling family business may lead to feelings of blame and disappointment between parents and children or siblings. When the success of a business is tied up with the heritage and tradition of a family, the decline of the business can lead to the destruction of the family as well. In such cases, the family business ceases to meet the needs of the family.

As you can see, family and business do not always fit easily together. Here are three recommendations to help ensure that your family business remains viable and continues to financially support the family:

1. Open lines of communication. Problems in a family can often be difficult to discuss. Family members that are in business together need to make a special effort to communicate because their livelihood depends on it. Issues such as performance expectations should be clearly defined and understood so that conflict can be avoided. In addition, family members need to communicate openly about long-term personal career goals and expectations.

2. Conduct business planning. Business planning is a formal process where partners strategically plan for the organizations long-term development. In the business planning process, partners consider issues such as the current and expected market environment, past performance, and existing strengths and weaknesses of the business. They combine this information with their expectations, the advice of consultants, and their shared values to come up with plans to meet the future. These plans should include a vision, mission, objectives, and goals for the business.

3. Formalize human resource planning. When family businesses make do with the people in the family as the sole source of management and labor, there is often little thought put into aligning human resources with the needs of the business; or, conversely, to aligning the business enterprise with the interests and skills of the

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people. The result is often people involved in aspects of the business that they are not qualified to handle and do not particularly care for. The solution is to carefully analyze each function of the business and the skills that management and labor need to effectively operate. If the family doesn't have someone with the skills and interests required, then a remedy must be found. Potential remedies include: hiring someone outside the family with the needed skills, seeking training for a family member, or eliminating that aspect of the business.

Family businesses have the powerful advantage of dedication and motivation from family members. This advantage can help a family business to overcome adversity that might destroy a non-family enterprise. In addition, a well-run family business can be part of an extremely positive environment in which to raise a family. In order to harness these advantages and meet the long-term needs of a family and a business, effective communication and planning must be part of the equation.

*Richard Stup
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FMD - One Year Later

About a year ago, February 20, 2001 to be exact, Great Britain discovered that they had an outbreak of Foot and Mouth Disease (FMD). While they had experienced FMD in the past, Great Britain had implemented many of the same protective measures that we rely upon in the U.S. to keep FMD and other highly contagious diseases out of the country. Somehow the barriers had been breached in the UK and FMD was present and rapidly spreading. Apparently the disease first occurred in pigs but rapidly spread to cattle and sheep. The statistics of the disease and its impact on the UK are staggering:

- 6 million animals destroyed,
- 4 million directly due to FMD and 2 million additional animals destroyed because they could not be moved to market during the outbreak;
- one in 8 of all farm animals in Great Britain were destroyed (4,860,000 sheep, 763,789 cattle, 428,000 pigs, 7429 goats and 300 other species).
- 9677 farms in 30 counties affected
- 7800 farmers and farm workers lost their jobs temporarily or permanently

The economic, social and emotional impacts of this outbreak are difficult to measure, but there is general agreement in the UK that by any measure, FMD has had profound effects on the entire nation. The cumulative effects of BSE (Bovine Spongiform Encephalopathy or Mad Cow Disease) and FMD have dealt a severe blow to the dairy and beef industries in the UK.

During the past 90 days there have been no new outbreaks of FMD in the UK. This 90-day period is the minimum considered necessary for the lifting of special restrictions put in place during the outbreak. It is likely that restrictions will be gradually lifted while government agencies continue to test and monitor for any evidence of remaining infection.

In the U.S., the UK problem has been a wake-up call to intensify our biosecurity measures on each farm and tighten our protective measures nationally. Healthy animals are a key to a safe and reliable food supply in the U.S.

*(Data Source -- ProMED)
Larry J. Hutchinson, D.V.M.
Veterinary Science Extension*

CAFO Continues, continues, cont....

Implementation of Pennsylvania's CAFO NPDES (Concentrated Animal Feeding Operation National Pollutant Discharge Elimination Systems) Permit program is well on its way. Any farm business with livestock (AFO – Animal Feeding Operation) that has more than 1000 animal equivalent units (total live weight of animals divided by 1000 = one AEU) should have applied to DEP (Department of Environmental Protection) last year for either an individual or a general NPDES permit.

******We interrupt this article for an important CAFO announcement******

February 18, 2002 is another important date for any farm that is a CAO (Concentrated Animal Operation) under the Nutrient Management Act. CAOs with between 301 – 1000 AEU's must apply for a PA CAFO NPDES Permit. To learn more:

- Contact your regional DEP office
- Visit DEP Web site at www.dep.state.pa.us/farmers/default.htm
- See article by Dodd and Abdalla in Farm Management Reports November 2001
- Contact your County Conservation District Office
- Talk with a knowledgeable consultant

If you qualify, it is **your responsibility** to comply. Fines for noncompliance can be substantial. It takes time to develop the materials needed for the entire permit application. The main portions of the permit include:

- Description and location of your AFO and all land that will receive manure
- Approved NMP (Nutrient Management Plan)
- Conservation Farm Plan (E&S plan for plowing and tilling)
- Identification and implementation of appropriate BMPs (Best Management Practices) to control pollution
- Certificate of design, installation and inspection of liquid manure storage structures by a Professional Engineer
- A plan for regular inspection, record keeping, emergency response, training and reporting concerning various aspect of the manure handling and storage system.

Long range business plans for any AFO should also consider existing CAFO requirements and the possibility that the animal numbers may change. Just like financing, building design and selecting a milking parlor the steps required to obtain an NPDES permit take time and effort.

Learning how to work with and abide with DEP regulations is becoming just as much a part of operating a dairy as following milk inspection rules. Talking with DEP and filling out forms and reports is not high on most peoples list of fun things to do. However, operating a CAFO without a proper permit is illegal. I have worked with field personnel in two of DEP's regional office and have found them helpful in determining the proper steps to take concerning the permitting process. My recommendation is that "if in doubt, check it out" contact your regional DEP office.

*Robert E. Graves
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Pennsylvania DHIA Averages

The 2000-2001 PaDHIA test year was completed On September 30. Pennsylvania DHIA averages for breeds with ten or more herds are listed below

<u>Breed</u>	<u>Herds</u>	<u>Milk</u>	<u>Fat</u>	<u>Protein</u>
Ayrshire	13	15552	595	486
Guernsey	11	14491	658	489
Holstein	1753	20591	753	625
Jersey	65	14866	688	528
B.Swiss	13	19703	770	655
Mixed	163	17301	665	543
All Breeds	2021	20066	743	614

The 2021 herds averaged 77.8 cows per herd, an increase of 2.4 cows over last year. Data are from DHIA and AP Test plans processed by PaDHIA. This years' average is 99 lbs. milk, -13 lbs. of milkfat and 25 lbs. of protein below the 1999-2000 figures.

Cow Removals*

Data from the 2000-2001 PaDHIA test year show that one-third of the cows in DHIA tested herds were removed last year. Reasons for removal can be classified into two categories: voluntary culling and involuntary culling.

<u>Reasons for removal</u>	<u>Number</u>	<u>% of removals</u>
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Voluntary

Low Production	4912	7.5
Dairy Purposes	5321	8.2

Involuntary

Reproduction	12385	19.0
Mastitis	8482	13.0
Injury	3732	5.7
Health (other)	2773	4.3
Type problems	4753	7.3
No reason given	14710	22.6
Died	8101	12.4

*Total removals during the 2000/2001 PaDHIA test year were 65178 cows or 32.44% of the cows on test.

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Focusing on Farm Profits: The Big Picture

Dairy producers have felt an increasing amount of competitive pressure over the past few years. The declining number of farms across all areas of agricultural production is well documented. Many farmers, dairy producers included, enjoy the lifestyle associated with production agriculture. However, without maintaining a focus on the farm's profitability, that lifestyle is not sustainable.

Dairy business owners should analyze each business decision they make in light of the potential effects on the farm's bottom line. Furthermore, the owner should look at both the short-run and long-

run effects of any decision. A major expansion, for instance, may be exactly what the farm needs to maximize long-run profits. However, the initial investment required may hurt the farm's cash flow over the short run. Although the option may be profitable, it may not cash flow.

Focusing on profitability will also lead to increased production efficiency. Generally speaking, dairy farms with higher producing herds are more profitable. This occurs because the managers of higher producing herds often find ways to increase their production while spending little, if any, more on production costs than farms with lower producing herds. True, increasing production, in and of itself, does not necessarily mean that profits will increase. However, data consistently show that there is a wide range in production per cow for farms with very similar production costs. Thus, some farms are able to increase profits by increasing the efficiency of use of the resources available to the farm business owner(s).

Another result of focusing on profitability is that the business owner may quickly realize the true value of his or her time. Management decisions have potentially major impacts on profitability. Often, managers need more information than they have on hand to make good decisions. Consequently, relatively poor decisions are made. Information is the key to sound decision-making and it takes valuable time to gather that information or to sort through all the information at the owner's disposal. If the owner spends too much time on work that could be hired at six or seven dollars an hour, he or she may be forfeiting the opportunity to gain much more per hour for time spent in managerial responsibilities.

Obviously, lifestyle choices, society, and uncertainty may constrain the owner's ability to maximize farm profits. However, competitive pressures necessitate that the dairy farm owner generate as much money per hundredweight of milk as possible. With this as the managerial focus, the farm will have a much greater potential for short-term survival and long-term strength.

This is the first in a series of articles discussing low-cost methods of increasing farm profits. Future articles will appear in *Dairy Digest* periodically over the next few months.

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Mycoplasma - The Hidden Mastitis

Lately, more producers have been plagued by an unfamiliar type of mastitis that can sweep through a herd with devastating effects to milk quality and production. Culture reports may come back with nothing unusual. But over a few months time, the herd will experience a bout of clinical mastitis that is unresponsive to treatment. Information from recent months SCC reports are also inconclusive because individual SCC from each infected cow may increase slowly or jump very quickly. This mastitis problem could be caused a mastitis-causing organism called *Mycoplasma*. Until recently, this bacteria was believed to be a problem only for large herds. This is no longer the case.

There are many species of *Mycoplasma* found in dairy cattle, but *Mycoplasma bovis* is responsible for over half the *Mycoplasma* mastitis cases, causing the most severe infections. *Mycoplasma* can be responsible for many diseases within a dairy herd ranging from pneumonia, arthritis, metritis to mastitis. Calves also may suffer

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from inner ear infections. The veterinarian or producer might suspect *Mycoplasma* mastitis when there is a significant increase in clinical mastitis over a few months within a herd with few other health problems. A distinctive characteristic of *Mycoplasma* mastitis is that more than one quarter, and often times all four quarters will become hard and swollen. Infected cows will have a marked drop in milk production. Changes in the milk may begin one to three days later, first becoming watery, containing small, "sand-like" flakes. Several days later, the turns milk yellowish-brown and then becoming like cottage cheese. When thinking back several months, the producer may remember the herd coughing or that the calves and heifers had cases of pneumonia. Many cows may be lame or show signs of arthritis.

Calves fed milk infected with *Mycoplasma* are now considered possible carriers of this bacteria. Unfortunately, the problem may not show up until many years later. *Mycoplasma* are commonly found in the respiratory and urogenital tracts of seemingly healthy cattle. Under stress, such as freshening, temperature extremes, herd additions or over crowding, the bacteria will settle in the udder. Since *Mycoplasma* likes cool, damp conditions, more outbreaks are seen during the late Fall, Winter and early Spring months.

Once *Mycoplasma* is suspected, culturing a bulk tank sample is a good first step. Ask the laboratory before hand if they can culture for *Mycoplasma* prior to sending the sample. Not all labs are set up to perform the special techniques that are required for culturing *Mycoplasma*. If the bulk tank is positive, the next step is to determine what animals are infected. For small herds, culturing the whole herd is advisable. For larger herds, culturing all animals with an elevated SCC is suggested.

Even though a few drugs have shown sensitivities under lab conditions, treatment of the cow seems to be ineffective. Some cows with adequate immune systems have been able to eliminate the infection themselves returning to previous production levels. Because bacteria is shed intermittently in the milk, she should be considered be infected for life. To help control the spread, all positive cows should be segregated from the rest of the herd and milked last. Positive cows should be culled if they become chronically infected.

Because *Mycoplasma* is spread cow to cow on milking equipment and on the milkers' hands, good milking hygiene is the best means of controlling this disease. Routine sanitation measures used to control other contagious organisms are effective against *Mycoplasma*. Milkers should be encouraged to wear latex gloves during milking.

Pre- and post dips with 0.5 to 1.0% iodine are the best disinfectants to use when milking cows. Culturing bulk tank milk every month or two can detect the disease before it runs rampant within a herd. Because milk from *Mycoplasma*-infected cows can cause disease in calves this milk should be discarded.

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The First North American Conference on Robotic Milking

will be held on March 20-22, 2002 at the Regal Constellation Hotel, Toronto, Ontario, Canada.

The Conference features 42 presentations in the seven plenary and research sessions and provides a unique opportunity to share worldwide expertise in this area.

Technical presentations will feature the leading world specialists from 14 countries. Topic areas include Robotic Milking and the Dairy Industry; Housing and Milking Facilities; Management and Animal Husbandry; Health and Mastitis; Milk Quality; Labour, and Economics; and Animal Welfare. More than 30 additional topics will be presented as posters. Please see the Conference website at www.ontariodhi.com/robotics under Program for full list of conference presentations.

Displays of new robotic milking equipment and design by world leading manufacturers will be a highlight of the Conference. As well, the third day of the Conference will include visits to farms that have operating robotic milking systems.

A producer panel shares their experiences following the dinner on the evening of March 21. The conference will be held in the Regal Constellation Hotel in Toronto, Canada on March 20-22, 2002. Cost is \$375 Canadian (about \$250 US.).

An optional pre-conference workshop examining regulatory issues for automatic milking systems has now been added. The workshop will be held on the afternoon of Tuesday, March 19th, 2002.

Speakers will discuss appropriate regulations to ensure that the safety and quality of milk are not compromised by the adoption of automatic milking systems. Additional information is on the website. Cost is \$75 CAN.

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