



Chris Mondak



Larry Tranel



Dale Thoreson

Dear Dairy Producers:

**Wow!** Talk about getting hit from all sides with forces so beyond our control. The global economy is affecting our dairy industry to a point few could argue we are in a crisis situation. Adding to the injury for various parts of the state was some serious crop damage from storms.

On the right column are financial and legal resources we wanted to bring to your attention that are available from ISU Extension. We, as dairy field specialists, also want to make sure you know you are welcome to call us for your dairy production and financial concerns and if we cannot help you, chances are we know who can.

We are holding many meetings on "The Dairy Financial Situation" across the state in July and August and although some have already taken place at the time of this newsletter printing, we have some of the information available that we can get you or help talk you through it.

**You are not alone, nor do you have to face this alone.** It is important to deal with, not avoid, tough financial situations as time usually works against us and there are tools available to help make good decisions during stressful times. And, maintaining healthy family and working relationships are very important as well when the chips are down.

So, please take care of yourself and if we can assist in any way, please give us a call. Our services are confidential and hopefully priceless to those who take advantage of them.

**Chris Mondak**  
ISU Extension Dairy Field Specialist, NW Iowa

**Larry Tranel and Dale Thoreson**  
ISU Extension Dairy Field Specialists, NE Iowa

## FINANCIAL RESOURCES

**FINPACK** helps you organize and analyze the current financial situation of your farm, answering the question, "Where am I?" Next, FINPACK will help you explore alternatives within your ag business, helping you to answer the question: "Where do I want to be?" After projections are analyzed, FINPACK provides you with the information to make better decisions about your ag business: "How do I get there?" .all of which helps you better manage your operation.

### RESOURCE PEOPLE who can assist with Financial spreadsheets and reports:

Mike Duffy, William Edwards, Iowa State University Extension Farm Management

#### FinPack Associates:

- Wendell Williams, 712-338-4958, [cwwilli@evertek.net](mailto:cwwilli@evertek.net)
- Mike Borcharding, 641-736-2104, [mborcher@omnitelcom.com](mailto:mborcher@omnitelcom.com)
- Charles Morine, 563-245-2162, [chuckm@alpinecom.net](mailto:chuckm@alpinecom.net)
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- David Enriken, 515-832-2647, [df1943@wmtel.net](mailto:df1943@wmtel.net)

## LEGAL RESOURCES

**IOWA CONCERN HOTLINE** 1-800-447-1985 – A 24/7 phone line to connect you with a resource person to get assistance on financial concerns, legal question, or stress. 24-hour access to confidential assistance.

### CENTER FOR AGRICULTURAL LAW AND TAXATION

Provides timely, objective information to producers, professionals and agribusinesses concerning the application of important developments in the law (federal and state legal opinions of relevance, as well as critical legislative developments), and is a primary source of professional educational training in agricultural law and taxation. Web page <http://www.calt.iastate.edu/>, or call 515-294-5217.

Provided by Iowa State University Extension Dairy and Farm Management Program Specialists:  
Ron Hook, Chris Mondak, Dale Thoreson, and Larry Tranel

**ISU Extension Dairy Team**  
**"Bringing Profits to Life"**



### ***Dairy Field Specialists***

- *Dale Thoreson, 319-267-2707*
- *Larry Tranel, 563-583-6496*
- *Chris Mondak, DVM, 715-737-4230*

### ***State Dairy Specialists:***

- *Dr. Lee Kilmer*
- *Dr. Leo Timms*

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### ***Inside This Issue:***

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# The Dairy Financial Situation



## Iowa State University Extension

invites **dairy producers, bankers, agri-business personnel, and community leaders** to an informational meeting outlining legal and financial options, strategies and resource people.

Dairy families, and the agri-businesses they work with, are seeing unprecedented losses from each hundredweight of milk produced. The dynamics of the global economy are impacting local farms and businesses. Through no fault of their own, many dairy operations are facing a financial crisis.

### Program:

- What the heck is happening to our dairy industry??!!
- What are our financial options and strategies? How do we talk to our banker about our situation?
- What legal options and strategies do we have?
- Making good decisions during stressful times: What tools are available to me and my family?
- What should we tell the kids?

All programs are 1:00 to 4:00 pm

- **Aug 4** - NE Research Farm, 3321 29<sup>th</sup> St, **Nashua**
- **Aug 5** - NE IA Dairy Foundation, 1527 Hwy 150 South, **Calmar**
- **Aug 6** - Public Library, 201 E. Charles St. **Oelwein**
- **Aug 18** - ISU Extension - Dubuque County Office, 14858 West Ridge Lane, **Dubuque**
- **Aug 19** - AEA Building, 14002 2<sup>nd</sup> St NW, **Elkader**
- **Aug 20** - ISU Extension- Jones County office/ Jones Co Farm Bureau, 605 E. Main, **Anamosa**
- **Aug 21** – Freedom Security Bank, 402 B Avenue, **Kalona**

**Local Contact:** Your local County Extension Office or your ISU Extension dairy field specialist:

Dale Thoreson, 319-267-2707

Larry Tranel, 563-583-6496

## Know Your Mediation Rights During These Tough Times

The following outline information comes from the Code of Iowa Chapter 654A **FARM MEDIATION — FARMER—CREDITOR DISPUTES**

- a. Agricultural property includes real estate and personal property
- b. Participate means attending a mediation meeting and discussing issues, stating a position and exchanging information
- c. The chapter applies to all creditors of natural persons, corporation, trust or limited partnerships operating a farm with a secured debt in excess of \$20,000.
- d. Creditors must file a request for mediation the Iowa Mediation Service before filing for any collection activity in the courts. It is a jurisdictional requirement.
- e. Within 21 days of receiving a request for mediation the Mediation Service must send a mediation notice to the borrower. **Within 21 days of the issuance of the mediation notice an initial mediation meeting must be held.**
- d. The mediator shall
  1. Listen to the borrower and the creditors desiring to be heard.
  2. Attempt to mediate between the borrower and creditor.
  3. Advise the borrower and the creditors of the existence of available assistance programs.
  4. Encourage the parties to adjust, refinance, or provide for of payment of the debts.
  5. Advise, counsel, and assist the borrower and creditors in attempting to arrive at an agreement for the future conduct of financial relations among them.
- e. The 42 day mediation period may be extended by mutual agreement of the parties.
- f. If the parties reach an agreement the mediator shall draft an agreement and have the creditor sign it.
- g. The Creditor may receive a release if the borrower waves mediation or if the all parties attend the mediation meeting(s) and fail to reach an agreement.
- h. The mediator may deny a release if the Creditor fails to participate and must notify the Creditor of the reasons for the denial.

*John R. Baker, Attorney at Law, Iowa Concern Hotline Administrator, Beginning Farmer Center  
Phone: 1-800-447-1985, Facsimile: 1-515-252-7829*

## “Managing Feed Costs” in 2009

By Lee Kilmer, Extension Dairy Specialist

Historically, feed costs have represented 40-60% of the total cost of producing milk. However, in the past year, this value has been higher on many farms. Consequently, when times are tough, cutting feed costs is the first place many producers look. The key issue to keep in mind is **“are there ways to reduce feed costs without losing milk?”** It is very easy to cut feed costs by eliminating or reducing the amount of supplemental protein or the mineral-vitamin premix, but often times this will result in dramatic reductions in milk produced. Your goal should be to maintain milk production while managing other costs.

Let’s look at 5 key feed cost management issues. First, how much “extra” feed are you putting in front of your cows, then cleaning out of the bunk the next day? Historically, most producers have fed for an average of 5% refusal, the goal being to have feed available in the in the event that a cow wants to eat another mouthful. Reducing the targeted amount of refusals from 5% to 2% means about \$400 per month for every 100 cows in your herd. Refusals from the milking cows are often fed to other livestock on the farm, but this becomes more expensive feed for them than what they really need.

Second, look at every ingredient in your ration. Are there some “questionable” ingredients? Most dairy rations will need some supplemental protein, as well as a mineral-vitamin premix, but what about “other” ingredients? Some will undoubtedly increase milk production and “pay their way”, but are all of them? If you are not sure, take them out of the ration.

Third, are you over-feeding some nutrients? Too many producers rely on average or “book values” for the nutrient value of their forages (alfalfa and corn silage). However, the actual protein, fiber, and energy in these feedstuffs can vary widely. This can result in feeding more supplemental protein than is needed, costing you money, or not feeding enough supplemental protein, costing you milk. Either way, you lose. The same thing is true on the energy side, causing you to feed more or less corn grain than you should, again costing you one way or the other.

Fourth. Historically, nutritionists have formulated rations for a higher level of nutrients than the animal requires, because it was “cheap insurance” and to account for the variability in the nutrient content of the feedstuffs. Sharpen your pencils, and feed to meet, but not exceed, the nutrient requirements of your cows.

Finally, don't forget to monitor the dry matter or moisture content of your wet feedstuffs! A small unnoticed change in the moisture content of your corn silage for example, can mean you are feeding a couple more pounds of water and a similar smaller amount of valuable nutrients, resulting in a drop in milk production. The bottom line is that we need to do everything we can to put as much milk in the bulk tank as possible, but in a cost-efficient manner. Be careful about cutting your feed costs by cutting out the key nutrients that the cow needs to maintain her current level of milk production.

## ACRE signup deadline approaches

by Ron Hook, ISU Extension Farm Management Specialist

The Farm Service Agency (FSA) recently announced that a set of default values for crop yields is available for farmers who want to enroll in the new Average Crop Revenue Election (ACRE) program. The default yields made available by FSA are based on the county yield averages estimated each year by the National Agricultural Statistics Service (NASS). However, instead of reflecting grain yields per harvested acre, like the published NASS data, the ACRE default yields will be calculated as yields per planted or intended to be planted acre. The default yield for each crop, county and year is equal to 95 percent of the yield per planted acre.

Any producer who elects the ACRE program must provide production information for each year from 2004 through 2008, for each program crop covered. Farm level yields will be calculated by dividing total bushels produced by total planted acres, just as for the county yields. For any given year the FSA default yield will be used if the actual production is less than the default yields, or if the crop was not planted that year. If production information is not available for a certain year, the county default yield will be assigned to that year and all years before that (back to 2004), even if production information is available for the prior years. The default yields for each county in Iowa can be found on the Iowa State University Extension Ag Decision Maker Web site, at [www.extension.iastate.edu/agdm/](http://www.extension.iastate.edu/agdm/). Click on the [Farm Bill Information](#) button, then the ACRE calculator icon.

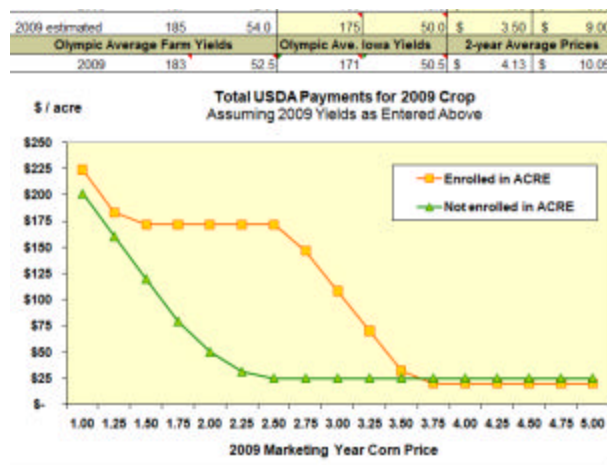
Producers who enroll in ACRE will be asked to certify total bushels harvested for each year from

2004 through 2008 on the FSA unit being enrolled. At a later time, FSA may ask for production evidence to substantiate the certified values. Acceptable documentation includes crop insurance records used to establish the actual production history (APH) yield on that FSA unit, as well as commercial receipts and settlement sheets, load summaries or other evidence of commercial sales. Records used to obtain USDA marketing loans or loan deficiency payments can be used, as well.

ACRE is a useful risk management tool in years with low prices or yield problems that affect most of the state. Although there is no guarantee that either of these will happen in the next four years, the potential payoff is large. The figure on the right illustrates the possible size of payments for the 2009 crop for a farm enrolled in ACRE with average yields of 175 bushels per acre for corn and 50 bushels per acre for soybeans, in a 50-50 rotation. Results are shown for different price levels, assuming both the farm and the state have average yields in 2009. Prices are national marketing year cash prices. The payments also include direct payments from USDA.

Under lower price scenarios, ACRE payments make up for lost revenue. Current projections show that with average yields, marketing year prices would have to average under \$3.67 for corn and \$8.92 for soybeans to trigger ACRE payments. Under the current counter-cyclical program, however, payments do not begin until prices are below \$2.35 for corn and \$5.36 for soybeans.

Producers have until August 14 to enroll in the DCP program for 2009. If they do not elect ACRE this year, they still have the option to elect it in a future year, through 2012.



Note: Price of soybeans is assumed to be 2.6 times the price of corn.

## Dairy Finances 101 for Crisis Situations by Larry Tranel, Dairy Field Specialist, ISU Extension, NE/SE Iowa

Let's assume a creditor is pressuring legal action due to an accounts payable or loan that you cannot find the cash to pay on time. Unfortunately, at times like these most dairy operations are simply trying to avoid losses and maintain a positive cash flow with no sight of profits. And, tight cash flow may strain quality of life goals.

At times like these, producers need to turn the financial and production data they have into information for making knowledgeable decisions and survival strategies. One goal of this is to give creditors more "insurance" or confidence in your management abilities. So, where do you start? Begin with a Net Worth (NW) Statement on January 1<sup>st</sup> (or when your tax year begins and ends) so you have a snapshot of your business at the beginning and ending of each accounting (tax) year. Constructing the NW Statement ten days later than the beginning or end of the accounting period could skew the information needed for inventory adjustments to the analyze profits. Table 1 depicts a sample NW Statement that gives information critical to your business.

**Table 1. The Net Worth Statement (or Balance Sheet)**

<b>Farm ASSETS (what you own)</b>		<b>Farm LIABILITIES (debt you owe)</b>		<b>** JAN 1, 2009</b>	
<b>Current</b>		<b>Current</b>			
Cash, Savings	\$7,500	Taxes Due	\$2,350		
Feed on hand	\$35,000	Accts Payable	\$22,000		
Acct. Receivables	<u>\$6,000</u>	Principal Due	<u>\$12,500</u>		
<b>Total Current</b>	<b>\$48,500</b>		<b>\$36,850</b>		
<i>Note: \$48,500 - \$36,850 = \$11,650 of Working Capital      \$48,500 / \$36,850 = 1.32 Current Ratio</i>					
<b>Non-Current</b>		<b>Non-Current</b>			
Cows /Heifers	\$167,000	Dairy Bank	\$142,000		
Machinery/Eq.	\$103,000	Creamy Creditor	\$119,000		
Buildings/Land	<u>\$330,000</u>	Land Contract	<u>\$69,000</u>		
<b>Total Non-Current</b>	<b><u>\$600,000</u></b>		<b><u>\$330,000</u></b>		
<b>Total Assets</b>	<b>\$648,500</b>	<b>Total Liabilities</b>	<b>\$366,850</b>		<i>57% Debt/Asset</i>
<b>Assets – Liabilities = Net Worth</b>		<b>\$648,500 - \$366,850 = \$281,650</b>			

Your current assets (\$48,500) minus your current liabilities (\$36,850) gives your Working Capital (WC) \$11,650 in the above example. Current assets divided by current liabilities gives your Current Ratio (CR) of 1.32. Working Capital should be enough to cover family living and current debt payments with a current ratio of 1.5 or higher meaning that is the amount of assets in excess of liabilities that can be turned to cash within the next year. In the above example with WC at \$11,650 and CR at 1.32, a lender would have cause for concern in your ability to make payments in the short run. The NW Statement measures the distance between you and insolvency (Net Worth less than \$0) and thus is the first and most important step to asses where you are in your business at a particular point in time. This NW Statement also shows a 57% debt/asset ratio which could be a risk concern to a lender.

The second statement needed is the Net Farm Income from Operations (NFIFO) Statement. While the above NW Statement shows beginning and ending points, the NFIFO Statement shows how you got from beginning to end. It is extremely important that producers take their cash records but account for inventory and other changes that do not get "cashed out" during the year like gains in cattle inventories or depreciation for instance. It is truly a gain or loss, but is not turned into cash during the year. On the next page are the components of a NFIFO Statement that show cash and non-cash income and expense changes on the NW Statement with the equation. These adjustments to Net Cash Farm Income use ending minus beginning values with their respective + or – signs.

**Table 2. Net Farm Income from Operations (NFIFO) Statement**

= Cash Farm Income	(from Schedule F)
- <u>Cash Farm Expenses</u>	(from Schedule F)
= Net Cash Farm Income	<b>(+\$300 per cow)</b>
+ Prepaid Expense Adjustment (End-Beg)	
- Accounts Payable Adjustment	
+ Feed Inventory Adjustment	
+ Livestock Inventory Adjustment	
- <u>Depreciation</u>	
= NFIFO	
- Equity @ 6%	(opportunity cost of capital)
= Return to Unpaid Labor	

The reason net cash farm income needs to be adjusted for inventory is the example in Table 2 that shows a net cash farm income of \$300 per cow. This \$300 of income does not show this producer made any money because they may have lost more than that in feed or livestock inventory for example. Dairy producers are encouraged to break down the farm incomes and expenses on a per cow and per hundredweight of milk produced basis. Returns to Labor less than family living expenses could be cause for concern to a lender as well because it could cause negative cash flow unless there were outside sources of income. This leads us to the third important statement—the Cash Flow Statement which shows all sources/uses of cash, monthly or yearly.

**Table 3. CASH FLOW STATEMENT**

Beginning Cash Balance	\$1,500
Non-farm Income	\$0
Income Taxes Paid	\$21,465
Principal Payments	\$20,000
Family Living Expenses	\$45,000
Capital Purchases	\$12,000
Capital Sales	\$0
New Monies (loans, savings, etc.)	\$0
Net Farm Cash Income	\$134,798
<b>Ending Cash Flow</b>	<b>\$36,333</b>

The example dairy has a \$36,333 ending cash flow which is about 7.59% excess. When the ending cash flow is under 10% there would be cause for concern that changes in prices paid or received may put you at risk. Producers may even have negative ending cash flows projected or in reality. In this situation, decisions need to be made and workable solutions needed to assist timely cash flow and financial obligations as bills come due.

So, those are the “Big 3” Financial Statements. If your situation needs immediate cash flow analysis, a cash flow spreadsheet is available on request. And, there are many FINPACK associates across the state willing and able to assist you doing a FINLRB or FINAN analysis. Due to the extreme milk price and feed price situation we find ourselves in, there is no cost to these at this time. And, besides preparing financial records for your banker, show your production records—a few years worth of records that illustrate you are not only a good financial manager, but also a good herd and production manager.

ISU Extension also offers the **Dairy TRANS** financial analysis system. This program uses tax (Schedule F) basis records with inventory changes from Beginning to End of year to analyze the dairy farm business, Cash income and expenses are on a divided by cow numbers and hundredweights of milk sold. Dairy TRANS also breaks down financial data based on labor FTE’s (full-time equivalent) number of acres and number of cows.

**A Sample Dairy TRANS Analysis input form is available that includes:**

- 1) A Beginning & Ending NW Statement
- 2) Schedule F for income and expenses
- 3) Cash Flow data which is not necessary for a profitability analysis except for capital purchases and sales but in today’s economic environment is most important.

After this exercise is done once, many report doing it in less than 30 minutes in subsequent years so it gives lots of very useful benchmark information for minimal time input to assist you.

Overall, the “Big 3” Financial Statements are “critical” during critical times as they help us better understand the farm . For more information on Managing Dairy Farm Finances, please contact Larry Tranel, ISU Extension at 563-583-6496 or email at [tranel@iastate.edu](mailto:tranel@iastate.edu) .

# Defining Dairy Operations, Pending Regulations and Best Management

by Angela Rieck-Hinz, ISU Extension Program Specialist

My extension dairy colleagues often remind me the terminology used in state and federal manure regulations is often not familiar to dairy producers and therefore producers may have a hard time understanding where their operations fit in the regulatory requirements. This article will attempt to briefly explain some terminology, provide an introduction to pending regulations and identify best management practices. For the purpose of this newsletter, I will only include requirements to meet state of Iowa regulations and will plan to address the federal requirements in a future newsletter article. The important thing for you to remember as a dairy producer is to determine how your operation is classified so you can be aware how regulations may impact your operation. As with many dairies, many housing types and animal types are present. To fully understand how your operation is designated you should contact your local DNR field office for assistance.

## Iowa Regulations

The regulatory requirements for animal feeding operations are separated by the type of structures used to house your animals, usually a confinement operation or an open feedlot, and then divided by the size of the operation. The following definitions come from Chapter 65 of the Iowa Administrative Code.

*An Animal Feeding Operation* is “a lot, yard, corral, building, or other area in which animals are confined and fed and maintained for 45 days or more in any 12-month period, and all structures used for the storage of manure from animals in the operation. Open feedlots and confinement feeding operations are considered to be separate animal feeding operations.”

*A Confinement Feeding Operation* is “an animal feeding operation in which animals are confined to areas which are totally roofed.”

*An Open Feedlot* is “a lot, yard, corral, building, or other area used to house animals in conjunction with an open feedlot operation.”

*An Open Feedlot Operation* is “an unroofed or partially roofed animal feeding operation if crop, vegetation, or forage growth or residue is not maintained as part of the animal feeding operation

during the period that animals are confined in the animal feeding operation.”

*A Small Animal Feeding Operation* or commonly referred to as a SAFO is a term associated with a confinement feeding operation and is defined as “an animal feeding operation which has an animal unit capacity of 500 or fewer animal units.”

## Recent Regulatory Changes Will Affect Dairies Defined as Confinement Operations

Earlier this year, the Iowa Legislature passed Senate File 432 which restricts surface application of liquid manure on snow-covered or frozen ground. This means if you have more than 500 animal units in confinement you will not be allowed to surface-apply manure to snow-covered ground from December 21 to April 1 annually or on frozen ground February 1 to April 1 annually, except in emergency situations. The 500 animal unit size requirement is equal to 500 immature dairy cattle or 350 mature dairy cattle. This law became effective on July 1, 2009. However, due to the regulatory process in Iowa, the DNR will be required to adopt rules to implement this law. Be advised the law is effective even if the rules to enforce the law are not finalized by winter.

Producers who have historically applied manure in the winter should consider steps to avoid winter land-application. Consider 1) applying more manure in late summer/fall to draw down storage volumes, 2) increasing storage volume, 3) delaying application until spring, and 4) managing water use to reduce the volume of water added to the storage structure or limiting precipitation additions to the storage.

## Best Management Practices for Small Producers

Producers with small animal feeding operations (less than 500 animal units in confinement), should be aware that even without the requirement of a manure management plan or lack of restrictions on winter application they are not allowed to cause water quality violations from manure that may be leaving their site. With winter application being prohibited for larger operations, one could anticipate the public will be scrutinizing the land application practices of smaller dairies in the future. The same practices that were mentioned above should be taken into consideration for smaller dairies. As you look to the future, other things to consider include 1) relocating the dairy if the proximity of streams is close and the potential for runoff into the stream exists, and 2) building short term storage to reduce the need for winter application. If winter application of manure is unavoidable, best management practices should be

employed to reduce the risk of manure nutrients moving off-site. Apply manure to land that is away from streams; apply manure on the flattest slopes; avoid application when rain is forecasted or if rapid snowmelt is anticipated. Reduction in nutrient losses means the manure nutrients can be better used for raising crops.

### Resources for Manure Management

There are many resources available for dairy producers to read and use to manage manure. Some suggestions include:

IMMS, Vol. 1, *Introduction to the Iowa Manure Manager Series*. This publication reviews the state and federal definitions used in manure management regulations and can help you to understand how your dairy is regulated. This publication is available at: <http://www.agronext.iastate.edu/immag/pubs/imms/intro.pdf>

IMMS, Vol. 2, *Winter Manure Application*. This fact sheet highlights research looking manure runoff from land application and provides best management practices to implement if winter application is unavoidable. This publication is available at: <http://www.agronext.iastate.edu/immag/pubs/imms/vol3.pdf>

The Iowa Manure Management Action Group (IMMAG) web page, located at: <http://www.agronext.iastate.edu/immag/>, provides links to new regulations, publications and events associated with manure management issues in Iowa. You can subscribe to a monthly email newsletter about manure issues by clicking on the “subscriptions” link when you visit this site.

### Corn Silage – The Important Basics

*by Dale Thoreson, ISU Dairy/Beef & Forage Specialist*

Right now is a good time to start corn silage harvest planning. Corn is in the early tassel stage, which means it silked about two days before the tassels appeared. Ideal corn silage is about 65% moisture or roughly ½ milk line on the kernel. It takes between 55 and 60 days most years from ¾ silking to black layer. We want to chop corn silage before black layer so we usually subtract 10-15 days from black layer to target chopping time.

Here is an example: Our corn silage field silks the 20<sup>th</sup> of July. Add 55 days and we set Sept 13<sup>th</sup> as the earliest it will black layer. Subtract 15 days and we should be ready to chop August 28<sup>th</sup>. Be sure to check the whole plant moisture to fine tune timing.

Your ideal silage moisture depends on the storage structures you have. See Table 1 in next column:

**Table 1:**

<u>Storage Structure</u>	<u>Silage Moisture %</u>
Upright silo	60-65
Oxygen limiting	50-60
Bunkers & piles	65-70
Bags	60-70

Cutter bar setting is also important in making high quality corn silage. If you are using a kernel processor (all kernels are crushed) then set the theoretical length of cut at ¾” and the processor silage roller at 1-2 mm. For unprocessed corn silage set the theoretical length of cut at ¼”. But make sure there are some pieces of stalk about ½” to ¾” long to maintain effective fiber. The dryer the silage, the more value of the kernel processing.

### Packing Silage is Crucial to Silage Quality

Packing silage is very important, especially bags, bunkers and piles. With bags we need to set the tension as tight as possible. Our goal is 14 lbs. of DM or more per square foot. Bunkers and piles should be filled using the wedge method so we are filling at a 40° degree angle. Corn silage should be spread into a longer no thicker than 6 inches and then packed completely before the next load is delivered. Brian Holmes, University of Wisconsin Extension Ag Engineer, has developed a spreadsheet to determine the amount of tractor weight needed depending on the tons of silage delivered per hour. You can find that spreadsheet on the University of Wisconsin Extension forage web page or call your local extension office for assistance.

Tower silage will pack because of the head pressure created but they will pack much more uniformly if we have a distribution of the silage delivery spout that will layer the silage rather than form a pile.

Finally, all bunkers and piles should be covered with plastic within 12 hours of finishing chopping. Remember that deterioration penetrates well beyond the color difference at the top. With no cover, Bolsen of Kansas State University, measured 80% dry matter loss in the top 10 inches. Covering with plastic reduced dry matter losses to 20% in those top 12 inches. This is a serious amount of forage and quality.

**Take home message:** Cut at ½ milk line, process all kernels or cut at ¼” theoretical length, pack hard and cover all bunkers, piles and tops of tower silos.

## Lead Poisoning of Cattle

*By Dale Thoreson, ISUE Field Specialist, Dairy/Beef/Forages*

Recently a livestock producer called to say he had two bred heifers found dead, one in a large pasture and another (dead for a couple of days) found just outside the pasture. They were part of 20 head on this 80 acre pasture that had heifers grazing it last year with no problems. Initially the farmer called his veterinarian and they began the search for a poisonous plant. Some were of concern and we sent them to Dr. Bob Hartzler, ISU Extension Weed Specialist for Identification.

Meanwhile another call came on Monday, following the previous Thursday call, and 2 more heifers were down. One was dead and the other likely to die very shortly. Symptoms were the same, convulsions, muscle twitching, foaming from the mouth and blindness. His vet made it in time to get tissue samples for the diagnostic lab. A couple of hours later another showed the same symptoms. The heifers had been removed from the pasture the previous Saturday. This fifth animal was also posted.

No more animals died. The plant was identified as Wild Licorice, a non-poisonous plant and the Veterinary Diagnostic lab reported Lead Poisoning was the cause of death. Now, why wasn't this a problem for the cattle grazed the previous year?

Perhaps a review done by the Canadians of what can lead to Lead Poisoning in cattle will be helpful:

1. Very small amounts of lead can cause poisoning. Calves licking crankcase oil, grease, from machinery, lead pipe plumbing and batteries can be in danger.
2. Small calves represent the greatest percentage of lead poisoning cases because they are curious eaters. Other cattle however can also be affected.
3. Junk or garbage in pastures can be a source of lead. Example sources include: some crop sprays, putty, lead-based paints and painted surfaces, roofing materials, plumbing supplies, asphalt, lead shot, leaded gasoline, and used oil filters.

Symptoms of lead poisoning are often similar to other diseases and require a veterinary diagnosis

to accurately confirm. Clinical signs of poisoning normally proceed death, nonetheless, in many cases animals are simply found down or dead in the pasture. Observable signs vary from sub-clinical to very dramatic and take from just a few days to as many as 21 days to develop. Initial signs include depression, loss of appetite or occasionally diarrhea. The central nervous system may be affected and cause cattle to grind their teeth, bob their head, or twitch their eyes or ears. Some animal may circle, press their head or body against objects, or become uncoordinated and stagger. Muscle tremors, excitement, mania, blindness or convulsions may also be seen.

Treatment of lead poisoning can be costly and ineffective if not started quite early after ingestion of the lead. Successful treatments are usually started before the symptoms begin to appear and are often reserved for very valuable animals.

Prevention is the key. Be aware of old or new machinery in pastures. Avoid junk or debris that could be a source of lead. (This could really be an issue after a severe thunderstorm or tornado with wind damage which results in roofing debris spread across the pasture.) Above all, DO NOT dispose of old car batteries on pastures where cattle have access to them.

*Source of information: "Lead Poisoning on Cattle" Agriculture, Food, and Rural Development. Alberta, Canada*

## Managing the Stress of Dairying

*by Larry Tranel, Dairy Specialist/Doctor of Psychology*

During stressful times it is extremely important to involve the family in discussions. Stress often causes irritability and it often takes a concerted effort to keep the mind above the emotions of it all.

For couples and parents, listening without criticizing is important while providing simple, yet honest answers to both the crisis and possible solutions. Though easy to blame self and others, identify those factors within or outside your control.

Even amidst difficulty, keeping confident in your and your families ability to overcome hardships is important as lost hope often leads to lost decision-making ability. So, keep your head up even while the price is down to better handle tough decisions that may lie ahead for you and your family.