

AGRICULTURE & NATURAL RESOURCES

Newsletter

**March
2009**

**Cooperative
Extension Service**
Adair County
409 Fairground Street
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www.ca.uky.edu/ces

Cattlemen’s Association Meeting

Thursday – March 5 – 6:30 pm

LWC Dining Center
All Adair County Cattlemen’s Association members and prospective members are invited to attend.

Vegetable Production Meeting

Monday – March 9 – 6:00 pm

Adair County Extension Office
Speakers: Dr. Terry Jones, UK Horticulturist and Nick Roy, Adair County Agriculture Agent

Grafting Fruit Trees

Sponsored by Adair County Garden Club

Thursday – March 19 – 1:00 pm

Adair County Extension Office
Speaker: Dr. Terry Jones, UK Horticulturist

Gardening Basics

Sponsored by Adair County Garden Club

Thursday – March 26 – 1:00 pm

Adair County Extension Office
Speaker: Nick Roy, Adair County Ag. Agent

Forage Meeting

Alternative Forage Crops

Tuesday – March 24 – 6:30 pm

Adair County Extension Office
Speaker: Nick Roy, Adair County Ag. Agent

FREE FORAGE TESTING

*to Assist Dairy and Beef Producers Fine Tune Rations
Sponsored by: Adair Co. Agriculture Development Council*

Dairy producers have been fortunate over the past couple of years with strong milk prices. However, 2009 has begun with milk prices that are likely below breakeven margins in some situations. When milk prices are low, the instant reaction for many producers is to cheapen up the feed or try to produce more milk. In the best case scenario, do both at once. The same can be said for Beef producers trying to formulate a least cost ration with the best daily gain. To assist producers looking to improve their bottom line, the Adair County Ag Development Council is now funding basic forages tests to those producers who would like to examine their rations and see if improvements can be made. While most dairy producers may have had their silages and hay tested this Fall, it is a good practice to re-test forages again because what you’re feeding now is usually not what your were feeding or tested this past Fall.

If you would like to take advantage of this forage testing program, contact the Extension Office at 384-2317. Producers should not attempt to collect grab samples of forages on their own. Samples will be taken of your hay, silage, and grain using testing probes to ensure accurate sampling. When the results return from the lab, the test results and ration will be analyzed by UK nutritionists. Producers will receive recommendations of how their ration may be adjusted for optimal production and possibly ways to make the ration cheaper without sacrificing production. Free forage testing will be available for a limited time.

Farm, Home & Garden Expo

**April 3, 2009
1:00 – 7:00 pm
Adair County Elementary School**



Choosing a Garden Site

Your garden site should provide a sunny exposure, adequate moisture and fertile

soil. Because of your property's limitations, however, you may be forced to select a less than ideal location. As much as possible, let the following suggestions guide you in choosing your garden site:

Avoid putting the garden in a low spot, at the bottom of a hill or at the foot of a slope bordered by a solid fence.

Such areas, where frost settles because of lack of air drainage, are slow to warm up in the spring. High ground will enable the vegetables to escape "borderline" freezes for an earlier start in the spring and longer harvest in the fall.

If possible, choose an area with a southern or southeastern exposure which warms up faster in the spring and receives the maximum amount of sunlight throughout the growing season. Midsummer vegetables, other than lettuce, should not be located on the north side of a building or on a northern slope of a hillside.

Plant your vegetables away from buildings, trees and other objects which would shade them. Your plants need at least eight hours of direct sunlight each day. You can grow lettuce in the shade if you must locate part of your garden in a partially shaded area.

Your garden needs water, from rainfall or other sources. However, too much water can be just as damaging as too little.

- Examine your garden site to see how it drains and avoid areas that stay soggy after a rain.
- Avoid heavy clay soils in favor of loamy soil.
- Improve sandy soils by adding large amounts of organic matter. Adding organic matter can often solve minor drainage problems; however, if the poor drainage is caused by underlying

layers of rock or hard clay (hardpan), correcting the drainage could involve the labor and expense of subsoiling with an excavator, laying tile or of building raised beds.

- Locate your garden away from trees as much as possible. Tree roots can compete with your vegetables for water and nutrients.
- Look for a site which supports lush vegetative growth, even if it is dark green, sturdy weeds. Although you can improve poor soil over a period of years, you can save much time and work if you begin with naturally rich soil.
- Make sure to use contour rows or terraces for hillside gardens.
- Avoid windy locations.

Finally, the closer the vegetable garden is to your back door, the more you will use it. You can see when your crops are at their peaks and can take maximum advantage of their freshness. Also, keeping up with planting, weeding, and watering and pest control will be easier.

Scholarship Applications

Now Being Accepted
by the Adair County Cattleman's Association

Deadline: April 15th

Due to increased membership, raffles sales of an Angus bull donated by Danny and Debbie Burris, and the generosity of Terry Partin donating the bull he won back to the Association, the Adair County Cattlemen's Association is able to develop a Scholarship Fund to assist Adair County students pay for college expenses. Beginning in 2009, one scholarship of \$500 will be presented to an Adair County Student who is or planning to attend a college or university. Scholarship applications can be picked up at the Adair County Extension Office or the High School Counselor's office.

Nick Roy 
County Extension Agent
For Agriculture & Natural Resources



Feed Costs Revisited

Jim Paulson, Extension Educator-Dairy

January 31, 2009

In my last article, published November 8, 2008, I discussed the growing trend of sustainable aspects of dairy farming and what that means. To review, the three main areas are: 1) economic, 2) environmental, and 3) social. Economics is number one because if we don't sustain a profit, we won't sustain our business. With the big drop in milk price since mid-2008, profitability is going to be a challenge in 2009. With feed costs representing 40-50% of the costs of producing milk, now is a good time to revisit your feed costs.

There are two basic ways to measure feed costs: cost per cow per day or cost per cwt. Both are dependent on costs to feed your herd. It is most likely different from other farms as it depends on amount and types of forage fed, amount of home raised feeds and purchased feeds, milk production level, and the base factor being your forage quality. At the bottom of the page is a simple form to help compute feed cost per cow per day. This form is also available on our dairy extension web site at: <http://www.extension.umn.edu/dairy/management/nutrition.htm>. Look for "Feed Cost Calculator". It is a downloadable spreadsheet for your use free of charge.

Once feed cost per head per day has been determined, we can calculate daily milk income and income over feed cost or IOFC. Most producers have a good idea of the bulk tank average per cow every time the milk gets picked up. For computing IOFC, include all milking cows, not just those whose milk is going in the tank, since we are feeding all of them. Milk income is simply the tank average milk in pounds times the milk price per pound. For example, a tank average of 75 pounds per cow per day with a net milk check price of \$13.00 per cwt equals \$9.75 per cow per day. If feed cost is \$5.00 per cow per day, this leaves an IOFC of \$4.75 as the gross margin to cover the rest of our costs. We expect to see the IOFC in a range of \$5.00 to \$7.00 per cow per day. Additionally, we still have to account for the feed costs of dry cows and heifers. This makes the margin shrink even more.

Where will IOFC be for you in 2009? What is your strategy for dealing with the lower milk price in 2009? One of the first things we usually look at is purchased feeds. Is there anything we can cut out? If so, why have we been feeding it in the first place? Most likely, it is there for a reason. Maybe some of the ingredients were used for a specific feeding problem and now that has changed.

But reducing feed cost will not necessarily increase IOFC if by doing so, it reduces milk production. The lowest cost ration may not necessarily be the most profitable.

What can you do to either reduce costs, increase milk production or both? Here are some things to consider:

1. Always strive for maximizing dry matter intake. One more mouthful may mean another pound of milk. This means fresh, palatable feeds, feed pushed up often so they can reach it, no sorting, mangers cleaned daily, cool comfortable cows, and the list goes on.
2. Watch days in milk. Really work at getting cows pregnant. Our target for days in milk is 150. Late lactation cows just don't milk as much. With margins squeezed, we may want to cut vet checks, breeding programs, etc. but that can come back to haunt us.
3. Concentrate on feeding high quality forages. That may start with your cropping plans for this spring and in the future. What is your cost for corn silage and haylage? Should you look at a different forage mix? Work with your nutritionist as you consider different options and get their input on amounts, varieties, with the goal of feeding more forage.
4. Look at all other costs and purchases in addition to feed. Are there other costs that are out of line?

Feed Cost Calculator (determines feed cost per cwt milk)				
Enter numbers in box provided and calculator will automatically determine your feed cost.				
Homegrown Feeds	Avg. lb/cow		\$/lb	\$/cow/day
Hay	5	x	0.10	= 0.50
Haylage	45	x	0.03	= 1.35
Corn Silage	50	x	0.02	= 0.78
Corn	12	x	0.06	= 0.72
Other:		x		= 0.00
Other:		x		= 0.00
Goal: > 60% of total			Subtotal (a)	= 3.35
Purchased Feeds	Avg. lb/cow		\$/lb	\$/cow/day
Soybean meal	3	x	0.18	= 0.54
Mineral	1.5	x	0.40	= 0.60
Distillers	5	x	0.07	= 0.35
Cottonseed	2	x	0.15	= 0.30
Other:	1	x	0.20	= 0.20
Other:		x		= 0.00
Goal: < 40% of total			Subtotal (b)	= 1.99
Feed \$/cow/day (a + b)	Avg. milk/cow			Feed \$/cwt milk
5.335	80	x	100	= 6.67
				Goal: < \$6.00 per cwt
by Jim Paulson U of MN Extension Educator-Dairy				
UNIVERSITY OF MINNESOTA EXTENSION				

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UREASE INHIBITORS

When urea fertilizers are applied to the soil, an enzyme called urease begins their conversion to ammonia gas. If this conversion takes place below the soil surface, the ammonia is almost instantaneously converted to $\text{NH}_4\text{-N}$ which is bound to soil particles. If the conversion takes place on the soil surface or on surface residues, there is a potential for the ammonia gas to escape back into the atmosphere in a process called ammonia volatilization.

Volatilization losses depend on the environmental conditions at the time of application. Soil temperature, soil moisture, amount of surface residue, soil pH, and length of time between application and the first rain event or irrigation are all factors that determine the total amount of N that could be lost via volatilization. Nitrogen losses from fertilizer applied prior to May 1 are generally very low. After May 1, N loss is greatest, especially when urea is surface-applied to soils with high residue or vegetation (i.e., no-till corn or pastures), during warm, wet weather followed by a warm, breezy drying period.

Volatilization losses can be substantially reduced if a urease inhibitor is used with the fertilizer. The most common urease inhibitor is NBPT (N[n-butyl] thiophosphoric triamide) sold under the trade name Agrotain[®]. Urease inhibitors reduce the activity of the urease enzyme for up to 14 days. As long as it rains during this 14-day period, the urea will be moved into the soil where it can be converted to $\text{NH}_4\text{-N}$ without the risk of volatilization.