

Field and Feedlot



Northwest Area Extension

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New Risk Management Tools for Cattle Feeders . . . 1
On-line N Rate Calculator Now Available! 2
Dairy Herd Management Meeting Highlights 2

New Risk Management Tool for Cattle Feeders

by Ron Hook, ISUE Farm Management Specialist

A new risk management tool became available to cattle feeders starting on January 31, 2006. Livestock Gross Margin (LGM) is a livestock insurance product that protects an expected gross margin (EGM) rather than a price as is the case with Livestock Risk Protection (LRP). Both products allow small and medium sized operations to lock in a profit that may not have the volume or expertise necessary to do so with futures and options contracts. LGM and LRP allow for small numbers of cattle to be protected and the premium for LRP is subsidized by USDA.

There are two types of operations identified under LGM—calf finishing and yearling finishing. In the calf finishing operation, it is assumed that a producer will take a 550# calf to a finished weight of 1150# by feeding 54.5 bushels of corn. In the yearling finishing operation, it is assumed that a producer will take a 750# yearling to a finished weight of 1250# by feeding 57.5 bushels of corn.

Gross margin is the difference between gross revenue and variable costs. Gross revenue is the revenue from selling finished cattle. Variable costs include feed and other costs that occur when finishing cattle. Live cattle futures represent the price used to calculate expected gross revenue for the finishing weights prescribed above. Feeder cattle futures represent the price used to determine the expected cost of the feeder animal and corn futures represent the price used to determine the expected cost of feed needed to finish the animal. The EGM is then calculated using the appropriate contract month prices for live cattle futures, feeder cattle futures, and corn futures. It is important to remember that the EGM has to cover the non-feed variable costs and provide some profit!

The EGM varies from month to month in an insurance period reflecting the varying prices in the futures contracts and thus the potential gross margin. EGM ranged from \$213 to \$361 for calf finishers and \$82 to \$236 for yearling finishers according to the RMA website on 2/9/06. A producer can choose \$0 to \$150 deductible in \$10 increments. The deductible is the portion of the EGM not insured. The EGM for each month is available at the following website:

http://www3.rma.usda.gov/apps/livestock_reports/

Each insurance period for LGM is eleven months long. No cattle can be insured during the first month of any insurance period. A producer must prepare a Target Marketing Report showing the number of cattle to be covered in each month of the insurance period. The maximum number of cattle that can be covered is 5,000 head in any one insurance period and 10,000 head in any insurance year (July 1 – June 30 period).

Coverage can be purchased from 5:00 pm on the last business day of each month until 9:00 am the next morning. The LGM policy provides insurance for the difference between the Gross Margin Guarantee and the Actual Total Gross Margin based on the producer's target marketings. Although LGM can only be purchased during the short window allowed each month, it is possible to get an idea of what the premiums are at the Center for Agricultural and Rural Development (CARD) website: <http://www.card.iastate.edu/>

At the end of January the premium estimate for calf finishing was \$29.78 per head which insured an average EGM of \$267.40 for March – December. The estimate for yearling finishing was \$26.81 which insured an average EGM of \$148.77 per head. It was assumed that the number of cattle marketed each month was the same and that \$0 deductible was chosen.

The differences between the Gross Margin Guarantees and the Actual Total Gross Margins for each month will be totaled and if the actual margin is less than the insured amount for the insurance period an indemnity will be paid. Livestock Revenue Insurance is sold by many crop insurance agents; check with yours for more details. More information is also available on these Livestock Revenue Products at:

<http://www.rma.usda.gov/livestock/>

Many forecasters have indicated that cattle prices may begin to decline later this year or into next year. This looks like a good time to put some revenue protection in place in the form of either a price floor or a guaranteed minimum gross margin. LRP insurance will lock in a minimum price for selling calves, yearlings, or live cattle. LGM insurance will lock in a minimum gross margin for finishing calves or yearlings. If you have questions contact Ron Hook, 712-754-3648, rhook@iastate.edu or Tom Olsen, 712-732-5056, tolsen@iastate.edu.

On-line N Rate Calculator Now Available!

by Joel DeJong, ISU Extension FS/Crops

Corn producers can calculate the economic return to nitrogen (N) application with different N and corn prices using a new regional Web-based tool located at the Iowa State University Extension Agronomy Web site.

The [Corn Nitrogen Rate Calculator](http://extension.agron.iastate.edu/soilfertility/nrate.aspx), online at <http://extension.agron.iastate.edu/soilfertility/nrate.aspx>, follows a newly developed regional approach for determining corn N rate guidelines that is being implemented in several Corn Belt states. The Web site includes an animated demonstration of the calculator.

University soil fertility specialists from the Corn Belt states began discussions in 2004 regarding N rates for corn production. They were looking at differences in methods for determining suggested N rates across states, and misperceptions regarding N rate guidelines. There were concerns about application rates as corn yields climbed to historic levels along with high N fertilizer prices. Results of those discussions included the development of a regional approach to N rate guidelines and a method for determining the most profitable fertilizer N rates for corn production in states across the Corn Belt.

The Web site calculates the net economic return to N application and finds the maximum return to N (MRTN) rate directly from recent research data, which is the regional approach suggested for developing corn N rate guidelines in individual states. The Web site includes N rate trial data for four states (Illinois, Iowa, Minnesota and Wisconsin) that had an adequate number of research trials available for corn following soybean and corn following corn. These trials were conducted with spring, sidedress or split preplant/sidedress applied N, and sites were not irrigated.

Using the online calculator, producers can calculate returns for one set of N fertilizer and corn grain prices or multiple prices for the state and rotation they are

interested in. An advantage is that prices can be tailored to a producer's specific N fertilizer purchase and corn grain marketing. The results of calculations are provided in a table and graphs.

The Web site calculates the MRTN rate in lb N/acre and net return to N in dollars/acre. Graphs also show the distribution of economic optimum N rates for the N response trials and the relationship between yield and economic optimum rate.

With the current historically high N fertilizer prices, the Corn Nitrogen Rate Calculator tool can help crop advisers and producers adjust N rates to maintain maximum return from N application. While the high N prices result in increased input cost and reduce profit, this tool can provide guidance in determining rates that provide greatest return to applied N.

Dairy Herd Management Meeting Highlights Managing the Dairy Herd for Productive Life

by Chris Mondak, NW Iowa Dairy Field Specialist

Eighty-six dairy producers, consultants, and industry partners participated in the NW Iowa Dairy Herd Management Meeting on February 15 at NW Iowa Community College in Sheldon, and on Feb 16 at the Community Center in Holstein. The theme of the meeting was "Managing for Productive Life," focusing on important herd management strategies in the areas of Herd Vaccination, Nutrition, and Udder Health.

Herd Vaccination Strategies: Vaccinations are no substitute for good management practices! In his talk on vaccination strategies, Dr. Dick Wallace, University of Illinois Extension Dairy Veterinarian, began and ended with this important advice: "In any herd health program, other good management control procedures such as ventilation, good nutrition, comfortable facilities, and correct milking procedures **MUST** be in place **before** vaccinations against infectious diseases are considered. Resist the temptation to overemphasize vaccination solutions."

Here are key factors to keep in mind when planning herd vaccination strategies:

- Work with your vet to customize a program based on prevalent diseases on your farm or in your region.
- Avoid once-a-year whole herd vaccination schemes. With once-a-year programs, there is high likelihood that the cows will not receive the necessary booster doses on time, or receive immune stimulation at the right time in their

lactation cycle. This will result in money spent on vaccines, but no actual herd immunity gained.

- Make a vaccination plan that focuses around reproductive events of the cows. This will ensure they get the right vaccines at the right times.
- An effective herd vaccination program will include protocols for groups of animals: Calfhood vaccination protocols, Dry cow protocols, Early Fresh cow protocols.

Nutrition: Feeding for Productive Life – Keeping rumens healthy and cows in the herd longer! Mike Hutjens, University of Illinois Extension Dairy Specialist, gave a lively presentation that emphasized the feed management connection to keeping cows productive. Citing the fact that replacement animals are expensive - \$2000 or more – dairy producers must focus on practices that successfully get cows and heifers through the dry cow period, transition time, and early post-partum period. Dr. Hutjens stressed that a sound nutrition program translates to many cow productive life benefits besides simply good milk production:

- A sound feed program avoids rumen acidosis
- Controls metabolic disorders near calving
- Limits foot disorders and lameness
- Achieves energy balance needed to get cows re-bred
- Maintains immunity and health through balanced ration and key minerals
- Meets energy requirements needed for maintaining body condition and avoiding losses from metabolic disorders (milk fever, ketosis, DAs, fatty liver).

Since rumen acidosis is so devastating, he gave the audience this homework: Take time to monitor the cows and the records for signs of acidosis. These signs indicate rumen acidosis:

- Less than 60% of cows cud chewing
- Over 10% cows with milk fat test 0.2% below milk protein test
- Evidence of hardship grooves (ridges) on hoof surfaces
- Erratic shifts in free choice bicarb consumption
- Laminitis
- Loose fecal droppings
- Cows' consumption of bedding and dirt

Take home message: Working with a nutritionist, completing these monitoring steps, and utilizing a Penn State Shaker Box to monitor the quality of the TMR (Total Mixed Ration) are important management strategies.

Your On-Farm Udder Health Program – How do you know it is working? Leo Timms, Iowa State University Extension Dairy Specialist, described monitoring strategies to evaluate udder health. Leo explained that many udder infections that result in clinical mastitis during the lactation period actually start during the 60-day period **prior** to the start of lactation. In heifers, 20-30% teats are open prior to calving, and in cows, a certain percentage **never** close teat sphincters during the dry period! Therefore, evaluating dry cow and springing heifer management is vitally important. Key things to monitor:

- Cleanliness in dry cow pens, stress control via correct stocking rates, feed bunk access, and heat abatement
- Production records graphs to monitor incidence levels of udder infection in fresh cows and heifers
- CMT paddle results: Use the CMT paddle on all fresh animals to monitor dry cow management. Goals should be <10% CMT gelling in fresh animals, and <5% quarters gelling. If your numbers exceed this, evaluate dry cow management ASAP
- Consider use of external teat sealants or internal teat sealants at dry-off time to provide a protective barrier from bacteria entering during the dry period. **IMPORTANT:** Carefully clean the teat ends and use clean procedures when inserting dry cow antibiotics or internal teat sealants.

Repeating the theme voiced by Dick Wallace and Mike Hutjens, Leo emphasized the need to **integrate several herd management practices** to achieve udder health and milk quality goals. Good cow prep and milking procedures certainly contribute to udder health, but without concurrent focus on other management areas of nutrition, clean comfortable facilities, and a sound vaccination program, high herd SCC and mastitis incidence may still occur.

To obtain a copy of the Proceedings from the NW Iowa Dairy Herd Management Meeting, contact Chris Mondak at cmondak@iastate.edu or call 712-737-4230. Cost is \$5.00/book plus mailing fees.