milk production, the profitability from 7 to 8 thousand kg milk yield decreased due to the higher feed costs.

Key Words: dairy cattle, gross margin, profitability

W102 Livestock gross margin insurance for dairy cattle: Analysis of program performance and cost under alternative policy configurations and market conditions. M. Valvekar*, V. E. Cabrera, and B. W. Gould, *University of Wisconsin, Madison*.

Livestock Gross Margin insurance for dairy cattle (LGM-Dairy) is a new risk management tool that can be used to establish a lower bound on a dairy producer's gross margin (defined as milk revenue minus imputed purchased feed costs). A producer's decision of the level of gross margin to insure has a significant impact on the gross margin guarantee (GMG) and resulting premium. An analysis of the relationship between these decision parameters is important to understand how this program could potentially benefit dairy producers. Objectives of these analyses are to (1) review the basic structure of LGM-Dairy (2) examine sensitivity of GMG and premium to changes in insured feed quantity and (3) quantify the impacts of changes in deductible level on important program characteristics. Although this program has been available only since August 2008, we review program performance under a variety of market conditions over the 2000-2008 period for a hypothetical Wisconsin dairy to provide an indication of the usefulness of this program under alternative market conditions. The level of corn and soybean meal equivalent fed are divided into discrete ranges to allow for a sensitivity analysis of GMG and insurance premium to feed quantities. GMG and premium are then calculated for different combinations of feed use and deductible levels, using the University of Wisconsin's LGM-Dairy premium calculator. Correlation coefficients analyze key relationships between different program parameters. Preliminary analysis using 2008 data indicates a negative association between deductible level and premium, a negative association between insured corn equivalents and GMG and a low correlation between insured soybean meal equivalents. Preliminary analyses of the impact of gross margin deductible on payout probability shows that maximum deductible corresponds with lesser payout probabilities.

Key Words: price risk, risk management, revenue insurance

W103 Description of Kentucky dairy management systems and producer demographics. R. A. Russell* and J. M. Bewley, *University of Kentucky, Lexington.*

To characterize the management of Kentucky dairy operations, a survey was distributed to all licensed milk producers in the state. Two hundred and twenty-nine producers responded to the survey. Mean age of responding producers was $50.9 (\pm 12.9)$ with a range of 22 to 82. Mean 2008 herd size (milking and dry cows) was $83.0 (\pm 101.8)$ with a projected herd size of $102.1 (\pm 114.4)$ in 2013. Mean daily milk yield (pounds per cow) was $52.7 (\pm 11.8)$ with a range of 15 to 85 pounds. Mean somatic cell count (cells/ml) was $304,524.6 (\pm 123,306.7)$ with a range of 75,000 to 750,000. When asked to describe how much of their income came from farming, 54.9% reported all of their income was from farming, 9.3% indicated their income was evenly split between farm and off-farm sources, and 5.8% said most of their income came from off-farm sources. Forty-eight respondents (22.4%) said they intended on staying in the business for more than 20 years, 61 (28.5%) for 10

to 20 years, 71 (33.2%) for 5 to 10 years, and 34 (15.9%) for less than 5 years. One hundred thirty-seven respondents (63.4%) indicated they would improve efficiencies in the next 5 years while 64 (29.6%) said they would expand, 41 (19.0%) would modernize and 36 (16.7%) said they would leave farming in the next 5 years. One hundred and seventysix (84.6%) producers indicated that Holstein was their primary breed followed by Jersey (8.2%), crossbred (3.4%), mixed (1.9%), Guernsey (1.0%), Brown Swiss (0.5%), and Milking Shorthorn (0.5%). Producers characterized their housing systems as follows: no housing (cows are outside year-round) (40.1%), new (<10 years) or modern freestall barns (22.2%), existing building(s) converted to freestall housing (17.9%), tie-stall or stanchion barns (8.7%), compost bedded pack (sawdust) housing (6.8%), and bedded pack (straw) housing (4.3%). The majority of producers milked cows in a pit parlor (77.7%) with the remaining milking in a stall barn with buckets or pipeline (14.3%) or flat parlor (8.0%). These results provide new insight into the management of Kentucky dairy operations.

Key Words: survey, dairy extension, management systems

W104 Characterization of the decision making behavior of Kentucky dairy producers. R. A. Russell* and J. M. Bewley, *University* of Kentucky, Lexington.

A survey was distributed to all licensed milk producers in Kentucky to gain a better understanding of the factors that influence decisions made by dairy producers. Two hundred and twenty-nine producers responded to the survey. When asked to describe criteria used to evaluate the success of their dairy operation, the criteria selected by the highest percentage of respondents were (1) ability to pay operating expenses without incurring unnecessary debt (91.6%), (2) well-being of animals in the herd (82.8%), (3) producing superior quality milk (75.8%), (4) keeping a balance in the checking account (73.1%) and (5) quality of life (67.0%). The top three sources of influence or information in decision making (with mean response calculated after assigning the following numeric values to producer response categories: not important-1; important-3, very important-5) were (1) advice from consultants, nutritionists, and veterinarians (3.70 ± 1.23) , (2) consultation with business partners and family members (3.68 ± 1.29) and (3) intuition and gut feeling $(3.10 \pm$ 1.45). When asked about criteria used to evaluate decisions, the criteria selected by the highest percentage of respondents were (1) ability to cash flow (94.7%), (2) availability of funds to pay for investments (80.5%) and (3) impact on the business's long-term financial performance (70.8%). Respondents were asked how frequently they reevaluated their long-term business strategy. The percentage of producers who listed annually was 29.4%, while 16.2% stated never, 14.7% monthly, 13.7% twice a year, 13.2% more than once per month, and 12.7% quarterly. With regard to adoption of automated monitoring technologies, producers indicated that modest adoption rates were a result of (1) not being familiar with technologies that are available (54.9%), (2) undesirable cost to benefit ratios (41.8%) and too much information provided without knowing what to do with it (35.9%). Utilizing this insight into dairy producer decision making should help industry professionals address dairy producer issues and concerns.

Key Words: survey, dairy extension, decision making behavior

W105 A Spanish language artificial insemination school for Idaho dairy employees. J. C. Dalton^{*1}, K. S. Jensen², M. Chahine³, and M. de