2012 Iowa Dairy Farm Survey

Executive Summary

Background:
A necessity to better understand the current dairy management practices, characteristics, and needs, along with future direction was identified by Iowa State University Extension Dairy specialists. A comprehensive survey was developed and summarized by Dr. Leo Timms, Extension Dairy Specialist, Jennifer Bentley, Extension Dairy Field Specialist, and Kristen Schulte, Extension Farm and Agribusiness Management Specialist. Survey and Behavioral Research Services (SBRS) at Iowa State University was contracted to conduct the mail survey to a sample population of dairy operations. Additionally, extension received generous support from industry collaborators that helped to fund the project including Brickle Brothers, Foremost Farms USA, Iowa Farm Bureau, Land O Lakes Purina Feed, Midwest Dairy Association, Northeast Iowa Community College and Vi-Cor.

Survey Results:
The sample for this study consisted of 1,000 producers drawn from a list of dairy operations in the state of Iowa. Thirty-eight percent of producers completed the survey; counties with higher concentration of dairy farms in the state returned the most surveys (Clayton, Dubuque, Delaware, and Allamakee). Results showed dairy operators are primarily male and between the ages of 41 and 60, and got started in the dairy industry as an operator and in management at a young age, less than 30 years of age. Just under half of operator’s have an education level no greater than high school, and a higher percent of operators spouses work off the farm. Generally, respondents are satisfied with their quality of life; however, they are typically not involved in farm organizations with under one-half being involved with the Iowa Farm Bureau, 4-H or FFA, dairy breed associations, or the Iowa State Dairy Association.

While the majority of operations are less than 250 head, the largest segment of dairy operations have a herd size between 50 and 99 head. There has been limited growth in larger operations or shift of operation size over the last six years according to the 2012 survey. Sixty-nine percent of operations today are structured as a sole proprietorship with an individual or family; just fewer than sixty percent of current operators started in the dairy industry by working with a similar operation structure. Over half of the operations graze to some degree while the majority of operations are not certified organic.

The primary breed on dairy operations is Holstein and operations typically have a Rolling Herd Average between 18 and 26 thousand pounds. Smaller herd sizes, certified organic herds, and Jersey and Cross-bred breeds displayed lower levels of production. In regards to milk quality, average component levels for all herds are 3.87 percent for fat and 3.17 percent for protein while the average Somatic Cell Count was 233 thousand.

Milking and housing systems are key components to a dairy operation. Forty percent of operations utilize tie-stall or stanchion barns for their milking system while just under half use a herringbone, parallel, or parabone style parlor. Smaller operations had a higher correlation of using a tie-stall or stanchion barn milking system. Over 60 percent of operations have freestall housing; however, this type of housing more common with larger dairy farms, over 100 head. In regards to recent updates, operators have more recently updated the cow housing facilities compared to milking parlor facilities.

Over half of farms use a computer to keep records for their operations, but 74 percent of operators keep records on individual cows. A majority of operations utilize DHIA records while 40 percent use PCDart, additional computer programs and manual recordkeeping were also identified as means to maintain records. Dairy operations employ a variety of management practices; the most common practice is using a consultant to balance rations while implementing computerized based technologies on the farm are less likely to be used.
Total acreage base for a dairy operation, on average, increased from 560 to 596 acres from 2006 to 2011. The number of acres planted to corn silage and hay has increased at a greater rate than the overall number of acres per farm since 2006. About half of dairy operations custom hire field operations; fertilizer and herbicide application and hay baling are commonly hired out by dairy operations. In regards to nutrient management, smaller operations placed manure in a spreader or building or spread daily while larger herds used a lined structure for storage. A majority of operations adjust commercial fertilizer application rate based on estimated nutrients in manure; however, only forty percent of operators test the nutrient content of their manure on a yearly or less frequent basis.

Over 60 percent of Iowa dairy operations utilize immediate family labor for both full and part-time positions. As herd size increased, the number of immediate family, full-time laborers increase to 3 workers while hired, full-time laborers increase to above ten workers. Full-time workers log more than 50 hours per week while part-time workers log 17 to 22 hours per week on a dairy operation.

Operator’s primary resource for dairy and farm management information is a dairy nutritionist; they also primarily receive information from veterinarians and other farmers. Producers prefer to receive information pertaining to farm management and production issues from magazines. When questioned on topics that need additional training in Iowa, production and management related issues rose to the top of the list. These topics include mastitis prevention and treatment, reproductive management, basic nutrition, crop production for dairy feed, and calf feeding and young stock management.

Currently, producers indicate that commodity prices and milk price volatility are two conditions that have some impact on farm businesses. In the future, over half of operators plan to stay in business for at least the next 15 years. One-third of operations plan to expand their herd at an average of 86 head with the majority of those herds expanding in the next five years. In regards to facility updates, 43 percent of operations plan to update calf or heifer facilities, this is over ten percent higher than any other facility type update. According to results, over half of dairy operations in Iowa will remain in operation under the current operator only slight growth in herd size and limited planned facility updates or expansion.

The 2012 Iowa Dairy Survey results are compared with the 2007 U.S. Census of Agriculture and past ISU Extension Dairy Industry surveys. Compared with the census, the represented sample from the 2012 survey was of larger herd size, but had similar business organizational structures and operator demographics. Compared to the 2000 ISU Extension Dairy Industry survey, the average herd size and number of acres owned and rented has increased. The percent of operations involved in a partnership versus sole proprietorship increased from 2000. There is still considerable support, about 40 percent of operations, for transitioning the farm to a family member comparing 2005 to 2012. The operator demographics have not changed drastically between survey years, but operators are slightly more educated and the percentage of spouses working off-farm has decreased slightly. In regards to facilities, dairy operations have made substantial changes since 2000. The percent of operations in a tie-stall or stanchion milking facilities decreased by 35 percent and percent of operations using freestall housing increased about 30 percent. Additionally, an increase percentage of farms use a lined structure for manure storage from 2000 to 2012. Comparison between surveys displayed growth in herds size and improvement in facilities, yet operation structure and operator demographic was similar.

**Conclusion:**
Iowa Dairy Industry has progressed over the past decade; however, the farms plan to only grow marginally and remain family oriented. Opportunities for programing can be extracted from this survey based on current and projected demographics and needs of the dairy industry and operators. This information is important for ISU Extension and industry organizations to better adapt to the needs of today and tomorrow’s operations.