Data for decision making

Dairy records will provide an opportunity for optimal return on investment more than ever for dairy farm operations over the coming months. Record setting prices for commodity feedstuffs influenced by the widespread drought in the U.S. will require optimal management during the next year.

Dairy farms need to have data, current data, and use the records to manage both feeding and breeding of the dairy herd. The coming months will require more than ever utilizing dairy records to manage individual cows and groups of cows. Operational decisions about inputs, milk production and which cows to cull will need to be based on data.

Concentrating on the basics

The most feed efficient cows will be your cows that have the lowest feed inputs with the highest trouble free milk production. Defining “trouble free” could include low incidence of metabolic disorders; few physical problems with the udder plus the feet and legs; quality milk production with low SCC; and getting bred back to start the next lactation. This sounds like a big task, but the majority of cows accomplish these goals day in and day out. We tend to remember the cows that are exceptions to the goals. These cows require more management, possibly incur greater treatment costs and will probably be lower in milk production or contribute no saleable milk. All this occurring while the cow has the same capital and feed input costs.

Working on developing a ration to reflect the current milk-feed price ratio and using what feedstuffs are available will help with the feeding portion of the dairy’s operation. Either balancing the ration with farm staff or with a nutritionist will be based on data. Having data to manage feeding will be more important than ever with current and projected costs of big three feed inputs being at record levels.

Cows that don’t meet the “trouble free” or feed efficient guidelines will need to be culled. Several recent university studies have shown that determining the balance of cow flow in the dairy operation may include fewer cows or culling cows sooner to address the economic conditions.

The important factor in decision making is having data to identify the secondary cull cow candidates. The top of the cull cow list is easy or self-identifying of which and when those animals must be culled. The second level on the cull list is easier to manage when data are available to evaluate and prioritize during the decision making process.

Genetics and Genomics coming into the management plans

As dairy farms have to make culling decisions which involve young or old dairy animals, the decision should also include evaluating the genetics. Cows being considered for culling and being in the secondary level on the culling list should
Dairy Beans * $200/ton Hay with $17.00 CWT Milk

have their genetic levels considered as a tie breaker for staying in the herd or being culled. Genetically superior cows for production and management traits will be a better option for economic returns and cow flow in the operation.

According to USDA-Animal Improvement Program Laboratory (USDA-AIPL) research presented at the recent American Dairy Science Association meetings in July 2012, many farmers are utilizing young genomic sires in their breeding decisions. Duane Norman, Jenna Hutchinson and John Cole researchers at USDA-AIPL reported this investment in high quality semen continues to be one of the best returns on investments from the breeding side of managing the dairy, even in economically challenging times.

When the AIPL research looked at the usage of young genomic bulls for reported Holstein breedings:
0% young genomic bulls were used in 2007
8% young genomic bulls were used in 2008
36% young genomic bulls were used in 2009
42% young genomic bulls were used in 2010
48% young genomic bulls were used in 2011

When the AIPL research looked at the usage of young genomic bulls for reported Jersey breedings:
0% young genomic bulls were used in 2007
0% young genomic bulls were used in 2008
22% young genomic bulls were used in 2009
32% young genomic bulls were used in 2010
39% young genomic bulls were used in 2011

The average difference in net merit dollars (NM$), weighted by number of breedings for Holsteins was $171 higher and for Jerseys was $186 higher for the offspring of young genomic bulls compared to the offspring of older progeny tested bulls. This difference in the genetic value equates to potential production from a cow entering the Holstein herd of $171 and Jersey herd of $186 over a cow of the same age or cows standing in the herd with a lower genetic level. This is an example of data driven decision making at the dairy farm level using genomic tools as part of the management and genetics program.

Management and Genetics are key together

The investment and participation in DHI programs plus having the information accessed for research in genetics and management at USDA-AIPL is the foundation of the U.S. genetic evaluations and management benchmarks for dairy producers. Providing tools for dairy management are key to the progress realized in the past, managing in the short-term challenging economic times and the foundation for the future.

Turning on the data “headlights”

DHI data to manage the dairy herd could be compared to turning on your headlights to drive in the dark or even during the daylight. You light up the road to see where you are going and keep the driver and surroundings in a safer environment. Probably even more important is that you are able to move from one point to another following a map and signs.

Using DHI data for feeding and breeding the dairy herd will provide a safer environment and a sustainable direction coming out of these economically challenging months. The future has bright points if good data and decision making are part of the plan.