Precision Feed Management Program Improves Profits and Helps the Environment

How efficiently feed is converted to milk has a significant impact on the economic and environmental sustainability of dairy farms. Feed costs account for 60% of the total expenses on a typical dairy farm. At the same time 50-70% of the nitrogen and phosphorous brought on to a dairy farm remains on the farm and may ultimately become an environmental concern.

With funding from the New York Farm Viability Institute and the Upper Susquehanna Coalition the Central New York Dairy and Field Crops Team has helped dairy farms work through a series of benchmarks that can be used to assess the feeding performance of individual dairy farms with easily available data. Dairy farms can compare their values to the benchmarks and see where there are opportunities for improvement. A plan is then developed to address the opportunities and problems on that farm so that the farm will achieve the benchmarks on a continuous basis.

Since 2008 the Precision Feed Management Benchmarks have been run on 115 dairy farms in the six counties. Where farms choose to develop and follow a plan to improve their performance the results can be dramatic. One way farms can show improved profitability is by looking at the margin or in this case milk income minus the feed costs.

For example a Fulton county farm was able to show an increase of milk income minus feed costs from $4.98 per cow per day to $5.81 or an improvement in profitability of $2,490 per month. This improvement came with feeding more high quality forage and improving dry and pre-fresh cow programs. A Herkimer County farm had even more dramatic results by increasing milk income from $3.83 to $6.73 per cow per day, a profitability increase of $10,440 per month.
Grazing farms receive precision feed management support during important summer months

Thirty two dairy farms that utilize intensive grazing participated in a Precision Feed Management project this summer. Because of the changes to their feeding program, grazing farms in the summer months have different issues from those farms that don’t.

Pastures that are well managed will tend to be high in crude protein. The initial run of precision feed management benchmarks demonstrated that 65% of the farms were above the desired 16.5% crude protein in the diet. Plans were developed to show producers how they could reduce protein by reducing protein in their grain or provide more energy in the diet to utilize the protein.

Dairy farms may utilize grazing to improve forage quality and reduce labor and machinery costs.

“First cutting in 2010 should have started up to two weeks earlier than normal because of the warm weather. A typical one hundred cow dairy farm that made their first cutting on time increased their farm profitability by $20,000”

Regional Dairy Specialist
David Balbian

Dairy and Field Crops Team helps producers improve first cutting forage quality

Knowing when to start first cutting haycrop can be a challenge for dairy producers. Harvest can not be tied to a particular calendar date but instead is dependent on heat and soil moisture. Alfalfa height has proven to be the best indicator of alfalfa and grass quality in the field and can give producers a heads up as to when to harvest.

To give producers some idea of when to start harvesting, the Dairy and Field Crops Team staff measured alfalfa height on 44 different fields across the six counties. Those locations were chosen to reflect the diversity of heat, elevation, and soil moisture found in our area.

The team utilized electronic media to get the results to producers as quickly as possible so they could see the quality at locations near them. This information was published every 5 days during early May on the team website and also sent by email to 280 producers and agribusinesses. Participants in the Precision Feed Management Program received notices through the mail.

Jacob VanEvera, Schoharie County, left and Project Technician Matt Korona, right measure alfalfa height to determine forage quality
Soybean producers benefit from scouting program

Sixteen soybean producers participated in a scouting program designed to help them better understand potential pest problems and assess their management practices. The program, funded by the Northeast Soybean Board through the NY State IPM Program, provided a program assistant to monitor soybean fields.

Participants had two soybean fields scouted each week beginning the third week in May until the third week in August. The scout issued each participant a weekly report of their field’s soybean growth and development and alerts to any weed, insect, or disease pests. All participants received a weekly summary of all of the fields so they could see how their fields compared.

Participants met as TAg Teams (Tactical Agricultural Teams) in different farm fields early and late season so that participants could have hands-on experience learning various pests. This year pests were few and producers did not need to apply pesticides to prevent losses on insects like soybean aphid.

Field scouting demonstrated an opportunity for producers to optimize plant populations for next year. Fifty one percent of the fields had plant populations that were lower or higher than desired. Those fields were either losing yield to low populations or wasting money on seed unnecessary to achieve optimum yields.

Dairy Day and Corn Day bring latest technology to Central New York

Each year the team hosts two major events, the annual Dairy Day and Corn Day at the Otesaga Inn in Cooperstown. Over one hundred people participate in each of these educational meetings aimed at bringing world class speakers to the Central NY area to address timely topics and new technologies.

At the Corn Day this past year Dr Imad Saab, Seed Science Leader, Pioneer Hi-Bred International was able impress the need for selecting cold tolerant hybrids when reducing tillage. University of Nebraska, Extension Engineer Paul J. Jasa laid out the steps necessary for successful notill crop production.

Highlights of Dairy Day were Dr. Thomas Overton’s, Department of Animal Science, Cornell University talk on factors affecting transition cow success and Penn State’s Jim Dunn discussing of milk marketing.

2010 Dairy Day speakers, left to right: A. Fay Benson, Cornell Cooperative Extension; Jim Dunn, Professor of Agricultural Economics, Penn State University; David Balbian, Central NY Dairy and Field Crops Team; Dr. Thomas Overton, Department of Animal Science, Cornell University
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The Central New York Dairy and Field Crops Team was awarded a grant from the New York Farm Viability Institute to implement Precision Feed Management through May of 2011.

We would like to acknowledge others for their financial support:

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The Upper Susquehanna Coalition sponsored University of Nebraska, Extension Engineer Paul J Jasa’s presentation at the Corn Day.

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