HOARD'S DAIRYMAN

Blog Entry:
Our industry now knows its carbon footprint
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The results are in, and all gasses are accounted for. Yes, today, the industry-supported group, Innovation Center for U.S. Dairy, has officially announced the completion of an unprecedented life cycle assessment study that measured all greenhouse gas emissions associated with one gallon of milk. Data was gathered at the beginning of the life cycle when crops are grown; milk is produced and delivered to processors; through processing, packaging and distribution; all the way to the purchase and disposal of the gallon of milk by the consumer.

The Innovation Center for U.S. Dairy commissioned the Applied Sustainability Center at the University of Arkansas to conduct the green house gas contribution life cycle assessment of fluid milk, also called the carbon footprint study. Dr. Greg Thoma, professor of chemical engineering at the University of Arkansas and lead investigator of the study, will present the findings tomorrow at the International Food Life Cycle Assessment Conference. Official and specific data will become available at that time.

Results of the study uncovered a great deal of variability among the emissions from farms. This variability was not associated with the size or location of the farm but was driven by on-farm practices. This variability gives the dairy industry “a tremendous opportunity to learn,
really from itself,” says Thoma. He adds that we now have a baseline, a number we can work
to improve.

From their research, management practices were found to contribute more or less to our carbon footprint. “Deep bedding used for longer than a month can be a significant source of emissions,” Thoma says. Anaerobic lagoons are also a significant source. “Dry-stacked, daily
spread are two of the least impactful manure management techniques in regards to greenhouse gas emissions.“Equally important to manure management issues is that farms that have generally speaking lower footprints also have much better feed conversion efficiency," Thoma says.

The story behind the LCA research started when an industry-wide goal to reduce greenhouse gas emissions by 25 percent by 2020 was created. That goal was penned in 2008, and in late 2009, a memorandum of understanding (MOU) was signed by the Innovation Center for U.S. Dairy and the USDA to support the voluntary goal.

We encourage you to turn to page 617 in our September 25, 2010 issue to read the full results of the study. Our account also includes the perspective of two farms involved in the research who are making strides to improve their own carbon impact.