USDA-ARS

Building on the USDFRC Legacy

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or over 40 years, the U.S. Dairy Forage Research Center has been the national and international leader in forage and dairy management trials. As I begin my tenure as the seventh USDFRC Director, we face challenges not seen in the dairy industry since the early days of the Center's history. The dairy industry

in the early 1980s was beset by trials differing from today's, but today's challenges are no less threatening. For me, it is personal.

No, I did not grow up on a dairy farm in the Upper Midwest. I grew up on a beef cattle farm in rural western Kentucky. But, the struggle of dairying



The U.S. Dairy Forage Research Center's main office (left) is on the University of Wisconsin-Madison's campus and houses the majority of the scientists and support staff. The research dairy (center) is located just north of Prairie du Sac adjacent to the Wisconsin River. The Environmentally Integrated Dairy Management Research Unit (right) is located in Marshfield, WI. Additionally, our researchers conduct trials at several UW Agricultural Research Stations and at sites across the U.S.

in the 21st century is something with which I am familiar. For the past 13 years, I have served as the Forage Extension Agronomist at the University of Georgia. I worked closely with a lot of dairies across the Southeast. Some of those farm families are among my dearest friends. And when the dairy crisis hit rock bottom, I lost one of those friends to its darkness.

So, helping dairy farm families is personal to me. It is my personal mission to assist our dairy farm families overcome the challenges they face. This is why I moved 1,000 miles away to join the nation's most preeminent team of researchers. At the helm, my mission is to lead our scientists and support staff to develop innovations that enhance the profitability and resilience of our farm businesses for the next generation and beyond.

Our purpose at the USDFRC is to conduct research and develop better management practices for the forage and dairy farmers in the U.S. The goal is to improve productivity, reduce the impact on the environment, and increase the profitability and sustainability of dairy farms across the nation.

The dairy industry has become far more efficient, especially in the last 10 years. In a research article published earlier this year, scientists found that the U.S. dairy industry used only 75% of the cattle, 83% of the feed, 80% of the land, and 70% of the water in 2017 to produce the equivalent amount of milk as they did in 2007. At the same time, manure production and greenhouse gas emissions (per cwt of energy corrected milk) decreased by ~20%! The work our USDFRC researchers do, along with countless other innovators and market factors, has helped the U.S. dairy industry achieve these efficiency and environmental gains.

Yet, more needs to be done. Challenges remain. Labor costs, management of an increasing herd/farm size, ensuring water quality, improving soil health, developing practical crop rotation systems for modern dairy farms, further reducing greenhouse gas emissions, ... the list of challenges goes on and on.

But, we have a lot planned to tackle many of these challenges head-on. Even before my first day, I surveyed our scientists and asked for a list of at least 10 innovations they believed the USDFRC will soon bring to the industry. I received back far more than 10. Our scientists have a lot of innovations in the pipeline.

We have had several retirements at the USDFRC in the past few years. The previous Center Director was able to hire some outstanding young scientists to fill several of those vacancies. I hope to continue to fill vacancies and adapt their research efforts to meet the changing needs. We seek to attract talent that bring new ideas and skill sets. Immediately after I arrived, we initiated the process to hire two key Research Leader positions for the Center. Those position descriptions have been written to attract experienced and highly successful scientists to lead two of

our research units. Within the coming weeks, I will be posting additional position descriptions for new scientists to address several key topics identified by our stakeholder advisory committee.

Similarly, we will be prepping for the future research and development needs of the dairy industry by rebuilding key infrastructure. Funds from the federal budget have been set aside to build a new research dairy on the former Badger Army Ammunition Plant property near Prairie du Sac, WI. This new research dairy replaces aging infrastructure too small for the number of dairy cows we need to conduct our research efforts at the USDFRC. In addition, the existing location of the research dairy is perilously close (<300') to the Wisconsin River. Another great benefit is that the move across the state highway gives us the opportunity to restore the federally owned Badger property to farmland. It will also place us along a major new bike trail allowing us an opportunity to educate the public about our research and the dairy industry, in general.

I left a successful career in Georgia because I have a passion for the dairy industry. Though I believe I was having a positive impact there, I came here because I felt I could have an even greater impact. The U.S. Dairy Forage Research Center is the preeminent dairy and forage research program in the country. It is a great honor and huge responsibility to be the Director of this Center. A great legacy has been forged. I look forward to building on that legacy and helping to serve the dairy farm families of this country.