

# Forage Research Center Marks 20 Years of Progress

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With a community-based study completed and passed by the Sauk County Board, there may be additional reasons for celebration at the U.S. Dairy Forage Research Center. "Cows, Crops, and Communities" is the theme for a celebration of the Center's 20th anniversary June 29 in Madison and June 30 at the farm outside Prairie du Sac.

The Dairy Forage Research Center (DFRC) is located near the former Badger Army Ammunitions Plant, a 7,500-acre facility on the Sauk Prairie in the southeastern portion of the county. When the U.S. government announced it was declaring the plant surplus property, the Center, along with the Ho-Chunk Nation, stepped forward to announce they wanted 3,200 acres. DFRC will use its approximate 1,500 acres to continue its basic and applied research that benefits dairy producers. On May 15, the Sauk County Board accepted a community report that proposed several uses including support for DFRC, the last of this type of facility in

the country.

Cutting-edge research and technology will be featured at DFRC's Madison labs, located on the UW-Madison campus at 1925 Linden Dr. Visitors can tour the facility from 1 to 5 p.m. on June 29 to see the latest research on improved forage digestibility and nutritional evaluation, new uses for alfalfa, development of alternative forages and enhanced sustainability of dairy farms.

On Saturday, a field day at the DFRC research farm on Hwy. 78 between Prairie du Sac and Merrimac will feature new products from alfalfa, potential savings from changes in forage storage, roasting soybeans, and forage harvesting machinery. The day's events run from 10 a.m. to 3 p.m. and will include dairy product education and promotion items, dairy treats, a visit by Sauk County Dairy Promoters mascot Dairy Daisy, and an opportunity to talk to scientists and staff members about research and the farming operation, says Richard Walgenbach, manager of the farm facility. The farm is the final test site for DFRC research, ensuring that improvements work under real production conditions.

DFRC Director Neal Martin explains that the lab and farm facilities are part of the U.S. Department of Agriculture's Agricultural Research Service (USDA-ARS). In addition to the campus and farm facilities, DFRC has three staff scientists located at two cluster locations at the University of Minnesota, St. Paul and Cornell University, Ithaca, N.Y. A total of 15 scientists, plus support staff and graduate students, post-doctoral candidates and visiting scientists, emphasize a multidisciplinary approach to researching problems related to the production and utilization of forages by dairy cattle. The partnership between USDA and the UW-Madison allows both staff and students to benefit through facilities and research. After 20 years of work, Martin says it has helped change how producers use forages in their operations for more efficient and environmentally friendly production and use.

"Forages are actually pretty environmentally friendly crops," Walgenbach notes. "They hold soil in place, it prevents run-off and, in the case of alfalfa, it has a very deep tap root that can actually re-capture nitrates that have been lost to the groundwater."

Some of the DFRC work is very technical; other work is not. Martin says the diverse program spans from the very

basic to the applied. Several of its milestones include the following:

- Discovered that feeding dairy cows 20 percent less phosphorus can save U.S. dairy producers \$100 million a year and improve water quality without sacrificing milk production or cow health.
- Developed a field macerator that reduces alfalfa hay drying time by two days, increases dry matter digestibility and improves protein utilization by the cow.
- Showed that proper roasting of soybeans for dairy cow diets can generate \$20 to \$40 million annually in added value.
- Increased the persistence, longevity, yields and disease resistance of red clover varieties, leading to an annual savings of \$140/acre/year.

Walgenbach says today's research at DFRC holds even more promise for the forage and dairy industries.

"We are an operating farm and we try to operate as economically and efficiently like any other dairy farm has to," he says. During the on-farm celebration, producers, as well as consumers, will be able to find out just how they do it. For more information on these events, call 608-264-5240, or check the DFRC website at [www.dfrc.ars.usda.gov](http://www.dfrc.ars.usda.gov). All events are free of charge.

