

11-2-2011

UNH-Led Project to Boost Northeast Organic Dairy Industry

Beth Potier

UNH Media Relations

Follow this and additional works at: <https://scholars.unh.edu/news>

Recommended Citation

Potier, Beth, "UNH-Led Project to Boost Northeast Organic Dairy Industry" (2011). *UNH Today*. 3821.
<https://scholars.unh.edu/news/3821>

This News Article is brought to you for free and open access by the Administrative Offices at University of New Hampshire Scholars' Repository. It has been accepted for inclusion in Media Relations by an authorized administrator of University of New Hampshire Scholars' Repository. For more information, please contact nicole.hentz@unh.edu.

Media Relations

UNH-Led Project To Boost Northeast Organic Dairy Industry

November 2, 2011



DURHAM, N.H. – Researchers from the University of New Hampshire are leading a multi-state project that aims to help organic dairy farmers better produce and market their milk. Funded by a grant from the U.S. Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) to 12 researchers from the universities of Maine, Vermont, Cornell, and the USDA, well as UNH, the research will explore how organic dairy farmers in the Northeast can enhance farm profitability by extending the grazing season and adding value to milk through flaxseed supplementation.

 SHARE	
	Print
	Email
	Subscribe
Facebook	
Tweet	
<input type="text"/>	

Jerseys at UNH's Organic Dairy Research Farm, where researchers will lead a USDA-funded study to enhance production and profitability of organic milk.

“Organic milk production has been one of the fastest growing segments of organic agriculture in the nation in the past decade, and the Northeast produces approximately 25 percent of the organic milk in the U.S.,” says principal investigator André Brito, assistant professor of organic dairy management at UNH. “Organic represents a tremendous potential to maintain rural economies and preserve working environmental landscapes through profitable organic dairy farms.”

“As more and more farmers adopt organic agriculture practices, they need the best science available to operate profitable and successful organic farms,” says Kathleen Merrigan, deputy secretary of the USDA. “America’s brand of organic agricultural goods is world-renowned for its high quality and abundance of selection. These research and extension projects will give producers the tools and resources to produce quality organic food and boost farm income, boosting the ‘Grown in America’ brand.”

The project, which was funded through NIFA’s Organic Research and Extension Initiative, addresses needs expressed by organic dairy farmers in a series of focus group interviews funded by two planning grants. “Organic dairy farmers were specifically concerned about the new pasture rule,” says Brito, noting a new federal standard that dictates ruminant animals must graze on pasture 120 days per year with about 30 percent of the total intake coming from pasture. Extending the grazing season has potential to reduce feed costs, a major obstacle to profitability for organic dairies.

Because extending the grazing season means keeping cows on pasture longer, researchers will conduct plot trials of various combinations of forage species, including perennial ryegrass, white clover, sorghum-sudan grass, brassicas, and small grains. The challenge in the Northeast, says Brito, is not only the late start and early finish of the growing season but also the heat of the summer, when many forage species are less productive.

The second research question – enhancing milk quality – also concerns what cows eat. Cows on pasture produce milk rich with omega-3 fatty acids and conjugated linoleic acids (CLA), molecules sought after for their human health benefits. For Northeast organic dairy farmers to tap the added value of omega-3 fatty acids and CLA, however, they need to ensure high levels of these throughout the year, not just when cows are on pasture.

In this project, the researchers hypothesize that supplementing cows’ winter forage with flaxseed will sustain omega-3 fatty acids and CLA concentrations, meeting year-round market demands for milk with improved fatty acid profile, and possibly commanding higher prices in the marketplace in the future. Further, the researchers will explore how flaxseed enhances milk production and improves cow health and

reproductive performance.

Because both research questions transcend dairy cows to embrace a wider agro-ecosystem – from soils to pasture plants to nutrients available to cows and thus to humans – the project is by its nature interdisciplinary, says Brito. His UNH colleagues on the project are assistant professor of agroecology Richard Smith, associate professor of reproductive physiology Dave Townson, and assistant professor of plant pathology Kirk Broders. A core team composed of animal scientists, economists, agronomists, ecologists, and Extension educators from partner institutions and 20 organic dairy farmers throughout the Northeast are involved in the four-year project, which is supported by a nearly \$2.9 million grant from the USDA.

The project taps the unique resource of UNH's Organic Dairy Research Farm, the first organic dairy farm at a U.S. land grant university and the only one in the Northeast. All animal feeding trials will take place within the UNH herd of 50 organic milking Jerseys, and plot trials will utilize the farm's 300 acres in Lee, as well as research farms at partner institutions.

Brito stresses that although this project arose to directly address needs of organic dairy farmers in the Northeast, its benefits will transcend that group to include conventional dairy farmers transitioning to organic or any dairy farmers who wish to adopt grazing systems. "It's not only the organic dairy producer who will gain from this research," he says. "We'll be generating information that can be used by the whole dairy industry, including conventional and organic dairy farmers outside the Northeast."

In addition to UNH's Brito, Smith, Townson, and Broders, investigators on this project are agronomist Heather Darby, associate extension professor Sidney Bosworth, and economics professor Bob Parsons, all from the University of Vermont; Richard Kersbergen, professor of sustainable dairy and forage systems from the University of Maine Cooperative Extension; A. Fay Benson from Cornell University Cooperative Extension; and animal scientist Kathy Soder, plant physiologist R. Howard Skinner, and ecologist Sarah Goslee, all from the USDA-Agricultural Research Service (ARS) Pasture Systems and Watershed Management Research Unit, located in University Park, Penn.

UNH's Organic Dairy Research Farm is operated by the NH Agricultural Experiment Station and College of Life Sciences and Agriculture at UNH. The property consists of 300 acres of which 120 are in woodlands, 140 in crops or forage production and 40 in pastures. In addition to the working land base, the current operation includes a milking Jersey herd; step-up four-stall milking parlor; animal, equipment, and storage barns; intensive rotational grazing system; numerous wells for water sampling; manure composting windrows; staff offices and sample processing space. The farm is managed as an integrated agro-ecosystem which includes all biological, physical and human related components. As such it offers a platform for research and education across many disciplines. Research priorities are relevant to both organic and conventional farm operations in the Northeast and beyond. More information is at <http://www.colasa.unh.edu/aes/odrf>.

The University of New Hampshire, founded in 1866, is a world-class public research university with the feel of a New England liberal arts college. A land, sea, and space-grant university, UNH is the state's flagship public institution, enrolling 12,200 undergraduate and 2,300 graduate students.

-30-

Photographs available to download:

<http://www.unh.edu/news/img/cows/cowsinsnow.jpg>

<http://www.unh.edu/news/img/cows/unhcowjpg.jpg>

Caption: Jerseys at UNH's Organic Dairy Research Farm, where researchers will lead a USDA-funded study to enhance production and profitability of organic milk.

Reporters and editors: André Brito, principal investigator for this project, can be reached at andre.brito@unh.edu or 603-862-1341.

Media Contact: [Beth Potier](#) | 603-862-1566 | UNH Media Relations



T-hall

Copyright © 2012 UNH Media Relations, 15 Strafford Ave, University of New Hampshire, Durham, NH 03824.
UNH is part of the University System of New Hampshire.
[ADA Acknowledgement](#) | [Privacy Policy](#) | [UNH Home](#) | [E-mail Webmaster](#)