The Northwest Crops & Soils Program will host the Dairy Webinar Series from February 11, 2022 to March 9, 2022. This will include seven (7) webinars covering a diversity of dairyrelated topics from higher forage diets to cost of production to emissions and manure matters.

All webinars are Free and will be from 11:30 a.m. to 1:00 p.m. Just register in advance and the Zoom link will be sent to you. We will also record and post the webinars on our web site as well.

Register in advance for this meeting: https://uvm-edu.zoom.us/meeting/register/ tZIscugoqDwiHtEklAnG9MlVC TV4NsIAJqH

Questions? Contact Susan.Brouillette@uvm.edu or call 802-524-6501 ext. 432. For more information: http://go.uvm.edu/conferences

FREE EVENTS

THE UNIVERSITY OF VERMONT EXTENSION

Certified Crop Adviser CEU credits available.

A QR code will be made available.

Friday, 2/11/22, Manure Matters: Sustainable Dung Ecology with Bryony Sands of UVM. 1 Integrated Pest Management CEU.

- Friday, 2/18/22, Higher Forages Diet with nutritionists Patrice Vincent and Kurt Cotanch. 1 Crop Management CEU.
- Wednesday, 2/23/22, Dairy Loose Housing Systems with Marcia Endres from the University of Minnesota. 1 Professional Development CEU.
- Friday, 2/25/22, UVM Forage and Dairy Research with Heather Darby and Sara Ziegler. 1 Crop Management CEU.
- Wednesday, 3/2/22, Green House Gas Emissions on Organic Dairy with Andre Brito of UNH and Horacio Aguirre-Villegas from University of Wisconsin-Madison. 1 Sustainability CEU.

Friday, 3/4/22, Genetic considerations for organic dairy herds with Glenda Pereira of the University of Maine. 1 Crop Management CEU.

Wednesday, 3/9/22, Cost of production in organic and grass-fed dairy systems with Jen Miller of NOFA-VT and consultant Sarah Flack. 1 CM CEU.



NORTHWEST CROPS & SOILS PROGRAM

To request a disability related accommodation to participate in this program, please contact Susan.Brouillette@uvm.edu or (802) 524-6501 by 2 weeks prior to the meeting so may assist you.



Additional funding provided by the University of Minnesota Digital Center for Risk Management Education Center under USDA/ NIFA Award Number 2018-70027-28584. USDA and the University United States Department of Agriculture





USDA National Institute of Food and Agriculture U.S. DEPARTMENT OF AGRICULTURE

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Manure Matters: Sustainable Dung Ecology

Friday, February 11, 11:30 a.m. to 1:00 p.m.

Bryony Sands is a postdoctoral research fellow studying the interactions between cattle pest and parasite management, beneficial insect biodiversity and pasture ecosystem function in livestock systems. She was at the University of Bristol in the UK for 11 years before coming to

Vermont to work with the Gund Institute in October 2021. She will talk about her research in the UK, which has focused on the role of insect decomposer communities in suppressing livestock parasites on pastures, and the impacts of veterinary parasiticides on these processes. She will discuss Integrated Parasite Management (IPM) for cattle as a potential tool which can simultaneously reduce the risk of pest resistance to veterinary treatments and reduce off-target environmental impacts on beneficial pasture insects.

1 IPM CEU

Higher Forages Diet

Friday, February 18, 11:30 a.m. to 1:00 p.m.

Can Cows Eat 17 pounds of Forage Fiber Per day? with Nutritionist Patrice Vincent of Canada. He will discuss the possibility of offering cows diets containing 12 to 18 lbs of fiber coming from forages. He will also present different farms feeding these levels of fiber with their milk yield and milk components yield, reproduction, SCC, and what they did differently with their forage production to achieve their goals.

Patrice grew up on a small Canadian dairy farm about 90 minutes North of Derby, VT where the philosophy of the farm was "Cows are meant to eat forage". To understand this, he started his education by graduating from McGill University in Agricultural Sciences. He decided to pursue his education in dairy nutrition for the last 18 years in Eastern Canada. In the last 10 years, we started to include crop rotation and cover crops to improve soil health to grow healthier and more nutritious forages. Today, we are looking at animal genetics to improve feed efficiency and animal husbandry to have the happiest cows we can have.

1 CM CEU

Forage Quality: Simplified with Kurt Cotanch who will share information on understanding forage analyses and how those values relate to quality and how we define quality. Kurt is an independent Dairy Nutrition consultant working as Barn Swallow Consulting and also part of NDS North America Dairy Ration software training and support. Kurt earned his graduate degree in Ruminant Nutrition from UVM in 1989 and then ran the UVM forage testing lab until 2000. He then directed the WH

Miner Research Institute forage lab for 17 years. In 2017, he became Director of Farm Operations for an artisan cheese producer in VT, where he gained further insights to cattle behavior, eating and rumination on dry hay rations. He has spent many years in the dairy industry focusing on nutrition, forage quality and rumen function.

Dairy Loose Housing Systems

Wednesday, February 23, 11:30 a.m. to 1:00 p.m.

Marcia Endres will provide an overview of compost bedded pack barns and talk about what has research and on farm observations taught us on how to make them work. Dr. Endres is a Professor and the Director of Graduate Studies in the Dept. of Animal Science at the University of Minnesota, holding an extension and research appointment.

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1 PD CEU







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2022 Dairy Webinar Series

Dairy Loose Housing Systems, continued

Dr. Endres's research team has studied how various housing and management systems can influence health, welfare and performance of dairy cattle. Dr. Endres and her team have also conducted research and outreach on precision dairy technologies, including robotic milking systems, automated milk feeders and individual cow behavior sensors. She teaches the dairy herd management course. Dr. Endres serves as director and committee chair on the Professional Animal Auditor Certification Organization Board and recently served as President of the Dairy Cattle Welfare Council. Dr. Endres received her Ph.D. from UMN, M.S. from Iowa State University, and Veterinary Medicine degree from University of Parana, Brazil.

UVM Forage and Dairy Research

Friday, February 25, 11:30 a.m. to 1:00 p.m. 1 CM CEU

Heather Darby and Sara Ziegler will provide updates on forage and other dairy research happening at UVM. Forage trials including variety evaluations, stockpiling studies, and interseeding will be highlighted. Alternative milking strategies and alternative forages will also be a focus.

Dr. Heather Darby is an agronomist and nutrient management specialist with UVM Extension. Over her almost 20 years with Extension, Heather has developed an extensive research and outreach program to address critical crop production and management needs of farmers across the state and region. Her efforts bring relevant research-based agronomic information that





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address both current and future needs and create opportunities to advance Vermont's agricultural industries.

Sara Ziegler is a research specialist focused on perennial and annual forage production and pasture management with UVM Extension. She works closely with farmers on developing and maintaining nutrient management plans and manages several research projects focused on organic and grass-fed dairy systems.

Green House Gas Emissions on Organic Dairy

Wednesday, March 2, 11:30 a.m. to 1:00 p.m.

Seaweed Feeding and Mitigation with **André F. Brito** who is an Associate Professor of Dairy Cattle Nutrition and Management in the Dept. of Agriculture, Nutrition, and Food systems at the University of New Hampshire. He grew up in Brazil and received his B.S. degree in Veterinary Medicine (1996) and a M.S degree in Animal Nutrition (1999) from the Federal University of Minas Gerais in Brazil. André moved to the U.S. in 1999 to pursue a Ph.D. in Dairy Science at the University of Wisconsin with his research focused on N utilization in dairy cows. In 2004, he returned to his home country Brazil to join the Federal University of Viçosa as a postdoctoral fellow. In 2006, Dr. Brito accepted a second postdoctoral position at the Dairy and Swine Research and Development Centre in Sherbrooke, QC,



Canada where he spent 3.5 years. Dr. Brito was hired by UNH in 2009 as an Assistant Professor and was promoted to Associate Professor in 2015. His lab focuses on improving nutrient use efficiency in lactating dairy cows under conventional and organic management through applied research ranging from amino acids nutrition to forage sources to grazing supplementation strategies.

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Green House Gas Emissions on Organic Dairy, continued

LCA of Organic Dairy Systems in the U.S. with Dr. Horacio Aguirre-Villegas who is a Scientist at the Biological Systems Engineering Department at the University of Wisconsin-Madison. His research lies at the intersection of climate change, energy, waste management, and food production. Over the last ten years, he has worked closely quantifying the environmental impacts of conventional and organic dairy systems including greenhouse gas emissions, ammonia emissions, resource use, and nutrients fate. He is interested in evaluating different manure management practices and



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technologies that can be implemented in small and permitted facilities to reduce these impacts. Dr. Aguirre-Villegas received his doctorate in Biological Systems Engineering from the University of Wisconsin-Madison.

Genetic Considerations for Organic Dairy Herds

Friday, March 4, 11:30 a.m. to 1:00 p.m. 1 CM CEU

Dr. Glenda Pereira, Assistant Professor and Extension Dairy Specialist, with the University of Maine, will share information on crossbreeding rotations for organic and low input herds, feed efficiency of crossbreds versus Holsteins, and polled and disbudding management.



Dr. Pereira grew up on a dairy farm in Sao Miguel, Azores where her dad and uncle still farm. She recently joined the University of Maine. Glenda spent the past 6 years at the University of Minnesota where she obtained her Master's and PhD at one of the two organic research herds at land grant institutions in the U.S. The focus of her research was on precision dairy technologies: wearables, crossbreeding, low-input, pasture-based, and feed efficiency.

Cost of Production in Organic and Grass-fed Dairy Systems

Wednesday, March 9, 11:30 a.m. to 1:00 p.m. 1 CM CEU

In this webinar, the cost of production of 100% grass fed dairy farms and of organic dairy farms will be presented along with some discussion on these two related, but different dairy management systems. Jen Miller, NOFA-VT's Farmer Services Coordinator will share information from research on the cost of production on Vermont organic dairy farms. Sarah Flack will present some of the University of Vermont's Grass-Fed dairy research data on the cost of production on 100% grass-fed dairy farms in the Northeast Region.

Jen Miller completed her masters' degree in Community Development and Applied Economics at the University of Vermont with a focus on USDA conservation programs and agricultural best management practices. After a few years providing business planning and educational services to beginning farmers in southern Vermont (an area which she now loves), Jen joined the NOFA team, excited to work statewide with farmers of all experience levels.





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Sarah Flack is a consultant and author specializing in grass-based and organic livestock production systems. In addition to her consulting, writing and teaching, Sarah participates in several research projects on 100% grass fed production systems.

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