

2014 Pasture Program Annual Report UNIVERSITY OF EXTENSION OF VERMONT EXTENSION OF THE PROPERTY OF



Pasture Program Highlights From 2014

- **Pasture Compaction Publication**
- On-Farm Energy Choices for Livestock Farms
- Healthy Soils = Water Quality
- Measuring Forage Impacts on Rumen Biodiversity and Animal Health
- Impacts of Outreach and Technical Assistance
- **Building New Partnerships to Serve Farmers**
- Increasing Farm Resilience in a Changing Climate

The goal of the UVM Center for Sustainable Agriculture's Pasture Program is to promote and enhance regenerative grass-based livestock agriculture by partnering with farmers and statewide collaborators to improve soil health and water quality, strengthen Vermont's livestock base, and celebrate viable, ecologically beneficial, and rewarding farm systems.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. University of Vermont Extension, Burlington, VT. University of Vermont Extension, and U.S. Department of Agriculture, cooperating, offer education and employment to everyone without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status

2013-2014 Program Highlights

"I loved that we just dealt with one issue all day and could go into some depth. Loved combo of science and practical example."

"Great gathering of people committed to the improvement of the environment...I always look forward to going home with a few new ideas to improve our efficiency."

--2014 VT Grazing & Livestock Conference participant(s)



The Pasture Program has worked directly with the non-profit farmer organization the Vermont Grass Farmers
Association since 1996. Staff receive funding to provide

light administrative support, membership management, meeting facilitation, conference coordination, and outreach on behalf of VGFA via targeted funds from USDA-NRCS. The longtime relationship with VGFA provides the Pasture Program with strong farmer partnerships, an advisory board for program direction and relevance, new research ideas, and the opportunity to guide on-farm research.

Technical Assistance

Contact: Kimberly Hagen, kimberly.hagen@uvm.edu

- In 2014, 61 farmer/producers were provided with technical assistance or consultation
- Of that group, 49.2% improved some part of their grazing/farm practices.
- Changes implemented included
 - dividing pastures into smaller paddocks to increase plant recovery times and encourage more even grazing and manure distribution;
 - improving paddock water supplies, reducing the
 - concentrated congregation of animals at a water location and creating erosion issues;
 - installation of fencing systems to prevent "back" grazing (a cause of overgrazing by repeated biting of regrowing plants);
 - and establishment of grazing practices to encourage greater forage residue for healthier plant roots and quicker recovery.



Photos (I): Kimberly
Hagen and Livestock
Specialist Joe Emenheiser chat dairy beef.
Above, setting up a handling system at the VT Grazing & Livestock Conference for a love demonstration; grass-fed beef farmer Helm Notterman explains his system;
Snug Valley Farm pigs nose around; Eric Noel,

Aaron Pratt and Sarah

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Outreach & Education

Contact: Jenn Colby, jcolby@uvm.edu

- 18th Annual VT Grazing & Livestock Conference hosted over 340 farmers and service providers from 6 Northeast states, and featured live animal demonstrations both days.
- Hosted or partnered on 12 pasture or livestock workshops, with 360 attendees on topics of fallow land reclamation, swine, dairy, poultry, and beef, planned grazing, bedded pack manure management, and season extension.
- Four of the top ten most-viewed stories on the Across the Fence You Tube channel were with the Pasture Program (swine, keyline plowing, bedded pack, and grazing).
- Over 10 pasture or livestock-related presentations given to farmers, researchers and students in VT, NH, NY, and IN.
- Completed a ten-year review of the effectivess ness of pasture outreach and technical assistance (see right).

Just a few things we've learned this year:

Of sampled farmers received technical assistance from the Pasture Program in the last 10 years,

57% improved environmental conditions

51% improved animal health and farm success

43% improved forage production

36% improved quality of life

34% improved profitability

Twenty-nine percent of conference evaluation respondents (n=361) described making changes on their farms (or in their lives) as a result of attending the VT Grazing & Livestock Conference.

Documented changes made as a result of technical assistance visits from 2010-2014 ranged from 49%-67% of the farms visited.

The number of written business plans (n=252) and NRCS grazing plans (n=257) has increased from 2010 to 2104.

Applied Research Contact: Juan Alvez, jalvez@uvm.edu

From left: Calves at the Choiniere dairy, Juan prepping for Party on the Farm, and checking out the floodplain at Pine Island Farm

- Provided educational more than 10 pieces for the Pasture Program blog, with topcs ranging from using animal behavior to distibute manure, so automatic gates, to ecosystem services and biodiversity in grazing systems.
- Led a project focused on data collection from dairy animals fed a a variety of diets in order to better understand their health and production.
- Monitored the effectiveness of an establishment of woody plant species to support goat browsing in a floodplain (right).
- Documented the seasonal changes on a grass-based beef farm by taking biological readings, as well as plant production and distribution.
- Continued to expand partnerships between Vermont and South American graziers for future learning exchanges between farmers.



What went well in 2014?

- VT REACH and SARE grants awarded to study biodiversity of livestock feed, health and production
- Strong partnerships built with VT
 Agency of Agriculture, NOFA-VT
 and others on livestock issues from
 animal welfare and behavior to
 production and marketing support.
- Our emphasis on soil health provided new opportunities to demonstrate the benefits of grassbased systems, including water quality.

CT River Watershed
Swine Industry Support
Biodiversity and Livestock wellbeing
New Energy Assessment Tool for Farmers
Water Qulality and Riparian Health
Expanding partnerships