

CONNECTING VERMONTERS WITH RESEARCH-BASED INFORMATION SINCE 1913



IMPROVING LONG ISLAND SOUND WATER QUALITY

With its headwaters near the Canadian border, the Connecticut River watershed drains nearly 11,000 square miles of populated, agricultural and forested lands. Water from its 33 tributaries in New Hampshire, Vermont, Massachusetts and Connecticut contributes 70% of the fresh water entering Long Island Sound. With this comes stormwater runoff and excess nitrogen, which cause algae blooms, low oxygen levels and harm to native species.

The Long Island Sound Watershed Resource Conservation Partnership Program (LISW-RCPP) is a five-year project supporting collaborations among six states (Rhode Island, New York and the four previously mentioned) with the goal of improving water quality and mitigating conditions. UVM Extension received \$875,000 from the Connecticut Council of Soil and Water Districts in 2015 to spearhead the effort in Vermont and New Hampshire under the leadership of Jenn Colby.

In addition to internal match provided by UVM Extension, Colby successfully secured \$469,000 of in-kind and cash



UVM Extension Agronomist Dan Hudson (above) uses a soil test pit to demonstrate the relationship of root growth, cover crops and soil health at a cosponsored UVM-UNH workshop in Haverhill, N.H. (Image: Jenn Colby, UVM Extension) matching funds from eight partner organizations. UVM Extension and these collaborators, working together, are providing outreach, education and technical assistance to farms within the northern section of the watershed.

Soil health and nutrient management, land conservation and climate resiliency are the primary areas of focus. In year one, RCPP team members visited 37 individual farms providing guidance on soil quality and health, forage management, grazing, nitrogen application and other measures. Conservation plans were initialized on 31 of those farms to implement recommended changes.

UVM Extension faculty and staff have also documented more than 550 points of contact with agriculture industry professionals through field days, consultations and educational events. By raising awareness and recommending changes—tailored to the needs of each farm—Extension and LISW-RCPP partners

are improving soil health and water quality, ultimately reducing the amount of nitrogen fed into the Sound.



The Connecticut River watershed is the area of land (highlighted, right) that catches precipitation; it provides all the water for the Connecticut River and drains into Long Island Sound. (Image: U.S. Fish and Wildlife Service)

Hurricane Irene drenched New England with rainfall in late August 2011, causing the Connecticut River to deposit muddy sediment (left) into Long Island Sound. (Image: Landsat 5 satellite on September 2, 2011 by Robert Simmon (NASA Earth Observatory) [Public domain], via Wikimedia Commons)



AGRITOURISM: THE GROWING BUSINESS OF OPENING FARMS TO VISITORS

With the rising popularity of local foods, many farm business owners are expanding operations to include on-farm experiences for the public. Known as agritourism, it's the business of establishing farms as destinations for public education, recreation and purchase of farm products, giving visitors the opportunity to connect with the working landscape—and generate additional revenue for the host farm.

Agritourism requires careful business planning, training and assessment. Until recently, farmers often experienced difficulty finding the support and resources needed to be successful.

UVM Extension's Lisa Chase, in partnership with several other Vermont organizations, is helping farmers increase profits, create jobs, and improve their quality of life. Over a two-year period, through workshops, conferences and a resource website, UVM Extension trained more than 500 participants on farm safety, marketing, social media and customer service skills.

Armed with this new knowledge, 81% of survey respondents felt prepared to implement best practices on their own farms. And a year later, participants reported high levels of success with their agritourism operations, further legitimizing this emerging form of business. More information at *www.uvm.edu/vtagritourism*.

AGRITOURISM TRAINING



assessed their farm, business or organization for needed improvements or new ventures

implemented improvements or new ventures



75% reported a positive impact on **PROFITS**

\$3,954 average increase in profitability

JOB CREATION

PROFITABILITY -

36% of farms & businesses created additional jobs including at least 5 full-time and 19 part-time/seasonal jobs

QUALITY OF LIFE

74% reported increased PERSONAL SATISFACTION from their farm

85% reported increased enjoyment SHARING FARM LIFE & HERITAGE with visitors



YOUTH FARM SAFETY IS NO ACCIDENT

Nationwide, 42% of on-farm adolescent deaths involve vehicles and machinery. The fatality rate for youth in agriculture is 3.6 times higher than in other industries. With falls and livestock also causing injury, farm work is among the most dangerous jobs for young workers.

UVM Extension is paying attention to these statistics and taking action.

Since 2014, the 4-H Youth Farm Safety team provided safety instruction to more than 490 young people through 12 Farm Safety Days, six full-day tractor trainings,

and other 4-H or on-farm programs. Safe livestock handling, first aid, equipment maintenance, safe tractor operation and hands-on practice time were key features of the

trainings. 53 teens and young adults received National Safe Tractor and Machinery Operation Program Cards, a certification requiring at least 24 hours of supervised practice.



HANDS-ON EXPERIENCE AND GOOD COACHING MADE ME COMFORTABLE EVEN THOUGH I'VE NEVER DONE THIS BEFORE!"

> 90% of Farm Safety Days participants reported improved understanding of how to work safely around animals. Tractor Safety Course participants reported increased understanding of how loads and hills affect tractor stability, and 81% know that a tractor's Power

EVERY THREE DAYS, A CHILD DIES IN AN AGRICULTURE-RELATED INCIDENT Take-Off (PTO) turns approximately nine times per second—too fast to avoid entanglement of hair and clothes.

Young farmers are Vermont's farming future—

and training, practice and respect for the dangers of working on a farm are crucial to their safety. This hands-on knowledge is exactly what UVM Extension 4-H provides.

Data from NIOSH, 2006; and NCCRAHS, 2016.

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