

# CHAMPLAIN VALLEY CROP, SOIL & PASTURE TEAM

THE UNIVERSITY OF VERMONT  
**EXTENSION**  
SUMMER 2020

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## FOCUS ON AGRICULTURE: MOVING FORWARD

By Kirsten Workman, Agronomy Specialist

Summer is in full swing and I think everyone is thankful for the busy hum of field work to keep us moving forward with purpose and determination. It was a spring like no other in history. Not because of weather, but another natural disaster of sorts – the coronavirus, COVID-19. As I write this article from my “home office,” I am reminded that it is not in the rearview mirror by any means. While many of us already knew it, I think our neighbors and communities now understand that agriculture is an essential service. Quarantines and pandemics don’t negate the need for safe, healthy, accessible food; they amplify it instead. I also hope the social unrest our country is experiencing can remind us all to be kind and patient with one another, especially in these trying times.

Vermont farmers are a perspicacious and pragmatic bunch, and have always been self-reliant by nature and necessity. Now is no different. As many producers find themselves up against an economic downturn that happened so suddenly, we are left to rely on those skills even more. Some producers have seen an uptick in demand for their products but have had to shift their production or market models drastically to fit it into their business model and take advantage. While the effects are multiple, we are all being tested and reminded about how important it is to be sustainable – economically, environmentally and socially.

In this issue you’ll see a few nuggets about how we can do that amidst challenging times. The Champlain Valley Farmer Coalition (CVFC) has hired a familiar face to lead them into their next phase,

representing farmers and moving us forward through the current challenges and potential future opportunities. An economic case study about the financial impacts of adopting conservation practices on Foster Brothers Farm shows that no-till and cover cropping can meet all three sustainability targets. Our crop insurance education expert shares relief programs available for dairy producers. Now is a perfect time to take a closer look at grazing and how it might fit into your production model, and Cheryl shares some resources to help make that transition even more financially feasible. Jeff shares some training he’s completed during his sabbatical that marries his interests in agriculture, hunting and recreation; reminding us that loving our work is just as important as doing it.

Enjoy and stay safe!

Kirsten



*Kirsten's son, Johnny, helping her set up insect traps for pest monitoring in soybean fields. This project is being led by Ann Hazelrigg, director of the Plant Diagnostic Clinic at UVM.*

## NEWS, EVENTS & INFO YOU SHOULD KNOW

This time last year we reminded you of the Addison County Fair and Field Days. Unfortunately, the fair is canceled so we will have to see you next year! To help support the fair, consider a donation. Any amount will help. Perhaps you could donate the amount you would normally spend on maple creemees and cotton candy? You can send a check to Addison County Fair and Field Days, 1790 Field Days Road, Vergennes, VT 05491.

Until then, stay connected to our work with our email updates and please do keep calling us with questions. If you want to learn more about crops and livestock in our state, the Vermont Breakfast on the Farm hosted a virtual tour this year that you can view here <https://vermontbreakfastonthefarm.com>.



## The deadline for Agriculture Assistance Applications is October 1, 2020

### Vermont Agency of Agriculture, Food and Markets

The application for dairy producers and processors has been released and you will hopefully have gotten a letter from the Agency in the mail. This first application is directed at dairy producers and processors who have experienced income loss, additional expenses, and market disruption as a result of the COVID-19, and the Vermont Agency of Agriculture, Food and Markets is poised to distribute \$25 million in federal Coronavirus Relief Funds to qualified applicants.

\$21.2 million will be available as direct payments to eligible dairy producers (cow, goat, and sheep milk) and \$3.8 million is allocated for eligible dairy processors (i.e., bottled milk, cheese, yogurt, butter, ice cream) to cover losses and expenses related to the COVID-19 public health emergency.

For the application you will need your Agency-assigned unique ID number, completed and signed W-9 form, documentation of any federal or state aid received related to COVID-19 including Dairy Margin Coverage Program, and documentation of additional expenses or lost revenue since March 1, 2020. Dairy producers will need milk price payments stubs for January through March 2020, and dairy processors will need comparisons of manufactured milk volumes and processed dairy product sales between 2019 and 2020, during the claim period.

More information and application at [go.uvm.edu/vtagcovid](http://go.uvm.edu/vtagcovid).

## Online Resource for Conservation Equipment

The Agency of Agriculture has developed an online resource which allows farmers, service providers and partners to locate conservation equipment and services that are available from UVM Extension and Conservation Districts near them. Check it out at <https://agriculture.vermont.gov/equipment-rental>.

## Webinar Series: Grazing and Forage Season Extension

August 11, August 28, September 18

Topics covered in the series (in order) cool season annuals, stockpiling, over-winter cover crops, and integrating the system. This series is a collaboration between UMass, UMaine and UVM Extensions. For more information and registration, go to [go.uvm.edu/grazingseries2020](http://go.uvm.edu/grazingseries2020).

## WELCOME JOHN ROBERTS!

On June 1, the Champlain Valley Farmer Coalition (CVFC) welcomed its first Executive Director, John Roberts. John was a founding member and the first president of CVFC. He spent 36 years operating a Brown Swiss cow dairy farm with his wife, then went on to work with the Vermont Agency of Agriculture, Food and Markets (VAAFAM). John has been hired with grant funds from VAAFAM which enabled CVFC to undergo a strategic planning process in 2018-2019, and which were extended, in part, to hire executive leadership. John sees CVFC as an operation representing nimble and diverse farmers and products, and wants to ensure its members have the latest and best information on agricultural production and marketing.

"We will always have an emphasis on a non-regulatory, but effective, approach to water quality," he notes, "but it will also be important to demonstrate that farmers, as custodians, managers and producers on the land, are also the best environmental stewards." Read the full story at [go.uvm.edu/robertscvfc](http://go.uvm.edu/robertscvfc).



# RELIEF PROGRAMS AVAILABLE FOR DAIRY FARMS

By Jake Jacobs, UVM Crop Insurance Education Coordinator

As the dairy industry navigates through unpredictable market fluctuations and impacts from coronavirus, dairy producers must consider all options, which might provide some relief. There are several federal programs designed to protect dairy producers from losses.

The Dairy Margin Coverage (DMC) program, administered by the Farm Service Agency (FSA), and the Livestock Gross Margin for Dairy policy (LGM-Dairy), administered by the Risk Management Agency (RMA), offer similar risk management protection for dairy producers. DMC and LGM-Dairy are two USDA dairy risk tools that are based on margin coverage, which is basically the milk price minus the feed cost. Producers may participate in both programs.

The Dairy Margin Coverage (DMC) program is the risk management program for dairy producers that replaced the Margin Protection Program for Dairy (MPP-Dairy). DMC continues to offer protection to dairy producers when the difference between the all-milk price and the average feed price (the margin) falls below a certain dollar amount selected by the producer.

In the LGM-Dairy program (<https://legacy.rma.usda.gov/livestock/>), the indemnity at the end of the 11-month insurance period is the difference, if positive, between the gross margin guarantee and the actual gross margin. The LGM-Dairy Insurance Policy uses futures prices for corn, soybean meal and milk to determine the expected gross margin and the actual gross margin. The price the producer receives at the local market is not used in these calculations. Enrollment is 12 times per year, on the last business Friday of each month.

RMA (<https://www.rma.usda.gov>) introduced the Dairy Revenue Protection program (Dairy-RP or DRP, <https://legacy.rma.usda.gov/livestock>) in late 2018. Unlike the DMC and LGM programs, Dairy-RP insures against unexpected declines in quarterly revenue from milk sales. Dairy-RP addresses the gap in coverage by providing revenue and yield insurance. Expected revenue is based on futures prices for milk and dairy commodities, and the amount of covered milk production elected by the dairy producer. The covered milk production is indexed to the state or region where the dairy producer is located. According to RMA figures, Dairy-RP coverage has been steadily gaining favor among dairy farmers for risk management,

now covering approximately 25% of all U.S. milk production. Farmers can participate in both DMC and Dairy-RP at the same time. Dairy producers can also purchase LGM and Dairy-RP policies together, but some restrictions apply.

Dairy-RP has two pricing options:

- Class Pricing Option – the classified milk price uses a combination of Class III and Class IV milk prices as a basis for determining coverage and indemnities.
- Component Pricing Option – uses a combination of butterfat, protein and other milk solids values; select the butterfat test percentage and protein test percentage to establish your insured milk price.

The dairy producer must make 5 decisions when choosing Dairy-RP:

1. Value of milk protected.
2. Amount of milk to cover.
3. Level of coverage (70, 75, 80, 85, 90, 95%).
4. Which quarterly contracts he/she wishes to purchase; prices are in each of the quarterly contracts.
5. Protection Factor: Between 1.0 and 1.5 in .05 increments. The selection made impacts both the premium and indemnity proportionately; the producer may choose a different factor for each type and practice indicated on the quarterly endorsement.

Is USDA risk coverage right for your dairy farm? Weigh the options so you can make an informed decision. More information about all these programs is available on the UVM Ag Risk Management Education website (<http://go-uvm.edu/ag-risk>) or contact Jake Jacobs at [jake.jacobs@uvm.edu](mailto:jake.jacobs@uvm.edu). To sign up for DMC, contact your local FSA office (<http://go.uvm.edu/vtfsaoffices>). To enroll in LGM-Dairy or Dairy-RP, contact your crop insurance agent. Request a list of crop insurance agents at your USDA service center or generate a list on the RMA website Agent Locator at [www.rma.usda.gov/tools/agent.html](http://www.rma.usda.gov/tools/agent.html).

*This material is based upon work supported by USDA/NIFA under Award Number 2018-70027-28588.*



# COVER CROPS AND NO-TILL ARE A NET BENEFIT FOR FOSTER BROTHERS FARM

By Kirsten Workman, Agronomy Specialist

George Foster and his son Jeremy manage crop production on the Foster family's fifth generation 2,200-acre dairy farm in Addison County, Vermont. They grow 550 acres of corn silage, 300 acres of soybeans, 100 acres of small grains, and 1,250 acres hay/haylage each year on their farm, which is predominated by Vergennes clay soils. The family not only sells milk through the Agri-Mark Family Dairy Farms® cooperative where it is made into world-famous cheese, but they also operate Vermont Natural Ag Products—home of the Moo™ line of compost and soil amendment products.

George has become a humble, yet impactful leader of a soil health movement in Vermont. While the farm has always had a conservation ethic, George and Jeremy have dramatically changed their cropping systems over the last eight years. After some failed attempts at no-till 20 years ago, George attended the UVM Extension No-Till and Cover Crop Symposium and that was when he knew he could make it work on their farm. He had a solid vision and took a pragmatic approach to implementation of these practices.

The Fosters agreed to help us investigate the economic plusses and minuses of cover cropping and no-till through a state Natural Resources Conservation Service (NRCS) Conservation Innovation Grant (CIG).



## Making the Transition

After acquiring a new no-till corn planter in 2012, the Fosters began transition by applying no-till on their lighter soils utilized for corn silage, and then fields going into first-year corn silage on their clay fields, while simultaneously adding cover cropping. Paying good attention to nitrogen management was key to maintaining and increasing yields. Adjusting equipment was important, and they now have a roller-crimper and no-till drill in addition to the no-till corn planter. All of their crops and cover crops are now no-till and they grow their own cover crop seed!



## Why Cover Crops?

When you ask George why he grows cover crops, he'll tell you, "It's what makes no-till work!" He's sure it's the reason no-till didn't work 20 years ago when they first tried it. He explains that the cover crop roots open the soil while the leaves protect the soil surface. He has observed many of the benefits we often espouse like improved water infiltration/management, increased organic matter, increased soil biology, improved soil structure, reduced compaction, and resilient crops leading to more reliable yields which are less stressed by weather extremes.



## Cost of Entry

Cost of entry of conservation practices is a common challenge and concern for producers. Managing these costs, spacing out expenditures, borrowing equipment, hiring custom work, cost sharing and grant funding are all ways producers manage these investments. Foster Brothers Farm utilized all these approaches. Out-of-pocket expenses made up roughly 53% of the equipment cost. Divided over their corn acres, the equipment was paid for in 5 years. Including soybeans and small grains, it only took 3 years to see a return on investment.

## Changes in Costs Associated with Cover Crops and No-Till

We used machinery cost estimates (NRCS Machinery Cost Estimator, Cover Crop Economics Tool version 3.1) and actual labor and seed costs to determine the annual increases and decreases in crop production costs. Foster Brothers Farm saw an increase in costs related to planting the cover crop and use of a roller crimper for termination of cover crop. Cost decreases were seen in labor, plowing and harrowing (see graph). The net effect of these changes is approximately a \$45/acre decrease in cost as compared to conventional tillage on this farm.

Compared to their previous tillage system, this method requires less labor, leads to better crop quality, reduces/eliminates replanting costs, increases yields, and provides more resiliency to wet springs and dry summers. Their corn yields have been steadily increasing and their soybean fields saw a substantial increase. More efficient spring

Change in Cost associated with Cover Crop &/or No-till (per acre)



operations and changes in new hay seedings improved earnings.

George is still tweaking the cover crop system with his soybeans, and he is mindful that avoiding compaction is more important than ever. He reminds farmers who are trying no-till to be patient in the spring and check underneath the surface before planting.

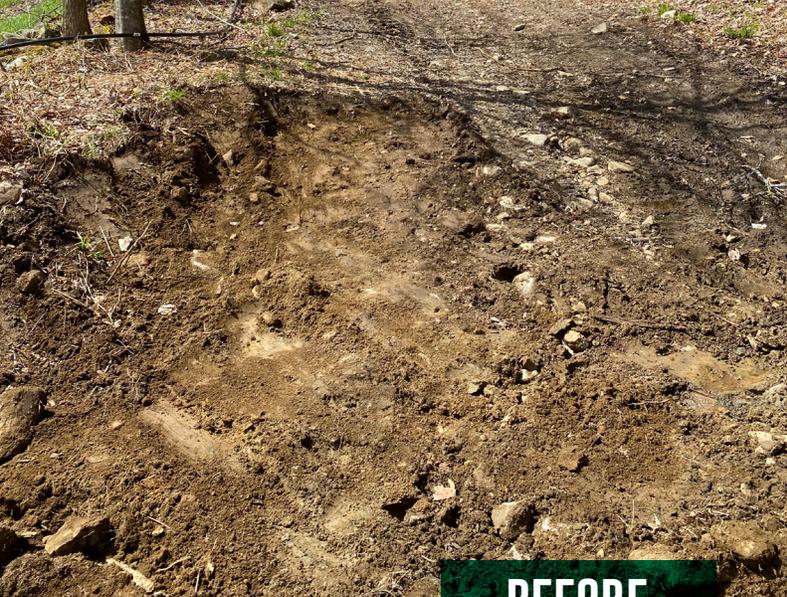
This highlight is a summary of a case study *Vermont Case for Conservation Agriculture Fact Sheet*. Read the full case study at [go.uvm.edu/caseforc](http://go.uvm.edu/caseforc)



# IMPROVED CATTLE LANES BENEFIT LAND AND ANIMALS

By Cheryl Cesario, Grazing Outreach Specialist

Funding through the Vermont Agency of Agriculture's Pasture and Surface Water Fencing (PSWF) Program has enabled farmers across the state to install a variety of grazing infrastructure projects. Two recently completed projects in our region include installation of improved animal trails, or laneways. A herd of animals moving back and forth to a barn can create a lot of impact on the landscape resulting in potential erosion or runoff. Additionally, wet and muddy trails or rocky and uneven trails can be detrimental to hoof health and animal locomotion. In grazing systems, improving animal trails can be one of the most expensive elements to install. The PSWF program provides a great opportunity to make the needed improvements with 90% cost share, meaning that the farmer puts in just 10% of the total cost of the project.



**BEFORE**



**AFTER**



**"THIS TRAIL WILL HELP OUR FARM IMMENSELY BY ALLOWING US TO MOVE OUR CATTLE MORE OFTEN WITHOUT ANY EROSION ON OUR TRAIL. THE COWS LOVED IT TOO! NO ROCKS, ROOTS OR STUMPS STICKING OUT TO INJURE HOOVES AND FEET."**



# QUALITY DEER MANAGEMENT ASSOCIATION (QDMA) DEER STEWARDSHIP CERTIFICATION PROGRAM

By Jeff Carter, UVM Extension Agronomist

I recently had the opportunity, through the National Association of County Agricultural Agents Scholarship Program, to study whitetail deer, their behaviors and relationship to our intentional habitat management, and the population dynamics of both deer and people. Over a 10-week period in winter 2020, I completed the Quality Deer Management Association (QDMA) Deer Steward Level 1 Certification. The online training involved a six-part learning series hosted on the Clemson University's Canvas online learning system. This training provided a framework for the basic understanding I need to support my professional sabbatical leave from UVM. My leave started in June 2020, and I am studying and writing about the planting of wildlife food plots. In addition to a certification, I received a deeper understanding of how to describe these complex habitat and population dynamics to other people.

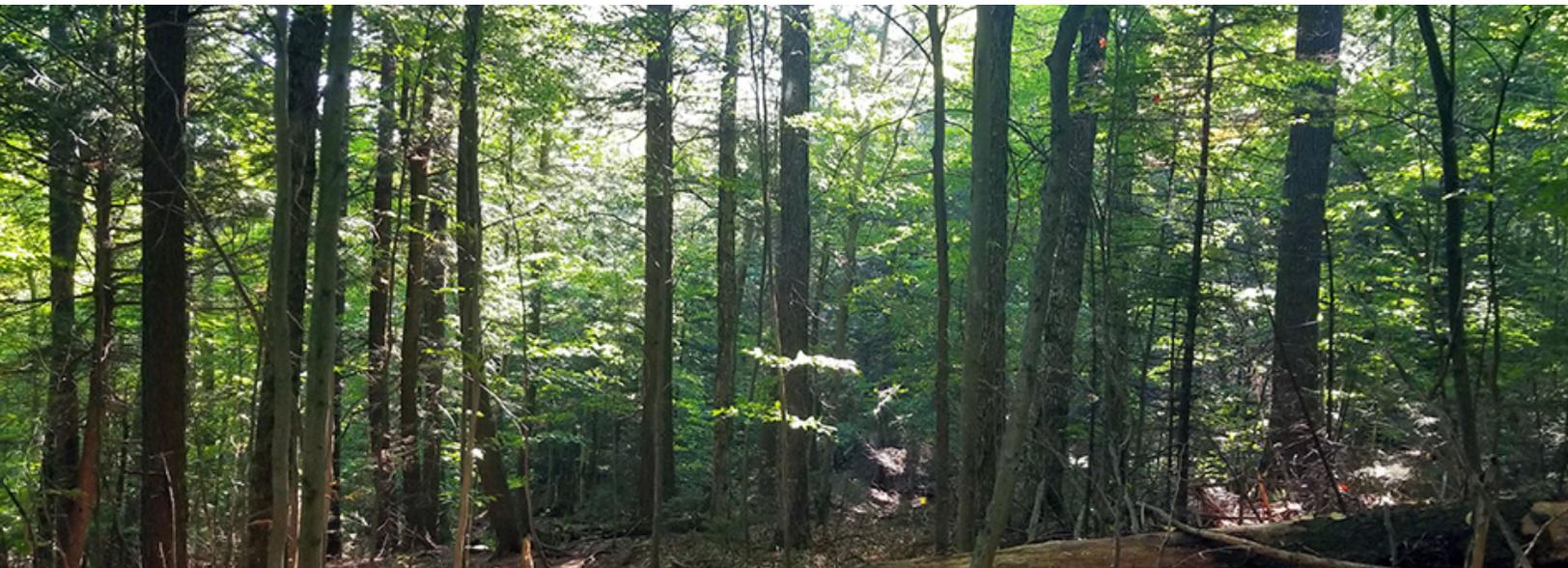
The QDMA Deer Steward Level 1 training was a six-part learning series which included History, Biology, and Ecology; Herd Management; Current Concerns; Habitat Management; Hunter Management; and Herd Monitoring. The writers and speakers were very well prepared with research-based factual information and provided over 20 hours of high quality education and thought stimulation.

Unfortunately, I was not able to complete the QDMA Level 2 certification because the COVID-19 pandemic forced cancellation of the program in Alabama that was scheduled during May 2020. Attending and completing the Level 1 program has helped me gain a more comprehensive knowledge base for developing an education program for Vermont and New England landowners. The final outcome of my planned efforts for Deer Steward Certification and UVM sabbatical leave will be a published state-specific guide for landowners and practitioners, *A Field Practice Guide for Growing Successful Wildlife Food Plots in Vermont*, to help private landowners protect and enhance natural resources including soil, water and wildlife. This work will also provide Extension support for emerging



NRCS initiatives expanding wildlife habitat improvement practices in Vermont.

I have been growing and talking to other people about food plots for deer and turkeys for over 30 years because it is fun, and because I like to hunt. I am learning about a more holistic approach to deer habitat management that combines agriculture, forestry and recreation. This has inspired me to continue my studies to learn even more so I can help Vermont landowners experience fulfilling wildlife encounters with habitat improvements and food plots in agroforestry settings.





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