

# AGRIVIEW



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## USDA RURAL DEVELOPMENT Upcoming Grants and Loans

By Sarah Waring, USDA Rural Development

In USDA Rural Development's Business Programs, we have an emphasis on supporting agricultural producers and small rural businesses. Go to [rd.usda.gov](http://rd.usda.gov), click on Programs & Services tab and then choose Business Programs to see all the options. Here is a run-down of USDA Rural Development producer-specific grant and loan programs on the horizon or currently open.

If you are a meat producer, please explore these:

### Meat and Poultry Processing Expansion Program

Due to open again in the spring, but important to look early and

often at grant requirements and business/feasibility plans.

Eligible uses: building new or expanding processing facilities, modernizing equipment, ensuring compliance with packaging and labeling requirements, upholding occupational safety requirements, offsetting costs associated with becoming USDA inspected facility, supporting workforce training and recruitment and more.

*Eligible entities:* Sole proprietor businesses or other entities that engage or want to engage in meat and poultry processing. Learn more



Rural Development for a spring announcement.

### Meat and Poultry Intermediary Relending Program

The Meat and Poultry Intermediary Lending Program (MPILP) provides grant funding to intermediary lenders who finance – or plan to finance – the start-up, expansion, or operation of slaughter, or other processing of meat and poultry. The objective of the MPILP is to strengthen the financing

by taking the Self-Screening Eligibility Guide and staying in touch with USDA

capacity for independent meat processors, and to create a more resilient, diverse, and secure U.S. food supply chain. This will probably open again in the fall of 2023.

Eligible uses: purchasing and developing land, construction of new facility, expansion of existing, refinancing debt, purchasing cooperative stock, paying for feasibility studies, handling waste management, improving leaseholds, and more.

*Eligible entities:* Private nonprofit corporations, public agencies, Tribes, and cooperatives that finance – or plan to finance – the start-up, expansion, or operation of meat and poultry processing are eligible to apply. Learn more by taking the Self-

*continued on page 4*



Vermont Agency of Agriculture, Food & Markets

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## Farmers a Force: Reflections on a Year Gone By

**A**s we march into 2023, we reflect on the year that was, and the year to be. Vermont agriculture continues to grow and adapt. Farmers, and all those who help them put food on our table, are a creative and resilient force. No matter what 2022 threw at them they were up to the challenge. All were facing inflation and labor issues, but Vermont farmers continued to produce high quality food for our region and the nation. This effort does not happen without a strong commitment from many hands.

Agriculture faced strong head winds with substantial increases in the cost of feed and fuel, but we continued to rally. For example,

organic dairies started down menacing 50% increases in the cost of feed because of supply chain issues. While Vermont was able to stand up a \$200,000 granting program to help with on-farm needs to meet the demands of new markets, unmanageable day-to-day costs remain. Working with regional partners, the Agency appealed to USDA to see if the federal government could offer support. We hope good news will come soon.

Vermont made record investments in our rural communities. This investment will be making their way to farmers, producers and those making their living off the land in 2023. Many of the policies were proposed by the Governor's Future of Agriculture Commission. The Commission suggested investing in food related businesses so they could grow and feed more Vermonters and those in the region. A \$40 million dollar program led by the Agency of Commerce and Community Development will issue grants to businesses that need to invest in new infrastructure. For example, these investments could help with storage, distribution, waste management, and meat processing for Vermont companies. We have already seen one slaughterhouse receive substantial funding from this program as well as USDA and the Vermont Working Lands Enterprise Fund. Construction is underway and we look forward to more projects like this in 2023.

The Working Lands Program also will help farmers, producers and those who work in the woods. More than \$3 million dollars will support farmers and producers so that they can make food more affordable. The Working Lands Program is proven to grow Vermont's rural economy while producing products. These dollars will be distributed in 2023, which is great news for a more robust food and forestry system.

The Commission also proposed investing in more technology to help dairy farmers manage their businesses. This could mean upgrades

to help with manure management, milking equipment or infrastructure. The Northeast Dairy Business Innovation Center is committed to this priority. The Center housed at the Vermont Agency of Agriculture, Food and Markets recently awarded more than one million dollars to dairy farmers to improve their on-farm milk storage and handling. We hope to have a second program in 2023 to protect farmers' milk and support tremendous needs related to milk storage, cooling, refrigeration, and processing of dairy. We encourage all those working in dairy to follow the Northeast Dairy Innovation Center. We are working closely with processors and farmers to support this important industry in Vermont and our region.

This year a special focus emerged to support and attract the next generation of young farmers. Working with the Vermont Housing and Conservation Board, the Agency will deliver a report on recruiting and supporting youth in agriculture. We spent the summer talking with many partners on this important issue and we will be working with the legislature on next steps in 2023.

Farmers are also coping with climate change. They stand ready to help improve the environment by implementing Climate Smart Farming. The Agency's budget includes spending nearly \$5 million dollars more on agronomic practices that mitigate climate change. This includes planting more cover crops and improving soil health, such as reducing phosphorus losses from agricultural fields.

The budget also includes dollars for the Payment for Ecosystems Program, which protects environmental health, rewards farmers for helping protect our collective environment, and provides performance-based payments to Vermont farmers. This \$1 million dollar program creates a pilot that could reward farmers for best practices that improve the environment and the climate. It will be an important year for these

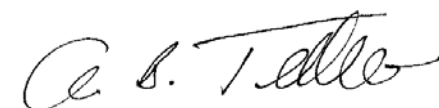
pilot programs as those dollars reach the field.

The Agency's lab in Randolph continues to support all our state agricultural programs. The lab protects consumers and ensures the health and safety of agriculture and water quality programs. We also are supporting other agencies like Education and Agency of Natural Resources when they need our expertise.

Also in 2022, we made significant investments in food security programs, farm-to-school programs, early educator grants, and child nutrition investments in our schools. This approach means all Vermonters can benefit from healthy, nutritious food and a robust local food system.

It was a great year for Vermont maple. After a few down years due to weather, sugarmakers produced a significant crop. Vermont continues to lead the nation in maple production with more than 50% of the syrup produced in the United States coming from Vermont maple trees. We continue to support this important and growing sector and have added staff to the agency to offer marketing and technical support. We also have employees working on compliance and quality issues ensuring integrity remains a high priority for those producing and selling Vermont maple.

These commitments to Vermont agriculture underscore its importance in our everyday lives. We are grateful for the support of Vermonters, farmers, producers, and those working in Montpelier and Washington. There is much work to do but our approach creates opportunities, while helping feed the region and keeping our land in production. We are grateful for all your support and look forward to a healthy and prosperous 2023.



Anson Tebbetts, Secretary, Agency of Agriculture, Food & Markets

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# The Farm First Peer Network

By Juana Lopez, VT Agency of Agriculture, Food & Markets

Climate change, inflation, family, weather problems, droughts, high fuel problems, inflation, family, mental and physical health, and the pandemic are among the many issues and stressors that farmer owners deal with on a regular basis. Sometimes, these problems keep piling up and it can feel as if you are alone with it. Farm First, a Vermont-based program tries to tackle these issues by providing farm owners with confidential and personal services that best suits their needs. They provide resources, professionals, and personal support to address a wide range of issues. For example, this issue could include financial concerns, alcoholism, illness, and many more.

One of the programs that Farm First Provides is The Farm First Peer Network. The Farm First Peer Network is a group of diverse

farmers from around the state who have been trained in active listening and accessing resources. Sometimes, it's only having another farmer who can understand what you're going through that can make a difference. These trained peers can be a first call when things start to go sideways. They can help talk you through a situation, build on your past successes, brainstorm possible solutions, or make a referral for accessing other resources or counseling.

Some Farmer Peers are still in training, but Farm First will have 16 trained and ready farmer peers by the end of February. They hail from all corners of the state and participate in all forms of farming including dairy, cattle, fruits, and vegetables, and integrated.



peer. You will be able to choose from there the forms of communication with the peer whether it be in-person, on the phone or virtually. Over time, you'll get to know our peers by seeing them making presentations with us at agricultural conferences and events.

The Farm First Peer Network is valuable and important because it

allows farmers to know that they are supported and valued for the type of work they do. The most important thing is to help reduce the levels of stress farmers may be facing with the help of other community members and resources.

Currently, the primary way to find a peer is through the interactive map at: <https://farmfirst.org/peer-support-network> (You can also find a link at [farmfirst.org](https://farmfirst.org)). Once you click on the link, you will notice that there are pins on a map. Each pin indicates a farmer peer with their name, city, and style of farming and a little description about themselves. This allows you to be able to connect with a farmer peer that best suits the type of problems you are facing and be more personal for each individual. Once you submit a form, that will be your first connection with a

peer. You will be able to choose from there the forms of communication with the peer whether it be in-person, on the phone or virtually. Over time, you'll get to know our peers by seeing them making presentations with us at agricultural conferences and events.

The Farm First Peer Network is valuable and important because it allows farmers to know that they are supported and valued for the type of work they do. The most important thing is to help reduce the levels of stress farmers may be facing with the help of other community members and resources.

For more information on connecting with a farmer peer, please reach out to Leanne Porter at [leannep@farmfirst.org](mailto:leannep@farmfirst.org) or call (802)-277-5060

For additional information, visit:

- <https://www.farmfirst.org/>
- <https://agriculture.vermont.gov/farm-first-resources-support-farmers>

## This Month's Recipe

### Corn Flake No Bake Bars

Makes 12

#### Ingredients

- 4 cups Corn Flaked cereal
- 1 cup peanut butter (other nut or seed butters can be used if you have peanut sensitivities in your house)
- 1 cup pure maple syrup or honey

#### Directions

1. Line an 8 x 8 pan with parchment or waxed paper and set aside.
2. Add your corn flake cereal into a large mixing bowl and set aside.
3. In a microwave safe bowl or stovetop, melt your peanut

butter with pure maple syrup. Pour over the corn flakes and mix until fully combined. Pour mixture into the lined pan and lightly wet your hands. Press bars firmly into place and refrigerate for at least 30 minutes, or until firm. Cut into bars.

#### Notes

If kept at room temperature, these bars are pretty gooey. Prefer them firmer? Keep them in the fridge.

If you can imagine them not being eaten immediately, you and freeze these for a month or two.



Join us at NOFA-VT's 41st annual Winter Conference

## BACK TO THE ROOTS

Saturday, February 18 & Sunday, February 19, 2023

in-person at University of Vermont with a live-streaming option

[nofavt.org/wc](https://nofavt.org/wc)



## DAIRY BUSINESS INNOVATION CENTER

# New Grants for Dairy Processors Across the Northeast

By Katie Spring, Northeast Dairy Business Innovation Center at VAAFM

In an ongoing effort to increase sustainability and resilience of the dairy supply chain across our 11-state region, the Northeast Dairy Business Innovation Center (NE-DBIC) announces two grants for dairy processors. Find the Request for Applications for the grants below, plus our full funding calendar, on our website: <https://agriculture.vermont.gov/dbic/grants>

### Dairy Processor Research & Development Innovation Grant

New funding is available to support processing innovation across a variety of scales and to support dairy processors in gaining knowledge that will allow them to make informed, long-term business investments.

Centered on developing alternatives to current industry standards, project areas may include sourcing, novel product development, alternative production solutions, transportation and distribution, supply chain,



operations, employee welfare, marketing, and consumer experience. An educational or information sharing component is required for all grants to benefit other regional dairy processors.

Grants will range from \$75,000 to \$250,000 with a 25% (cash or in-kind) match commitment required.

Request for Applications will be available on January 10th. Application period is January 26 – March 23, 2023.

### Existing Dairy Processor Expansion Grant

With a goal to diversify and strengthen the supply chain for dairy farmers and consumers, this grant offers existing dairy processors across the Northeast funding to acquire specialized equipment needed to increase the processing capacity of regionally produced milk and other activities to support expansion and meet demand.

Split into multiple fund-

ing tiers, this grant will accommodate processors of all scales. Larger awards will be required to participate in a multi-stage application process, while smaller award ranges will apply in a single round application process.

Requests for Applications will be released January 26th for the multi-stage process, while the single-stage application for smaller processors is estimated to open in spring.

For more information about these two grants, contact the NE-DBIC team at [agr.dairyinnovation@vermont.gov](mailto:agr.dairyinnovation@vermont.gov)

### USDA Grants

*continued from page 1*

Screening Eligibility Guide, and checking the website for updates on funding availability.

If you are an agricultural producer looking for other grant options:

**Value Added Producer Grants:** The Value-Added Producer Grant (VAPG) program helps agricultural producers enter value-added activities to generate new products, create and expand marketing opportunities, and increase producer income. This opens in the spring of 2023. You may receive priority if you are beginning or socially-disadvantaged farmer or rancher, small or medium-sized farm, a cooperative or proposing a mid-tier value chain project.

*Eligible uses:* planning activities or working capital expenses related to producing and marketing a value-added ag product. [https://www.rd.usda.gov/sites/default/files/midtier\\_value\\_chain\\_vapgfy22.pdf](https://www.rd.usda.gov/sites/default/files/midtier_value_chain_vapgfy22.pdf)

### Rural Energy for America Grants: OPEN NOW!

The program provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements. Agricultural producers may also apply for new energy efficient equipment and new system loans for agricultural production and processing.

*Eligible uses:* new renewable energy systems, such as solar, geothermal, biomass or other. Also, high

efficiency HVAC, insulation, lighting, cooling, doors and windows and equipment replacement for high efficiency equipment.

### *Eligible entities:*

Agricultural producers with at least 50 percent of their gross income coming from agricultural operations, and small businesses in eligible rural areas.

Learn more: contact our local office, Ken Yearman Business Programs Director, at [Kenneth.yearman@usda.gov](mailto:Kenneth.yearman@usda.gov), or Misty Sinsigalli Area Programs Director, at [misty.sinsigalli@usda.gov](mailto:misty.sinsigalli@usda.gov)

**Lending programs:** these are both loan guarantee programs:

**Business and Industry (B&I):** This program offers loan guarantees to lenders for their loans to rural businesses. Open Year

Round – as an ag producer you would work with YOUR lender to access this program.

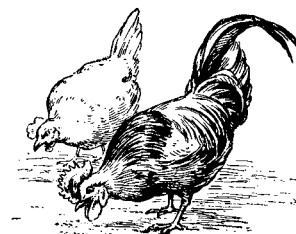
### *Eligible uses:*

- Business development, growth, modernization, conversion, or repair
- Buy and develop land, buildings, and associated infrastructure for commercial or industrial use
- Buy and install machinery, equipment, supplies, and inventory
- Refinance debt to create cash flow and create jobs
- Acquire businesses or industries when the loan will maintain operations, and create or save jobs

### Food Supply Chain Guarantee program:

This program guarantees loans of up to \$40 million for qualified lenders to finance food systems projects, specifically for the start-up or expansion of activities in the middle of the food supply chain. Learn more, and work with your lender by going to the Frequently Asked Questions site.

Don't forget that Ag Marketing Services (another branch of USDA) has a lot of great grant and loan programs for local food and marketing. Here's cheat sheet: <https://www.ams.usda.gov/sites/default/files/media/FoodSupplyChainFactSheet.pdf>





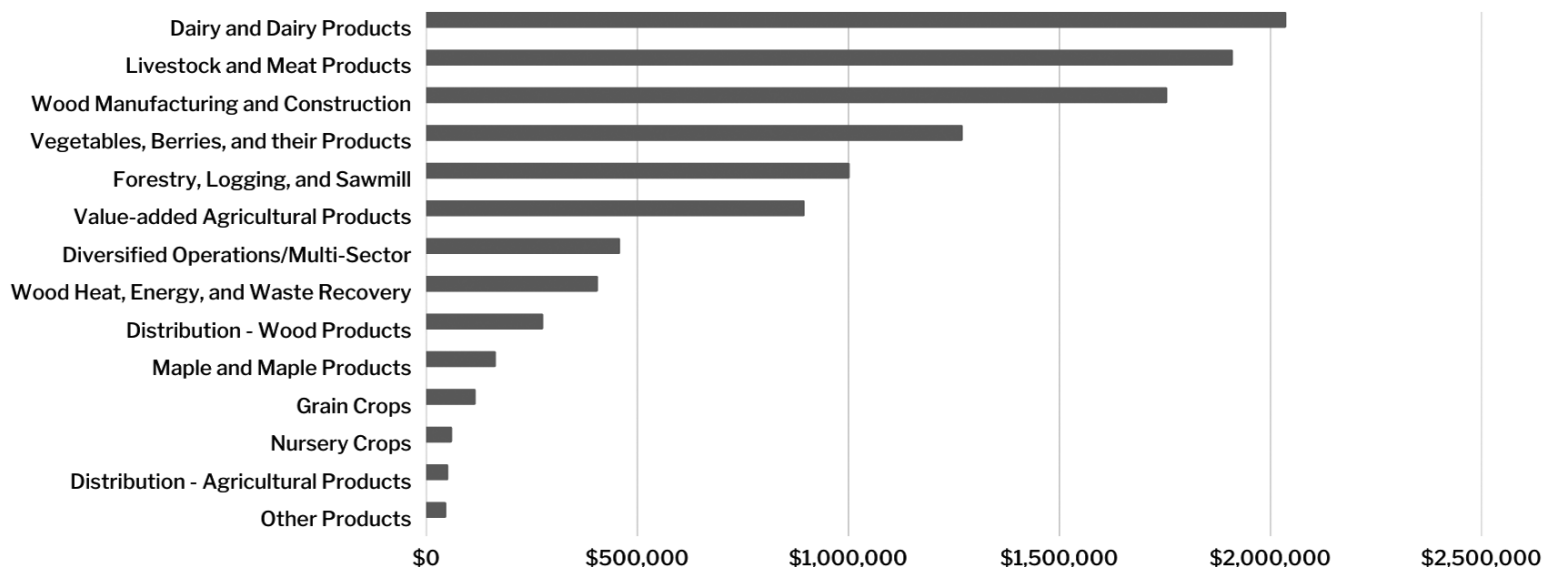
# Working Lands Enterprise Initiative Celebrates 10 Years of Supporting Vermont's Farm and Forest Economies

By Clare Salerno, VT Agency of Agriculture, Food & Markets

This year marks the tenth year of the Working Lands Enterprise Initiative! In 2012, the Vermont Legislature passed Act 142, the Vermont Working Lands Enterprise Initiative, which created the structure for investment of state funding into agricultural and forestry-based businesses.

Over the last 10 years, farm and forest businesses from all 14 of VT's counties across have accessed \$13.6 million from the Working Lands Enterprise Fund (WLEF) and leveraged \$22.5 million in matching funds. With growth supported by WLEF grants these farm and forest businesses generate tens of millions in new economic activity, strengthen local supply chains, and invest in the future of Vermont's

Working Lands Enterprise Initiative grant funds to businesses in different economic sectors, 2012-2022



working lands.

“Investing in Working Lands is smart public policy. Vermont would not be Vermont without Agriculture or Forestry. These dollars grow our economy while making it more affordable to do business in the Green Mountains,” says Anson Tebbetts, Secretary of the Vermont Agency of

Agriculture, Food, and Markets.

In the 10 years of the program, WLEI has funded 418 agriculture and forestry projects. Businesses that completed WLEI projects have created 539 new jobs, impacted 24,007 acres, and generated \$55,557,487 in sales one year after completing their grant.

WLEI and the governing

board are committed to stimulating economic development in both the agricultural and forestry sectors of Vermont. To support strategic investments each year, the Working Lands Enterprise Board prioritizes a range of critical gaps and opportunities for maximum impact.

In agriculture, dairy and

meat products make up the bulk of investments. Produce operations and value-added agricultural products have also been key areas of grantmaking.

Forestry makes up about a third of WLEI business grant investments to date, with wood manufacturing and construction businesses that use local

*continued on page 16*

## Nutrient Management Plan Updates

Did you know you need to update your Nutrient Management Plan (NMP) every year to stay in compliance with the State of Vermont Required Agricultural Practices (RAPs)?

If your NMP is out of date or you need assistance in updating your plan, UVM Extension or your local Conservation District can help! The more advance notice we have, the better we will be able to help with your NMP update.

If you are already working with a UVM Extension or Conservation District staff person, please feel free to reach out to them directly. They are ready to schedule an update with you!

If you are unsure who should help you with your NMP update, please contact Susan Brouillette at the UVM Extension Office to get connected with technical assistance at [Susan.brouillette@uvm.edu](mailto:Susan.brouillette@uvm.edu) or call 802-524-6501, ext. 432.

## LFO Annual Report and Operating Fee Reminder:

Large Farm Operations (LFO) must submit an annual report and operating fee of \$2,500 to the Agency of Agriculture, Food & Markets by February 15 of each year. A fillable PDF of the annual report form, additional forms, and information can be found at <https://agriculture.vermont.gov/lfo>.

Checks of \$2,500 should be made payable to Vermont Agency of Agriculture, Food & Markets and submitted to VAAFM, Attn Jeff Cook, 116 State Street, Montpelier, VT 05620.

## VERMONT AGRICULTURE & FOOD SYSTEM PLAN 2021 – 2030: Land Use Planning

**Editor's note:** This brief is part of the Vermont Agriculture & Food System Plan 2021-2030 submitted to the legislature in January 2021. To read the full plan, please go to <https://agriculture.vermont.gov/document/vermont-agriculture-and-food-system-strategic-plan-2021-2030>



**Lead Author:** Sarah Danly, VSJF

**Contributing Authors:** Ari Rockland-Miller and Diane Bothfeld, VAAFM; Chris Campany, Windham Regional Commission; Alison Low, Northeastern Vermont Development Association; Tory Littlefield and additional Two Rivers-Ottawquechee Regional Commission staff; Mariah Noth, Vermont Housing and Conservation Board

### What's At Stake?

Land use planning is an important tool for aligning settlement patterns and natural resource management with Vermont residents' values. Community-level plans and policies affect many concrete land management and development decisions in Vermont. It is difficult to support farm viability without intentional local and regional land use policies that preserve agricultural land, and without a culture that values the services and economic opportunities provided by the natural resource. Land use policies are living

documents, and economic, demographic, and geographic shifts call for a thorough updating of existing plans and policies. Communities empowered to directly engage with the food and agriculture community, and to proactively plan for transitions happening beyond municipal borders, will both protect our existing agricultural land base and increase economic opportunity throughout the whole food system, including processing and distribution, market development, and food access.

### Current Conditions

Vermont is divided among 11 regional planning commissions (RPCs), each with a regional land use plan, and as of 2017, 84% of Vermont municipalities had also adopted

a municipal plan.<sup>1</sup> State planning statutes require regional and municipal plans to include a land-use map and policies for preservation of natural and scenic resources, as well as sections on other topics related to the food system such as economic development, flood resilience, housing, and transportation. RPC staff also encourage municipalities to include food access considerations in their plans.

Land use planning is a highly effective (and cost-efficient) form of farmland preservation, and includes an array of regulatory tools such as zoning, conservation

subdivision design, and overlay districts. State-level review of proposed development under Act 250 requires conformance with local and regional plans, which gives these plans additional legal weight when Act 250 is triggered. However, Act 250 is not itself a statewide land use plan, and many developments are designed to avoid triggering Act 250 jurisdiction, leaving local policies as the only regulatory oversight.

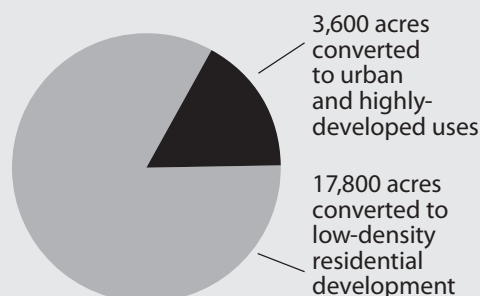
A tendency in traditional planning to characterize farmland as "open space" can diminish the understanding of farms as businesses and

Planning is also an important and increasingly utilized tool for improving food access at several points in the supply chain. For example, food access is dependent upon food retailers. The location of these retailers can be influenced by zoning regulations or development incentives, or location challenges can be mitigated through better transportation planning (*see Food Security brief.*)

### Bottlenecks & Gaps

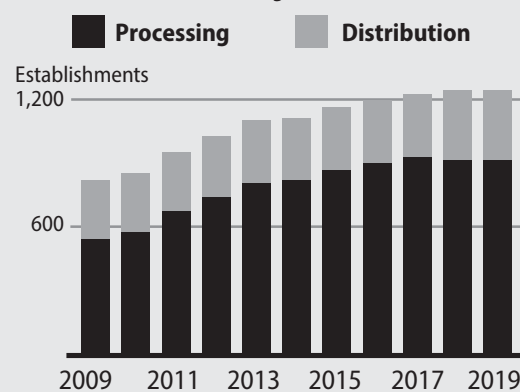
- Most existing zoning relies on minimum lot size requirements, which do not preserve farmland from low-density residential development and can actually lead to greater loss of farmland as housing units are forced to spread out over a larger acreage.
- Much of the farmland currently protected by planning and conservation efforts is located along waterways. Additional land must be protected to provide an adequate land base in the face of increased erosion and flooding and other impacts of climate change (*see Climate Change brief.*)
- The regulatory framework for accessory on-farm businesses (e.g., paid farm stays) is confusing; these are often essential for maintaining farm viability and can be regulated by municipalities.
- Land use tools for protecting farmland can overly restrict

**From 2001-2016, approximately 21,400 acres of Vermont farmland were compromised by development.**



### Vermont Food Manufacturing, Storage, and Wholesale Distribution Establishments

The growth in Vermont's food system over the past decade has required an increase in processing and distribution infrastructure, and additional capacity will be needed if this growth is to continue.





development of agricultural workforce housing, processing and distribution infrastructure, and retail venues.

- Volunteer planners may feel disempowered or lack information on how to support the local food system.

### Opportunities

- Criterion 9(B) of Act 250 is a strong tool in Vermont law that ensures that development within its jurisdiction maintains the agricultural potential of Vermont's important farmland and which can be leveraged in conjunction with local plans.
- RPCs and other planning entities can provide resources—including expertise and funding—to municipalities for strategic planning around

the food system.

- Many Vermonters value the aesthetic, economic, environmental, cultural, and culinary contributions of farm businesses, and most local planning commissions are supportive of preserving the working landscape.
- Land use planning frameworks that incorporate economic development principles, such as “smart growth” and “placemaking” frameworks, can be leveraged to support food system considerations.
- Existing geographic research data, if aggregated and made widely available, would enable local land use planning to incorporate a greater understanding of both local conditions and the wider food system (e.g., mapping of

geographic barriers to food retail stores).

### Recommendations

- Create a new position at the Agency of Agriculture, Food and Markets or Agency of Commerce and Community Development (ACCD), to develop and disseminate resources and trainings on agricultural economic development and its role in farmland conservation, best practices for municipal support of agricultural facilities (e.g., slaughterhouses), and best practices for creating housing within agricultural districts. Cost: 1 FTE \$125,000 per year; \$50,000 for resources development and training.
- Map Vermont's agricultural land base and production capacity, including geographic

data about predicted climate change impacts, aggregation and distribution infrastructure, and regional dietary needs. Disseminate this information to communities to help inform land use decisions and prioritize use of state funding and incentives. Potential partners include UVM, the Vermont Center for Geographic Information, and the Natural Resources Conservation Service. Cost: \$250,000 over two years.

- Create a permit specialist or ombudsperson position to assist farm businesses in navigating municipal and state land use permitting requirements, especially regarding on-farm accessory businesses and farm employee housing. Cost: 1 FTE: \$100,000

per year (potentially as part-time positions in multiple regions).

- Provide trainings for local and regional planners to educate landowners about climate change mitigation and adaptation strategies that minimize land loss. As a first step, the Vermont Association of Planning Districts and Development Agencies and the Vermont State Conservation Districts should convene to assess what is already being done and how to increase this capacity within the planning community.
- Fund ACCD to include agricultural stakeholders in its smart growth and downtown development programs (e.g., the Better Places program). Cost: \$25,000 per year minimum.

## Vermont's Preliminary Report on 2022 Deer Seasons

*Hunters Took More than 17,000 Deer in 2022*

By Joshua Morse, VT Fish & Wildlife Department

The final number of deer taken in Vermont's 2022 hunting seasons will not be available for a few more weeks, but the Vermont Fish and Wildlife Department says the final tally will be a little over 17,400 deer. Those deer will provide approximately 3.5 million servings of local, nutritious venison.

The buck harvest will be close to 9,600, which will be up from 2021 (9,133) and near the previous 3-year average of 9,482. The final antlerless deer harvest will be around 7,800, also similar to

the previous 3-year average (7,651). The archery season harvest, which accounts for much of the total antlerless deer harvest, will be the second highest on record, behind only the 2020 season.

“Hunting conditions were generally good in 2022,” said Nick Fortin, the department's deer project leader. “Limited fall foods caused deer to move more and spend more time feeding in fields, which made it easier for hunters to locate them. Snow during much of the regular season in November also helped hunters locate and see deer.”

The primary goal of Vermont's deer management

strategy is to keep the deer herd stable, healthy and in balance with available habitat. “Maintaining an appropriate number of deer on the landscape ensures deer and the habitats that support

them remain in good condition and productive,” said Fortin.

The 2022 White-tailed Deer Harvest Report with final numbers will be on Fish and Wildlife's website in

early March. Beginning in late March, the department will be holding informational hearings to share biological information and to listen to any information people wish to share.





# DAIRY BUSINESS INNOVATION CENTER

## Sensory Directed Research on Artisanal Cheese to Benefit the Local, Regional, and National Dairy Industry

By Heather Darby and Roy Descroches, UVM Extension

**W**hat's a bug got to do with it?" might seem like a strange question, but it's answer could increase the success of artisanal cheeses. In 2020, The Vermont Agency of Agriculture, Northeast Dairy Business Innovation Center (NE-DBIC) teamed up with the University of Vermont Extension to investigate

factors that influence artisanal cheese flavor quality. Recently, Dr. Ben Wolfe (microbiology) and Dr. Scott Frost (chemistry) from Tufts University collaborated with UVM Extension to understand the complex connection between flavor, microbes, and chemistry, in artisanal cheese.

In August, the multi-discipline team travelled to collaborating cheese farms,

Jasper Hill and Spring Brook, to collect a set of cheese samples to submit to a range of analytical tests. It was critical to have the various tests conducted on the exact same set of cheese wheels so that the data could be linked.

The sample set included multiple wheels of Alpha Tolman, Whitney, and Harbison from Jasper Hill, and Reading, Ashbrook and Tarentaise from Spring Brook. The UVM Extension trained panel tasted the samples, while Tufts University conducted microbiological and innovative chemical tests on the same samples. The various data sets are currently being analyzed and initial results are promising.

The microbial diversity results begin to tell an interesting story.



Touring the cellars at Jasper Hill Farm.

being unique, Alpha Tolman and Whitney similar, Reading and Ashbrook similar, and Tarentaise being slightly different.

### How do they affect the taste of the cheese?

The sensory data suggests a similar story. When plotting flavor dimensions that typically represent cheese flavor ("Richness") and quality ("Cleanness"), we see a similar picture to the microbial diversity result with Harbison (HAR)

and Tarentaise (TAR) occupying unique positions on the flavor map, Alpha Tolman (ALT) and Whitney (WHT) plotting closer, as with Reading (REA) and Ashbrook (ASH).

Sensory data of the 4 cheeses evaluated in the study.

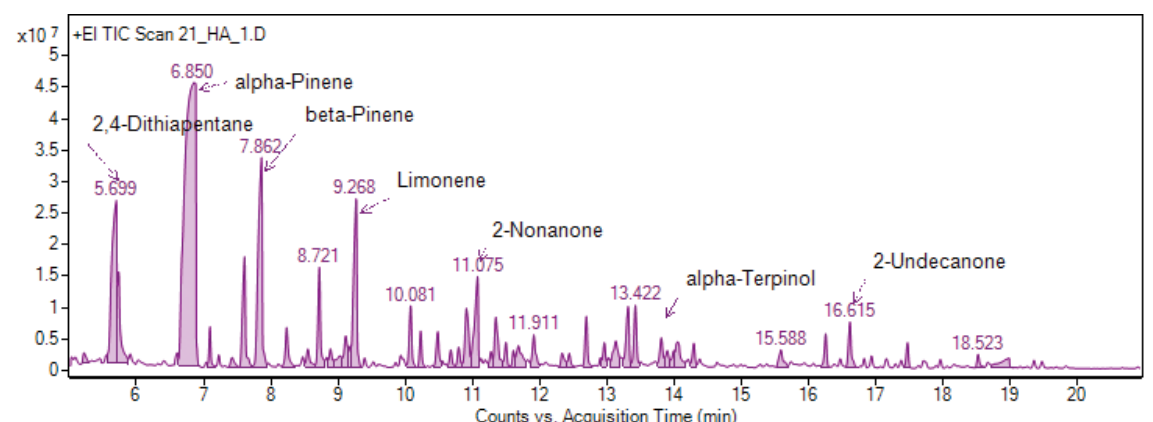
### What microbes are present?

Microbial diversity was influenced by the type of cheese and by the type of cellar the cheese was aged in. The microbial diversity results suggest the cheese samples fall into four clusters, with Harbison



Touring the aging room at Spring Brook Farm

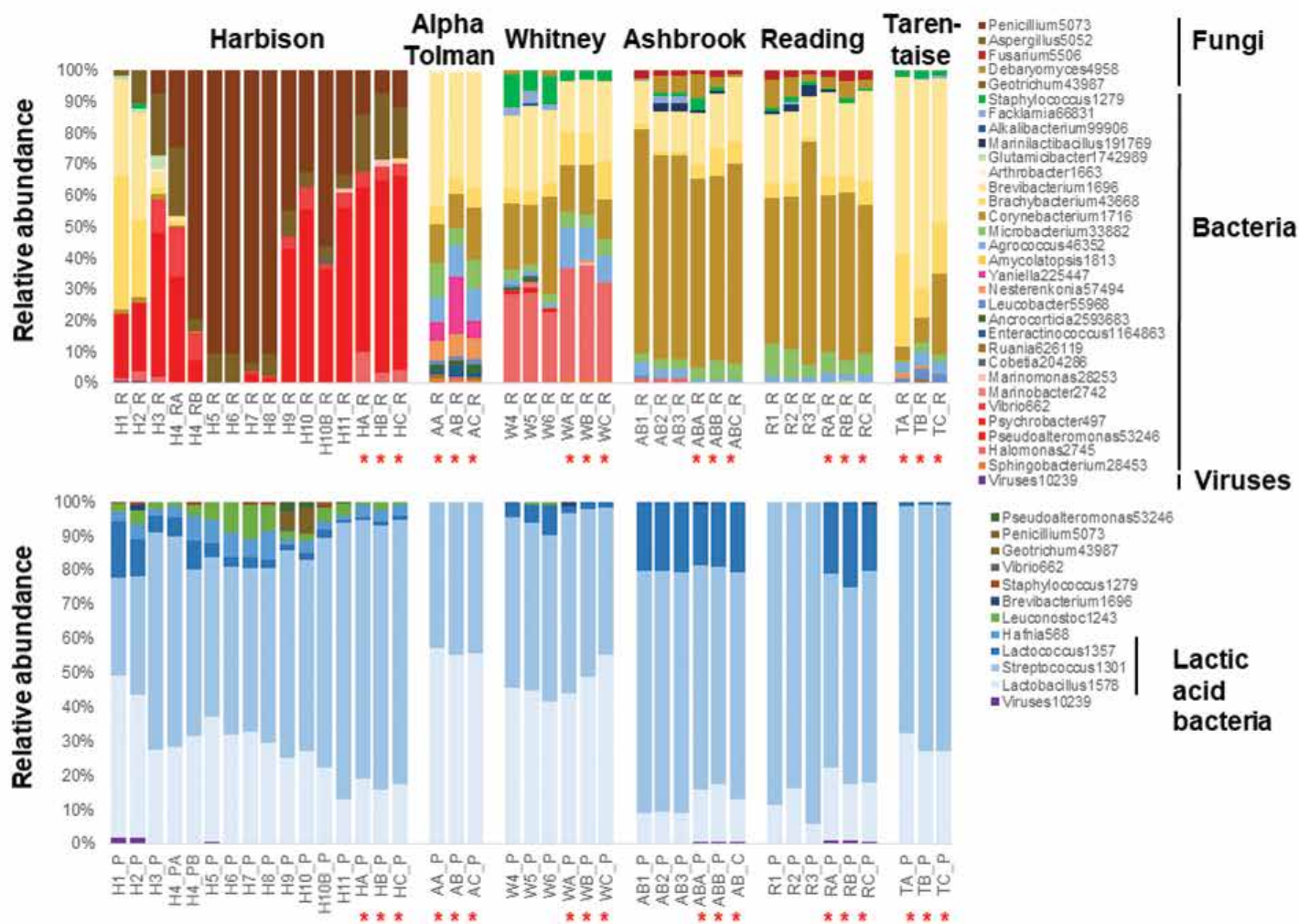
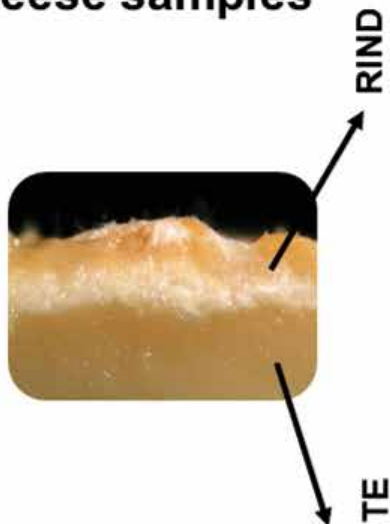
### Chemical Compounds Identified from Harbison Using the Gas Chromatograph/Mass Spectrometer







## Rind and paste microbial diversity from all DBIC cheese samples



### What type of chemistry do they create?

In addition to microbial and sensory data, we generated a robust chemical/sensory database on the cheese samples using a Gas Chromatograph/Mass Spectrometer (GC/MS) that was outfitted with an Odor Detection Port (ODP). The ODP allows a trained smeller to describe the odors as the GC/MS identifies chemical peaks. The chemistry data is currently being compiled. An example chromatogram for Harbison identifies a range of flavor compounds. The sensory information generated by the trained smeller at the ODP will be added to the chemistry results. Once completed, it will help us

understand the contribution of chemical compounds identified in cheese to its flavor. In addition, it will help us begin to link flavor chemistry and microbial diversity to cheese flavor.

### What's a bug got to do with it?

Microbes generate the chemistry responsible for the cheese flavor we love. By understanding possible connections between microbes (bugs), chemistry, and flavor, we can help cheese makers engineer cheese in the future that optimizes customer satisfaction. Answering the question, "What's a bug got to do with it?" is key to success.



The gas chromatograph/mass spectrometer and the trained smeller collecting cheese chemistry data



## VERMONT VEGETABLE AND BERRY NEWS



Compiled by Vern Grubinger,  
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Extension  
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[www.vvbg.org](http://www.vvbg.org)

## Twenty-Three Practices To Consider For 2023

To access the VBGA newsletter with the live links mentioned below, go to <https://www.uvm.edu/vtvegandberry/newsletter/1-2-23.pdf>

**H**appy new year! Here are some “best practices” to consider this year, provided as a reminder. Not all are appropriate to every farm, and some may already be implemented on your farm. Hopefully, these prompt you to take an action or two, even if it’s just making a note on the calendar to remember to do something. Feel free to send me ideas that should be included in future reminders.

**1. Renew your farm’s membership in the Vermont Vegetable and Berry Growers Association**, or join for the first time by creating an account. The annual fee is \$70 per farm (includes all people on your farm), increasing to \$80 after January 31. Businesses and organizations can become

members for \$80. When you sign up, you can also register for the annual meeting on January 24 in Montpelier, enroll in the CAPS produce safety program, and/or make a donation to support research and extension programs.

**2. Service your greenhouse / high tunnel heating and ventilation systems** before you start them up. Make sure furnaces, fans, louvers, etc. are in optimal condition. This can improve efficiency and avoid problems such as heating or cooling failures, or ethylene damage from combustion gases. For details, see this UVM Extension Ag Engineering blog post and this check list by agricultural engineer John W. Bartok, Jr.

**3. Reduce heat loss from greenhouses / high tunnels.** Seal cracks in wooden walls and around doors (bicycle inner tubing or old drip tape can work). Insulate sidewalls / endwalls up to bench height. Inspect and lubricate louvers to make sure they are shutting tightly. For more information see these fact sheets from UMass and Penn State.

**4. Check greenhouse thermostats for accuracy and proper installation** (in an aspirated box). Consider upgrading thermostats for improved efficiency and production quality. For details, see this UMass Extension fact sheet and this UVM Extension Ag Engineering blog post.

**5. Sample high tunnel soils well in advance of planting**, using the correct soil test. For established tunnels, we recommend that you use the Long Term/Combined High Tunnel Package offered by the UMaine soil test lab. This

includes the Basic High Tunnel Test (modified Morgan’s extract, like a field soil test) PLUS the Saturated Media Extract (potting soil test) for all major and micronutrients, and it includes soluble salts and available forms of nitrogen. Test results report both season-long nutrient availability and short-term nutrient intensity.

**6. When using compost-based potting mixes, obtain test results from the supplier**, or send a sample off for analysis using the saturated media extract test. Plant a few bioassays ahead to time to confirm potting mix quality. This is especially important if you are trying a new brand or making your own mix. Doing a bioassay is simple: plant a few flats of fast-growing crop like beans, cress, lettuce and/or oats and observe plant performance. Having a ‘control’ flat filled with a standard commercial mix for comparison can be informative. For details see this fact sheet from Penn State.

**7. Perform maintenance on tractors and trucks** to extend operating life and be ready for use come spring, see this check list from Utah State Extension. If you’re using tractors in winter, here’s a shorter checklist of maintenance for cold weather operation. And, here’s a tractor pre-use checklist from OSHA.

**8. Get your wash and pack shed ready for harvests.** Replace food contact surfaces with materials that are easy to clean, see this UVM Extension Ag Engineering fact sheets on smooth and cleanable surfaces. Upgrade your cleaning tools and supplies such as brushes, brooms, scrapers, squeegees, mops, sponges and scrubbers.

Order materials for cleaning (soap or detergent to removes germs, dirt, and impurities from surfaces), sanitizing (to lower the number of germs on surfaces) and disinfecting (to kill germs on surfaces). To understand more about these process see this brief guide by Chris Callahan

**9. Upgrade bins, buckets, and totes for produce harvest and storage** to increase efficiency and ease of cleaning. See this blog post by UVM Extension Ag Engineering as well as this one-pager on how to clean bins properly

**10. Develop SOPs for crop harvest, washing, packing and share with your employees.** To support this, you may want to use the 2012 Roxbury Farm Crop and Harvest Manual which was updated in 2022 by Jean Paul Cortens and is available here. This highly practical guide was developed with input from 20 other farmers. It describes indicators for harvest readiness, harvest procedures, cleaning/washing and storage procedures for 48 crops.

**11. Use hot water treated seed to reduce seed-borne pathogens**, especially in tomato, pepper, and brassicas. UMass offers a low-cost heat treatment service. Here is a description of the treatment, its pros and cons, the crop/disease combinations it is most effective for, and the cost. They also explain how to do it yourself and the equipment you’ll need.

**12. Identify crop disease problems early, before they get out of control.** Meg McGrath at Cornell’s Long Island Horticultural Research and Extension Center maintains an extensive photo gallery of vegetable crop diseases that can help. If

you’re unsure, e-mail pictures of plant problems for diagnosis to Ann Hazelrigg at the UVM Plant Diagnostic Clinic, or to your Extension plant pathologist in other states. Here are some tips for submitting a ‘digital sample’ for diagnosis. A live sample may eventually be needed, but you can save time by sending the right kind of images first.

**13. Plan to take leaf samples from perennial fruit crops.** Leaf analysis, or tissue testing, is the most reliable way to determine the nutrient needs of berries, grapes, and tree fruits so you can apply the correct types and amounts of fertilizer. (Soil tests are still need for soil pH and lime or sulfur recommendations). Samples should be collected in mid-summer using fully mature leaves before they start to senesce. This ~\$28 test is an excellent investment in optimizing fruit production. Dairy One performs this analysis and provides Cornell recommendations with results. Penn State, UConn, and many other land-grant universities also perform this analysis.

**14. Optimize drip irrigation** by adding lines in high tunnels and in the field if the entire root zone of a crop is not getting wetted, especially during dry periods. This is most common on light-textured, sandy soils, where water tends to move down rather than sideways. This article has a couple of good images showing water movement over time in different textured soils.

**15. Test your irrigation water.** The smaller the rooting volume, the more important this is because small growing containers are less buffered than larger volumes (e.g. trays compared



## CLASSIFIEDS

To place a classified ad in *Agriview* sign up to be a paid subscriber — visit our website: <https://agriculture.vermont.gov/administration/vaafm-news/agriview/advertising-agriview>

Email: [Ag.agriview@vermont.gov](mailto:Ag.agriview@vermont.gov), phone: 802-828-1619. Deadline for submissions is the 1st of each month for next month's issue. Example: January 1st deadline for February issue.

**Cattle**

Equipment Operator. Crop Production Assistant. CSA Coordinator & Wash Pack Manager. All positions with details at [root5farm.com](http://root5farm.com) (5)

text 802-291-4525 (3)

Cheesemaking equipment: copper vat, 2 pile presses and micro perfs, including all the associated miscellanea required to make an award-winning alpine style cheese. Sold on site. Also, Bison Trail hand stock trailer. Looks rough; still tough, we need something bigger. Sold on site. North Pomfret, VT. [info@ThistleHillFarm.com](mailto:info@ThistleHillFarm.com). 802-457-1884 (4)

**Equipment**

Tri-axle equipment hauling trailer with pintel hitch. Steel body 8' by 16' with steel frame and treated wood deck. Some rust in frame. Registered in Vt until 9/23. Good rubber. spare tire, pickup pintel hitch, ramps included. \$950 obo. Call or

4.5 ton grain bin, 6.5 ton grain bin, (2) 8 ton grain bins

**For Agricultural Events and Resources Visit:**

- The VT Agency of Agriculture Events Calendar: <https://agriculture.vermont.gov/calendar>
- UVM Extension Events Calendars: [https://www.uvm.edu/extension/extension\\_event\\_calendars](https://www.uvm.edu/extension/extension_event_calendars)
- Vermont Farm to Plate Events Calendar: <https://www.vtfarmtoplate.com/events>
- Northeast Organic Farming Association of Vermont Events Calendar: <http://nofavt.org/events>
- DigIn Vermont Events Calendar: <https://www.diginvt.com/events/>
- Agricultural Water Quality Regulations: <http://agriculture.vermont.gov/water-quality/regulations>
- Agency of Ag's Tile Drain Report now available here: <http://agriculture.vermont.gov/tile-drainage>
- VAAFM annual report available here: [http://agriculture.vermont.gov/about\\_us/budgets\\_reports](http://agriculture.vermont.gov/about_us/budgets_reports)
- Farm First: Confidential help with personal or work-related issues. More info call: 1-877-493-6216 any-time day or night, or visit: [www.farmfirst.org](http://www.farmfirst.org)
- Vermont AgrAbility: Free service promoting success in agriculture for people with disabilities and their families. More info call 1-800-639-1522, email: [info@vcil.org](mailto:info@vcil.org) or visit: [www.vcil.org](http://www.vcil.org).

For more agricultural events visit our *Funding Opportunities & Resources for Businesses* webpage at: [http://agriculture.vermont.gov/producer\\_partner\\_resources/funding\\_opportunities](http://agriculture.vermont.gov/producer_partner_resources/funding_opportunities)

priced to sell. 38 John Deere hay elevator. 16 ft New Holland hay elevator. 802-624-0143. (5)

Meyers Snow plow 8'6" wide \$800. 7 yard dump body on INK Truck \$1500. 802-558-0166 (5)

Gehl 5640 skid steer-82 HP-2 speed -New Tires Has steel Tracks -2675 Hrs' \$19,995 (5)

**Equine**

Trailer – 2 horse thorobred size, dressing room, ramp and tag along. 802-345-8026 (6)

6 stable available, indoor arena. Outdoor paddocks, do all work yourself and all feed. Slight fee for water & lights. 802-345-8026 (6)

**Hay, Feed & Forage**

400 Wrapped Bales Available. 1st May cut. 2nd June cut. 3rd July cut. Call 802-446-2791(2)

Certified Organic wrapped round bales for sale. approx 50%dry matter. Have forage sample results for 3rd cut, \$45,00/ 50.00 per bale depending on which hay is taken. Call or text 1-802-210-5279 (5)

4x5 round bales. Early 1st cut. 802-265-4566 (6)

4x4 Wrapped Round Bales, 1st cut 2022 for sale. \$45/bale  
4x4 Dry Round Bales, \$50/bale  
4x4 Wrapped Round Bales, 1st cut 2021 \$40/bale  
Pickup at the farm. 1710 Wild Apple Road, South Pomfret, 05067 Call Tom at 802-457-5834 (6)

Good Quality First cut netted large dry round bales, \$50  
Excellent Quality First cut 9x200 ft Ag Bags of 2021 Haylage early cut Delivery available, David Leblanc 802-988-2959 or 802-274-2832 (6)

**CHITTENDEN COUNTY**

June cut hay, never wet, 4' X 5' round bales, \$35/bale loaded, Cash/good check only, Westford, Ray at 802-355-2930 (5)

**FRANKLIN COUNTY**

200 tons certified Organic corn silage stored in an ag bag. Will load for you. 180 wrapped 4X4 certified organic round bales 18% protein – price negotiable. Highgate Center, VT 802-868-7535 If no answer, please leave a message. (1)

Certified organic wrapped round bales. The hay is dry, or close to dry. We have forage sample results if interested. Trucking can be arranged. \$45-55/bale depending on which hay is taken. 802-752-5669 (1)

**ORANGE COUNTY**

Large square bales. 1st, 2nd and 3rd cutting plus mulch bales. Wrapped and dry. 1000+ available. Some round bales available too. 802-236-7741 or [csfarm1@gmail.com](mailto:csfarm1@gmail.com) (2)

**WASHINGTON COUNTY**

100+ 4x4 wrapped round bales \$50 each 802-793-3511 (2)

Small square bales – 1st cut \$6.00 or less for quantity. 802-793-3511 (4)

**Sheep & Goats**

Goats: Now taking orders for our 2023 registered Alpine kids. Lazy Lady Farm, with 35 years of breeding experience will have doe and buck kids, from 30 does, available starting in March. We have a 2800# herd average with DHIA testing. We are CAE, CL and Johnes free with annual testing. Please visit our website: [www.lazyladyfarm.com](http://www.lazyladyfarm.com) for farm info and our sales

list. 802-595-4473 [laini@lazyladyfarm.com](mailto:laini@lazyladyfarm.com)

**Wanted**

A 1941 farm license plate with the prefix AGR. Also need a 1944 farm plate. Terry at 802-885-5405 (6)

**For Sale**

Entire Micro Dairy and Cheese House For Sale. AlpineGlo Farm has been successfully making farmstead goat cheeses since 2016 in the Windham County area. Inventory includes a herd of 12 ADGA Alpine Dairy Goats (currently due to kid in April), all milk parlor contents, and all cheese house contents including 30 gallon pasteurizer. We currently are looking to sell the entire business, to be set up on your own farm. Real estate is not included in the sale. For a complete list of inventory please contact the farm directly. Located in Southern Vermont. Contact Rachel Ware at [rachel@alpineglofarm.com](mailto:rachel@alpineglofarm.com) or (802) 463-2018. [www.alpineglofarm.com](http://www.alpineglofarm.com)





## Vegetable & Berry News

*continued from page 10*

to pots compared to the field). But in any situation, testing irrigation water may avoid problems with pH, alkalinity, conductivity, hardness, chloride, and sodium. Penn State offers guidance and irrigation water tests start at \$35.

UMass offers an irrigation water test for Pythium, Phytophthora, and Rhizoctonia that may be useful if you irrigate from a

pond that has potential to be a source of infection for crops.

**16. Install monitoring systems** – at least for greenhouse temperature, and maybe much more. A simple temperature alarm can save you a bundle if the heat goes out, or vents aren't open when they should be. Keeping tabs on vegetable storage conditions is a good idea, too. Here's some information from UVM Ag Engineering about

monitoring options on the farm.

**17. Buy a decent backpack sprayer.** There are several battery-powered models that growers seem to like, based on a recent posting to the VVBGA grower listserv (another benefit of membership). These include the Dramm BP4 series and the My4Sons sprayer. No endorsement intended, just saying.

**18. Monitor spray coverage by using water sensitive cards.** If you apply pesticides, organic or conventional, good coverage is important. Here's an article with images that shows how these cards can help you assess coverage. Here's a video with a lot more information.

**19. Assign someone on the farm to conduct regularly scheduled pest scouting and monitoring practices so that problems are identified early, when they can still be managed.** Michigan State University has a good summary of IPM scouting in vegetable crops, and UMass Extension has developed crop specific scouting guides and forms. Going through your crops carefully once a week can help avoid major losses.



**20. Take steps to prevent bird damage to blueberries, strawberries, and other small fruits and tree fruits.**

This comprehensive fact sheet from 2016 by UNH Extension summarizes available techniques and their effectiveness, including visual and auditory deterrents, repellents and toxicants. If you're concerned about SWD damage as well, consider netting specifically designed for excluding that insect, which will also exclude birds. A comprehensive blog post on exclusion netting was published by Chris Callahan last year.

**21. Develop an employee handbook.** I say this every year because it's important and not as hard as it sounds. Many benefits derive from being clear about employee expectations. Use this personnel policy generator to edit pre-existing text that makes it easy to create

your own farm employee handbook.

**22. Keep pollinators in mind.** Check out the UVM Extension pollinator support web site to learn about the many practical things you can do to support wild and managed bees and other pollinators, such as allow cover crops to flower longer, minimize ground disturbance, leaving woody debris and plant residues on the ground, using Integrated Pest Management to avoid pesticide use, and mowing less total area, less frequently, at a higher height (to allow more flowering.)

**23. Adopt as many positive practices for labor management as you can.** This booklet produced by ATTRA describes ten areas in detail; hopefully it will give your farm some new ideas for enhancing employee satisfaction and thus performance and retention.

## Agency Contact Numbers

To help you find the right number for your question, please consult the list below. You are always welcome to call our main line 802-828-2430. We will do our best to route you to person most able to answer your question quickly and accurately.

### Program Phone Numbers

Act 250	802-461-6798
Animal Health	802-828-2421
Business Development	802-828-1619
Dairy	802-828-2433
Enforcement: Water Quality or Pesticide	802-828-2431
Feed, Seed, Fertilizer & Lime	802-828-5050
Licensing & Registration	802-828-2436
Meat Inspection	802-828-2426
Produce Program	802-522-7811
VT Agriculture & Environmental Lab	802-585-6073
Water Quality BMP	802-828-3474
Water Quality Grants	802-622-4098
Water Quality Reports	802-272-0323
Weights & Measures	802-828-2433
Working Lands	802-917-2637

## VERMONT PESTICIDE APPLICATOR MEETING

Updates on agricultural crops, pest management, and pesticide safety  
*This program will provide Vermont or New York\* recertification credits.*

**March 20:** Virtual via Zoom

Register at <http://go.uvm.edu/vtpa23>

*\*Those seeking NY credit must submit a copy of their applicator ID and check-in for roll call prior to start of meeting. See program for details.*

Visit [www.uvm.edu/extension/psep](http://www.uvm.edu/extension/psep) for more information about the program or contact Sarah Kingsley-Richards at (802) 656-0475 [sarah.kingsley@uvm.edu](mailto:sarah.kingsley@uvm.edu)



THE UNIVERSITY OF VERMONT  
EXTENSION



VERMONT  
AGENCY OF AGRICULTURE, FOOD & MARKETS

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, Vermont, 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. Any reference to commercial products, trade names, or brand names is for information only, and no endorsement or approval is intended.

## INITIAL PESTICIDE CERTIFICATION MEETING

Review of the Northeast CORE Manual followed by the Vermont Pesticide Applicator CORE Exam  
*This program will provide Vermont recertification credits.*

**April 18:** Fireside Inn & Suites, West Lebanon NH

**April 20:** Robert Miller Community Center, Burlington VT

Register at <https://go.uvm.edu/core23>

Visit [www.uvm.edu/extension/psep](http://www.uvm.edu/extension/psep) for more information about the program or contact Sarah Kingsley-Richards at (802) 656-0475 [sarah.kingsley@uvm.edu](mailto:sarah.kingsley@uvm.edu)



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# More About the Food Safety Consumer Protection Division

**D**id you know that the Food Safety Consumer Protection (FSCP) Division engages in many emergency preparedness, response and recovery activities in support of farmers and agricultural businesses? It's true. And it is not just the FSCP team; every work unit in the Vermont Agency of Agriculture, Food & Markets contributes to protecting and ensuring the resiliency of Vermont's most critical infrastructure. In addition to ensuring safe food and fair markets during peacetime, we ramp up during less peaceful times in ways that may surprise you. Here are some examples and ways to learn more:

- We conduct foreign animal disease investigations during high consequence animal disease outbreaks that can wreak havoc on animal health, food prices, and Vermont's general economy. Our response throughout the ongoing high pathogenic avian influenza (HPAI) outbreak, in partnership with wildlife and public health colleagues, is one example where early disease detection and prevention of spread has been critical. To learn more about how to protect your birds from HPAI or to become a "flock defender", visit <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/df-resources/df-resources>
- The Agency of Agriculture employs a carcass manage-

ment specialist. Farmers who have experienced livestock mortality emergencies who can benefit from assistance with composting and other methods of disposal can utilize this expertise. If you ever find yourself in need of help in this department, please contact us. These are certainly difficult circumstances to manage, but the Agency can help.

- The Agency supplies a member to the Vermont Drought Task Force to be the voice of farmers. Two primary responsibilities of the Task Force are to gather the information necessary to assess the impact of dry conditions and to make recommendations to the Governor or agencies responsible for responding to drought or drought related impacts on Vermont agriculture.
- Along with other Agency colleagues, the FSCP Division supports the State Emergency Operations Plan by ensuring when the State Emergency Operations Center (SEOC) is activated, it is staffed with an agricultural voice, in support of you. Staff deployed to the SEOC during emergencies like flooding, power outages, and natural disasters triage incoming calls related to agriculture and ensure they are routed to the Agency subject matter experts who can help. During past emergencies, the FSCP Division has activated the Vermont Disaster Animal Response

Team to assist with pet-friendly sheltering for Vermonters; coordinated assistance for trapped or stranded livestock; assisted farmers during barn roof collapses and fires; completed impact assessments

on agricultural commodities; provided assistance to farmers who have experienced crop flooding; and collaborated with partners to respond to technological emergencies. Whether the agricultural

emergency is large or small, it is likely that the Agency of Agriculture either has the expertise to provide direct assistance or can route you to the most appropriate resources to address the circumstances at hand.

## Upcoming Grant Opportunities

**T**he Agency of Agriculture, Food & Markets is pleased to be able to help you more easily identify upcoming grant opportunities. Go to <https://agriculture.vermont.gov/grants/calendar> for more information.

### Programs Open Year-Round

#### Farmstead Best Management Practices (BMP) Program

Technical and financial assistance for engineered conservation practices on Vermont farms.

*Jenn LaValley*

[Jenn.LaValley@vermont.gov](mailto:Jenn.LaValley@vermont.gov)

802-828-2431

#### Pasture And Surface Water Fencing (PSWF) Program

Technical and financial assistance for pasture management and livestock exclusion from surface water on Vermont farms.

*Mary Montour*

[Mary.Montour@vermont.gov](mailto:Mary.Montour@vermont.gov)

802-461-6087

#### Grassed Waterway and Filter Strip (GWFS) Program

Technical and financial assistance for implementing buffers and seeding down critical areas on VT farms.

*Sonia Howlett*

[Sonia.Howlett@vermont.gov](mailto:Sonia.Howlett@vermont.gov)

802-522-4655

#### Conservation Reserve Enhancement Program (CREP)

Implementation costs of vegetated buffers and rental payments for maintained buffers on Vermont agricultural land.

*Ben Gabos*

[Ben.Gabos@Vermont.gov](mailto:Ben.Gabos@Vermont.gov)

802-461-3814

*Phil Wilson*

[Phillip.Wilson@vermont.gov](mailto:Phillip.Wilson@vermont.gov)

802-505-5378

### March

#### Farm to School Vision Grant

Grants to help schools, childcare providers and afterschool programs engage with food system issues through youth education and empowerment

*Gina Clithero*

[Gina.Clithero@vermont.gov](mailto:Gina.Clithero@vermont.gov)

802-585-6225

### April

#### Dairy Marketing & Branding Services Grant

Grants for value-added dairy processors to access professional services to implement marketing tactics, brand improvements, and overall strategy

*Brockton Corbett*

[brockton.corbett@vermont.gov](mailto:brockton.corbett@vermont.gov)

802-498-5111

### April

#### Local Food Market Development Grants

Grants to help farm and food producers access local institutional and wholesale markets

*Gina Clithero*

[Gina.Clithero@vermont.gov](mailto:Gina.Clithero@vermont.gov)

802-585-6225

# Agency of Agriculture Water Quality Grants – Start Planning Today!

By Sonia Howlett, VT Agency of Agriculture, Food & Markets

You may have or be interested in a water quality grant from the Agency of Agriculture, Food & Markets. What does that process look like?

## 1. Apply

All Agency of Agriculture, Food and Market (AAFM) Water Quality grant applications are available on our website, at [agriculture.vermont.gov/water-quality/assistance-programs](http://agriculture.vermont.gov/water-quality/assistance-programs). Deadlines occur throughout the year.

Applications for most of our grant programs can be completed online or printed and filled out before scanning or mailing to submit. Conservation District staff, AAFM field inspectors, Technical Service Providers and UVM Extension specialists may be able to assist you in finding and completing an application. Make sure you read all the program information and submit all required documentation!

## 2. Work with AAFM staff to submit any missing documentation, then wait (grant is reviewed)

If you are missing any components, you may be contacted and asked to submit those pieces within a certain time period. If you have not recently received a grant from AAFM, you will also be asked to submit a W9 in order to be entered into the state's payment system. Any questions about how to complete this form should be directed to a tax account-

ant or advisor as AAFM personnel are not permitted to provide you with advice for how to complete this form.

All complete grant applications are reviewed by qualified personnel. Some of programs, like the Capital Equipment Assistance Program (CEAP) are always quite competitive. Others, like the Field Agronomic Practices (FAP) Program are first-come-first-served, but all

are dependent on the budgets and program demand. AAFM staff will confirm that your organization and project meet eligibility criteria and that your farm is in "good standing" with the Agency.

## 3. Hear back and return signed grant, if awarded

AAFM staff will contact you to let you know about the status of your applica-

tion. If you were not awarded a grant, you will receive a letter or email and will be encouraged to apply again the next year, if you are eligible.

If you have been awarded a grant, you will be sent a copy of the grant to sign, as well as a Good Standing Certificate to affirm that you are in good standing with the Agency. You must sign and return both documents to be

eligible for payment. Many programs also require a Certificate of Insurance proving your valid liability and workers compensation insurance, while also listing the State of Vermont, its agents and employees as additional insured under your policy. Before applying for a grant, please read Attachment C: Standard State Provisions for Contracts and Grants, which contains grantee requirements for insurance coverage and other state regulations.

## 4. Purchase/Farm/Construct, and then Submit invoice/claim form

The next step in the process is to complete the project at hand for which you have an active grant agreement. Some programs will require that you submit an invoice or a claim form demonstrating that you have completed the practices, while other programs may require engineering oversight throughout construction. The reimbursement process will be detailed in your grant award and may differ between programs.

## 5. Field Check

An AAFM staff member will reach out to you to let you know that they will come by to verify or certify your field/equipment/project. This allows us to document your conservation practice implementation. Some programs require a visit to occur before payment, while other programs may include visits that occur throughout your grant agreement.

### 2023 AAFM Water Quality Grant Application Deadlines

Program	Deadline	Grant Purpose	Contact
<b>Vermont Pay for Performance Program</b>	January 20	Payments for modelled phosphorus runoff reductions from conservation practices. This innovative program requires excellent records/data management.	Brodie Haenke: (802) 636-7852
<b>Field Agronomic Practice (FAP) program: Spring practices.</b>	March/April	Per-acre payments for conservation practices. In spring, eligible practices include reduced tillage, manure injection, no-till renovation and rotation into perennial forages. Must apply >30 days before implementation.	Nina Gage: (802) 622-4098
<b>Farmstead Best Management Practices (BMP) Program</b>	April 1	Technical and Financial Assistance for engineered conservation practices (up to 90% cost-share)	Rob Achilles: (802) 917-1397
<b>Field Agronomic Practice (FAP) program: Rotational Grazing.</b>	June 15	Per-acre payments for conservation practices. June 15 latest deadline to receive payment on 2021 Rotational Grazing	Nina Gage: (802) 622-4098
<b>Field Agronomic Practice (FAP) program: Cover Crop</b>	August 1	Per-acre payments for conservation practices. August 1 latest deadline to receive payment on 2021 Cover Crop. Other eligible fall practices include manure injection and no-till renovation: apply >30 days before implementation.	Nina Gage: (802) 622-4098
<b>Capital Equipment Assistance Program (CEAP)</b>	November 1	Purchase of innovative equipment that aids in the reduction of runoff (up to 90% cost-share)	Nina Gage: (802) 622-4098
<b>Pasture and Surface Water Fencing (PSWF) Program</b>	Year-round	Technical and Financial Assistance for pasture management and livestock exclusion from surface water (up to 90% cost-share)	Kaitlin Hayes: (802) 622-4112
<b>Grassed Waterway and Filter Strip (GWFS) Program</b>	Year-round	Technical and Financial Assistance for implementing buffers and seeding down critical areas (up to 90% cost-share)	Sonia Howlett: (802) 522-4655
<b>Conservation Reserve Enhancement Program (CREP)</b>	Year-round	Implementation costs of vegetated buffers (up to 90% cost-share) and rental payments for maintained buffers in 15-30 year contracts.	Ben Gabos: (802) 461-3814



# Haystack Farmstead Re-engineers On-farm Slaughter Facilities with Working Lands Enterprise Initiative Grant

By Scott Waterman, VT Agency of Agriculture, Food & Markets

A seventh-generation dairy family in Pawlet has embraced the potential growth and adaptation possibilities that a Working Lands grant can enable. Brian and Brea Leach of Haystack Farmstead, a cattle grazing operation established in 2016, are working to tackle an ongoing challenge for many Vermont food producers, including their own: meat and poultry slaughter.

“We think there are many reasons why livestock farming is a valuable component of the Vermont working landscape,” said Brian Leach of Haystack Farmstead. “We secured

Working Lands Enterprise Initiative funding to fund the construction of an engineered on-farm processing system to be operated as a small cooperative with our farm and two other local farmers.”

Leach believes entrepreneurial thinking with timely investments directed at this pressing need within the local food system will lead to success for their business and the local farming community.

“With grant funding from Working Lands, we have an opportunity to build a viable processing system for our farm that secures our future here and takes meaningful steps to helping others do the same,” Leach said.

While Pawlet has a long history of commercial

farming and forestry activity, according to Leach it still struggles with its agricultural identity. “If we can address some of our systemic problems, our grazing enterprise could be one of several in Pawlet alone, one of hundreds throughout the state,” said Leach. “We are working with other farmers in town to provide low-cost training and access to the grant-funded facility to address their shared viability concerns.”

Working Lands Enterprise funding has been vital to many of our Vermont agricultural and forestry businesses as they explore expansion, diversification, or functional improvements to their businesses. As the Leachs at Haystack Farmstead recognize, Working Lands funding

can address some of the missing economic components that will allow future business success.

Says Leach, “A livestock enterprise set-up on a single holding of a few hundred acres needs to realize the income from processing livestock to be viable. On our 350-acre farm, we can safely graze enough stock to generate 30 finished beef per year and carry a replacement herd through the winter. If everything is set up well the farm could net \$60k if we do the processing ourselves and market the product effectively. This is very close to a livable income, with some time for a handful of other diversified earning activities.”

Our Vermont agricultural communities and farmers have always dreamed of

fulfilling work while feeding their families, friends, and communities. The heritage of a farming life in Vermont has always brought challenges, and the economic realities of the 21st century have only increased the pressures of maintaining and prospering working lands businesses.

“There was a time when farmers sent their kids to school in hopes that they’d make a better life for themselves off the farm. What I’ve realized is that it doesn’t have to be that way,” Leach reflected. “Everything I grapple with on the farm can be improved. There is a good system hiding in there, it just takes time and money to build it. I want this farm to be a peaceful, productive, and fun place to live and work.”



Courtesy Haystack Farmstead

The Leach Family on their tractor at the Pawlet farm.

## Water Quality Grants

*continued from page 14*

### 6. Payment

If all the above is satisfactory, you will receive payment according to the terms of your grant agreement. Please keep in mind that the payment timeframe can vary widely from one program to the next. Some programs require all practices to be complete while others have the flexibility to provide partial payments. If you are not sure where your grant process is at, you should contact your grant manager to make

sure you have submitted all required paperwork.

### 7. Follow-up

Some of our grants have longer term follow-up and reporting requirements. For example, CEAP grants require that you report the acres where you used that equipment for the first 3 years that you own it.

### 8. Apply again!

Most AAFM grant funding rounds are held annually and you can apply or re-apply every year.



**Working Lands**

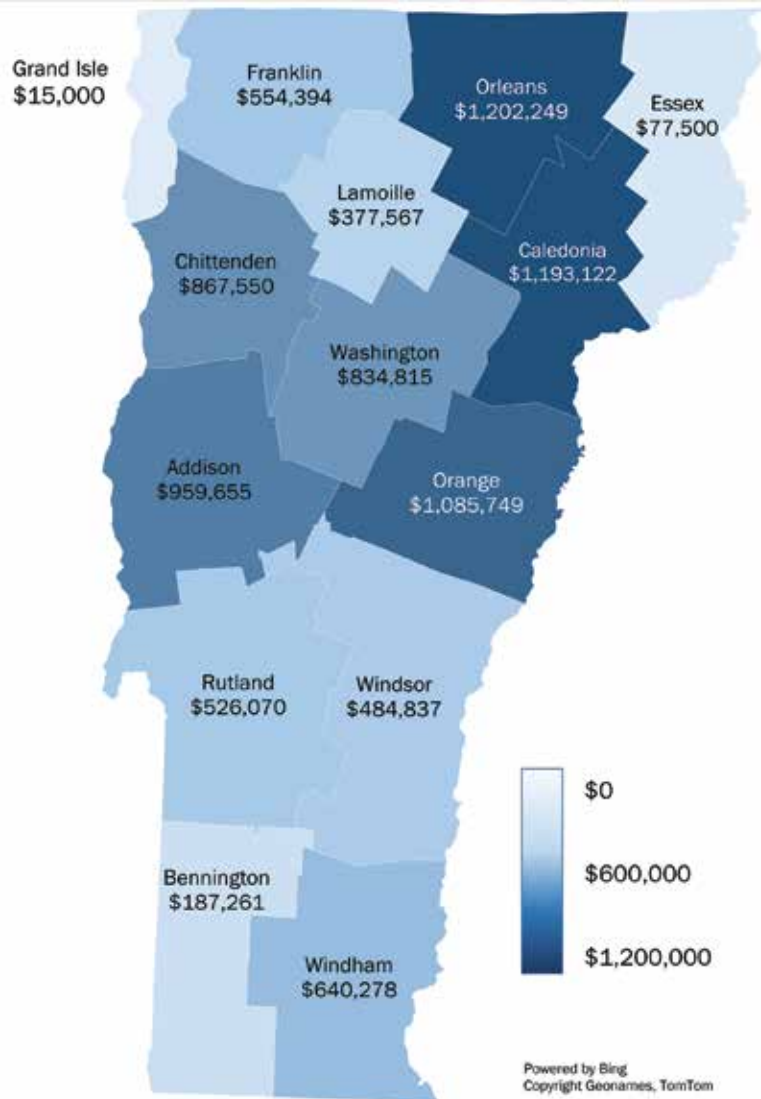
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wood receiving the most investments. Primary forestry, logging, and sawmill operations also represent a critical sector of Vermont's working lands economy and WLEI grant investments. In recent years, the Working Lands Enterprise Board has sought to increase funding specifically to forestry

businesses, including those involved in wood heat and energy like pellet mills and firewood processors.

In fiscal year 2022, WLEI also prioritized funding for service provider organizations and service producer associations providing technical assistance and business assistance to agriculture and forest businesses.

**WLEI Grant Funds to Businesses per County, 2012-2022**



*Ben Notterman of Snug Valley Farm in East Hardwick greets his pigs. Snug Valley Farm received a WLEI grant in 2022 to upgrade on-farm cold storage.*

Secretary Tebbetts acknowledges the impact of this program. "The Working Lands Enterprise Initiative grows our economy while keeping our land in active production. These

investments keep our land working, which is great for Vermont's rural economy." Working Lands Enterprise Initiative applications will reopen in fall 2023. To read about the significant impact

of and diverse projects funded by the Working Lands Enterprise Initiative, visit [workinglands.vermont.gov](http://workinglands.vermont.gov) or follow the Facebook page @vtworkinglands.



*U. S. Senator Peter Welch and Secretary Anson Tebbetts toast with milk during a roundtable discussion held in St. Albans with farmers and producers focused on dairy needs for Vermont as Congress considers the upcoming Farm Bill reauthorization.*



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