

AGRiVIEW



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New Phosphorous Reduction Payment Program Opening for Applications

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

Starting January 1, Vermont farmers can apply to a new, performance-based payment program to support water quality improvements that they have made on their farms. Funded by USDA and administered by the Agency of Agriculture, Food & Markets, the new Vermont Pay for Phosphorus (VPPF) program will compensate farms statewide for phosphorus load reductions from crop and hay fields. There are \$4.9 million in payments to farms planned over this 5-year program. Visit agriculture.vermont.gov/VPPF to apply.

After applying to the program, farmers will be asked to provide complete and up to date Nutrient



Management Plans, soil tests and manure tests that meet the Required Agricultural Practices standard for their farm size. This information will be entered into a web-based modeling software, the Farm Phosphorus Reduction Planner (FarmPREP), to estimate the phosphorus reductions occurring

on hay and crop fields. Technical assistance from local Conservation Districts will be available to assist with this process. To support farmers' time engaging with this process, first-time applicants will be eligible for a data entry payment of up to \$4,000 per farm.

If farms are selected to enroll in

the full VPPF program after this data entry process is complete, they will be eligible to receive an annual payment for quantifiable and field-verifiable reductions in phosphorus loading evaluated through FarmPREP. FarmPREP will estimate the pounds of phosphorus running off each farm field each year under current management and will compare to estimated runoff from baseline historical management assumptions developed for the Lake Champlain TMDL. Enrolled farms will then receive payment per pound of phosphorus runoff they reduce across their whole farm above and beyond a threshold set with reference to state and federal standards.

Over the past year, the Agency has been working with a small set of

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Vermont Agency of Agriculture, Food & Markets

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THE VIEW FROM 116 STATE STREET

And just like that, 2022 is here. Where do the days go? 2021 was another year of constant change under Covid-19. At times, we returned to our former world with its schedules, routines and traditions but the cloud of the pandemic was always with us. We welcomed vaccines to protect us against the virus arrived and so did the booster shots. Vermonters continue to do their part to mitigate the virus but it's still with us.

We are grateful for our farmers and producers who continue to feed us under challenging circumstances. We know expenses are up for feed, supplies and fuel. We also are working on solutions with finding help to do the work. We are working with our partners in state government on helping the private sector find employees. The Agency

along with the Agency of Commerce and Community Development, Department of Labor and a host of dairy processors are meeting and trying to find solutions. It's clear we need to think of new ways to attract and maintain workers. This issue is not contained within Agriculture but can be found across all industries. More work will need to be done in 2022.

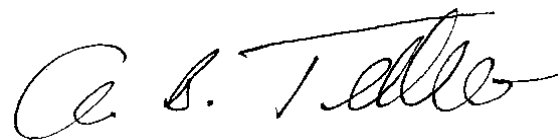
In 2021, the legislature did not meet in person but as I write this there are plans to open the State House once again to hearings and debate. We also expect opportunities for the public to participate virtually. This change has allowed more to listen from their homes, barns, fields, tractors, gardens, and businesses. Most of the committee hearings are also recorded so the public can also hear policy developed at their convenience.

We expect it to be a busy 2022 legislative session. Bills that did not make it into law can be taken up again and there will be a host of new proposals in the House and Senate. The Agency spends most of it's in the Agriculture and Forestry, Commerce and Natural Resources committees. We often are asked to respond to bills that are proposed, and we do our best to give solid factual information as lawmakers deliberate.

We want to hear from you as well as we propose and debate public policy. Please reach out to us with your suggestions. The best ideas often come from real life experience

and from the field.

The legislature also wants to hear from you. If you want to offer your thoughts start with your Representative or State Senator. There is full listing on the legislature's home page. Get to know them and keep your eye on ways to participate at the State House or in your community. The session begins the first week in January and runs until the middle of May. Our focus will be on growing the Vermont economy, protecting the vulnerable and making it more affordable for Vermonters to live, work and play in the Green Mountains. Wishing you peace and prosperity in 2022.



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

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This Month's Recipe

Creamy Chicken Tortellini Soup

A hearty variation of chicken noodle soup. You can find this and even more recipes at newenglanddairy.com

Ingredients

- 3 tablespoons butter
- 4 carrots, peeled and chopped
- 2 celery stalks, chopped
- 1 medium onion, diced
- 1 garlic clove, minced
- Salt and pepper to taste
- 3 tablespoons butter
- ¼c all-purpose flour
- 4 cups chicken broth
- 2 cups milk
- 1 cup half and half
- 2 bay leaves, ½ tsp rosemary, ½ tsp thyme, and any other herbs of choice
- 2 cups cooked chicken (rotisserie works well, or you can boil 1-2 chicken breasts)
- 2 cups cooked tortellini

Instructions

1. Melt the butter in soup pot over medium heat. Add carrots and celery, sauté for 5 minutes.
2. Add onion, sauté for 3 minutes more.
3. Add garlic, salt, and pepper, and sauté for 2 minutes more.



4. Remove vegetables from pot and set aside while you make the roux.
5. Over medium heat, melt butter. When hot, add the all-purpose flour and stir to combine. Cook and continue to stir occasionally until the roux turns a light golden-brown color. Gradually stir in 1 cup of chicken broth until thoroughly mixed and smooth.
6. Add in the cooked vegetables, broth, milk, half and half, and seasonings, stirring until all ingredients are combined. Simmer for 30 minutes.
7. At this point, taste the soup and add additional salt, pepper, and seasonings if desired. Add chicken and tortellini and cook for 15 minutes more.
8. Remove the bay leaves and serve with a little cheese sprinkled on top – enjoy!

Vermont Specialty Crop Block Grant Program 2022 Request for Applications

By Gina Clithero, VT Agency of
Agriculture, Food & Markets

The Vermont Agency of Agriculture, Food and Markets announces two funding opportunities for specialty crops organizations. Specialty crops are fruits and tree nuts; vegetables; culinary herbs, spices, and horticulture medicinal plants; nursery, floriculture, horticulture, and Christmas trees; honey; hops; maple syrup; and mushrooms.

The Vermont Agency of Agriculture, Food and Markets will release two funding opportunities on January 18, 2022:

- 2022 Vermont Specialty Crop Block Grant Program:** Any entity may apply, but projects must benefit more than one specialty crop business, individual, or organization. Applicants should describe how a project will benefit a specialty crop industry, a group of producers or busi-

nesses, or the public, rather than a single business or organization.

- Specialty Crop Producer Association Grant:** This grant opportunity will support producer associations that serve specialty crop businesses. Eligible applicants are producer associations, cooperatives, and groups of producers/businesses. Service providers that serve producer associations, cooperatives, and groups of producers are

also eligible. This grant is possible thanks to additional federal funding from a COVID-19 related stimulus bill.

The deadline to apply for both opportunities will be **February 25, 2022, at 11:59 PM**. Learn more and apply at agriculture.vermont.gov/grants/specialtycrop.

Contact AGR.SpecialtyCrops@vermont.gov or 802-585-6225 with any questions.

New Program Offers Free On-Farm Technical Aid

By Tony Kitsos, UVM Extension

University of Vermont (UVM) Extension and the UVM Center for Sustainable Agriculture recently launched a new program to provide free on-farm technical assistance for Vermont dairy farm business owners and managers interested in improving their bottom line through changes in management practices.

The program's technical service providers will work one-on-one with farmers to answer questions and provide technical assistance in a number of areas including milk quality, grazing and pasture management, dairy nutrition, animal housing and facilities, animal husbandry and personnel management. In addition, they may source grant funding for fences, waterlines and barnyard improvements and help farms enroll in state and federal programs, such as those that provide payments for rotational grazing and excluding livestock from waterways.

Tony Kitsos heads up the team, which includes two recently hired dairy herd management educators,

Whitney Hull and Kelsie Meehan. Kitsos and Hull are available to work with medium- and large-scale cow dairy operations while Meehan will assist small-scale, small ruminant, organic, grass-based and/or transitional cow, goat and sheep dairies.

To learn more or to request

assistance, go to <https://go.uvm.edu/dhm-assistance>. Or contact Kitsos by email tony.kitsos@uvm.edu or by phone 802-524-6501 x 440.

The program is supported by the Northeast Dairy Business Innovation Center, which is hosted by the Vermont Agency of Agriculture,

Food and Markets. The center, established in 2020 to serve a ten-state region, supports projects that target dairy farms and processors to provide market research and technical assistance to promote development, production, marketing and distribution of dairy products.

Coming Soon!

Vermont Farm Show

February 1- 3, 2022

As a friendly reminder, there is an admission fee this year. Tickets are \$4 if purchased in advance and \$5 at the door per person. For all the latest information, please go to www.vtfarmshow.com



Choiniere Family Farm Receives New England Leopold Conservation Award

By Sand County Foundation

The Choiniere Family Farm of Highgate Center, Vermont has been selected as the recipient of the 2021 New England Leopold Conservation Award®. Given in honor of renowned conservationist Aldo Leopold, the prestigious award recognizes those who inspire others with their dedication to land, water and wildlife resources in their care. Dairy farmers Guy and Beth Choiniere receive \$10,000 and a crystal award for being selected.

The Sand County Foundation and national sponsor American Farmland Trust present the Leopold Conservation Award to private landowners in 23 states for extraordinary achievement in voluntary conservation.

"As the national sponsor for Sand County Foundation's Leopold Conservation Award, American Farmland Trust celebrates the hard work and dedication of the New England recipient," said John Piotti, AFT President and CEO. "At AFT we believe that conservation in agriculture requires a focus on the land, the practices and the people and this award recognizes the integral role of all three."

"Recipients of this award are real life examples of conservation-minded agriculture," said Kevin McAleese, Sand County Foundation President and

Chief Executive Officer. "These hard-working families are essential to our environment, food system and rural economy."

"The Choinieres embody so much of the ethos and practice that Aldo Leopold taught and modeled, for generations," said Spencer Meyer, Senior Conservationist at the Highstead Foundation. "I cannot think of a more fitting way to celebrate two inspiring legacies than by recognizing the Choiniere Family Farm with the 2021 Leopold Conservation Award."

"We are pleased to present this award to Guy Choiniere and the Choiniere Family Farm. I am thrilled that a dairy farm so devoted to conservation agriculture, and improving water quality has been chosen as the first New England Leopold Conservation Award recipient from Vermont," said Nathan L'Etoile, New England Director of American Farmland Trust. "Not only does Choiniere Family Farm hold itself to a high standard, but Guy devotes his own time to teach tomorrow's watershed stewards, elementary school students around Lake Champlain, the importance of conservation practices to



keeping our lakes and rivers clean."

The New England Leopold Conservation Award is made possible through the generous support of American Farmland Trust, New England Forestry Foundation; Wildlands, Woodlands, Farmlands and Communities; Sand County Foundation, Farm Credit East, David and Ann Ingram, Yale School of the Environment, and Whole Foods.

About Choiniere Family Farm

Guy Choiniere believes the health of the soil is the health of the farm. This land ethic drives his actions on a dairy farm that's been in the Choiniere family since 1945.

While navigating changes in the farm economy,

climate and farming practices, the Choiniere Family Farm has become a model of innovation and adaptability for other New England dairies. Soil health and erosion control practices have kept the farm productive and resilient despite an increase in severe storms, rainfall and periods of drought in northwest Vermont.

Prompted by an unstable market for conventional milk in the 1990s, Guy studied and then transitioned to organic production. It's a move he said was good for his cows, land and bottom line. A few years later he seeded 25 acres of corn to permanent hay and pasture in order to convert his herd to 100 percent grass-fed. That move fetched an even better price for their organic milk.

After taking over the farm, Guy also began addressing environmental issues with assistance from the USDA's Natural Resources Conservation Service. The conservation plan he developed remains a work in progress today.

To prevent soil erosion and improve water quality, the Choinieres planted 5,000 trees along banks of the impaired Rock

River. They also conveyed a 51-acre river corridor easement that designates an area where the river can meander naturally. The land can still be farmed, but the river will not be dredged. There is also a permanent 50-foot naturally vegetated buffer along 12,000 feet of the river's bank.

Keeping nutrients on the farm and out of the river was also aided when Guy switched from conventional liquid manure storage to an innovative compost bedded pack system. During the winter the cows are fed hay in large hoop barns designed to mimic the comfort and atmosphere of being on pasture. Excess hay provides bedding and catches manure before being trod down into compost. When the cows resume rotational grazing in May, pigs are let into the barns to root around and expedite the composting process before it is spread on fields as nutrient-rich fertilizer. Guy is an ambassador to help other dairies manage bedded pack systems.

The Choiniere Family Farm participates in Vermont's roadside sign program that identify conservation practices like rotational grazing, cover crops, no-till and streamside plantings. The Choinieres, who were Vermont's Conservation Farmers of the Year in 2009, are now the first New England Leopold Conservation Award recipients from the Green Mountain State.

Safe Snow Removal from Your Barn Roof

By Cornell University
Extension

When the snow comes down heavy and hard, it's time for farmers to start thinking about barn roof safety.

Heavy snow can put barn roofs at risk, but snow removal must be performed carefully. Removing snow without the proper approach can actually cause more damage by creating an unbalanced load. Remember, your number one priority must be to protect your own safety!

Farmers are encouraged to consider these safety tips, provided by Cornell University, when considering snow removal from a barn roof.

Do...

- DO consider a systematic approach. You need a plan! For a diagram of the best way to remove snow from your barn structure, see this tip sheet from Cornell
- DO listen for creaking or moaning – if your barn is built from wood, unusual sounds may indicate there's trouble afoot
- DO look for bending or bowing rafters, headers, or columns. There are often visual cues to be found if you look carefully at the structure
- DO ask for help. You can't do this alone. Who is your back up? Is there anyone in your community with expertise

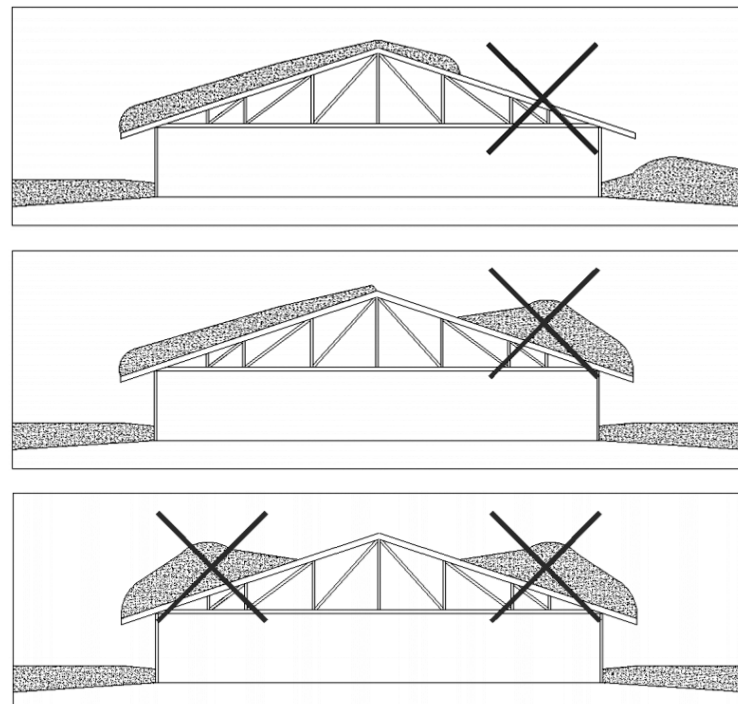
or equipment, who might be willing to help?

Don't...

- DON'T remove snow unequally from the roof. Unbalanced loads can create even more problems.
- DON'T pile snow atop the roof. Do not simply move the snow from one area of the roof to another
- DON'T attempt to clear the snow yourself! Make sure there are others nearby, helping and watching, in the event of a problem

Most importantly, **do not put your own safety at risk.**

For a full overview of the best way to remove snow from a barn roof, visit [http://](http://blogs.cornell.edu/beefcattle/files/2014/11/SnowRemoval-1f91q43.pdf)



blogs.cornell.edu/beefcattle/files/2014/11/SnowRemoval-1f91q43.pdf

Vermont farmers are

critical to our landscape, heritage, economy, and communities. We have *none to spare!* Be safe!

BACK TO THE BASICS PART 2:

Soil pH

by Jennifer Alexander,
Poultney Mettowee
Conservation District

This article is the second in a series on the basics of soil health and how it can influence yields.

What makes the soil sour (acid)? Without getting too much into the chemistry of acidification of the soil, soil acidity occurs naturally when rain leaches calcium, potassium, and magnesium out of the soil, when plant material decomposes, and man-made fertilizers such as nitrogen are added.

For well over 125 years, it has been understood that the soil must have proper

pH to grow good plants and have good yields. According to Alva Agee in Right Use of Lime in Soil Improvement, first published in 1919, "When improvement is planned for, involving additions of organic matter and plant food, the application of lime to correct acidity is the first requirement. ... Liming must form the foundation of a new order of things. The ability to grow the clovers and to furnish rich vegetable matter to the soil, which naturally is poor in humus, rests upon lime application first, and then upon any supply of plant food that may continue to be lacking."

So how can you tell if you have acidic soils? The best way to tell is to take

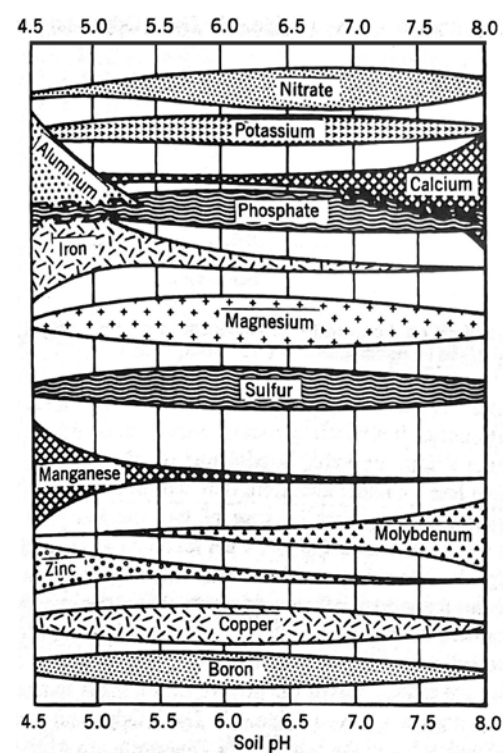
a soil sample and send it to UVM or Dairy One for analysis. For a basic test at Dairy One the cost is \$9. For a more informative test with micronutrient values the price increases to \$15 at both UVM and Dairy One. Remember from the Back to the Basics Part 1 article published November 2021, a soil test will also tell you the approximate base level of fertility in the soil.

Highly acidic soils affect nutrient uptake, as shown in the soil pH to nutrient update graph, attached. As you can see, soils with the pH between 6.0 and 7.0 offers the plants the best opportunity to absorb nutrients that are beneficial to them (nitrogen, phospho-

rous, potassium, sulfur, calcium, and magnesium).

The lower the pH of the soil, the more phosphorus is bound to aluminum and iron and thus unavailable for plant uptake since it is not available in the soil solution. But if soil pH is too high then phosphorus will bind with calcium, with the same result. The goal is to aim for that sweet spot of pH 6.0-7.0.

To throw a wrench in this, is *continued on page 12*



The relation between soil pH and the relative availability of plant nutrients in mineral soils. The wider the bar, the greater the soil availability.

Northeast Dairy Business Innovation Center Receives \$6.1 Million in Third Round of Funding

Investments in innovative projects and business grants planned for 2022

By Ollie Cultrara, VT
Agency of Agriculture, Food &
Markets

The Northeast Dairy Business Innovation Center (NE-DBIC), hosted by the Vermont Agency of Agriculture, Food & Markets, announces the center's third round of funding through the USDA Dairy Business Innovation Initiatives (DBII) program. The \$6,133,333 award allows the NE-DBIC, established in 2019, to continue investing in projects that advance the regional dairy industry through at least 2024.

The NE-DBIC takes a targeted and intentional approach to supporting community- and climate-forward dairy production across

the ten-state region served by this center. Farmers and processors will continue to directly benefit from opportunities through a combination of direct technical and business assistance, education, access to resources, and grants. Over half of total grant funds in this round are allocated for innovation – bringing emerging ideas and strategies into the mainstream and making them accessible to farmers and processors at all scales across the region. Grants to dairy businesses in 2022 will focus on marketing and branding, food safety, grazing



and alternative management systems, agritourism, on-farm and processor innovation, and sustainable packaging innovation.

These grant opportunities will build on research and development currently underway through the NE-DBIC. Using this additional funding, NE-DBIC will advance its strategic and cohesive approach to positioning the Northeast as the leading producer of dairy products that support rural communities, climate resilience, and long-term industry success.

"At the NE-DBIC we

prioritize projects that have clear impacts on dairy resilience, adaptability, and continuous improvement by making catalytic investments in projects that develop stronger systems and relationships," said Laura

Ginsburg, NE-DBIC Center Lead. The NE-DBIC serves all New England states, Delaware, New Jersey, New York, and Pennsylvania.

For more information, visit agriculture.vermont.gov/dbic

Dairy Food Safety & Certification Grant Open Now

The Northeast Dairy Business Innovation Center (NE-DBIC) is accepting applications for the Dairy Food Safety & Certification Grant Program until February 3, 2022. This funding is available to help dairy producers and processors increase food safety standards and meet audit requirements to sell into certain markets.

Eligible projects may include technical assistance, audits, plan writing, and infrastructure upgrades. For more information, visit agriculture.vermont.gov/dbic/activities/dairy-food-safety-certification-grant, email kathryn.donovan@vermont.gov, or call (802) 585-4571.

VHCB Water Quality Grants Available for Vermont Farms

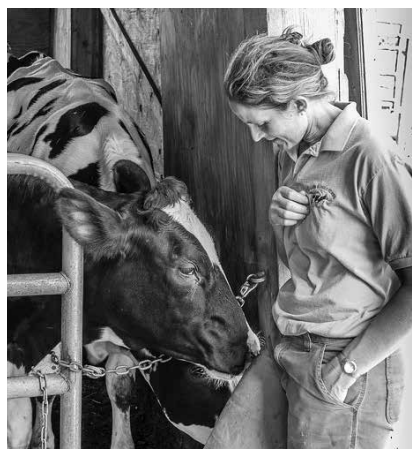
Currently accepting applications for up to \$40,000

The Vermont Farm & Forest Viability Program, a program of the Vermont Housing & Conservation Board, has grant funds available for on-farm capital improvement projects that have a positive impact on water quality. Eligible farmers can apply for a Water Quality Grant, which provides \$5,000 to \$40,000 in funding. Applications are due by January 21, 2022. More information, eligibility requirements, and web-based applications are

available on the Vermont Farm & Forest Viability Program Website at: <https://vhcb.org/WQG>. Viability staff will be available to

answer questions at a virtual informational session on Wednesday, January 12th from 4pm-6pm.

Water Quality Grants



Peter Guman Photography

Renee and Chet Baker own and operate a first-generation dairy farm in Albany, VT, providing milk to the award-winning Jasper Hill Creamery. In 2019 the pair received a VHCB Water Quality Grant for \$35,359 to build a new concrete manure stacking pad.

help farmers make capital improvements that enhance manure management and soil health, reduce runoff, and ultimately support the long-term success of farm enterprises. Construction, renovation, long-term infrastructure, and in some cases, equipment projects are eligible. The grants assist with the costs of improvements required to comply with regulations and are designed to complement existing federal & state programs. These grants are funded by the State of

Vermont through Vermont's Capital Construction and State Bonding Act.

For questions regarding this grant opportunity, please contact: Aaron Guman at Aaron@vhcb.org or 802-828-5587.

The Vermont Farm & Forest Viability Program provides business planning, technical assistance, and ownership transfer planning to farm, food and forest products businesses. For more information about the Viability Program, please visit www.vhcb.org/viability.

Announcing Goat & Sheep Dairy Supply Chain Grant Awards

By Ollie Cultrara, VT
Agency of Agriculture, Food & Markets

The Northeast Dairy Business Innovation Center (NE-DBIC) is pleased to announce the award of Goat & Sheep Dairy Supply Chain Grants to six dairy businesses in Vermont and New Jersey. The funds will support a variety of projects aimed at improving goat and sheep dairy supply chains. Five grantees are located in Vermont:

- **Ayers Brook Goat Dairy, LLC of Randolph** will increase herd productivity through genetic herd improvements and sales of bucklings and semen



A selection of Vermont Shepherd cheeses produced on the family farm in Westminster West, Vermont. Photo courtesy of Vermont Shepherd.

with proven genetics throughout the region. These efforts will bolster the genetic foundation

of dairy goat herds at farms throughout New England to support competitiveness and profitability of the

regional goat dairy industry.

- **Boston Post Dairy, LLC of Enosburg Falls** will invest in key systems and equipment to increase production efficiencies and expand product line availability to existing and prospective retail accounts.
- **Iu-lu Artisan Ice Cream (Harmack LLC) of Vergennes** will conduct research and development of new value-added lines of goat and/or sheep milk ice cream to address a niche market opportunity.
- **Tups Crossing Farm LLC of Orwell, VT** will

purchase equipment to improve operational efficiencies and milk quality to help meet demand for local fluid goat milk by Vermont Creamery.

- **Vermont Shepherd LLC of Putney, VT** will increase the genetic capacity of dairy sheep in Vermont and provide an education series to potential and existing sheep dairy farmers.

The sixth grant recipient is Misty Meadows Sheep Dairy of Woodbine, New Jersey. For more information, visit agriculture.vermont.gov/dbic/activities/goat-sheep-dairy-supply-chain-grant

Vermont Shepherd Sheep Dairy Workshop Series

By Rebecca Dixon, Vermont Shepherd

Are you interested in starting or improving your flock of dairy sheep? Vermont Shepherd, one of the country's oldest and most well-known sheep dairies, invites you to a series of 5 workshops in which we will explore how to successfully raise and farm dairy sheep in the northeast. With our collected knowledge of over 30 years in this industry and the help of additional experts, you will learn from start to finish how to begin a new

venture or improve upon and innovate your existing sheep dairy business.

This free workshop series is made possible by a Goat & Sheep Dairy Supply Chain



David and Yesenia Lelpi Major of Vermont Shepherd with some of their flock. Photo courtesy of Vermont Shepherd.

Grant from the Northeast Dairy Business Innovation Center. The series consists of five workshops:

- Lambing for Dairy Sheep (March 2022)

- Milking (May 2022)
- Pasture and Animal Management for Sheep Dairies (July 2022)
- Sheep Health for Dairy Farms (August 2022)
- Final Products (October 2022)

Each of these workshops will include hands-on experiences and opportunities for your questions to be answered. We've learned a lot about what works running a sheep farm and dairy (and what doesn't!) and we're excited to be able to share this knowledge with you. We hope to see you there!

For full workshop descriptions and more information visit <https://vermontshepherd.com/2022-dairy-sheep-workshop-series/>



Vermont Shepherd sheep dogs Joni and Cookie walk the sheep up after milking. Photo courtesy of Vermont Shepherd.

Eye on *E. coli*

Understanding pathogens of concern for fruit and vegetable farms

By Ollie Cultrara, VT
Agency of Agriculture, Food & Markets

What do you think when you hear the phrase “produce safety”? You may have seen headlines about foodborne illness outbreaks, such as the recent outbreaks of *E. coli* linked to baby spinach or Salmonella linked to onions. Because many fruits and vegetables are commonly eaten raw, we can’t rely on cooking to kill any harmful bacteria, viruses, or parasites that may be hitching a ride on our produce. Here in the Agency’s Produce Program, when we say “produce safety,” we mean protecting fresh fruits and vegetables from becoming contaminated with pathogens that can get people sick.

Pathogens are tricky! They’re too small to see, and contaminated produce won’t necessarily look spoiled. Understanding the pathogens we’re most concerned about—where they come from, the environments they thrive in, and how they spread—is key to preventing contamination from happening in the first place. Let’s look at one category of pathogens that is a culprit in some foodborne illness outbreaks: *Escherichia coli* (*E. coli*) bacteria.

What’s at stake

While most of the over 700 species of *E. coli* bacteria live harmoniously in human or animal guts,



certain types of *E. coli*, like *E. coli* O157:H7, can make people sick. Symptoms of a pathogenic (disease-causing) *E. coli* infection can include diarrhea, stomach cramps, fever, nausea, or vomiting. In severe cases, infection can cause life-threatening or chronic conditions. Young children, older adults, and people who are pregnant or immunocompromised are at the highest risk for severe illness or death from foodborne pathogens, but anyone can become sick from contaminated food.

How it spreads

Pathogenic *E. coli* can live in the intestines and spread through the feces of ruminants, such as cattle, goats, sheep, or deer, as well as humans. Pigs and birds can spread it, too. Soil, water, worker hands or clothing, tools, and other food contact surfaces can all be routes of cross-contamination if they come in contact with feces. Factors to consider when assessing risks of *E. coli* contamination in fruit and vegetable production include livestock and wildlife activity, adjacent and upstream land uses, manure and compost storage, agricultural water quality, worker hygiene, and

sanitation.

E. coli O157:H7 can survive in environments with or without oxygen in temperatures from 45 to 121 degrees Fahrenheit. While these bacteria thrive in warm, damp, and dark environments, they can survive in dust, soil, sediment, or water for weeks or months.

Reducing risks

Farms are open, biodiverse environments where microorganisms are present. While biological risks can’t be eliminated, they can be managed. When it comes to *E. coli*, it boils down to keeping poop off of produce! Good agricultural practices to reduce the risk of produce becoming contaminated with pathogenic *E. coli* include:

- Understanding and protecting the quality of water used on produce
 - Avoiding harvest of produce with visible animal damage or feces
 - Reinforcing good health and hygiene practices, including regular hand-washing
 - Routinely cleaning, and when appropriate, sanitizing, food contact surfaces
- Bacteria need food (like sugars from fruits or vegetables), moisture, and the right temperature range to grow and divide. In the wash/pack area, spaces where water and organic debris collect are important to clean regularly to avoid allowing these “harborage points” to become

environments where bacteria can survive and multiply.

Next steps

The Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR) is a federal regulation that aims to prevent foodborne illnesses related to fresh fruits and vegetables. The PSR sets a science-based, national standard for safely growing, harvesting, packing and holding produce on farms. The rule focuses on microbial contamination risks – conditions that could

spread harmful pathogens to produce.

Whether or not your farm is subject to inspection under the PSR, the Vermont Agency of Agriculture’s Produce Program can help you implement practices to protect food safety on your farm. Contact the Vermont Produce Program at AGR.FSMA@vermont.gov, or (802) 461-5128. For more information and references for this article, visit agriculture.vermont.gov/produceprogram.

AgroForestry Grants Available

By Interlace Commons

Interlace Commons seeks farms and institutions interested in developing alley cropping, forest farming, and silvopasture. Farms will receive two years of free technical services and a robust planting budget. Farms must be located in the following states: Connecticut, Maine, Massachusetts, New Hampshire, eastern New York, northern Pennsylvania, Rhode Island, and Vermont.

If your organization or farmer constituents are interested in applying, please email meghan.giroux@gmail.com by email by January 30th, 2021.

The purpose of this project is to improve agroforestry technical assistance for forest farming, alley cropping, and silvopasture to meet the growing support needs of farmers seeking to adopt these practices. Agroforestry has tremendous potential to reduce greenhouse gases, improve biodiversity, increase yield and crop diversity, enhance food access, and much more. However, farmers consistently face a critical lack of agroforestry technical assistance throughout the U.S., which hinders adoption. To increase agroforestry adoption, project partners will combine collective expertise to implement a Train the Trainer (TtT) model that provides agroforestry education and builds a network of agricultural technical service providers (TSPs). This model will include an online course for virtual learning throughout the U.S. and

continued on page 14

Getting What You Pay For

By Dwight Brunette, VT
Agency of Agriculture, Food & Markets

New homes benefit from newer construction techniques and materials that make them more efficient; however, for many Vermonters living in older less efficient homes, using more energy is the only way to maintain reasonable indoor temperatures in the winter. For many, this means relying on heating oil, and lots of it! Generating heat and hot water is especially tough on Vermont's vulnerable citizens who may be living on a fixed income. For Vermonters, oil delivery trucks are a common sight on our roadways, especially during the winter months. Traveling between houses, businesses, and farms, these specialized fuel trucks distribute home heating oil, kerosene, gasoline and diesel, depending on the need of the consumer.

How can you, as a Vermont consumer, be sure that you are getting what you pay for even when you may not be present for your



Weights & Measures 100-Gallon Testing Unit (Prover)

fuel delivery? The Agency of Agriculture's Weights and Measures (W&M) specialists provide an essential service to Vermonters! We ensure, through yearly inspections and testing, that the oil delivery trucks, equipment and operators are delivering what the consumers are paying for. Vermont Law requires fuel businesses to deliver products accurately to consumers. Home heating fuel dealers ensure accuracy by utilizing metering systems similar to gas pumps used to fuel our vehicles. Home heating fuel delivery systems must be maintained and checked periodically to ensure accuracy. Vermont W&M specialists use a clever but simple device called a "prover" to test the accuracy of the delivery system.

A "prover" is a specially designed, calibrated, stainless steel container made for testing liquids. The standard prover used to test oil product delivery trucks has a 100-gallon test volume. To begin the test, the W&M specialist starts the meter at zero and then fills the prover to the volume to be tested. When testing oil delivery trucks, the standard is a 100-gallon draft. The specialist fills the prover until the display on the delivery truck meter reads 100 gallons, checks the volume delivered by reading markings on a glass tube called the 'sight-



Vehicle Tank Meter used for commercial fuel deliveries.

glass', and records the result. If you remember high school chemistry, the sight glass looks like a typical graduated cylinder and is read much the same way. The markings are in 5-cubic inch volume divisions.

After reading the prover, the specialist determines whether the results are within the tolerance for delivery for a Vehicle Tank Meter (VTM). The tolerance is the allowable amount a delivery can vary from the exact reading on the testing device (prover). The tolerance allowed for a VTM is adopted by The National Conference on Weights & Measures and published by the National Institute of Standards and Technology (NIST). Vermont adopts these regulations and tolerances for regulatory purposes. In the case of a 100-gallon fuel oil test, the tolerance is 69.3 cubic inches, plus or minus from 100 gallons delivered. There are 23099.93 cubic inches in 100 gallons (US). This allowable error is 0.3%, which is extremely small and imparts little economic impact on either the device owner or the consumer. It



Inspector Dwight Brunette testing a Vehicle Tank Meter in the early morning hours.

also indicates how incredibly accurate a meter can be!

Even though VTMs can be very accurate in design and in testing, other steps in the fuel delivery process can make a delivery inaccurate. Faulty hoses and nozzles, malalignment of display numbers, failure to start the delivery on zero and/or maintain the proper delivery volume and pressure, inadequate maintenance or mechanical problems, and other operator error can lead to inaccurate deliveries. During an inspection, the W&M specialist monitors the operator using the

delivery equipment to identify and troubleshoot issues. The specialist's ability to identify problems and explain them to the operator helps to ensure deficiencies are remedied. If left uncorrected, these issues could lead to injury, spills, improper delivery, or loss to the business or consumer.

The VTM inspection is a process with many parts, some human and some mechanical, but this specialized inspection helps ensure operator safety and benefits the consumer by ensuring you get what you pay for!

Subscribe to Field Notes!

A quarterly newsletter from the Vermont Agency of Agriculture, Food & Markets' Food Safety and Consumer Protection Division

If you eat food or purchase commodities at retail in Vermont, you will benefit from quarterly updates from the Agency's Food Safety and Consumer Protection Division, comprising the Dairy, Animal Health, Meat Inspection, Weights and Measures, and Agricultural Products Sections. Get a glimpse into how this specialized team ensures safe food and fair markets for all Vermonters! To subscribe, visit here: <https://vermont.us7.list-manage.com/subscribe?u=7858fdf10d2a4e7ed78a12245&id=6612b3a6ff>

VERMONT AGRICULTURE & FOOD SYSTEM PLAN 2021 – 2030:

Bread

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>

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Bakery; Charlie Emmers,

Patchwork Bakery;

Jim Williams, Backdoor

Bread; Susan Slomin,

Green Rabbit Bakery;

Lisa Lorimer, formerly of

Vermont Bread Company.

What's At Stake?

Vermont is well-known for its bakeries, from artisanal bakeries to nationally distributed brands. Finding locally grown grains that are suitable for making good bread has been a long-term challenge for Vermont's bakers.

Current Conditions

Vermont's small bread bakers sell products through



food co-ops, independent retailers, and farmers markets, and to cafés and restaurants. Larger bread companies' primary markets are regional major metropolitan areas. Consolidation in the distribution and grocery sectors has made it difficult to operate successfully as a mid-sized bakery, as access to national grocery chains necessitates a certain scale, leading Vermont's bakers to either scale up to national sales or remain at a smaller scale and mostly distribute in-state.

While Vermont bakers wish to purchase local ingredients, local wheat faces barriers to bakery sales. It can be difficult for small-scale farmers to get access to the same resources that are available to large grain producers (see Food-Grade Grains brief). These challenges extend from

the fieldright through to storage, cleaning, and milling, as well as competing against commodity prices. Bakers are thus more likely to purchase honey, maple syrup, barley malt, or nonwheat grains from local producers.

While Vermont's bakers purchase far more wheat than any other grain, many small bakers are interested in purchasing local, non-wheat grains, are willing to pay a premium for them, and would need relatively small amounts, ranging from one to eight tons annually. Bakers are also interested in processed products such as malted barley.

With specialty grains that are added in small quantities primarily for flavor purposes, the farmer is not subjected to the challenges and costly testing involved in growing a quality wheat crop.

By growing specialty grain crops, or selling non-grain inputs to bakeries, our local farmers can focus on what makes other local foods superior: flavor. They also enter a market that demands neither large quantities nor globally competitive prices.

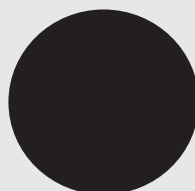
Bottlenecks & Gaps

- The state's few grain farmers are focused primarily on wheat, with a few growing rye and corn, but it is not easy for a small grain grower to produce wheat of the quality and low price that bakers have come to expect from the commodity market.
- Non-wheat grains of interest to bakers are only sparsely available from Vermont sources, if they are available at all.
- Lack of grain aggregation, processing, and quality-testing infrastructure limits growers' access to bread makers, and creates inefficiencies and uncertainty for bread makers interested in purchasing local grain products.
- The quality of each crop of wheat can vary widely depending on the variety grown, annual weather patterns, and soil conditions. These quality differences are not apparent without sending the wheat off to be tested. What may appear to be a good crop of wheat could in fact be of limited or no use to commercial bakers.

Opportunities

- Vermont's bread bakers and farmers are innovative, unafraid to take risks and experiment.
- The potential market that non-wheat grains represent for the state's farmers is small, but the prices that most small bakers would be able to pay for non-wheat grains is significantly higher than they would pay for wheat.
- Value-added products such as malted barley would be attractive to bakers and provide a higher price point to growers.
- Processing does not need to be a prerequisite for selling grain to small bakers, as many of them have small grain mills.
- Demand for small quantities of specialty grains in the state and potential growth in demand for these grains in the future, whether wheat or otherwise, gives Vermont farmers new market opportunities and can create more diverse crop rotations beneficial to soil and water quality.

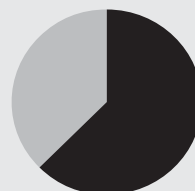
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In a survey of eight Vermont bread bakers...

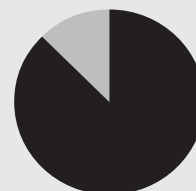
All eight indicated they would use more locally or regionally grown grain if they were able.



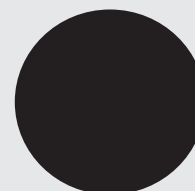
Seven indicated that they would pay between 20% to 40% more for local grains than for equivalent grains from a non-regional source.



Five have their own processing equipment on site.



Seven would like to find local grains other than wheat and rye, including emmer, einkorn, spelt, Kamut, corn, oats, and barley.



All eight are only interested in using organically grown grains.



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KEVIN CHANNELL Kevin@farmandforestservices.com
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Email: 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

Black Angus heifers and bull calves for sale. Contact 802-558-8196 for more information. (10)

Organic grass-fed Jersey fresh or springing cows or heifers wanted. 802-645-0865 (10)

14 bred Holstein heifers. Call Wayne (802) 285-6383 (11)

Equipment

Potato planter – Spedo “Baby” Automatic potato planter, new in 2016, 5 acres of use. Great shape, Always under cover. Spedo Potato Digger for 25 hp or less, new in 2016, 5 acres of use. Excellent condition, always under cover. Both pieces can be viewed on video at OESCOinc.com Sold as a pair only \$4600, 20% off price of new. Sprayer – Rears Pak Tank, 100 gallon, boom covers 10 feet, diaphragm pump, high pressure hand-held hose for spraying trees. Excellent condition, rebuilt in 2016 by Orchard Equipment and Supply, less than 10 acres use. Price – \$2400, 20% off purchase price. Charlie Siegchrist - 802-878-2607 or siegchristbarberfarm@gmail.com (10)

Ford L 8000 tandem dump truck 19ft rack. Hyd dump with tail gate, electric automatic crood tires and body. New batteries 213,000 miles, \$17,500. 802-265-4589 (11)

John Deere Harrows 10ft, 30ft hay elevator good shape, 24ft hay elevator, 2 furrow plows, 3 furrow plows, 285 oliver spreader, 19 ton grain bin, 11 ton grain bin, 7 ft blade also I fix grain bin all over Vermont. 802-624-0143 or 802-895-4683 (11)

General

High tunnel greenhouse assembly & maintenance: ledgewood, harnois, rimol and more. Complete assembly, end wall construction, poly installation, renovation, and repairs. Experienced and professional. Plan ahead! Get in touch now to get on the 2022 schedule. Contact Mike Feiner at feinervt@gmail.com, www.vineripe.net, (802) 498-8031.

Hay, Feed & Forage

Excellent quality first cut wrapped round bales; baleage. Shelburne VT Call Andy 802-598-6060. Analysis available upon request.

Organic haylage 12% protein \$45 per ton, 15% protein \$55 per ton. 802-537-2435

4x4 round balage mixed grains cut late June. \$30 802-325-3707

1st cut 4x5 round bales. Don Pettis, 802-265-4566.

Certified Organic First Cut Wrapped Round Bales for sale. Clover, Timothy and mixed grasses. Test samples and delivery available. Call Matt 802-558-3879.

Vetch & rye seeds for sale, mixed in 50 lb. bags, \$1/lb. certified by Vermont Organic Farmers. Thornhill Farm, 198 Taylor Road, Greensboro Bend, VT 05842, todd@thornhillfarmvermont.com, 802-441-3176

2021 First cut \$4.00 at barn in Ryegate. Call Steve 802-584-4450

Hay for sale: 1st cut organic round bales. Randolph Center. Call John at 522-8798

Certified organic first cut wrapped round bales for sale – cut by mid June, good sized and well made. Asking \$50/each with 200 bales available. Beidler Family Farm, Randolph Center Contact: 802-728-5601 or brentbeidler@gmail.com.

Excellent quality first, second, and third cut wrapped round bales for sale. First cut by June 1, dry. \$50.00/bale Please call 802-454-7198

1st, 2nd & 3rd cut haylage and corn silage for sale at the bunk. Call Peter Gebbie 802-533-2984, leave a message

Dry 2nd Cut Hay For Sale 5' round bales, avg. 750 lbs, \$100/bale- Craftsbury, VT 802-624-0539

Certified organic 4x4 round bales for sale. First cut 45.00, second and third 55.00. 802-793-7526

Excellent quality wrapped round bales for sale. \$50/bale. No emails. Please call 802-454-7198

1st Cut 4 x 4 Wrapped round bales \$45/bale Call Tom at 802-457-5834

1st, 2nd & 3rd cut round bales. 2nd cut square bales - \$6.00 per bale. Volume discount for square and round bales. Please call Chris 802-272-0548.

ADDISON COUNTY

1st cut 4x5 round bales never wet. Good horse & cow hay. 802-948-2627 or 802-558-0166

Certified organic, small square bales always stacked and stored under cover, 35-40lbs/bale. \$4/bale, discounts available for large quantities. 802-989-0781 for inquiries.

Hay for Sale in Addison, VT. Large square bales and small squares. \$50-60 for Large, \$3.50-4.50 for Small. Delivery Available. Call Jack 802-989-8968

Hay for sale. \$3.25 bale. 802-377-5455



1st cut 5ft diameter round bales. \$30-\$35 Orwell 802-948-2211

Straw for sale - \$7/bale for 50 or more. \$8/bale for less than 50, \$6/bale for all in the barn, approx. 350. from our winter rye harvest in August. certified organic. Thornhill Farm, Greensboro Bend, 05842, todd@thornhillfarmvermont.com, 802.441.3176

Hay for Sale, Cows have been sold. 750 Lb 4X5 round bales stored inside or tube wrapped.

Bedding/Mulch \$35 Heifer/ Beef \$40 Dairy \$55 I will load your truck. In Whiting Call 802-623-6584

Large organic round bales good heifer/dry cow hay \$45/bale call 802-948-2382 evenings

BENNINGTON COUNTY

Corn Silage 1000 ton plus. Haylage 500 ton plus. Round bales 4x4. Square bales small. 802-394-2976

CALEDONIA COUNTY

Square baled hay- Top quality, VOF certified organic, generous sized. 1st cut \$4.50/bale, 2nd cut \$5.50/bale at the barn in Barnet. 802-592-3088

CHITTENDEN COUNTY

Round bales for horses. Clean first cut timothy mixed grass, quality net wrapped 4' X 5' bales. Never wet. \$45. each. 802- 879-0391 Westford.

15 large 5x5 round bales mixed grass w/some timothy + clover 800+lbs \$50 each. Call 899-4126

FRANKLIN COUNTY

Good Quality Hay 1c & 2c from western US & Canada. Alfalfa orchard & orchard sweet grass 18 to 20% plus protein large bales & organic by trailer loads. Large or small square bales of straw whole or processed at farm we load on direct delivery by trailer load. Mountain View Dairy Farm 802-849-6266

Excellent 2021 1st cut hay wrapped round bales for sale. Call Wayne (802) 285-6383

LAMOILLE COUNTY

Organic baled straw. \$5.50/bale. Organic First Cut Hay. \$5.00/bale. Certified Organic. Valley Dream Farm, Cambridge. 802-644-6598. valleydreamfarm@gmail.com.

ORLEANS COUNTY

Pure alfalfa for sale and also 1st, 2nd and 3rd cut big/small squares, round bales, wrapped or unwrapped, straw and switch grass. Call Richard at 802-323-3275.

Organic Certified Silage for Sale: We will deliver from our farm or you can come and pick up. Call for prices and delivery charge. 1-802-744-2444 or 802-274-4934 or 802-744-6553.

North Troy- Good quality certified organic large round bales, some dry and some wrapped and 9x200 ft ag bags fo haylage. Also conventional large round bales and 9x200ag bags of haylage. Delivery available 802-988-2959 or 802-274-2832

RUTLAND COUNTY

Good quality 1st and 2nd round bales available, wrapped and dried. Please call 802-446-2435.

WASHINGTON COUNTY

200-4x4 round bales 1st & 2nd cut \$45 each. 802-229-9871

WINDHAM COUNTY

1st cut hay. Good horse hay. \$4.50 bale 802-254-5069

WINDSOR COUNTY

Hay for sale-400 square bales, Reading, Windsor County Vt. \$3.50 per bale at the

CLASSIFIEDS

barn. Call 802-484-7240
4x5 dry round bales \$45.00
delivery available. 802-457-
1376

Rolling Meadows Farm: square
bales in the field or barn
\$4.00. Delivery can be
arranged at \$5.50. Very nice
hay from fertilized fields in

the South Woodstock and
Reading area. Call 802-484-
5540 or goodfarmvt@gmail.
com. Ask for David.

1st. cut dry round bales for
sale. Never been rained on,
stored under cover. \$50. @
1st. cut haylage bales for sale.
\$45. Rte. 5 Weathersfield
Bow 802 -546-4340.

Dry Round Horse Hay, \$50/
Bale. 200 Bales left. Call
802-356-5030.

Poultry

Young Rhode Island Red laying
hens for sales -- Just starting
to lay, raised on pasture with
continuous fresh grass, clean
water and organic grain. Sold
for the special price of \$18

each in groups of 5 birds
or more. Royalton, VT Call
Jinny 802 763 7296 (10)

Swine

Four piglets wormed, cut and
ironed. Born June 25,2021
Asking \$70.00 each Call
603-256-8422 (11)

Wanted

Wanted: caretaker for "hobby"
horse farm in the Upper
Valley of Vermont, Wood-
stock area. Onsite housing
provided. Part time light
duties are perfect for retired
person or couple. Mail
inquiries to wrbfarm1@aol.
com. References required. (11)

Bread

continued from page 10

Recommendations

- Increase funding for research to identify marketable grains that grow well in Vermont, such as barley, spelt, and heirloom wheat varieties. With climate change and ever more unpredictable weather and seasonal patterns, creating new varieties and production strategies that can be resilient in Vermont will become of even greater

importance than it is now.
Cost: \$75,000 per year.

- Develop regional market connections and a marketing mechanism for Vermont grain products, particularly specialty grains. Provide funding for the Northern Grain Growers Association to develop a marketing program for Vermont grain farmers which highlights product quality. Convene interested stakeholders (UVM Extension, nonprofits, government agencies, producer groups, buyers)

to facilitate purchasing relationships between producers and bakeries. Cost: \$25,000 per year.

- Create a Vermont grains processing center, which could control the quality of grain through consistent cleaning, drying, milling, processing, and storing. This center would encourage more working lands to transition to grains and have a multitude of benefits, including job creation, market security, and opportunities for value-added processing.

It would also increase the reliability of grain quality for buyers, mitigating the risk to bakers of quality inconsistencies, and boosting the potential monetary value for farmers.

- Increase funding for technical assistance. Farmers and grain-related businesses have technical assistance requirements that are not always readily available in Vermont. Building connections through UVM Extension and the Northern Grain

Growers Association to increase technical assistance availability would improve grain quantity and quality. Cost: 1 FTE at UVM Extension, \$100,000 per year.

- Explore and develop organic transition programs, modeled after similar programs developed by La Milanais and Kashi, in collaboration with larger commercial processors selling baking flour, such as King Arthur Flour, Champlain Valley Milling and Maine Grains.

Phosphorus

continued from page 1

farms and their management data to research the accuracy and potential of this program. This initial research initiative was supported by a Conservation Innovation Grant from Vermont Natural Resources Conservation Service (NRCS). The full Vermont Pay for Phosphorus program is supported by a \$7 million grant award from the national USDA NRCS through the Regional Conservation Partnership Program (RCPP) Alternative Funding Arrangement (RCPP-AFA), under Supplemental Agreement number 2145-A-0368.

Interested applicants should understand that the Vermont Pay for Phosphorus program relies heavily

on farm management information, including crop rotation, manure application, and field practice implementation records, in addition to a complete and up to date NMP necessary for enrollment. Enrolled farms will commit to keeping detailed, accurate, and legible records of this information, with support from technical assistance providers. As this program is USDA-funded, all information provided by agricultural landowners and producers in order to participate is prohibited to be disclosed except as necessary for delivering technical assistance.

To learn more about the Vermont Pay for Phosphorus program or apply, visit: <https://agriculture.vermont.gov/VPFP>. Applications are due January 31.

Soil pH

continued from page 5

that pesky aluminum ion. Fields with a pH between 6.0 and 7.0 but with a high aluminum content will likely require a higher phosphorous application for plant available phosphorous. This was the case for the soil tests shown in the November article.

Given the ridiculously low milk prices, and the increasing expense of everything, instead of purchasing more phosphorus fertilizer the farm with those high Al soil tests is going to concentrate on increasing their soil pH to 7-7.3 to not only free up some of that bound phosphorus but to also allow the phosphorous that they are applying to be more readily available to the plants.

The takeaway from all of this is, know both your soil

pH and your soil nutrients before spending your hard-earned money on fertilizer.

For more information

please contact Jennifer Alexander by email Jennifer@pmnrco.org or by phone 802-558-6470.

Certified Custom Applicator Operating Fees Due January 31

All owner/operators or full-time custom applicators must be certified with the Vermont Agency of Agriculture, Food & Markets (Agency) to operate within the state of Vermont. Each year operators must meet educational requirements and submit an annual operating fee of \$30.00 to maintain certification and a license. The deadline to submit this operating fee is January 31, 2022.

All companies that employ certified custom manure applicators as well as all self-employed certified custom manure applicators will receive a renewal notice and form in the mail along with information regarding each applicator's progress toward meeting educational requirements. If you should have received this mailing and did not, contact the Agency at 802.828.2431

To learn more about the Certified Custom Applicator Program, visit agriculture.vermont.gov/custom-applicator or contact Jenn LaValley at 802-828-2431.

Application for Vermont Businesses to Vend at Big E Opening in January

By Kristen Wirkkala, VT
Agency of Agriculture, Food & Markets

The Vermont Agency of Agriculture, Food & Markets welcomes applications from Vermont businesses seeking to vend at the Vermont Building at the Eastern States Exposition (Big E). The Vermont Building is one of six New England buildings on the Avenue of the States at the Big E, a 17-day fair and exposition that takes place each September in West Springfield, MA. During this event, which brings in approximately 1.5 million people each year, the Vermont Building hosts a variety of Vermont food and retail businesses, which showcase the best of what

our state has to offer.

This annual event provides a unique regional marketing opportunity to Vermont businesses, helps to elevate the Vermont brand, and supports the Vermont economy. Booth spaces are offered for

both retail and food/beverage products. There are booth spaces for the entirety of the 17-day fair, for 8–9-day rotating spots, and occasionally for 5–7 days. While most booths are inside, there are additional spaces on the

grounds for products deemed an appropriate fit.

Any business or organization will be considered that is registered with the Vermont Secretary of State, has been in business for over one year, and is in good

standing with the State of Vermont. The Agency has identified the following product priorities for the Vermont Building for 2022: (1) Products that use Vermont-sourced ingredients and/or materials; (2) savory foods that do not require fryers or grills; (3) Vermont-made accessories; (4) Vermont-made pottery; (5) hot and cold coffee to go; (6) products that align with regional/national trends.

The Request for Applications (RFA) for this opportunity will be released later this month. Visit <https://agriculture.vermont.gov/bigeventendor> for more information.

For questions regarding this opportunity, please contact Kristen Wirkkala at kristen.wirkkala@vermont.gov



Applications for Trade Show Assistance Grants Opening in January

By Kristen Wirkkala, VT
Agency of Agriculture, Food & Markets

The Vermont Agency of Agriculture, Food & Markets welcomes applications from Vermont agricultural and forestry businesses for Trade Show Assistance Grants. These grants provide businesses with funds to identify, plan, exhibit, and sell their Vermont products at out-of-state trade or virtual shows targeting out-of-

state buyers during 2022.

These matching grants can mitigate the financial risks associated with exhibiting at trade shows, which provide opportunities to network with wholesale buyers.

The Working Lands Enterprise Initiative has set aside \$30,000 to be selected through a competitive process and will support Vermont businesses to execute their yearly marketing plans through financial assistance with tradeshow expenses.

Funding may be used to reimburse up to 50% for the following approved expenses: travel; marketing assets and booth design; registration fees; booth fees; furnishings; utilities; shipping/freight; other marketing costs. This grant may fund up to five years of attendance at a single trade show. Applicants may include up to five trade shows in their yearly marketing plan, requesting between \$2,000 - \$5,000 in eligible reimbursements for the year.

Eligible applicants are

Vermont-based agricultural and forestry businesses that meet the following criteria: (1) Business is registered with the Vermont Secretary of State and has been in business for over one year with an address indicating that they perform substantial functions in Vermont; (2) Business has three or more wholesale accounts; (3) Business meets one of the following two criteria: (i) 50% or more of their product ingredients/components are from

Vermont; (ii) The product, if substantially transformed, was transformed in Vermont.

The Request for Applications (RFA) for this opportunity will be released later this month. Visit <https://agriculture.vermont.gov/grants/tradeshow> for more information.

For questions regarding this grant opportunity, please contact Kristen Wirkkala at kristen.wirkkala@vermont.gov

Takeaways: National Hemp Regulators Conference

By Hemp Program, VT
Agency of Agriculture, Food &
Markets

The Vermont Hemp Program participated in a two-day conference of national hemp regulators in November. Connecticut and North Dakota hosted the virtual conference, multiple states helped organize seven sessions exploring many topics including the potential of hemp as an animal feed, hemp testing methods and how to establish “dry weight basis” when measuring potency. There were discussions on the differences between state level hemp program policy and included updates from federal regulators and programs. The session coordinated by Maine and Vermont focused on USDA’s final rule and the flexibility offered with performance-based sampling, sample methods for remediated crops, and requirements for using sampling agents and USDA’s training.

On the first day of the conference, Bill Richmond, USDA Hemp Program Chief, emphasized that next year brings about change on how hemp cultivation is regulated nationally with the repeal of the 2014 Farm Bill Hemp Pilot program authorization and the implementation of USDA’s final rule. Absent legal change, hemp growers will register under a State plan approved by USDA. Or, in the absence of an approved State plan, with USDA, directly. Mr. Richmond



shared the launch of Hemp eManagement Platform (HeMP). HeMP is USDA’s online system to manage information from Domestic Hemp Production Program participants, which includes state and tribal regulators, laboratories testing hemp crops, and growers regulated by USDA. These participants will use the online platform to submit testing results, required reports and other program information to USDA. It also includes a portal for law enforcement officials to search for hemp licensee/registrant information and detailed maps of where hemp is being grown based on lot level data from Farm Service Agency (FSA). More information can be found here, <https://www.ams.usda.gov/rules-regulations/hemp/hemp-emanagement-platform>.

The FSA as noted above has a key role in the Domestic Hemp Production Program. Devon Marsden from FSA explained the requirements for all growers, this includes producers of hemp for personal use, to establish farm records, and

to report hemp crops and field locations in 2022. Here is guidance on the hemp acreage reporting procedure for growers, https://www.fsa.usda.gov/Internet/FSA_Notice/cp_765.pdf. The Vermont Hemp Program encourages its growers to contact their local FSA office, <https://offices.sc.egov.usda.gov/locator/app?state=vt&agency=fsa>, to get a head start on this process.

The second day started with a discussion about hemp variety trials conducted by researchers at the University of Tennessee and their associated agricultural extension service, North Dakota State University, and Arizona Ag Improvement. Researchers conducted trials to study the genetic stability in cultivars over time, and the efficacy of different products used to control pathogens such as powdery mildew, among other topics. Some interesting highlights include a variety trial that found higher nitrogen application rates were linked to higher pre-harvest CBD concentrations. A different

study showed that some approved products for pathogen control proved to be ineffective when crops experienced prolonged rainy conditions. The overarching takeaway from all the research presented is consistent with what Vermont growers have been reporting anecdotally and through data gathered from record collection; more breeding work and research is needed for growers to cultivate reliable and productive crops.

Jessica Burgess of the Massachusetts Hemp Program, and Cort Jensen of the Montana Hemp Program, discussed the differences and similarities between their hemp programs and the challenges they face. Mr. Jensen highlighted that the use of certified sampling agents for the purposes of pre-harvest sampling is proving to be challenging for growers in his state, due to the distances between most growers. This makes using sampling agents either unaffordable

for growers, or uneconomical for sampling agents. They also talked about how each state regulates hemp and recreational high THC cannabis. Ms. Burgess explained that high THC cannabis is not considered an agricultural commodity in MA, and is therefore regulated under a different program, but there is some crossover. The Hemp Program in MA is currently adopting rules to allow for hemp products to be sold in the commercial cannabis market. A consistent theme throughout this discussion was how USDA’s final rule governing hemp production is affecting states in different ways. In Vermont for example, in 2022, in addition to being required to work with FSA, growers will be required to use certified sampling agents to take pre-harvest samples. More information regarding sampling agents can be found here, <https://www.ams.usda.gov/rules-regulations/hemp/information-sampling>.

AgroForestry Grants

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regional in-person training at demonstration sites in the Midwest (MW), Northeast (NE), and Southeast (SE). Focus practices will include forest farming, alley cropping, and silvopasture initially, with room for expansion to other agroforestry practices over time. Training will be available to public, private, and non-profit TSPs, and farmers interested in implementing agroforestry practices. Intentional justice, equity, diversity, and inclusion (JEDI) efforts will be made to engage people from diverse communities, including BIPOC, LGBTQA+, economically distressed, and other underserved populations.

Live Webinar Series on Farm Succession and Transfer Starting January 26th

By Mike Ghia, VT Farm Viability Program

What is the future of your farm? If you are like most farmers, you are so busy with the day-to-day business of farming you find it difficult to take the time to plan ahead long-term, particularly planning for a transition from one generation to the next. It can be especially challenging during times of financial uncertainty. And it can be difficult if there is not someone immediately lined up to take over the farm. At the same time, you probably have hopes for the future of your farm, and have thought some about what you would like to happen to your

business and your land. With sound succession planning with concrete action steps, it is more likely that the goals and desires of all the generations involved can be met, and there is a greater likelihood that the farm will stay in farming.

The "Farm Succession Planning Webinar Series" is for farmers to learn about key issues, tools and resources to help them make informed decisions and take action steps towards transferring their farm to the next generation of their family or a non-family successor. Farmers will learn from professionals who can help in the process and from other farmers. Topics include retirement, financial, and estate planning, taxes, legal

entities, and determining goals for retirement, business transitions, and your land. All generations, including family and non-family members, who may play a role in your farms future are encouraged

to attend.

This series is organized by Land For Good, in partnership with the Vermont Housing & Conservation Board and will be held on four successive

Wednesdays from 11 am - 1 pm starting January 26th.

For more info and to register, visit Farm Succession Webinar Series or call 603-357-1600.

Upcoming Grant Opportunities

The Agency of Agriculture, Food & Markets is pleased to be able to help you identify upcoming grant opportunities. Please 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
(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.

Kaitlin Hayes
Kaitlin.Hayes@vermont.gov
(802) 622-4112

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
(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
(802) 461-3814

Phil Wilson
Phillip.Wilson@vermont.gov
(802) 505-5378

January

Community Supported Agriculture Grant
Reimbursement for 80% of the cost of community supported agriculture shares for early childcare providers.

Trevor Lowell
Trevor.Lowell@vermont.gov
(802) 585-9186

Specialty Crop Block Grant Program

Grants for collaborative projects to benefit multiple fruit, vegetable, honey, maple, hops, Christmas tree, or nursery crop producers or organizations

Gina Clithero
AGR.SpecialtyCrops@vermont.gov
(802) 585-6225

February

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
(802) 461-3814

Phil Wilson
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(802) 505-5378



Vermont Farm Bureau is a grassroots not-for-profit membership organization dedicated to supporting Vermont farm families, agriculture and forestry.

We advocate for public policies that strengthen and grow our agricultural economy and conserve our natural resources.

www.vtfb.org



Governor Scott Celebrates Vermont's Christmas Tree Industry with Annual Tree Cutting

Christmas Tree Farms Vital Part of Vermont Working Lands and State Brand

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

Governor Phil Scott and Agriculture Secretary Anson Tebbetts visited Maple Hill Farm in Barton on Monday, November 29th to celebrate the beginning of the Christmas season with the help of Vermont's farmers. The trees cut during that visit decorated the Pavilion Building in Montpelier, which houses the Governor's Office.

"As we enter the holiday season, Vermont and its people, including our farmers, offer so many reasons to celebrate," said Governor Phil Scott. "This is a time of year to take note of the good and unite around the true meaning behind each of the seasons' traditions: Togetherness, community and hope."

"We were honored to have the Governor visit our farm. This is a special time of year for us! We are so lucky to see and visit with all our friends and neighbors, all while hunting for the perfect tree,"



Stephanie and Nick Lussier of Maple Hill Farm with Governor Phil Scott.

said Nick Lussier of Maple Hill Farm, who along with his wife Stephanie, own and operate the 30-acre maple and Christmas tree farm located in the Northeast Kingdom. They also produce and handcraft pure wood-fired Vermont maple syrup, maple cream, and their signature maple seasonings and

jellies, as well as raw honey.

According to the 2017 USDA Census, there are 3,650 acres in Christmas tree production in Vermont across 70 farms with a crop worth more than \$2.6 million. Many more Vermonters bring to market Christmas trees, wreaths, garland and

other decorator items each year, according to Jim Horst of the NH/VT Christmas Tree Association. "Many trees are sold to the wholesale market for ultimate resale throughout the region," Horst said. "Others, though, are sold directly to the consumer, who enjoy the

process of actually visiting the farm and taking part in the "cut your own" experience."

"Choosing and cutting a Vermont Christmas tree is a holiday tradition. It brings families together in the Green Mountains bringing joy and happiness during this special time of year," said Secretary Tebbetts. "We are grateful for all the Christmas Tree farmers who work the land and grow such beautiful trees for us to enjoy."

Vermont holiday trees have also decorated homes in New York City, Boston and Philadelphia each year, with thousands of Green Mountain trees sold in urban pop-up markets. In addition, visitors to Vermont participate in our holiday tradition by hauling home freshly cut trees. This season, the country is experiencing a shortage of wholesale Christmas trees, but Vermont's pick-your-own crop is prepared for the season, with plenty of trees to choose from when you visit your nearest Christmas tree farm.



CSFO Reminder: Annual Certification Forms are Due January 31, 2021

Any farm that has 50 acres or more of annual crops, houses 50 or more mature dairy cows, or 75 cattle, heifers, veal calves, cow/calf pairs, or youngstock, or 40 horses, or a combination of animals with a total live weight that equals more than 90,000 pounds is a CSFO and must register annually with the Agency of Agriculture, Food and Markets.

Visit www.agriculture.vermont.gov/csfo to learn more and to fill out an online or print version of the Annual Certification Form.

