

Beech Leaf Disease: A New Pest Attacking Vermont's Forests

By Plant Health Section, VT Agency of Agriculture, Food & Markets

ince over 78% of Vermont's forested land is owned privately there is no doubt that Vermont farmers own a portion of that forested land, as a wood lot or a sugarbush. Invasive pests that impact our forests have the potential to move in firewood or in nursery stock, as well as through natural spread. One such plant pest that made its appearance last fall in two towns in southeastern Vermont is beech leaf disease. Last July, the Vermont Agency of Agriculture, Food & Markets suggested that the public "be on the look out" for beech leaf disease (BLD), which can kill all species of beech trees. This includes American beech, the only native beech to North America,



and European beech, an ornamental tree in residential landscapes and potentially used as street trees due to its majestic character. BLD is now present in all New England states and is creeping northward.



The source of BLD is a nematode, Litylenchus crenatae mccannii. As the summer progresses into fall, nematode populations present on a beech tree will increase and take up residence in leaf buds. The damage



occurs in the leaf buds and in mature leaves resulting in deformed yellowed cupping, or if more advanced leathery leaves. As the disease progresses a tree may prematurely

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AGRIVIEW

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THE VIEW FROM 116 STATE STREET

t was so gratifying to see so many Vermonters and those around the region celebrating dairy last month. The annual "June is Dairy Month" continues to deliver and so does dairy.

From the parades to the special events, it was a busy month for dairy. Governor Phil Scott issued a proclamation recognizing dairy saying ,"the state of Vermont looks to continue to honor our dairy farmers and the positive impact they have on communities within the state."

Let's look at a few of the facts on why dairy is important to Vermont and our lives. It's impressive data.

In 2023 VT cheeses received 142 domestic and international cheese awards, including:

- 51 awards at the Big E
- 44 awards at American Cheese Society







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- 24 awards at International Cheese and Dairy Contests
- 23 awards at Guild of Fine Foods World Cheese Awards

Vermont's dairy industry contributes jobs:

- 3,813 direct jobs
- 9,632 indirect jobs
- 13,400 total jobs

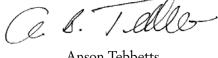
Dollars:

- \$1.6B direct economic impact
- \$2.6B indirect economic impact
 - \$4.23 billion total economic impact
- \$54.2M in exports
- \$812.3M in total wages (this includes direct, supplier, induced)

As of January 2024:

- 116,000 dairy cows
- Produce 21,675 lbs. of milk per cow
- Total milk production = 2,536,000,000 pounds

Dairy products make up nearly 60% of Vermont's agricultural economy. June may be behind us but let's keep honoring and celebrating our dairy farmers and those who make a living from dairy. It's worth celebrating every day.



Anson Tebbetts Secretary, Agency of Agriculture, Food & Markets

State of Vermont Executive Department A Proclamation

WHEREAS, with 486 total dairy farms and approximately 116,000 cows, dairy

production has contributed significantly to Vermont's unique

identity; and

WHEREAS, in 2023 alone, Vermont dairy farmers worked diligently to harvest

2,536,000,000 pounds of milk, which was used in the making of Vermont's world-class fresh cheeses, yogurts, and frozen desserts;

and

WHEREAS, the dairy industry is a major part of Vermont's workforce as it

provides over 13,000 jobs; and

WHEREAS, dairy farmer's dedication and resilience has positively impacted the

state's economy, and it has directly contributed \$1.6 billion to

Vermont's GDP; and

WHEREAS, in 2023, Vermont dairy products received 142 awards from

numerous domestic and international organizations, recognizing the

high-quality work our dairy farmers do; and

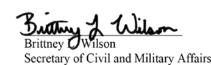
WHEREAS, this month, the state of Vermont looks to continue to honor our dairy

farmers and the positive impact they have on communities within

the state.

NOW, THEREFORE, I, Philip B. Scott, Governor, hereby proclaim the June, 2024, as





DAIRY MONTH in Vermont.

Given under my hand and the Great Seal of the State of Vermont on this 31st day of May, A.D. 2024.

Philip B. Scott Governor

This Month's Recipe

Easy Fry Bread

It's Fair season, and what is better than Fry Bread at the fair? Enjoy!

Ingredients

- 2 cups flour
- 1 1/2 tsp baking powder
- 1/2 tsp salt
- 1 cup water
- Enough oil to deep fry the dough

Directions

- 1. Mix together the flour, salt, and baking powder. Then add the water and mix with a wooden spoon until the dough comes together. Knead the dough for a
- few minutes on a floured surface. Then let it rest for 30 minutes to 60 minutes.
- 2. Cut the dough into small equal pieces. Roll them out on a floured surface in a disc, until they are 1/4th inch thick. I make them about 4 inches in diameter.
- 3. Pour the oil into a large pot until it is about 1 inch to 1.5 inches deep. Heat it on medium heat until it reaches 350 F.
- 4. Fry the dough for 30 seconds to

- 1 minute per side until nice and golden brown on each side. Then place them on a paper towel-lined plate or on a wire rack. Finish frying the rest.
- 5. Once done, top with maple syrup, butter, jelly, powdered sugar, honey, or your favorite sweet seasoning.
- 6. You can also try as a base for taco toppings, like beans, meat, lettuce, tomato, sour cream, etc.

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Agency of Agriculture Takes Action to Combat Non-Native Invasive Plant Species Threat

By Plant Health Section, VT Agency of Agriculture, Food & Markets

■ he Vermont Agency of Agriculture, Food and Markets has taken a proactive step to safeguard the state's ecosystems from the threat of invasive plant species. Recognizing the significant risks posed by non-native invasive plants and utilizing existing statutory authority, Vermont Agriculture Secretary Anson Tebbetts has declared eight new plant species as plant pests. This list includes Kudzu, Mile-a-Minute, Japanese Stiltgrass, Porcelain Berry, Wineberry, Waterwheel, Water Hyacinth and Water Soldier. These designated plant species are not native to Vermont and present an ecological and/or economic threat to Vermont.

Non-native invasive plant species are capable of being introduced into Vermont by humans either intentionally, or unintentionally. The designation of these species as plant pests enables the Agency to regulate their human aided movement within



Porcelain Berry

the State. Individuals or entities wishing to engage in activities such as selling, transporting, or moving these plant pests within the state will now be required to obtain a permit from the Secretary of Agriculture Food and Markets. This permit will ensure that such activities are conducted in a manner that minimizes the risk of introduction or spread of these invasive plants.

The selection of these eight new plant species was made in consultation with Vermont state government partners including



Kudzu

the Vermont Departments of Forests, Parks and Recreation, the Departments of Environmental Conservation, and Fish and Wildlife at the Agency of Natural Resources.



Water Soldier

For more images and plant information for this designation, visit: Vtinvasives.org/plantpests

Contact: Emilie Inoue, 802-505-0217, Emilie.Inoue@vermont.gov

Beech Leaf Disease

continued from page 1

drop its leaves, and over time the lack of leaves results in branch dieback and eventual death. The spread of the disease may be caused by natural transmission due to weather (wind and rain), birds, or human aided movement. If harvesting trees, if possible, take the additional step of destroying infected plant material like branches, soil and leaves. If that is not possible, avoid transporting infected plant material off site after harvest, and don't transport seedlings. It's always best not to move firewood, and a good practice to prevent the spread of invasive pests and/ or pathogens to purchase firewood where you plan to burn it or certified heat-treated firewood.

Plant pests move on nursery stock, too. Nursery stock coming into Vermont should always be accompanied by a valid certificate of inspection, a reasonable facsimile, or other certification acceptable to the Secretary of Agriculture from the state of origin or to a federal United

States Department of Agriculture, Animal Plant Health Inspection Service, Plant Protection and Quarantine (USDA, APHIS, PPQ) inspector. The certificate's purpose is to indicate that the nursery stock is believed to be free of injurious pests or plant diseases.

If BLD is present, treatment for individual trees in a residential landscape or of street trees is possible, but there is no known method for forest-scale treatment for the nematode. When choosing a pesticide, the product must be registered in the Vermont, and the label is the law.

Please report any suspected sighting of BLD or of any other plant disease or invasive insect to Vermont Invasives by going to vtinvasives.org/get-involved/report-it

Resources

Vermont Forest Invasive Pest Status Map, Beech Leaf Disease, https://experience.arcgis.com/exp erience/4a3efe4febd2425494 7e600372793632/page/Beech-Leaf-Disease/

Highly Pathogenic Avian Influenza in Dairy Cows

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

ince early March 2024, the U.S. Department of Agriculture, Food and Drug Administration, Centers for Disease Control and Prevention, and State veterinary and public health officials has been investigating an illness among primarily older dairy cows.

Vermont veterinarians continue to monitor the situation as it develops and are learning from other states and officials around the country. As of June 7, 2024, no cases have been detected in Vermont and no links to affected states have been identified.

For more information, the latest updates and resoures, please visit the Vermont Agency of Agriculture, Food & Markets website here: https://agriculture.vermont.gov/HPAIinDairyCowsAnEmerging AnimalHealthIssue

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DAIRY BUSINESS INNOVATION CENTER

Dairy Innovation Grant Leads to Economic and Ecological Benefits

By Katie Spring, Northeast Dairy Business Innovation Center

cGarry Dairy Farm is well known for their production, milk quality, and herd management.

For nearly 20 years, Ed and Diane McGarry have milked around 110 Holsteins. In 2018 their son, Brian, joined them as a partner in the business, and in 2021 they were named Vermont Dairy Farm of the Year. Now, just five years into becoming a partner, Brian McGarry is showing how investment in innovation and technical assistance can support the transition from one generation to the next.

Last year, McGarry Dairy received a \$44,716 Dairy Farm Innovation and Alternative Management Grant, a program that supported farms in improving both ecological and economic outcomes through whole farm system approaches. The funding allowed McGarry to purchase and install four AMS Galaxy cow brushes, 140 Allflex cattle monitoring collars, and a Consumer Dynamics Scio Cup feed testing device. Together, these improved animal health and feed quality while decreasing wasted feed and purchased feed costs.

"Economics and cow health go together," Brian said. "The cow brushes are hard to put a number on, but the collars and Scio Cup have been helpful with cow health. The Scio Cup allows us to get the dry matter really dialed in and make sure we don't have extra feed waste. It's helped us be able to understand what's going on really quick, and to go over that with our nutritionist."

Brian noted the rising costs of fuel and putting up feed. Precise insight into their dry matter levels led to a decrease in feed waste, and as a result improved their bottom line. While the Scio Cup helps reduce waste, the cattle monitoring collars have led to boosted production.

"The collars have helped us be able to get to sick cows sooner and make treatment decisions quicker," said Brian. "This helps us retain more of our animals and getting them to older years gets more total production per cow. With the collars we're also able to catch more heats. This is dropping our days open and helping get us cows into peak production more often. This all helps cows retain higher intakes and produce milk more efficiently. When intakes stay high it makes it easier for us to cut down on grain and feed higher forage diets."

NE-DBIC Dairy Farmer Cohort

Before applying for



Ed and Diane McGarry (left) and their son Brian.

the Dairy Innovation and Alternative Management Grant, McGarry Dairy participated in a NE-DBIC funded cohort through the University of Vermont Extension's Northwest Crops and Soils Program and led by Dr. Heather Darby. Farmers in the cohort received direct technical assistance by a team of providers, including Jeff Sanders, an agronomy specialist at UVM.

The McGarrys built on previous work they'd done with Darby and Sanders, which included implementing no-till and working to reduce their fertilizer rates. Through the cohort, they added new varieties, updated their crop rotations, and identified forage quality and animal health as areas to focus on for the grant. This collaboration with technical

assistance providers helped the McGarrys develop a competitive grant application that led to funding.

Continued Improvement and Collaboration Leads to Innovation'

The McGarrys multi-year focus on improving forage, building resilient cropping systems, and utilizing no-till planting paid off in 2023, when they were one of the few farms able to run trucks in the fields during one of the wettest summers on record. Looking ahead, McGarry's plan to continue working with Dr. Heather Darby and Jeff Sanders to further improve their systems and produce higher quality feed.

Overall, the Dairy Innovation and Alternative Management Grant led to key economic and

environmental benefits for McGarry Dairy. Limiting feed waste led to reduced grain hauling, which in turn decreased local traffic and lowered the farm's carbon footprint. The ability to quickly identify health issues, optimize feed, and enhance cow comfort has resulted in healthier, more productive cows. These improvements show how integrating technology alongside technical assistance can lead to more sustainable and resilient businesses.

Farmers looking to make similar investments can explore NE-DBIC programs, including the Dairy Farm Improvement & Modernization Grant, which is expected to open again in January 2025. To see a full list of dairy innovation grants, visit our funding calendar.

Current and Upcoming Dairy Grants

By Ali Boochever, Northeast Dairy Business Innovation Center

t the Northeast Dairy Business Innovation Center (NE-DBIC), our goal is to help dairy farms and processors innovate to become more sustainable and resilient. Whether you're looking for funding to purchase specialized equipment, to implement an innovative practice, or to receive technical assistance, consider applying for an NE-DBIC grant. Access full details and Requests for Applications online at nedairyinnovation.com/ grants

Open Funding Opportunities:

Dairy Processor Modernization Grant

This grant program will provide funds to support dairy processors in modernizing their processing facilities for long term business viability. Projects funded through this grant will focus primarily on upgrading or adding specialized dairy processing or packaging equipment essential for business growth. Projects must address at least one of the following areas:

- 1. Expanded processing capacity: Adding or replacing equipment to scale growth, increase production capacity, utilize more regionally sourced milk, and meet market demand.
- **2.** Increased facility efficiencies: Replacing outdated



equipment to improve labor efficiency, reduce production costs, lower resource/energy usage, and enhance food safety.

3. Implementation of packaging improvements: Adding or replacing equipment to reduce packaging waste, minimize use of virgin plastics, reduce supply chain waste, or extend/improve product shelf life.

Applicants will qualify into tiers based on milk utilized on an average production day, regardless of the number of days per week they process. Volume may differ based on the product made and processors should reference the volume measurement for their specific product. Volume is a measurement of inputs and not finished products.

- Tier 1: 10,000+ units of volume per average production day
- Tier 2: 1 9,999 units of volume per average production day

Awards will range from \$75,000 to \$350,000 for Tier 1 and \$15,000 to \$150,000 for Tier 2, with a 25% match commitment. Approximately

\$1,200,000 total funds are available for this round. The application deadline is August 8, 2024, at 2 PM ET.

New Dairy Processor Start-up Grant

Grant funds are available to dairy farmers and early-stage processors looking to diversify by adding processing to their operations. Funds may be used to purchase specialized dairy processing equipment and supplies, enhance food safety, marketing and branding, increased market access, and/ or product development.

Applicants must allocate part of their funds to receiving technical assistance or training as part of their projects. Applicants are strongly encouraged to engage in technical assistance activities like business planning, market research, or other relevant pre-work ahead of applying.

The Request for Applications (RFA) will be released this month. Awards will range from \$15,000 to \$75,000, with a 25% match commitment. Approximately \$500,000 in total funds are available this round.

Upcoming Funding Opportunities:

Innovation in Dairy Processor and Packaging Grant

This grant will provide funds for dairy processors, dairy producer associations, and educational research institutions to conduct research and development projects that support innovation for Northeast dairy processors of various scales. Projects funded through this program will help dairy processors gain knowledge that will allow them to make informed, long-term business investments with positive environmental and/or economic impacts.

Funded projects will focus on developing alternatives to current industry standards through initiatives that are applicable, scalable, and replicable to other Northeast dairy processors. Each project must include an educational or information-sharing component for other regional dairy processors. Projects should increase collaboration across the dairy sector to ensure the greatest number of businesses benefit.

The RFA for this grant is expected to be released in August. Awards will range from \$75,000 to \$350,000, with a 25% match commitment. Approximately \$1,500,000 in total funds are available for this round.

Dairy Co-packing Grant

This grant will provide funds for existing Northeast dairy processors to initiate new co-packing arrangements or expand existing co-packing capabilities. Processors who have not previously co-packed will be eligible for funds to add copacking capabilities to their current business. Processors that currently co-pack will be eligible for funds to add new co-packing partnerships, scale up existing co-packing relationships, or add additional co-packed product lines.

Applicants will be required to utilize technical assistance or training as part of their projects. Applicants are strongly encouraged to engage in technical assistance such as business planning, market research, or other relevant pre-work ahead of applying for this grant. Funds may be used to purchase specialized dairy processing equipment and/or supplies, increase food safety, marketing and branding, market access, and/ or product development.

The RFA is expected to be released in late 2024. Awards will range from \$15,000 to \$150,000 with a 25% match contribution.

Find out more on our full funding calendar at nedairyinnovation.com/grants

Big Cheese: Making High-Quality Artisan Cheese

By Heather Darby and Roy Desrochers, University of Vermont Extension

ow do consumers want artisan cheese to taste, and how can producers make such cheese? The answers to these questions are critical to expanding the market for artisan cheese—and perhaps other dairy products. The Northeast Dairy Business Innovation Center (NE-DBIC) funded a University of Vermont Extension project to explore these questions and get some answers.

UVM Extension used an innovative sensory-directed approach to understand artisan cheese flavors and factors that might affect artisan cheese sensory qualities identified by consumers.

Key to the study was creating a reliable way to make objective measurements to understand artisan cheese flavors that consumers want and to identify factors that may affect those flavors.

No mechanical instrument in the world can match the human nose in its ability to detect cheese flavor compounds. So a panel of UVM Extension personnel were trained to objectively assess artisan cheese samples provided by Jasper Hill Farm in Greensboro and Spring Brook Farm Cheese in Reading.

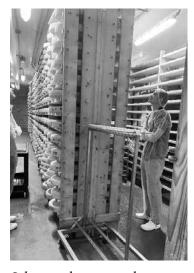
The sensory method they used, Profile Attribute



Smelling cheese chemistry using an Odor Detection Port at Tufts University



Preparing cheese samples at Jasper Hill Farm



Selecting cheese samples at Spring Brook Farm Cheese

Analysis (PAA), is based on the original Flavor Profile Method developed by Arthur D. Little, Inc., which has been used around the globe for decades to develop market-leading food products.

The objective taste data that UVM trained tasters generated was correlated with subjective consumer responses, such as overall likeability, and other objective cheese data, including levels of healthy fats, microbiological profiles, and chemistry.

Our all-star project team included cofounder and cheesemaker Mateo Kehler from Jasper Hill Farm, and cheesemakers Lisa Griffin and Frankie Buckley from Spring Brook Farm Cheese, all of whom provided extensive knowledge about cheese and the cheese making process, as well as the cheese products used in this study.

The technical team

included UVM's Dr. Jana Kraft, who analyzed the cheeses' fatty acids; and two Tufts faculty: Dr. Benjamin Wolfe and Dr. Scott Frost, our microbiology and chemistry experts, respectively. UVM's Roy Desrochers, a global sensory expert, managed the sensory component of the research, including the trained taste panel and innovative consumer testing using the Product Attribute Elicitation Method, commonly referred to as PEM.

What did we learn? We confirmed that consumer preferences for cheese-flavor quality have not changed since Covid-19. Specifically, we found that well-established metrics based on the Flavor Leadership Criteria still hold true. In these metrics, high-quality cheese flavor has an immediately identifiable flavor that is well-balanced and complex, with a compatible mouthfeel, no

odd aromas or flavors, and a short aftertaste. We found that consumer preference data for the core drivers of cheese flavor were consistent with data that was well-established before the pandemic.

We found that microbial profiles matter to cheese-flavor quality and that cheese-storage conditions can easily influence whether different cheese types taste different or similar.

For example, different types of cheeses stored in their own isolated spaces had different microbial profiles and tasted different from each other. By contrast, different types of cheeses stored in the same space had similar microbial profiles and common flavor characteristics.

We found that artisan cheeses with higher levels of healthy fatty acids had higher sensory quality and were more liked by consumers. Cheesemakers can use this information to develop unique marketing messages such as, "tastes great and contains healthy fatty acids."

We identified chemical compounds such as acetic acid 2-methylpropyl ester and propanoic acid hexyl ester that contributed to the unique taste of cheese, whether it was buttery and creamy or stinky and sweaty. We can now look for sources of these compounds at the farm or in the cheesemaking process to engineer the cheese for more or fewer of these tastes.

Most importantly, we were able to develop a reliable cheese-flavor quality index that can be used moving forward to understand additional factors at play.

In addition, we can apply sensory and consumer knowledge from this study to other areas of the dairy industry, including grass-fed milk and yogurt.

To learn more about this study, check out our webinar series on YouTube. It can be found in the UVM Extension Northwest Crops and Soils section under the series name "A Sensory Directed Approach to Understanding Artisan Cheese."

Watch the whole series or enjoy one of the single webinars focused on the sensory qualities and flavor of cheese, consumer testing, healthy fats analysis, or microbiology at bit.ly/uvm-sensory-research

Resources for Becoming a Produce Safety "Champignon"

By Kiera Ebeling, VT Agency of Agriculture, Food & Markets

nterest in growing specialty mushrooms, such as oyster, shiitake, and lion's mane, is on the rise. With this increasing popularity, there also comes a need for resources on how to maintain crop quality while minimizing food safety risks.

Specialty mushroom growers should be aware that while they don't require a license from the Vermont Agency of Agriculture, Food & Markets to begin growing, mushroom operations are considered "produce farms" that may need to comply with federal food safety standards called the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR). Growers can learn more about the Produce Safety Rule on the Agency website at https://agriculture. vermont.gov/food-safety/ produce-program. Please reach out if you would like to discuss how your operation may need to comply with the FSMA PSR.



Another helpful resource is a factsheet called "Boosting the Quality and Safety of Specialty Mushrooms," by author Mary Saucier Choate of UNH Extension. The factsheet outlines key considerations mushroom growers should consider for maintaining a high-quality crop. Cultivating mushrooms is a unique balance between beneficial and detrimental fungal growth. Cultivators often have a keen eye for monitoring microbial activity, which is the foundation of safe produce handling practices and a high quality

Key produce safety considerations include:

- Worker Personal Hygiene/ Health
- Pest Intrusion



- Water Quality
- Sanitary Handling of Harvest Containers, Surfaces, Tools
- Grow Room Sanitation
- Refrigeration
- Market Packaging
- Transportation
- Documentation

Find the full factsheet at https://extension.unh.edu/

resource/boosting-quality-safety-specialty-mushrooms-fact-sheet.

The Vermont Produce Program is here to support you in evaluating produce safety risks and in finding reasonable, effective solutions. We support farms of all sizes and production types.

We offer individualized

farm visits to discuss safe produce growing and handling practices, often referred to as On-Farm Readiness Reviews (OFRR). Reach out now to schedule yours!

Have questions or want to get in touch? Contact AGR. Produce@vermont.gov or call Kiera Ebeling at 802-461-6152.

Vermont Forests, Parks & Recreation: Forest Health Program

By Vermont Department of Forests, Parks & Recreation

he Department of Forests, Parks & Recreation's Forest Health Program has unveiled a new tool to empower residents in the fight against invasive forest pests. The recently launched Vermont Forest Invasive Pest Status Map offers an interactive platform to track the spread of invasive species such as beech leaf disease, elm zigzag sawfly, elongate hemlock scale, emerald ash borer, and hemlock woolly adelgid across the state.

The Forest Invasive Pest Status Map provides users with an overview of town infestations and detection years for each invasive pest. One of the key features of the map is its user-friendly interface. Users can select a pest to learn where it has been identified, basic information, and how to report Plattsfür D

WERM SUT

VERM SUT

Conway

AMPSHRE

Rocher

Saratoga
Springs

Keene

Nashua

sightings.

With increased awareness and timely reporting, Vermonters can play a vital role in protecting the state's forest health and ecological integrity. To view the map, go to https://vtinvasives.org/news-events/news/vermont-forest-health-program-launches-interactive-invasive-pest-status-map



Pre-Harvest Agricultural Water Update for Produce Farms

By Tucker Diego, VT Agency of Agriculture, Food & Markets

he U.S. Food and Drug Administration (FDA) recently published revised preharvest agricultural water requirements for produce farms subject to the Food Safety Modernization Act (FSMA) Produce Safety Rule.

Pre-harvest agricultural water is water used during growing that directly contacts produce, such as water used for irrigation, crop sprays, or frost protection using a direct application method.

Produce farms are now required to make pre-harvest agricultural water assessments to identify any potential hazards and implement corrective or mitigation measures as appropriate. These revisions replace the mandatory microbial water quality

testing that was previously required in the 2015 version of the Produce Safety Rule. While no longer required, microbial water quality test result can still be an important factor for a farm to consider if they choose to conduct testing as part of their agricultural water assessment.

Compliance dates for the pre-harvest agricultural water requirements are tiered by farm size. Farms subject to the Produce Safety Rule with annual produce sales above \$500,000 must comply by April 7, 2025. Farms with sales between \$250,000 and \$500,000 must comply by April 6, 2026, and farms with sales between \$25,000 and \$250,000 by April 5, 2027.

Key requirements:

Annual Agricultural Water Assessment – Produce farms are required to conduct annual agricultural water assessments to evaluate factors that can impact the produce safety of their water. Factors include:

- The location, type, and degree of protection of the farm's agricultural water sources and distribution systems
- Agricultural water application methods and

application timing

- Crop characteristics
- Environmental conditions
- Other relevant factors, such as the results of any microbial water quality testing

Risk-Based Outcomes

Based on the findings of annual agricultural water assessments, produce farms must determine if corrective or mitigation measures are necessary to reduce the potential for contamination of produce or food contact surfaces with hazards identified in their assessment.

The chart below summarizes the actions farms are required to take based on the outcome of their assessment:

Annual Agricultural Water Assessments and Risk-Based Outcomes



Pre-harvest agricultural water for non-sprout covered produce.

Based in part on inspections and maintenance of agricultural water systems and an evaluation of various factors, including:

- Nature of the water source and distribution system
- Degree of protection of the water system
- Water use practices

- Crop characteristics
- Environmental conditions
- · Other relevant factors

Is my water <u>not safe or not of adequate</u> sanitary quality for its intended use?

YES

Immediately discontinue use and implement corrective measures before resuming use.

NO

Are <u>adjacent or nearby land uses</u> reasonably likely to introduce known or reasonably foreseeable hazards from <u>animal</u> <u>activity, biological soil amendments of animal origin (BSAAO), or human waste?</u>



Implement mitigation measures promptly, and no later than the same growing season.

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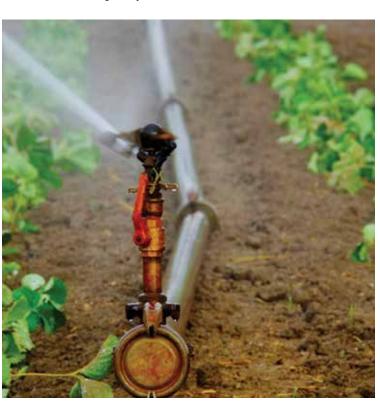
Are there <u>other conditions</u> that are <u>reasonably likely to introduce known</u> <u>or reasonably foreseeable hazards</u> onto covered produce or food contact surfaces?

YES MUST DO Implement mitigation measures as soon as practicable, and no later than the following year.

Water testing as part of assessment to determine if measures are needed.

NO

CONTINUE REGULAR
INSPECTIONS AND MAINTENANCE
OF YOUR AGRICULTURAL WATER SYSTEMS.

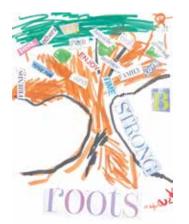


Growing Works of Art

By Gwen Kozlowski, UVM Extension

he contest theme for 2024 was the ABCs of Trees. Students chose a letter of the alphabet and identified a tree-themed word with companion artwork.

For the complete story behind the artwork, please go to https://vtcommunityforestry.org/ arbor-day/growing-works-art-contest



Hazel Newport - Kindergarten *B* is for branches.



Stone McClurg Northfield Elementary School – 1st Grade R for Roots



Aria Williams Roxbury Village School -2nd Grade P is for Pine tree. S is for Shade. F is for forever tree.



Sadie Martone Tinmouth Mountain School -3rd Grade M is for Magic



Kaylie Blouin Homeschool, Graniteville D is for Different



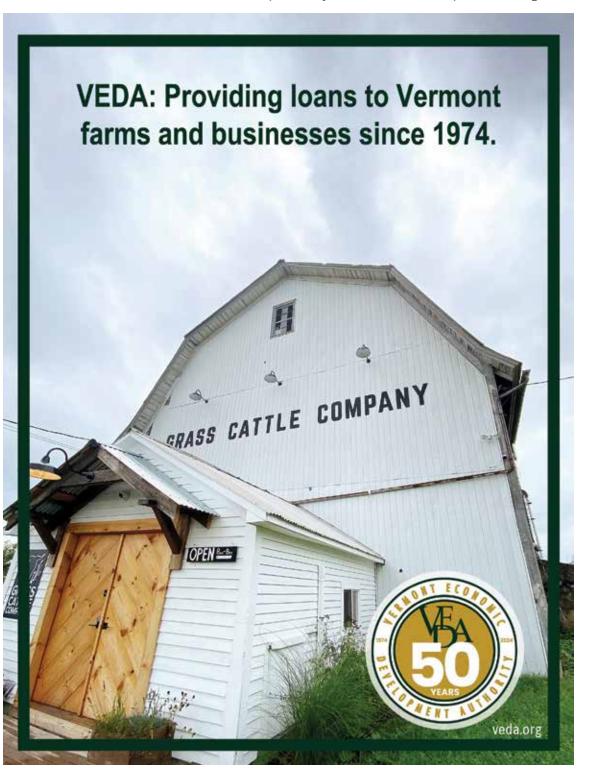
Phoebe Hoyler Ripton Elementary School -5th Grade F is for Feeling Tree.



Wesley Price Mater Christi School -6th Grade B is for Beauty



Paige Kennedy St Johnsbury School -7th Grade B is for Blossoming



VERMONT VEGETABLE AND BERRY NEWS



Compiled by Vern Grubinger, University of Vermont Extension 802-257-7967 ext. 303, or vernon.grubinger@uvm.edu www.vvbga.org

Reports From The Field

(Westminster) Not to jinx it but last month it rained an average .45 inches either Monday night or Wednesday morning. Everything is germinating well, crops are coming up ok and look great, and we've had perfect cultivation. We've been harvesting lettuce, kale and strawberries for several weeks.

The perfect season usually ends when I freeze the first planting of sweet corn in the cold frame in May. But this year we have an outside chance of picking corn by the Fourth of July; that's something we've never done.

(Grand Isle) The blueberries are developing nicely. Have placed monitoring traps for cherry fruit worm. Did a pollinator survey for the second year. Counted many bumble bees at start of bloom. As the boom was ending honeybees started to appear. Now I'm able to start identifying the different bumble bee species. Sampled for Japanese beetles and averaged 5 grubs per square foot.

(Hinesburg) Crops growing well. The gradual

buildup of temps this spring was preferable to the spiking temps of recent springs. CSA and farmstand demand on par. Restaurant sales down and hearing comments about trying to cut costs. Had some success treating thrips on overwintered onions with nematodes from IPM labs.

(Huntington) With cooperative weather at-hand, we have been able to get most crops in the ground 4 to 7 days early this year. 4.5" of rain in April and 3.9" in May put us on the slightly drier side of average, which has been greatly appreciated.

Early seedings of baby spinach are beautiful and lush, with none of the damping off that can often afflict that crop. After a cloudy-yet-warm April, tunnel crops have reveled in the return of the sun since early May.

Potatoes are up and have received two tine weddings to date. The hiller will have to get dusted off within a week, which is ahead of schedule. Our onion crop has been startlingly slow to grow, in a remote field that had a cover crop of red clover last year. I've been scratching my head trying to figure out what is going on, but no answers or even good leads, yet.

(Burlington) First summer CSA pickups this week. We're all filled up despite our July 2023 flooding travesty. Our dedicated members are our biggest asset besides our staff, without question.

Normal early June green things (baby salad, head lettuce, spinach) are looking good, and I am happy that our tunnel cukes are producing on the early side. I always wonder how much of the 'bounty' element of a CSA share is really about having the veggies that people want most, more than large quantities. Clearly, each contributes to a sense of abundance, but our early tunnel cucumbers, a very popular item, definitely helps our sense of abundance in the early weeks.

For a not notably hot spring, and with no change in our planting dates and approaches, we are about to start picking our earliest field Zucchini this week. Go figure. Looking forward to a soaking rain so we can seed out 5-6 acres of a Sudangrass - sunn hemp cover crop mix. We haven't been suppressing weeds well in our clover mixes in fields where we have a chickweed seedbank, so we are moving to something more weedcompetitive.

(Orwell) We are experimenting with some new types of clips for tunnel tomatoes in an effort to reduce the use of plastic. Potato aphids continue to be a challenge, although timely releases of beneficials and spot spraying is helping. We're continuing to experiment with soil building in tunnels, trying additions of chopped mulch, wood chips, and composted manure. Seeing some good soil improvements but also some N tie up where wood chips are heavy. Hoping we can catch up on work and clean up loose ends as summer helpers ramp up.

Update From The UVM Plant Diagnostic Clinic

Ann Hazelrigg, UVM Extension

If you see wilting in seedlings, check for maggots.

Onion, cabbage and seed corn maggots can all do damage in cool moist springs. Onion and cabbage maggots just attack the hosts they are named for, but seed corn maggot can damage a wide range of plants. If they are involved, you should see holes in the lower stem/ roots and the little whitish maggots. They don't like warmer soil temperatures, so any new damage should be minimal. See: https:// ag.umass.edu/vegetable/factsheets/onion-maggot

Early wilting in brassicas can be due to a soilborne disease called wirestem caused by *Rhizoctonia* solani. The disease can be a problem in direct seeded plants or transplants. The root looks like a rat tail and can be constricted. There really is no rescue, start over. Rootshield may have some preventative benefit.

Bronzing on basil has been seen in a high tunnel. This can be caused by downy mildew, cold damage or sun damage. If you do not see dirty-looking spores on the leaf undersides, it is likely an abiotic cause, especially if the damage is appearing only in one age of tissue. In this case, the grower was seeing the bronzing in the older tissue, with the new leaves healthy and green.

Lots of four lined plant bug damage seen in greenhouse herbs. This little pest causes angular leaf spotting that looks like a disease on mints, basil, oregano and other herbs. You often see the damage but rarely the yellow/greenish striped bug. https://extension.umn.edu/yard-and-garden-insects/four-lined-plant-bugs

Dieback and poor flavor

of Annapolis strawberries reported. Samples showed Colletotrichum, the pathogen that causes strawberry anthracnose in the crown and on petioles. This disease used to be considered a more southern disease but it appears to be on the rise in the Northeast. For pictures and more information: https://ohioline.osu.edu/factsheet/plpath-fru-16

Leaf curl in anemones diagnosed. This disease is caused by the fungus Colletotrichum fioriniae and can also infect celery, causing curled and twisted leaves that look like herbicide damage. Black lesions can also appear on the stalks. The pathogen likes warm wet conditions, and also attacks apples causing the disease called bitter rot. Weed hosts include lamb's quarters, redroot pigweed, common groundsel and oakleaf goosefoot. Landscape plants such as peonies and box elder have also been shown to be good hosts. Rotation and hot water seed treatment of celery kills the pathogen on the seed, and there are some tolerant cultivars.

Soil Health Tips

Becky Maden, UVM Extension

Summer cover crops: a short window between crops during the summer can be an excellent opportunity to reduce weed pressure and build soil organic matter. Suggestions for quick growing summer cover crops include Buckwheat (50-70 lbs/A), Sorghum-Sudangrass (35-50 lbs/A), Sunhemp (Crotalaria juncea) (20-30 lbs/A), and forage-type Pearl Millet or Japanese

continued on page 12

CLASSIFIEDS

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

Email: Agr.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

- Jersey & Jersey/Holstein cross dairy cows, in Highgate Ctr Vermont; Certified Organic & Grass-only, very tame. Farmer retiring, needs surgery. Vaccinated, Negative for Johnes. Two A2 cows and ten A1 cows still need new homes! (as do 12 bred heifers, all A1, due to freshen in late spring). 802-868-2356 (landline); 802-370-1051 (cell); jyoust87@vt.edu (7)
- 4 AI Holstein heifers due in March. Georgia Vt. 802-527-2010 leave message. (7)
- Angus bulls for sale. Greensboro, VT (802) 533-9804 (10)

Equipment

- 1 ½ horsepower Deloval vacuum pump good for sugaring or milking. 80ft New Holland hay elevator like new. 802-624-0143. (7)
- Red Cedar fence posts 7ft & 8ft. 803-265-4566 (7)
- Commercial Blooming onion cutter & frying tanks 802-365-4000 (7)
- Massey-Harris "Pony" tractor with cultivators, plows, runs great. \$5,000. J.D. Gator as is. Special \$950. Steel Totes 4x4 with plastic liner. \$99 each. 1-802-483-2870 (7)
- 32 X 8 ft. flat trailer suitable for up to 23 dry round bales. Large unobstructed space constructed with pressure-treated planks, railroad rails, trailer hitch, and 8 tires. \$5000 or best offer. Braintree Call Lynn, 802-728-9749. (8)
- J.D. post hole digger, 3pt., ex condition = \$950. N.H. Model 900 chopper, 2 heads, excellent = \$25,000. Pinwheel Rake, 3pt., 4 wheels = \$750. J.D. hopper blower,

pto, good condition - \$950. J.D. Forage Wagons, tandem, 16 ft. = \$12,500 each. Several plows 3, 4, 5 bottom, good condition. Pittsford, VT 1-802-483-2870 (9)

- John Deere 446 Round Baler. 2 - 32 foot Hay elevator on wheels. 600 gallon bulk tank sap. Call 802-222-7645 (9)
- 1985 John Deere 950, \$WD, power steering, 1249 hrs, \$8400. John Deere brush hog \$750. 802-453-2724 (9)
- 2 Hay Wagons just running gear. 717 New Holland one row corn chopper. 3 Pt hitch weight for tractor. Phone # (802) 442-4877 (9)
- Hayrite Elevator 16' excellent condition. Stored inside.
 Used less than 20 hours.
 List price \$2,100. Price \$950. West Rupert,
 bearmountainfarmVT@gmail.
 com 802-394-7852 (9)
- D&S Livestock Feeders. Two
 D&S #F1316 8' long. One
 D&S #H600 round feeder.
 List price \$1,835 & shipping.
 Price \$600 West Rupert,
 bearmountainfarmVT@gmail.
 com 802-394-7852 (9)
- 1999 Gallignani 3200L round baler for sale. Excellent condition: double twine, fixed chamber, rolls in front, chain in back, runs on little power. Good for baleage or dry hay. \$6000 includes spare auger, assorted parts, operators and parts manuals, 4 bundles of 9000' plastic twine that works best in this machine. Always under cover. Danville, 802-748-8461. (9)
- Milking Equip, Bulk Tank, Vac Pump, Balance Tank, Pipe Line, Receiver, Milk Pump, 2 ATO, 4 Cow Walk Thru, Head Locks, Free Stall, Hoops, Rd Bale Unroller, Ford







THE VERMONT AG BULLETIN

Grants, Learning, News & More

The Agriculture Development Division publishes a weekly newsletter featuring grant opportunities, workshops/webinars, and news, for its subscribers. The Agency encourages you to sign up to receive the newsletter. You can also find the form and past issues by going to https://agriculture.vermont.gov/administration/vaafm-news.

Sq Baler, 3 Pt Fert Spreader, JD 450, Dozer, 3 Pt Wood Splitter, Bulk Tank Washer, 91' 2WD Dodge Trk, 75 gal, Hot H2O Heater LPG. 802-348-6303. (9)

4 Gehl Forage Boxes with good running gears. \$1500.00 each or 5500 for all four. Gehl 99 Blower \$1500.00 - Very Good Shape. 2 Older Hay Elevators \$250.00 each.

Please call 802-272-0548 (9)

Gehl round bailer model rb 1475. In very good, well maintained condition. New belts still in the box; will come with it. Please call 802-425-2385. (9)

John Deere 10 ½ transport harrows. 7 -8 ton Brock grain bin. 19 ton Brock grain bin. 16ft Snuco hay elevator. 15 ton Brock grain bin. 802-624-0143 (10)

Pasteurizer/Chart Recorder/
Thermometers: 30 gallon
Micro Process Design
pasteurizer, lids, paddle
and motor. Thermometers;
indicating, recording, and
air space. Anderson chart
recorder, spare paper and
pens. In good condition and
continued on page 12



Vegetable & Berry News

continued from page 10

Millet (12-250 lbs/A)

Summer nitrogen progresses, you may see

management: As the season crops that are pale in color or show weak growth, which may be a sign of nitrogen deficiency. Nitrogen is always changing form in the soil and availability in plant available forms can be difficult to predict. More information about nitrogen management can be found in the New England Vegetable Management Guide.

One tool that can help you assess N status in annual crops is the pre-sidedress nitrate test, which measure soil nitrate (plant available N) at the time the soil sample is taken. Samples must be brought or mailed immediately to the UVM soil analysis lab (\$10 per sample).

Tissue samples (leaf analysis): in perennial fruit crops or long season vegetable crops (like tunnel tomatoes), this is an important way to assess the nutrient status of crops. Tissue samples reveal what the plant has actually taken up from the soil. Test results provided by the Dairy One lab come with Cornell fertility recommendations for fruit; cost is \$30 per sample. https://dairyone. com/services/foragelaboratory-services/planttissue-analysis/

Pollinator Support Report

Laura Johnson, **UVM** Extension

This month's report comes UVM graduate students, Leslie Spencer, a PhD candidate studying blueberry pollinators and pests across 10 Vermont

A few (native) bumblebee species are doing a lot of pollination, and we've seen lots of large bumblebee queens collecting pollen to bring back to their nests to feed developing bumblebee larvae. Last week, the larvae began to hatch and emerge as worker bumblebees. Workers look the same as the queens, but about half the size; they collect pollen as well. Several species of (native) mining bees are

also hard at work pollinating blueberry blossoms. At farms with hives, lots of honeybees are out visiting blueberries.

Less common pollinators we've seen visiting blueberry flowers this spring include: Green sweat bees, Beemimic robber flies, Red admiral butterfly, Canadian tiger swallowtail, Bedstraw hawkmoth, Ruby throated hummingbird, Forester moths, Several species of wasps, Carpenter bees, both big and small, the yellowish cuckoo bumblebee (like a cuckoo bird, this species is a brood parasite, laying its eggs in the nests of other bumble species), and Northern amber bumblebee (an uncommon species of bumblebee in Vermont!)

VVBGA Members: Create Your Free Pick-Your-Own Listing

Will you sell PYO fruit, flowers, pumpkins or other crops this season? Later this month we'll launch VVBGA's brand new searchable list of PYO farms – open to the public. So please take 5 minutes to add your info today! You can change your listing as often as you like. It's easy!

- 1. Log in to your VVBGA member account at https://vvbga.org/
- 2. Click "Pick-Your-Own-Listing" on the left-hand menu.
- 3. Click the orange "Add Your Listing" button.
- 4. Click on each section of the listing. A drop down will appear. Fill in all the details relevant to your farm's PYO operation.
- 5. Hit the "Save" button at

the bottom of the page after you complete your listing.

Tech Tips From UVM Extension Ag Engineering

Andy Chamberlin, **UVM** Extension

The latest podcast episode from The Farmer's Share features Jacob Mills of McDonald's Farmstand in Danville VT: EP20 https:// thefarmersshare.com

Classifieds

continued from page 11

used lightly seasonally. Selling as a set for \$11,000 Located in Westminster, Vt. Contact rachel@alpineglofarm.com for details and pictures. (10)

General

Trucking to C.V.L.M. every Tuesday, strong market, several buyers for Beef, Sheep, Goats. Call Eddie 1-802-483-2870 (7)

Hay, Feed & Forage

Hay small square bales 1st cut never wet. \$5 a bale. Leave message. 802-442-2646 (7)

Small square bales of 2022 1st cut, nice and dry \$5.00 per bale. Also have 2023 2nd cut for \$6.00 per bale. Call 802 223 5747 (7)

1 st, 2nd and 3rd cut grass haylage layered in bunk with preservatives. 250 tons, \$55/ ton. Call Larry Scott, Ekolott Farm, Rt. 5, Newbury, VT 802-291-2363 (9)

ORANGE COUNTY

1st, 2nd and 3rd cut grass haylage layered in bunk with preservatives. 250 tons, \$55/ ton. Call Larry Scott (8)

WINDHAM COUNTY

Riverview Market Farms has certified organic hay available in round bales. We have first quality hay as well as mulch hay. Pick up at our farm at 68 East Putney Ferry Road

Putney, VT 05346. Call Cory at 802-289-3420. (9)

Large Square Bales, 1st Cut Hay. Saxtons River, VT. (802) 463-3875 (9)

WINDSOR COUNTY

1st and 2nd Cut wrapped 4x4 round bales for sale, \$55/bale, Call Tom at 802-698-3390

For Sale

We have Black and White Border Collie puppies for sale. One male and one female. Parents are on our farm. Born 1/9/2024. Beautiful lovable smart puppies ready for a new home. Call 802-342-0612 Wallingford, Vt. \$500. (9)

Help Wanted

Organic Livestock Farm in N. Danville seeks co-manager/ co-producer to assist in current operations while leveraging farm assets to conduct their own enterprise. Farm currently raises cattle, sheep and pork but could host more of the same or other production. Looking to diversify offerings in our farm store as well. Could help facilitate the look for housing for those from out of town. More detailed description of the opportunity can be found on the Landlink listing for Lewis Creek Jerseys. Email badgerbrookmeats@gmail. com or call Vince at 802-748-8461. (10)

2024 Vermont Fairs and Field Days

Lamoille County Field Days	July 19-21, Johnson, VT
Franklin County Field Days	August 1-4, Highgate, VT
Addison County Fair & Field Days	August 6-10, Vergennes, VT
Vermont State Fair	August 13-17, Rutland, VT
Caledonia County Fair	. August 21-25, Lyndonville, VT
Bondville Fair	August 23-25, Bondville, VT
Champlain Valley Exposition August 23-5	September 1, Essex Junction, VT
Guilford Fair	st 31-September 2, Guilford, VT
Orleans County Fair	September 4-8, Barton, VT
The Tunbridge World's Fair	September 12-15, Tunbridge, VT

Research Roundtable Addresses Needs of Migrant Farmworkers

By Katie Spring, Northeast Dairy Business Innovation Cetner

n March, a group of farm service providers, farmworkers, Agency staff, and advocates gathered at the University of Vermont (UVM) for the Migrant Farmworker Research Roundtable. Held by UVM Extension and the UVM Department of Community

Development and Applied Economics, this roundtable focused on the essential role of migrant farmworkers in Vermont's food system.

Dan Baker and Naomi Wolcott-MacCausland presented findings and outcomes from three programs focused on migrant farmworkers in Vermont, one of which was funded by the Northeast Dairy Business Innovation Center. "The

902 461 6709

well-being of these workers is essential to the future of farming in Vermont, as well as the families and communities these folks support back in their home country," writes Baker. Recordings of these presentations are available in both English and Spanish.

Find links to the recordings and read a report on the roundtable at nedairyinnovation.com/migrant-dairyfarmworker-safety

Upcoming Grant Opportunities

The Agency of Agriculture, Food & Markets is pleased to be able to help you more easily 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.

Emma Redel

Emma.Redel@vermont.gov 802-261-5628

Ellen Friedrich

Ellen.Friedrich@vermont.gov 802-261-5629

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 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.

Ellen Friedrich

Ellen.Friedrich@vermont.gov 802-261-5629

Conservation Reserve Enhancement Program (CREP)

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

Ben Gabos

Ben.Gabos@Vermont.gov

802-461-3814

Phil Wilson

Phillip.Wilson@vermont.gov

802-505-5378

July

New Dairy Processor Start-up Grant

Grants to support the start-up of new dairy processing capabilities for existing farmers or experienced dairy processors. Engagement with technical assistance ahead of an application is strongly encouraged.

Ali Boochever

ali.boochever@vermont.gov

(802) 261-5740

August

Innovation in Dairy Processor and **Packaging Grant**

Grants to provide long-term investments that increase dairy processors' environmental and economic sustainability. Kathryn Donovan

kathryn.donovan@vermont.gov (802) 585-4571

Fall

Organic Certification Cost Share Program

Partial reimbursement of direct costs for organic certification Terry Smith

Terry.Smith@vermont.gov

802-828-5667



Agency Contact Numbers

Phone numbers for Agency programs are listed below. You are always welcome to call our main line at 802-828-2430. We will do our best to route you to the person most able to answer your question quickly and accurately.

Program Phone Numbers

Act 250	802-461-6/98
Animal Health	
Business Development	802-828-1619
Dairy	
Enforcement: Water Quality/Pesticides	802-828-2431
Feed, Seed, Fertilizer & Lime	802-828-5050
Licensing & Registration	802-828-2436
Meat Inspection	
Northeast Dairy Business	
Innovation Center	802-522-3186
Pesticide & Plant Health	802-828-1732
Produce Program	802-522-7811
Vermont 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

Adopt a Cow Program Connects Students with New England Dairy Farmers

By Elicia Pinsonault, New England Dairy

hree New England dairy farmers hosted live chats this spring with students in classes across the region who "adopted" calves as part of the Adopt a Cow Program.

Gervais Family Farm in Enosburg Falls served as this year's Vermont host farm. Other participating farms for the 2023-2024 school year included MacGlaflin Farm in New Hampshire and Mapleleaf Farm in Connecticut. The Adopt a Cow program is a year-long virtual educational program administered by the Dairy Excellence Foundation with support from New England Dairy.

This is the third year that New England Dairy has partnered with the Dairy Excellence Foundation for the Adopt a Cow Program. In its first year, the program had 1,200 participating schools in New England, reaching 36,000 students. For the 2023-2024 school year, Adopt a Cow reached over 91,400 students in 2,800 classrooms across our region.

At the heart of the program is the ability for students to watch a calf grow throughout the school year while paired with a New England dairy farm. Through photo & video updates, hands-on learning activities, curriculum, and virtual visits, students and teachers gain a deeper understanding of dairy farming and milk's

journey from farm to fridge. The program culminated in three live chats, where students could interact with the farmer, meet their adopted calves, and get questions answered in real time. Questions asked during the live chat focused on topics including cow care, nutrition and dairy products, and sustainability. More than 730 classrooms participated in this year's live chats.

The Adopt a Cow Program will return for the 2024-2025 school year in September with host farms in Vermont and Connecticut. Want to see the Adopt a Cow Program in your local schools? Share registration information with teachers in your community, which can be found at dis-

coverdairy.com/adopt-acow. Registration closes September 15, 2024.



Participants at the 2024 4-H Day at the Capitol, April 26 in Montpelier, pose with Gov. Phil Scott after their meeting with him. They are (left to right) Shane Bradley, Danville; Judah Noel, St. Johnsbury; Luke Morrison, Danville; Gov. Phil Scott; Eli Bursey, St. George; and Gwendolyn Bradley, Danville. (photo: Amy Miller/UVM Extension 4-H)

The Pesticide Applicator newsletter is going digital in 2024!

This change will allow:

- Fast delivery direct to your email
- Easy to click links and answer quizzes
- Save time and money

The Agency of Agriculture, Food and Markets wants to ensure you receive the Pesticide Applicator Report (PAR). Please confirm your email address with the Agency using the link, https://forms.office.com/g/fNFGigN3FF.

If you have any questions, please email agr.pest@vermont.gov or call 802-828-1732.

Please adjust your email settings so that email



coming from agr.pest@ vermont.gov will make it to your inbox and avoid it arriving in your Junk email box. You can also always find the latest, and past PARs with quizzes by scanning the QR code.

Pesticide Applicator Certification Exams

By Stephanie Smith, VT Agency of Agriculture, Food & Markets

re you ready to take a Pesticide Applicator certification exam? Have you studied the appropriate materials? Do you know which exam or exams you need to become certified or licensed? Are you 18 or older? Please register online at least a week (7 days) in advance or by contacting the Certification & Training coordinator at 802-828-1732. All exams are given by the Vermont Agency of Agriculture, Food & Markets. Scan the QR Code to schedule.

- All exams are CLOSED BOOK
- Please bring a calculator
- Please bring a current, state-issued, picture ID (required) There is no cost to sit for (take) exams, *however* there is a fee for obtaining certification.

Montpelier Every Wednesday

Every Wednesday 9:00 am – 12:00 pm

Williston

Bi-weekly 1st and 3rd Thursdays 9:00 am – 12:00 pm

St. Johnsbury

Monthly Every 2nd Thursday 9:00 am – 12:00 pm

Rutland

Monthly 1st Tuesday 1:00 pm – 4:00 pm

Brattleboro Monthly 1st Thursday 9:00 am – 12:00 pm

VT Agency of Agriculture, Food and Markets Tick Surveillance

By Patti Casey, VT Agency of Agriculture, Food & Markets

■ he VT Agency of Agriculture, Food & Markets' Environmental Surveillance Program has conducted tick surveillance for about a decade, and we've learned a lot. We have improved our surveillance techniques and figured out the best places to look for ticks and what the elevational cutoffs are for tick viability, we've hired additional field technicians. and we've added several programs to our surveillance efforts. Here is our most recent tick update.

2023 Vector Surveillance Update

The 2023 Vector
Surveillance season was
a busy one for us. Our
stalwart team of six field
staff spent more time than
usual collecting ticks and
mosquitoes and our lab staff
were similarly taxed. We
worked with the VT Dept of
Health (VDH) Laboratory
and the Centers for Disease
Control and Prevention
(CDC) in Fort Collins,
Colorado to test ticks and
mosquitoes for pathogens.

Tick Surveillance — Vermont Department of Health Pathogen Prevalence Spring Tick Survey

Our Spring Tick Surveillance in partnership with VDH ran May 5 through June 21, 2023. These ticks are collected from 48 established sites statewide every spring.



Long-Horned Tick

Specimens are counted, identified to species, and tested for four different pathogens that can cause Lyme disease, Anaplasmosis, Babesiosis, and Miyamotoi disease. Going forward, including those collected in 2023, the CDC will add testing for *Ehrlichia spp* and an additional *Anaplasma* strain.

Our 2023 tick numbers for VDH surveillance are:

- 1,257 Black-Legged Ticks
- 510 American Dog Ticks
- 1 Rabbit Tick (nymph)
- 1,768 ticks total

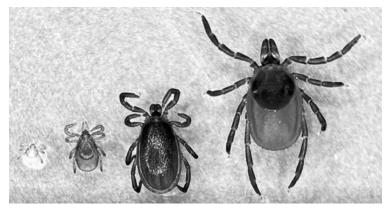
VT Agency of Agriculture, Food & Markets' Statewide Town Density Tick Survey

We continue to collect ticks from every Vermont town over a five-year period (we're currently in our second five-year round), visiting 25-30 established sites each spring and fall to track population numbers, geographic expansion, and disease infection rates in ticks. Our 2023 spring season ran April 26 through June 22. We collected 122 Black-Legged Ticks and

39 American Dog Ticks. Black-Legged Ticks will be tested for five pathogens this winter (the four previously mentioned plus Powassan, or Deer-Tick Virus). Fall surveillance ran October 19 through November 16, 2023 and numbers are currently being tallied.

Fall Asian Long-Horned Tick Survey

We conducted a study in partnership with VT Fish & Wildlife to inspect harvested deer in southern Vermont for the Long-Horned Tick, a highly invasive tick species not yet reported in Vermont but which has been found in adjacent counties in New York and Massachusetts and that is expanding their territory rapidly throughout the mid-Atlantic and northeast regions. Long-Horned Ticks are a wildlife and livestock pest of significance. We found none on the deer we inspected, but we did collect more than 1,000 Black-Legged Ticks that are being donated to the Tri-State Tick Project through the University of Vermont.



Black-Legged Tick

Passive Tick Surveillance Project

We welcome Vermonters to submit ticks they collect from themselves or their children and pets or the environment for identification to species, sex, life stage, and engorgement rate for assistance when communicating with their health care provider. We do not test these ticks for pathogens.

For more information, visit our website, and remember to practice personal protection against tick and mosquito bites:

• Cover up with long

sleeves and pants, tuck pants into socks or wear gaiters

- Use an EPA-registered insect repellant or treat your clothing with permethrin
- Limit outdoor dawn and dusk activities when mosquitoes are active
- Put clothing in a dryer on high for 15 minutes, shower to remove crawling ticks after being outdoors
- Do a daily tick check
- Repair broken screens and remove all standing water from your property

North American Manure Expo

he North American Manure Expo is coming to Auburn, NY on July 17-18, 2024. The Expo offers two full days of tours, demonstrations, education sessions and networking, all delivering the latest and

greatest in manure management solutions and technologies in the heart of the Finger Lakes region.

Registration is now open for tours and expopasses. View the website for all details, including



registration links, the agenda, and accommodations at https://www.manureexpo.ca/

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Working Lands Enterprise Board Awards \$2.3 Million to Vermont Farm, Forest, and Food Businesses and Organizations

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

he Working Lands
Enterprise Board
(WLEB) announces
51 awards to working lands
businesses and organizations
in 2024. The \$2,329,561 in
awards will support those
who are earning a living off
the land.

"The challenges the farm and forest economy sectors face are significant, which is why my Administration continues to prioritize investments in the rural regions of our state," said Governor Phil Scott. "These awards are important to growing our economy and making it more affordable for those working the land."

The award categories are:

- American Rescue Plan Act (ARPA) Primary Producer Impact Grants - \$812,991 awarded to 6 farms. These grants support businesses engaged in growing crops, raising livestock, and harvesting timber in advancing their businesses after being negatively impacted by the COVID-19 pandemic. These grants were made possible by one-time federal funds allocated to the Working Lans Enterprise Initiative (WLEI) by the legislature.
- Business Enhancement
 Grants \$558,343 award ed to 14 businesses. These
 grants support farm, forest,
 and food businesses using
 local products with market



Colleen Goodridge and her sons operate Goodridge Lumber in Albany, which received a \$225,789 Supply Chain Impact Grant to convert from diesel generated to electrical three-phase power.

development, infrastructure, equipment costs, and workforce development to advance their businesses.

- Small Farm Diversification & Transition Grants \$150,000 awarded to 12 farms. These grants support small farms in diversifying farm products, transitioning to a new form of farming, processing farm products, and developing an accessory on-farm business. These grants were made possible by a one-time appropriation from the legislature.
- Supply Chain Impact
 Grants \$788,159
 awarded to 6 businesses
 and nonprofits. These
 grants support farm, forest,
 and local food businesses
 investing in critical supply
 chain infrastructure such as distribution and
 processing initiatives investments that create
 new opportunities for
 multiple businesses in

their respective supply chains

Trade Show Assistance Grants - \$59,968 awarded to 13 businesses. These grants support local food and forest businesses to attend trade shows to bring Vermont products to out of state markets. In addition to the \$50,000 allocated for Trade Show Assistance Grants from WLEB, Hannaford provided a \$2,500 donation and the Vermont Dairy Promotion Council provided an additional \$8,288 for dairy businesses.

"These investments enable businesses of all sectors and sizes to increase sales and efficiency, advance equity, improve land management, and adapt to climate change and the post-pandemic economy. We are proud to support these businesses that enhance our rural communities and economies." said Vermont Agency of Agriculture, Food & Markets Secretary Anson Tebbetts.

"The Working Lands Enterprise Board is grateful to receive ongoing general funds and one-time allocations to support a diverse range of agriculture and forestry businesses that are keeping Vermont's working landscape vibrant and vital," said Elizabeth Sipple, Working Lands Program Lead. "A key element to the Working Lands impact is the program's ability to flexibly respond to businesses



Emily Hartz and Jonah Mossberg own and operate Milkweed Farm in Westminster West, which received a \$15,000 Small Farm Diversification & Transition Grant to purchase a new display cooler for their farm store.

most pressing needs. In the beginning of the program, there was speculation that farmers and forest industry business owners would be too busy to fill out a grant application, but each year there is record-breaking demand. In fiscal year 2024, we saw the greatest demand to date, with grant requests for business grants totaling over \$16.2 million."

WLEB also invests in service providers and producer associations who work directly with working lands enterprises to support them as they grow, pivot, and adapt to an ever-changing marketplace. Earlier this year, WLEB awarded \$652,211 to service providers and producer associations to provide technical services and business assistance to farm and forestry businesses in Vermont.

In the upcoming fiscal

year 2025, \$1 million will be available for agriculture and forest businesses and organizations. Applications will open in the fall. Please visit www.workinglands. vermont.gov to find out more.

The Working Lands Enterprise Initiative (WLEI) and governing board (WLEB) were created by the Vermont Legislature in 2012 to stimulate economic development in the agricultural and forestry sectors. WLEI is a collaborative effort between the Vermont Agency of Agriculture, Food, & Markets, the Vermont Department of Forest, Parks, & Recreation, and the Vermont Agency of Commerce & Community Development.

The complete list of grantees is at: workinglands. vermont.gov/node/453