



CONTENTS...



SECRETARY'S MESSAGE3
 ADMINISTRATION DIVISION.....4-6

VERMONT AGRICULTURE & ENVIRONMENTAL LAB.....7

WATER QUALITY DIVISION8-14
 FINANCIAL ASSISTANCE PROGRAMS.....8
 EDUCATION & OUTREACH9-11
 INSPECTION AND ENFORCEMENT.....12
 VT PHOSPHORUS INNOVATION CHALLENGE.....13

FOOD SAFETY & CONSUMER PROTECTION DIVISION14-20
 MILK & DAIRY REGULATION.....14
 AGRICULTURAL PRODUCTS.....15
 WEIGHTS & MEASURES SECTION16,17
 ANIMAL HEALTH SECTION.....18,19
 MEAT INSPECTION SECTION20,21

AGRICULTURE DEVELOPMENT DIVISION22-29
 DIVISION MISSION AND IMPACT.....22,23
 DAIRY PROGRAM.....24
 FARM TO SCHOOL/CHILD NUTRITION.....25
 LOCAL, DOMESTIC, INTL MARKETING.....26
 VT PRODUCE PROGRAM.....27
 WORKING LANDS ENTERPRISE.....28
 MAPLE INDUSTRY.....29

PUBLIC HEALTH & AG RESOURCE MANAGEMENT.....30-36

HEMP PROGRAM.....31
 VECTOR SURVEILLANCE PROGRAM.....32
 PEST SURVEY & OUTREACH PROGRAM.....33
 GROUNDWATER MONITORING PROGRAM.....34
 PESTICIDE PROGRAM.....35
 APIARY PROGRAM.....36

AGENCY LEADERSHIP.....37

VISIT WWW.AGRICULTURE.VERMONT.GOV TO VIEW THE VAAFM WEBSITE



SECRETARY'S MESSAGE

Dear Vermont Legislator,

“2019 was an exciting year for Agriculture. Vermont continues to produce high quality food for the world to enjoy. The Agency of Agriculture, Food and Markets is proud to play a role in that mission and we are committed to growing the economy, making Vermont more affordable and protecting the most vulnerable.

While 2019 was a challenging year for our farmers on many fronts including a wet and snowy year, Vermont’s agricultural families and communities remained committed to feeding our state, as their parents and grandparents did before them. As they take on new environmental concerns and requirements, honoring Vermont’s proud history of agriculture, our working lands, and our rural heritage of farming remains the mission of our farming families and agricultural communities.

In this summary report of 2019, we will emphasize important statistics and programs that support our agricultural community and environment. We believe this report emphasizes the important cultural contribution our farmers provide to our state.

Behind every number are people and communities working to keep Vermont the special place that we have all grown to love, that makes us proud, and where we want to raise our families.

Thank you for your service to Vermont.”

Anson Tebbetts



Secretary Anson Tebbetts (right) with Governor Phil Scott and others at the Sprague Farm in Brookfield during the Legislative Dairy Tours in August, 2019.

Anson Tebbetts is a life-long Vermonter born in Cabot, Vermont. He and his family still live on the family farm along Tebbetts Road in Washington County. His parents and grandfather ran a traditional dairy, converting to an organic operation until his father’s death in 2001.

AGENCY OF AGRICULTURE DIVISIONS

ADMINISTRATION DIVISION

See pages 4 - 6

WATER QUALITY DIVISION

The VAAFM Water Quality Division is responsible for administering the Vermont Agricultural Nonpoint Source Pollution Control Program. This includes:

- Farm Water Quality Inspections and Enforcement
- Education and Outreach to the Agricultural Community about Regulations and Requirements
- Technical and Financial Assistance to Achieve State Water Quality Goals

AGRICULTURE DEVELOPMENT DIVISION

The Agriculture Development Division strives to meet the needs of Vermont's agricultural community by improving agricultural business capacity, consumer awareness and access, and farmland stewardship through technical assistance, grant funding, promotional opportunities, and collaborative efforts.

Providing coordinated support and needed resources to farm, food, forestry businesses and non-profit partners creates a vibrant and viable agricultural community in our state and a higher quality of life for all Vermonters.

PUBLIC HEALTH & AGRICULTURE RESOURCE MANAGEMENT DIVISION

The Public Health & Agricultural Resource Management Division (PHARM) works to protect human, animal, and plant health, the environment, and consumers by providing fair regulatory programs, exceptional customer service, and in-depth technical assistance in a wide variety of agricultural topics.

VERMONT AGRICULTURAL & ENVIRONMENTAL LABORATORY

VAEL provides analytical services to the Vermont Agency of Agriculture, Food & Markets (VAAFM), the Vermont Agency of Natural Resources (ANR) and, by contract, with other organizations.

FOOD SAFETY & CONSUMER PROTECTION DIVISION

The mission of the VAAFM Food Safety Division is to maintain and advance an equitable and safe marketplace through fair enforcement of Vermont's laws and rules and by providing technical assistance to involved parties to foster their success.

The Vermont Agency of Agriculture, Food & Markets (VAAFM) facilitates, supports and encourages the growth and viability of agriculture in Vermont while protecting the working landscape, human health, animal health, plant health, consumers and the environment.



The Agency of Agriculture is involved in all aspects of agriculture in the state. The Agency regulates, develops and promotes agriculture and agricultural products in Vermont. The Agency currently has 121 classified employees, five exempts and twelve paid temps and interns.



Anson Tebbetts was appointed Vermont's Secretary of Agriculture, Food, and Markets by Governor Phil Scott in January of 2017. Prior to his appointment, Tebbetts spent more than twenty years as part of the WCAX news team, serving as the station's news director since 2009. From 2007-2009, he stepped away from his role at WCAX to serve as Deputy Secretary of the Agency of Agriculture, under the Douglas administration. An avid bird enthusiast, he co-hosts "For the Birds" on WDEV & WLVB radio.

Tebbetts, a graduate of Emerson College, is a Vermonter with deep agricultural roots. He was born and raised on his family's farm in Cabot, where he continues to reside today with his wife Vicky and their two children. In 2001, the Vermont Farm Bureau honored him with their Friend of the Farmer award.

Alyson Eastman was appointed Deputy Secretary of the Agency of Agriculture, Food, and Markets by Governor Phil Scott in January of 2017. Most recently, she served in the Vermont State legislature, representing the Addison-Rutland 1 District. A graduate of Champlain College, Eastman has owned and operated several successful businesses over the years, offering a wide variety of services including property management, payroll, bookkeeping, and H-2 Visa management.



Agriculture has always been an important part of her life. She grew up on the family farm in Orwell, Vermont. Throughout her youth, she was active in 4-H. She continues to live on the family farm in Orwell with her husband and two sons.

ACT 250 | PRIMARY AGRICULTURAL SOILS (PAS)

Vermont is a leader in fostering policy that maintains our State's important farmland and iconic landscapes, while supporting a thriving economy. Criterion 9(B) of Act 250 does not prohibit development on farmland, but it requires that suitable mitigation be provided for any reduction in the agricultural potential of the State's PAS, associated with proposed jurisdictional development.

79 PROJECTS REVIEWED

FIELDIED INQUIRIES FOR AN ADDITIONAL REQUESTS

62 SOIL REVIEW LETTERS

FOR PROJECTS WITH COMPLETE APPLICATIONS

8 ACT 250 SITE VISITS

AND 8 ACT 250 HEARINGS ATTENDED WITH TESTIMONY

6 COMMENT LETTERS

SUBMITTED TO DEC SUPPORTING VAAFM

9(B) CRITERIA EDUCATION

FOR FARMERS, ENTREPRENEURS, STATE & LOCAL OFFICIALS

VERMONT MILK COMMISSION

The Vermont Milk Commission is codified in State statute under 6 V.S.A. Chapter 161 with the following purpose 6 V.S.A. § 2921(b):

(b) The general purposes of this subchapter are to protect and promote the public welfare by insuring at all times an adequate supply of clean, pure milk and cream of proper quality to meet the needs of the inhabitants of this State and to ensure the continuing economic vitality of the dairy industry by stabilizing the price received by farmers for their milk at a level allowing them an equitable rate of return....

This purpose continues a decade later as the dairy industry explores fair pricing and supply management systems that could be implemented regionally and nationally. The Milk Commission provided a recommendation on Supply Management and has been working with the Vermont Farm Bureau and The Wisconsin Farmers Union to move this concept forward.

LICENSING & REGISTRATIONS

To increase efficiency in State Government, online licensing was an identified state project and was successfully launched by the Agency of Agriculture on October 16, 2019, which allowed for the acceptance of credit card and ACH (automatic clearing house) payments.

⇒ From October 16-December 31, the section has received \$976,074.60 in online payments.

The Licensing & Registration section of the Administration Division is responsible for processing the annual registrations for 30,026 products (Feed, Fertilizer, Lime, and Pesticide) as well as issuing licenses to 9785 registrants for the 27 types of businesses that the Agency of Agriculture has purview of:

- Pesticide Applicators
- Pesticide Company Licenses
- Pesticide Dealers
- Seed Dealers
- Ginseng
- Nursery Dealers
- Retail
- Weights and Measures
- Apiary
- Dealer/Repair Person
- Maple Dealers/Processors
- Public Weighmaster
- Hemp
- Euthanasia Shelters
- Euthanasia Technicians
- Fair Registration
- Meat Handlers
- Pet Merchants
- Livestock Dealers
- Livestock Packers
- Livestock Transporters
- Dairy Technicians
- Milk Handlers
- Equipment Dealers

OTHER ADMINISTRATION PROGRAMS

ACCESSORY ON-FARM BUSINESS —A farmer, farm resident, or farm lessee may operate a subordinate business located on a farm regulated by the Agency of Agriculture, Food & Markets under the Required Agricultural Practices (RAPs) rules

ON-FARM RENEWABLE ENERGY —The Agency explores and promotes strategies related to the expansion of on-farm energy production (e.g., bioenergy, solar, wind) as well as the deployment of energy efficiency improvements for farms and food system businesses.

FARMLAND CONSERVATION — The Agency co-holds conservation easements with VHCB, the Vermont Land Trust and Upper Valley Land Trust . It approves farmland conservation applications, develops policy and guidance that affects conserved farmland, and shares in the responsibility of steward the easement in partnership with VHCB.

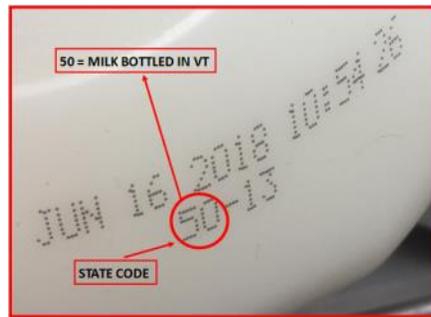
VAAFM NEWS

The agency, through its communications department, has committed to telling the stories of Vermont's agriculture community, through video, social media, agency web content, and any other means like Facebook lives. We do this to ensure that the public sees the real people and communities that are behind Vermont's agricultural and working lands culture.



CREEMEE FROM A COP

The mission of this program is to promote Vermont dairy through positive interactions of Vermont law enforcement and members of their community.



**KNOW THE CODE!
LOOK FOR "50"**

If you desire to support Vermont dairy farmers by purchasing more Vermont milk, one way to do so is to find milk that is bottled in Vermont. Our state is home to large dairy co-ops who ship your local farmer's milk to a number of milk bottlers and processors in the New England area. However, much of it goes to bottlers in Vermont, which means if you can find "50" at your local grocery, you are likely supporting Vermont dairy farmers by purchasing that milk.



AGRIVIEW

Agriview is a monthly publication of the Vermont Agency of Agriculture, Food & Markets. Its mission is to educate and inform Vermonters about issues, events, and discussions that impact the state's agricultural industry and the people that work in it. In September, Agriview turned 80 years old! The Agency of Agriculture recognizes the importance of this publication to many in our farming communities. During today's world of media consolidation, digital media, and print delivery decline, we are working hard to continue Agriview for another 80 years!

AGRICULTURE AND DAIRY PROMOTION

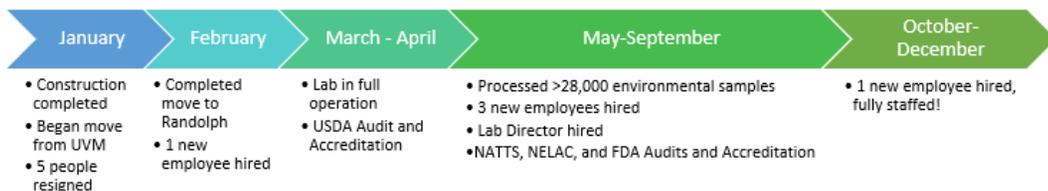
Working with its partner the Vermont Dairy Promotion Council (VDPC), the agency displayed a cow statue in front of the agency building in Montpelier to engage the public. This is one example of the efforts of the agency to support its constituencies as they continue to support the states vital working lands economy, rural families, communities, and agricultural businesses.



The Vermont Agriculture & Environmental Laboratory (VAEL) provides analytical services to the Vermont Agency of Agriculture, Food & Markets (VAAFM) and the Vermont Agency of Natural Resources (ANR).

In August 2011 Tropical Storm Irene flooded the state office complex in Waterbury, destroying laboratories for both VAAFM and ANR. Temporary facilities were located across the state but there remained a need to establish a permanent facility and bring these laboratories under the same roof again. In 2019, the new Vermont Agriculture and Environmental Laboratory in Randolph Center opened to serve this purpose.

In January 2019, the VAAFM Agriculture and Environmental Lab began its move from facilities on the UVM campus to the new Randolph facility. 2019 was a year of transition for the VAAFM Agriculture and Environmental Laboratory, yet the drive, talent and resilience of the staff kept the lab running throughout the transition and we realized many accomplishments throughout the year.



VAEL FACILITY LABORATORIES

- VAAFM Agriculture and Environmental Lab (dairy, virology, molecular biology, serology, hemp, maple products, pesticides, feed, seed, fertilizer, air quality, water quality including nutrients, heavy metals, air toxics)
- VAAFM Weights and Measures Lab
- VAAFM Plant Industry Lab
- VAAFM Animal Pathology Lab
- ANR Forests Parks and Recreation Entomology Lab and State Entomology Collection
- ANR DEC Watershed Management Biomonitoring Lab
- ANR Fish and Wildlife Fish Health Lab

94 DAIRY PRODUCERS
SUPPORTED THROUGH ROUTINE SAFETY AND QUALITY TESTING

130+ TESTS OFFERED
TO SUPPORT STATE AGENCIES, VOLUNTEER GROUPS AND ACADEMIA

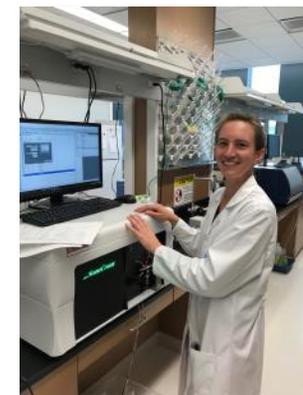
88 MONITORING PROJECTS
SUPPORTED STATE-WIDE

1000+ ANIMAL HEALTH
SAMPLES ANALYZED TO SUPPORT VERMONT LIVESTOCK

28,788 ENVIRONMENTAL
SAMPLES PROCESSED

10,691 PHOSPHORUS
SAMPLES PROCESSED

6 NATIONAL ACCREDITATIONS
HELD



VAAFM WATER QUALITY DIVISION

FY19 FINANCIAL ASSISTANCE TO FARMERS

11,490 ACRES

IMPROVED THROUGH FUNDED PRACTICES

85 PRACTICES

FUNDED AND INSTALLED

\$3.7 MILLION

STATE EXPENDITURE FOR IMPLEMENTATION

\$2.5 MILLION

FEDERAL EXPENDITURE LEVERAGED

NEARLY \$1 MILLION

INVESTED BY VERMONT FARMERS

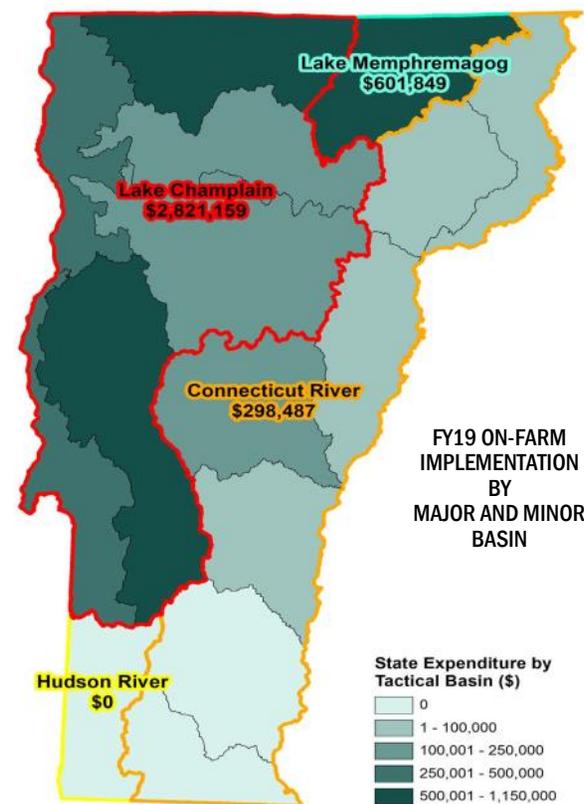
While regulation of agricultural operations provide a legal mechanism for oversight of farms, the goal is to improve water quality in Vermont and reduce nonpoint source nutrient loading from agriculture. The Water Quality Division administers multiple financial assistance (FA) opportunities for farmers in Vermont.

In FY 2019, the Water Quality Program invested more than \$3.7 million of State funds and leveraged over \$2.5 million in Federal expenditure to fund on-farm implementation of conservation practices to improve water quality in the state of Vermont. Vermont farmers invested just under \$1 million of private funds in cost-share contributions towards implementation of these projects.

Waste Storage Facility (above) and Heavy Use Area (below) implemented voluntarily on a beef CSFO in Benson through Vermont's BMP Program



Implementation of manure injection equipment acquired through the CEAP Program.



ASSISTANCE PROGRAM DESCRIPTIONS

- **Farm Agronomic Practices - FAP:** Financial assistance to Vermont farms for implementation of soil-based agronomic practices that improve soil quality and reduce erosion.
- **Best Management Practices - BMP:** Technical and financial assistance program to assist farmers with on-farm improvements designed to abate agricultural waste discharges into state waters.
- **Capital Equipment Assistance Program - CEAP:** Financial assistance for new or innovative equipment that will aid in the reduction of surface runoff of agricultural wastes to state waters, improve water quality of state waters, improve manure management, separate phosphorus (P) from manure, and decrease greenhouse gas emissions.
- **Grassed Waterway and Filter Strip Program - GWFS:** Technical and financial assistance to Vermont farmers for in-field agronomic best practices to address critical source areas, erosion, and surface runoff through establishment of perennially vegetated grassed waterways, filter strips, critical source area seeding, and associated infrastructure.
- **Pasture and Surface Water Fencing Program - PSWF:** Pasture management technical and financial assistance to Vermont farmers to improve water quality and on-farm livestock exclusion from surface waters statewide.
- **Conservation Reserve Enhancement Program - CREP:** Technical and financial assistance program designed to reduce sediment runoff and improve water quality by removing land from agricultural production and establishing vegetative buffers.

PROGRAM	EXPENDITURE	AWARDS	IMPACT
FAP	\$265,076.76	\$326,433.06	11,468 Acres Improved
Sample FAP Practices Installed	7087 Acres : Cover Crop		Average 28% reduction in total P per acre ¹
	1671 Acres : Conservation Tillage		Average 27.5% reduction in total P per acre ¹
BMP	\$2,238,469.51	\$3,331,677.26	76 Practices Installed
Sample BMP Practices Installed	34 Waste Storage Structures		42% reduction in total P ²
	36 Heavy Use Area Protection & 16 Clean Water Diversion		53% reduction in total P for barnyard runoff management ²
CEAP	\$1,187,417.05	\$1,138,700.00	34 Pieces of Equipment/Technology
Sample CEAP Equipment Acquired	17 Cover Crop Equipment		Average 28% reduction in total P per acre ¹
	4 Silage Management Equipment		1 acre of feed storage can lose as much nutrients as 120 acres of cropland ³
PSWF	\$24,533.33	\$50,922.73	9 Practices Implemented
GWFS	\$17,850.00	\$21,950.00	21.83 Acres Improved
CREP	*No new contracts due to FSA National Office determination that land subject to environmental regulations is ineligible. CREP should be available to VT Farms in FY20.		

1) Vermont Agency of Natural Resources, Department of Environmental Conservation - Current Methods to Measure Nutrient Pollutant Reductions
 2) A tool for estimating best management practice effectiveness for phosphorus pollution control. MW Gitau, WJ Gburek, AR Jarrett - Journal of Soil and Water Conservation, 2005.
 3) Evaluation of silage leachate and runoff collection systems on three Wisconsin dairy farms. A Wunderlin, E Cooley, B Larson, C Herron, D Frame, A Radatz, K Klingberg, T Radatz, and M Holly - Discovery Farms Wisconsin, 2016.

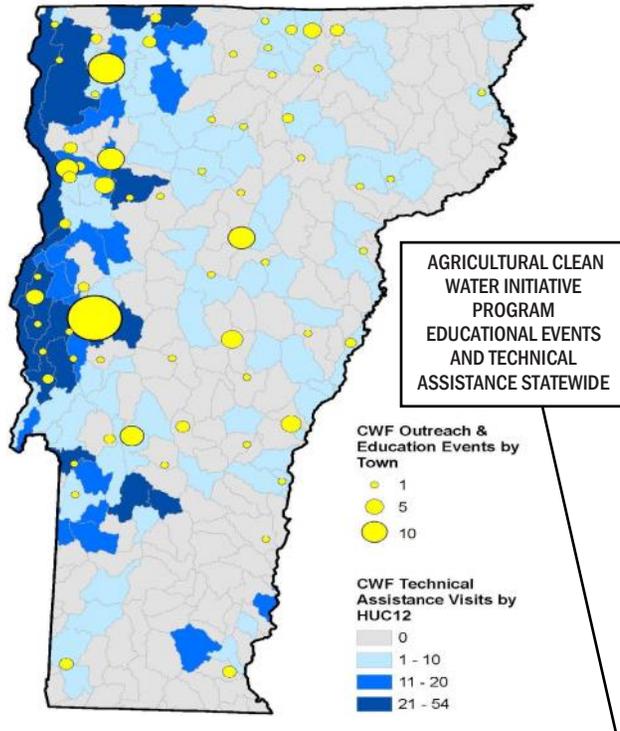


Before (left) and after (right) installation of a perennial vegetated filter strip in the Lake Memphremagog watershed to filter field runoff from the adjacent agricultural field and reduce sediment and nutrient runoff to nearby surface water.



The Water Quality Division within the Vermont Agency of Agriculture, Food and Markets (VAAFM or the Agency) is responsible for ensuring farms meet the State agricultural water quality non-point source regulations. The Agency performs this task through the use of regulatory, technical, and financial assistance programs provided to farmers and partner organizations.

VAAFM also works to reduce nonpoint source nutrient pollution from agricultural land through education and outreach programs, as well as grant awards to partners through the Agricultural Clean Water Initiative Program (Ag-CWIP). Ag-CWIP, which is made possible by the Vermont Clean Water Fund, supports partners to provide educational programs, innovative phosphorus reduction strategies, and technical assistance to Vermont farmers.



University of Vermont Extension Service and Champlain Valley Farmers' Coalition hold an on-farm workshop to discuss the benefits of grassed waterways and filter strips in reducing field erosion.



8,541 ATTENDEES
REACHED THROUGH EDUCATIONAL EVENTS

627.3 HOURS
OF EDUCATIONAL OPPORTUNITIES FOR VT FARMERS

230 EVENTS
EDUCATIONAL EVENTS HELD STATEWIDE

1,448 TA VISITS
BY VAAFM STAFF AND PARTNERS



VAAFM staff train agricultural service providers about water quality regulations for farms and Required Agricultural Practices compliance and inspections.

Map of VT showing TA visits by HUC12 and the number of outreach and education events by town. Darker blue regions received more TA, and bubbles are proportional to education and outreach events in each town. TA from VAAFM staff is not included.

AGRICULTURAL CLEAN WATER INITIATIVE PROGRAMS

- **University of Vermont Extension:**

Comprehensive Extension Programming for education and outreach, certification programs, technical assistance for conservation implementation and funding opportunities, business planning, and research and development to support educational programs.

- **Vermont Association of Conservation Districts:**

Education and outreach, technical assistance, land treatment planning, and organizational capacity development.

- **Natural Resources Conservation Council:**

Education and outreach for increased awareness of water quality regulations and best practices, technical assistance regarding conservation practices and funding opportunities, as well as organizational development and capacity building to increase organizational effectiveness across ten state Natural Resource Conservation Districts.

- **Vermont Grass Farmers Association:**

Educational programming for Vermont farmers to undertake, improve and/or expand their grass-based livestock production, strategic planning and expanded membership benefits as well as outreach to increase Vermonters understanding, appreciation and adoption of livestock grazing best management practices that improve water quality.

- **Vermont Technical College: Agricultural Institute:**

Education and outreach to Vermont Technical College students regarding nutrient management planning. This work will support regulatory compliance with Required Agricultural Practices and Medium and Large Farm Permits and Rules as applicable.

- **Farmers Watershed Alliance of Franklin and Grand Isle:**

Education and outreach activities focused on precision agricultural tools and technologies, conservation practices for water quality improvements and regulatory compliance, as well as organizational capacity development.

- **Poultney Metowee Natural Resources Conservation District:**

Support for the Agronomy and Conservation Assistance Program (ACAP) in providing technical assistance in nutrient management planning and implementation of farm conservation practices, particularly targeted at direct outreach to small producers.

- **Franklin Watershed Committee:**

Education and outreach regarding agricultural practices and their role in achieving TMDLs for Lake Carmi, the Pike River and Lake Champlain to help bring together a divided community of stakeholders, farmers, environmental entities, and the general public through collaborative goal setting and improved communications.

- **Missisquoi River Basin Association:**

Outreach programs to schools and community groups ensuring the importance of clean water is expressed to a wide range of watershed residents, one-on-one outreach through site visits, and focused on farm water sampling.

- **Champlain Valley Farmers Coalition:**

Education and outreach, technical assistance, and leadership development and strategic planning to expand organizational capacity and development.

- **Friends of Northern Lake Champlain:**

Organizational capacity development to support existing and new services to farmers.

- **Scott Magnan's Custom Service:**

Education and outreach as well as technical assistance to producers in implementing and utilizing precision agricultural tools and technologies to more precisely apply and track nutrients applications.

- **Newtrient LLC**

Research and development for strategic pathway for inducing phosphorus extraction and removal technologies on Vermont dairy farms.



Staff from the Franklin County Natural Resources Conservation District provide technical assistance to a farmer for Land Treatment Planning.



University of Vermont Extension Service soil specialists use a rainfall simulator to demonstrate the effects of cover crops on runoff and infiltration.



University of Vermont Extension Service soil specialists use a rainfall simulator to demonstrate the effects of cover crops on runoff and infiltration.

34 LFOS (LARGE FARM OPERATIONS)
114 MFOS (MEDIUM FARM OPERATIONS)
310 CSFOS (CERTIFIED SMALL FARM OPERATIONS)
 NUMBERS OF OPERATIONS OF VARYING SIZES PERMITTED WITH VAAFM

91 APPLICATORS
 CERTIFIED CUSTOM MANURE APPLICATORS

1240 FARM VISITS
 FOR WATER QUALITY INSPECTION AND TECHNICAL ASSISTANCE

115 ENFORCEMENT ACTIONS
 ASSOCIATED WITH 179 ALLEGED VIOLATIONS

The Vermont Agency of Agriculture, Food and Markets (VAAFM) has developed a comprehensive approach to the regulation of farms in the State in order to best protect water resources. The approach to regulating Vermont farms addresses all farm sizes, providing size-specific regulatory oversight ranging from Small Farm Operations (SFOs) and Certified Small Farm Operations (CSFOs) subject to regulation under the Required Agricultural Practices (RAPs) Regulations, to Medium Farm Operations (MFOs) regulated under the state's MFO General Permit, to Large Farm Operations (LFOs) regulated under a LFO Individual Permit.

The information below summarizes the VAAFM Agricultural Water Quality Enforcement Program State Fiscal Year 2019 (FY19) Annual Report. In FY2019, the Enforcement Program recorded 571 water quality compliance visits and 115 enforcement actions for alleged violations on 98 farms. Two additional enforcement actions were issued to two custom applicators for violations of the RAPs.

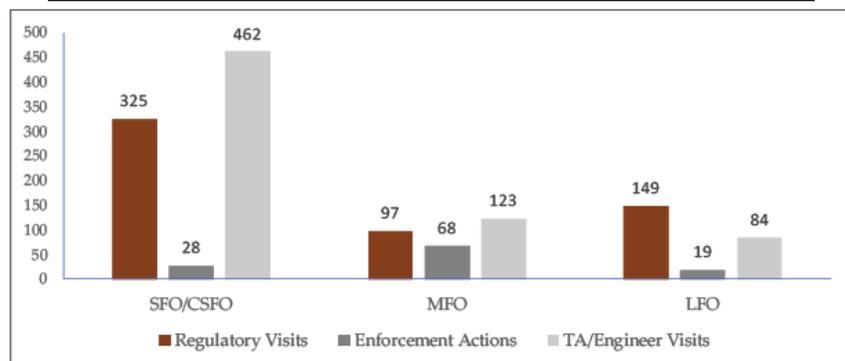
In FY19, VAAFM issued 115 enforcement actions to farms. Of these, 17 were Notice of Violations (NOVs) which assessed associated monetary penalties totaling \$30,000. VAAFM referred several cases to the Vermont Attorney General's Office (AGO) for civil enforcement in FY19 and the AGO is working to obtain corrective action and monetary penalties. A further 38 farms were referred to the Agency of Natural Resources, Department of Environmental Conservation (ANR DEC) for suspected point source discharges to surface water. To obtain accurate penalty amounts for these cases, please contact ANR DEC.



VAAFM water quality farm specialist inspection.



FISCAL YEAR 2019 FARM VISITS AND ENFORCEMENT BY FARM SIZE



SUMMARY OF ENFORCEMENT ACTIONS AND REFERRALS 2016-2019

YEAR	INVESTIGATIONS & INSPECTIONS	FARMS RECEIVING ENFORCEMENT ACTIONS	REFERRALS TO ATTORNEY GENERAL'S OFFICE	REFERRALS TO AGENCY OF NATURAL RESOURCES
2016*	379	38	1	1
2017*	505	82	2	18
2018	652	101	7	32
2019	571	98	6	38

**Data reported for 2016 and 2017 reflect calendar year reporting, whereas 2018-2019 data reflects State Fiscal Year data.*

The Vermont Phosphorus Innovation Challenge (VPIC) was announced in February 2018 as an X-Prize style competition to harness creative solutions to address phosphorus pollution in Vermont. VPIC complements ongoing, essential work to install conservation measures and best management practices to reduce phosphorus losses from farms and in stormwater runoff from developed lands. These new technologies aim to make existing protections even more effective.

Of the 27 initial VPIC applicants, six groups were selected for initial funding awards. Beginning in September 2018, awardees engaged in technology prototyping and business case development, honing their technologies for phosphorus recovery and researching the market potential for the extracted nutrients. The final component of Stage Two for VPIC was the submission of a final business report. These reports included a detailed business plan describing the method, process and costs for full implementation; the proven ability of the technologies to recover phosphorus; the potential revenue streams associated with recovered phosphorus; and an explanation of the suitability of technology or practice to address Vermont’s existing phosphorus challenge. Submission of this report qualified participants to move on to Stage Three of the VPIC.

Following a thorough review of the reports, five projects were selected for further development. Each awarded project is unique and proposes an effective and innovative solution to address the phosphorus pollution that impacts water quality statewide.

- **DVO, Inc. and University of Vermont (UVM) – Chilton, WI** **\$500,000**
Anaerobic digesters at dairy farms statewide that will be enhanced for advanced solids control using Dissolved Air Flootation (DAF) processes.
- **Green State Biochar – Barton, VT** **\$135,000**
Use of local renewable organic wood waste materials that are processed in an innovative pyrolysis machine developed in Vermont to produce a sequestered carbon product called Biochar.
- **Agrilab Technologies Inc. – Enosburg Falls, VT** **\$320,200**
Use of a combination of existing phosphorus (P) recovery technologies, composting and drying equipment to establish a series of hub and spoke sites for P processing infrastructure in Franklin, Addison, Lamoille and Caledonia counties.
- **Digested Organics – Ann Arbor, MI** **\$137,500**
Awarded funding for the construction of a mobile ultrafiltration (UF) system to process manure and/or digested manure from about 100 dairy cows.
- **Village of Essex Junction, Chittenden County Solid Waste District and UVM – Essex Junction, VT** **\$58,907**
Struvite generation systems are employed to remove Phosphorus from waste streams originating from water resource recovery facilities.



VAAFM Secretary Anson Tebbetts tours one of the VPIC proposals and their recovered phosphorus product.



Steam rising from batches of composted manure solids, wood chips and P concentrate

The Dairy Section of the Vermont Agency of Agriculture Food and Markets has oversight of the dairy industry in Vermont and is responsible for assuring that sanitation standards are followed to minimize the risk of unsafe products entering the marketplace.

The Dairy Section is comprised of a team of dairy specialists that regulate and educate all entities involved in fluid milk production to milk processing. The Dairy Section also maintains federal standards for dairy products that allows Vermont dairy products to be sold both in and out of state and globally.

Milk Tank Truck inspection being performed by farm inspector Eric Perkins



Dairy plant inspectors Brian Young and Justin "Jay" Jeror conducting a pasteurizer training for over 35 pasteurizer operators across Vermont



Dairy plant inspectors Justin "Jay" Jeror, Greg Lockwood, and dairy farm inspector Sue James inspecting a robotic milk metering system



Robotic milk metering and sampling system located in a milk tank truck



697	TOTAL DAIRY FARMS
152	TOTAL DAIRY PLANTS
2,150	DAIRY FARM INSPECTIONS
408	DAIRY PLANT INSPECTIONS
252	DAIRY PLANT EQUIPMENT TESTS
31	ENFORCEMENT INSPECTIONS
783	MILK SAMPLING STOPS
186	MISCELLANEOUS INSPECTIONS (BULK MILK HAULER & MILK TANK TRUCK)
61	TECHNICAL ASSISTANCE VISITS

During 2019, the entire dairy section has played a part in reviewing, observing, and critiquing technologies for a robotic milk tanker system, pictures shown above. In 2020 Vermont will be one of the first states in the United States to have a robotic milk metering and sampling system on the road collecting milk. The dairy section has worked with FDA, the state of NY, and NH during this process to uphold milk safety standards while also confirming farmers' milk will be correctly measured and sampled with this new technology.

The Agricultural Products section includes regulatory programs for produce safety, maple products, and USDA Country of Origin Labeling (COOL).

PRODUCE SAFETY—Staff conduct annual produce safety farm inspections under the federal Food Safety Modernization Act, Produce Safety Rule, which establishes science-based minimum standards to prevent foodborne illness outbreaks associated with fresh produce. Inspection staff coordinate with produce program partners within VAAFM as well as federal (FDA), state, and Extension partners. 2019 was the first year of initial inspections on large produce farms covered by the regulation (covered farms with >\$500k in average annual produce sales). Covered farms receive produce safety training and are offered educational On-Farm Readiness Reviews (OFRR) prior to inspection. Staff also provide ongoing educational and technical assistance regarding the regulatory requirements of the Produce Safety Rule. Only farms covered by the Produce Safety Rule require an inspection. Other farms are eligible for exemptions based on size, crops, or if produce receives further processing. The program is fully funded by a five year cooperative agreement with the FDA.



Produce Farms by Coverage (2019)

Coverage Categories	Totals	Inspections begin
Covered, large (>\$500k)	16	Spring 2019
Covered, small (\$250k to \$500k)	5	Spring 2020
Covered, very small (\$25k to \$250k)	6	Spring 2021
Qualified Exempt	145	NA
Processing Exempt	2	NA
Excluded (<\$25k and Rarely Consumed Raw)	330	NA
TOTAL	504	

Produce Farm Inspections (2019)

Farms requiring inspection	16
Inspections conducted	16
Farms inspected	16 (100%)

Educational, TA, and Verification Activities (2019)

On-Farm Readiness Reviews (OFRR)	11
Other educational/TA visits	2
Farm coverage verifications	330



Governor Phil Scott taps the first tree in Hardwick, VT during the early 2018 maple season.

Maple sugarhouse in Colchester, VT



USDA COUNTRY OF ORIGIN LABELING

Staff perform USDA Country of Origin Labeling (COOL) reviews at retail locations throughout the state as part of a cooperative agreement funded by USDA's Agricultural Marketing Service. Country of Origin Labeling is a federal labeling law that requires retailers to notify customers with information regarding the source of certain foods, including lamb, goat, and chicken; fish and shellfish; fresh and frozen fruits and vegetables; certain nut crops; and ginseng products.

2019 USDA COOL REVIEWS CONDUCTED	10
----------------------------------	----

MAPLE PRODUCTS—2019 was a transition year with new staff taking on maple product regulatory work for the division. Agricultural Product Specialist, Tucker Diego, took on these additional duties mid-way through 2019 and has participated in maple trainings, conferences, and has updated the division's inspection protocols to begin routine maple inspections in January, 2020. Maple product inspections will be conducted at retail locations across the state. Maple syrup is sampled to assess grade standards for color, flavor, clarity, and density, as well as labeling requirements. The goal of maple product inspections are to ensure a fair and level playing field for consumers and the maple industry by enforcing Vermont maple product laws.

The Weights and Measures section provides consumer protection, especially as it relates to some of our most vulnerable Vermont residents. Inspections on weighing and measuring devices including oil, propane, and gasoline meters as well as scales assure accurate delivery of volume and weight when goods are purchased by Vermont consumers.

UPC Inspection Stats	
Total inspections	325
Passed	258
Norm Fail	24
Inc Fail	43
Total businesses inspected	183
Total items inspected	19663
Number of undercharges	90
Average undercharge percentage	21.9%
Number of overcharges	481
Average overcharge percentage	23.3%

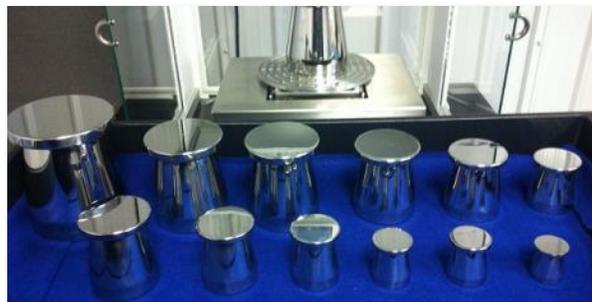
Class	Active	Total Insp	Unique Bus	Multiple Insp	App	Rej	Clo	OoS
Small Scale	3283	2255	630	17	2196	40	5	14
Medium Scale	521	296	203	7	278	11	1	6
Vehicle Scale	222	173	142	10	145	24	1	3
Livestock	2	2	1	0	2	0	0	0
Hopper Scales	114	78	34	0	78	0	0	0
Liquid Measuring Device	8340	5959	486	217	5549	281	35	94
Vehicle Tank Meter	658	481	100	18	414	16	21	30
LPG Meters	423	298	81	4	286	10	2	0
Linear Measure	44	27	26	0	27	0	0	0
Onboard Weighing	2	2	1	0	2	0	0	0
Wheel-Load Weigher	200	175	0	0	0	0	0	0

These products are crucial to residents who need to heat their homes and often commute long distances to work. Price verification scanner inspections protect consumers in retail stores. Many of these inspections take place at discount locations where many consumers expect lower prices that assist working families with meeting their household budgets.

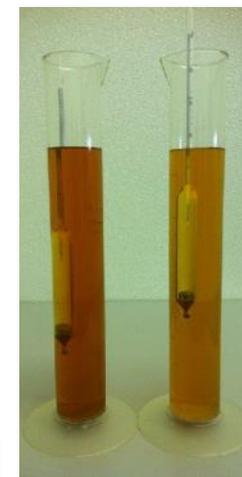


Produce Scales

The W&M Metrology Laboratory is part of the Vermont Agriculture & Environmental Laboratory, located in Randolph on the Vermont Technical College campus. Significant new equipment was purchased, both supplementing existing functions and offering an expansion of calibration services to businesses in the Northeastern part of the country. Expanded services include the calibration of large volume provers and weight test carts and marks the first major expansion in decades. Significant tolerance testing of hydrometers used in the maple industry were performed. A total of 8,452 hydrometers, 1,470 weights, and 56 five-gallon test measures were tested during 2019.



Medium Weights



Maple Hydrometers

WEIGHTS & MEASURES NOTICE of VIOLATIONS/PENALTIES
1/1/2019–12/19/2019

32	SCANNER VIOLATIONS	\$197,500
11	SHORT WEIGHT	\$25,750
4	HYDROMETERS	\$12,500
1	LABELING	\$1,000
48	TOTALS	\$236,750

* *In addition to the Notice of Violations, the section also issued an additional 37 warning letters for similar violations.*

The W&M inspection and enforcement program was very active during 2019 issuing 48 violations for a total amount of \$236,750.00 in penalties being issued. Notices of Violations were issued for Scanner, Short Weight, Hydrometer, and Labeling violations. 5 pre-hearings and 5 formal hearings took place in the resolution of cases where hearings were requested.



VT Attorney General TJ Donovan addresses the media during the joint press conference announcing the enforcement action against Dollar General.

The W&M section also referred and assisted the VT Attorney General’s office with a major price verification scanner case involving the retail chain Dollar General. The AG’s office successfully negotiated a 1.75-million-dollar settlement with Dollar General. Some of the settlement funds were donated to the VT Food Bank. The settlement provided consumer protection by ensuring improved pricing for VT consumers in retail stores throughout Vermont.



VAAFM Secretary Anson Tebbetts speaks to the media, explaining how the everyday activities of the VAAFM Weights & Measures section protects consumers and holds businesses in Vermont accountable to consumers.



The new VAEEL Laboratory on the campus of the Vermont Technical College is home to the Weights & Measures section.

BY THE NUMBERS—2019 ANIMAL HEALTH ACTIVITIES

16 QUARANTINES

ISSUED FOR DISEASE SUSPECTS OR ILLEGAL ACTIVITIES

\$10K PENALTIES

ASSESSED FOR ADMINISTRATIVE VIOLATIONS

37 WARNING LETTERS

ISSUED FOR NON-COMPLIANCE

1,157 AVIAN INFLUENZA

AND PULLORUM TESTS CONDUCTED AT NO CHARGE FOR POULTRY PRODUCERS

1,954 REGULATORY TESTS

FOR BRUCELLOSIS OR TUBERCULOSIS COMPLETED

\$3,675 PET SHOP LICENSE

FEEES COLLECTED

\$13,375 FEES COLLECTED

FROM LIVESTOCK DEALER, PACKER, TRANSPORTER LICENSE FEES

THE MISSION

- The Animal Health Section maintains the ability of Vermont's livestock, poultry, and livestock products to be sold locally, nationally and internationally through both disease monitoring and testing programs and implementation of state and federal livestock identification and movement programs. The Section's success with these programs allows Vermont to continue to receive federally designated disease-free status for swine brucellosis, pseudorabies, classical swine fever, cattle tuberculosis and brucellosis and chronic wasting disease. Maintenance of disease-free status eliminates the need for additional interstate and international pre-export testing and the economic burden that would be placed on Vermont livestock producers.
- The Animal Health Section oversees the inspection and licensing of pet merchants, livestock dealers, transporters, and packers and issues registration certificates to certified euthanasia technicians and associated facilities.
- State Veterinarians perform on farm investigations for diseases of high economic impact such as Foot and Mouth Disease and African Swine Fever and educate veterinarians and producers on what to look for and how to report.

2019 ANIMAL HEALTH ACTIVITIES

- ⇒ The Vermont Legislature passed Act 64, requiring all commercial slaughterhouses operating in Vermont to maintain records detailing information regarding livestock slaughtered at the facility and allowing Agency staff access to such records.
- ⇒ USDA mandated a transition to mandatory electronic livestock ear tags as the only accepted form of official identification by 2023. USDA has since paused this transition and State Veterinarians will continue to work with producers on the challenges and opportunities posed by this mandate for when it again moves forward.
- ⇒ Section staff provided technical assistance, outreach and education to livestock producers in the Section's daily work in addition to specific initiatives, including poultry biosecurity assessments, swine biosecurity assessments and implementation kits, and one-on-one assistance with livestock identification administration.



****Image from a Lyndonville Vermont area game camera in early 2019**** Feral swine posed a challenge as Vermont had its first two cases of feral swine and an escaped domestic herd that had the potential to become feral. One documented feral swine (pictured) was positive for pseudorabies, a disease Vermont is free from, prompting State Veterinarians to perform surveillance of neighboring herds. Vermont is one of twelve states without a feral swine population. Once established, feral swine populations are highly destructive to agricultural crops and natural habitat and can be threatening to people and wildlife.

The Animal Health Section of the Vermont Agency of Agriculture, Food and Markets closely regulates the movement of livestock into and out of Vermont. Through this close oversight, Animal Health Section personnel help to prevent the introduction and spread of domestic and foreign animal diseases that could be devastating to Vermont's livestock agricultural industry.



Metal Ear Tag

Livestock Exported:

- Cattle 3034
- Swine 12
- Sheep 238
- Goats 236
- Poultry 5639

Livestock Imported:

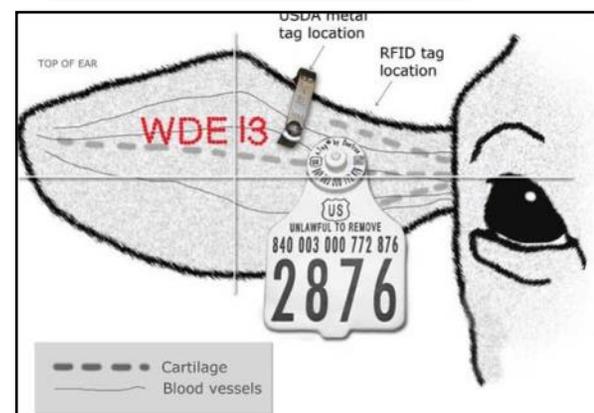
- Cattle 2431
- Swine 3292
- Sheep 1240
- Goats 416
- Poultry 80,068

RFID Ear Tag



2019 OFFICIAL IDENTIFICATION OUTREACH ACTIVITIES

- Staff met with **35** livestock producers (swine, beef, and dairy) on farm to determine the type of official ear tags most appropriate for their production system, issue free tags, and discuss biosecurity principles. Official ear tag use and monetary value in Vermont:
- **13,1096** RFID tags shipped directly to producers from tag manufacturers = **\$393,288**
- **1450** RFID tags provided at no cost to producers and dealers through on farm meetings = **\$4,350**
- **140,000** metal ears tags provided at no cost
- **6** RFID scanners provided to pilot program participants at no cost



Ear Tag Placement Diagram

THE MISSION

The Meat Inspection Section provides mandatory daily inspection, compliance activities and technical assistance throughout the meat and poultry industry in Vermont. The Meat Inspection Service enforces State and Federal laws and regulations to protect the health and welfare of consumers and the public by assuring meat and poultry products produced in Vermont are wholesome, unadulterated, and properly marked, labeled, and packaged.



The Vermont Agency of Agriculture, Food & Markets Meat Inspection team.

The program provides invaluable technical assistance to existing and potential plant operators and individual producers, and regularly correlates activities with the other Divisions and State Agencies and Departments to fairly and consistently enforce all regulatory aspects of animal and food production.

2019 INSPECTION NUMBERS

Daily Slaughter and Processing Inspections	2909
Retail compliance and enforcement inspections	440
Custom Slaughter and Processing Inspections	51
Microbiological Sampling	66
Drug and Antibiotic Sampling	28

2019 HIGHLIGHTS

- Operations covered include commercial and custom (Not for Sale) slaughter and processing, wholesale distribution and retail. Generally, the products that inspection services are provided for include red meat (beef, veal, pork, lamb and mutton, goat) and poultry (chickens, turkeys). There are also other species such as elk, red deer, alpaca, rabbits, emu, game birds (quail, pheasants, etc.).
- Over 2019, the section has gone through structural changes and strategic planning, in an effort to increase efficiency in the provision of services, and to increase options for small meat and poultry processors in Vermont.
- Rolling out of the Retail Specially Processed Meat/Poultry Variance Program in 2019 answered the growing desire for local entrepreneurs to expand their market shares among consumers for smoked, cured and uncured products, refined livestock fats, dried and pickled products.
- Annually, USDA FSIS conducts a review of the state program. Vermont’s most recent review occurred in November 2019, and the program is scheduled for its every-three-year on-site review in 2020.

THE MISSION

The Vermont Meat Inspection Compliance and Enforcement program is the second line of defense in assuring that consumers receive wholesome, properly labeled meat and poultry products. Our compliance officer and investigators are charged with investigating violations of the Vermont Meat and Poultry Inspection Statutes of product in commerce.

Activities include administering, coordinating, supervising or performing inspectional, investigative, analytical, or advisory work to assure understanding of the compliance with the applicable Federal and Vermont laws, regulations, or mandatory guidelines.

2019 COMPLIANCE ACTIVITIES

Inquiries to the Meat Inspection Section	120
Distributors, Warehouses, and Transporters surveillance	13
3D/4D Operators, Salvages, Renderers, Food Banks, and Exempt Poultry	11
Restaurants, Retailers, Institutions, Animal Food, Custom Exempt, Abattoir, Processor, Port-of-Entry, Bonded Area, Broker, and Miscellaneous visits	424
Surveillance Follow-up visits	14
Violation Cases or Investigations	12
Letters of Warning issued	12
Administrative Hearings	1
Consumer Complaints investigated	12
State Recalls	0
Licensed Meat and Poultry Handlers	1901

The VAAFM Compliance Officers work in liaison with USDA Compliance Officers, local law enforcement officers and the State's Attorneys General Office. Violations of the law can result in notices of warning, detentions, stop-sale orders, administrative actions, civil fines, and/or criminal prosecution.

2019 MEAT HANDLER LICENSE TYPE

4-D Handler	1
Animal Food Manufacturer	6
Broker, Meat or Poultry Products	1
Custom Packing and slaughter	29
Federal Commercial Packing Plant	24
Federal Commercial Poultry Slaughterhouse	4
Federal Commercial Slaughterhouse	6
Public Warehousemen	5
Renderer	3
State Commercial Packing Plant	9
State Commercial Poultry Slaughterhouse	2
State Commercial Slaughterhouse	2
Wholesalers	135
Retail Small Meat Processor	301
Retail Large Meat Processor	88
Retail Prepackaged Meat and Poultry	1305



THE MISSION

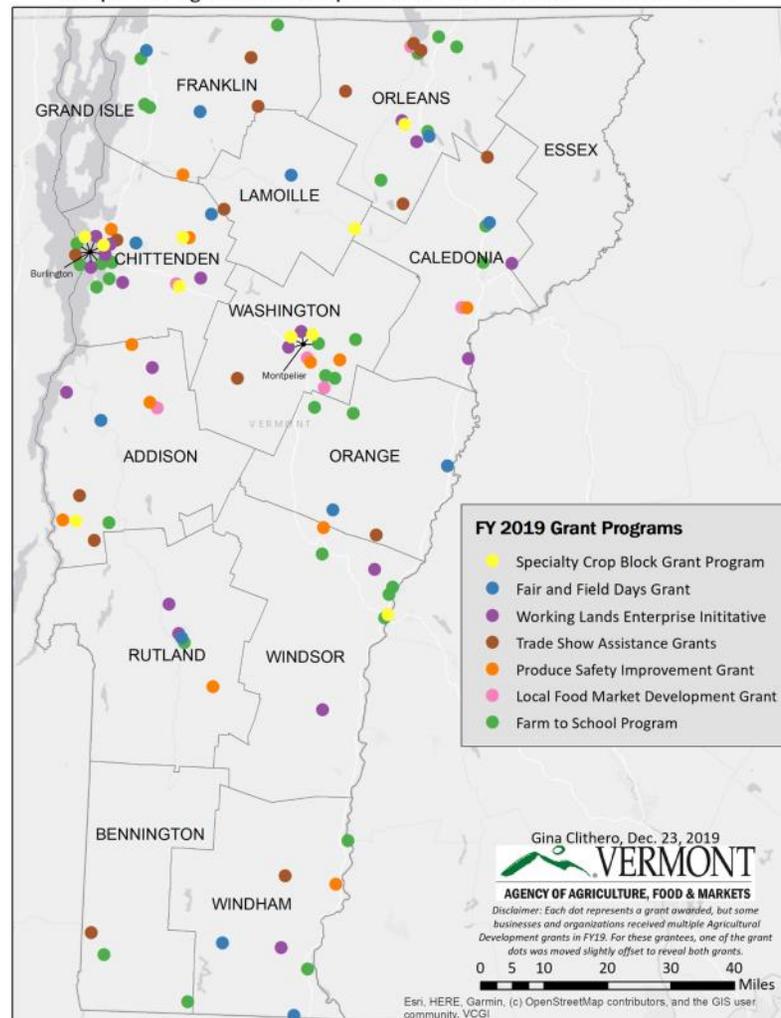
The Agriculture Development Division strives to meet the needs of Vermont's agricultural community by improving agricultural business capacity, consumer awareness and access, and farmland stewardship through technical assistance, grant funding, promotional opportunities, and collaborative efforts.

Providing coordinated support and needed resources to farm, food, forestry businesses and non-profit partners creates a vibrant and viable agricultural community in our state and a higher quality of life for all Vermonters. We achieve this by engaging in the following efforts:

- **Promotion of Vermont** agriculture and food products at local, regional, and international events.
- **Connection of Vermont** agricultural businesses to resources and market opportunities and convening food system stakeholders to focus on critical agricultural sectors and investment areas.
- **Identification and assistance** in developing new markets, local and out of state, for Vermont agricultural producers and their products.
- **Support** for increased agricultural literacy and access to healthy, local foods to improve equitable access and appreciation for our agricultural industry's contribution to the community, economy, and culture of our state.
- **Focused attention** on economic issues within the dairy industry and its critical contribution to Vermont's economy and working landscape.
- **Assurance** that the produce growers are educated, supported, and have the tools to achieve compliance with the on-farm produce safety requirements in the Food Safety Modernization Act's (FSMA) Produce Safety Rule.
- **Administration of the Vermont Working Lands Enterprise** program to include management of the Working Lands Enterprise Board and their investments.
- **The Process Improvement Team (PIT)**, composed of select program managers, division leaders, and grant administrators, met monthly to discuss practices that build internal process efficiency within the division's seven primary grant programs.

Investing in Vermont's Agricultural Economy

Recipients of Agricultural Development Grants and Contracts in Fiscal Year 2019



GRANT PROCESS IMPROVEMENTS

- Developed comprehensive training curriculum on Grants Management System (GMS) for new and tenured program managers; trained seven managers to proficiency
- Designed standardized documents to streamline grants management, including templates for grantee communication and annual grant tracking
- Developed visual tools to build collaboration capacity, including process flow maps and outline of administrative roles and responsibilities
- Built and distributed surveys to gauge customer and staff satisfaction with grants management experience
- Collaborated with system administrator to re-design grantee payment request module, resulting in significant reduction in grantee errors and increased efficiency in payment processing

AGRICULTURE DEVELOPMENT 2019 SUCCESSES

AGRICULTURE DEVELOPMENT 2019 INVESTMENTS

Grant Program	# recipients	\$ invested
Farm to School & Childcare grants	33	\$278,700
Fair & Field Days Capital grants	13	\$309,656
Local Food Market Development	6	\$30,000
Produce Safety Improvement Grants	12	\$56,085
Specialty Crop Block Grant	10	\$307,992
Trade Show Assistance Grant	16	\$32,074
Working Lands Enterprise Initiative	19	\$823,118
Totals	109	\$1,781,540

AGRICULTURE DEVELOPMENT 2012–2019 INVESTMENTS

Grant Program	# recipients	\$ invested
Farm to School & Childcare grants	236	\$2,243,985
Fair & Field Days Capital grants	109	\$2,839,967
Local Food Market Development	59	\$290,000
Produce Safety Improvement Grants	29	\$204,114
Specialty Crop Block Grant	98	\$2,995,992
Trade Show Assistance Grant	85	\$127,913
Working Lands Enterprise Initiative	203	\$6,123,118
VT Producer Association Grant	8	\$16,000
Totals	827	\$14,841,089

7 FUNDING OPPORTUNITIES

OFFERED TO FARM, FOOD & FOREST RELATED BUSINESSES

109 GRANTS & CONTRACTS

PROVIDED TO VERMONT BUSINESSES

\$1.78 MILLION AWARDED

IN TOTAL GRANT FUNDS

38 DAYS GRANT PROCESS

74 DAYS IN 2017 | 49% IMPROVEMENT

93% GRANTEE SATISFACTION

REPORTED ADEQUATE GRANT MANAGEMENT STAFF

An independent poll by Vermont Public Radio (VPR) and Vermont PBS (VTPBS) found tremendous public support for dairy in the Green Mountains in 2019.



The scientific poll released by the VPR and VTPBS found a total of 93% of Vermonters support Vermont dairy. “These independent results are encouraging as we try to grow the Vermont economy,” said Agriculture Secretary Anson Tebbetts. “We are working hard to improve the livelihood for dairy farmers throughout Vermont.”

THE IMPORTANCE OF DAIRY TO VERMONT

- VAAFM coordinated the Northern Tier Dairy Summit, which 240 people attended, including 115 farmers from Vermont, New Hampshire, New York, Connecticut, and Massachusetts.
- Dairy Summit outcomes have led to new initiatives, such as the Secretary’s Dairy Advisory Council, opportunities for farmer education, and dairy farm tours for legislators.
- VAAFM was named one of three USDA Dairy Innovation Centers for the northeastern region, contributing millions of dollars to collectively develop strategic and relevant projects to address the continued economic issues within the dairy sector.
- Specialty cheese market research was completed, showing that high-quality and specialty cheese production is still a viable option for Vermonters with room in the New England market for additional supply.
- The Working Lands Enterprise Initiative, realizing the higher dollar need of the dairy sector, added a new grant category of up to \$150,000 for projects who impact multiple farms and change long-term farm viability.

4 NEW OBJECTIVES

- **Convene a Secretary’s Dairy Advisory Committee** which will meet quarterly to discuss current issues from the farmer’s perspective and share Agency work. Committee nominations will go out shortly and the first meeting will be this summer.
- **Publish a Monthly Agriview Article** about current topics in dairy such as market trends, national policy changes that impact Vermont dairy farmers, and updates regarding grant funded work that the Agency is completing or that we have granted.
- **Coordinate Legislative Farm Tours** this summer and fall to ensure to all legislators understand what really happens on a farm and hear directly from you.
- **Visioning and goal development workshops** to meet the needs of farmers who expressed a desire to develop a long term plan for their farm beyond the standard business plan. Workshops will be planned for early 2020.

The Northern Tier Dairy Summit was attended by 240 participants with 115 dairy farmers present from across New England. Keynote speakers and breakout sessions encouraged participants to think outside the box, develop a long-term vision, and work collaboratively to move dairy into a positive future.



The Summit reinforced ongoing VAAFM commitments, and developed 4 new objectives in support of Vermont’s dairy industry.

4 ONGOING OBJECTIVES

- **Growth Management Plan** – the Milk Commission will continue to meet, and Agency staff will remain engaged in regional and national level discussions regarding a national growth management plan.
- **Positive Messaging Campaign** – VAAFM currently produces a “Fantastic Farmer” series and has engaged additional dollars for a targeted positive dairy focused campaign.
- **Truth in Labeling** – VAAFM is actively engaged at the national level regarding standards of identity for items carrying a dairy product label to ensure they are made from real milk.
- **Milk in Schools** – VAAFM and partners work closely with schools and school nutrition agencies to allow higher fat milk back into schools



THE MISSION

The Farm to School and Child Nutrition grant programs help schools develop and sustain relationships with local producers, enrich the educational experience of children, improve the health of Vermont children, and enhance Vermont's agricultural economy.

Beyond these grant programs, the agency collaborates on several strategic initiatives that aim to increase demand for local food in schools, make farm to school more accessible for Vermont schools, and shape policies that better integrate farm to school into classrooms, cafeterias, and communities.



2019 HIGHLIGHTS

- ⇒ In fiscal year 2019, 33 Vermont schools and Early Childhood Education organizations received direct financial assistance and support services, impacting 3,665 students and children. A total of \$278,700 was invested in supporting their farm to school programming
- ⇒ Expansion of the Farm to School Child Nutrition Grant has brought farm to school support to three early childhood education organizations around the state, with more applying for the upcoming grant round.
- ⇒ Vermont's reputation for leadership and innovation in farm to school played a role in securing two federal grants, totaling \$281,550, in leveraged support for Vermont farm to school implementation efforts. Additional federal support for farm to school have been solicited for FY20 as well.
- ⇒ A newly hired Farm to Institution program manager will focus on local product procurement in schools, colleges, hospitals, and other institutions including correctional facilities. This position will work closely with Agency of Education, beginning in 2020-2021 school year, to capture average annual percentages of local food purchased by Vermont K-12 schools. This new legislative requirement will help capture comprehensive local procurement data as well as aid in developing incentives for encouraging growth in schools' local food procurement over time.
- ⇒ VAAFM offered infrastructure investment support to the Chittenden Regional Correctional Facility to serve local fluid milk. The facility made the commitment to provide fluid milk and selected a local source (Kingdom Creamery Dairy, E. Hardwick) but lacked adequate daily cold storage of the milk jugs. VAAFM provided the correctional facility support to purchase a milk cooler for milk storage. Facilitation of local fluid milk procurement will be promoted to other Vermont correctional facilities over the next year.

The Vermont Agency of Agriculture works with food, beverage and forestry businesses to develop domestic and international markets through financial assistance, education, research, market entry, and promotional assistance. The Agency coordinates market research and promotion through In-Country Marketing Representatives and an extensive group of overseas agricultural trade officers.



2019 HIGHLIGHTS

TRADE SHOW ASSISTANCE

\$32,074 AWARDED

TO 16 VERMONT AG & FOOD BUSINESSES TO ATTEND OUT-OF-STATE TRADE SHOWS

\$3,491,092 FUTURE SALES

ESTIMATED FROM 4,321 SALES LEADS GENERATED DURING OUT-OF-STATE EVENTS

\$90K SALES

GENERATED AT OUT-OF-STATE TRADE SHOW EVENTS

\$309,656 AWARDED

TO 16 VERMONT FAIR & FIELD DAY EVENTS

- **VAAFM attended 4 national and international trade shows, organized 2 Vermont Pavilions on behalf of 23 businesses in collaboration with the Vermont Agency of Commerce and Community Development and the US Commercial Service.**
 - ⇒ **Canadian Health Food Association West**
 - ⇒ **Expo West**
 - ⇒ **National Restaurant Association**
 - ⇒ **Summer Fancy Food Show**
- **VAAFM coordinated the organization and promotion of community events that support the growth of local food markets, including:**
 - ⇒ **Consumer Night at the VT Farm Show the annual Capital Cook-off and a Buy Local Market featuring 36 local product vendors.**
 - ⇒ **5th Annual Open Farm Week in August 2019 with over 70 events hosted on 40 participating farms delivering agritourism experiences to over 1,000 attendees.**
 - ⇒ **Farmers Market Conference in Central Vermont in March 2019 with over 40 farmers market managers and board members in attendance.**
- **VAAFM promoted 51 summer and 16 winter farmers market at Vermont's 17 rest areas and info centers, as well as, libraries, food co-ops, chambers of commerce and other community organizations, to build support and participation in Vermont's direct markets for procurement of local products and support of local agriculture and food entrepreneurs.**
- **VAAFM staff co-managed the Vermont Building during the Big E, a 17-day exposition in West Springfield, MA.**
 - ⇒ **28 Vermont food and retail vendors participated in both 2018 and 2019.**
 - ⇒ **In 2018, Vermont vendors grossed: \$1,845,274.76**
 - ⇒ **In 2019, Vermont vendors grossed: \$1,973,078.92**
- **Maple industry market research report was completed with demonstrated opportunities in value-added products, recommendations for Vermont maple industry to focus on retail market development and promotion of the health and wellness attributes of maple syrup as more than a "pancake syrup" but to be included as an ingredient and snack product.**
- **\$30,000 was awarded to 6 grantees to foster Vermont producers' access to new markets by addressing barriers in the supply chain through The Local Food Market Development Program.**

2019 HIGHLIGHTS

\$332,633 SPECIALTY CROP

GRANTS SUPPORT COMPETIVENESS THROUGH USDA FUNDING

\$56,085 AWARDED

IN 12 PRODUCE SAFETY IMPROVEMENT GRANTS

560 VT PRODUCE FARMS

ENROLLED IN VT PRODUCE PORTAL TO ASSIST WITH FSMA COMPLIANCE

30 READINESS REVIEWS

TO ASSIST VT PRODUCERS COMPLY WITH PRODUCE SAFETY RULES

96 PRODUCE GROWERS

TRAINED IN PRODUCE SAFETY BEST PRACTICES & FSMA REQUIREMENTS

100% LARGE FARMS

ALL 16 LARGE PRODUCE FARMS (\$500K+ SALES) INSPECTED



THE MISSION

The Vermont Produce Program helps grow Vermont's produce industry by aiding produce farms of all sizes and stages of development to meet food safety requirements, access markets, and promote public health as sustainable agricultural businesses. In addition, the Produce Program works with partners, distributors, and retailers to clarify expectations around produce safety requirements.



The Vermont Produce Program helps farmers understand their farm's requirements under the Food Safety Modernization Act (FSMA) Produce Safety Rule through classroom and one-on-one training.

PROGRAM GOALS

- ⇒ Understand requirements under the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR);
- ⇒ Access resources to improve produce safety practices, which can also lead to increased efficiency, produce quality, and market access;
- ⇒ Prepare for a FSMA Produce Safety Rule inspection by providing on-farm education and trainings; and
- ⇒ Ensure a safer U.S. food supply by focusing on the prevention of food-borne illness that poses threats to both public health and the economy.



New Leaf CSA, a 2018 PSIG grantee, was awarded \$9,502 to upgrade their wash/pack house to a covered facility, and a cold storage unit, and install stainless-steel counters and sink for produce washing and handling.



PROGRAM HIGHLIGHTS

- **Working Lands Enterprise Initiative (WLEI) continues to bring leaders of the agriculture and forestry sectors together, creating great synergies and leverage as these working lands industries work together in public-private partnership. The Working Lands Enterprise Initiative supports innovative entrepreneurs at the forefront of Vermont's Working Lands economy through technical, business and financial assistance to help growing businesses thrive.**
- **Due to strong collaboration over the past eight years, across three agencies and due to staff with experience in the private sector, the Initiative is now poised to increase scale of projects, drive innovation, and add both jobs and revenue growth to agriculture and forestry businesses.**
 - ⇒ **Since 2012, over \$6.1 million dollars invested from Working Lands Enterprise Fund, and over 10 million dollars leveraged – reaching all 14 counties, resulting in over \$27 million in sales revenues and over 500 jobs created.**
- **WLEI works with the Vermont Community Loan Fund, and the Vermont Economic Development Association to provide zero or low-interest loan programs to Working Lands entrepreneurs.**
 - ⇒ **The \$142,478 Working Lands Enterprise Fund (WLEF) dollars expended to date has leveraged \$775,500 in Vermont Community Loan Fund (VCLF) capital that has been lent to 21 working lands enterprises.**
 - ⇒ **18 have been to agriculture and 3 to forestry or wood products enterprises.**
 - ⇒ **These enterprises have retained 41 jobs and anticipate to create an additional 22 jobs, for a total job impact of 63. That equates to \$2,262 WLEF dollars per job created or retained.**
- **The Vermont Ski Areas Association (VSAA) donates to the Working Lands Enterprise Fund.**
 - ⇒ **VSAA awarded its 2019 Ski Vermont Grant to KJ Pratt Logging and Tree Service, LLC, of Jericho, VT. The grant was funded through proceeds from Ski Vermont's Fifth Grade Passport program, which helps children get involved in skiing and snowboarding.**
- **Farm and Forest Businesses Assistance Matchmaking Platform - VAAFM and Vermont Sustainable Jobs Fund are collaborating towards the development of an online continuum of technical, business and financial services portal for the agriculture and forest/wood products sectors, to be launched in 2020.**

PROGRAM MISSION

The Working Lands Enterprise Initiative supports innovative entrepreneurs at the forefront of Vermont's Working Lands economy through technical and financial assistance to help growing businesses thrive. The program is made possible through the support of the state legislature, multiple state organizations and public/private donors.



\$6.1 INVESTED SINCE 2012

LEVERAGING ADDITIONAL \$10 MILLION

500 JOBS CREATED

AND \$27 MILLION SALES REVENUES SINCE 2012

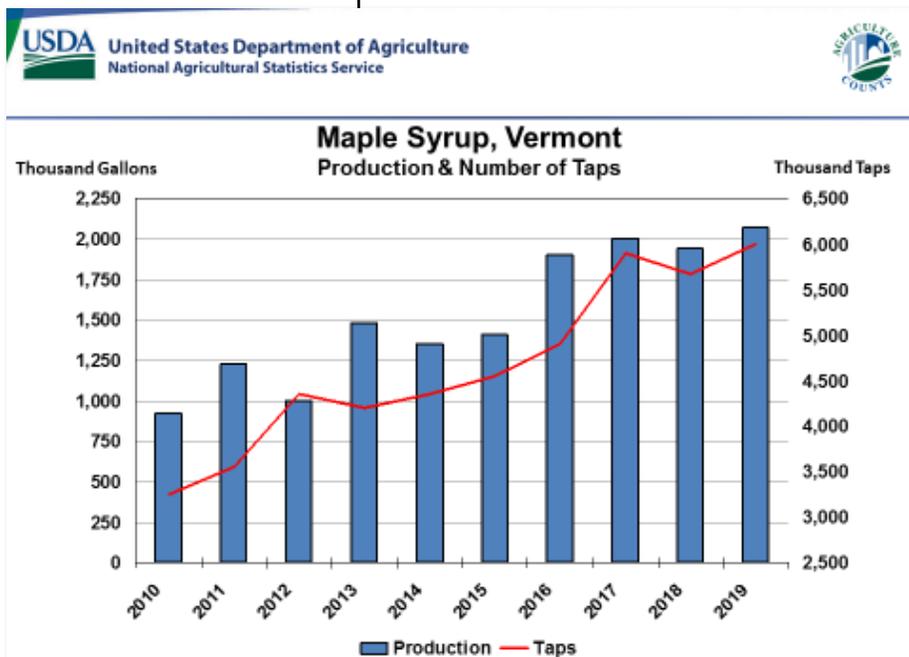
\$823,118 FY19 INVESTMENTS

\$633,210 = 12 AGRICULTURE | 7 FORESTRY PROJECTS
\$189,908 = SERVICE PROVIDER | TRADE SHOW ASSISTANCE GRANTS

\$1.5 MILLION FY20

104 APPLICATIONS REQUESTING OVER \$4.6 MILLION

VERMONT MAPLE PRODUCTION



MAPLE MILESTONES

- ⇒ Vermont continues to be the number 1 maple syrup producer in the United States, second only to Canada worldwide.
- ⇒ Vermont has led the U.S. in the number of maple taps every year since 1916 and was only out produced in 1926 and 1918.
- ⇒ Vermont typically tapped between 5.5 and 6 million trees prior to 1935 but declined to around 1.5 million in the 1960's.
- ⇒ In 2003 Vermont tapped 2.12 million trees and has been steadily increasing that number to the 6.00 million in 2019.
- ⇒ Annual production prior to 1935 was typically between 1 million and 1.4 million gallons. This dropped to around 200,000 to 300,000 gallons in the 1970's.
- ⇒ Since 2003 Vermont's maple syrup production has increased from around 500,000 gallons to over 2 million gallons today.



Vermont's Agriculture Secretary Anson Tebbetts said, "Vermont's sugar makers are proud to lead the nation once again. Pure Vermont maple is now more than about pouring this natural product on pancakes. You can now find Vermont maple in salad dressings, spirits, beer and a host of products. This growth shows the strength of maple and the tremendous opportunities for Vermont and its sugar makers."

2.07 MILLION GALLONS
PRODUCED IN 2019—7% INCREASE OVER 2018

6 MILLION TAPS
IN 2019 WITH AVERAGE .0345 GALLONS PER TAP

\$54.3 MILLION VALUE
VERMONT MAPLE MARKET IN 2018—UP 1% FROM 2017

\$28 AVG. PRICE PER GALLON
IN 2018—UP \$1 DOLLAR FROM 2017

DIVISION PROGRAMS

In Vermont, hemp is considered an "agricultural product" when grown by an individual that is registered with Vermont Agency of Agriculture, Food & Markets (the "Agency") as part of its pilot program. Cannabis sativa L. with a delta-9 THC concentration greater than 0.3 percent on a dry weight basis is not hemp and is not an agricultural product.



HEMP PROGRAM



The VT Agency of Agriculture's Vector Surveillance Program and Plant Industry are part of the agency's Environmental Surveillance Program (ESP). The ESP conducts statewide environmental surveillance as it relates to public health associated with agriculture and plant industry in the state of Vermont.

VECTOR SURVEILLANCE & PUBLIC HEALTH PROGRAM

The Groundwater Monitoring Program (GMP) monitors the quality of groundwater on and around agricultural land use areas. GMP samples and tests private drinking water sources and surface waters to determine if agricultural contaminants such as pesticides or nitrate are making their way to ground or surface water.



GROUNDWATER SURVEILLANCE PROGRAM



Professional and homeowner use of pesticides are regulated by this Division under the Vermont Regulation for the Control of Pesticides. These regulations cover sales restrictions, proper use, storage, and disposal of pesticides.

PESTICIDE PROGRAM

DIVISION MISSION

The Public Health & Agricultural Resource Management Division (PHARM) works to protect human, animal, and plant health, the environment, and consumers by providing fair regulatory programs, exceptional customer service, and in-depth technical assistance in a wide variety of agricultural topics. Our staff is dedicated and here to help, whether you are a farmer with concerns, a member of the public with an insect question, or a regulated entity that needs guidance.

2019 HIGHLIGHTS

390 WATER SAMPLES

TO MONITOR AGRICULTURAL IMPACTS ON GROUND & SURFACE WATERS

76,763 MOSQUITOES

AND 3,254 TICKS COLLECTED AND SAMPLED FOR INFECTIOUS DISEASES

\$238,000 GRANTS

ADMINISTERED FOR PUBLIC EDUCATION AND HEALTH SAFETY PROGRAMS

120 NURSERY INSPECTIONS

GINSENG, CHRISTMAS TREES, ORCHARDS, VINEYARDS AND OTHERS

2019 HEMP SEASON HIGHLIGHTS

Hemp program registration fee in 2019 = \$25
Total fees collected = \$33,320
Program acre growth 2018 to 2019 = 170% ↑

GROWERS

986 GROWER REGISTRATIONS
9,100 ACRES FOR CULTIVATION
65% 5 ACRES OR LESS
40% GROWN BY 8% OF REGISTRANTS
90% GROWN FOR FLOWER/OIL/SEED

PROCESSORS

292 GROWER REGISTRATIONS
64% EXTRACT CANNABINOID (CBD)
20 PLANNED CERTIFIED LABORATORIES



PROGRAM MISSION

In Vermont, hemp is considered an “agricultural product” when grown by an individual that is registered with Vermont Agency of Agriculture, Food & Markets (the "Agency") as part of its pilot program. Industrial hemp or hemp is the Cannabis sativa L. plant including all parts of the plant, whether growing or not, with a delta-9 tetrahydrocannabinol [THC] concentration of not more than 0.3 percent on a dry weight basis.

The Agency through its Hemp Program, authorized under 6 V.S.A., chapter 34, accepts registrations from interested hemp growers and processors. There are no residency requirements, minimum acreages, or limitations on the numbers of registrants. This is an annual registration program. Growers and processors must have a valid registration prior to sowing through harvesting, drying and all processing activities.



VAAFM Deputy Secretary Alyson Eastman tours a Grand Isle hemp growers field.



- The 2019 hemp growth was due to the 2018 Farm Bill removing hemp from the definition of “marihuana” in the Controlled Substances Act, greater access to seed, and interest in cultivation of a crop with the potential for a higher return on investment.
- The Agency registered growers separately from processors in 2019 and began developing rules for regulation, including requirements for registration, testing for potency and contaminants, reporting and recordkeeping, and enforcement and criteria for a Vermont brand.
- Vermont growers and processors developed a strong network. The Agency witnessed a collegial and innovative atmosphere within the industry. Many new businesses came to Vermont to contribute to and support the industry and to take advantage of what Vermont can offer in terms of its reputation for producing quality, craft products.
- Weather, questionable plant genetics, access to drying and processing capacity, reports of contracts falling through at the end of the season were some of the growing pains of this season.

PROGRAM MISSION

The VT Agency of Agriculture's Vector Surveillance Program and Plant Industry are part of the agency's Environmental Surveillance Program (ESP). The ESP conducts statewide environmental surveillance as it relates to public health associated with agriculture and plant industry in the state of Vermont.

The Vector Surveillance Program tracks vector (disease-carrying) populations of mosquitoes and ticks statewide through several programs.



MOSQUITO SURVEILLANCE PROGRAM

- The Mosquito Surveillance Program traps mosquitoes that may carry such diseases as West Nile virus, Eastern Equine Encephalitis, and Zika virus, identify them to species in our laboratory, and coordinate with the Vermont Department of Health (VDH) Laboratory to test the mosquitoes for viruses.
- The program's primary goal is to locate and monitor vector mosquitoes in the interest of protecting public health, not to control nuisance mosquito populations (as opposed to the Mosquito Control Districts, who are charged with and receive financial assistance from the state for controlling nuisance mosquito populations for comfort through larviciding). We maintain a database of our findings.
 - 100 trap sites statewide
 - 80 towns
 - at least 4 different types of traps to conduct surveillance.
 - 6 to 8 field and lab technicians from May through November each year.
- Our Mosquito Surveillance Program includes a rapid response arm that micro-locates surveillance to areas of concern, whether stemming from human or veterinary illness or from overwhelming numbers of nuisance mosquitoes that could contain vector populations.

TICK SURVEILLANCE PROGRAM

- The Tick Surveillance Program completed its first 5-year cycle of our statewide survey of all state towns and goes to gather information on what tick species exist in Vermont, what their preferred habitats are, what the tick density is by town, and what diseases they may be carrying.
- Ticks are tested for diseases such as Lyme disease, anaplasmosis, babesiosis, Powassan virus, and Borrelia myamotoi.
- The Passive Tick Surveillance Program, in which Vermonters who find ticks on themselves, their children or pets, or in their environment can send them to our laboratory for identification. In return, we provide information as to the species, life stage, sex, and engorgement rate of the tick, so that in the event of illness, the sender can give this information to a care provider to inform treatment. We do not test these ticks for diseases.
- We partner with Vermont Department of Health (VDH) in a separate statewide tick surveillance program that targets geographic areas of concern based on tick densities (as determined by our own internal tick surveillance program) or on geographic areas of increased human illness as reported by VDH.
- We also survey for and prepare to respond to emerging tick and mosquito disease vectors, populations of which are as yet undetected in Vermont, such as the Asian Long-Horned Tick and the Lonestar Tick.

2019 VECTOR SURVEILLANCE

MOSQUITO	#
Mosquitoes collected	76,763
Mosquitoes tested	56,636
Mosquito pools* tested	3,217
Trap sites	105
Towns	83
Counties	14
WNV+ ¹ pool samples	5
% WNV+ pool samples	0.16%
WNV+ towns	4
WNV+ counties	4
EEE+ ² pool samples	0
% EEE+ pool samples	0%
Potential Zika vector (specimens)	24
TICK Agency of Agriculture	
Ticks collected	132
Ticks tested	132
Towns	17
Counties	9
Test results (VAEL)	<i>pending</i>
TICK VT Department of Health	
Ticks collected	3,122
Ticks tested	<i>pending</i>
Towns	48
Counties	12
Test results (CDC)	<i>pending</i>
<i>VAEL, VT Agricultural and Environmental Laboratory</i>	
¹ WNV, West Nile virus	
² EEE, Eastern Equine Encephalitis	
*A mosquito pool consists of 1 to 50 specimens/vial submitted for testing	

2019 PROGRAM HIGHLIGHTS

121 NURSERIES SURVEYED

FOR STATE AND FEDERAL PESTS

1,246 TRAP COLLECTIONS

SCREENED FOR TARGET PESTS

318 PEOPLE TRAINED

VIA WORKSHOPS, EDUCATION AND PRESENTATIONS

200 VERMONT TOWNS

INCLUDED CITIZEN VOLUNTEERS TO MONITOR FOR PESTS

30 CITIZEN VOLUNTEERS

MONITORED PURPLE TRAPS FOR EMERALD ASH BORER

PROGRAM MISSION

State Pest Survey and Outreach (SPSO) is home to the Cooperative Agricultural Pest Survey (CAPS) Program, which conducts surveillance for and responsive management of federally regulated invasive pests such as the Emerald Ash Borer, Asian Long-horned Beetle, and Spotted Lantern Fly. SPSO also inspects and certifies harvested ginseng, seed potatoes, Christmas trees, and plant nurseries. Program staff are authorized to issue state and federal phytosanitary certificates for certain plant commodities, providing support for niche agricultural market exports.

Our State Entomologist identifies pests, answers questions, and educates the public on issues such as bed bugs, tent caterpillars, and other pests, as well as coordinating with the State Pest Survey Coordinator.

Emerald Ash Borer (EAB) was discovered in Vermont for the first time in late February 2018. The invasive pest was found on private property in Orange County by a forester conducting a land management survey for the property owner. The evidence of EAB was hidden well, deep in the woods, but knowing what to look for was important for the forester in identifying the signs of EAB.

Vermont's Congressman Peter Welch held a press conference on March 26th in Randolph to address the discovery of EAB in Vermont, and how the federal government will help Vermont address the situation. Agriculture Secretary Anson Tebbetts and other state officials were present as well.

As 2020 begins, EAB has been discovered and confirmed in 7 Vermont counties as the invasive bug continues to spread across the state. EAB is likely to be present in other locations within ten miles of known infestations. Moving any infested material, especially ash firewood, logs, and pruning debris, can quickly expand the infestation. VAAFM and the Vermont Department of Environmental Conservation have continued to educate the public about the hazards of EAB and how to protect against its spread.

EAB larvae kill ash trees by tunneling under the bark and feeding on the part of the tree that moves water and sugars up and down the trunk.



2019 PROGRAM HIGHLIGHTS

Total VAAFM employees sampling	16
Counties sampled	14
Total water samples taken, all programs	390

GROUNDWATER MONITORING

Private Drinking Water Sources	
Total water samples taken	170
Total wells sampled	159
Total new wells with agricultural impact ¹	4 ²
Surface Water Sources	
Total water samples taken	220
VAAFM Ambient Surface Water Study (25 sites)	167
Collaborative Research Study: Miner Institute (7 sites)	53
Other Sources (subset of Private Drinking Water Sources)	
Legacy/monitoring projects sampled in 2019	4
Legacy sampling sites ("wells") sampled in 2019	48
Statewide sampling for glyphosate, 318 results complete = 0 detections	
No herbicide detections exceeded drinking water standards or aquatic benchmarks	
¹ Defined as NO ₃ ≥ 10 ppm	
² Two on-farm, 2 farm neighbors	
Data accurate as of 12/19/19; reporting only on samples with results completed, not pending	

PROGRAM MISSION

The Groundwater Monitoring Program (GMP) monitors the quality of groundwater on and around agricultural land use areas. We sample and test private drinking water sources and surface waters to determine if agricultural contaminants such as pesticides or nitrate are making their way to ground or surface water. All sample results are reported back to the water user and entered into our statewide database.

- ⇒ GMP partners with the VAAFM Water Quality Division and outside agencies such as the Natural Resources Conservation Service (NRCS) to work with farms to reduce potential infiltration of contaminants to groundwater through such efforts as cropping practices and nutrient management and storage.
- ⇒ GMP monitors several legacy sites statewide with which we have been involved for many years as part of a voluntary, coordinated effort to reduce groundwater infiltration of agricultural contaminants, as well as responding to concerns and complaints from citizens as they arise in other areas.
- ⇒ GMP conducts surface water and tile drainage studies around cropped fields, working with external partners such as New York's Miner Institute and the VT Department of Environmental Conservation, and have an ongoing glyphosate (RoundUp®) monitoring program. To date no glyphosate has been detected in any of our 500+ surface and groundwater samples, despite sampling on and around areas where and when glyphosate has been applied.
- ⇒ GMP water sampling is heavily biased toward areas of potential agricultural contamination and does not accurately reflect groundwater quality outside of agricultural land use areas. In other words, we look in areas where we expect to find contamination and our results represent those areas – other parts of the state likely have much lower incidences of such things as nitrate and herbicides.



2019 PROGRAM HIGHLIGHTS

11,701 PESTICIDES PRODUCTS

REGISTERED WITH THE AGENCY OF AGRICULTURE

\$2 MILLION REVENUE

GENERATED FROM PESTICIDE REGISTRATIONS

34 COMPLAINTS INVESTIGATED

15 AGRICULTURE | 19 NON-AGRICULTURE

40 ROUTINE INSPECTIONS

OF PESTICIDE APPLICATIONS | 10 AGRICULTURE—30 NON-AGRICULTURE

96 RETAIL LOCATIONS

INSPECTED FOR RETAIL SALES

112 APPLICATOR CHECKS

RECORDS CONFIRMED AS ACCURATE AND UP-TO-DATE

PROGRAM MISSION

Professional and homeowner use of pesticides are regulated by the Public Health and Agriculture Resource Management Division and the Pesticide Program under the Vermont Regulation for the Control of Pesticides. These regulations cover sales restrictions, proper use, storage, and disposal of pesticides. Product registration, applicator certificates, dealer licenses, and permits may be required for use of certain pesticides, all of which are issued from this Division. Homeowners and professionals are responsible for following the directions on product labels and for properly disposing of all unused pesticides.

The 2019 pesticide program consisted of 4 field staff, located throughout the state. These staff respond to inquiries, attend and provide trainings, conduct routine inspections and respond to complaints in both agriculture and non-agricultural settings. Non-agricultural pesticide applications include mosquito control, rights-of-way, turf, golf course, ornamental, forestry, aquatic, residential and commercial pest control applications.

Pesticide Usage is reported annually to the Vermont Agency of Agriculture by certified commercial, non-commercial and government applicators, as required by the Pesticide Regulations and compiled into annual reports available on the VAAFM website.



2019 PROGRAM HIGHLIGHTS

14,500 HONEYBEE HIVES

REGISTERED WITH THE AGENCY OF AGRICULTURE

750 BEEKEEPERS

REGISTERED WITH VAAFM

12 COMMERCIAL BEEKEEPERS

>300 COLONIES—ANOTHER 12 SIDELINER BEEKEEPERS WITH <300 COLONIES

736 BACKYARD BEEKEEPERS

MOST WITH LESS THAN 10 COLONIES

1,311 APIARY LOCATIONS

NEARLY HALF LOCATED IN CHAMPLAIN VALLEY COUNTIES

48 APIARY INSPECTIONS

COMPLETED WITH 2 PART-TIME INSPECTORS

1 CASE AMERICAN FOUL BROOD

FATAL BACTERIAL DISEASE

The Vermont beekeeping industry has grown steadily over the last decade. There are now approximately 2,000 beekeepers owning about 11,000 hives in Vermont. These beekeepers have 2,500 locations where they keep their bees throughout the state. While most are hobby beekeepers with just a few hives kept at home, there are several commercial operations with upwards of 1,200 hives and dozens of locations each, mostly on farms, primarily on the western side of the state, along the Champlain Valley. While honey production is the primary goal of many beekeepers, most of the commercial operations also derive a significant portion of their income by providing bees for pollination services. Apples are the main crop, with pumpkins, blueberries and various small fruits and vegetable crops also pollinated.

PROGRAM MISSION

The Vermont Agency of Agriculture, Food and Markets' Apiary Inspection Program works to ensure that Vermont beekeepers comply with the Vermont Apiary Law. The duties of the apiary inspector emphasize technical assistance and education as well as the regulatory component. Specific activities performed by this inspector include:

- ⇒ Provide technical assistance to beekeepers to maintain healthy, productive hives.
- ⇒ Inspect bee hives for the presence of diseases and pests.
- ⇒ Coordinate sellers and buyers of honey, bees wax, bees and other hive products.
- ⇒ Assist VT beekeepers in getting State and Federal approval of new mite control materials.
- ⇒ Assist fruit and vegetable growers with securing honey bees to pollinate crops.
- ⇒ Work with apiculture officials in other states and at the Federal level on honey bee related issues.
- ⇒ Issue Health Certificates to beekeepers moving bees out of state, if needed.
- ⇒ Present talks to beekeepers, schools, and civic groups about honey bees and pollination.

VAAFM Honey Bee hive inspection.



Secretary

Anson Tebbetts

Deputy Secretary

Alyson Eastman

Director of Administrative Services & Dairy Policy

Diane Bothfeld

Food Safety & Consumer Protection Division

Dr. Kristin Haas, State Veterinarian & Division Director

Dr. Katherine McNamara, Assistant State Veterinarian & Deputy Director

Water Quality Division

Laura DiPietro, Director

Ryan Patch, Deputy Director

Public Health & Ag Resources Management Division

Cary Giguere, Director

Linda Boccuzzo, Deputy Director

Agricultural Development Division

Abbey Willard, Director

Vermont Agriculture & Environmental Laboratory

Rebecca Harvey, Director

Legal Counsel

Thea Schwartz, Assistant Attorney General for Agriculture, Food, and Markets

Alison Stone, Assistant Attorney General for Agriculture, Food & Markets

Steven Collier, General Counsel

Finance

Amy Mercier, Director

Technology

Hunter Thompson, Director

Communications and Policy

Scott Waterman, Director

Executive Assistant

Terry Smith



Vermont Agency of Agriculture, Food & Markets

116 State Street, Montpelier, Vermont 05620

94 Harvest Lane, Williston, Vermont 05495

802-828-5667

VAEL Laboratory

163 Admin Drive, Randolph Center, VT 05061

802-585-6073

www.agriculture.vermont.gov

Facebook | Twitter | Instagram | YouTube



