



**VERMONT**

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**AGENCY OF AGRICULTURE, FOODS & MARKETS**

## 2013 Annual Report

**Introduction**

The following report documents the major activities and achievements of the Vermont Agency of Agriculture, Food, and Markets (VAAFAM, or simply the Agency) in FY 2013. Each section is accompanied by a description of the section's purpose, as background for the reader. Additional activities occurring during the 2013 calendar year (July-December 2013) are noted separately, when appropriate. Facts and Figures, when appropriate, are listed in bulleted form by section.

The report represents all four Agency divisions: Administration, Agricultural Development, Agricultural Resource Management, and Food Safety & Consumer Protection. Reports were submitted by section leads in each respective division and we reviewed by Division Directors.

Although this document represents a comprehensive summary of the Agency's 2013 activities, it is a working document, subject to edits and amendments. In some cases, year-end data was not yet available at the time this report was prepared.

**Agency Mission Statement**

VAAFAM 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.

<b>Administration.....</b>	<b>3</b>
Administrative Functions.....	4
<b>Agricultural Development .....</b>	<b>6</b>
Dairy Policy & Promotion.....	7
Food Export Northeast.....	8
Irene Recovery Efforts .....	9
Farm to School Program .....	9
Ag & Culinary Tourism .....	10
Farmer Education.....	11
ACT 250, Criteria 9B .....	13
Land Use Planning.....	14
Conservation .....	14
Meat Industry Development.....	15
Specialty Crop Block Grant Program.....	15
Local Food Market Development .....	17
Working Lands Enterprise Initiative.....	19
<b>Agricultural Resource Management (ARM) .....</b>	<b>22</b>
Agrichemical Management.....	23
ARM Enforcement.....	26
Engineering .....	28
Laboratory.....	29
Plant Industry.....	31
Water Quality.....	33
<b>Food Safety &amp; Consumer Protection .....</b>	<b>38</b>
Animal Health .....	39
Consumer Protection.....	41
Dairy Quality and Regulation .....	41
Meat Inspection.....	42

## Administration

### Division Chiefs:

- Secretary Chuck Ross
- Deputy Secretary Diane Bothfeld
- Deputy Secretary Jolinda LaClair

### Staff:

- Charlene Flinn, Administrative Services
- Donna Gilman, Business Office
- Marcey Hodgdon, Business Manager
- Alison Kosakowski, Marketing & Promotions Administrator
- Scott Marshia, Systems Developer
- Faith Raymond, Executive Office Manager
- Dennis Parker, Business Office
- Jim Shover, Systems Developer
- Stephanie Smith, Chief Policy Enforcement Officer
- Diane Zamos, Attorney

### Programs:

- Executive
- Business Office
- IT
- Marketing & Promotions
- Legal

## Administrative Functions

**Lead:** Sec. Chuck Ross, Dep. Sec. Diane Bothfeld, Dep. Sec. Jolinda LaClair

**Description:** Operational and Financial oversight for the Agency. The Administrative team provides IT, Communications, Legal and facilities support to the 90+ VAAFM staff.

### **Summary:**

2013 was a year of honing and refining for the Agency of Agriculture. Staff changes, internal reorganization, and team-building have helped to foster a greater sense of internal alignment and efficiency. After the significant infrastructure challenges related to the building in 2012 which required relocation of some staff, (maintenance, air quality) the headquarters team is once again collated at 116 State Street, resulting in improved communication, partnership, and cross-functional synergy.

VAAFM continues to streamline its processes under the leadership of the **financial manager**. The team continues to push for great efficiencies and more tightly monitored administration of the granting and contracting process. The business office also led the Agency through the transition to the online time-reporting and expenses transition, a major change-management initiative that required significant time and effort. This implementation impacted literally every state employee with regard to timesheet submissions, paycheck information retrieval, and personal, deduction and benefit data updates and storage. Also a new module in the Financial System, VISION, was implemented; the Expense Module, as the new method for state employees to submit requests and receive reimbursement for business expenses. Both these changes have had an incredible learning curve but have resulted in several efficiencies. Also in 2013 was the implementation of a new budget development system, Vantage. Vantage was chosen by a committee comprised of both state employees and legislative members with an eye toward results based accountability (RBA) functionality. Agriculture was chosen as a pilot RBA program in the 2014 budget development, specifically the Working Landscape Initiative.

The Agency continued to build its **marketing and communications** capacity under the leadership of the Marketing and Promotions Administrator, hired in 2011. Strong media interest throughout the year resulted in approximately 350 media inquiries, including requests for interviews, facts/ figures, and agency comment. The top media issues for the year included excessive flooding and its impact on farmers, contaminated compost, bed bugs/pesticide misuse, maple grade changes, the Food Safety and Modernization Act (FSMA), on-farm slaughter, water quality/total maximum daily load (TMDL), dairy pricing, the Farm Bill, and genetically engineering/crop science. The Agency continues to oversee the Vermont Building at the Eastern States Exposition in West Springfield, MA. The 2013 sales figures in the Vermont Building broke all records, totaling over \$1.68 million dollars for Vermont vendors. With partnership from VDTM and BGS, VAAFM is chipping away at the \$750k deferred maintenance needed to keep the building operations. In September 2014, VAAFM will host the National Association of State Departments of Agriculture (NASDA) annual conference at the Burlington Hilton, and looks forward to showcasing the best of Vermont's community-based agriculture to the ag leaders from across the country.

Over the past year the **IT department** continued its focus on upgrading the Agency's dated systems. The Agency's new website was launched early last summer and has helped promote the Agency. We are

continuing to add new information and make updates. The section hired a temporary GIS specialist to help us map our farms and will help the Agency create an Enterprise Geographic Information System (GIS) system. The Agency also received the funding needed to update our current dairy, grants management and water quality software.

**Legal:** The bulk of legal services in 2013 were dedicated to Public Service Board matters, Act 250 *de novo* appeals, and pending foreclosure cases involving conserved farms where the Agency is a co-holder of the conservation easement. General counsel across the Agency and legal counsel's involvement with administrative enforcement actions continues to yield to pending litigation.

Two of the Public Service Board cases, *North Springfield Sustainable Energy Project* and *Vermont Gas Systems Phase I*, were complex litigation which required significant legal resources to manage the discovery and testimony associated with multiple parties. One Act 250 appeal required co-counsel from the Attorney General's Office due to the number of facts and expert witnesses named and the related volume of pre-trial work, including depositions. This one case, which settled after significant resources were invested in pre-trial discovery and motions, highlighted the need for amendment and the policy choices inherent in the Act 250 statutory scheme under criterion 9(B) ; that is, how to objectively define and mitigate impacts to primary agricultural soils. During 2013, however, the quality of the Agency's Act 250 work improved and the need for legal services to support the program decreased significantly from prior years. No new appeals were taken during 2013.

## Agricultural Development

### Division Directors:

- Deputy Secretary Jolinda LaClair
- Deputy Secretary Diane Bothfeld

### Staff:

- Alex DePillis, Sr. Ag. Development Coordinator
- Johanna Herron, Ag. Development Coordinator
- Sylvia Jensen, Ag. Land Use
- Colleen Leonard, Ag. Policy Administrator
- Chelsea Lewis, Ag. Policy Administrator
- Melissa Moon, Grants Specialist II
- Noelle Sevoian, Ag. Development Coordinator
- Louise Waterman, Sr. Ag. Development Coordinator
- Ken Hafner, Agriculture Recovery Specialist

### Programs:

- Dairy Policy & Promotion
- Food Export Northeast
- Irene Recovery
- Farm to School
- Ag & Culinary Tourism
- Farmer Education
- Special Crop Block Grant Administration
- Local Food Market Development
- Meat Industry Development
- Working Lands
- Land Use Planning & Conservation

## Dairy Policy & Promotion

**Program Lead:** Diane Bothfeld

### **Section Description:**

The Dairy Policy and Promotion section monitors national and regional dairy policy and its implications for Vermont. (Regulatory dairy issues are not handled in this section, but are part of the consumer protection and animal health division.)

The Agency of Agriculture received funds from the VT Dairy Promotion council to generically promote the dairy industry, dairy products and research on dairy products in the state of Vermont. The staff member is involved in local and national dairy policy formulation, evaluation and education for Vermont farmers.

### **Summary of activities:**

- **Farm Bill Input:** Worked closely with Vermont congressional delegation, local cooperatives and Secretary of Agriculture to formulate the dairy section of the 2012 Farm Bill – Dairy Security Act.
- **Northeast Association of State Departments of Agriculture (NEASDA) Dairy Actions:** Assisted Northeast Association of State Department of Agriculture on dairy related issues. Co-led a working group to discuss potential changes to the Federal Order System to benefit Northeast Dairy Producers. Four working groups are addressing improvement of the process to change Federal Orders, Transportation issues, and Decoupling of Class I and other Classification issues.
- **Vermont Milk Commission:** managed nomination process with Governor’s office. Commission members are reappointed and one meeting was held in early October. Commission members received an overview of the industry in Vermont and the Northeast.
- **Northeast Dairy Sustainability Group:** major dairy processors – Ben & Jerry’s, Stonyfield and Cabot meet quarterly to discuss sustainable activities of the dairy industry and determine steps forward for dairy farmers as well as processors to improve sustainability. This resulted in sponsorship of re-write to the farm energy handbook in conjunction with Farm to Plate (F2P).
- **Green Mountain Power (GMP) Cow Power Expansion:** collaborate with representatives from Green Mountain Power to determine means to expand the Cow Power program. Determine barriers to new methane digesters on farms, new business models between GMP and farms and potential of organic materials from ACT 148 going into existing methane digesters.
- **Green Mountain Federation of Dairy Farmer Co-op’s:** met quarterly with this dairy farmer group to discuss State and Federal Dairy policy, statutes and regulation.
- **Brown Bag Lunch Series at Ben & Jerry’s:**
  - Deputy Secretary Bothfeld and Secretary Ross met with CEO of Ben & Jerry’s to discuss dairy policy
  - Both provided presentation to Ben & Jerry’s staff during brown bag lunch series
- **Award Winning Dairy Products:** Vermont dairy processors garnered multiple awards in several key competitions gaining national and international recognition for cheese, Greek yogurt, cream cheese, dried whey and butter.
  - Based a promotion program off this trend
  - Winners Circle promotion
    - VT Life 2 page spread in summer edition
    - Videos of chef’s using award winning products
    - In conjunction with New England Dairy Promotion



- News spots with chefs and producers
  - Blogging – producers were guest bloggers
  - Additional web based advertising
- **Public Speaking Promoting Dairy Industry:** provided presentations to multiple groups
  - 2+2 scholarship students
  - WLEB board
  - Farm Show Dairy Farmers Banquet
  - Dairy Farmer organizations – Cooperatives, milk processors
- **Promotion Activities for Dairy:**
  - Cheesemakers Festival
  - Junior Iron Chef
  - Red Sox co-sponsor with VT Tourism – two dairy videos on VT on the big screen – VT Dairy Farmer attends to be interviewed
- **Attracting new processors:** Met with a dairy processors interested in locating in Vermont.
- **DairyVision:** worked with representatives of the dairy industry to institute a new professional management organization (DairyVision) to move the innovative dairy farmers in Vermont to be more professional business managers. Goal to maintain viability of farm and increase the milk supply from profitable dairies in the state.
- **Vermontdairy.com:** continues to see more than 1000 visitors each month.

## Food Export Northeast

**Program Lead:** Chelsea Bardot Lewis

**Program Description:** The Food Export Program of the Vermont Agency of Agriculture Food & Markets connects Vermont food companies with international markets. It operates in close partnership with Food Export-Northeast, Vermont Specialty Foods Association, and the Vermont Global Trade Partnership.

### **Section summary:**

In 2013, 25 Vermont companies from across 10 counties participated in Food Export services and activities. These activities ranged from webinars on a variety of topics, to meeting buyers at domestic buyers missions at trade shows, to attending international trade missions and trade shows in Europe, Asia and Canada. 2013 sales figures will be released in early 2014.

In October, the program lead-coordinated the Food Show Plus! (trade show servicing) program at ANUGA in Cologne, Germany this as part of our membership agreement with Food Export Northeast. ANUGA is the largest trade show in the world, and Vermont maple company Bascom Family Farms had a booth in the Organic pavilion. The show was a success for Bascom and all of our Northeast companies. We are still compiling evaluation data, but expect that projected sales from the show will be into the millions. There was a particular interest among European buyers for specialty/gourmet/natural/organic retail products, which Vermont companies are well-suited to supply.

In November, the program lead accompanied Secretary Ross on a Vermont Food and Agriculture Trade Mission to China (including stops in Hong Kong, Guangzhou, Shanghai and Chengdu). The Vermont Cheese Council, Bascom Family Farms maple, and Caledonia Spirits all participated in this mission, which was financially supported by NASDA and Food Export Northeast. The delegation met with buyers, local

trade specialists and US and Chinese government officials. The delegation also visited the Hong Kong Wine and Spirits Fair at which Caledonia Spirits was named “Best Gin” and received a gold medal award.

## Irene Recovery Efforts

**Program Lead:** Diane Bothfeld, Ken Hafner

**Program Description:** Ongoing monitoring and activity related to the agricultural impact of Tropical Storm Irene.

- **Highlights (accomplishments) of Recovery/ Milestones Achieved:**
  - Identified sources of funding and technical resources to assist farms recovering from Irene
  - Did follow-up contact with farms that requested assistance on the Castleton State College, Irene Farm Survey
  - Connected farms with agencies dispersing Community Development Block Grant funding for Irene recovery and provided assistance with the application process for those funds
  - Provided funding from two different sources to assist farms with feed needs resulting from Irene
  - Developed an agency Emergency Management system and completed two tabletop exercises of the system using ICS
  - Provided ICS training to key agency personnel
  - Updated and completed the agency Continuity of Operations Plan (COOP)
- **Recovery Needs Ongoing, especially gaps identified:**
  - ICS training for remaining staff
  - Ongoing updates to COOP Plan
  - Additional tabletop and field exercises of the agency Emergency Management system
- **Potential Legislative / budget issues:**
  - Concerns for produce safety – Ag has no current authority to condemn produce in the field that has been contaminated through natural disaster – flooding
- **Recommendations for ongoing Recovery Effort:**

Identify funding source for assistance to farmers for disaster events – especially smaller scale farms not covered by USDA Farm Services Agency

## Farm to School Program

**Program Lead:** Johanna Herron

**Program Description:** Vermont has been engaged in Farm to School to school programming since 2006, and is a national leader in the Farm to School movement. The Vermont model has been replicated by other states, and portions have been used as best-practice examples by the USDA. Vermont currently has sixty schools participating in Farm to School programming.

### **Summary of Activities:**

In 2012 the Farm to School Grant Program gained additional funding annually until 2016 due to the CDC Community Transformation Grant secured by the Department of Health.

Funding from this grant will focus on expanding regional support for Farm to School programming, technical assistance and evaluation. Through a Memorandum of Understanding (MOU) with the Department Health, the Agency received \$110,000 in 2012 and will receive \$80,000 in subsequent years.

In 2013 the state grant program funded 5 schools with implementation grants (between \$7,500 and \$16,000) and 4 schools with planning grants (\$5,000 each) for a total of \$75,000.

The leveraged funds from the Department of Health will allow us to continue supporting technical assistance, evaluation and regional Farm to School efforts. Four regional Farm to School groups were awarded a grant for \$10,000. The regional Farm to School groups have been working together to create a tool to measure the breadth and depth of a Farm to School program and is expected to test it on schools in the upcoming year.

The Agency worked with Vermont FEED, UVM and PEER Associates to administer the evaluation toolkit to the awarded grantees. During this process a lot was learned about the stakeholder groups asked to participate and the process of administering such a tool. Unfortunately the results showed some difficulty with data collection and therefore resulted in poor evaluation results. Our upcoming year will focus more on the process of good data collection for evaluation efforts in hopes we identify how to successfully collect good data that will then be reliable and useable.

### **Vermont Farm to School Network**

The Network was created by state partners in 2009 to engage and connect educators, farmers, regional and statewide programs, food service directors, school administrators and state agencies involved in advancing Farm to School. In 2013 the Network held three regional meetings, hosted Vermont Farm to School Awareness Day, and launched an event during National Farm to School Month called “Crunch for Lunch” where parents were invited to schools to eat a local lunch with their kids. An evaluation task working group has been created from this group to really dig into and coordinate Farm to School evaluation efforts. Two meetings have been held during 2013 with plans to meet quarterly in the upcoming year.

*Grant dollars administered: \$155,000 (\$75,000 state, \$80,000 VDH/CTG)*

### **National Farm to School Regional Steering Committee**

The agency continues to represent Vermont on the regional steering committee for the National Farm to School Network. This work includes monthly and annual reports to National on Farm to School activities in Vermont as well as monthly regional steering committee conference calls to address regional programmatic and infrastructure needs.

## **Ag & Culinary Tourism**

**Program Lead:** Chelsea Bardot Lewis

**Program Description:** Agricultural tourism (agritourism) has been defined as “a commercial enterprise on a working farm conducted for the enjoyment, education, and/or active involvement of visitors” . Agritourism is an important strategy for promoting agricultural literacy, through activities to promote a better understanding of food and agriculture among an increasingly urbanized public. It contributes to farm viability and the vitality of the working landscape by providing additional income to farmer. The Vermont Agriculture and Culinary Tourism Council was created in 2010 to ensure the inclusion of agriculture in the tourism sector. Members of the council include statewide organizations such as the Cheese Council, Maple Association, Grape & Wine Council, Brewers Association, VT Farms Association, Farmers’ Market Association, Northeast Organic Farming Association, Department of Tourism & Marketing, Shelburne Farms, UVM Tourism Data Center and Vermont Fresh Network.

**Summary of Activities:** In September, 2013, the Vermont Agency of Agriculture received a \$88,500 grant from the USDA Federal-State Marketing Improvement Grant Program, in partnership with the Department of Tourism and Marketing, Shelburne Farms, and the University of Vermont. The project aims to amplify the economic impacts of agricultural and culinary tourism for Vermont farms through a multi-faceted approach, including:

1. Research and evaluation of economic impacts
2. Capacity development and risk management for producers offering on-farm experiences
3. Coordinated marketing campaign to drive visitors to farm and food businesses offering authentic experiences
4. Leadership and network development to ensure the sharing of best practices and strong agricultural organizations

Beneficiaries from this project will include many sectors in agriculture and associated industries. In 2011, there were nearly 7 million visitors to Vermont who stayed overnight. They spent an average of \$353.96 per visit per person. If this project could entice 25% of these visitors (875,000 couples) to spend 7 additional dollars on a Vermont farm or local food experience, it could bring over \$6 million into the Vermont farm and food economy.

## Farmer Education

**Program Lead:** Louise Waterman

### **Program Description:**

The Farmer Education section is responsible for educational outreach to farmers, particularly in the dairy sector, with a focus on best practices and management training. Act 250 criterion 9B duties are also managed in this section.

### **Summary of Activities:**

- **Rebate for Roll Bars Program Advisory Board Member** - Program launch 3 years ago: 300 + calls to the hotline, 150 ROPS installed and 250K funds raised for the 70% rebate cost share for each ROPS installed
- **NASS Advisory Board Member** – meet annually to give input to NASS

- **Health and Wellness at the Farm Show – Year Two** - blood pressure + glucose screening, hearing testing, massages and riding a bike while making a fruit smoothly
  - Blood Pressure Screenings - approximately 250
  - Blood Glucose Monitoring – approximately 200
  - Body-Mass Index Information – approximately 200
  - Tdap vaccinations – approximately 35
  - DermaScan facial sun-damage monitoring was available for use throughout the show. Approximately 100 people were assisted with interpreting the scan.
  - Hearing information and earplugs were picked up by about 400 people
  - Smoothie Bike and nutritional information was provided to approximately 500 people
  - Farm First, the dairy producer assistance program, spoke to approximately 50 producers about personal issues of concern to them including medical, family/relationship, farm succession, legal, financial and mental health.
  - Approximately 235 massages.
- Regional **bilingual First Aid and CPR classes** and farm safety events – including skid steer safety training - in Franklin and Addison County – 50 producers in attendance
- **Farm Safety Articles** published in Agriview monthly
- **Rural Road Safety Project** – distributed 450 slow moving vehicle signs to producers + direct mail on rural road safety to 900 dairy producers + PSAs to motorists and information to all high school driver education programs throughout the state

#### **Study group for migrant license bill S-238 – billed passed**

- Two Regional **youth farm safety** camps – presented farm fire safety to ~ 40 youth
- **Hands-on training using a fire extinguisher** – at farm safety events and individual farms – 200+ trained
- **Youth Farm Safety Program** advisory board member
- **Dairy Farm Safety Program** – Participants have been successful in getting worker compensation insurance rate reductions.
- Co-facilitate - **Green Mountain Dairy Discussion Group** – we meet 6 to 7 times/year, average attendance is 35 producers/meeting
- **Dairy of Distinction Program** – program participants are judged and recognized each year. 160 farms participate with 5 new farms in 2013
- **Farm 2 Plate** – member of the dairy development work group

- **Farm First Program - 4<sup>th</sup> year** – farmer assistance program to improve health, wellness and productivity among VT dairy farmers and family members. Licensed mental health providers and resource specialists statewide provide confidential help for any concern. To reach a counselor, farmers call a dedicated toll-free line and are offered in-person counseling appointments or concrete help with resource issues.
- **Farm Health Task Force** – steering committee member for this 50+ member organization – provided Agrisafe training for 30 medical and agricultural professionals in 2013
- **Horse Farm Of Distinction** – established through the Chittenden County Farm Bureau to recognize equine farms in VT
- Facilitate **dairy mg teams** Teams improve communications and accountability – for everyone including the producer.
- **Everything Equine** – annual equine event with ~ 3,000 in attendance each year – help secure product donations + topics for the educational workshops
- **Farmland Advisors/training for farm transfer planning** – member
- Support the Agency's involvement in **criterion 9B of ACT 250**

## ACT 250, Criteria 9B

**Program Lead:** Chief Policy Enforcement Officer (Stephanie Ann Smith, AICP); Agriculture Development Coordinator (Vacant)

### Program Description:

**Farmland is a limited resource within the state and its preservation is vital to continuing the economic growth of the third largest sector of Vermont's economy.** The Agency is statutory party in the ACT 250 permitting process. The Agency participates in the permitting process to protect its interest by specifically commenting on the 9(B) Criterion to applications under review. This criterion addresses the preservation of primary agricultural soils and insuring its availability for future producers. The Agency is the expert on primary agricultural soils and their ability to support farming activities. It conducts an initial analysis of what qualifies as primary agricultural soils, evaluates impacts to rated soils and recommends mitigation to the District Environmental Commission.

**Partners:** The Agency works with the Natural Resources Board, the Vermont Housing and Conservation Board, and the Agency of Natural Resources.

**Issues:** The Agency, since the amendments in 2006 to the ACT 250 permitting statute, has found an increasing number of permits are challenged and require legal representation for resolution. The default is that if primary agricultural soils exist of a certain size and location within the proposed development, mitigation of impacts to agricultural soils occurs on-site. This is increasing difficult and challenged by applicants leading to uncertainty in the process and demands on resources. To address some of these issues the legislature will consider proposed legislation to allow a choice of mitigation for applicants – on

or off-site – for a fee. This fee is used to conserve primary agricultural soils with our partners (see Conservation Section), it also intends to clarify the statutory definition of primary agricultural soils (PAS). Another aspect of the Agency's on going work is to educate the District Environmental Commission on the importance of smaller agricultural parcels that parties question whether they meet the current definition of PAS, and their capability to support farm activities. This proves to be an ongoing aspect of the Agency's work, which requires resources but should result in additional mitigation fees. These efforts provide accurate information that the District Environmental Commission can use to make informed decisions.

## Land Use Planning

**Program Lead:** Land Use Administrator (Sylvia Jensen)

**Projects:** The Agency actively engages with partners on land use issues and policy discussions. The Agency now has a presence at Vermont's Agencies of Planners and Developers Association's (VAPDA) meetings as an Associate Member. The organizations bylaws were amended to include the Agency. These meetings take place approximately eight times a year and provide an opportunity for the Agency to share policies, projects and outreach that may affect the regional planning commissions work. It is also an opportunity for the Agency to hear about the work of the VAPDA members and other associate members.

The Agency monitored H. 329 proposing changes to the Use Value Appraisal Program (commonly called Current Use). The Agency also conducted Listening Sessions on Farmland Conservation and Current Use. This took place in four locations across the State.

## Conservation

**Program Lead:** Land Use Administrator (Sylvia Jensen)

**Program Description:** Since 1987 approximately 143,000 acres of agricultural land have been conserved. The Agency plays an active role in farmland conservation with our partners. The Secretary is a statutory board member of the Vermont Housing and Conservation Board and as a co-holder, the Agency helps guide, enhance, and advocate for the farming industry during deliberations on farmland conservation project development, and in its review of stewardship requests, easement amendments, and appraisal configurations. Once easements are granted, it also reviews all Governor's Acceptances to be sure the documents are in order, with special attention paid to project funding and conservation easements. The Agency also worked with two landowners to developed two different projects. Neither of these were successful, but not for the hard work and time put in by staff. In the future, the Agency will no longer develop projects but will continue to work on stewardship, easement amendments and appraisal configuration.

**Partners:** Vermont Housing & Conservation Board, VT Land Trust, Upper Valley Land Trust, and American Farmland Trust

**Issues:** The Agency continues to work with its partners forging our shared missions through the institution of policies and procedures, memorandums of understanding, and statutory amendments that

affect the program. A bill was introduced last legislative session to address conservation easement amendments; S. 119. The Agency will continue to monitor its progress this session.

**Other conservation projects:** Continuing work on the Missisquoi & Trout Wild & Scenic River study along the upper stem of the Missisquoi River (Lowell to Enosburg Falls village) and the Trout River. Participation in F2P Land Access & Stewardship Group policy discussions.

## Meat Industry Development

**Program Lead:** Chelsea Bardot Lewis

**Program Description:** The goal of the Meat Industry Development program is to support the development of vibrant and viable meat value chains. By 2025 Vermont's value added meat industry will be where the artisan cheese industry is today. In coordination with the Meat Inspection Section, the Meat Processing Task Force, and the Meat and Poultry Processors Association, partnerships are identified and cultivated between producers, processors, and distributors to make Vermont meat accessible to both local and regional consumers.

### **Program summary:**

The Agency has continued to coordinate the Meat Processing Task Force of F2P, which facilitates collaboration between livestock slaughter and processing stakeholder organizations to coordinate technical assistance and build Vermont's meat industry.

**Industry Education:** The strategy behind educational content offered by Task Force members is to bring together producers and processors to develop industry-led solutions to scaling up the meat industry. The Agency coordinated the first ever New England Meat Conference on March 22-23, 2013 in Concord, NH. Over 300 meat producers, processors, and industry professionals were in attendance. We also brought a Vermont delegation to the American Association of Meat Processors Convention in Charleston, S.C. in July. The trip included a visit to a slaughter facility with innovative humane handling practices, and a restaurant processing high quality cured meat products.

**Infrastructure Development:** Program lead has worked closely with the Meat Inspection Section to increase meat processing capacity in the state. Black River Meats opened their new processing facility in Springfield in June, and plans are underway for a state of the art slaughter facility on the accompanying site, which would significantly increase slaughter and processing capacity in the state.

**Technology:** Funds were secured through the Working Lands Enterprise Fund to invest in new technologies for inventory management for small-scale slaughter facilities. The project is underway in partnership with Mad River Food Hub and Vermont Farm Viability Program.

**New England Beef-to-Institution (NEBI) Initiative:** Program lead continues to facilitate the NEBI Steering Committee, which works to open institutional markets to local beef producers.

## Specialty Crop Block Grant Program

**Program Lead:** Chelsea Bardot Lewis, Johanna Herron



**Program Description:**

The Vermont Agency of Agriculture receives Specialty Crop Block Grant Program (SCBGP) funding annually from the USDA Agricultural Marketing Service (AMS) to “enhance the competitiveness of specialty crops.” We encourage projects that sustain the livelihoods of Vermont farmers and strengthen the local economy by: promoting healthy communities; improving efficiency; enhancing food safety; developing new/improved seed varieties; creating organic and sustainable production practices; and establishing local and regional food systems. Grants may be up to three years in length.

**Program summary:**

Vermont received an allocation of \$208,920.91 from USDA-AMS in 2013, 10% of which is utilized by VAAFAM for administration. This was down from \$223,712.42 in 2012, due to sequestration cuts. 2013 funding priorities included: organizational development; market access, branding and consumer education (local, regional, national, international); supply chain development; food safety and traceability; pest and disease management; productivity enhancement, cost containment and innovation.

The review panel included two farmers and a produce distributor, as well as representatives from the Vermont Agency of Agriculture, and the Vermont Sustainable Jobs Fund. The application process included a mandatory letter of intent (LOI). A total of 23 letters of intent were received via email, totaling \$552,906.30 in requests. The review committee ranked the LOIs and invited 13 applicants to submit a full proposal. Twelve applicants submitted full proposals, totaling \$241,553.50 in requests. Ten projects were chosen for funding and accepted the award, pending USDA approval. Committee feedback was aggregated without attribution and passed along to applicants.

After administering a competitive process to choose recipients, our state plan was submitted to USDA-AMS in July, 2011. The state plan was approved in August, and in October we announced the 10 grant recipients, whose projects benefit Vermont fruit, vegetable, and maple producers, and increase consumer access to locally produced food (see below).

**The 10 projects awarded in 2013 were:**

- University of Vermont Extension Center for Sustainable Agriculture to improve produce safety by providing food safety training for farmers (\$19,826)
- Northeast Organic Farming Association of Vermont to increase consumer participation in community supported agriculture (CSA) programs by creating a statewide CSA network (\$24,685)
- Vital Communities to open and expand farm-to-workplace markets for specialty crop producers through promotion, matchmaking, and sharing best practices (\$17,367)
- Intervale Center to increase food hub sales by developing best practices, and developing and implementing a marketing and outreach campaign (\$11,000)
- Vermont Maple Sugar Makers’ Association to increase sales among maple sugar producers by developing and implementing a comprehensive social media marketing campaign (\$13,000)
- Increase consumer awareness and increase export sales of Vermont value-added specialty crop products (\$20,000)
- University of Vermont Apple Program to provide access to timely production-related information that will enhance farm profitability and sustainability (\$10,000)
- Floating Bridge Food and Farms Cooperative to increase consumer awareness and consumption of locally grown specialty crops (\$9,855)

- University of Vermont to increase the profitability of Brassica farmers by developing low-input management strategies to reduce Brassica losses to swede midge (\$50,000)
- University of Vermont's Department of Plant and Social Science to help blueberry and raspberry growers minimize the damage caused by the spotted wing drosophila (\$12,296)

## Local Food Market Development

**Program Lead:** Abbey Willard

**Program Description:** Cultivating relationships and opportunities between Vermont producers and institutional markets.

### **Summary of Activities:**

#### Increase access to local foods in state government

In 2014 the State of Vermont Workplace Community Supported Agriculture (CSA) Program for state employees was extended to statewide access. VAAFAM reached out to over 96 CSA farms of which 49 expressed interest in offering workplace deliveries. In the end, 5 CSA farms delivered fresh produce, eggs, meat, breads, and other value-added products from Vermont producers to two employees' workplaces. 48 State employees expressed interest in participating in the workplace CSA delivery program while in the end 31 employees actually participated for the 2014 season. An additional 6 employees "indirectly" participated by engaging in on-farm CSA pick-ups relationships that worked better with their schedules and farm preferences.

#### Local Food Market Development grant program

In FY '12 and '13, the Vermont Legislature provided a total of \$80,000 to VAAFAM to support for the Vermont Local Food Market Development Grant Program. Another \$40,000 was made available for FY '14. This program focuses on increasing Vermont producers' access to institutional markets and increasing the quantity of local food available in our institutions. Matching grants of up to \$7,500 were awarded to 20 Vermont farmers, producer groups, food-focused community organizations, and food hubs to further institutional market relationships.

These grant funds will allow for institutional connections to expand, new relationships to develop and for more efficient production, processing, and marketing of local product to assured institutional markets. Funded farm to institution activities will include: purchasing equipment to improve production and processing efficiency, supporting on-farm storage & processing in a commercial kitchen facility, coordinating matchmaking events to connect producers with institutional buyers and identifying market opportunities and providing production planning assistance.

As a result of this funding, the following outcomes have been reported:

- Development of 58 new institutional markets for local food products, helping 66 new farmers find new customers for their products;
- Facilitation of \$355,000 in gross local food sales- 55% increase over 2011 sales;
- Creation of seven new jobs in the agriculture sector;
- Diversion of 500 tons of organic waste from the landfill and addition of 35 new food generator pick-up sites; and
- Reduction in food labor inputs and increased attention to production efficiency and increased yields

### Farm to Institution development efforts

VAAFM hosted two farm to institution forums to facilitate supply chain communication. These forums were organized in response to identified barriers between ag producers and institutional consumers, including:

- Communication opportunities;
- Relationship building between producers, consumers, and intermediaries;
- Alignment of appropriate supply and demand; and
- Clarification around role of brokering, matchmaking, and value-chain facilitation.

The first forum was hosted by UVM in November 2012 focused on local food procurement opportunities with Sodexo, a food service management company responsible for serving 34,000 institutional meals daily in Vermont. The event connected Sodexo food service and management staff with Vermont farmers, processors, and distributors, emerging food businesses, food hubs and technical assistance providers. 80 supply chain partners attended, hence representing all the desired stakeholder groups and offering a transferable model of value-chain facilitation that can be effectively implemented across sectors and with additional markets. Nearly 12 new local food procurement relationships were established as a result of networking that occurred at the forum.

The health care community expressed interest in coordinating a 2<sup>nd</sup> farm to institution forum to build upon the great work of Health Care Without Harm and commitment of Vermont health care facilities to making healthy, local, and sustainable food purchases. This forum, financed by Farm to Institution New England (FINE), was hosted by Wake Robin Life Care Community in Shelburne. The event drew 55 stakeholders representing hospital food service directors and administrators and key supply chain partners to discuss procurement barriers and opportunities for sourcing local, sustainable food.

### Food Access and EBT at Farmers Market

Farmers' markets represent a significant sector of the direct to consumer marketing opportunities that exist in Vermont. The 41 of the 80 farmers' markets that self-reported sales claimed over \$8.3 million in total gross sales during the 2012 season.

VAAFM participates in an EBT Team of partners that resulted in the development of a \$13,500 annual memorandum of understanding with the Department for Children and Families (DCF) to support EBT at farmers markets, such as purchasing new and repairing broken EBT machines and supporting Harvest Health coupon program (double value redemption of EBT benefits at farmers markets). During the 2013 market season, 45 of Vermont's farmers' markets were authorized and equipped to accept 3SquaresVT benefits on EBT cards.

VAAFM supports NOFA in their management of the VT Farmers Market Association (VTFMA). VTFMA now has 51 member markets that benefit from statewide promotion and participated in the development of best practices documents to guide the work of Vermont farmers' markets. During FY '14 legislative session, VTFMA (supported by NOFA) plans to present their statutory requirement of best practices regarding market safety, governance & policy, and marketing for farmers' markets.

### Produce Safety

Food Safety Modernization Act (FSMA) proposed rules were published in early spring of 2012 after which Secretary Ross mobilized an internal VAAFM group to read the rules to formulate official comments for submission and form an education and outreach plan for Vermont stakeholders to increase awareness of the proposed rules and encourage comments.

VAAFM's primary focus is on the Produce Safety rule which covers raw agricultural products. Due to the diverse farms that are adding on farm processing, we are also collaborated with the VT Dept. of Health, who maintains primary authority over the Preventive Controls rules.

VAAFM pushed for a Northeast listening sessions with the FDA when it became clear that the listening sessions that FDA were organizing throughout the country did include our region. VAAFM in conjunction with NASDA pushed for a meeting between state depts. of Ag and Health, university extension and FDA which was held May 3rd in Hartford, CT. The NH congressional delegation in conjunction with other New England congressional delegation pushed for a New England public listening session and farm tour, which was held August 20th and 21st in both VT and NH. The meeting involved a public listening session in Hanover, NH. The farm and facility tours in VT on the 21st provided an opportunity for FDA to hear and see Vermont scale community-based agriculture.

To maintain communication with our congressional delegation, VAAFM staff met on May 6th to provide highlights of the May 3rd meeting in CT and also included them in the August listening session. To prepare state legislators, VAAFM held a spring informational session that provided an overview of rules and a primer for the Agency's legislative priorities in FY '15 & FY '16. VAAFM is collaborating with NASDA on a number of projects and remains actively engaged at the national level.

Secretary Ross and staff will continue to communicate with our legislature regarding statutory authority to regulate produce and engage with FDA to determine roles regarding education, technical assistance, and compliance.

## **Working Lands Enterprise Initiative**

**Program Lead:** Dep. Sec. Jolinda LaClair, Colleen Leonard

**Program Background:** The Vermont Working Lands Enterprise Initiative was enacted by the Legislature in 2012, Act 142, to create the Working Lands Enterprise Board (WLEB), the Working Lands Enterprise Fund (WLEF), and the addition of four forestry sector seats to the Vermont Agricultural & Forest Products Development Board. Act 142 brought a renewed commitment to Vermonters' values by funding the Working Lands Enterprise Initiative for the management and investment of \$1 million into agricultural and forestry based businesses. The legislature refunded the Initiative in FY13 for \$1.2 million. Over 97 percent of Vermonters value the working landscape. Approximately 20 percent of Vermont's land is used for agricultural purposes and 75 percent as forestry. The backbone of Vermont's "working landscape" is the economic viability of the agriculture and forestry based businesses. It is Vermont's working landscape that allows us to be a key economic engine within the northeast metropolitan markets of the regional farm and forest economies. For a more comprehensive overview, visit [www.vermontworkinglands.com](http://www.vermontworkinglands.com)

**Program Description:** The Vermont Working Lands Enterprise Board is an impact investment organization whose mission is to grow the economies, cultures, and communities of Vermont's working landscape by making essential, catalytic investments in critical leverage points of the Vermont farm and forest economy, from individual enterprises to industry sectors. Vermont prospers and its unique sense of place thrives in large part because of intelligent investment in the people and enterprises that comprise its farm, food, and forest based systems.

The Working Lands Enterprise Initiative is a cross-agency, cross-sector network of partners around the same investment platform: Vermont Agency of Agriculture, Food & Markets; Vermont Forests, Parks & Recreation; Vermont Agency of Commerce & Community Development; nine private sector members from across the supply chains of Agriculture and Forestry; and Ex Officio members from the Vermont Economic Development Authority; Vermont Housing Conservation Board; and the Vermont Sustainable Jobs Fund.

The WLEB solicits, reviews, and awards investments (currently in the form of grants) for farm and forest based businesses within the following three categories:

- I. **Enterprise Investment Grants:** \$3,000-\$20,000 grants with a 25% cash required match available for early-stage and growing agricultural and/or forestry based businesses that demonstrate the need for capital & infrastructure, marketing, market development, business development and/or technical assistance in order to enhance the viability of their business.
- II. **Service Provider Grants:** \$10,000 - \$150,000 grants with a 50% cash/in kind required match available for technical assistance and support services provided to agricultural and/or forestry based businesses that will benefit industry sector(s) and address a need not already filled by an existing program(s).
- III. **Capital & Infrastructure Investment Grants:** \$15,000 - \$75,000 grants with a 1:1 required match (50% cash) available for shovel-ready projects that demonstrate a viable business plan and project feasibility to increase operational capacity for impact beyond the immediate business or organization (i.e. benefits multiple working lands businesses, benefits the supply chain, benefits an entire sector).

#### **Timeline of Activities:**

**December through February, 2013** – Received 389 grant applications from all 14 counties requesting \$12 million in funds-- twelve times than that of the amount available (\$986,500).

##### **Demand by Investment Area:**

###### **1. Enterprise Investment Area**

Received 191 applications requesting \$2.1 million

Funded 20 Enterprises (14 ag, 6 forestry) = \$204,406 (\$145,871 Agriculture/\$58,535 Forestry)

###### **2. Service Provider Grant Area**

Received 84 Letters of Intent requesting \$3.2 million

Funded 8 Service Providers (6 ag, 2 forestry) = \$369,802 (\$271,802 Agriculture/\$98,000 Forestry).

###### **3. Capital & Infrastructure Investment Area**

Received 112 Letters of Intent requesting \$6.7 million

Funded 8 Businesses (4 ag, 4 forestry) \$411,522 (\$203,369 Agriculture/\$208,153 Forestry).

**March through June, 2013** – WLEB awards 36 grants to Farm & Forest based businesses:

- Gov. Shumlin announces 20 grantees of Working Lands Enterprises
- Gov. Shumlin announces final 16 grantees of the Working Lands Fund

**July, 2013** – WLEB hosts a strategic investment planning session to reflect on round 1 funding decisions, frame future investment strategies and priorities for FY14, enhance board development, and deep-dive into topic areas such as financing options, emerging opportunities for food system and forest products businesses, and opportunities for investment into Vermont’s commodity dairy industry.

**November, 2013** – WLEB releases second round of funds:

- Working Lands Enterprise Board Announces the Release of Available Poultry Processing Funds (\$40,000)
- Working Lands Enterprise Board Announces over \$1 million in Available Grant Funds

## Agricultural Resource Management (ARM)

### Division Chiefs:

- Director: Jim Leland
- Deputy Director: Laura DiPietro

### Staff:

Rob Achilles, *Ag Engineer*  
 Gregory Bouchard, *Ag Systems Specialist*  
 Jeffrey Comstock, *Soil Scientist*  
 Stephanie Congo, *Ag Systems Specialist*  
 Jeffrey Cook, *Financial Manager*  
 Bethany Creaser, *Resource Mgmt Specialist*  
 Antonia Davis, *Registration Specialist*  
 Ben Gabos, *Water Quality Specialist*  
 Katie Gehr, *Agribusiness Systems*  
 Cary Giguere, *Pesticide Section Chief*  
 Christine Gingras, *Ag Systems Specialist*  
 Alan Graham, *Vector Mgmt Specialist*  
 Dominique Golliot, *Resource Mgmt Spec.*  
 Wendy Houston-Anderson, *Enforcement*  
 Doug Johnstone, *Resource Management*  
 Jennifer LaValley, *Registration Specialist*  
 Trevor Lewis, *Water Quality Specialist*

Anne Macmillan, *Agrichemical Toxicologist*  
 Abigail Pajak, *Water Quality Specialist*  
 Nathaniel Sands, *Water Quality Specialist*  
 Andrew Squires, *Resource Management*  
 Heather Tolman, *Registration Specialist*  
 David Tremblay, *Resource Mgmt Specialist*  
 Matt Wood, *NPM ED Coordinator*  
 Emilie Inoue, *Pest Survey Coordinator*  
 Tim Schmalz, *Plant Industry Section Chief*  
 Candace Barber, *Lab*  
 Wendy Blackman, *Lab*  
 Anne Charbonneau, *Lab*  
 Romeo Cyr, *Lab*  
 John Jaworski, *Lab Supervisor*  
 Kristen Needham, *Lab*  
 Nat Shambaugh, *Lab*

### Programs:

- Agrichemical Management
- ARM Enforcement
- Engineering
- Lab
- Plant Industry
- Water Quality

## Agrichemical Management

**Section Chief:** Cary Giguere

### **Program Description:**

Agrichemical Management Section serves as the State Lead Agency for the control of pesticides, feeds and fertilizers and liming materials, as well as issuing special permits for pesticide uses, including Rights of way pesticide use permits, golf course permits, aerial application permits, mosquito larvaciding permits, and experimental use permits. The ground water monitoring program is also housed in this section. The primary role of the ground water monitoring program is to monitor drinking water wells for corn herbicides and nitrates. This role is served by providing the primary oversight for product registration and enforcement for use consistent with state and federal regulations. This section also works with US EPA to procure special registrations under sections 18 and 24c of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) to allow Vermont producers access to pesticide products that would not be available otherwise. The ARM field agents under this section perform field inspections to determine compliance of the regulated community with the Accepted Agricultural Practices Regulations (AAPs), the Vermont Regulations for the Control of Pesticides, and the Vermont Feed, Seed and Fertilizer Regulations. The Section provides technical compliance assistance and takes enforcement actions when necessary in response to violations of the regulations above.

*The Vermont Regulations for the Control of Pesticides* establish the legal standards that must be met when a pesticide is used or sold in the state of Vermont and are designed to protect human health and the environment from unintended consequences of pesticide use. ARM field staff perform inspections to monitor pesticide use, storage, sales, and disposal activities throughout the state to ensure that these activities are taking place in compliance with the State's pesticide regulations. Field work includes routine unannounced inspections to evaluate pesticide use and sales compliance with the Regulations and inspections conducted in response to complaints received from the public regarding suspected violations of the pesticide regulations.

Accepted Agricultural Practices (AAPs) are the foundation of Vermont's Agricultural Nonpoint Source Water Quality Program. AAPs are state-wide restrictions designed to conserve and protect natural resources by reducing non-point source pollution through the implementation of improved farming techniques rather than investments in structures and equipment. All agricultural operators are required to conduct their farming activities in compliance with the AAPs, including all medium and large farms operating under permits. Field staff conduct inspections in response to complaints from the public, and perform routine surveillance inspections to check for compliance.

### **Summary of Activities: Bed Bug Pesticide Misuse Investigation**

The State of Vermont faced a widespread pesticide contamination event during 2013, due to the misuse of a canceled pesticide product that was primarily used to treat bed bug infestations in the Rutland area. The organophosphate pesticide Chlorpyrifos was found in people's homes at high levels. The state has invested significant resources to define and mitigate health and environmental issues related to the alleged misuse of this pesticide. This also constitutes the largest fine ever assessed for pesticide misuse to any applicator or company.

Agency of Agriculture and the state Health Department and have worked on the issue continuously since June 2013, the USEPA Office of Emergency Management also joined the State efforts to mitigate



exposure risks. The Agency of Agriculture led efforts to identify locations where Vermonters were most likely at risk of being exposed to high levels of this pesticide. The health department staff has assessed the scientific literature and provided guidance to residents and worked to assist in relocation of exposed individuals. Staffs from both State and Federal agencies worked side-by-side in the field to assist each other, document environmental conditions, possible exposures, and collect samples, both environmental and biological. Both health and agriculture laboratories collaborated on analytical methods, resources and samples. Coordination of sampling, testing, relocation and case management activities by environmental health, local health and agriculture staff, were managed by the health department's emergency operation center for over 6 months. Over a dozen different programs have contributed personnel and other resources.

Results to date have identified over 40 residential sites exceeding the health department's minimum action level. Residents in these apartments have received recommendations to relocate. Several have relocated, including a mother, her toddler and newborn, an elderly man, and a family with a disabled child. Relocation was not been easy for these families.

The Commissioner of Health, the Secretary of Agriculture and the Division Director of Waste Management and Prevention all requested cleanup assistance from the EPA, the Commissioner of Health and the Secretary of Agriculture wrote to specifically request the in-person assistance of the EPA to clean-up the pesticide contamination. Both felt that consequences of not cleaning this up properly could present a major environmental contamination and cause health issues for those who are least able to protect themselves. US EPA agreed to assist Vermont in the clean-up and arrived in September. US EPA has committed 2 million dollars to the clean-up of contaminated homes and hopes to be finished by mid-2014. Almost all residents affected by high levels of this pesticide in their homes have been low-income Vermonters. Cleanup options for the residents are limited. In-state private companies have declined to perform the cleanup, because they do not have the expertise to do so properly. The EPA's Emergency Response and Office of Pesticide Programs were invaluable in their guidance, support and assistance to the state thus far in this investigation.

#### **Persistent herbicide contaminated compost**

In late June, 2012, Green Mountain Compost (GMC) and the Vermont Agency of Agriculture received a series of calls from people who reported symptoms indicative of persistent herbicide damage in gardens containing Green Mountain Compost products. The investigation surmised that, Aminopyralid was found to be the persistent herbicide active ingredient that was the cause of the plant harm. The traceback investigation concluded that in Vermont the use of the herbicide Milestone on grass hay that was eventually fed to horses had resulted in aminopyralid being present in horse manure and subsequently in the composted product of these manures. Vermont has raised the issue nationally with the US EPA that when pesticide label statements place risk mitigation measures on a pesticide label that ask a party other than the pesticide applicator to mitigate the downstream risk associated with the product, such statements are unenforceable and do not work. Vermont has worked with the registrant to effect a label change that protects Vermont composters from this type of contamination. Aminopyralid use on pastures in New England is now prohibited on the product label provides Vermont composters a substantial buffer from future contamination. During the investigation it was discovered that nationally no regulatory or commercial laboratory was capable of detecting Aminopyralid in compost down to levels that had a negative effect on plants. Vermont has worked with the registrant to help develop new testing methodologies that will work for labs across the country, providing composters with the necessary analytical options and abilities to do quality control on their compost

inputs. The Vermont Agency of Agriculture Laboratory participated in the registrant sponsored method validation. The method should be commercially available in early 2014.

### **Aerial application of mosquito adulticide for Eastern Equine Encephalitis**

2013 marks the second year that aerial adulticiding occurred for mosquitos. This response was in response to a declaration of an imminent risk to public from mosquito pools found to be positive for eastern equine encephalitis (EEE).

### **Pesticide Program**

1. As of September 30, 2013, Vermont had 569 private, 733 commercial, 135 non-commercial, and 197 government pesticide applicators holding valid certificates. For pesticide dealers, there were 39 Class A and 165 Class B dealers that held valid pesticide dealer licenses. (Class A Dealers are licensed to sell Restricted-Use products and class B Dealers are licensed to sell outdoor use products with greater than 3% active ingredient in Vermont.)
2. During this fiscal year, ARM certified 180 new applicators (40 private, 114 commercial, 8 non-commercial and 18 governments) and recertified 277 applicators (73 private and 204 commercial). These numbers do not reflect reciprocal certificates issued to applicators from other states.
3. In addition, 19 new Pesticide Dealer licenses were issued, 0 Class A and 19 Class B. Pesticide applicator certification and dealer licensing exams continue to be administered weekly at the Agency in Montpelier, and monthly in Brattleboro, Rutland, Saint Johnsbury, and Derby. Due to the fact that many of the State's landscaping and structural pest control companies are located in Chittenden County, we offer exams during odd months in Colchester and even months in St. Albans.

### **Feed Program**

This program provides for the registration, inspection and analysis of all commercial animal feed products sold in Vermont. The purpose of the inspection and analysis is to ensure that feed users are receiving a product that meets the nutritional guarantee specified by the labeling. Penalties are assessed to manufacturers for products that are deficient in protein. Penalties are usually \$50 per violation. However, penalties can be increased for subsequent violations. All penalties are paid to the Agency. Violations are based on the label guarantee and the percent deficient.

A complete analysis report is published annually. In addition to protein, the Agency's laboratory analyzes for fat, fiber, non-protein nitrogen, ash moisture and trace minerals. The feed laboratory can also analyze for medications and mycotoxins.

### **Fertilizer and Lime Program**

The fertilizer program provides for the registration, inspection and analysis of commercial fertilizer products sold in Vermont. The purpose of the inspection and analysis is to ensure that fertilizer users are receiving a product that meets the chemical guarantee specified by the labeling. The statutory authority for the program is found in 6 V.S.A. Chapter 28.

Penalties are assessed to manufacturers for products that are deficient in nitrogen, available phosphoric acid or phosphorous, and soluble potash or potassium content. The value of the penalty is based on the labeling guarantee percentage, the percent deficient and the total sample weight. If a product is consigned to a consumer then the penalty is paid to that person. If no person is identified, then the penalty is paid to the Agency. No penalties are assessed for trace mineral violations. Annual analysis summary reports are available through the Agency.

Fertilizer manufacturers and dealers are required to register their commercial products with the Agency. The annual registration fee is \$15 per nutrient guarantee, or a maximum of \$105 per product. The registration fees directly fund the sampling and analysis program. Fertilizer tonnage fees are also required. The fees are \$.25 per ton sold in Vermont, or a minimum of \$50

#### Facts & Figures:

Program	Companies	Registered Products – 2013
Pesticide	1289	10943
Fertilizer Manufacturers	356	3264
Lime Manufacturers	34	88
Feed Manufactures	716	11338
Totals	2395	25633

#### **Feed Program:**

130 Samples taken and analyzed for Protein, Fat, Fiber and mineral guarantees.

#### **Fertilizer Program:**

44 Fertilizer Samples taken and analyzed for Nitrogen, Phosphorus, Potassium, and Mineral guarantees.

Samples are low due to focus on the misuse of pesticides in a bed bug case.

## **ARM Enforcement**

**Program Lead:** Wendy Houston-Anderson

**Program Description:** The ARM Enforcement Section staff performs field inspections to determine compliance of the regulated community with the Accepted Agricultural Practices Regulations (AAPs), the Vermont Regulations for the Control of Pesticides, and the Vermont Feed, Seed and Fertilizer Regulations. The Section provides technical compliance assistance and takes enforcement actions when necessary in response to violations of the regulations above, and manages the Title 24 §4413(d) Municipal Zoning exemption for farming activities and farm structures.

#### **Program summary:**

The Section supports the growth and viability of agriculture by providing the assistance needed to bring agricultural operations into compliance with applicable regulations and by assisting farmers in navigating the agricultural exemption to local zoning outlined in 24 V.S.A. Work related to the “farming and farm structure exemption” from local and municipal zoning provided for under Title 24, Chapter 117, Section 4413(d) falls into three categories:

- 1) Requests for Agency determinations regarding whether an operation is considered farming and an accepted agricultural practice, and whether a proposed structure meets the AAP definition of “farm structure”;
- 2) Requests for variances to local building setbacks for farm structures due to circumstances that prevent the structure from being able to be built in accordance with local setbacks;
- 3) Requests to build a farm structure in a designated flood hazard area (floodplain). These requests require the Agency of Agriculture to work with the Floodplain Management Section of the Department of Environmental Conservation, under a Memorandum of Understanding, to ensure that farm structures built in a floodplain are constructed in accordance with National Flood Insurance Program (NFIP) standards.

In addition, the Section processes requests for exemptions to the Winter Manure Spreading Ban (Section 4.03(c) of the AAPs) in cases where farmers are facing emergency conditions that have compromised their ability to continue to store manure throughout the duration of the ban.

#### **Facts & Figures:**

Water Quality: (Numbers reported are for the calendar year, and are as of 12/3/2013. Therefore, these numbers will differ from other reports that are generated using the full calendar year, i.e. the Agency’s Water Quality Enforcement Report.)

The following inspection numbers represent all inspections conducted on small farms to determine compliance with the Accepted Agricultural Practices Regulations (AAPs). Also included are the numbers of inspections of medium and large farms conducted in response to a complaint received, and compliance checks that result in an enforcement action. Complete numbers of inspections conducted on medium and large farms can be found in the Water Quality Section of this report.

#### **Activities:**

##### **Water Quality Inspections Conducted**

AAP inspections – 96 (56 complaint driven; 40 compliance checks)  
 MFO inspections in response to complaint received -10  
 MFO compliance inspections (no complaint) – 7  
 LFO inspections in response to complaint received - 4  
 LFO compliance inspections (no complaint) – 3  
 Enforcement actions taken without field inspections (failure to report) - 19

##### **Water Quality Enforcement Actions:**

Corrective action letters – 14 (3 MFO; 11 SFO)  
 Cease and desist orders – 2 (SFO)  
 Cases referred to Attorney General’s Office – 1  
 Notices of Violation (with penalty) – 24 (1 –LFO; 22-MFO; 1-SFO)  
 Assurances of Discontinuance – 2 (MFO)  
 Final Orders - 2 (MFO)

**Manure Spreading Requests:** 5 requests; 4 exemptions granted (one confirmed to be completed compost – no exemption necessary)

**Pesticide Program Inspections:** (Numbers reported are for the Federal Fiscal year – 10/1/2012 to 9/30/2013)

Ag Use - 33

Ag Referral - 3

Non-ag use - 33

Non-Ag Referral - 119

Certified Applicator Records Check - 150

Marketplace Inspections - 96

Restricted Use Dealer Inspections – 35

**Pesticide Enforcement Actions:**

Letters of warning – 1

Cease and Desist Orders – 8

Notices of Violation with Administrative penalty – 5

Assurances of Discontinuance – 1

Final Order -1

License suspension - 1

**Land Use-related activities:**

Farming/farm structure determinations –15

Farm structure variances –18

Construction of farm structures in floodplain - 3

## Engineering

**Section Chief:** Rob Achilles

**Program Description:**

Provide technical and financial assistance through the Best Management Practice (BMP) program for the planning, installation and construction of conservation practices to effectively use nutrients, manage agricultural wastes and enable farms to comply with State and federal water quality regulations.

**2013 summary:**

**Program Description:**

Provide technical and financial assistance through the Best Management Practice (BMP) program for the planning, installation and construction of conservation practices to effectively use nutrients, manage agricultural wastes and enable farms to comply with State and federal water quality regulations. Provide financial assistance to farm completing conservation practices through the Natural Resources Conservation Service EQIP and AMA programs.

Commonly funded production area practices include waste storage structures, heavy use area protection, milk house and process wastewater systems, and bunks and barnyard runoff collection and treatment. Implementation of these conservation practices provides significant public benefit of reducing nutrient and sediment loading to water of the state.

Production area practices are eligible for up to 90% cost share. Field practices, such as animal trails and walkways, are eligible for up to 50% cost share. The yearly maximum payment for a single practice is \$50,000 and \$75,000 for two or more practices.

Agricultural engineers are available to provide the technical know-how to help address water quality concerns. They are able to provide one-on-one consultation to discuss potential regulatory concerns, can recommend site-specific conservation practices to remedy the issues, and assist farms with financial assistance through the BMP or AMM programs.

#### **2013 summary:**

4. BMP - \$987,000 on 32 grants for 64 conservation practices on farms (as of 12/06/13). We anticipate releasing another \$215,700 on 6 grants for 10 practices prior to the year end.
5. EQIP and AMA - \$76,700 on 32 EQIP and 2 AMA grants.
6. Provided nearly 400 farm visits.

## **Laboratory**

**Program Lead:** Jim Leland, John Jaworski and Cary Giguere

**Program Description:** The Laboratory Section provides routine and emergency laboratory testing services in support of the Agency's mission. The Central Dairy Lab and Meat Lab programs provide information to protect public health; the Mastitis and Animal Health Lab programs promote animal health; the Feed and Fertilizer Lab programs ensure consumers receive products of value and the Pesticide Laboratory programs produce data to assist regulators in the preparation of enforcement actions and policymakers in developing sound environmental policy.

**Program Summary:** Fiscal year 2013 continued to be a challenge for the Agency's Laboratory Programs. In August, the Agriculture and DEC Labs moved into renovated shared laboratory space in the UVM Hills Science Building. This is the second time the Labs have moved in less than a year, however, it is the first time all the State's laboratory equipment is in the same location since the Waterbury facility closed. The Dairy, Animal Health and Mastitis Labs were able to set up quickly and become operational in less than a month. The Feed and Fertilizer, Meat and Pesticide Labs struggled with lab setup and stored instrument issues. The Nitrogen/Protein Analyzer was not able to be repaired and subsequently had to be replaced. It took several months to get recently purchased Pesticide Laboratory instrumentation installed and training scheduled. Issues continued on getting the glassware washer operational for the upcoming summer season.

The Laboratory Section is comprised of 7 laboratories and a laboratory certification program. The laboratory staff works collaboratively in the various labs to support the mission of the agency.

The Animal Health Laboratory is responsible for analyzing blood samples for Brucellosis, Equine Infectious Anemia, Anaplasmosis and performance enhancing substances. Milk samples are tested for Brucellosis. Reports are reported to the Animal Health Section.

The Central Dairy Laboratory is responsible for analyzing dairy products manufactured within the State on a monthly basis to ensure the products meet minimum State and Federal standards. Testing of water supplies used by farms, dairy and meat plants in the production, processing, cleaning and sanitizing of equipment. In addition, the lab provides support to dairy producers experiencing milk quality issues. Testing includes bacteria counts, phosphatase, antibiotics, freeze points, somatic cells, butterfat, protein, solids non-fat and lactose. Results are reported to the Dairy Section.

The Mastitis Laboratory offers diagnostic and identification services to the agricultural community. This lab works closely with the Milk Quality Enhancement Program providing lab support to assist producers in solving milk quality problems. This past year, the Lab staff worked with Dr. John Barlow providing electronic somatic cell analysis on 2 mastitis research projects. The Laboratory also works with the Pfizer Animal Health Antimicrobial Surveillance Program providing bacterial organisms to develop more effective drugs for the treatment of mastitis.

The Molecular Biology Laboratory is not operational. Currently, the University of Vermont has limited the scope of work that may be performed due to the location of the lab near a classroom. This past winter, the lab staff collaborated with the Vermont Health Lab on PCR methodology for West Nile Virus and Eastern Equine Encephalitis analysis in mosquito pools.

The Meat Laboratory provides analytical services to consumers, the meat industry and Meat Inspection Section to ensure meat and meat products comply with State and Federal regulations. Results are reported to the Meat Inspection Section.

The Feed and Fertilizer Laboratory analyzes feed and fertilizer products offered for sale to ensure consumers receive what is guaranteed on the product label. This laboratory provides label guarantee analysis services to pet food manufacturers developing new products for the market. Results are sent to the Agriculture Resource Management Division for distribution to the manufacturer and consumer for compensation or possible enforcement action.

The Pesticide Analytical Laboratory tests pesticide products, pesticide applicators and their products as well as residue levels in areas which may have been treated. This section screens ground and surface water for routinely used pesticides to determine if there is off target movement. Monitoring data is reviewed to determine if there is a need to restrict the use of certain pesticides. The Pesticide Lab worked on variety of projects: Corn Herbicide and Seed Treatment Compounds in Pollen; Amitraz in Honey, Herbicides in Compost and Compost starting materials. Toward the end of the fiscal year, the Lab began working on a series of samples collected in a bedbug spray application investigation.

The Laboratory has 2 FDA Laboratory Evaluation Officers who certify or approve industry laboratories and milk receiving facilities to perform official analysis for bacteria counts, somatic cell and antibiotics. Manage an annual antibiotic split sample program for 52 milk receiving facilities. There are 3 full service certified industry laboratories; 2 certified antibiotic labs and 50 approved milk receiving facilities.

#### 2013 Testing information

7. 1652 samples tested for Brucellosis

8. 1303 samples analyzed for Equine Infectious Anemia (Coggins)
9. 68 samples tested from Horse Pulling Contests for performance enhancing substances
10. 1647 samples tested for bacterial identification to diagnosis and treat mastitis
11. 660 dairy/meat plant and farm water samples analyzed for the presence of coliform.
12. 3500 tests performed on fluid dairy products
13. 247 Feed Samples were analyzed for Protein, Fat, Fiber, Moisture and Minerals.
14. 187 Fertilizers were tested were Nitrogen, Phosphorous, Potash and Micro-Nutrients.
15. Post Irene work continues on rebuilding the Pesticide Lab programs.

Discussions continue between the Agency of Agriculture and the Department of Environmental Conservation (DEC) on consolidating the Agriculture and DEC into a single laboratory unit. The Legislature approved a \$100,000 to: 1.) develop a governance and business administration model for a consolidated laboratory and 2.) Cost estimate to build a new laboratory facility.

## Plant Industry

**Section Chief:** Tim Schmalz

**Program Description:** Plant and plant product regulatory oversight and enforcement, certification and inspection for interstate and international shipment, mosquito/other biting arthropod surveys and control oversight and technical assistance, cooperative agricultural and forest pest survey and outreach, represent Vermont on plant pest advisory boards, plant-related legislative testimony, technical assistance and outreach.

### Program Summary:

- Rule revisions –Nursery/Ginseng (initiated in 2012), plan to complete 2<sup>nd</sup> quarter of 2014
- CAPS Program – ongoing USDA Cooperative relationship, including statewide emerald ash borer survey and trapping program, Forest Pest outreach program.
- Arbovirus Survey – Eastern Equine Encephalitis virus (EEEv) and West Nile Virus (WNV) survey and detection, suppression through aerial application of adulticides, ongoing outreach and education on EEE and other arboviruses, continuing cooperative relationship with VT Dept of Health
- Nursery inspection –nursery inspection and technical assistance to growers and dealers in living plant material (\$150 million in VT annually), conducted inspection/survey of listed noxious weeds
- Seeds – Inspected 31.5 acres of seed potatoes as part of annual certification process
- Genetically Engineered Seed - report and subsequent testimony to legislature on quantities sold in Vermont from 2002 to 2012
- Regulatory compliance– inspected hemlock nursery stock and Christmas trees for import and export requirements
- Permitting – USDA 526 import permits for movement of regulated plant pests, issuance of state permits for noxious weeds (in collaboration with Agency of Natural resources Permitting Division and Lakes and Ponds), HWA, etc.
- Hemp – implementation and oversight of the industrial hemp registry, legislative testimony and tracking of industrial hemp bill (S.157/Act 84)



- Agricultural and Forest Pest programs – cooperative relationships with USDA APHIS PPQ and Vermont Forests and Parks Department to survey, identify and control regulated and dangerous plant pests, including Asian Longhorned Beetle, Emerald Ash Borer, and Hemlock Woolly Adelgid; provide testimony to Legislature and other bodies (PSB) on invasive exotic plant pests
- Technical Assistance – including assistance and financial oversight to mosquito control districts, nursery and greenhouse production facilities, structural pest control, noxious weed mitigation efforts, agricultural and forest pest identification and control recommendations

**Plant pest quarantine and regulation** –several State and Federal plant pest quarantines, including:

16. Hemlock woolly adelgid joint quarantine prohibits importation of hemlock nursery stock from infested areas, allows import of uninfested hemlock nursery stock through inspection and certification.
17. Noxious Weeds quarantine rule, prohibits sale, movement, distribution, possession of certain potentially and demonstrated invasive plants.

**Mosquito and arbovirus surveillance and control** –

18. Survey of Vermont mosquito population for presence and abundance of arthropod-borne viruses capable of causing human disease (arboviruses). Assists VT Dept of Health with arbovirus control.
19. Technical assistance to the mosquito control districts in their larviciding programs, and permitting and financial oversight.

**Certification Services** - provides opportunities to sell value-added products to consumers here and outside the state, or allow movement of regulated products into interstate trade, or allow the introduction of Vermont harvested materials into international trade under endangered species treaties.

20. Phytosanitary certification (international and interstate shipments),
21. Seed and seed potato certification,
22. Firewood heat treatment certification,
23. Ginseng certification,
24. Industrial hemp registry

**Cooperative survey and outreach** – AAFM collaborates with USDA, Universities, other state agricultural agencies, a variety of non-governmental organizations, and other agencies within Vermont state government, CAPS program, survey and outreach on variety of pests (e.g., Asian longhorned beetle, emerald ash borer, sirex wood wasp, sudden oak death).

**Nursery inspection** –approximately 209 licensed nursery growers and dealers inspected in 2013. In addition to the standard nursery inspection, we also looked for eight different CAPS plant hosts and eight CAPS pests/ diseases. While many nurseries carried host plants such as *Acer spp*, no CAPS pests were detected anywhere in the state. Inspectors verified compliance with rules and provide technical assistance. Elongate hemlock scale was identified at a nursery and although not a regulated pest, infested trees were destroyed to mitigate the spread of the pest to the surrounding forest.

**National Plant Board** –represents Vermont on the regional (eastern) and National Plant Boards; serves as an advisory group to the federal government on agricultural policy matters.

**Facts & Figures:**

FY 2013 (and through December 2013/FY 14 1<sup>st</sup> half)

25. Mosquito Survey and arbovirus control – extensive survey and sampling efforts commencing June 15, 2013, continuing throughout season until early October
  1. Expanded arbovirus surveillance program, hiring and training two summer vector management technicians
  2. Hired new Vector Management Coordinator (permanent classified position, new 2013)
  3. Identified 32,727 mosquitoes, 32 species, and submitted 1,338 pooled mosquito samples for arbovirus testing
  4. Trapped in 31 towns, representing 5 counties
  5. Identified 27 West Nile virus (WNV) samples – 7/7/13-10/6/13
  6. Identified 22 Eastern Equine Encephalitis virus (EEEV) samples – 7/28/13-9/8/13
  7. Collaborated with USDA to look at the effects of wetland restoration on mosquito populations
  8. Collaborated with Connecticut Agricultural Experiment Station on blooded mosquitoes to look at how Eastern Equine Encephalitis virus (EEEV) circulates within the bird population and how it may affect human health
  9. Assisted Lyndon State College on tick surveillance by providing technical assistance and loaning rodent traps for a survey of immature deer ticks
  10. Surveyed moose and deer during hunting season to look for presence of EEEV antibodies in serum, in joint effort with the VT DOH – over 700 blood samples were collected. This is the fourth year of this study.
26. August 2013 – 2 aerial applications of mosquito adulticide on 8,000 acres in Addison and Rutland Counties, 8/22 and 8/27
27. Ginseng – 180 pounds dry root certified, 48 licensed diggers reporting in 2012
28. Nursery Inspection – 209 licensed nursery operations inspected, 11 non-licensed operations identified and licensed
29. Hemlock Woolly Adelgid Quarantine – 1539 trees inspected and released for sale
30. Genetically Modified Seed – 1,909,223 pounds of GE seed sold in Vermont in 2012
31. Seed Potatoes – approximately 32 acres entered for certification in 2013
32. Phytosanitary Certification – 8 federal certificates issued
33. Christmas Trees – 6 farms inspected for Gypsy moth and Pine shoot beetle (Domestic quarantines), 1 farm inspected for international shipment, approximately 300 trees shipped internationally
34. Industrial Hemp – 7 farms registered as intending to grow hemp in 2014, with 173.5 acres to be cultivated

## Water Quality

**Program Lead:** Laura DiPietro

**Program Description:** The Water Quality Section of the Division of Agricultural Resource Management houses a number of programs to protect water resources from pollution caused by agricultural operations. These programs combine regulatory, technical assistance and financial assistance components to both protect Vermont waters and ensure compliance with all levels of state water quality regulations that may apply to farming activities.

**2013 summary:**

**Best Management Practice (BMP) Program:** Funding through the BMP program is available for the voluntary construction of on-farm improvements designed to abate non-point source agricultural waste discharges into the waters of the state of Vermont. Such construction must meet standards that are consistent with goals of the Federal Water Pollution Control Act and with State water quality standards.

**Capital Equipment Assistance Program (CEAP):** Financial assistance was made available in FY2013 for new or innovative equipment to aid in the reduction of surface runoff of agricultural wastes to state waters, improve water quality of state waters, reduce odors from manure application, decrease greenhouse gas emissions, and reduce costs to farmers when they apply manure or implement a NMP. Custom applicators, non-profit organizations, groups of farmers and individual farmers were eligible for this program. Funding was based on availability and priority watershed, with the total amount of financial assistance not to exceed \$50,000 or 50% of total cost of equipment. Examples of types of eligible equipment include: drag-line manure systems, manure injection equipment and no-till drills and seeders. Annual reports stating equipment use must be submitted to the Agency for three years after the purchase of equipment.

In 2013, 35 CEAP grants were created obligating \$1,011,300. Of this amount, \$714,800 has been expended.

**AGO Edge of Field Monitoring:** The AAFM is partnering with the Lake Champlain Basin Program (LCBP), the Department of Environmental Conservation (DEC) and the USDA Natural Resources Conservation Service (NRCS) to conduct a paired watershed water quality monitoring study to examine the efficacy of edge of field agricultural best management practices (BMPs) at reducing nutrients from leaving the field.

**CREP:** The CREP program, a partnership with the USDA and the USFWS, encourages the installation of conservation buffers along waterways by providing land owners with a yearly rental payment and by covering the cost of planting the buffer. The success of this program can be credited to the 4:1 federal to state match in financial assistance that pays 90% of the installation costs and all of the rental payments for the land during the length of the contract, typically 15 years. There are four partner agencies cooperating on this program: VT Agency of Agriculture, USDA Natural Resource Conservation Service, USDA Farm Service Agency, and the US Fish & Wildlife Service's Partners for Fish and Wildlife program.

**Farm Agronomic Practices Program:** Provides Vermont farms with state financial assistance for the implementation of soil-based practices that improve soil quality, increase crop production, and reduce erosion and agricultural waste discharges. The FAP Program also encourages continued assistance for nutrient management plan update/maintenance and outreach on agricultural water quality impacts and agricultural water quality regulations through educational and instructional activity grants. The FAP grant program continues to grow and increase in popularity with the farming community. Many times, the program allows farms to experiment with new practices that they might not implement without the financial assistance. The goal is to get the farms to adopt the practices so they will continue to do them on their own without program funding. The program has grown such that it is projected that the requested funding will continue to surpass the yearly allocation.

**MFO and LFO Programs** were created in response to federal regulations of the Clean Water Act (CWA) for Concentrated Animal Feeding Operations (CAFO) in order to allow the Agency to regulate farms of this size in the state. The programs provide a common-sense, Vermont-based, cost-effective alternative to a federal permitting program by allowing MFOs to seek coverage under a single Vermont state

General Permit and LFOs operate under an individual LFO state permit. The program's requirements exceed those of the CWA and reduce the amount of phosphorus and other nutrients that would find their way into Vermont waterways.

**Nutrient Management Plan (NMP) Grant Program:** The NMP Program provides state financial assistance to farms interested in developing and updating a NMP for their farm. Nutrient management planning is a key component of meeting agricultural water quality goals. A challenge to this program is the lack of staff time to fully review and ensure proper implementation of NMPs that farms submit into the program and in 2014 we will be implementing new strategies to attempt to increase implementation oversight and compliance.

**Lake Champlain TMDL and Stakeholder Process:** AAFM has been working closely with the Environmental Protection Agency (EPA) and the Agency of Natural Resources (ANR) to develop a draft Total Maximum Daily Load (TMDL) for phosphorus in Lake Champlain expected in the summer of 2014. AAFM has simultaneously been engaged in an agricultural stakeholder public process to develop information that will help promote accelerated conservation practice implementation and enhanced regulatory systems that are more appropriate for improved water quality and provide reasonable assurances for the TMDL.

#### **Facts & Figures:**

##### **AGO Edge of Field Monitoring**

- Some of the practices being evaluated as part of this water quality monitoring initiative are cover cropping, aeration tillage prior to liquid manure application and manure injection.
- Total cost of this project is \$1,020,841.72, of which \$573,055.00 is provided by the NRCS, \$349,999.72 provided by the LCBP, \$1,410.00 provided by the AAFM, and \$96,377.00 of in-kind laboratory services provided by the DEC.
- Six farms currently have seven established sampling sites.

##### **CREP:**

- To date more than 2,700 acres have been enrolled in the program.
- Most of the acreage is enrolled as riparian forested buffers (2,374.4 acres) and 82% of the contracts are in the Lake Champlain Basin.

##### **FAP Program:**

- 213 farms applied for the FAP Program in FY2013 (13 LFOs, 78 MFOs , and 122 SFOs)
- **One non-profit organization applied for the FAP Education and Outreach portion of the program to** conduct nutrient management courses to farmers throughout the state
- 20,969 acres of practices were implemented across the state in FY2013
- \$436,814 of program funds were administered in FY2013

FAP Program Practices	Requested Totals		Accepted Totals		Implemented Totals	
	Acres	Funding	Acres	Funding	Acres	Funding
Cover Crop	14,052	\$ 399,019.33	12,646	\$ 356,826.01	9,186	\$ 259,243.00
Rotation	2,327	\$ 58,168.75	1,855	\$ 46,372.68	1,422	\$ 35,559.43
Cross-Slope Tillage	100	\$ 1,000.00	100	\$ 1,000.00	100	\$ 1,000.00
Nurse Crop	1,759	\$ 17,589.00	1,441	\$ 14,410.57	1,385	\$ 13,845.57
Alternative Manure Incorporation	4,788	\$ 119,707.50	2,115	\$ 52,882.50	1,575	\$ 39,365.00
Strip Cropping	166	\$ 4,150.00	166	\$ 4,150.00	152	\$ 3,800.00
Conservation Tillage	5,385	\$ 64,620.00	2,950	\$ 35,402.00	3,040	\$ 36,476.00
Aeration Tillage	4,932	\$ 59,180.00	3,466	\$ 41,594.00	2,170	\$ 26,045.00
Aerial Cover Crop Seeding	3,730	\$ 37,297.00	3,730	\$ 37,297.00	1,909	\$ 19,088.00
Education and Outreach				\$ 5,000.00		\$ 2,392.30
<b>Totals</b>	<b>37,238</b>	<b>\$ 760,731.58</b>	<b>28,469</b>	<b>\$ 594,934.76</b>	<b>20,939</b>	<b>\$ 436,814.30</b>

***MFO and LFO Program (reporting period of January 1 – December 3) :***

- 113 technical assistance visits
- 50 inspections
- 68 regulatory/enforcement visits
- An additional 42 visits were made to small farms by these four staff members (8 technical assistance visits, 6 inspections and 8 regulatory/enforcement visits).

***NMP Program:***

- 85 farms applied for NMP financial assistance (16 SFOs, 61 MFOs and 8 LFOs)
- Total acreage was 63,498
- Obligated program funds were \$116,807

**July 2012-present additions:**

**FAP Program:** For FY2014, VAAFM has a grant agreement with UVM Extension to administer \$300,000 of the FAP Program in the Lake Champlain Basin. VAAFM is managing the program throughout the rest of the state and has had 42 farms (27 SFOs, 13 MFOs and 2 LFOs) apply for practices on 6,402 acres. To date, 2,112 acres of practices have been implemented and \$43,487.50 has been administered

**AGO Critical Source Area Cost Share Targeting:** The AAFM is partnering with the Lake Champlain Basin Program and the USDA Natural Resources Conservation Service to provide farmers within the Missisquoi Bay watershed with 100% cost share for addressing critical source areas for phosphorus on their farms. Combined funding for this project totals \$866,696.33, with 24 farms participating. AAFM will provide approximately \$30,000 towards to total program costs from the FAP and BMP program funding.

**Certainty:** The AAFM received a Conservation Innovations grant (CIG) from the USDA Natural Resources Conservation Service Vermont office to develop a water quality “Certainty” program in Vermont. This program will be designed to encourage increased participation in the implementation of agricultural best management practices by both allowing farmers to have an incremental implementation plan and giving them a level of “Certainty” that their implementation plan will hold under possible regulatory

changes in the future. The total for this grant is \$150,000.00, half of which is provided by the NRCS and the other half by the AAFM.

**Certainty Enhancement:** The AAFM received an additional \$50,000.00 from the USDA Natural Resources Conservation Service (NRCS) to expand the aforementioned Certainty program. These additional funds will focus on encouraging small farmers to participate in a Certainty program. AAFM is matching these funds with \$25,000.00 to give a total of \$75,000.00 for Certainty Enhancement.

**Nutrient Trading:** The AAFM received a Conservation Innovations grant (CIG) from the USDA Natural Resources Conservation Service (NRCS) National office to assess the feasibility of a water quality nutrient trading program for phosphorus in the Missisquoi Bay and Otter Creek watersheds. This project budget totals \$1,562,452.00, half of which will be provided by the NRCS and the other half match by the AAFM and the Agency of Natural Resources (ANR).

## Food Safety & Consumer Protection

### Division Chief:

- i. Dr. Kristin Haas, DVM

### Staff:

- James Cameron , *Animal Health Specialist*
- Shelley Mehlenbacher, *Asst. State Vet*
- Stephanie Parks, *Administrative Asst.*
- Scott Dolan, *Consumer Protection Specialist*
- Michael Larose, *Consumer Protection Specialist*
- Henry Marckres, *Consumer Protection Chief*
- Marc Paquette, *Weights & Measures Specialist*
- Susan James, *Dairy Specialist*
- Gregory Lockwood, *Dairy Specialist*
- Steven Nicholson, *Dairy Specialist*
- Daniel Scruton, *Dairy Specialist*
- Steve Volk, *Dairy Specialist*
- Jeremy Beaucage, *Food Safety Spec.*
- Edward Jackson, *Food Safety Spec.*
- Craig Koscielski, *Food Safety Spec.*
- Katherine McNamara, *Asst. State Vet*
- Julie Morrison, *Meat Safety Spec.*
- Carrie Roberts, *Admin. Asst.*
- Darryl Kuehne, *Animal Health Specialist*
- Patrick Nevers, *Animal Health Specialist*
- Dwight Brunette, *Consumer Protection*
- Sumner Kuehne , *Consumer Protection*
- Hugh Lund, *Consumer Protection Specialist*
- Steven Parise, *Consumer Protection Specialist*
- Bonnie Haskins, *Admin. Assistant*
- Laurel Junkins, *Dairy Systems Coordinator*
- Jon Magnant, *Dairy Specialist*
- Eric D. Perkins, *Dairy Specialist*
- Brian Young, *Dairy Specialist*
- Robert Aprilliano, *Food Safety Spec.*
- Eric Holmgren, *Food Safety Spec.*
- Ann Killimayer, *Food Safety Spec.*
- Terry McKenna, *Food Safety Spec.*
- Michael Mitchell, *Meat Safety Compliance*
- Randy Quenneville, *Meat Programs Chief*

### Programs:

- 1) Animal Health
- 2) Consumer Protection
- 3) Dairy Regulation
- 4) Meat Inspection

## Animal Health

**Program Lead:** Dr. Shelley Mehlenbacher

**Program Description:** The Animal Health Section of the Vermont Agency of Agriculture, Food, and Markets protects the health and welfare of Vermonters and their livestock and poultry by advancing a safe and secure food supply within a marketplace that provides fair and equal access to consumers and processors while enhancing Vermont's working landscape, rural character and local economies. Through its prudent enforcement programs, the Section maintains the ability of Vermont's livestock, poultry, and livestock products to be sold locally, nationally and internationally. Through its technical assistance and inspection programs, the Animal Health Section provides outreach to producers, processors and consumers on appropriate animal agricultural practices that assure the health and humane treatment of livestock and compliance with best practices, laws and regulations.

### **2013 Summary of Activities:**

During 2013, the Animal Health Section continued to meet its statutory obligations by engaging in regulatory and enforcement activities, technical outreach and assistance activities, and initiatives that demonstrate ongoing collaboration with Vermont producers and licensees, state and federal sister agencies and departments, and NGOs. Two significant licensing changes occurred in the Animal Health Section in 2013. Through the Fee Bill process, the Animal Health Section increased the license fees for Livestock Dealers/Packers/Transporters; the last increase in these fees occurred in 1997. Additionally, the passage of Act 30, "An act relating to the sale, transfer, or importation of pets", moved statutory responsibility for licensing and inspection for hobby breeders from the Agency to the municipalities. The Section performed significant outreach to all stakeholders affected by these changes. The Animal Health Section worked diligently during 2013 to maintain Vermont's disease-free status with USDA for Brucellosis, Tuberculosis, Scrapie, and Pseudorabies. In addition, State Veterinarians obtained approval from USDA for Vermont's Chronic Wasting Disease Program, thereby helping to ensure that Vermont cervid producers can continue to move animals in interstate commerce if they desire. This is beneficial to Vermont's increasingly diversified animal agricultural industries. The Animal Health Section continued to participate in the New England States Animal Agriculture Security Alliance (NESAASA) and continued the project to survey all commercial Vermont dairy farms to evaluate their ability to ship milk safely during a Foot and Mouth Disease outbreak. The Animal Health Section continued its collaboration with DMV officials regarding requirements for moving livestock in interstate commerce. With the promulgation of the federal Animal Disease Traceability rule, the Animal Health Section initiated a number of new activities to maintain compliance. One temporary employee was hired for four months for data entry of movement and disease testing paperwork. The amount of paperwork the office receives increases significantly during the summer and fall months and an additional employee was needed to meet demands and ensure Traceability requirements were met. Additionally, the electronic Certificate of Veterinary Inspection initiative was launched when the Section signed on to use a pdf document created jointly by the Colorado and Kansas Departments of Agriculture. Animal Health veterinarians set up meetings with livestock clinics to encourage its use and this effort will continue into 2014.

### **Facts and Figures for CY 2013**



- Financial: The Section administered \$104,023 in USDA grants, collected \$6,300 in Pet Merchant and \$7,765 in Livestock Dealer/Packer/Transport Licenses, collected \$10,000 in Administrative Penalties, and \$2745 in drug testing fees for horse pull events.
- Licenses and Registrations: The Section issued 42 pet merchant licenses; 54 livestock dealer licenses; 53 livestock transporter licenses; and 4 livestock packer licenses. The Section registered 14 fairs, 31 pet shelters and rescue organizations, 5 certified euthanasia shelters, 8 certified euthanasia technicians, and certified 2 new euthanasia technicians.
- Animal Movement: The Section ensured compliance during, and processed documentation for, the export of 33, 578 head of livestock and poultry from Vermont and did the same for 44,799 head of livestock and poultry imported into Vermont.
- Compliance Activity: The Section issued 5 Notices of Violation and 25 Letters of Warning; completed 2 swill feeding investigations; reviewed 4,457 equine infectious anemia test charts; attended 45 livestock sales events; completed 100 annual inspections of licensees and registered organizations; consulted on 16 animal welfare investigations; monitored 12 horse pulls for compliance; performed 14 tissue residue inspections between 2 commissioned field staff members.
- Farmed cervid herds: Two farmed cervid herds ceased business in 2013 and the Section met with three new cervid farms to bring the total number of herds at the close of 2013 to 15. Forty six samples for Chronic Wasting Disease testing were collected through slaughter or on-farm deaths.
- National Poultry Improvement Plan Participants: The Section provided technical assistance to two new NPIP participants to bring the total number of participant flocks in the state to three. The Section provides quarterly to yearly testing of flocks for multiple diseases.
- Emergency preparedness: 434 Dairy biosecurity and farm readiness surveys were conducted by Animal Health and Dairy Inspection field staff.
- Traceability activities: Six veterinarians were accredited through joint VAAFM and USDA sessions. 41,898 livestock ear tags were issued to veterinarians; 7,800 were issued to producers, and 39,600 were issued to livestock dealers.
- Disease testing, prevention, investigation: The state has one Johnes vaccinated herd; the Section issued quarantines to 16 premises, 2 for rabies related issues; performed 20 disease investigations; tested birds at 9 poultry swaps and 10 fairs; performed 361 Avian Influenza tests and 876 Pullorum tests. The Section performed compliance reviews on 2673 test charts submissions for tuberculosis testing in cattle, sheep, alpaca, and goats; 2073 brucellosis test submissions for cattle, sheep, alpaca, and goats; and 230 Brucellosis vaccinations charts; and completed 19 Comparative Cervical Tests for tuberculosis.
- Technical assistance was provided at the twice-yearly Beef Producers sale, the Green Mountain Spectacular Llama exhibition, 14 fairs, 9 bird swaps, consumer emails and calls, and Levels II and IV Humane Investigation Classes.

## Consumer Protection

**Section Chief:** Henry Marckres

**Program Description:** The mission of the Consumer Protection Section is to protect public health, maintain and improve the integrity of Vermont agricultural products, and ensure equity in commerce for all. This is achieved through technical assistance, education, and regulatory oversight in the areas of product production, grading and quality and in all areas of weights and measures in Vermont.

**Summary of Activities:** In 2013, the Consumer Protection Section completed mandated areas of inspection including the section's role in the areas of Good Agricultural Practices (GAP), maple certification inspections and attaining NIST certification for our weights and measures lab.

Licenses Issued	Inspections Performed	Follow up on Complaints
Class C Pesticides – 1122	Medium Scales – 192	73 visits on complaints
Ice Cream and Frozen Desserts – 595	Liquid Measuring Device – 6,059	
Milk – 1263	Vehicle Tank Meter – 476	
Motor Fuel Dispensers Locations – 745	LPG Meter – 269	
Other meters – 240	Linear Measure – 27	
Retail Scanning Locations – 396	Heavy Duty Scale – 177	
Small Scales – 1337	Livestock Scale – 2	
Bulk Plant Meters – 49	Hopper Scale – 84	
Hopper Scales – 53	Small Scale – 1,784	
Propane Fill Stations – 138	Packages Checked – 4,100	
Truck mounted Propane Meter Companies – 100	Unit Price Checks – 10,675	
Heavy Duty Scales – 178		
Vehicle Tank Meter Companies – 155		

Consumer Protection also performs USDA inspections for shell egg production, frozen poultry for the school lunch program and Country of Origin Labeling (COOL) in retail stores.

The Consumer Protection Weights and Measures lab tests and approves hydrometers used in the maple industry. In 2013, staff tested nearly 11,000 sap and syrup hydrometers that were distributed throughout the maple producing regions of the U.S. and Canada. Vermont is the only state lab that offers this service. This one program brings in about \$30,000.00 per year.

## Dairy Quality and Regulation

**Section Chief:** Daniel L. Scruton

**Program Description:** The Dairy Section provides oversight of the dairy industry and is responsible for assuring that sanitation standards are followed to minimize the risk of unsafe products entering the marketplace. The section also has one specialist dedicated to helping farmers solve milk quality problems, and an administrative assistant.

The Dairy Section oversees the Vermont Dairy Promotion Council (VDPC). VDPC is funded almost exclusively by farmers. The funds are used to promote the sale of milk and milk products.

**FY12 summary:** The Dairy Section 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 qualified to work with all industry sectors along the farm to plate continuum.

In addition to the specific accomplishments referenced below, the Dairy Section continued to provide state and federally mandated support in 2012 for Vermont's farms and plants. By providing consistent and reliable inspection services and technical assistance to this critical infrastructure, the Dairy Section helped to ensure that Vermont dairy industry stakeholders could produce dairy products that live up to Vermont's strong Brand standards.

Dairy Section activities are not only important in-state, but they are also regionally and nationally significant. Farm and plant inspectors participated in FDA training sessions during 2013 to maintain the Dairy Section's ability to rate supplies for national acceptance. The Dairy Section Chief attended the National Conference on Interstate Milk Shipments where changes to the PMO are discussed and voted on. With the oversight of the Dairy Systems Coordinator, the Milk Quality Enhancement Program continues to assist farmers to improve the quality of milk supply. The Dairy Section oversees the Vermont Dairy Promotion Council (VDPC) funds. In 2012 \$2,586,282.20 was collected and allocated by the Council for dairy promotion work.

#### Statistics for FY12

970 dairy farms: (end of FY12)	93 processing facilities (end of FY12)
· 934 are milking cattle	1. 14 new facilities in FY12
· 31 are milking goats	1. 55 are on-farm operations
· 5 are milking sheep	1. 51 are small with less than 500 pounds per day capacity
· 2,318 farm inspections completed	2. 315 plant inspections

## Meat Inspection

**Section Chief:** Randy J. Quenneville

**Program Description:** The Meat Inspection Section provides mandatory daily inspection for the meat and poultry slaughter and processing industry through a cooperative meat and poultry inspection program with USDA's Food Safety Inspection Service (FSIS). This cooperative program is responsible for inspection of commercial, custom, wholesale and retail meat and poultry production and distribution of these products within the State of Vermont.

For a slaughter facility to operate and slaughter animals for the commercial market, it is required that a Food Safety Specialist be present the entire time the plant is in operation during the day. Processing facilities require a daily inspection by a Food Safety Specialist on each day of operation.

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.

USDA, FSIS provides 50/50 funding for the state program as well as 100% reimbursement when providing inspection to federal plants under a cross-utilization agreement. Currently there are 7 federal plants covered by state inspectors on a regular basis and the program provides relief inspection upon request from FSIS (if personnel are available) to any of the other 19 federal plants.

There are 7 full-time Food Safety Specialists (plus one trainee position) that perform a variety of food safety inspections. All Food Safety Specialist receive federal training enabling the program to participate in the cross-utilization program mentioned above.

**Summary of Activities:** In addition to providing the required daily inspection to the meat and poultry industry, 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. The program also provides technical information directly to members and committees of the Vermont legislature as they work on statutory language for emerging activities in the agricultural sectors. These activities have enabled the industry to more than double the number of state inspected plants since January of 2012.

The program is reviewed annually by the USDA FSIS, certifying the program meets “at least equal to” standards for all components of the program, including statutory authority, inspection procedures, microbiological sampling, staffing and training, humane handling, other consumer protection, compliance and enforcement, civil rights and financial capabilities for maintaining the program. Every three years, USDA FSIS also conducts on-site reviews of the state programs. Vermont’s most recent review occurred in June 2012, and the program passed all components of certification.

**Inspection:** The State of Vermont has 16 licensed meat and poultry slaughter/processing facilities operating under state inspection, and 26 licensed meat and poultry slaughter and processing facilities operating under federal inspection. (Two facilities actually operate under both State and Federal Inspection) From July 1, 2012 to June 30, 2013, approximately 926 days of inspection were performed at the 14 State-inspected establishments by the Food Safety Specialists. Additionally, there are 1,927 meat and/or poultry handlers licensed to buy, sell, prepare, process, pack, store, transport, or otherwise handle meat and poultry food products within the state of Vermont. From July 1, 2012 to June 30, 2013, Food Safety Specialists performed 830 compliance and enforcement inspections on retail establishments, and 132 Sanitation Reviews at custom slaughter and processing facilities.

**Microbiological and Residue Sampling:** Food Safety Specialists collect meat and poultry food product samples as part of the Meat and Poultry Inspection Section’s pathogen and residue verification sampling programs to monitor and analyze production processes, identify and evaluate potential foodborne hazards, and respond to recognized, emerging, or potential threats to the food supply. The Pathogen

Sampling Programs include sampling for *Salmonella*, *Campylobacter*, *Escherichia coli O157:H7*, and *Listeria monocytogenes*.

Verification sampling of meat and poultry products for *Salmonella* occurs at state-inspected livestock and poultry slaughter and processing facilities and for *Campylobacter* at state-inspected poultry slaughter establishments. From July 1, 2012 through June 30, 2013, 23 *Salmonella* and 6 *Campylobacter* samples were taken at state inspected establishments.

The *Escherichia coli O157:H7* sampling program provides for verification sampling of non-intact beef products from slaughter and processing establishments that produce these types of non-intact products. From July 1, 2012 through June 30, 2013, 15 beef samples were taken and analyzed for *Escherichia coli O157:H7*.

Violative drug residue testing for antibiotics continues to be conducted in all slaughter establishments through in-plant "carcass-side" testing utilizing the Kidney Inhibition Swab Tests (KIS), and through Vermont's participation in the National USDA Domestic Residue Monitoring 2012 program. From July 1, 2012 through June 30, 2013, 4 KIS tests and 4 national samples were performed by Food Safety Specialists as part of their inspection duties.

Establishments that produce ready-to-eat (RTE) meat and poultry products are subject to the RTE product verification sampling program for *Listeria monocytogenes* and *Salmonella*, and food contact and environmental surfaces for *Listeria monocytogenes*. There were no state inspected establishments that produced RTE products over from July 1, 2012 to June 30, 2013.

**Compliance and Enforcement:** 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.

There were 58 consumer concerns reported to the Agency regarding meat and poultry products in Vermont. As a result of these concerns, 13 cases warranted further investigation and documentation. As part of risk-based reviews, 154 were performed at Retail markets, Wholesale distributors, Restaurants, Farmers' Markets, Public warehousemen, Animal food manufactures, Custom processors, and Renderers. Consequently, 853 pounds of contaminated, adulterated, misbranded or uninspected meat and poultry products were detained and removed from commerce in Vermont; 15 Notices of Warning were issued for meat and poultry violation cases; 3 violation cases that involved uninspected products being distributed and sold in Vermont from out of state firms were transferred to USDA FSIS OPEER Compliance and Investigations Division for follow-up.

**Humane Handling:** Slaughter establishments cannot operate unless in-plant inspection personnel are present. Specific verification activities for humane handling are performed and documented by the in-plant inspection personnel on every day of slaughter operation, as well as at any time live animals are present in the establishment. From July 1, 2012 to June 30, 2013, 146 Humane Handling verification activity tasks were performed at the state inspected livestock slaughter establishment.

All licensed commercial slaughter establishments operating in Vermont (livestock and poultry, state and federal) are required to submit a written humane livestock handling plan for review and approval by the Secretary of Agriculture, Food and Markets or designee.

**Meat Handler Licenses**

January 1 – December 2013

4-D Handler	2
Animal Food Manufacturer	7
Broker, Meat or Poultry Products	5
Custom Packing Plant	29
Custom Poultry Slaughterhouse	1
Custom Slaughterhouse	3
Federal Commercial Packing Plant	21
Federal Commercial Poultry Slaughterhouse	3
Federal/State Commercial Packing Plant	2

Federal Commercial Slaughterhouse	6
Public Warehousemen	2
Renderer	4
State Commercial Packing Plant	10
State Commercial Poultry Slaughterhouse	5
State Commercial Slaughterhouse	1
Wholesalers	158
Total	259

**Active Retail Meat Licenses**

Meat processing large	83
Meat processing small	341
Pre-packaged meats	1244

May 1, 2012 - April 30, 2013

**Reported Processing Production=2,107,485 lbs.**

July 1, 2012 – June 30, 2013

1,748,380 lbs. = red meat and poultry products processed at state inspected custom processing establishments.

359,105 lbs. = red meat and poultry products processed at state inspected commercial processing establishments.

**Poultry Slaughter**

Species	Number	Pounds
Turkeys	1,672	40,496
Chickens	8,914	32,570

Number of animals and pounds produced at State Inspected Slaughter Establishments  
July 1, 2012 – June 30, 2013

**Livestock Slaughter**

Species	Number	Pounds
Bovine	553	313,582
Calves	22	3,676
Swine	646	110,246
Ovine	335	13,167
Goat	35	1,342
Deer	182	7,259
Elk	10	2,886
Alpacas	42	4,046

Number of animals and pounds produced at State Inspected Slaughter Establishments  
July 1, 2012 – June 30, 2013