



2013 Annual Report

Massachusetts
Department of
Agricultural
Resources





Department of Agricultural Resources

251 Causeway Street, Suite 500, Boston, MA 02114
617-626-1700 fax: 617-626-1850 www.mass.gov/agr



DEVAL L. PATRICK
Governor

MAEVE VALLELY BARTLETT
Secretary

GREGORY C. WATSON
Commissioner

The United States agricultural system is in the midst of profound change – the result of a number of converging developments including unprecedented weather and climate phenomena, innovative policies being developed at levels of governance and growing consumer insistence on knowing where and how the foods they eat is being grown.

How safe and secure is our food system? Is it resilient enough to respond to the expanding list of demands, opportunities and challenges before it? Meaningful – even transformative – initiatives designed to strengthen local, state and regional food systems are being undertaken throughout the country. We are all part of the food system. Now we are gaining a better understanding of how we can each play positive roles in shaping it if we choose.

A February 2004 New York Times article entitled “The Seeds of a New Generation” reported on the small but growing movement among farmers in the heartland to shift from monoculture corn operations to growing a more diverse variety of fruits and vegetables tailored to the demands of local and regional markets. The momentum for this shift is being driven in part by changes in the Farm Bill, increased consumer demand for local agricultural products and droughts that threaten to return portions of the nation’s “breadbasket” to their natural desert conditions. This turns out to be good for the farmers, local economies and the environment.

None of this is new to Massachusetts. In fact, we have been in the forefront of re-thinking our agricultural system since the mid-1970’s when the future of farming in the Commonwealth was very much in doubt. At that time Massachusetts was losing an average of 200 farm businesses and 20,000 acres of farmland each year! You didn’t have to be a mathematician or an economist to see where that trend would ultimately lead without a course correction.

Massachusetts was the first state to craft its own agriculture recovery strategy. “A Policy for Food and Agriculture in Massachusetts” was published in 1976. Many of the recommendations it put forth to address the state’s looming farm crisis were extraordinarily successful - including the country’s first agricultural land preservation program (APR), and support for farmers to sell their produce directly to consumers via a variety of venues including farmers’ markets and roadside stands.

Only twenty-two pages in length that policy document is remarkable in its vision and comprehensiveness – laying out a synergistic menu of options to preserve farmland and enhance farm businesses that were within the Commonwealth’s capacity to implement.

Timely, succinct and grounded in reality, that document inspired action that we are still reaping benefits from. More than 70,000 acres of farmland on over 850 farms have been forever preserved for agriculture by purchasing their development rights. Overall farmland acreage has stabilized while the number of farms is increasing. Massachusetts ranks seventh in the nation in numbers of farmers’ markets.

In 2013 Massachusetts farmers faced a new set of challenges– many driven as much by opportunities as by crisis - – no less daunting than those of the 1970’s. Most who read this are familiar with the issues: Food safety Modernization Act; Gap Harmonization; the cost of energy; lack of adequate infrastructure; pressures from development; global competition and farm labor to name some of the more obvious ones.

Our original vision and strategic thinking has served us well, but we are due for a 21st century upgrade. The Massachusetts Food Policy Council’s recommendation to develop a strategic plan for the Massachusetts Food System is a major step in that direction. Its goal is to provide a compass that will help guide us towards a more robust and resilient food and agricultural system.

Equally important it will helpfully inform the next governor and new members of the Massachusetts General Court of the importance of maintaining (and growing) the Commonwealth’s capacity to address the nutritional needs of its citizens.

Gregory C. Watson, Commissioner

A handwritten signature in blue ink that reads "Gregory C. Watson".

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Statutory Purpose: This report is intended to not only inform the public generally, but to meet several statutory reporting requirements. The 2012 Annual report of the Massachusetts Department of Agricultural Resources covers the following:

- Chapter 310 § 11 of the Acts of 2008, an annual report of the Farm Technology Review Commission (page 8)
- M.G.L. Chapter 20 § 25, an annual report of the Agricultural Lands Preservation Committee to the public (page 6)
- M.G.L. Chapter 20 § 30, an annual report of the Massachusetts Dairy Promotion Board to the House and Senate Committee on Ways and Means and the Executive Office of Administration and Finance (Appendix 4)
- M.G.L. Chapter 94 § 14, an annual report on milk coupon programs to the Joint Committee on the Environment, Natural Resources and Agriculture, the Secretary of Energy and Environmental Affairs and the Secretary of Housing and Economic Development (page 43)
- M.G.L. Chapter 128 § 5, an annual report of the entire Department (entire report)
- M.G.L. Chapter 13B § 5A, a report on IPM efforts to the Clerk of the Senate and the House of Representatives and the Joint Committee on Natural Resources and Agriculture (pages 58)
- M.G.L. Chapter 252 § 2, a report of the State Reclamation Board (Appendix 1)

Cover Photos are thanks to the following MDAR staff: Gerard Kennedy, Rick LeBlanc

COMMISSIONER OF AGRICULTURAL RESOURCES

BIOGRAPHY OF COMMISSIONER GREGORY C. WATSON



Greg Watson was sworn in as the Department's 19th Commissioner by Governor Deval Patrick on April 2, 2012. He also served as Commissioner (1990 to 1993) under then Governors Dukakis and Weld. His major accomplishments as Commissioner during his first tenure included the promulgation of innovative groundwater protection regulations designed to prevent contamination of aquifer recharge areas; outreach program to farmers to adopt integrated pest management techniques; working to make Massachusetts the first state to establish a dairy pricing system; and clarification of acceptable agriculture practices under the Wetlands Protection Act.

Commissioner Watson has a long connection to and appreciation of agriculture starting in his childhood where his grandmother tended a vegetable garden and fruit trees and visiting his uncle's working farm in Tennessee. His first hands on experience with agriculture started in 1978 as he worked with urban community groups and rural farmers to develop a network of six neighborhood-based farmers' markets in Greater Boston. He was also a founding member of the Massachusetts Federation of Farmers' Markets.

Commissioner Watson has served in a variety of capacities related to both sustainable agricultural practices and energy efficiency. Before his appointment as Commissioner in 1990, Greg was the executive director of the New Alchemy Institute, an applied research farm with close links to the cranberry, vegetable, and green industry.

Prior to that, Commissioner Watson was appointed Assistant Secretary for Science and Technology with the Massachusetts Executive Office of Economic Affairs and served concurrently as Deputy Director of the Massachusetts Centers of Excellence Corporation. As executive director of the Dudley Street Neighborhood Initiative, Greg made urban agriculture a major focus of the community's revitalization plan that featured community gardens, a farmers' market, and a 10,000 square foot community greenhouse.

Most recently, Commissioner Watson was engaged as the Senior Advisor for Clean Energy Technology within the Executive Office of Environmental Affairs. He was on loan from the Massachusetts Clean Energy Center – the agency that administers the Commonwealth's Renewable Energy Trust.

Commissioner Watson serves on the boards of the Schumacher Center for New Economics, Remineralize the Earth, and Ocean Arks International. He currently resides in Falmouth, Massachusetts.

AGENCY ORGANIZATIONAL OVERVIEW

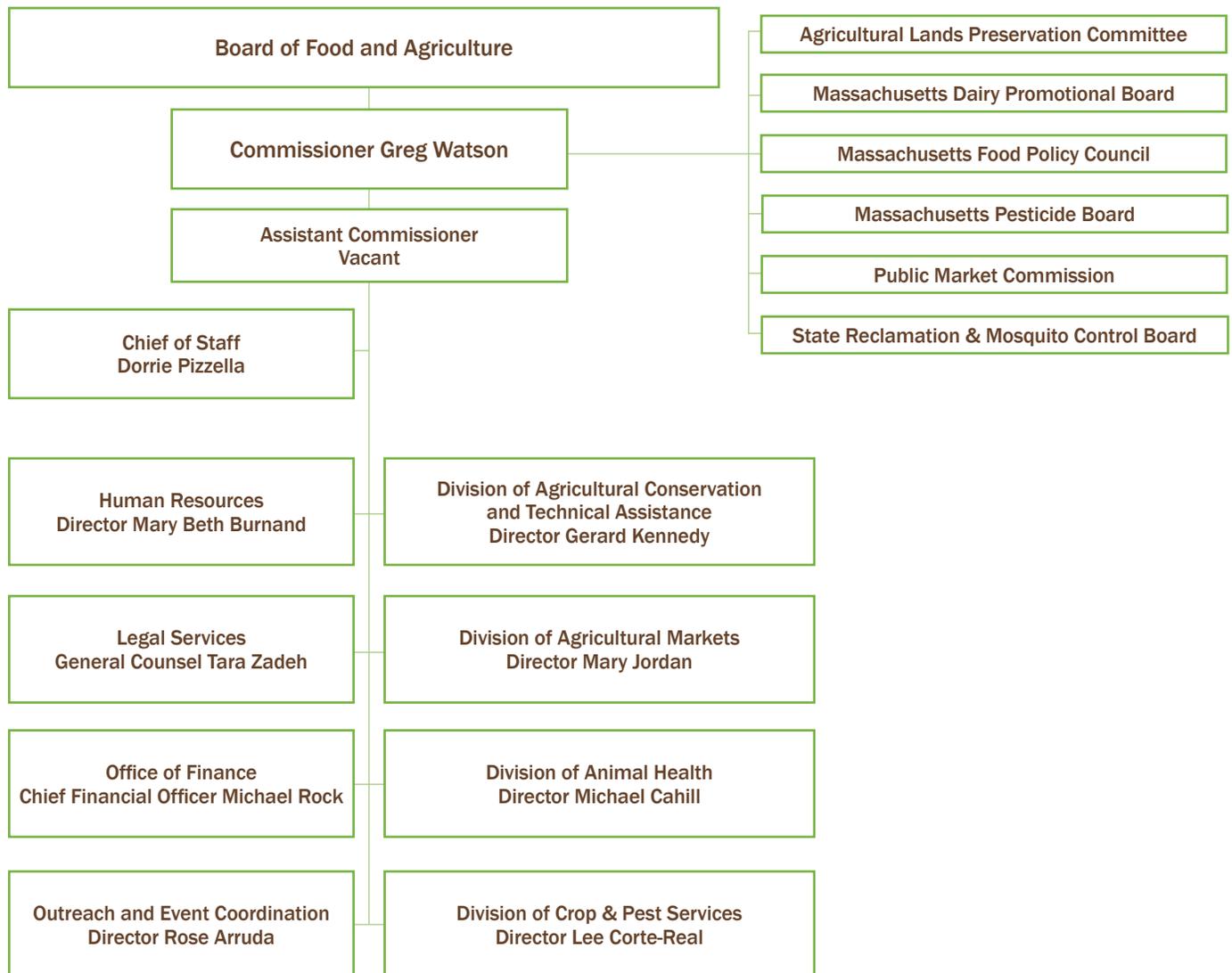
MISSION

The Massachusetts Department of Agricultural Resources' (MDAR) mission is to ensure the long term viability of agriculture in Massachusetts.

HISTORY

MDAR has a long and illustrious history dating back prior to the creation of the US Department of Agriculture. As early as 1852, the various county presidents of the Agricultural Societies across Massachusetts came together to create the Board of Agriculture, a body that has, over the years, evolved into the current Board of Food and Agriculture and the Massachusetts Department of Agricultural Resources within the Executive Office of Energy and Environmental Affairs.

This overview is accurate as of January 2014.



AGENCY ORGANIZATIONAL OVERVIEW, cont.

DIVISION OF ADMINISTRATION

The Division of Administration is responsible for the day-to-day activities of the department in providing support and guidance to the other four divisions in their regulation as well as promotion and enhancement of the agricultural industry in Massachusetts. The Division also promotes cross-pollination among all divisions to optimally achieve MDAR's objective of maintaining a vibrant and sustainable agricultural sector within the Commonwealth. MDAR's Legal Services office as well as its Human Resources and Office of Finance staff are a part of this division.

DIVISION OF AGRICULTURAL MARKETS

The Division of Agricultural Markets fosters the growth and viability of the Commonwealth's agricultural markets including domestic, international, as well as state agricultural fairs. Staff offer field expertise in the development and support of innovative market venues, business expansion, grant opportunities, consumer and industry outreach. The Division seeks to promote new opportunities for consumers to gain greater access to local agricultural products and endorses high quality standards for the agricultural industry. Division staff work closely with over 50 agricultural and commodity organizations as well as with a broadbreadth of local, state, and federal level entities.

DIVISION OF ANIMAL HEALTH

The Division of Animal Health focuses its efforts on ensuring the health and safety of the Commonwealth's domestic animals. Animal Health staff work closely with the Department of Public Health, the Animal Rescue League of Boston, the MSPCA, local veterinarians, local health departments, municipal animal inspectors and animal control officers when responding to possible disease situations. Rapid response to potential outbreaks ensures the fewest number of animals and animal owners are affected. Working in concert with the Divisions of Agricultural Technical Assistance, Crop and Pest Services, and Agricultural Markets, through diligent inspection, examination and licensing, Animal Health promotes the health and welfare of companion and food-producing animals in Massachusetts.

DIVISION OF CROP AND PEST SERVICES

The Division of Crop and Pest Services is responsible for the regulation of many aspects of the agricultural and pesticide industries in Massachusetts through diligent inspection, examination, licensing, registration, quarantine, and enforcement of laws, regulations and orders; to improve operational efficiency and mainstreaming of programs and policies into overall administration priorities. The Division ensures the quality of farm inputs, such as fertilizer, animal feed, and seeds and inspects consumer products such as plants, fruits, and vegetables. The Division prevents and minimizes the impacts of pests entering the state via imported produce and plants. The quality of farm products is monitored in conjunction with the USDA's grading program.

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE

Working with the Divisions of Agricultural Markets, Animal Health, and Crop and Pest Services, the Division of Agricultural Conservation and Technical Assistance (DACTA) works to advance the conservation and utilization of agricultural resources through preservation, environmental stewardship, technology, technical assistance and education in order to enhance the viability of agricultural enterprises and safeguard natural resources. DACTA delivers services to conserve agricultural lands and improve agricultural stewardship and use of natural resources; promote energy efficiency and use of renewable energy; and ensure economic competitiveness and profitability. These programs are supported by the Division's digital based information management systems and interaction with local, state, and federal partners.

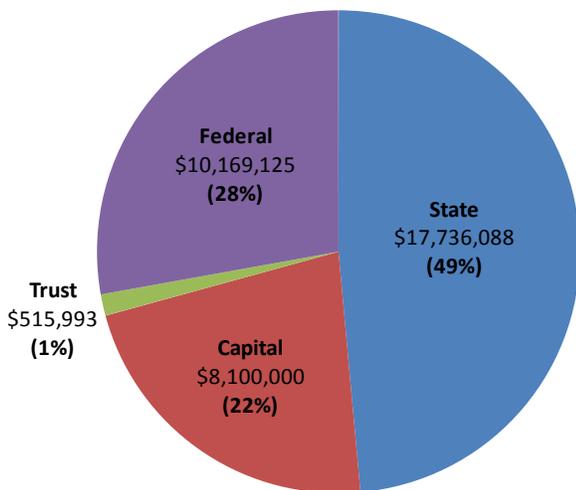
A complete staff directory can be found in Appendix 1.

FINANCIAL REPORT

CHIEF FINANCIAL OFFICER

Michael Rock

MDAR expended \$36.5 million in fiscal year 2013, an increase of \$3.7 million over FY2012 expenditures (\$32.8 million). The increase in fiscal year 2013 spending is primarily attributed to two factors: 1) a \$1.5 million increase in Supplemental Food Account funding and 2) a sharp increase of \$3 million in federal expenditures pertaining to the Farm and Ranch Lands Protection Program (FRPP). These two large increases were partially offset by a reduction of \$1 million in fiscal year 2013 capital funding as the earmarked renovation of the Three County Fairgrounds in Northampton was completed in the prior fiscal year. Fiscal year 2013 expenditures by funding source were as follows:



BUDGETARY APPROPRIATIONS

MDAR expended 99.72% of its final fiscal year 2013 budgetary appropriated amount of \$17.785 million, reverting just \$49,295. The largest portion of the reverted funds was for the earmarked apiary inspection program, which didn't obtain full staffing until the start of this past summer.

ADMINISTRATION ACCOUNT (2511-0100)

The Administration Account funds the day-to-day operations of the agency. The fiscal year 2013 General Appropriations Act (GAA) provided Administration account funding of \$4,857,151. In December, 2012 the Governor was forced to implement 9C budget reductions.

Section 9C of Chapter 29 of the Massachusetts General Laws requires that when projected revenue is less than projected spending, the Governor must act to ensure that the budget is brought into balance. The 9C cuts resulted in a loss of \$335K in agency funding through the elimination of the following:

- The Buy Local program (\$200K)
- Larvicide control funding for the SRB's Plymouth and Bristol Districts (\$100K)
- a reduction in payroll funding (\$35K)

In the spring of 2013, MDAR received good news that as a result of an uptick in the Commonwealth's revenue, funding for the Buy Local program had been restored. The Administration Account ended the fiscal year with funding of \$4,722,151.

Fiscal year 2013 Administration Account spending by category was as follows:

- Nearly 88% for employee's salaries and benefits
- Over 5% for the Buy Local and 4H Program earmarks
- 1.7% (\$79,200) as an annual matching share to the agency's 3-year, \$1,218,563 federal "Pesticide Analytical" grant, to fund lab services with the University of Mass Amherst Massachusetts Pesticide Analysis Laboratory
- The remaining 5.3% supported the agency's day-to-day operational expenses

SUPPLEMENTAL FOOD APPROPRIATION (2511-0105)

The MDAR Supplemental Food Appropriation provides for the purchase of supplemental foods for the Emergency Food Assistance program. This appropriation comprised 73% of the agency's state appropriated budgetary funding in fiscal year 2013. The agency utilizes 2% of these funds for administering the program. MDAR contracts with the Greater Boston Food Bank, which is responsible for the distribution of a percentage of funds earmarked for other Massachusetts food banks under a contractual agreement. In fiscal year 2013, funding for the Food Bank Program was consolidated under MDAR; prior to that, funding had been jointly administered by MDAR and the Mass. Department of Education (DOE). Funding for the Food

FINANCIAL REPORT cont.

Bank program in fiscal year 2013 was \$13 million, a \$500K increase over the fiscal year 2012 amount of \$12.5 million. This funding provided over 15.2 million meals.

INTEGRATED PEST MANAGEMENT ACCOUNT (2511-3002)

Funding for MDAR's Integrated Pest Management (IPM) program has still not recovered from the pre-recession period. Funding in fiscal year 2013 was \$63,163, including a \$12k earmark to UMass Amherst for a study on the mitigation of the Brown Marmorated Stink Bug. This is a 79% reduction in funding compared to a funding level of \$303,000 in fiscal year 2008. This has impacted the agency's ability to meet its statutory requirements under Chapter 85 of the Acts of 2000 ("Act to Protect Children and Families from Harmful Pesticides") and MGL Chapter 132B (Massachusetts Pesticide Control Act).

CAPITAL (BOND) ACCOUNTS

In fiscal year 2013 the agency expended 100% of its \$8.1 million in capital (bond) funding. Capital funded programs included the Agricultural Preservation Restriction (APR) Program, APR Improvement Program, Farm Viability Enhancement Program (FVEP), Agricultural Business Training, Aquaculture, Agricultural Environmental Enhancement Program (AEEP), and the Tri-County Fairgrounds renovation project. By utilizing a mixture of capital, federal and trust funds, the agency expended nearly \$12.2 million on Agricultural Preservation Restrictions to protect approximately 1,354 acres of land, and another \$650K on 13 agricultural covenants to protect an additional 862 acres. As was mentioned above, capital expenditures by the agency decreased in fiscal year 2013 by \$1.1 million, nearly all of which was attributed to the completion of the earmarked renovation of the Three County Fairgrounds in Northampton in the prior fiscal year.

FEDERAL FUNDS

MDAR expended over \$10.1 million dollars in federal grant funds in fiscal year 2013. The federal Farm and Ranch Lands Protection grant was the largest component of the agency's federal funding, comprising over 78% of the total. This grant is utilized to fund a variety of MDAR

programs, including the APR program, the Farm Viability Enhancement Program, the Agricultural Environmental Enhancement Program and the Agricultural Energy Program.

TRUST FUNDS

In fiscal year 2013 the Legislature established the Homeless Animal Prevention and Care Fund. This trust account is funded by a voluntary check-off donation on the Mass. Department of Revenue's annual income tax return, beginning with the 2012 tax return forms sent out this past January. To date, the trust fund has received \$260,730. The funding will be used by MDAR to offset costs associated with the vaccination, spaying and neutering of homeless dogs and cats as well as dogs and cats belonging to low income residents, and to assist with the training of animal control officers.

REVENUE

MDAR is currently responsible for the collection of 29 different fees, ranging from pesticide applicator and milk dealer licenses to nursery and greenhouse inspection fees. For the fifth year in a row, MDAR has generated more revenue than its budgetary allocation for the administrative costs of the agency. In fiscal year 2013, MDAR revenue of \$5.856 million exceeded the agency's year-end operating budget (Administration and IPM accounts combined) of \$4.785 million by nearly \$1.071 million dollars. Fiscal year 2013 revenue was nearly 4% higher than the prior fiscal year and set an all time high for the agency.

MDAR FEE REVENUE 2007-2013

YEAR	REVENUE
2008	\$4,601,948
2009	\$4,709,686
2010	\$5,159,485
2011	\$5,679,206
2012	\$5,633,212
2013	\$5,856,068

HUMAN RESOURCES

HUMAN RESOURCES DIRECTOR

Mary Beth Burnand

The Human Resources (HR) Office administers and oversees all HR functions for the Massachusetts Department of Agricultural Resources (MDAR) and the 9 mosquito control districts under the State Reclamation Board. Specific functions include:

- Position Management including classification and posting requirements through hiring
- Coordination of training opportunities for employees through EOEEA's PACE system
- Family Medical Leave Act and the Americans with Disabilities Act
- Diversity Initiatives and Equal Employment Opportunity
- Unemployment
- Worker's Compensation
- Labor Relations
- Workforce Planning

EMPLOYMENT OPPORTUNITIES

All employment opportunities for MDAR and the State Reclamation and Mosquito Control Projects are posted on the Commonwealth of Massachusetts' Commonwealth Employment Opportunities (CEO) website at <https://jobs.hrd.state.ma.us/recruit/public/3111/index.do>

If you find a position within MDAR, please download our employment application and forward it to the HR Director along with a resume and cover letter. The employment application is found on our website at <http://www.mass.gov/eea/docs/agr/admin/employment-application.pdf>.

The Commonwealth of Massachusetts is an equal opportunity/affirmative action employer. Women, minorities, veterans and people with disabilities are strongly encouraged to apply.

SELF-IDENTIFICATION PROGRAM FOR VETERANS AND PERSONS WITH DISABILITIES

In May, 2013, Governor Patrick announced the Strategic Plan to Increase the Employment of Veterans in the Commonwealth. The goal of this plan is to increase the employment of Veterans in the Executive Branch while balancing efforts of non-discrimination, equal opportunity and diversity pursuant to Executive Order 526 and our

current efforts to be a Model Employer of Persons with Disabilities. All employees were provided an opportunity to self-identify.

PERFORMANCE RECOGNITION PROGRAM

Each year, the Commonwealth of Massachusetts, through its Human Resources Division, coordinates a Performance Recognition Program. This program formally recognizes outstanding state employees who demonstrate exemplary leadership, strong commitment, and an extraordinary work ethic.

The Department of Agricultural Resources recognized the following individuals as its 2013 recipients of the Commonwealth's Citation of Outstanding Performance:

- Dr. Lorraine O'Connor, Chief Veterinary Health Officer-Division of Animal Health
- David Webber, Program Coordinator III, Division of Agricultural Markets
- Alexander MacDonald, Animal Health Inspector, Division of Animal Health

HUMAN RESOURCES, cont.

DEPARTMENT OVERVIEW - 4TH QUARTER 2013

TOTAL WORKFORCE: 75											
<i>Males: 35 (46.67%)</i>											
<i>White</i>	<i>%</i>	<i>Black</i>	<i>%</i>	<i>Hispanic</i>	<i>%</i>	<i>Asian</i>	<i>%</i>	<i>Native American</i>	<i>%</i>	<i>Unknown</i>	<i>%</i>
31	41.33	3	4.00	0	0.00	1	1.33	0	0.00	0	0.00
<i>Females: 40 (53.33%)</i>											
<i>White</i>	<i>%</i>	<i>Black</i>	<i>%</i>	<i>Hispanic</i>	<i>%</i>	<i>Asian</i>	<i>%</i>	<i>Native American</i>	<i>%</i>	<i>Unknown</i>	<i>%</i>
32	42.67	4	5.33	1	1.33	1	1.33	0	0.00	2	2.67
<i>Minorities: 10 (13.33%)</i>											
--	--	<i>Black</i>	<i>%</i>	<i>Hispanic</i>	<i>%</i>	<i>Asian</i>	<i>%</i>	<i>Native American</i>	<i>%</i>	--	--
		7	9.33	1	1.33	2	2.67	0	0.00		
<i>Vietnam-era Veterans ("VEV"): 0 (0.00%)</i>											
<i>White</i>	<i>%</i>	<i>Black</i>	<i>%</i>	<i>Hispanic</i>	<i>%</i>	<i>Asian</i>	<i>%</i>	<i>Native American</i>	<i>%</i>	<i>Unknown</i>	<i>%</i>
0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
<i>Disabled: 0 (0.00%)</i>											
<i>White</i>	<i>%</i>	<i>Black</i>	<i>%</i>	<i>Hispanic</i>	<i>%</i>	<i>Asian</i>	<i>%</i>	<i>Native American</i>	<i>%</i>	<i>Unknown</i>	<i>%</i>
0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00

BENCHMARKS (PARITY) FOR THE COMMONWEALTH:

<i>Females</i>	48.80%
<i>Minorities</i>	20.70%
<i>Veterans</i>	3.50%
<i>Persons with Disabilities</i>	12.00%

ADMINISTRATIVE DIVISION STAFF

*Top: Commissioner Greg Watson, Mary Beth Burnand, Alex Gill, Michael Rock
 Middle: Juanita Antunes, Barbara Scoff, Joyce Toland, Rose Arruda, John Rosa
 Bottom: Sandra Payne, Dorrie Pizzella, Linda Demirjian, Nu Ngoc Nyugen
 Not pictured: Catherine de Ronde*



LEGAL SERVICES

GENERAL COUNSEL

Tara Zadeh

Legal Services operates within the MDAR Administration, and consists of a General Counsel, 3 assistant counsels, and 1 paralegal. It provides a wide range of advisory and technical legal services to the Commissioner and all Divisions and programs within the Department. Legal staff represents MDAR in administrative and judicial proceedings that include exercising the authority conferred upon them by the Office of the Attorney General as a Special Assistant Attorney General. In addition, legal staff serves in a support capacity in matters in which the Attorney General represents MDAR. The goal of Legal Services is to provide quality legal support to the agency and the overall administrative needs of MDAR. In this capacity, Legal Services provides assistance for all regulatory and enforcement matters, answers public questions regarding the programs, represents the agency in administrative hearings, and helps each program achieve its goals. In 2013, staff provided the following specialized services to each Division:

WORK WITH THE DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE

Staff assisted with the preparation of composting regulations, APR program guidelines, and program documents. Staff also interpreted statutes and regulations, reviewed farm viability covenants, and assisted APR staff with matters involving both restricted and state owned leased land. A major focus in 2013 was to ensure the acquisition of Agricultural Preservation Restrictions and to assist in stewardship and enforcement matters.

WORK WITH THE DIVISION OF AGRICULTURAL MARKETS

Staff assisted in reviewing contracts and marketing material, including completion of the Boston Public Market contract and the grant for the development of a food policy plan.

WORK WITH THE DIVISION OF ANIMAL HEALTH

Staff provided all legal advice as needed for any matter that arose, prepared cease and desist orders, prepared notices of assessment of penalties, and represented MDAR in all adjudicatory hearings brought before the Division of Administrative Law Appeals.

WORK WITH THE STATE RECLAMATION AND MOSQUITO CONTROL BOARD (SRB)

Staff provided advice to the SRB regarding the governing of district budgets and budget-making transparency, and reviewed proposals involving policy and regulatory matters. Staff also assisted in the defense of Mosquito Control Districts/Projects in personnel matters, contracts negotiation for services and offices, and all other legal issues.

WORK WITH THE DIVISION OF CROP & PEST SERVICES

Staff reviewed letters of warning, notices of assessment of penalties, and license revocations and suspensions. Staff also assisted in interpreting and applying statutes and regulations, enforcement of pesticide laws and regulations, and drafting of pesticide supervisor and plant nutrient regulations.

OTHER

Legal Services managed all public records requests, ensured compliance with the Commonwealth's Conflict of Interest Law, trained all new employees and contractors on Executive Order 504 regarding protection of personal information, ensured that employees, boards and commissions are educated on the Open Meeting Law, and provided updates of any changes in applicable statutes, regulations and executive orders. Legal Services also oversaw all contracts and regulatory changes, provided legislative comments, and provided support to Human Resources staff as needed.



LEGAL SERVICES STAFF

*Clockwise from top left: Michael Demakakos, Tara Zadeh, Carol Szocik, Kevin O'Brien
Not pictured: Jessica Burgess*

SNAPSHOT OF MASSACHUSETTS AGRICULTURE

AGRICULTURAL ECONOMIST

Catherine de Ronde

Massachusetts is the third most densely populated state in the country and among the top three states for farmland value at \$12,000 per acre. In addition, factors such as a short growing season and high national competition make farming in Massachusetts a unique and challenging occupation. As a result, Massachusetts farmers have emerged as agricultural entrepreneurs, many taking advantage of small scale and diversified farming to meet upcoming trends and demands.

Massachusetts has approximately 7,755 farms in production, covering over 523,000 acres, and an annual market value of \$492 million dollars. In addition, according to a 2012 report by Farm Credit East, agricultural processing is estimated to add an additional \$13 billion to market value. The majority (80%) of farms in the state are individually or family owned. The average farm is 68 acres in size, and brings in \$63,000 in annual sales. In 2013, a trend towards an increasing number of smaller farms continued.

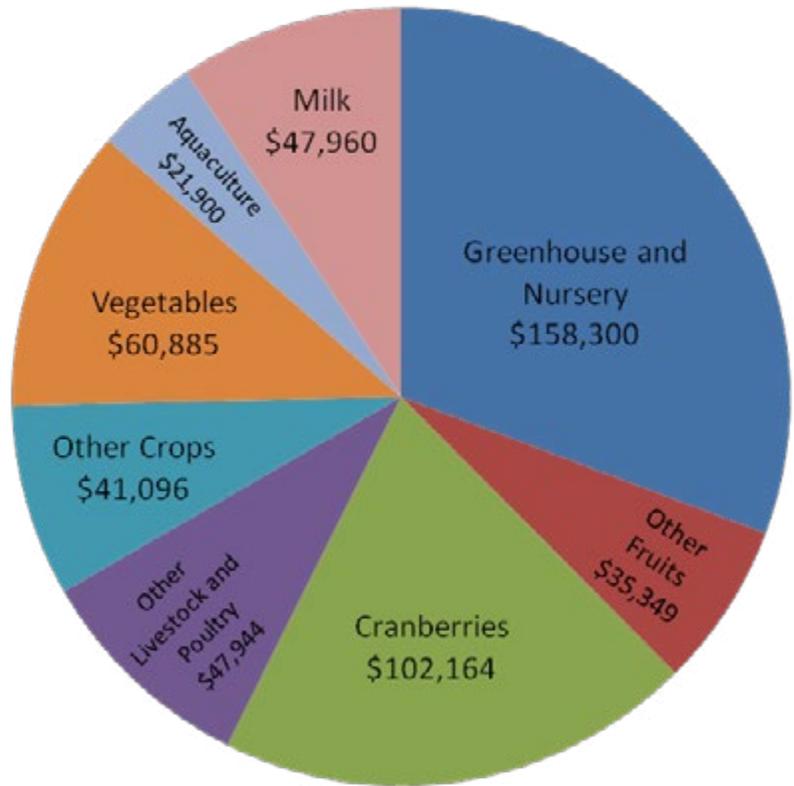
GREENHOUSE & NURSERY

The greenhouse and nursery industry, Massachusetts' top agricultural sector, has a market value of \$158 million, accounting for approximately 28% of the state's agricultural output. Approximately 1,000 commercial greenhouse and nursery businesses are operating in the state. The industry has suffered over the last few years, primarily due to competition and marketplace uncertainty. Competition has been a result of the expansion of garden centers at "big-name" national home improvement stores, which benefit from economies of scale, thereby allowing competitive pricing. Marketplace uncertainty has been driven by uncertainty in the housing market, which is inherently linked to greenhouse and nursery sales; since the 2008 housing market downturn, housing sales, particularly new home construction, have significantly decreased, and greenhouse and nursery sales have followed suit. USDA Census data shows that the percentage of total market share for

this sector has been on the decline since 2002 (at 40%), and market value has seen fairly significant swings (a 10% increase from 2002 to 2007, followed by a 14% decline between 2007 and 2012). The housing market is now on the rebound, providing the state's greenhouse and nursery industry with some relief.

CRANBERRIES

With an annual market value of \$102 million, making up 20% of the state's agricultural output, the second biggest agricultural sector in the state is the cranberry industry. There are approximately 400 cranberry growers in Massachusetts, most of whom farm in the southeastern part of the state. Approximately 70% of these growers are small family farms with less than 20 acres of bogs.



Mass. Cash Receipts (in \$1,000 Dollars)

SNAPSHOT OF MASSACHUSETTS AGRICULTURE cont.

In 2013, industry concern continued as cranberry prices plummeted as a result of market instability. This was due to an influx of Canadian product as that country entered into large scale cranberry production. The cranberry industry has seen market fluctuations and oversupply before, but historically combatted the instability by allowing the United States Federal Cranberry Marketing Order to use its power to regulate supply. However, given that today's oversupply is in large part coming from Canada, cooperation is needed between both American and Canadian growers. In addition to the oversupply, demand for cranberries has remained stagnant. One way the industry is addressing this issue is by market expansion, particularly in foreign markets.

PRODUCE

The produce sector has an annual market value of \$96 million with nearly 1,600 producers, 40% growing vegetables and 60% growing fruit.

The biggest concern for Massachusetts produce growers in 2013 was the Food Safety Modernization Act, specifically the Act's proposed rules on Standards for Produce Safety and Preventive Controls for Human Food. The proposed rules expand upon current voluntary guidelines followed by producers to maintain food safety, adding extensive record-keeping and paperwork. Many growers already follow such practices and procedures, and many will be exempt from the requirements because of farm size or product, however the many implications of the Act were still a cause of concern for many growers this year.

This summer, listening sessions were held with the Food and Drug Administration (FDA) across the country, including a session in Massachusetts, to allow the industry to ask questions and express concerns. As a result of these sessions, FDA announced that it will be revisiting and rewriting portions of the Act in 2014, at which point industry will have additional opportunities for review and comment.

LIVESTOCK & POULTRY

With an annual market value of \$48 million, the livestock and poultry sector is growing by value, output, number of producers, and variety of products. Growth in the sector can be attributed to the increase in demand for local meats. Massachusetts growers have access to the Boston market, where consumers are willing to pay a premium for local products. However, there was concern over whether the state's producers could continue to meet the increasing momentum and demand for these products, due to the limited USDA slaughter and processing facilities. Unfortunately this concern was exacerbated by the tragic December fire at Bloods Farm in Groton, one of two USDA slaughter and processing facilities in the state.

AQUACULTURE

The aquaculture industry in Massachusetts is responsible for an annual market value of nearly \$22 million. With the exception of a few major finfish producers, the majority of the state's aquaculture is comprised of approximately 300 shellfish farmers producing primarily oysters and quahogs on 1,000 acres of intertidal and sub-tidal land.

This year, the state's aquaculture harvest areas were shutdown for the first time due to an outbreak of *Vibrio parahaemolyticus*, a bacteria that can cause gastrointestinal illness. In dealing with health concerns surrounding the outbreak, the industry faced significant economic hardship. Concern continues over the potential for increases in shutdowns, as well as the potential damage to the industry's reputation and livelihood.

SNAPSHOT OF MASSACHUSETTS AGRICULTURE cont.

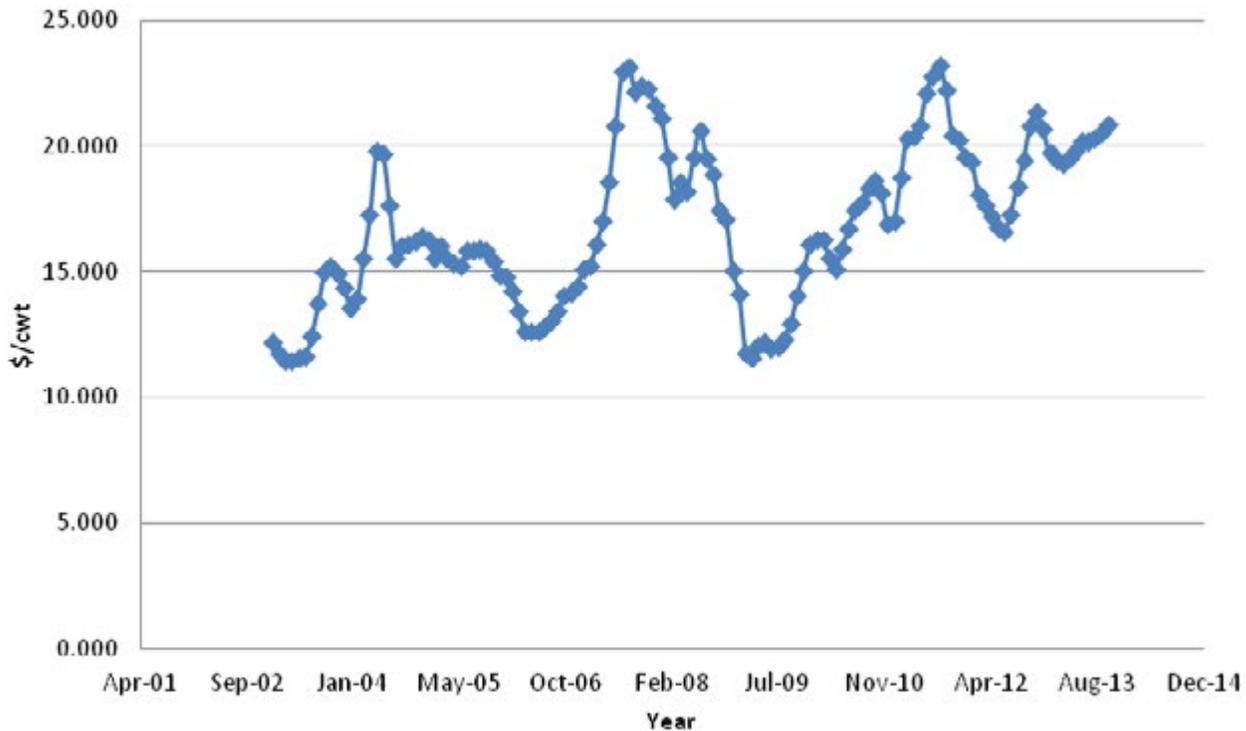
DAIRY

The dairy industry is a small but critical part of the state’s agricultural economy, with a market value of \$48 million from the 151 remaining dairy farms. The majority of these farms are members of cooperatives. However, 15 of the farms produce, process, and market their own milk. For those dairy farmers who are members of cooperatives, the major struggles continue to be discrepancies between fluctuating milk prices set by the Federal Milk Marketing Order, and cost of production that typically exceeds these prices.

In 2013, dairy farmers received \$4 million dollars as a result of the Dairy Tax Credit Program, which was designed to provide a safety net to support Massachusetts dairy farms through revenue stability provided when either milk prices paid to dairy farmers fall or costs of production rise. In addition to the tax credit, some dairy farmers

will receive a payback from the Milk Producer’s Security Fund. On December 30th, 2013, an Act relative to the milk producer’s security fund reimbursement was signed by Governor Deval Patrick into Chapter 191 of the Acts of 2013. The Act allows for a milk producer who paid into the fund to be reimbursed up to an amount equal to the money paid into the fund, minus any funds previously distributed, plus a pro rata share of the interest earned on the fund. As the Massachusetts dairy industry is continuously struggling to compete in a harsh economic climate, returning this money will be extremely beneficial to those dairy farmers who paid into the fund.

Farmer Milk Prices



BOARDS AND COMMISSIONS

MDAR's mission to support, regulate, and promote the Commonwealth's agricultural future is enhanced by the various boards and commissions from which the Department draws expertise and guidance. Current and statutorily authorized boards include the Agricultural Lands Preservation Committee (ALPC), Board of Food and Agriculture, Massachusetts Dairy Promotion Board (MDPB), Massachusetts Food Policy Council (FPC), Massachusetts Pesticide Board, Public Market Commission, and State Reclamation and Mosquito Control Board (SRMCB).

While the names of all board/commission members as well as contact information for the various MDAR staff liaisons are provided, please note that all Department Boards and Commissions may also be reached directly for official correspondence by US Post at:

Massachusetts Department of Agricultural Resources
Attn: [Board or Commission Name]
251 Causeway St., Suite 500
Boston, MA 02114

BOARDS AND COMMISSIONS cont.

AGRICULTURAL LANDS PRESERVATION COMMITTEE (ALPC) (M.G.L. CHAPTER 20 & 24)

CHAIRMAN

Gregory C. Watson, Commissioner, MDAR

STAFF LIAISON

Ron Hall

The ALPC's function is to evaluate and accept or reject applications for Agricultural Preservation Restriction (APR) projects based upon the criteria outlined in the General Laws as well as federal program criteria. There are 9 members, including 4 farmer members appointed by the Governor, 2 non-voting members, a designee of the Undersecretary of the Executive Office of Housing and Economic Development, a designee of the Secretary of Energy and Environmental Affairs, the Chairman of the Board of Food and Agriculture, and the Commissioner of Agricultural Resources who serves as the chair.

STATE AGENCY MEMBERS

Gregory C. Watson, Commissioner, MDAR

Robert O'Connor, designee of Secretary Sullivan, EOEEA

Phillip DeMartino, designee of Undersecretary Brooks, EOHCD

Gordon Price, Chairman, Board of Food and Agriculture

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Stephen Verrill, farmer

Warren Shaw, Jr., farmer

Frederick Dabney, Jr., farmer

George Beebe, farmer

NON-VOTING MEMBERS

Barbara Miller, designee of Christine Clarke, State Conservationist, USDA Natural Resources Conservation Service

Stephen Herbert, designee of Steve Goodwin, Dean of the College of Natural Sciences, University of Massachusetts Amherst

The Agricultural Lands Preservation Committee (ALPC), addresses on a quarterly basis various MDAR Approval requests, including the consideration of Waivers of Sale for non-family transfers of APR property, requests for Certificates of Approval (COA) for structural improvements and enhancements to the APR property, and review of Special Permits to engage in one-time limited, non-agricultural activities/uses. During 2013, the ALPC issued 10 Waivers, 19 COAs, 6 Certificates of Completion for previous COAs, and 1 Special Permit.



BOARDS AND COMMISSIONS cont.

BOARD OF FOOD AND AGRICULTURE (M.G.L. CHAPTER 20 § 1)

CHAIRMAN
Judy Leab

STAFF LIAISON
Dorrie Pizzella, MDAR

The Massachusetts Board of Food and Agriculture was established in 1852 to promote crop and animal husbandry in the Commonwealth. It predates the organization of the Massachusetts and US Departments of Agriculture. The Board is comprised of 7 members appointed by the Governor each representing different counties who serve for 7 years or until a successor is qualified. At least 4 of the members must be farmers whose principal vocation is the production of food and fiber. The Chair of the Board serves as a member of the Agriculture Lands Preservation Committee (ALPC). The Board approves the appointment of the Assistant Commissioner, advises the Commissioner on major agency policies and initiatives, and advocates for the Massachusetts farming industry.

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Laura Abrams-Bartlett – Middlesex County, farmer
 Judy Leab – Berkshire County, farmer
 Glynn Lloyd – Suffolk County, Chief Executive Officer, City Growers, LLC*
 Gordon Price - Essex County, farmer*
 Kimberly Stevens – Franklin County, farmer
 Noli Taylor - Dukes County, Coordinator, Island Grown Schools*

**Replacing the expired terms of Chair Frederick Dabney – Bristol County, farmer, John Lebeaux – Worcester County, town administrator, and Frank Matheson – Middlesex County, farmer.*

2013 ACTIVITIES OF THE BOARD

2013 was a year of transition for the Board. The Board elected a new Chair, Judy Leab of Ioka Valley Farm in Hancock, and welcomed 3 new members: Laura Abrams (owner of JP Bartlett Nurseries in Sudbury), Glynn Lloyd (owner of City Fresh Caterers and CEO of City Growers, LLC, a cooperative that promotes and engages youth in urban farming in Dorchester and Roxbury), and Noli Taylor (coordinator of Island Grown Schools, the Vineyard's farm to school program). The Board also participated in listening sessions on the Congressional Farm Bill and federal Food Safety Modernization Act (FSMA) rules, advised the Commissioner on the agency's operating budget, and provided feedback on a variety of departmental priorities, including implementation of the Boston Public Market, creation of a Massachusetts Food System Security Plan, development of the Agricultural Preservation Restriction (APR) Program Special Permit Policy, and promulgation of MDAR's proposed regulations regarding both compost and plant nutrients/fertilizer.

BOARDS AND COMMISSIONS cont.

MASSACHUSETTS DAIRY PROMOTION BOARD (MDPB)

(M.G.L. CHAPTER 20 & 30)

CHAIRMAN

The Commissioner of Agricultural Resources’ designee, Mary Jordan, Director of the Division of Agricultural Markets, MDAR

VICE-CHAIRMAN

Sam Shields, Agri-Mark

SECRETARY

Krisanne Koebke, MA Cooperative Milk Producers Federation, Inc.

TREASURER

Darryl Williams, MA Association of Dairy Farmers

STAFF LIAISON

Julia Grimaldi, MDPB Coordinator

The Massachusetts Dairy Promotion Board (MDPB) develops programs and policies with the objective of increasing the consumption of Massachusetts dairy products through promotion, research, and educational activities. The nine member board is made up of representatives of MDAR, the Executive Office of Administration and Finance, the dairy farming industry, and the milk processing industry.

STATE AGENCY MEMBERS

Mary Jordan, designee Commissioner Gregory C. Watson, MDAR

Sean Faherty, designee Secretary Jay Gonzalez, ANF

PUBLIC MEMBERS (APPOINTED BY THE COMMISSIONER OF THE DEPARTMENT OF AGRICULTURAL RESOURCES)

Lynne Bohan, Massachusetts Food Association

David Hanson, dairy farmer, Agri-Mark, Inc.

Kathleen Herrick, dairy farmer, MA Association of Dairy Farmers

Krisanne Koebke, dairy farmer, MA Cooperative Milk Producers Federation Inc.

Warren Shaw, dairy farmer, New England Producer Handler Association

Sam Shields, dairy farmer, Agri-Mark, Inc.

Darryl Williams, dairy farmer, MA Association of Dairy Farmers

2013 ACTIVITIES OF THE BOARD

The following motions were adopted by the board in 2013:

- Approved allocation of \$65,000 to Community Involved In Sustaining Agriculture (CISA) to develop a Buy Local dairy campaign and market research project.
- Approved allocation of \$30,000 to the New England Dairy Promotion Board’s “Must be the Milk” campaign.
- Approved allocation of \$30,000 for the New England Dairy & Food Council “Fuel Up to Play 60” school wellness and nutrition initiative.
- Approved allocation of \$10,000 to Eastern State Exposition.
- Approved allocation of \$6,300 to Massachusetts Agriculture in the Classroom.
- Approved allocation of \$4,100 to the Massachusetts Cheese Guild.

2013 ACCOUNT SUMMARY, MASSACHUSETTS DAIRY PROMOTION BOARD TRUST ACCOUNT

YEAR	DEPOSITS	EXPENSES	BALANCE
2013	\$202,832.48	\$140,058.33	\$62,774.15



BOARDS AND COMMISSIONS cont.

**MASSACHUSETTS FOOD POLICY COUNCIL (MFPC)
(M.G.L. CHAPTER 20 § 6C)**

CHAIRMAN

Gregory C. Watson, Commissioner, MDAR

VICE CHAIRMAN

Jeff Cole, Federation of Massachusetts Farmers Markets

STAFF LIAISON

Bonita Oehlke

STATE AGENCY MEMBERS

Commissioner Gregory C. Watson, MDAR
 Undersecretary Michael Hunter, designee of Secretary Gregory Bialecki, MEOHED
 Commissioner Cheryl Bartlett, MDPH
 Katie Millet, designee of Commissioner Mitchell Chester, MESE
 Kerry Bowie, designee of Deputy Commissioner Gary Moran, MDEP
 Frank Martinez Nocito, designee for Commissioner Stacey Monahan, MDTA

LEGISLATIVE MEMBERS

Senator (vacant)
 Representative Kimberly Ferguson
 Senator Robert Hedlund, Assistant Minority Leader
 Representative Stephen Kulik, Vice Chairman of the House Committee on Ways and Means

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Frank Carlson, Carlson Orchards, Food processor and handler
 Helen Caulton-Harris, Springfield Board of Health, Local health department representative
 Jeff Cole, Federation of Massachusetts Farmers Markets
 Manuel Costa, President, Costa Fruit and Produce, Food processor and distributor
 Amanda Kinchla, M.S., Food Safety Extension Specialist, UMASS Amherst
 John Lee, Allandale Farm, Farmer
 Vivien Morris, MS, RD, MPH, LDN, Boston Public Health



Commission, Community nutrition

ADVISORY COMMITTEE MEMBERS (APPOINTED BY THE FPC)

Shemariah Blum-Evitts, Lutheran Social Services' New Lands Farm Program
 Cris Coffin, American Farmland Trust
 Selvin Chambers, The Food Project
 Nancy Cohen, UMass
 Christa Drew, MA Food Policy Alliance
 Steven J. Herbert, UMASS
 Phil Korman, Community Involved in Sustaining Agriculture (CISA)
 Brad Mitchell, Farm Bureau
 Ellen Parker, Project Bread
 Winton Pitcoff, NOFA/MA/MA Maple Producers Assn
 Helen Rasmussen PhD, Tufts

2013 ACTIVITIES OF THE BOARD

Four meetings were held in 2013, at the Worcester Union Train Station Conference Hall:

- January 30th, 2013: The FPC discussed the Advisory Committee's recommendation for a statewide plan, and agreed to focus on the following two goals:
 - The increase of food production within the state.
 - The barriers and leverage points that come up in the intersection of food processing, distribution, marketing, access, security and public health.
- March 1st, 2013: The FPC discussed the Advisory Committee's strategies for the development of a statewide food plan. The FPC was given authority to

BOARDS AND COMMISSIONS cont.

act as a fiduciary agent, to hold and administer funds, and to contract for services. The FPC agreed to oversee the strategic planning process including drafting a Request for Response (RFR) for a facilitating entity. Funding could be from private or public sources.

- June 7th, 2013: A \$100,000 appropriation for the strategic plan, along with enabling language to allow MDAR to administer public and private funds, was included in budget legislation. The Advisory Committee reviewed the draft RFR for a facilitating entity for a statewide strategic food systems plan, updated and approved for release on August 6, 2013, with responses due on September 9, 2013.
- November 25, 2013: The 9 member RFR Review Committee met previously to advance 3 proposals in response to the RFR for a facilitating entity to develop a statewide strategic food systems plan:
 - Changing Tastes (changingtastes.net)
 - Metropolitan Area Planning Council (MAPC - mapc.org)
 - Dialogos (dialogos.com)

Each applicant presented its vision at the FPC meeting. MAPC received the most votes from FPC members. A motion was passed to award the contract to MAPC and to have MDAR execute the contract in accordance with the specifications set forth in the RFR.

MASSACHUSETTS PESTICIDE BOARD (M.G.L. CHAPTER. 132B § 3)

CHAIRMAN

Lee Corte-Real, designee Commissioner Gregory C. Watson, MDAR

STAFF LIAISON

Steve Antunes-Kenyon

The Board's responsibilities entail advising the Commissioner of MDAR with respect to the implementation and administration of Massachusetts general laws pertaining to pesticides. The Board also hears appeals of those aggrieved by the actions or decisions of MDAR or the Subcommittee of the Pesticide Board. The 13 member board consists of representatives of MDAR, the Department of Environmental Protection, the Department of Fish and Game, the Department of Conservation and Recreation, and the Department of Public Health, as well as farmers, commercial pesticide applicators, pesticide toxicologists, and members of the environmental community, the medical community, and citizens at large.

STATE AGENCY MEMBERS

Lee Corte-Real, designee Commissioner Gregory C. Watson, MDAR

Kathy Romero, designee Commissioner Kenneth L. Kimmell, MDEP

Martha Steele, designee Commissioner Cheryl Bartlett, MDPH

Michael Moore, MDPH-Bureau of Environmental Health - Food Protection Program

Jack Buckley, designee Commissioner Mary Griffin, MDFG

Ken Gooch, designee Commissioner Edward M. Lambert, Jr., MDCR

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Richard Berman, pesticide applicator

Dr. Richard Bonnano, farmer

William Clark, conservation and extension agent

Laurell Farinon, conservation agent

Dr. Jack Looney, professor

Dr. Brian Magee, toxicologist

Physician (Open)

BOARDS AND COMMISSIONS cont.

2013 ACTIVITIES OF THE BOARD

In 2013, the Pesticide Board met and was provided with updates of issues that might impact pesticide applicators and use of pesticides in the Commonwealth, including:

- A review of the 2012 Emergency Response to Mosquito Borne Disease
- Proposed Direct Supervision Regulations
- Country of Origin Labeling

The most significant issue that the Board was required to take action on was an appeal of an Administrative Penalty and changes to the Children and Families Protection Act requirements for the use of Etofenprox on school properties for the purposes of mosquito control. The Board also considered the Pesticide Board Subcommittee policy to classify subsurface termiticides as State Restricted Use. In addition, the Board was also presented with an appeal of the approval of the 2013 NSTAR Yearly Operational Plan for Rights-of-Way application on Cape Cod, which was referred to the Division of Administrative Law Appeals.

PUBLIC MARKET COMMISSION

CHAIRMAN

Gregory C. Watson, Commissioner, MDAR

PROJECT MANAGER

Mark Lilienthal

STATE AGENCY MEMBERS

Commissioner Gregory C. Watson, MDAR

Carole Cornelison, Commissioner, MDCAM, designee of Secretary Glen Shor, EOAF

Mary Griffin, Commissioner, MDFG, designee of Secretary

Richard K. Sullivan, Jr., EOEEA

William Tuttle, Deputy Director, MassDOT, designee of Secretary Richard A. Davey, MassDOT

LEGISLATIVE MEMBERS

State Representative Gailanne Cariddi, 1st Berkshire District

State Senator Anthony Petrucci, 1st Suffolk and Middlesex District

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Executive Director of the Rose Kennedy Greenway Conservancy (VACANT)

Nancy Caruso, designee of Mayor Thomas M. Menino

Lauren Shurtleff, Planner, designee of the Executive Director of the Boston Redevelopment Authority

In March 2012, the Commonwealth of Massachusetts designated Boston Public Market Association, Inc. (BPMA) the developer and operator of the Boston Public Market, a 28,000 square foot indoor/outdoor farmers' market on the ground floor of the Haymarket MBTA station, adjacent to the Rose Kennedy Greenway. Once complete, the Market will provide local farmers, fisherman and specialty crop producers a year-round, high-volume venue for direct sales. It will feature a mix of permanent interior and seasonal outdoor vendor stalls offering produce, cheese, eggs, ice cream, meat, poultry, fish, flowers, wines and craft beers, baked goods and other Massachusetts and New England grown food and farm products. The project is a public-private partnership. The non-profit BPMA is responsible for the design, permitting, and build-out of

BOARDS AND COMMISSIONS cont.

the market, management of its day-to-day operations, and fundraising to match a \$4 million state funding commitment. MassDOT is the owner and lessor of the ground floor space. In August 2011, Governor Patrick created the nine-member Boston Market Commission to define and protect the Market’s public mission, select an operator, and set overall policy regarding its fiscal performance, management, maintenance, operations, and community programming.

2013 ACTIVITIES

The project made significant headway in 2013. In June, the BPMA hired a new CEO (Elizabeth Morningstar), launched a new logo, website, and Friends of the Market program, developed a business plan, expanded outreach to commodity producers and guilds, hired an architectural

firm, and initiated design of the market space. In September, BPMA began a capital campaign, closing out the year with \$4 million in donations from foundations and individual donors. The \$4 million in private funding will trigger the release of another \$4 million in state capital bond financing for design and market build-out. At the end of December, the BPMA finalized a master lease with MassDOT for the ground floor retail area, subject to the approval of the Public Market Commission, the MassDOT Board, and the Federal Highway Administration. Construction of the Market is expected to begin in the summer of 2014, with the goal of opening in spring 2015.



BOARDS AND COMMISSIONS cont.

STATE RECLAMATION AND MOSQUITO CONTROL BOARD (SRMCB)

(M.G.L. CHAPTER 252 § 2)

CHAIRMAN

The Commissioner of Agricultural Resources' designee Lee Corte-Real, Director of the Division of Crop & Pest Services, MDAR

STAFF LIAISON

Mark Buffone, Executive Director, SRMCB

The SRMCB oversees mosquito control in the Commonwealth of Massachusetts and establishes administrative and technical policy, guidelines, and best management practices to insure that mosquito control programs are effective and safe. The SRMCB also appoints all Commissioners of the various regional mosquito control projects. The three member board is comprised of representatives of MDAR, the Department of Conservation and Recreation, and the Department of Environmental Protection.

Although the SRMCB is an independent board that sits within MDAR, the Division of Crop and Pest Services provides support to the SRMCB through staff time and resources that are allocated to ensure the efficient operation of mosquito control services to member communities. In addition to the time devoted to SRMCB activities by the Division Director, who serves as the Chairman of the SRMCB, MDAR staff dedicates significant portions of their time to the SRMCB and to the administration of the mosquito control districts. In particular the staff Entomologist, who is the SRMCB Executive Director, devotes the majority of his time to the coordination of SRMCB activities, oversight of the Mosquito Control District (MCDs), and support of the state arbovirus surveillance program in conjunction with the Department of Public Health.

Additional Division staff provides technical support for pesticide operations by providing meteorological data or enforcement support during wide-area aerial treatments.

Staff also provides reviews of mosquito pesticide products and provides health and environmental assessments when required. These support activities are provided by MDAR to the SRMCB and are not charged to mosquito district budgets.

STATE AGENCY MEMBERS

Lee Corte-Real, designee Commissioner Gregory C. Watson, MDAR

Gary Gonyea, designee Commissioner Kenneth Kimmell, MDEP

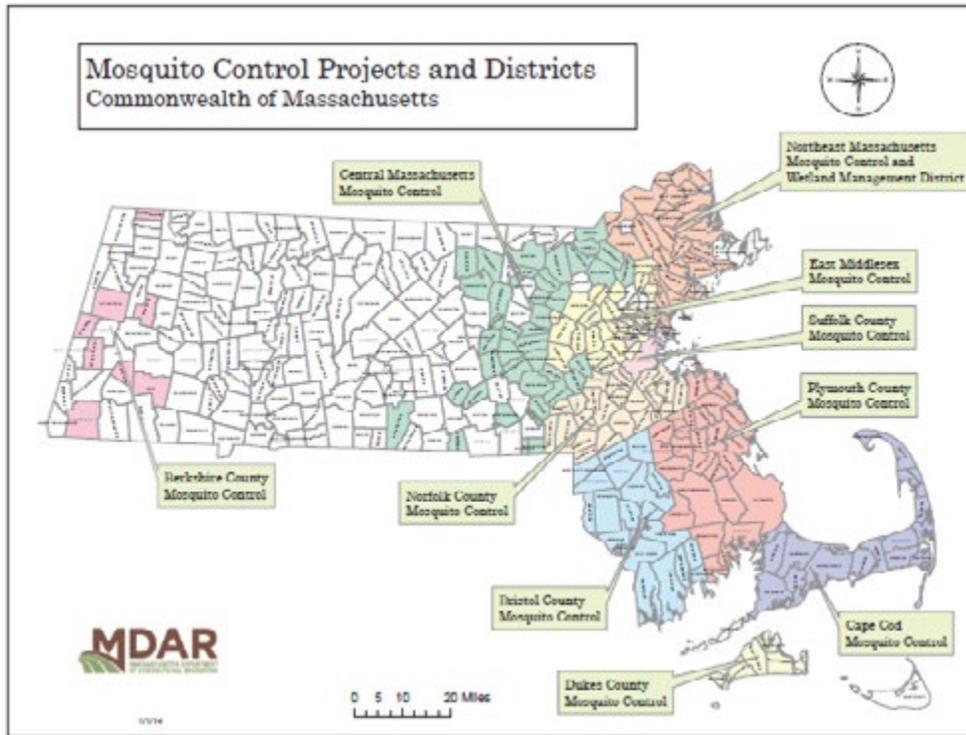
Bruce Hansen, designee Commissioner Jack Murray, MDCR

MOSQUITO CONTROL DISTRICTS/PROJECTS AND MEMBER MUNICIPALITIES

In the Commonwealth, there are 9 organized or regional mosquito control districts/projects providing mosquito control services to a number of municipalities. The areas covered by mosquito control services coincide with major population areas, well-known tourist areas, and areas where mosquito-borne diseases such as EEEV and WNV have occurred. During 2013, the SRMCB recognized Martha's Vineyard (MV) as the Dukes County Mosquito Control Project based on a past enabling act of legislation. Though this particular project does not engage in a comprehensive mosquito control program, this recognition permits the island to participate in an Interagency Service Agreement (ISA) with the MA Department of Public Health (DPH) and permits the SRMCB to pay for testing of mosquito collections.

During 2013, 3 additional municipalities voted to join an established mosquito control program, 2 in the Central MA Mosquito Control Project (Groton, Lowell) and 1 in the the Berkshire County Mosquito Control Project (Richmond). The town of Uxbridge also voted to opt out of the Central MA Mosquito Control Project. This resulted in an overall increase in total membership to 197 (56% of the state's 351 municipalities). All mosquito control districts/projects are represented in the map below.

BOARDS AND COMMISSIONS cont.



pools of mosquitoes, animal and human cases, and in response to arbovirus risk elevation alerts by MDPH. The data collected was helpful to the SRMCB, MDPH, the Governor’s office, EOEEA, and others to address questions about where and when treatments were taking place. This was especially true in communities where EEEV and WNV positives were found during the peak risk period of the season.

As in previous years, the SRMCB required that mosquito districts/projects submit an annual operational report. These reports

2013 SRMCB UPDATE

Aerial adult mosquito control operations by aircraft were not necessary during 2013. However, the season was not without serious arbovirus concerns. Both WNV and EEEV were widespread, with animal and human cases of both arboviruses and 1 human fatality caused by EEEV. In response to the elevated mosquito-borne risks, increased ground equipment treatments utilizing Ultra-Low-Volume (ULV) technology was conducted by mosquito control districts/projects statewide to reduce adult mosquito populations. Because of the increase in ULV operations taking place in many areas of the state, a new arbovirus response reporting form was developed and posted to the SRMCB’s website by MDAR’s Division of Agricultural Conservation and Technical Assistance (DACTA) (from the Mosquito control project and districts web page, see Additional Resources). This web-based form allowed the mosquito control districts/projects to record when and where ULV treatments occurred. The responses were automatically entered into a database used to document these operational tactics conducted in response to positive

are very comprehensive documents that satisfy the MEPA special review process and help to keep the public better informed about mosquito control work, practices, personnel, equipment and products each year. The 2013 annual operational reports can be found at mass.gov/eea/agencies/agr/pesticides/mosquito/annual-operation-reports.html.

FY14 BUDGET

Regional mosquito control districts submit proposed budgets to the SRMCB for review and certification of budget amounts deemed necessary by the Board to ensure an appropriate level of funding is available to carry out mosquito control operations. After budgets are certified by the Board, a proportionate share of the total district budget is deducted from each member municipality’s local aid distribution as reported on the Cherry Sheets, the official notification of state aid by the MA Department of Revenue. Mosquito control funds are deposited in districts’ trust accounts and expenditures are administered by the Board.

The SRMCB received specific details concerning the proposed FY14 budgets, including year to date spending, prior year estimated balance forward (funds rolling over), past and present salary increases, and local municipal feedback of mosquito control services. The feedback from member municipalities is obtained via a standard form required as part of the SRMCB Budget Notification and Compliance Policy, to document whether or not communities support proposed FY14 budgets. The mosquito control districts/projects send the standard form to their local member communities. The SRMCB typically requires two-thirds of the member communities in any mosquito control service area to support a budget, particularly a budget with a large increase, as an indication that local communities support these budget increases.



The FY14 budgets for the 9 regional programs totaled \$11,270,235, an increase of \$439,487 (4.3%) compared to FY13, and FY14 budget increases ranged from 0% to 15.4%. FY14 budget amounts approved and certified by the SRMCB during 2013 are listed in the table below.

FY14 BUDGET AMOUNTS APPROVED AND CERTIFIED BY THE SRMCB

DISTRICT	BUDGET
Berkshire County Mosquito Control Project	\$ 239,583
Bristol County Mosquito Control Project	\$ 1,290,550
Cape Cod Mosquito Control Project	\$ 1,821,201
Central Massachusetts Mosquito Control Project	\$ 1,890,213
East Middlesex Mosquito Control Project	\$ 676,517
Norfolk County Mosquito Control Project	\$ 1,589,314
Northeast Massachusetts Mosquito & Wetland Management District	\$ 1,589,540
Plymouth County Mosquito Control Project	\$ 1,604,197
Suffolk County Mosquito Control Project	\$ 265,264
State Reclamation and Mosquito Control Board	\$ 303,859
Total	\$ 11,270,235

DIVISION OF AGRICULTURAL MARKETS

MARY JORDAN, DIVISION DIRECTOR

The mission of the Division of Agricultural Markets is to foster the economic growth of the Commonwealth's domestic and international agricultural markets by offering field expertise in the development and support of innovative market venues, business expansion, food safety, grant opportunities, and consumer and industry outreach.

In 2013, project highlights included the management of USDA Federal State Market Improvement Program (FSMIP) and the Specialty Crops Block Grant Program (SCBGP) which included the implementation of several Division marketing initiative grant projects. Food safety education and outreach remain priorities for MDAR, and Division staff assisted with the implementation of food safety trainings, GAP pre-audits as well as with grower education and outreach to respond to the Food Safety Modernization Act during the comment period for the Produce Rule and the Preventative Controls Rule.

The Agricultural Markets Division continues to work with over 50 agricultural and commodity organizations, including 8 regional 'Buy Local' initiatives, 42 community, livestock and youth agricultural fairs, and a broad range of other local, state, and federal entities.

Through its award-winning MassGrown & Fresher initiative and the Commonwealth Quality Program, the Division seeks to cultivate new opportunities for consumers to gain greater access to local agricultural products while endorsing high quality standards for growers and producers. The Massachusetts agricultural industry also benefits from these programs as well as from export marketing initiatives with the anticipation of sustaining both a viable economy and agricultural entities.

PROGRAM LISTING

- Agricultural Commissions
- Agricultural Directional Signage
- Agricultural Fairs Development
- Agricultural Tourism
- Commonwealth Quality Program
- Culinary Tourism
- Export Development
- Farm and Market Report

- Farm to School Project
- Farmers' Market Nutrition Program
- Farmers' Market Program
- Federal-State Market Improvement Program
- Food Safety Program
- Harvest New England Initiative
- Massachusetts State Exposition Building, West Springfield
- Massachusetts Grown and Fresher Campaign
- Organic Cost Share Certification
- Retail Coupons for Fluid Milk Program
- Specialty Crop Grant Program
- Value Added Technical Assistance

AGRICULTURAL COMMISSIONS

Richard LeBlanc

As of December 2013, Massachusetts had a total of 158 Agricultural Commissions (AgComs) and 131 Right to Farm bylaws in communities across the commonwealth. This is an increase of 9 AgComs and 7 Right to Farm (RTF) bylaws over 2012. There are 119 communities that have both an AgCom and RTF. There are also a number of communities, including heavily populated cities and towns like Holyoke, Hopkinton, and West Springfield, that hope to adopt AgComs and Right to Farm Bylaws in the coming year.



DIVISION OF AGRICULTURAL MARKETS STAFF

Left to right: Sarah Ryan, David Webber, Bonita Oehlke, Julia Grimaldi, Rebecca Davidson, Ellen Hart, Rick LeBlanc, Mary Jordan, Michael Botelho

DIVISION OF AGRICULTURAL MARKETS, cont.

Although agriculture is enjoying unprecedented popularity, the communities that are adopting these initiatives are facing stronger public scrutiny and are having to provide more compelling reasons for establishing an AgCom or adopting an RTF bylaw. To lay the groundwork for a successful vote requires homework: persuasive speaking points, researching strategies for success, and anticipating what the objections may be. Once the bylaw is adopted, municipalities typically require additional encouragement to appoint AgCom members and convene meetings. The majority of communities that have adopted AgComs are performing great work with volunteers who are supportive of farmers and farming and are working to become knowledgeable in agricultural issues.

A contributing factor for adopting these initiatives is the funding priority incentive in the APR Municipal Grant Program (APR-Muni), since the Commonwealth Quality Municipal Grants (Smart Growth) program that ran for the past seven years was recently discontinued. Two regional initiatives also contributed to the visibility and effectiveness of local AgComs:

- The Berkshire Taconic Community Foundation provided 2 rounds of funds to the Mass. Association of Agricultural Commissions (MAAC) to establish and carry out a small grant program for Berkshire County AgComs. This enabled those towns to carry out a wide variety of agricultural support projects.
- In partnership with the New Entry Sustainable Farming Project and Land For Good, staff worked on a project for Hampden County AgComs to map all potential but inactive farmland larger than 2 acres in size.

The MAAC, organized in 2010, continues to be a valuable resource for the dissemination of information through their website, massagcom.org, the AgCom Listserve Forum, and their annual meeting, held in Sturbridge this past March. Nine workshops were offered, including the very popular Municipal Issues and Farming in Wetlands. With MDAR assistance, MAAC coordinated a series of winter 2013-2014 regional AgCom meetings to bring together Ag Com members, farmers, agricultural vendors and service providers.

AGRICULTURAL DIRECTIONAL SIGNAGE PROGRAM

Richard LeBlanc

The Agricultural Directional Signage Program is managed by MDAR in cooperation with the Massachusetts Department of Transportation. The program allows for the placement of agricultural directional signs along state roadways for farms located off those roadways. In 2013, there were eight new applications for signs. Criteria and application are online at: www.mass.gov/agr/markets/agritourism/signs.htm.

AGRICULTURAL FAIRS DEVELOPMENT

Ellen Hart

Mary Jordan

When funding is available, MDAR allots prize monies to agricultural fairs and supports 4-H activities in National Competitions. The staff manages the Massachusetts State Exposition building on the Eastern States Exposition fairgrounds, home to the Big E Fair in West Springfield, inspects fairs, and conducts workshops, seminars, and training sessions. This past year, staff published a comprehensive list of agricultural fairs that was promoted on the Massachusetts Grown & Fresher website (mass.gov/massgown). Staff also assisted the Massachusetts Agricultural Fairs Association to distribute this listing through such venues as the Regional Tourist Councils, Chambers of Commerce, Mass. Turnpike Authority rest areas, bookstores, and libraries. There were 47 fairs held throughout the Commonwealth in 2013: 19 major fairs, 8 community fairs, 9 youth fairs, 3 livestock shows and 8 Grange fairs. State Rosettes were given to fairs upon request and used to recognize excellence for "Best in Show." Over 3 million visitors attended these fairs in 2013.

DIVISION OF AGRICULTURAL MARKETS, cont.

AGRICULTURAL TOURISM

Richard LeBlanc

Agricultural tourism (agri-tourism) merges the world of travel with experiences of food and farming production. A visit to a farm can be an adventure for the entire family. Many farmers are becoming increasingly creative about making their farms attractive to tourists by adding farm stands, corn mazes, bed and breakfasts, and picnic tables, or by offering bus tours, recreational activities, etc.

In 2012, MDAR received a USDA Specialty Crops Block Grant to implement a MassGrown & Fresher Initiative to educate the public about agri-tourism opportunities for consumers and tourists. This grant enabled MDAR to design and create a new table top display, as well as create recipe and rack cards for use in 2013. These new materials were displayed at the 10th anniversary AAA Travel Marketplace at Gillette Stadium in March, where more than 18,000 attendees stopped by to sample apples and maple syrup. Maps in both paper and online versions were offered to encourage the public to visit agri-tourism destinations across the Commonwealth. With assistance from the Massachusetts Office of Travel and Tourism and Regional Tourism Councils, over 25,000 maps were distributed in 2013, at information centers, fairs, and food festivals throughout the state.

COMMONWEALTH QUALITY PROGRAM

Michael Anthony Botelho
Rebecca Davidson

Commonwealth Quality (CQP) was launched in 2010 as standards based audit program created to promote local products and support agricultural businesses across the Commonwealth. The CQP program assists its members in improving and enhancing their operations in order to maintain and improve their market access. The



Commonwealth Quality seal helps consumers, buyers and business partners identify products, produced and harvested in Massachusetts, that incorporate food safety as well as Best Management Practices (BMPs) that promote environmental sustainability and stewardship.

Currently, CQP supports 5 agricultural sectors: produce, forestry, lobster, aquaculture, and dairy. Throughout 2013, the program has continued its outreach to local producers, the public and industry officials with the intent of raising awareness of the program and its core practices.

In 2014, the program plans to launch a Maple sector to allow consumers to find and purchase Massachusetts maple syrup and other maple-based products that are harvested and processed responsibly.



Visit mass.gov/cqp to learn more about the program and to find certified products near you!

CULINARY TOURISM

Julia Grimaldi
David Webber

The Culinary Tourism Program was launched in 2009 with funding from a USDA Specialty Crops Block Grant. Culinary Tourism is a subset of agri-tourism that focuses specifically on the search for, and enjoyment of, prepared food and drink. Culinary Tourism promotes all distinctive and memorable gastronomic experiences. It fosters valuable connections in the agricultural community and hospitality and tourism sector that ultimately benefit growers and food producers who offer unique culinary experiences.

Savor Massachusetts offers hundreds of web-based resources for the culinary traveler, growers and chefs, including a variety of dynamic on-the-farm activities, wine, cheese & brewery “trails”, a monthly culinary and agricultural events calendar, and seasonal recipes. Log on to mass.gov/massgrown and click on Savor Massachusetts for a complete list of resources.

DIVISION OF AGRICULTURAL MARKETS, cont.

EXPORT DEVELOPMENT

Bonita Oehlke

MDAR works closely with Food Export USA Northeast, with funds from the USDA Foreign Agricultural Service. The line item in the Farm Bill that supports these programs is the Market Access Program. Massachusetts food and agricultural businesses can receive a 50% reimbursement for funds used for eligible export development expenses. Awards made to 31 Bay State companies in 2013 totaled close to one million dollars.

There are a wide array of programs and services available for export development, including exporter education, in-country market research, and support at domestic and

international trade shows for Massachusetts agricultural and food businesses. These opportunities are described in full at mass.gov/eea/agencies/agr/markets/exports

FARM & MARKET REPORT

Richard LeBlanc

The Farm & Market Report is MDAR's bimonthly newsletter, which includes the Commissioner's Column, program/grant updates, workshop/educational updates, news from the USDA, a calendar and a classified section. The Report is the primary tool MDAR uses to communicate information and programs to the agricultural industry. For 2013, MDAR published 6 Reports along with 30 extra email blasts with timely notices on ag-related events. Also in 2013, MDAR sent 6 MassGrown & Fresher eblasts to over 3000 consumers containing information on available seasonal crops, along with updates on local food, fairs and festivals. Information contained in these eblasts pertains to consumer events that involved Culinary Tourism, agricultural fairs and other agricultural events. Past issues can viewed at www.mass.gov/eea/agencies/agr/markets/farm-and-market-report.

SPOTLIGHT: MA EXPORT *Plenus Group Inc./Boston Chowda Co., located in Lowell, is a small-medium sized*



business that participated in the 2013 National Restaurant Association's Buyers Mission as well as the Caribbean and Central America Buyers Mission organized through Food Export USA Northeast.

Jamie Crane, Sales Manager

for the Plenus Group, explained, "We briefly met with a buyer from Bermuda at the NRA Buyers Mission and the following Mission." As a result, the company landed their first-time export sale to Bermuda in September for an initial order of their frozen seafood soups valued at \$9,000, and shipped a second order in October worth \$22,000. Crane commented, "When you have the opportunity to sit down one-on-one during a Buyers Mission and talk about your company and products, it's priceless. I never would have had an opportunity to meet face-to-face and explain what my company does cohesively outside of these events."

Another program Boston Chowda Co. participated in was the no-cost Food Export Helpline. Crane used this program to complete documents needed to successfully ship their 1st-ever export sale to a buyer in Panama, including \$8,000 of their frozen seafood soups.

FARM TO SCHOOL PROJECT

David Webber

From kindergarten to college, interest in serving locally grown foods in cafeterias is increasing in Massachusetts and throughout the northeast United States. Feeding locally grown foods to students can be a good way for food service directors to improve the nutritional value and taste of school meals, while supporting the local economy. Selling local products to schools can be profitable for Massachusetts growers who are looking for a new way to connect with local consumers.

The Massachusetts Farm to School Project, of which MDAR is a primary sponsor, provides technical assistance to Massachusetts farmers and schools as they attempt to find a good match. Data shows approximately 231 school districts reporting that they preferentially purchased locally grown foods during the school year, and 114 farms reporting they sold directly to schools or other institutions.

DIVISION OF AGRICULTURAL MARKETS, cont.

Case Study: The Worcester Kindergarten Initiative: Focusing Parents and Students on Local Specialty Crop Farmer Connections

In 2013, Farm-to-School concluded a 3-year Specialty Crop Block Grant project to expand their Worcester Kindergarten Initiative. The project built further upon existing work to improve nutrition and local agriculture education in Worcester. This project engaged parents around what their children were learning in the classrooms, provided take-home specialty crop products, and educated participants about where in Worcester to find and buy specialty crop

products. With the help of Specialty Crop funding, Farm-to-School has been able to grow the program from the original 300 students in 2010 to 700 in 2013, an increase of 133%. Farm-to-School hopes to be able to eventually reach all Worcester public school kindergartners and their families with this program over the coming years.



An additional 89 Massachusetts colleges and private schools reported they preferentially purchased local foods.

The Worcester Kindergarten Initiative expanded to engage 450 students in 17 classrooms at five low-income public schools. The initiative includes on-site mobile farmers' market visits, field trips to community gardens, classroom presentations, and taste tests.

In spring of 2013, the project began planning for the new Harvest of the Month Campaign, which officially launched in September of this year. The 6 month campaign includes pledges by participating schools to highlight select fruits and vegetables during the fall. In return, schools receive free promotional materials, including stickers, produce "trading cards," and posters. In the pilot year of the program, 115 school districts (nearly 1/3 of the state's total districts) and 9 colleges and universities signed on to participate.

For more information:

- MA Farm to School Project: mass.gov/eea/agencies/agr/markets/farm-to-school/
- National Farm to School Network: farmtoschool.org

FARMERS' MARKETS NUTRITION PROGRAM (FMNP)

David Webber

The Massachusetts Farmers' Market Nutrition Program (FMNP) provides women and children in the Federal Supplemental Food Program for Women, Infants, and Children (WIC), and low income elders with coupons redeemable at farmers' markets for fresh fruits and vegetables. Local farmers are reimbursed for the face value of the coupons, thereby enhancing earnings and supporting participation in farmers' markets.

Participation in the FMNP benefits farmers by attracting a new base of customers to farmers' markets, thereby providing additional sales opportunities. It also allows farmers to capture a greater share of the consumer food dollar and promotes diversification on farms by encouraging the production of locally grown fruits and vegetables. Participation also benefits coupon recipients by providing participants with coupons redeemable for fresh produce, introducing families and seniors to farmers' markets, and supporting nutrition education efforts.

Massachusetts also serves low-income seniors, who are unable to use the coupons due to access limitations, by facilitating bulk purchasing of produce. This produce is distributed to homebound elders with their regularly scheduled meals deliveries, or distributed at on-site meal programs.

DIVISION OF AGRICULTURAL MARKETS, cont.

Funding for the FMNP is provided by the U.S. Department of Agriculture's Food and Nutrition Service with an additional required state match.

2013 program information:

- 218 farmers' markets and 371 growers participated
- Senior FMNP
 - \$483,896 "food" dollars (\$53,767 admin funds)
 - Number of Seniors Receiving Coupons: 19,411
 - Number of Seniors served through Bulk Purchasing: 3,457
 - Benefit Level: \$25
- WIC FMNP
 - \$325,428 "food" dollars (\$ 66,653 admin funds)
 - Number of WIC Participants Receiving Coupons: 22,884
 - Benefit Level: \$20

For more information about the FMNP:

- Massachusetts FMNP Program: mass.gov/eea/agencies/agr/markets/farmers-markets/farmers-market-coupon-program.html
- USDA FMNP Information: www.fns.usda.gov/fns
- Massachusetts WIC Program: mass.gov/WIC

FARMERS' MARKET PROGRAM

David Webber

Although there were 21 new farmers' markets in 2013, the overall number of markets decreased slightly in 2013 to 249. Massachusetts Farmers' Market Week was held the week of August 18th, and Governor Patrick's proclamation was read at the City Hall Plaza Farmers' Market in Boston on August 19th, in conjunction with the annual Massachusetts Tomato Contest.



In addition to seasonal farmers' markets operating from spring until fall, 40 farmers' markets operated during the 2013-2014 winter season, including

new markets in Gloucester, Wilbraham, and Worcester/The Canal District.

GROWTH OF SEASONAL FARMERS' MARKETS

YEAR	NUMBER OF MARKETS	PERCENT GROWTH
2004	101	9%
2005	114	13%
2006	126	11%
2007	139	10%
2008	167	20%
2009	203	22%
2010	233	15%
2011	250	7%
2012	254	2%
2013	249	-2%

GROWTH OF WINTER FARMERS' MARKETS

YEAR	NUMBER OF MARKETS	PERCENT GROWTH
2008	0	
2009	6	600%
2010	18	200%
2011	35	94%
2012	40	14%
2013	40	0%

FARMERS' MARKET RESOURCES

MDAR maintains a comprehensive list of farmers' market resources on its website for consumers, market managers and farmers (mass.gov/massgrown). A list of farmers' markets with their days, times, and locations can be found along with a crop availability guide, shopping and produce storage tips, healthy recipes, and nutrition information.

A Farmers' Market Managers Workshop, held in Sturbridge in February, was attended by over 100 farmers' market managers and was co-sponsored by Massachusetts Farmers Markets, the Cooperative Development Institute, and Harvest New England. Topics included market planning and promotion.

DIVISION OF AGRICULTURAL MARKETS, cont.

- NEW SEASONAL FARMERS' MARKETS IN 2013**
- ADAMS
 - ATHOL MEMORIAL HOSPITAL
 - CAMBRIDGE/CENTRAL SQ. WEDNESDAY
 - EGLESTON SQ.
 - FRAMINGHAM DOWNTOWN COMMON
 - LAWRENCE/BROADWAY & PARK
 - LAWRENCE/CAMPAGNONE COMMON
 - LOWELL/HIGHLANDS SATELLITE
 - MILFORD
 - NEWBURYPORT/ARROWHEAD
 - NORWELL
 - PALMER/YELLOW HOUSE
 - PITTSFIELD/DOWNTOWN
 - ROXBURY CROSSING
 - SHARON
 - STOUGHTON
 - TRURO
 - WAREHAM
 - WEST ROXBURY
 - WORCESTER/CANAL DISTRICT
 - WORCESTER/HANOVER INSURANCE

FEDERAL - STATE MARKETING IMPROVEMENT PROGRAM (FSMIP) GRANT PROGRAM

Mary Jordan

FSMIP, funded through the U.S. Department of Agriculture (USDA) Agricultural Marketing Service (AMS), is designed to assist in exploring new market opportunities for U.S. food and agricultural products, and to encourage research and innovation aimed at improving the efficiency and performance of the U.S. marketing system.

In 2013, FSMIP awarded \$37,374 to MDAR, in cooperation with the New Entry Sustainable Farming Project, to determine the best methods for expanding the existing business model to new markets by doing the following:

- identify the needs of wholesale and institutional outlets
- research aggregation/distribution costs of the Food Hub
- address challenges in meeting new food safety requirements imposed by new markets, as the FDA's Food Safety Modernization Act is implemented.

SNAP/EBT AT FARMERS' MARKETS

Increasing access to farmers' markets by SNAP participants continues to be a priority. The number of farmers' markets accepting EBT/SNAP in 2013 grew from 110 to 126, while SNAP redemption at those markets increased from \$312,835 to \$336,049.

Massachusetts has been awarded \$587,934 over the past 12 years in support of various agricultural marketing improvement projects. Past projects in Massachusetts can be found here: www.ams.usda.gov/AMSV1.0/FSMIP

GROWTH IN NUMBER OF FARMERS' MARKETS ACCEPTING SNAP AND SNAP SALES

YEAR	NUMBER OF MARKETS	TOTAL SNAP SALES
2007	9	\$4,543
2008	18	\$8,447
2009	30	\$19,119
2010	58	\$122,685
2011	90	\$221,707
2012	110	\$312,835
2013	126	\$336,049

FSMIP funds a wide range of applied research projects that address barriers, challenges, and opportunities in marketing, transporting, and distributing U.S. food and agricultural products domestically and internationally. Eligible agricultural categories include livestock, livestock products, food and feed crops, fish and shellfish, horticulture, viticulture, apiary, forest products, and processed or manufactured products derived from such commodities. Proposals that address issues of importance at the state, multi-state, or national level are appropriate for FSMIP. FSMIP also seeks unique proposals on a smaller scale that may serve as pilot projects or case studies useful as models for others. Of particular interest are proposals that reflect a collaborative approach between the states, academia, the farm sector and other appropriate entities and stakeholders.

DIVISION OF AGRICULTURAL MARKETS, cont.

For more information on the FSMIP program please refer to:

- www.mass.gov/eea/agencies/agr/markets/fsmip.html
- www.ams.usda.gov/AMSV1.0/FSMIP

FOOD SAFETY

Bonita Oehlke
Michael Botelho

Food safety continued to be in the spotlight in 2013, based partly on national outbreaks of foodborne illness that have occurred and the corresponding publicity. Supermarkets continued to require independent third party audits to demonstrate that produce was grown, harvested, packaged and transported according to best management and agricultural practices. The supermarket industry continued to accept USDA Good Agricultural Practices (GAP) but many are now requiring Harmonized GAP standards for food safety verification. USDA GAP or Harmonized GAP and corresponding audits offer a cost effective option for growers to meet this cost of doing business. A cost share



program implemented with USDA Specialty Crops Block Grant funds and coordinated by MDAR was available to all growers to offset audit costs. During 2013, 14 mock audits were performed to rehearse GAP procedures, 28 growers became USDA GAP or Harmonized GAP certified, and 13 growers took advantage of the GAP cost share program. There were also 5 food safety trainings held across the state, with over 300 participants. More information about GAP & Good Handling Practices Audit Program can be found at mass.gov/eea/agencies/agr/farm-products/gap-and-ghp-audit-program.html

The Food Safety Modernization Act (FSMA, fda.gov/Food/GuidanceRegulation/FSMA/default.htm) was also a major topic in 2013, with grower education and outreach done regarding the comment period for both the Produce Rule and the Preventative Controls Rule. MDAR provided comments on both rules and also supported a regional comment from the Northeast State Departments of Agriculture. Comments focused on water quality standards and testing, standards for using raw manure and compost, provisions affecting mixed-use facilities, and procedures for withdrawing the qualified exemption.

HARVEST NEW ENGLAND INITIATIVE

Mary Jordan

Harvest New England Association (HNE) is a collaborative marketing program created by the New England state departments of agriculture in 1992. The HNE mission is to facilitate the sales of New England agricultural products through traditional and evolving wholesale market channels utilizing the Harvest New England brand. The initiatives are implemented through regional, collaborative marketing initiatives, brand stewardship, education, relationship building, and support of research and policy development. The Association is a non-profit corporation registered with the U.S. Department of the Treasury, and is recognized as a 501 (c)(5) organization by the Internal Revenue Service. This past year, the HNE Committee implemented several of the USDA Specialty Crops Block Grant project initiatives funded in 2012, including the restructuring of the HNE Website, HNE logo brand specification guidelines, and implementation of the 4th

DIVISION OF AGRICULTURAL MARKETS, cont.

Harvest New England Agricultural Marketing Conference and Trade Show, held in Sturbridge in February. In 2014, plans will begin for the 2015 Marketing Conference. The Harvest New England Association has developed programs and activities over the past 20 years and the Committee looks forward to streamlining the goals of the organization to further enhance the economic viability of New England agriculture. For more information, visit www.harvestnewengland.org

MASSACHUSETTS STATE EXPOSITION BUILDING, WEST SPRINGFIELD

Mary Jordan
Howard Vinton
Ellen Hart

MDAR manages the Massachusetts State Exposition Building located on the Avenue of States at the Eastern States Exposition in West Springfield. The Massachusetts Building Advisory Committee is comprised of dedicated MDAR staff members that work together to choose new vendors, make vendor recommendations, and offer suggestions for the betterment of our building and how best to showcase our building to the public. Each year, in preparation for the annual 17 day 'Big E Fair,' Massachusetts organizations and businesses are invited to apply to showcase Massachusetts agriculture, commerce, culture, food or tourism at the fair through informational, educational, promotional, and retail exhibits.

The 2013 Big E Fair was held Friday, September 13 – 30, 2013 and brought record-breaking attendance with enjoyable "fair-like" temperatures. There were a total of 30 vendors/exhibitors inside the state building and 5 vendors/exhibitors in the backyard of the building. For the 2nd year in a row, there were 4 vendors who sold their products outside on the two side porches of the Building, mainly on weekends. New exhibitors this year included Stonecraft of Lowell and the National Park Service, Springfield Armory National Historic Site. Massachusetts Day was held on Thursday, September 19th and the lawn in front of the Building was filled with many informational booths promoting tourism as well as Massachusetts agriculture. The day's activities began with the singing of the National

Anthem by Abigail Shaw, a member of the Blackstone Valley 4-H Dairy Club, with special presentations later in the day, including the announcement of the winners of the 2014 Massachusetts Agriculture Calendar Amateur Photo Contest. Steve Walsh, Outreach Coordinator for the Massachusetts Office of Travel & Tourism, was the 2013 recipient of the Massachusetts Building "Wall of Fame" award. Special guests for the day included Governor Deval Patrick and Undersecretary of the United States Department of Agriculture, Edward Avalos.

MASSGROWN & FRESHER

Richard LeBlanc

The award-winning MassGrown & Fresher logo and website program continues to link consumers to locally grown farm products, specialty foods, and fun "ag-tivities" through its agri-Google mapping feature that maps retail farm businesses across the Commonwealth. This interactive map (mass.gov/agr/massgrown/map.htm) locates farms, agricultural fairs, and farmers' markets, and gives the user the ability to access custom information and directions. The MassGrown & Fresher website (mass.gov/Massgrown) continues to increase page views on an annual basis, with a 16% increase in views in 2013 over 2012. While the agri-Google map remains the most popular part of the website, interest is also growing in pick-your-own apple orchards and Consumer Supported Agriculture (CSA) offerings. There were also 22 farms added to the agri-Google map in 2013. In addition to promoting MassGrown & Fresher, MDAR also promotes "Massachusetts Made with Pride" by producing stickers, price cards, and posters that are offered to farmers and food producers online (mass.gov/eea/agencies/agr/markets/logo-program).

DIVISION OF AGRICULTURAL MARKETS, cont.

RETAIL COUPON FOR FLUID MILK PROGRAM

Catherine de Ronde

This program was established to allow for the use of fluid milk coupons in promotional and marketing campaigns of milk and cream for the consumer, an effort to increase fluid milk consumption. According to MDAR regulations, these promotions must not result in a sale of milk that is below the cost of production nor appear to be predatory towards any Massachusetts dairy farm that directly markets and sells its own fluid milk to consumers. In 2013, there were 117 notifications of promotions within the state, an increase of 30 percent from 2012. Of the 117 notifications, 50 were 'cross-promotions' where 2 entities were marketed jointly, so that a benefit in the purchase of one product is earned by the purchase of the other product. For these cross promotions the non-dairy entity covers the cost of the promotion, the milk is non brand-specific, and the promotion is offered statewide. The remaining approved promotions consisted of 52 'cents off' coupons ranging in price from \$0.25 to \$1.00. Two proposed promotional campaigns were denied due to what would have resulted in the sale of milk below cost.

ORGANIC COST SHARE CERTIFICATION

Ellen Hart

In 2013, there were 92 farmers that received Organic Cost Share funds. MDAR works closely in conjunction with the USDA Agricultural Marketing Service to reimburse certified organic farmers up to 75% (\$750 dollars maximum) of the total certification cost. Funds are available to farms that are inspected and certified and/or inspected and receiving renewal of certification. The total funds allocated by the USDA in 2013 for Massachusetts was \$60,000 for farmer cost-share. The deadline for submitting applications to MDAR for reimbursement is October 15th of each year.

SPECIALTY CROP GRANT AWARDS

Julia Grimaldi

Daniel Rhodes

In 2013, the United States Department of Agriculture (USDA) awarded MDAR approximately \$419,000 in grants to enhance the competitiveness of Massachusetts specialty crops. Specialty crops are defined by the USDA as fruits and vegetables, dried fruit, tree nuts, horticulture (including maple syrup and honey), and nursery crops (including floriculture). MDAR has the opportunity through the USDA Specialty Crops Block Grant Program to submit proposals annually for projects that address the goals the USDA has for solely enhancing the competitiveness of specialty crops. Although MDAR makes the initial review and award recommendations to the USDA, the USDA makes the final decision concerning grant awards. Commodity Groups, Buy Local organizations, and Universities are eligible for this grant program, provided their proposals meet all the specifications of MDAR and USDA. A list of the 13 Specialty Crop grant recipients and their projects are available at www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5105139

VALUE-ADDED TECHNICAL ASSISTANCE

Bonita Oehlke

Both growers interested in adding value to their harvest and food entrepreneurs with new products can take advantage of inspected shared-use kitchens across the state, including the Western MA Food Processing Center in Greenfield, Dartmouth Grange Kitchen, and Crop Circle Kitchen in Boston. Adding freezer capacity to the Greenfield facility has increased the opportunity for selling local produce to schools. MDAR works with partners in public health for guidelines on food production to assist participants.

Members of the Massachusetts Cheese Guild, an organization that promotes the state's 21 cheese makers, have won more awards making artisanal cheese than any other state in the nation. The Guild had an official kickoff in 2013, more information is available at macheeseguild.org.

DIVISION OF AGRICULTURAL MARKETS, cont.

Fifty-eight Massachusetts food companies exhibited at the 2013 International Summer Fancy Food Show, an impressive presence of Bay State entrepreneurial food businesses. MDAR organized a Massachusetts Pavilion, featuring products from 30 Bay State companies. These small to medium-sized food companies met new customers and developed sales from the 24,000 mostly independent retail buyers in attendance. The trade show has a reputation as the premier marketplace for value-added foods. Farm stand operators and retail businesses looking to add Massachusetts value-added products to their inventory attended the event.

Work on the Grain to Glass project continued, with funding from USDA Rural Development and the Federal State Marketing Improvement Program (FSMIP). A focus on the opportunity for local ingredients shows promise for malted grains, hops, pumpkins and specialty ingredients.

For more information about this program, see mass.gov/eea/agencies/agr/markets/culinary-tourism/value-added-food-products.html

DIVISION OF ANIMAL HEALTH

MICHAEL CAHILL, DIVISION DIRECTOR

The Division of Animal Health is a major partner in regulating the agricultural community to ensure the safety of the Commonwealth's poultry and dairy products as well as the health of our livestock. This charge includes the inspection, examination, and licensing of both food-producing and companion animals to minimize the risk of disease. The Division licenses, inspects, or registers dairy farms (both raw and pasteurized producers), commercial cattle, poultry, and swine operations, as well as race horses and equine riding stables, pet shops, and animal rescue shelters. It also prepares emergency response plans for companion animals and provides training to municipal animal control officers.

The Division is comprised of 19 full time employees, including veterinarians, program managers, inspectors, and administrative support staff. Division personnel work within several programs with funding provided by the United States Department of Agriculture through cooperative agreements (see table below). This financial support allows the Division to continue important disease surveillance and response efforts by maintaining or even increasing staff levels even when the Commonwealth's budgetary constraints threaten to hinder these necessary activities.

For 2013:

COOPERATIVE AGREEMENT	FUNDING
<i>Foreign Animal Disease Prevention</i>	\$2,713
<i>Active and Passive Surveillance for the avian program (formerly Notifiable Avian Influenza)</i>	\$61,982
<i>Scrapie</i>	\$5,771
<i>Swine Garbage Feeding Surveillance</i>	\$19,901



DIVISION OF ANIMAL HEALTH STAFF

Top: Alex MacDonald, Mike Cahill, Megan Megrath, Glenn Harris, Dr. Lorraine O'Connor; Middle: Lauren Gilfeather, Elsie Colon, Robin Rice; Bottom: John Nunes, Esther Wegman, Sandra Pepe; Not Pictured: Patricia Cabral, Stephanie Funk, Ed Hageman, Linda Harrod, Cathy Kaszowski, Dr. Fred Mach, Sheila Phelon, Auzinda Tavares

PROGRAM LISTING

- Animal Imports and Livestock Markets
- Biosecurity Program
- Dairy Program
- Equine Program
- Homeless Animal Prevention and Care Fund Program
- Municipal Animal Inspection Program
- Pet Shop Licensing and Inspection Program
- Poultry Program
- Rabies Control Program
- Reportable Disease Program
- Shelter and Rescue Program
- Swine Program

DIVISION OF ANIMAL HEALTH (AH), cont.



ANIMAL IMPORTS AND LIVESTOCK MARKETS

Esther Wegman

All livestock, horses, poultry, waterfowl, and other animals, including cats, dogs and other pets entering Massachusetts from other states must comply with Commonwealth regulations that require an official Certificate of Veterinary Inspection stating the animal is healthy prior to travel. Additionally, some species may require certain testing to ensure negative status for diseases of concern depending on their state of origin. These measures significantly reduce the possibility of introducing contagious disease to the Commonwealth's domestic animal population. To further enhance these efforts, livestock dealers and transporters are licensed and their equipment and facilities are inspected. There were 30 licensed livestock dealers, 14 licensed equine dealers, and 60 licensed poultry dealers in Massachusetts in 2013.

DAIRY FARMER TAX CREDIT PROGRAM

Catherine de Ronde

In 2013, MDAR continued administering programs established by the 2008 Dairy Farm Preservation Act. These programs include the Dairy Farmer Tax Credit Program, which was established as a mechanism to offset the cyclical downturns in milk prices paid to dairy farmers. In any given month within the calendar year, when milk prices drop below the cost of production, financial assistance of up to \$4 million dollars can be issued to dairy farmers in the form of a tax credit. The amount distributed is based on the number of months the milk price fell below the cost of production and the

production amount sold by the dairy farm. In 2013, the tax credit was triggered in 12 out of 12 months, resulting in a total payout to the state's dairy farmers of \$4.0 million dollars. This is up from 2012, where the tax credit was triggered in 11 of 12 months, resulting in \$3.68 million dollars in payouts to producers.

DAIRY PROGRAM

John Nunes

The Dairy Program ensures a healthy environment for livestock and a safe, high quality supply of milk at fair prices for consumers, processors, and dairy farmers. This requires careful inspection and monitoring to enforce the relevant laws and regulations. The Program monitors milk production, hauling, distribution, pricing, marketing, and inspection of dairy farms to assure a safe and healthy supply of milk to processors, and ultimately consumers. Many factors influence the quality and quantity of milk produced by a dairy farm. Bacteriological counts measured through testing of milk samples helps determine the quality of milk. When the counts exceed regulatory standards, a dairy farmer is required to return to compliance within a timely fashion. At the end of 2013 there were 153 bovine farms and 15 caprine farms certified as dairies.

ENFORCEMENT ACTIONS

The Division utilizes a progressive enforcement protocol consisting of a Letter of Warning for violations required to be corrected within the following 10 days; a Letter of Warning for test results indicating 2 of the last 4 samples were out of compliance with standards; a Shut-Off Order for test results indicating 3 of the last 5 samples were out of compliance with the standards; and an immediate Cease and Desist order for any test results that were excessively beyond the range of accepted standards.

In 2013 the Division issued:

ACTION	NUMBER
10-day Letter of Warning	8
2 out of 4 Letters of Warning	35
3 out of 5 Shut-Off Orders	5
Cease and Desist	23
Antibiotic Residue Shut-Offs	5

DIVISION OF ANIMAL HEALTH (AH), cont.

EQUINE PROGRAM

Sandy Pepe

The Division of Animal Health administers a number of programs involving horses and other equine species. Licenses are issued to horseback riding instructors and the riding schools/stables where they operate. Riding stable licenses are also issued to any business where horse-drawn hay rides, horse-drawn sleigh rides, carriage rides, pony rides, and trail rides are offered to the public for a fee. As noted above, the Division also requires a license for anyone engaged in the business of dealing, auctioning, or transporting equine animals. This licensing includes record keeping requirements that seek to bolster other programmatic disease control efforts. Additionally, the Division organizes the registration program for the Massachusetts State Racing Commission which promotes the breeding and racing of thoroughbred and standardbred horses in the Commonwealth.

For 2013 MDAR issued 2,331 licenses for horseback riding instructors and licensed 519 riding school/stables.

ENFORCEMENT ACTIONS

In 2013, 6 riding school/stables were found operating without licenses. All 6 businesses were issued Cease and Desist orders, and were required to obtain the necessary licenses before resuming operations. All but 1 of the businesses applied for and received licenses.

HOMELESS ANIMAL PREVENTION AND CARE FUND PROGRAM

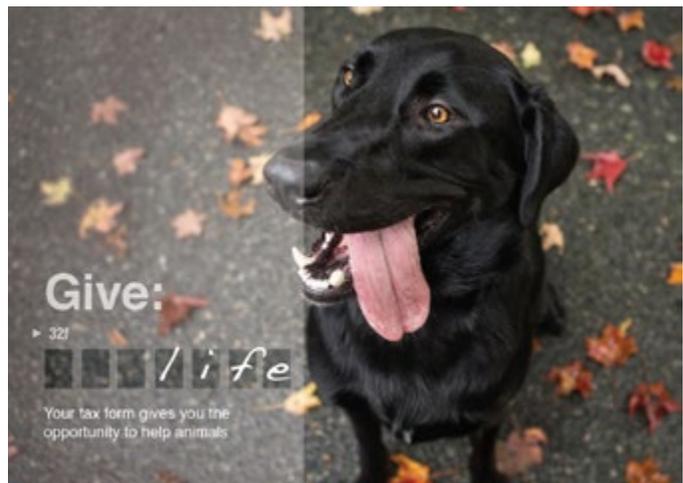
Lauren Gilfeather

On August 2, 2012, Governor Patrick signed into law Chapter 193 of the Acts of 2012. This law amended a number of statutes related to animal control, and created the Homeless Animal Prevention and Care Fund, which is administered by the Division of Animal Health. The law mandates that proceeds from the Fund be used to offset costs associated with the vaccination, spaying, and neutering of homeless dogs and cats, including those owned by low-income residents, and to assist with the training of animal control officers.

This program seeks to respond to the Commonwealth's ongoing problem of animal homelessness by:

- Lowering the number of dogs and cats lost to euthanasia
- Reducing the public safety risk and taxpayer expense associated with abandoned, feral and aggressive companion animals
- Standardizing the mandated animal control officer training to create stronger and more uniform enforcement across the Commonwealth.

The Homeless Animal Prevention and Care Fund is funded through a voluntary tax check-off on the Massachusetts state tax form. In 2013, over 17,000 taxpayers donated \$249,030 to the fund. In September 2013 a five-person advisory committee was appointed and sworn in by the Governor, in accordance with the fund's authorizing statute. The Advisory Committee advises the Department on expenditures from the fund, and in 2013 developed the first comprehensive list of animal control officers in the state, adopted a schedule for required animal control officer training, created a framework for a spay/neuter voucher program, and set aside an allotment to be used for promoting the fund. The Department also hired a coordinator to administer the program beginning in 2014.



DIVISION OF ANIMAL HEALTH (AH), cont.

MUNICIPAL ANIMAL INSPECTOR PROGRAM

Michael Cahill

The Division of Animal Health is responsible for appointing municipal animal inspectors for each and every city and town in the Commonwealth. These inspectors act as agents of the Division of Animal Health in the communities they serve. The primary duty of the municipal inspector involves issuing quarantines to owners of animals that have been exposed to or are potentially spreading the rabies virus. The other major role the inspectors fulfill for the Division is conducting the annual inspections of all domestic livestock and poultry housed on properties in their respective towns. These inspections are a part of MDAR's disease surveillance system and assist in ensuring animal owners provide basic necessities for the animals in their care. Additionally, the information the Division receives through these inspections assists in the development of emergency response plans for disease outbreaks or other disaster situations. Municipal Animal Inspectors may be called upon to serve as first responders in implementing these response plans at the local level. During 2013, there were 507 municipal animal inspectors appointed to fulfill the above duties for cities and towns across the Commonwealth.



PET SHOP PROGRAM

Esther Wegman

The Division of Animal Health has the statutory responsibility to license all pet shops. For 2013 there were 142 duly licensed businesses. Inspections are required for licensure and for subsequent annual license renewals of all Massachusetts pet shops. Each establishment must meet strict facilities requirements designed to maximize sanitary conditions that promote animal health. These requirements are in place to protect the health of the animals, as well as that of the visiting public and the employees who work in these shops. In 2013, there were 3 pet shops found to be operating without the required license. All 3 of these operations were issued a Cease and Desist order and required to come into compliance before continuing activities. Fines were also issued to 3 different stores that failed to comply with the regulations, including one individual who was found to be operating without a license, and 2 licensed pet shops for egregious violations of the established regulations.

POULTRY PROGRAM

Ed Hageman

The Poultry Program works with producers and consumers promoting local poultry and poultry products. Massachusetts law requires live poultry and hatching eggs moving within the Commonwealth to originate from flocks tested for and confirmed free of *Salmonella pullorum* bacteria. This annual testing is performed by the Division of Animal Health. Other testing available to Massachusetts poultry producers include Avian influenza, *Mycoplasma gallisepticum*, *M. synoviae*, *M. meleagridis* and *Salmonella enteritidis*.

Through the 2013 testing season, a total of 11,444 birds were tested for the presence of *Salmonella pullorum*. There were a total of 413 premises inspected in response to requests from flock owners wanting to certify their flocks negative for *S. pullorum*. Each of the 413 premises visited had a minimum of ten percent of the *S. pullorum* samples screened for Avian influenza. The total Avian influenza samples for 2013 were 3853. Two commercial turkey farms requested additional testing, a total of 600

DIVISION OF ANIMAL HEALTH (AH), cont.



Mycoplasma gallisepticum, 200 *M. synoviae* and 200 *M. meleagidis* samples were taken at these two farms.

There were 29 flocks with birds that showed up as either reactors or positives for salmonella. Of these, 14 had birds submitted for necropsy, but the laboratory was unable to confirm the presence of the disease. For 1 of the flocks, the owner opted to euthanize the bird that tested positive. In another flock, the bird that tested positive was eaten by a predator. The positive bird in a third flock was isolated and retested twice, and continued to test positive, though it did not appear ill. The remaining 12 flocks had birds that were retested and confirmed negative.

There were 16 birds in 3 flocks that tested positive in an avian influenza screening. Following this, more thorough PCR testing was conducted, with all of the birds eventually confirmed negative.

The Poultry Program provides producers, consumers and municipal and state officials with educational materials, information on safe egg handling, best management practices, production/grading support and flock inspections. The local food movement and growth in consumer awareness of how food is produced have contributed to an expansion of backyard and commercial poultry production here in Massachusetts. The efforts of the Division of Animal Health strive to educate our residents. It is our hope that, through education, we can reduce the potential for conflicts with abutting neighbors, government officials and poultry enthusiasts. The Division of Animal Health supports the keeping of poultry when

it is done responsibly; benefiting the birds, the owners and the communities in which they are located.

RABIES PROGRAM

Patricia Cabral

Rabies is a viral disease that can affect all mammals, including humans. The virus attacks the central nervous system and can be secreted in saliva. Because rabies affects people as well as animals, control of this disease has become a top priority for the Division of Animal Health. With the cooperation of the Department of Public Health, the Division of Fisheries and Wildlife, and Municipal Animal Inspectors, every aspect of potential rabies exposures is addressed in order to prevent further spread of the virus.

In 2013 there were 2,901 reported domestic animal bites or scratches to humans or other domestic animals and 1,842 possible domestic animal exposures to rabies. Of the 1,842 possible exposures, 69 were to animals confirmed to be rabid by the State Lab.

To enhance the numbers of vaccinated domestic animals in Massachusetts, the Rabies Program has implemented a user friendly registration system for municipalities and entities holding rabies clinics. Registered clinics are posted on the MDAR website at <http://www.mass.gov/eea/agencies/agr/animal-health/rabies-control-program/>. In 2013, there were 161 rabies vaccination clinics promoted through this service. As part of the 12th annual outreach effort by the Division to increase awareness about rabies, laws requiring vaccinations for cats and dogs, and the benefits of vaccinating domestic animals, the Rabies Program distributed literature throughout Massachusetts. Staff also attended various MDAR and stakeholder events to distribute information and give presentations.

REPORTABLE DISEASE PROGRAM

Esther Wegman

Reportable diseases include foreign animal diseases that are not currently affecting the state, diseases that have serious consequences to public or animal health, and diseases that MDAR has either previously eradicated from Massachusetts or is very close to eradicating. Veterinary practitioners

DIVISION OF ANIMAL HEALTH (AH), cont.

are required to report suspected or positive cases of these diseases promptly to the Division of Animal Health. The Division seeks early detection in order to mount a rapid response in an effort to reduce the number of animals and animal owners affected by a disease outbreak.

In addition to the rabies cases mentioned previously, there were 203 suspected cases of reportable diseases in 2013, including the following:

CASES	DISEASE	ANIMAL(S) IMPACTED
109	Parvovirus	dog
44	<i>Salmonella pullorum</i>	poultry*
16	Panleukopenia	cat
16	Avian influenza	poultry**
4	Eastern Equine Encephalitis	horse
3	Canine Distemper	dog
3	Feline Calcivirus	cat
2	Listeriosis	goat
2	West Nile Virus	horse
1	Blastomycosis	dog
1	Babesia	dog
1	Caprine Arthritis Encephalitis	goat
1	Contagious Ecthyma	sheep

* Follow up testing confirmed negative status

** Follow up PCR testing confirmed negative status

SHELTER AND RESCUE PROGRAM

Auzinda Tavares

The Division of Animal Health’s Shelter and Rescue Program ensures the health and safety of companion animals being offered to the public for adoption, through the registration of individual shelters and rescue groups who operate adoption programs within Massachusetts and those that adopt animals into Massachusetts from other states. Since many shelter and rescue animals have had little or no veterinary care, this disadvantaged portion of the domestic animal population requires greater attention. The rules that are in place serve as protection to the Commonwealth’s resident animal population, the animals being handled within the shelter

and rescue community, and the individuals who seek to help them. For more information, see <http://www.mass.gov/eea/agencies/agr/animal-health/shelter-and-rescue/>

ENFORCEMENT ACTIONS

In 2013, there were 321 registered shelters and rescues operating in Massachusetts. The Division issued 115 Cease and Desist orders to shelters and rescues that had failed to register with the Department and operate within the prescribed rules (1-AHO-05). Administrative fines were issued to 14 groups that failed to comply with issued Cease and Desist orders.

SWINE PROGRAM

Sandy Pepe

The Swine Program includes permitted garbage feeders, licensed swine dealers, as well as Classical Swine Fever, Brucellosis and Pseudorabies testing. The word “garbage” is defined as any meat waste, or meat waste combined with food waste, resulting from handling, preparation, cooking, and consumption of foods, including animal carcasses or parts thereof. Anyone feeding garbage to swine being raised to be sold for public consumption must obtain a permit from the Division of Animal Health and USDA/APHIS Veterinary Services. The issuance of this permit requires a facility inspection and garbage cooker temperature check. All garbage, regardless of previous processing, must be heated to 212 degrees Fahrenheit for a minimum of 30 minutes prior to being fed to swine. These strict regulations were implemented to mitigate the risk of disease transmission associated with feeding meat scraps to swine herds. In 2013, 20 permits to feed garbage were issued to swine operations in the Commonwealth.



DIVISION OF CROP AND PEST SERVICES

LEE CORTE-REAL, DIVISION DIRECTOR

The Division of Crop and Pest Services is responsible for the registration and licensing of pesticide products, commercial applicators, and certain pesticide uses. It also oversees the inspection and licensing of farm products, plant industries, and the administration of the State Reclamation and Mosquito Control Board.

Each program area has statutory requirements as specified by the General Laws of the Commonwealth of Massachusetts, as well as regulations to enforce the provisions of these laws.

FARM PRODUCTS AND PLANT INDUSTRIES PROGRAM

The Farm Products and Plant Industries (FPPI) Program staff support multiple programs based upon seasonal or workload needs, including nursery inspection, CAPS, and feed and fertilizer programs. In many cases, inspectional staff members provide coverage for programs outside of their primary area of responsibility, which results in more effective program administration.

The FPPI Program had a busy year, with the inspection programs and the registration of feed and fertilizer products showing the most activity. Demand for inspection of farm products, nurseries, greenhouses and apiaries continues to be very high. These quality-control programs have proven to be extremely popular and helpful with growers, farmers, shippers, sellers, buyers and consumers as demand for high quality products continues to increase.

The FPPI Program administers a number of diversified quality-control programs for farm products and nursery stock, including Truth-in-Labeling Laws on fruit, vegetables, commercial feed, pet food, fertilizer, lime and seeds. The FPPI Program has also expanded into the certification of farms and production facilities under the USDA Good Agricultural Practices (GAP) requirements, which has the potential to become a significant new programmatic area.

In 2013, the FPPI Program collected more than \$1,551,056 through feed and fertilizer product registrations, nursery certification and vegetable inspection fees.



DIVISION OF CROP AND PEST SERVICES STAFF

Top: Taryn LaScola, Hotze Wijnja, Trevor Battle, Michael McClean; 2nd Row: Robert Rondeau, Sunny Cai, Howard Vinton; 3rd Row: Sandra Payne, Jennifer Forman Orth, Mark Buffone; Bottom: Hoang Vo-Phuong, Susie Reed, Lee Corte-Real; Not Pictured: Steven Antunes-Kenyon, Alfred Carl, Stacy Kilb, Alexandra Lopez-Swetland, Phyllis Michalewich, Laurie Rocco

APIARY INSPECTIONS

Al Carl

As a service to Massachusetts beekeepers, MDAR Apiary Inspectors work with beekeepers to help them maintain healthy colonies, and conduct hive inspections to check and assist with the detection of diseases and/or pests. Beekeepers are advised on how to treat any problems found. Apiary Inspectors also certify the movement of honey bee colonies throughout the state and the nation and inspect these colonies for diseases, pests and unwanted bee species. This industry benefits our state's fruit and vegetable industry by providing pollination services that would not otherwise be available, ensuring fruitful crops. To meet the need for honey bee pest detection and hive management in 2013, two additional seasonal apiary inspectors were hired and trained to inspect honey bee hives in Essex and Norfolk Counties as well as in contiguous counties.

In 2013, 3,071 resident beekeepers maintained approximately 8,303 hives in Massachusetts. These numbers fluctuate from year to year due mainly to high winter hive mortality and the addition of hobbyist beekeepers

DIVISION OF CROP AND PEST SERVICES, cont.



to county apiary inspection lists. Approximately 20,000 honey bee hives managed by six commercial migratory beekeepers entered Massachusetts for apple and cranberry

mites (hives being treated with amitraz during cranberry pollination) to 15 to 19 (in colonies not receiving any treatment). All commercial beekeepers advised of their VM levels were confident that they could reverse VM population growth after leaving cranberry pollination. The few samples (5) analyzed for *Nosema* significantly exceeded a level that can cause economic injury (1 million spores per bee). MDAR reached out to cranberry growers through the Ocean Spray Cooperative to offer strength inspections for honey bee colonies, however only 1 grower took advantage of this free service in 2013.

pollination service. Commercial hives leased to Massachusetts apple and cranberry growers originated from Florida, Georgia, and Louisiana. Most of these hives have made the migratory pollination circuit: almonds in California (February), highbush blueberries in New Jersey (March and April), apples in MA, NY, NH, and ME (April-May), lowbush blueberries in ME (May-June), and cranberries in MA (June-July). Both resident and migratory honey bee colonies were systematically checked for diseases, parasites and other issues, including:

- American Foulbrood (AFB): Levels of AFB remained very low in 2013; with 6,062 resident and migratory hives inspected, only 64 resident hives were found to be infected (about 1%).
- Small hive beetle (SHB): SHB was detected this year in resident as well as migratory hives. Isolated injury was sustained in very weak colonies, particularly in cranberry growing regions, where migratory and resident beekeepers often interface. There has been no reported injury to hives or beekeeping equipment this year.
- Varroa Mite (VM): In 2013 all hives inspected for AFB were also monitored for VM. All hives inspected contained VM populations. High VM loads can foster high virus loads, and when these are combined with other parasites such as the microsporidian *Nosema ceranae*, maintaining honey bee colonies can become difficult.

Commercial migratory hives leased to Massachusetts cranberry growers in 2013 were functional, but not as strong as in previous years. Inspectors randomly sampled 77 hives for VM, with populations ranging from 5 to 8

BRANDING LAW

Howie Vinton

Inspections were made at hundreds of retail stores for conformance with the Branding Laws on potatoes and apples. Any misbranded products found are relabeled or removed from sale by issuing a Stop Sale Order. There were 42 site visits conducted in 2013, and Stop Sale Orders were issued on 6 lots of apples or potatoes that did not meet grade requirements. The lots in question were removed from the store shelves and shipped back to the packer.

COOPERATIVE AGRICULTURAL PEST SURVEY (CAPS)

Jennifer Forman Orth

As part of the Cooperative Agriculture Pest Survey (CAPS) program, nursery inspectors performed inspections for the following non-native pests at 59 nurseries in 12 counties:

- City longhorned beetle, *Aeolesthes sarta*
- Emerald ash borer, *Agrilus planipennis*
- Asian longhorned beetle, *Anoplophora glabripennis*
- Rough-shouldered longhorned beetle, *Anoplophora chinensis*
- Mountain oak longhorned beetle, *Massicus raddei*
- Japanese pine sawyer, *Monochamus saltuarius*
- Small white-marmorated longhorned beetle, *Monochamus sutor*
- Chinese longhorned beetle, *Trichoferus campestris*
- Mile-a-minute vine, *Polygonum perfoliatum*

DIVISION OF CROP AND PEST SERVICES, cont.

Inspectors continued to monitor two existing Mile-a-minute vine infestations, both of which are under management by growers. No other pest species were found.

The State Pest Survey Coordinator and CAPS Survey Technician also performed insect surveys with pheromone traps at 20 Christmas tree farms and nurseries across the state, targeting the following pests of conifers:

- Black Spruce Longhorned Beetle, *Tetropium castaneum*
- Brown Spruce Longhorned Beetle, *Tetropium fuscum*
- Japanese Pine Sawyer Beetle, *Monochamus alternatus*
- Nun Moth, *Lymantria monacha*
- Masson Pine Moth, *Dendrolimus punctatus*

None of the above target species were found.

Other CAPS projects included:

- Year 4 of a biological control program using beetles to control invasive Mile-a-minute vine in Canton and Falmouth, MA.
- Continued management of a Kudzu infestation in Needham, MA. Growth at the site has been reduced by more than 75%.
- Farm Bill-funded surveys of orchards and vineyards to detect the presence of diseases and pests of stonefruit

and grapes, and a nursery survey for the disease Ramorum Blight (*Phytophthora ramorum*). No targets were found in these surveys.

As part of our continued pest outreach efforts, MDAR continued to perform Asian Longhorned Beetle (ALB) outreach in the Worcester County area. Overall, ALB outreach in 2013 included 45 presentations and 23 tabling opportunities. August, officially declared by the Governor as Forest Awareness Month, was the 5-year anniversary of the discovery of ALB in Worcester, and was marked by a press event. Staff also began focusing more outreach on Emerald Ash Borer, following the recent discovery of this pest in Dalton (September 2012) and North Andover (November 2013).

COUNTRY OF ORIGIN LABELLING (COOL) INSPECTIONS

Trevor Battle

Since 2006, MDAR has been working under a Cooperative agreement with the USDA to perform audits relative to Country of Origin Labeling [COOL] requirements. Country of Origin Labeling is a labeling law that requires retailers, such as full-line grocery stores, supermarkets, and club warehouse stores, to notify their customers with information regarding the source of certain foods. Food



DIVISION OF CROP AND PEST SERVICES, cont.

products (covered commodities) contained in the law include muscle cut and ground meats (beef, veal, pork, lamb, goat, and chicken), wild and farm-raised fish and shellfish, fresh and frozen fruits and vegetables, peanuts, pecans, macadamia nuts, and ginseng. For 2013, 34 COOL inspections were assigned and completed. The inspections included new record keeping guidelines from USDA requiring additional records verification.

FEED PROGRAM

Howie Vinton

In 2013 the Feed Program reviewed and registered 11,768 products, with receipts of registered products and late fees totaling \$1,176,800. This was an increase of 6% over 2012 totals. There were 237 feed products sampled for crude protein, crude fat and crude fiber under the Truth in Labeling law.

A total of 654 feed products were found in 2013 that were not registered. There were 78 letters issued to companies, 56 for unregistered products and 22 for label violations or unapproved ingredients. Six additional companies were issued Stop Sale orders, with their products removed from the shelves until payment was received.

FERTILIZER PROGRAM

Bob Rondeau

In 2013, 98 companies were issued licenses to manufacture and distribute fertilizer in Massachusetts, and over 3,300 products were registered as specialty fertilizers. In addition, 81 lime products were registered. There were a total of 320 samples of fertilizer products being offered for sale in Massachusetts tested for Nitrogen, Phosphorus and Potash. Assessment penalties in shortage of guaranteed levels were charged on 39 products found to be deficient (12%), with a total of \$5,790 fines collected and turned back to the farmers or submitted to the state's treasury. The tonnage tax is assessed and collected on a semi-annual basis. Total revenues for the Fertilizer program were in excess of \$446,677, an increase of 9% over 2012 totals.

FRUIT AND VEGETABLE INSPECTION

Bob Rondeau

Demand for fruit and vegetable inspection services continues to be primarily for the export of apples, with the majority of those being shipped to the United Kingdom, Canada and El Salvador. The Export Apple Inspection Program is of importance primarily because of the demand for controlled atmosphere (CA) stored apples, including the valuable McIntosh variety. Apples for export are required to meet quality standards set forth by the US Export Apple Act and must also meet the phytosanitary requirements of the importing country. Over 21,600 cartons of apples were certified in 2013 as complying with the US Export Apple and Pear Act. Receipts in excess of \$15,471 were collected for apple export inspections.

GOOD AGRICULTURAL PRACTICES (GAP)

Bob Rondeau

There has been an increased focus on good agricultural practices (GAP) to verify that farms are producing fruits and vegetables in the safest manner possible. Third party audits are being utilized by the retail and food service industry to verify their suppliers are in conformance to specific agricultural best practices. The USDA Agricultural Marketing Service, in partnership with MDAR, offers a voluntary audit-based program that verifies adherence to the recommendations made by the Food and Drug Administration. In 2013, 27 companies applied for USDA GAP and GHP audits and completed the inspection process, an increase from 23 companies in 2012. The program collected a total of \$15,471 in fees.

DIVISION OF CROP AND PEST SERVICES, cont.



NURSERY INSPECTIONS

Phyllis Michalewich

The Nursery Inspection Program requires the inspection and certification of nurseries and greenhouses in the state. There are 5 inspectors on staff that conduct annual inspections of all certified nurseries in the Commonwealth to ensure that they are free of insects and plant diseases. All known growers and agents are required to be licensed and must renew annually. A grower's certificate is required to sell, exchange, give, deliver or ship within the commonwealth any tree, shrub or plant commonly known as nursery stock. An agent's license is issued to those who buy and sell nursery stock from certified nurseries throughout the country.

In 2013, there were 593 growers and agents inspected. The top pests/pathogens identified during inspection were Powdery mildew, Cedar apple rust, Leaf spot, and Slugs. The Department licensed 1023 agents and 170 growers, for a total of \$85,373 in receipts. Inspectors also conducted trace forward inspections to determine whether any growers or agents received nursery stock from other states that had been infected with Boxwood blight or Ramorum blight.

PHYTOSANITARY INSPECTIONS

Phyllis Michalewich

Growers in Massachusetts who export plant material and/or seed require inspections prior to shipping. State and Federal Phytosanitary Certificates are issued by staff for shipment of plants and plant materials to other states or countries, certifying the shipment as being free from insects and plant diseases.

In cooperation with USDA-APHIS Plant Protection and Quarantine, MDAR conducts phytosanitary inspections and issues federal and state certificates. In 2013, staff inspected and issued 724 Federal Phytosanitary Certificates for the Boston and Amherst State duty stations using the USDA PCIT electronic application process. The certificates were issued for exports destined for 45 different countries including Canada, the United Kingdom, Australia, and the Netherlands, the leading importers in that order. In addition, staff also issued 581 State Phytosanitary Certificates for states including California, Washington, and Oregon.

When requested, inspectors also provide inspections for houseplants that are being moved to other states. There were 5 of these inspections conducted in 2013, as well as 2 post entry inspections of plants that were brought into the Commonwealth.

DIVISION OF CROP AND PEST SERVICES, cont.

PESTICIDE PROGRAM

The Massachusetts Department Agricultural Resources is the lead state agency for pesticide regulation in the Commonwealth under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) as well as the Massachusetts Pesticide Control Act. The Pesticide Program carries out the day to day responsibilities of regulating pesticides in the Commonwealth, including the licensing of pesticide applicators, the registration of pesticide products, and the enforcement of the statute and regulations. In addition, the Pesticide Program carries out other pesticide related activities in support of the regulatory mandate, such as education, outreach, and water monitoring. The Pesticide Program also acts as support staff for the Pesticide Board and Pesticide Board Subcommittee.

AQUATIC VEGETATION MANAGEMENT

Hotze Wijnja

Review Process

Reviews of new active ingredients of aquatic herbicides for use are conducted cooperatively by MDAR and MassDEP. In 2013, MDAR staff conducted a special review in support of the registration of Clipper Herbicide, which contains the active ingredient flumioxazin. Following the registration of this new aquatic herbicide product, MassDEP-Office of Research and Standards (ORS) consulted with MDAR staff on the further review and evaluation of this aquatic herbicide for final approval of availability for licensed use in the Commonwealth. Two additional new aquatic herbicides remain to be reviewed.

MDAR staff also interacted with stakeholders to address issues and challenges in lake and pond management, through participation in the biannual meetings of the Lakes and Ponds Advisory Committee.

As a follow up to a study monitoring pesticide occurrence in the suburban surface waters of Spy Pond in Arlington and the Aberjona River in Winchester and Woburn, staff collected samples from the Aberjona River on May 24th, 2013. Targets included atrazine, bifenthrin, carbaryl, diazinon, fipronil, and imidacloprid. Carbaryl, fipronil and imidacloprid were detected at levels below 1 ppb. These levels did not exceed benchmarks for the protection of human health and aquatic life.

CHILDREN AND FAMILIES PROTECTION ACT (CFPA)

Trevor Battle

School IPM-Plan

The Children & Families Protection Act (CFPA), which protects children and families from harmful pesticides, was enacted in the year 2000. The Act mandates that all public/private schools K-12, school age child care programs and daycare centers have an Integrated Pest Management (IPM) Plan, puts limitations on pesticide use inside and outside of schools, and requires notification for some pesticide applications.

The school IPM Program continues to move closer to near 100% compliance. In 2013, there were strong outreach efforts to schools and daycare programs that had started but never completed their IPM plans. From these efforts, IPM plan compliance for both schools and daycare programs stands at 98.4% and 96% respectively, up from 97% of schools and 95% of daycare programs in 2012.

During 2013, 99 CFPA inspections were completed, and resulted in 24 Letters of Warning being issued.

ENFORCEMENT

Taryn LaScola

The Enforcement program is charged with enforcing the provisions of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the Massachusetts Pesticide Control Act (MGL 132B) and the regulations promulgated thereunder. The enforcement program conducts routine inspections of pesticide users' establishments and the producers from which they acquire the products. Enforcement also investigates complaints regarding the misuse of pesticides in addition to providing education and outreach about Department pesticide programs.

There were a total of 336 inspections completed in 2013, which included agricultural and non-agricultural use observations, records and marketplace inspections, and dealer inspections. There were also 6 Restricted Use Dealer inspections, and 87 Certified Applicator Record inspections. Staff also completed 15 marketplace inspections, 16 Producer establishment inspections, and 50 non-agricultural For Cause inspections consisting of consumer complaints and licensing violation inspections

DIVISION OF CROP AND PEST SERVICES, cont.

due to possible misuse pursuant to MA regulations. Similar to 2012, the large number of inspections was due to the increase in compliance verification and education and outreach by the enforcement staff. A total of 29 non-agricultural use inspections were completed and 3 agricultural follow ups, which are conducted when a consumer complaint is filed with the Pesticide Program. In addition, 40 Agricultural Use Inspections were completed in 2013, including 20 Worker Protection Standard Inspections.

GROUND WATER PROGRAM

Hotze Wijnja

Registration Review

As part of the pesticide registration process, MDAR has an on-going program to assess the potential of pesticides to impact water resources. A total of 18 new active ingredients were reviewed and registered during 2013:

New Chemicals:

- 3-decen-2-one
- Ametoctradin
- Amicarbazone
- Florasulam
- Fluxaproxad
- Laminarin
- Penflufen
- Penthiopyrad
- Picoxystrobin
- Potassium phosphate
- Pyroxasulfone
- Sedaxane

Biological Pesticide Active Ingredients:

- *Aureobasidium pullulans* strain DSM 14941
- *Chromobacterium subtsugae* strain PRAA4-1
- *Cydia pomonella* granulovirus V22
- *Isaria fumosorosea* Apopka Strain 97
- *Paecilomyces lilacinus* strain 251
- *Trichoderma hamatum* isolate 382

Of these new active ingredients, Sedaxane was classified as a “potential groundwater contaminant” and was added to the Massachusetts Groundwater Protection List.

Outreach and Education

MDAR staff continued with outreach efforts directed at the agricultural community and the general public regarding the state’s groundwater protection regulations. Staff addressed inquiries related to clarification of the ground water protection regulations and requirements as needed. Staff also presented a lecture on the environmental fate of pesticides and groundwater protection as part of the UMass Extension Pesticide Education Workshop on March 22nd.

Staff continued to be involved in discussions to address concerns from citizens on Cape Cod relative to the potential impacts to groundwater resources from the proposed herbicide applications in power line corridors on Cape Cod. At a meeting with state representatives and senators from Cape Cod, staff provided information about the groundwater protection program and assessments that were conducted specifically to address this issue.

Program staff coordinated and participated in the meetings of the EPA Region 1 (New England) Water Quality Roundtable, a group that meets twice a year to address environmental and regulatory issues related to pesticide use in the New England states, and attended biannual meetings of state officials and EPA Office of Pesticide Program staff. Staff also contributed to an issue paper addressing the concerns related to the effects of persistent herbicide residues in compost.

Enforcement

MDAR staff continues to include the enforcement of the groundwater regulations as part of their standard inspections. These inspections ensure that pesticide users understand and comply with groundwater regulations, particularly the notification requirement for the use of ground water protection-listed (GWP) pesticides within Zone II areas. Records of these notifications are maintained such that information on these pesticide applications is available when needed.

The Department received one application for a renewal of a pesticide management plan (PMP) seeking approval for the use of atrazine and metolachlor on a corn field located in a recharge area in Halifax, MA. This PMP was approved

DIVISION OF CROP AND PEST SERVICES, cont.

upon an assessment by program staff and subsequent review and commenting submitted by MassDEP and DPH. Local wells were sampled to confirm that there was no impact to local groundwater resources.

MASSACHUSETTS WORKER PROTECTION STANDARD Laurie Rocco

The Agricultural Worker Protection Standard (WPS) is a regulation aimed at reducing the risk of pesticide poisoning and injury among agricultural workers and pesticide handlers. The WPS offers occupational protections to agricultural workers (people involved in the production of agricultural crops) and pesticide handlers (people who mix, load, or apply crop pesticides) that work at agricultural establishments (farms, nurseries and greenhouses). It requires that owners and employers on agricultural establishments provide protections to workers and handlers from potential pesticide exposure, train them about pesticide safety, and provide mitigations in case exposures occur. In 2013, MDAR supplied the UMass Cranberry Station with all pertinent WPS information including “How to Comply” manuals and posters. Pesticide enforcement inspectors made WPS materials including recordkeeping manuals available when conducting compliance monitoring of farms, and “How to Comply” manuals were distributed on DVD as well as in hard copy format.

MDAR continues to work with different organizations throughout the state, providing EPA Worker/Handler Verification cards, when requested. In 2013, the following organizations received cards:

- Volante Farms (Needham)
- Springfield Technical Community College (Springfield)
- New England Farm Workers Council (Holyoke)
- Edgewood Bogs (Carver)
- UMass Cranberry Station (Wareham)
- J & J Farms (Amherst)
- New England Farm Workers Council (Holyoke)
- Calabrese Farm (Southwick)

Following trainings, a total of 221 individuals received Worker Verification cards, while 56 individuals received Handler Verification cards.

PESTICIDE APPLICATOR AND LICENSING PROGRAM Steve Antunes-Kenyon

The Massachusetts Pesticide Control Act requires all persons who apply pesticides in public and private places used for human occupation and habitation, with the exception of residential properties with three or less dwelling units, to be in possession of a valid license or certification issued by MDAR. There are 4 types of pesticide licenses in Massachusetts: Commercial Applicator License, Commercial Certification License, Private



DIVISION OF CROP AND PEST SERVICES, cont.

Certification License and Dealer License. These licenses permit the legal use of pesticides including but not limited to the following: purchase, sale, application, mixing, loading, storage, disposal, and transport.

Certification and Licensing Exams

Pesticide examinations are offered to individuals seeking pesticide licensure throughout the year, with a minimum of one exam each month. In 2013 the Department administered 26 pesticide exams for the four licensure types. A total of 1,952 individuals registered for exams in 2013 (1,749 took the exam, 203 were no-shows). Out of the 1,749 who took exams, 1,092 passed (62.4%). Receipts from exam fees generated a total of \$159,325 in 2013; this was returned to the General Fund.

New and Renewal Pesticide Licenses

Once individuals have passed the appropriate exam, they are sent a pesticide license application. This document must be renewed on an annual basis pursuant to state pesticide law and regulations.

All commercial and private certifications and licenses, with the exception of Dealer Licenses, expire on December 31st of each year (Dealer Licenses expire on the last day of February of each year). Individuals eligible to renew for the next year automatically receive a renewal application each October. Each applicator must renew his/her certification and/or license by January 1st. Applications submitted after the expiration of the current license but before June 30th must pay a late fee equal to the exam fee in order to renew their license. Applicators that do not submit renewals prior to June 30 are required to retake and pass state examination(s) to be eligible for a certification or license for the new year.

There were 1,036 new licenses issued in 2013, and 8,118 renewal licenses, generating total receipts of \$995,979 for 2013.

Continuing Education

License holders must attend continuing education programs and obtain contact hours to maintain and enhance their pesticide application knowledge. Applicators who do not meet the required number of educational hours are obligated to retake the state examination to be recertified or relicensed.

In 2013, 722 applicators were chosen as part of a random audit to verify that they had met the required number of contact hours by the end of a three year training period. There were 642 audits approved, an 89% compliance rate. The remaining individuals either did not return the audit paperwork or did not satisfy the educational hours required.

Pesticide Applicator Continuing Education (PACE)

MDAR staff, UMASS Cooperative Extension, and various industry associations and companies continued to educate the pesticide-user community regarding laws and regulations through lectures and presentations. During the federal FY13 the Department approved 351 continuing education programs to support the recertification requirements for all licensed applicators.

PESTICIDE PRODUCT REGISTRATION

Susie Reed

Any person who has obtained a pesticide product registration from the EPA must then apply for a registration with MDAR. The registrant, or an agent acting on behalf of the registrant, is required to submit an "Application for New Pesticide Registration", a Material Safety Data Sheet (MSDS), and a product label. A fee of \$300 dollars is also required for each different EPA registration number. New products are usually registered on a monthly basis. Every product label is thoroughly reviewed for compliance with state and federal laws and then brought to the Pesticide Board Subcommittee for consideration. A registration is valid for a period beginning with the initial date of approval by the Subcommittee and ending on the next June 30th. Each registration must be renewed annually no later than July 1, at a cost of \$250 per EPA number. Registrations of products with new active ingredients are assessed a fee of \$500 each.

There were 8,053 pesticide products renewed in 2013 and 1,027 new products registered, which represented receipts of \$2,415,900 and \$308,100 respectively. There were 22 new active ingredients registered.

State Restricted Use Classification

A Federal General Use pesticide product registered by the Commonwealth may be classified as either general use or reclassified as State Restricted Use based upon its use pattern or the potential to become a groundwater contaminant. In 2013, 33 products were reclassified as State Restricted Use.

Special Local Needs (SLN) Registration

When a particular agricultural problem exists that can only be mitigated through the use of a pesticide that is not federally registered for that specific purpose, a Special Local Need registration may be issued by the state under section 24c of FIFRA. There were no new SLNs registered in 2013.

Experimental Use Permits (EUP)

State experimental use permits are required to control potential hazards of pesticide experimentation under outdoors, greenhouse, and domestic animal trial conditions. To obtain such a permit, a state application must be filed with the Pesticide Board Subcommittee along with a product label, a copy of the EPA EUP and a fee of \$300 dollars. There were no new EUPs granted in 2013.

PESTICIDE USE REPORTS

Steve Antunes-Kenyon

The Department requires that all licensed applicators submit annual use reports for all pesticide applications. The use report identifies the active ingredients, amounts, and use site and patterns of pesticides used in the Commonwealth. As is done annually, in 2013 forms were mailed to all licensed applicators for summary reporting.

RIGHTS-OF-WAY (ROW) MANAGEMENT

Mike McClean

The Rights-of-Way (ROW) program enforces the provisions of 333 CMR 11.00 by regulating the use of herbicides to control vegetation on all rights-of-ways within the Commonwealth. The ROW program has substantial interaction with many state agencies and municipalities through its administration and also provides public notification and opportunity for the general public and interested parties to comment on the various ROW treatments.

Compliance Monitoring

MDAR staff conducted 30 "Use Observations" along rights of way in the Commonwealth in 2013. One recordkeeping inspection was conducted and one Limited Application Waiver was issued. One complaint investigation was conducted that resulted in two Letters of Warning being issued.

Vegetative Management Plans (VMPs)

VMPs are an overview of an entire ROW System. They describe potential methods of herbicide control, including pesticides, mechanical and biological methods, or any Integrated Pest Management or IPM techniques. Plans must be renewed on a 5 year cycle and must be presented at public hearings in areas affected by ROW practices. In 2013 10 plans were reviewed, brought to public hearing, and approved by the ROW Coordinator.

Yearly Operational Plans (YOPs)

The ROW Program received and approved 36 YOPs in 2013, consisting of the names, rates and amounts of pesticides to be applied along specific ROWs, as well as the individual sites, and identification of "sensitive areas" where prohibitions in standard application practices are warranted. Each plan was reviewed and comments were made by the ROW Coordinator.

Sensitive Areas

The ROW Program along with the Department of Environmental Protection review and approve herbicides for use in Sensitive Areas as defined in 333 CMR 11.04. MDAR improved the review process this year to include a process for review of inert ingredients contained in a herbicide formulation.

Outreach Activities

ROW program staff participated in 3 educational outreach courses hosted by Bay State Roads. The target audience was Massachusetts municipal employees. The courses focused on invasive plants identification, control strategies and ROW and pesticide regulations. Staff also attended an annual safety training held by Vegetation Control Service, Inc. in Athol, Massachusetts, and provided outreach to the Cape Cod Delegation concerning the use of herbicides on NSTAR ROWs on Cape Cod.

RIGHTS-OF-WAY VEGETATION MANAGEMENT

Mike McClean

Review Process

There were no new herbicide reviews completed during 2013. Requests were received for review and approval of a number of herbicide products for use in Rights-of-Way vegetation management. These herbicides were included in the workplan for the collaborative review of herbicides by MDAR and MassDEP.



2013 OUTREACH & EVENTS



Pat Patriot and Commissioner Watson, along with Patriot Alum Jermaine Wiggins and Dairy Farmer Susan Shield, celebrate June Dairy month at the June 12th “Fuel Up to Play” event at Brookfield Elementary School in Brockton.



US Undersecretary of Agriculture Alvarez and Commissioner Watson celebrate Massachusetts Day at the Big E.



Food Safety Meeting with U.S. Representative Jim McGovern.



Ceremony marking 5th anniversary of discovery of Asian Longhorned Beetle in Worcester, with Secretary Sullivan, DCR Commissioner Murray, Commissioner Watson, Congressman Jim McGovern, and Former Lt. Governor Tim Murray.



Annual Christmas Tree Cutting at Crane Neck Christmas Tree Farm in Groveland with farmer Bill Latham, Betty Gorski (selectwoman), Minority leader Bruce Tarr, Undersecretary Maeve Vallely Bartlett, Commissioner Watson, State Rep. Lenny Mirra, and Donald Gearney (selectman).

2013 OUTREACH & EVENTS



*First Annual MA Urban Farming Conference
Mel King (Social Activist/Community Organizer and Adjunct Professor, Dept. of Urban Studies and Planning, MIT),
Commissioner Watson, Glynn Lloyd (Co-Founder, City Growers and Founder and CEO, City Fresh Foods), Greg Horner (Senior Program Officer, Cedar Tree Foundation)*



Commissioner Greg Watson at Agriculture Day at the State House.



Neponset Health Center staff Celebrate Massachusetts Food Day.



Senator Mo Cowan tours Worcester's Regional Environmental Council Mobile Market with Farmers' Market Coordinator Anthony Gardner, Secretary Rick Sullivan, and Commissioner Watson.



Higher Ground Farm representatives greet Nuffield Scholars, Eisenhower Fellow Alex Dowse, and Commissioner Watson as part of an Urban Farm Tour.



Annual Tomato Contest at City Hall Plaza with Undersecretary Maeve Vallely Bartlett, Tomato Winner Tom Napoli of Idlywilde Farm, and Commissioner Watson.

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA)

GERARD KENNEDY, DIVISION DIRECTOR

Working with the Divisions of Agricultural Markets, Animal Health, and Crop and Pest Services, DACTA works to advance the conservation and productivity of agricultural resources through preservation, environmental stewardship, technology, technical assistance and education, in order to enhance the viability of agricultural enterprises and safeguard natural resources.

DACTA delivers services to conserve agricultural lands and improve agricultural stewardship and use of natural resources, promotes energy efficiency and use of renewable energy, and ensures economic competitiveness and profitability. DACTA programs are supported by MDAR's digital-based information management systems and interaction with local, state, and federal partners.

PROGRAM LISTING

- Agricultural Business Training Programs
- Agricultural Environmental Enhancement Program (AEEP)
- Agricultural Preservation Restriction Program (APR)
- APR Improvement Program
- Aquaculture Program
- Composting Program
- Energy Efficiency, Conservation, and Renewables Program
 - Agricultural Energy Grant Program
 - Farm Energy Discount Program
 - Massachusetts Farm Energy Program
- Farm Viability Enhancement Program
- Land Use
- Massachusetts Emergency Food Assistance Program (MEFAP)
- Matching Enterprise Grants for Agriculture Program (MEGA)
- Milkhouse Wastewater Pilot Program



DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE STAFF

From left to right: Rick Chandler, Sean Bowen, Barbara Hopson, Michael Gold, Craig Richov, Delia Delongchamp, Gerard Kennedy, Michele Padula, Joao Tavares, Ron Hall, Bill Blanchard

Not shown: Dake Henderson, Laura Maul, Gerald Palano

AGRICULTURAL BUSINESS TRAINING PROGRAM (ABTP)

Rick Chandler

In 2013, the Agricultural Business Training Program (ABTP) delivered the following courses to 41 farms:

- Tilling the Soil of Opportunity (TTS) Full Business Plan Course: 9 established farms completed this 11-session course in Amherst, with 7 receiving post course technical assistance.
- Planning For Startup: 9 startup farms completed this 6-session course in Amherst.
- Exploring the Small Farm Dream: 23 prospective farms completed this 5-session course, which was run once in Marlborough and once in Amherst.

The statewide trend toward smaller farm enterprises continued, with most participants in “Exploring” and “Planning” courses having no recent farm history. These early stage courses were split between younger entrants and

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

older retiree/career changers. Many farms sent more than one participant to each training.

Overall, it was another year for fresh ideas and entrepreneurial energy in these groups, with the participants rating the overall value for the courses at 4.75 on a 0-5 scale.

AGRICULTURAL ENVIRONMENTAL ENHANCEMENT PROGRAM (AEEP)

Laura Maul

AEEP is a voluntary program that provides financial support to agricultural operations to help implement conservation practices intended to protect the Commonwealth's natural resources by the prevention or mitigation of pollution that may arise from agricultural practices. Since 1999, the program has funded 456 projects statewide that improve water quality, conserve water, reduce greenhouse gas emissions, and conserve energy. Agricultural operations have received over \$5 million dollars to help them address environmental concerns on their farms. In Fiscal Year 2013, 31 projects were funded totaling \$369,210. For Fiscal Year 2014, the program expects to fund another \$345,000 in projects on 30 farms. Projects are selected based on their potential to impact the most sensitive resources, including drinking water supplies, wetlands, Department of Environmental Protection (DEP) priority water bodies, and Areas of Critical Environmental Concern.

A particular strength of AEEP is its ability to complement federal funding from the Natural Resource Conservation Service (NRCS) EQIP program for environmental practices on farms, enabling the completion of, for example, a costly manure management structure that the farmer otherwise could not afford to complete. Examples of funded projects include the installation of manure management systems, pesticide storage facilities, fencing to keep livestock out of wetlands, energy efficient pumps with low emissions, irrigation, automated irrigation, and water control structures.

AGRICULTURAL PRESERVATION RESTRICTION PROGRAM (APR)

Ron Hall

The Agricultural Preservation Restriction Program (APR) preserves and protects agricultural land, including soils, as a finite natural resource, and prevents them from being built upon for non-agricultural purposes or used for any activity detrimental to agriculture. The program is designed to keep APR land values at a level that can be supported by the land's agricultural uses and potential.

During 2013, the APR program protected 21 farm projects covering over 1,078 acres. This raises the total farm properties enrolled to 861 and the total farmland protected to 69,917 acres. To acquire these restrictions, the program invested in state bond funding that was matched by another \$3,972,450 in reimbursements from the federal Farm and Ranch Lands Protection Program (FRPP). An additional \$478,380 in local contributions and \$4,322,035 in applied federal contributions were also leveraged. When all sources are considered, including owner bargain sales, the State received \$2.66 of value for every \$1.00 expended.

At the close of 2013, the APR program had an additional 27 projects in the resource evaluation phase and 26 projects (2,081 acres) that were ready to move through due diligence toward closing. Many of these projects will come to fruition in 2014, attracting additional federal investment in Massachusetts through the FRPP.

The APR Stewardship Program completed 56 Baseline Documentation Reports in 2013. An ongoing partnership contract between the Natural Resource Conservation Services and the Massachusetts Association of Conservation Districts conducted 229 required Federal monitoring inspections during 2013.

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

APR IMPROVEMENT PROGRAM (AIP)

Melissa Adams

The AIP provides business planning, technical assistance, and grants to commercial farm owners with farmland already protected from development with funding from MDAR's Agricultural Preservation Restriction (APR) Program. The program aims to help participating privately-owned farms stay profitable, keep APR land in active agricultural use, and enhance the economic viability of these farm operations and their contribution to the state's agricultural industry.

In Fiscal Year 2013, the fourth year of the program, 11 farms with 787 acres of APR land participated. These

farms received a total of \$63,770 in technical and business planning assistance, an average of \$5,797 per farm. A total of \$775,000 in grants was awarded, at levels ranging from \$25,000 to \$100,000 per farm, to help implement farm infrastructure improvement projects. Examples of these projects include: new hay storage barns, barn repairs, farmstand renovation, greenhouses, vegetable packing facilities with refrigeration, commercial kitchen expansion, an energy-efficient grain dryer, livestock housing, a dairy feeding/loafing area, a goat dairy processing facility, high-density apple trees, and a fruit winery.

Since AIP began in 2009, 44 farms with 6,203 acres of APR land have participated and received a total of \$3,025,000 in grants and \$277,198 in technical assistance under the Program.

For Fiscal Year 2014, AIP received 27 applications, with 10 selected for participation. Applications are typically accepted from April through June each year.

AIP FARM: BREEZELANDS ORCHARDS, WARREN

Breezeland's Orchards, a 190-acre orchard in Warren, applied to the APR Improvement Program and received assistance with business planning, retail layout, marketing, and website design. AIP grant funds of \$75,000 were used for worker housing to meet H2A requirements, to expand their bakery, purchase new freezers, plant new fruit trees, and to assist help with marketing outreach for the farm.



AQUACULTURE PROGRAM

Sean Bowen

The cultivation of marine and freshwater organisms is a very diverse segment of the Massachusetts agriculture industry. The Commonwealth's aquaculture industry produces aquatic species for food, education, research, ornamental, bait and sport fishing activities, including 7 species of shellfish and at least 10 species of finfish that are cultured experimentally and commercially.

The Food Safety and Aquaculture Specialist provides a variety of services to support the promotion and development of Massachusetts aquaculture. The integration of food safety and aquaculture within DACTA enables MDAR to assist the industry by facilitating regulatory compliance, offering permitting assistance, and affording more effective inter-departmental policy discussion.

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

CASE STUDY: EDGEWOOD BOGS, CARVER

The Agricultural Environmental Enhancement Program (AEEP) funded the construction of a pesticide mixing and storage facility for Edgewood Bogs in Carver, MA in 2013. The bogs are located in a sole source aquifer in Plymouth County which supplies water to both public and private water supplies. The construction of a pesticide mixing and storage facility will allow the cranberry operation to reduce pollution to surface water, groundwater, and/or soil by providing a safe environment for the storage, mixing, loading, and cleanup of agrichemicals on site.



Pesticide Storage and Mixing Facility, Edgewood Bogs, Carver, MA

COMPOSTING PROGRAM

William Blanchard

Agricultural composting is defined in 310 CMR 16.05(4) (c) as: “A composting operation for agricultural wastes when located on a farm engaged in “agriculture” or “farming” as defined in M.G.L. c. 128,1A.” Such composting operation may, in addition to agricultural wastes, utilize the following compostable materials, provided the operation is registered and complies with policies of the Department of Agricultural Resources:”

- Leaf and yard waste
- Wood wastes
- Paper and cardboard
- Clean compostable (i.e. thin) shells
- Non-agricultural sources of manures and animal bedding materials
- Less than 20 cubic yards or less than 10 tons per day of vegetative material; and
- Less than 10 cubic yards or less than 5 tons per day of food material

In 2013 MDAR registered 69 Agricultural Compost Sites. The program is responsible for registering new agricultural compost sites as well as renewing existing sites annually. During the course of the year the program coordinator works with personnel from federal, municipal and other state agencies to address concerns that arise in regard to the operation of registered sites.

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

ENERGY EFFICIENCY, CONSERVATION, AND RENEWABLES PROGRAM (ENERGY PROGRAM)

Gerry Palano, Alternative Energy Specialist

AGRICULTURAL ENERGY GRANT (AG ENERGY)

Gerry Palano

MDAR's Agricultural Energy Grant Program (Ag Energy) is an annual competitive funding program that fosters energy conservation and funds agricultural energy projects in an effort to improve energy efficiency and to facilitate adoption of alternative clean energy technologies by Massachusetts farms. The ultimate goal is to help farms become more environmentally and economically sustainable. The program is now in its 7th year.

Reimbursement grants of between \$25,000 and \$50,000 have been awarded in the past, with program requirements revised on an annual basis, including technology priorities. Farms with less access to federal, state, and electric and natural gas energy efficiency incentive rebate and grant programs, as well as those that have completed energy audits, are encouraged to apply. For Fiscal Year 2014, 38 proposals were received, with requests totaling more than \$810,000. Available program funds for this time period were \$325,000, with program criteria limiting individual proposals to a maximum of \$25,000. Program criteria prioritized energy efficiency and renewable energy technologies, including those relevant to the dairy, maple syrup and nursery sectors.

MDAR selected and awarded funding to 23 proposals for project implementation. Of these awards, 11 were energy efficiency and 12 were renewable energy projects. The energy efficiency projects included thermal curtains, electronic controls, high efficiency heating units and super insulation for greenhouses, high efficiency evaporators and reverse osmosis for maple syrup production, variable speed drive vacuum pumping for dairy, and a new high efficiency refrigeration walk-in cooler for vegetable storage. Renewable

energy projects included 11 photovoltaic (PV) installations and a geothermal heating/cooling system across a variety of farming sectors, including a 51kW roof-mounted PV system at a cranberry farm, where all the energy will be used to offset the cranberry operation's multiple electric pumping needs. Together, these projects will save Massachusetts farmers approximately \$120,000 per year and reduce greenhouse gas emissions by over 335 tons of equivalent CO₂.

To date, the program has invested a total of \$1,942,522 in 134 projects statewide, for a total capacity of approximately 1,500 kW for photovoltaic, wind and ADs installations.

CASE STUDY: AG ENERGY GRANT

Bill and Nancy Couto's Cranberry Farm in East Taunton received an AgEnergy Grant of \$25,000 for the installation of a 51kW roof-mounted photovoltaic (PV) system that will help offset almost all of the costs of the electrical pumping required for their cranberry operation. The over-200 panel roof-mounted PV project conserves land for agriculture, will generate over 55,000kWh of electricity per year, and will reduce equivalent CO₂ emissions by over 30 tons per year.



The five (5) central inverters located in the maintenance building convert the panels' direct current (DC) to alternating current (AC) and are of the correct electrical quality and characteristics for on-site use and export to TLMP.

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

FARM ENERGY DISCOUNT

Linda Demirjian

The Farm Energy Discount Program provides discounts of 10% on electricity and natural gas bills to eligible entities engaged in production agriculture. Subject to certification by MDAR, persons or corporations determined to be principally and substantially engaged in the business of production agriculture or farming for an ultimate commercial purpose will, upon written application, be eligible for a ten percent discount on rates.

Upon determination that the applicant qualifies for the Farm Discount, MDAR will certify to the appropriate power supplier (either electricity or natural gas) that the applicant meets the requirements for the Farm Discount. The discount is not available for propane or fuel oil accounts.

In 2013, over 1,594 farms were enrolled, totaling 3,948 utility accounts. With a conservative estimate of \$5,000/yr average for electric/natural gas expenditures, the 10% discount savings is \$797,000 for 2013 alone.

Since 2012, MDAR continues to enhance its new online system to allow participants to manage and update their accounts. Of the 1,594 farms in the program, the majority are now managing their accounts online. The goal is to eventually reach a point where MDAR's role in implementing the Farm Energy Discount Program is primarily conducted electronically.

ENERGY PROGRAM

MASSACHUSETTS FARM ENERGY PROGRAM (MFEP)

Gerry Palano

Jess Cook (BPRC&D)

MFEP is a collaborative statewide effort implemented by Berkshire-Pioneer Resource Conservation and Development Area, Inc. in partnership with MDAR and USDA-NRCS. The program aims to increase on-farm energy conservation and efficiency, promote renewable energy solutions for farm enterprises, reduce agricultural

greenhouse gas emissions, and improve farm viability through economical energy upgrades.

MFEP is a full-service technical assistance program helping over 490 agricultural producers across sectors, and has leveraged an average of 53% of total energy project costs for the 6 years of the program to date. A total of 200 projects have been installed at 126 farms, with average annual energy savings of \$8,300 per farm (saving \$1,054,150 annually), helping to improve the viability of agricultural businesses across the state. These projects range from simple refrigeration efficiency upgrades to commercial-scale solar photovoltaic systems.

In 2013, MFEP served 131 Massachusetts farms with technical and financial assistance, and partnered with federal and state agencies, public utilities, and non-profits to develop and complete 37 farm energy projects throughout the state. MFEP also helped 26 farms secure targeted audits or access public utility assessments that outline recommendations, payback periods and fulfill funding requirements, providing essential information for farm business decision-making.

Projects installed in 2013 resulted in annual savings of over 266,329kWh of electricity, 1,200 gallons of fuel oil, 10 cords of wood, 19,582 therms of gas and 5,606 gallons of propane, reducing agricultural emissions by over 490 tons of CO₂. Eight solar photovoltaic projects completed in 2013 are generating 148,097 kWh of electricity annually.

MFEP leveraged \$752,457 in federal, state, and ratepayer funds, and committed \$19,281 in MDAR incentives funds to energy efficiency projects in 2013. This year's farm energy projects resulted in annual energy savings of over \$100,000, helping farms create and maintain jobs and reinvest savings into the farming operation and local economy.

In 2013 MFEP also matched MDAR funds with a USDA-NRCS Conservation Innovation Grant of \$75,000 to pilot and promote innovative energy conservation practices on farms. As a result of MFEP's research in collaboration with regional energy experts, NRCS is offering new

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

Environmental Quality Incentives Program (EQIP) payments to farmers in Massachusetts, including root zone heating, both in-ground and mat heating options.

Over 60 farmers participated in MFEP training activities throughout 2013 (efficient refrigeration and storage, greenhouse energy efficiency, and renewable heating technologies) with CISA, NOFA, MassCEC, SEMAP and other partner organizations. MFEP staff also provided one-on-one mentoring to many farms preparing to submit projects for MDAR's Agricultural Energy Grant Program, USDA's Rural Energy for America Program (REAP), and

the NRCS EQIP Grant Program – resulting in 30 highly competitive grant awards.

Berkshire-Pioneer Resource Conservation and Development (BPRC&D) has worked with MDAR to develop and expand the activities and partnerships of the MA Farm Energy Program for the past 6 years. Unfortunately, 2013 also marked the point where BPRC&D discontinued their programs. Their commitment to farmers and the goals of the MFEP program contributed greatly to the program's success. As of the publishing of this report, BPRC&D continues to work diligently, using their own funding and staff, to help transition the MFEP

to MDAR's new program partner. A well deserved acknowledgement and thank you is due to BPRC&D for their genuine effort and support for farms across the state.

CASE STUDY: VALLEY VIEW FARM, TOPSFIELD

Elizabeth and Peter Mulholland have been successfully raising goats and making cheese for the past 11 years. Now milking 35 head of dairy goats, the farm sought to build a cheese cave that would allow expansion of the varieties and volume of cheeses produced at the farm. A \$25,000 FVEP grant helped to partially fund construction of a 12' x 28' cheese cave using pre-cast arches set into a hillside. Over the next five years, cheese



Photo by Kindra Clineff Photography

production is scheduled to increase to over 20,000 pounds annually, and the new structure will contain areas for retail sales, tastings, workshops, and space for other producers to store their cheese.

FARM VIABILITY ENHANCEMENT PROGRAM (FVEP)

Craig Richov

Since 1996, the FVEP has been an important part of MDAR's farmland protection and agricultural economic development strategy. The program is an innovative effort that offers farmers funding for farm equipment and capital upgrades following the completion of a business planning phase and in exchange for a 5 to 10 year no development covenant.

During Fiscal Year 2013, the FVEP provided technical assistance to help 14 farms complete business plans. Thirteen farms received funding for modernization, capital improvements and to improve production and marketing efforts. These farms were placed under Agricultural Covenants protecting 862 acres. The program impacted an additional 560 acres of leased land under participants' management. FY 2013 spending was \$650,000 in direct grants to farms and just over \$100,000 was spent on technical assistance costs to consultants and business plan writers. Twelve of the 13 farms invested additional capital totaling

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

\$367,000 in matching funds for an average participant investment of \$30,583.

Since the program's inception, some 386 farms have been protected by five or ten year covenants ensuring that 37,134 acres contribute to our agricultural industry. These farms have received a total of \$16,371,472 in grant assistance or an average investment of approximately \$441 per acre. Most impressively, over 99% of participating farms remain in active agriculture today, and 73% of farmers in the program invest additional capital beyond the grant amount to implement business improvement strategies. The average additional investment is nearly \$32,000 per farm.

For FY 2014, the FVEP received 21 applications and 10 had been selected for participation. Applications are accepted from April through June each year.

MASSACHUSETTS EMERGENCY FOOD ASSISTANCE PROGRAM (MEFAP)

Craig Richov

MEFAP enables the four regional food banks in Massachusetts (The Greater Boston Food Bank, The Food Bank of Western Massachusetts, the Worcester County Food Bank, and the Merrimack Valley Food Bank) to purchase food from manufacturers, distributors and farmers. All food is then distributed to a network of over 800 food pantries, soup kitchens and shelters. Through the program, a consistent supply of quality, nutrient-dense foods and locally grown fresh produce has been provided to citizens in need in the Commonwealth. The Greater Boston Food Bank administers the program for all four food banks. Funding is provided by MDAR through a line item in the annual budget.

The State Legislature established MEFAP in 1994, due to a reduction of federal funding. Initial funding in 1995 was just under one million dollars for food purchases. Support has steadily increased to a high of \$13 million in Fiscal Year 2014. Formerly managed by the Massachusetts Department of Education, operating funds to support the distribution of emergency food are now handled by MDAR. Separate

service contracts with each of the four major food banks enables MDAR to distribute \$1million in operating funds. MDAR oversees the purchase of food and in fitting with their mission to encourage spending on local foods like farm fresh produce, and locally produced and processed foods. The "Massachusetts Grown" Initiative earmarks a portion of the budget each year for the purchase of products from Massachusetts farmers, giving our local growers and producers another market and helping our hungry neighbors by providing nutritious, fresh produce. For 2013, \$720,000 worth of fruit, vegetables, eggs and dairy products were purchased from Massachusetts farmers and distributed through MEFAP. Among the most popular of these fresh high quality items were squash, apples, sweet corn, onions, peppers, and collard greens.

Service area population and poverty statistics developed by the U.S. Census Bureau were used to determine the allocation of MEFAP funds to the four food banks, 2013 distributions are detailed below.

DISTRIBUTION OF MEFAP FUNDS AMONG MASSACHUSETTS REGIONAL FOOD BANKS

FOOD BANK	LOCATION	PERCENT
<i>Food Bank of Western Massachusetts</i>	<i>Hatfield</i>	<i>13.97%</i>
<i>Greater Boston Food Bank</i>	<i>Boston</i>	<i>64.96%</i>
<i>Merrimack Valley Food Bank</i>	<i>Lowell</i>	<i>8.78%</i>
<i>Worcester County Food Bank</i>	<i>Shrewsbury</i>	<i>12.29%</i>

Percentages based on America's Second Harvest statistics

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

MATCHING ENTERPRISE GRANTS FOR AGRICULTURE (MEGA) PROGRAM

Kate Hayes

MEGA began its fourth year of operation under the Farm Viability Programs umbrella. This program aims to provide assistance to new and beginning farm enterprises (one to five years in operation) that aspire to have commercially viable farm businesses. By targeting this group of farmers, the Department has recognized the importance of beginning farmers to the Commonwealth's agricultural industry, and is filling a gap in services. The growth of new farms has been evidenced by the strong response to the Department's beginning farmer agricultural business training programs, as well by the USDA 2007 and preliminary 2012 Agricultural Census data. However, farmers with less than five years experience are usually not eligible for other Farm Viability programs.

The purpose of MEGA is to provide business planning and technical assistance along with a modest infusion of capital to new farmers who have the potential to expand productivity and/or commercial significance. MEGA participants can receive grants up to \$10,000 that they must match in cash on a one to one basis. Because many new farmers lease rather than own farmland, there is no land protection component to MEGA, but there is the matching funds requirement. Grant and matching funds must be spent on equipment or infrastructure improvements that will have a demonstrable positive impact on future economic viability.

In FY 2013 \$64,106 in grants ranging from \$4,000 to \$10,000 was distributed to 8 farms. An additional \$36,243 was spent on technical assistance consultations and business planning to 10 farms. In FY 2014, 23 farms applied to the program and 10 were selected to participate. Business planning and technical assistance to these farms is currently underway. MDAR anticipates that the next open application period for MEGA will be announced in April 2014.

MILKHOUSE WASTEWATER PILOT PROGRAM

Gerard Kennedy

Milkhouse wastewater includes wastewater that is generated through the processing of dairy products such as milk, cheese, ice cream, and yogurt that are customarily disposed of by Dairy Operations. The Memorandum of Agreement between MassDEP and MDAR which set up the pilot program for management of milkhouse wastewater will terminate at the end of 2014. The purpose of the pilot program is to collect data to demonstrate the effectiveness of above ground wastewater management systems, such as bark beds or vegetated treatment areas in managing milkhouse wastewater (MHW). Non-sanitary wastewater, such as MHW, is considered to be "industrial waste" by MassDEP regulations. Since MHW fits into this designation, any discharge of MHW to the ground violates MassDEP regulations to protect groundwater.

Participating dairy farms must evaluate the effluent characteristics of MHW and the efficacy of vegetated treatment areas that are installed and maintained in accordance with the NRCS Conservation Practice Standard. Currently, two "Pilot" farms are participating in a monitoring study as part of the pilot program. Other "Grantee" farms that install vegetated treatment areas to manage milkhouse wastewater will be required to participate in the pilot program.

In 2013, a total of 13 farms implemented pilot projects, including 6 vegetated treatment areas, 5 bark mounds and 1 bark bed.

DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA) cont.

STATE-OWNED FARMLAND LICENSING PROGRAM

Barbara Hopson

Since its creation in the Department in 1974, MDAR has been making “vacant public lands” available to groups and individuals for farming and community gardening. The “vacant public lands” of primary concern were the former state hospital farmlands which were left abandoned or underutilized when the Department of Mental Health (DMH) and Public Health (DPH) shut down their institutional farms in the 1960s and 1970s. Towns in which these institutions were located began looking to access this “vacant” land for housing projects, town garages, and other community uses. The Department’s goal was two-fold: to provide some level of protection for these state-owned farmlands (which have a high percentage of prime agricultural soils), and to ensure that they were used to their fullest agricultural potential.

For 2013, MDAR maintained agricultural license agreements with 16 farmers in 6 counties. State-owned farmland parcels are located in Agawam, Danvers Agricultural Reserve, former Grafton State Hospital, Lakeville, Middleborough, Monson Developmental Center, Northampton Agricultural Reserve, Westborough State Hospital, Western Massachusetts Hospital, and land in the Wachusett Watershed.

In 2012, MDAR began working with the Department of Developmental Services (DDS) and the Division of Capital Asset Management and Maintenance (DCAMM) to continue agricultural use of the land and building at the Templeton Developmental Center (TDC) after the partial shutdown of the TDC campus. This public private partnership is aimed to support TDC programmatic goals and provide commercial farmers the opportunity to license the agricultural fields as well as several farm buildings including a fully functional dairy operation and milk processing plant. Three farmers were selected in 2014 who will utilize all of the agricultural land and farm buildings.

Program Goals:

- **Promotion of Sustainable Farming and Agricultural Markets:** The State-Owned Farmland Program makes land available to established commercial farmers as well as new entry farmers. These lands are used to augment privately owned agricultural land for a variety of agricultural enterprises such as livestock and dairy production, vegetable farms, and pick-your-own operations.
- **Protection of Agriculturally Productive Lands:** Agricultural land legislatively transferred to the Department totaled 680 acres in 2011 and is protected under Article 97 of the Massachusetts Constitution as conservation land.
- **Development of a Framework for Sustainable Growth, Sustainable Development and Environmental Protection:** Land declared surplus to state agency needs generally contains viable agricultural land as well as non-agricultural land which may be suitable for limited development. The State-Owned Farmland Program works closely with other state agencies as well as private entities to develop comprehensive land use plans that incorporate agricultural land and development.

APPENDIX 1: STAFF DIRECTORY

Note: This directory is accurate as of January 2014. For an up-to-date listing of Department staff, please see www.mass.gov/eea/agencies/agr/about/mdar-staff-directory.html

LAST NAME	FIRST NAME	E-MAIL	PHONE	DIVISION	TITLE
Antunes-Kenyon	Steven	Steve.Kenyon@state.ma.us	617-626-1784	Crop & Pest Services	Environmental Analyst IV
Arruda	Rose	Rose.Arruda@state.ma.us	617-626-1849	Administration	Program Manager
Battle	Trevor	Trevor.Battle@state.ma.us	617-626-1775	Crop & Pest Services	Env. Health Insp.
				Ag Conservation &	
Blanchard III	William	William.Blanchard@state.ma.us	617-626-1709	Technical Assistance	Regional Planner
Botelho	Michael	Michael.Botelho@state.ma.us	617-626-1721	Agricultural Markets	Program Coordinator
Bouchard	Alisha	Alisha.Bouchard@state.ma.us	617-626-1715	Administration	Program Coordinator
				Ag Conservation &	
Bowen	Sean	Sean.Bowen@state.ma.us	617-626-1724	Technical Assistance	Environmental Analyst
Buffone	Mark	Mark.Buffone@state.ma.us	617-626-1777	Crop & Pest Services	Environmental Analyst
Burgess	Jessica	Jessica.Burgess@state.ma.us	617-626-1722	Legal Services	Legal Counsel
Burnand	Mary Beth	Mary.Beth.Burnand@state.ma.us	617-626-1710	Administration	Manager/Human Resources
Cabral	Patricia	Patricia.Cabral@state.ma.us	617-626-1786	Animal Health	Program Coordinator
					Manager/Animal Health and Dairy
Cahill	Michael	Michael.Cahill@state.ma.us	617-626-1794	Animal Health	
Cai	Sunny	Sunny.Cai@state.ma.us	617-626-1782	Crop & Pest Services	Environmental Health Insp.
Carl Jr.	Alfred	Al.Carl@state.ma.us	617-626-1802	Crop & Pest Services	Program Coordinator
				Ag Conservation &	
Chandler	Richard	Rick.Chandler@state.ma.us	413-548-1905	Technical Assistance	Regional Planner
				Ag Conservation &	
Chisholm	Christine	Chris.Chisholm@state.ma.us	617-626-1788	Technical Assistance	Regional Planner
Colon	Elsie	Elsie.Colon@state.ma.us	617-626-1810	Animal Health	Administrative Assistant
Corte-Real	Ilidio	Lee.Corte-Real@state.ma.us	617-626-1776	Crop & Pest Services	Manager/Crop and Pest Svcs.
Davidson	Rebecca	Rebecca.Davidson@state.ma.us	617-626-1744	Agricultural Markets	CQP Program Coordinator
				Ag Conservation &	
Delongchamp	Delia	Delia.Delongchamp@state.ma.us	617-626-1737	Technical Assistance	Regional Planner
de Ronde	Catherine	Catherine.DeRonde@state.ma.us	617-626-1811	Administration	Economist
Demakakos	Michael	Michael.Demakakos@state.ma.us	617-626-1783	Legal Services	Legal Counsel
Demirjian	Linda	Linda.Demirjian@state.ma.us	617-626-1733	Administration	Program Coordinator
Edwards	Clayton	Clayton.Edwards@state.ma.us	617-626-1782	Crop & Pest Services	Pesticide Inspector
Forman Orth	Jennifer	Jennifer.Forman-Orth@state.ma.us	627-626-1735	Crop & Pest Services	Marketing and Prod. Util Spec.
Funk	Stephanie	Stephanie.Funk@state.ma.us	617-626-1795	Animal Health	Insp. Haz. Sub and Pesticides
					Homeless Animal Care and Prevention Fund Coordinator
Gilfeather	Lauren	Lauren.Gilfeather@state.ma.us	617-626-1790	Animal Health	
Gill	Alexander	Alexander.Gill@state.ma.us	617-626-1765	Administration	Grants Mgmt. Specialist III

APPENDIX 1: STAFF DIRECTORY cont.

LAST NAME	FIRST NAME	E-MAIL	PHONE	DIVISION	TITLE
Gold	Michael	Michael.Gold@state.ma.us	617-626-1712	Ag Conservation & Technical Assistance	Administrative Assistant
Grimaldi	Julia	Julia.Grimaldi@state.ma.us	617-626-1763	Agricultural Markets	Program Coordinator
Hageman	Edward	Edward.Hageman@state.ma.us	617-626-1796	Animal Health	Program Coordinator
Hall	Ronald	Ronald.Hall@state.ma.us	413-548-1903	Ag Conservation & Technical Assistance	Regional Planner
Harris	Glenn	Glenn.Harris@state.ma.us	617-626-1795	Animal Health	Insp. Haz. Sub and Pesticides
Harrod	Linda	Linda.Harrod@state.ma.us	617-626-1795	Animal Health	Insp. Haz. Sub and Pesticides
Hart	Ellen	Ellen.Hart@state.ma.us	617-626-1742	Agricultural Markets	Program Coordinator
Henderson	Dake	Dake.Henderson@state.ma.us	617-626-1729	Ag Conservation & Technical Assistance	Edp Systems Analyst
Hopson	Barbara	Barbara.Hopson@state.ma.us	413-548-1906	Ag Conservation & Technical Assistance	Land Use Administrator
Jordan	Mary	Mary.Jordan@state.ma.us	617-626-1750	Agricultural Markets	Manager/Agricultural Markets
Kaszowski	Catherine	CKaszowski@state.ma.us	617-626-1813	Animal Health	Program Coordinator
Kennedy	Gerard	Gerard.Kennedy@state.ma.us	617-626-1773	Ag Conservation & Technical Assistance	Manager/Technical Assistance
Kilb	Stacy	Stacy.Kilb@state.ma.us	617-626-1735	Crop & Pest Services	Insp. Haz. Sub and Pesticides
LaScola	Taryn	Taryn.LaScola@state.ma.us	617-626-1782	Crop & Pest Services	Insp. Haz. Sub and Pesticides
LeBlanc	Richard	Richard.LeBlanc@state.ma.us	617-626-1759	Agricultural Markets	Program Coordinator
Lopez-Swetland	Alejandra	Alejandra.Lopez-Swetland@state.ma.us	617-626-1781	Ag Conservation & Crop & Pest Services	Marketing and Prod. Util Spec.
MacDonald	Alexander	Alex.MacDonald@state.ma.us	617-626-1795	Animal Health	Insp. Haz. Sub and Pesticides
Mach	Frederick	Fred.Mach@state.ma.us	617-626-1795	Animal Health	Veterinary Health Officer
Maul	Laura	Laura.Maul@state.ma.us	617-626-1798	Ag Conservation & Technical Assistance	Program Coordinator
McClellan	Michael	Michael.McClean@state.ma.us	617-626-1781	Crop & Pest Services	Environmental Analyst
Megrath	Megan	Megan.Megrath@state.ma.us	617-626-1798	Animal Health	Insp. Haz. Sub and Pesticides
Michalewich	Phyllis	Phyllis.Michalewich@state.ma.us	617-626-1801	Crop & Pest Services	Marketing and Prod. Util Spec.
Nunes	John	John.Nunes@state.ma.us	617-626-1813	Animal Health	Administrative Assistant
Nguyen	NgocNu	Ngoc-Nu.Nguyen@state.ma.us	617-626-1708	Administration	Accountant
O'Brien	Kevin	Kevin.Obrien@state.ma.us	617-626-1707	Legal Services	Legal Counsel
O'Connor	Lorraine	Lorraine.O'Connor@state.ma.us	617-626-1791	Animal Health	Veterinary Health Officer
Oehlke	Bonita	Bonita.Oehlke@state.ma.us	617-626-1753	Agricultural Markets	Program Coordinator
Padula	Michele	Michele.Padula@state.ma.us	617-626-1758	Ag Conservation & Technical Assistance	Regional Planner

APPENDIX 1: STAFF DIRECTORY cont.

LAST NAME	FIRST NAME	E-MAIL	PHONE	DIVISION	TITLE
Palano	Gerald	Gerald.Palano@state.ma.us	617-626-1706	Ag Conservation & Technical Assistance	Environmental Engineer
Payne	Sandra	Sandra.Payne@state.ma.us	617-626-1785	Crop & Pest Services	Administrative Assistant
Pepe	Sandra	Sandra.Pepe@state.ma.us	617-626-1797	Animal Health	Program Coordinator
Phelon	Sheila	Sheila.Phelon@state.ma.us	617-626-1813	Animal Health	Insp. Haz. Sub and Pesticides
Pizzella	Dorrie	Dorrie.Pizzella@state.ma.us	617-626-1703	Administration	Chief of Staff
Reed	Susie	Susan.Reed@state.ma.us	617-626-1778	Crop & Pest Services	Pesticide Product Registration Specialist
Rice	Robin	Robin.Rice@state.ma.us	617-626-1814	Animal Health	Field Investigator
Richov	Craig	Craig.Richov@state.ma.us	617-626-1725	Ag Conservation & Technical Assistance	Regional Planner
Rocco	Laurie	Laurie.Rocco@state.ma.us	617-626-1782	Crop & Pest Services	Insp. Haz. Sub and Pesticides
Rock	Michael	Michael.Rock@state.ma.us	617-626-1716	Administration	Manager/Chief Fiscal Officer
Rondeau	Robert	Robert.Rondeau@state.ma.us	617-626-1804	Crop & Pest Services	Program Coordinator
Ryan	Sarah	Sarah.Ryan@state.ma.us	617-626-1728	Agricultural Markets	Ag. Markets Program Coordinator
Scoff	Barbara	Barbara.Scoff@state.ma.us	617-626-1714	Administration	Accountant
Szocik	Carol	Carol.Szocik@state.ma.us	617-626-1718	Legal Services	Senior Land Use Planner
Tavares	Auzinda	Auzinda.Tavares@state.ma.us	617-626-1792	Animal Health	Administrative Assistant
Tavares	Joao	Joao.Taveres@state.ma.us	617-626-1719	Ag Conservation & Technical Assistance	Program Coordinator
Toland	Joyce	Joyce.Toland@state.ma.us	617-626-1713	Administration	Program Coordinator
Vinton III	Howard	Howard.Vinton@state.ma.us	617-626-1803	Crop & Pest Services	Mktg Prod Utilization Spec
Vo-Phuong	Hoang	Hoang.Vo@state.ma.us	617-626-1818	Crop & Pest Services	Edp Systems Analyst
Watson	Greg	Greg.Watson@state.ma.us	617-626-1701	Administration	Commissioner
Webber	David	David.Webber@state.ma.us	617-626-1754	Agricultural Markets	Program Coordinator
Wegman	Esther	Esther.Wegman@state.ma.us	617-626-1795	Animal Health	Program Coordinator
Wijnja	Hotze	Hotze.Wijnja@state.ma.us	617-626-1771	Crop & Pest Services	Chemist
Zadeh	Tara	Tara.Zadeh@state.ma.us	617-626-1705	Legal Services	General Counsel



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