



2014 Annual Report

Massachusetts
Department of
Agricultural
Resources



THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS



Department of Agricultural Resources

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CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

MATTHEW A. BEATON
Secretary

JOHN LEBEAUX
Commissioner

Following Governor Baker's election in November, 2014 and his decision to appoint me as Commissioner of the Department of Agricultural Resources (MDAR), I am pleased to highlight some of MDAR's many achievements during 2014 under the leadership of my predecessor, Commissioner Gregory C. Watson, as it advanced Massachusetts Agriculture to benefit both our farmers and the public at large.

MDAR's Division of Agricultural Markets (DAM) worked on several exciting programs with our agricultural partners. The Maple Commonwealth Quality Program was launched, with advisory support from the Massachusetts Maple Producers Association. The two-year federally supported Grain to Glass project concluded last spring with a March kickoff held with the MA Brewers Guild. USDA Rural Development and the Federal State Marketing Improvement Program (FSMIP) provided financial support for the popular Massachusetts Brewers Passport Program as well as a survey tool to help link craft brewers to local farmers/producers. FSMIP identified this project as one of two to showcase nationally. DAM also implemented the second year of the USDA Specialty Crops Block Grant, which focused on the implementation of a MassGrown & Fresher Initiative to educate the public about agri-tourism opportunities. Grant funds enabled staff to design and create a new table top display and recipe and rack cards. These new materials were displayed at our booth at the Boston Globe Travel Show, which had more than 24,000 attendees.

MDAR's Division of Agricultural Conservation and Technical Assistance (DACTA) created its Ag Food Safety Improvement Program (AFSIP) in 2014, to assist farmers in upgrading equipment and infrastructure in order to address regulatory and market demands for better food safety practices. Following a small pilot program, MDAR issued \$200,000 in grants for food safety practice implementation. Participants selected for funding received reimbursements of up to \$20,000. DACTA'S newly revised Agricultural Preservation Restriction (APR) program has also streamlined the approval process for agricultural improvements and non-agricultural activities, resulting in a faster turn-around. Approval requests are now reviewed by MDAR on a monthly basis. In the event that a request is denied, the Agricultural Lands Preservation Committee now serves as an appeals body in addition to its role in APR acquisitions.

The Division of Animal Health (DAH) oversaw the establishment and growth of the Homeless Animal Prevention and Care Fund (Mass Animal Fund) during 2014. The fund receives donations through a tax check-off option on line 32f of the Massachusetts Residential Income Tax form. Money from the fund may be expended to spay/neuter and vaccinate homeless animals or animals owned by low-income residents, and may also be used to provide training for municipal animal control officers (ACOs). Since July 2014, the program has issued over 2,800 vouchers, and nearly 1,500 surgeries have already been completed. The program is expecting to roll out the mandatory ACO training course in 2015. This program has been a welcome addition to DAH because it has expanded its role from one of regulatory oversight to one that includes direct municipal support. DAH is also working to complete the promulgation process for regulations related to the operation of animal rescues and shelters. Data from 2008 showed approximately 10,000 animals entering Massachusetts annually for the purpose of adoption; in 2012, the number grew to 14,000. As more and more families choose rescues and shelters as the source of their family pets, DAH has an obligation to ensure animals in these settings are healthy and well cared for.

The primary issue that the Division of Crop and Pest Services (CPS) addressed in 2014 was the expanding range of duties it provides to protect Massachusetts agriculture and the public at large. In an increasingly tight fiscal environment, CPS personnel have found creative and innovative ways to accommodate a wide range of new responsibilities.

In 2015 MDAR plans to continue to closely follow its mission: helping to keep Massachusetts' food supply safe and secure, and working to keep Massachusetts agriculture economically and environmentally sound.

John Lebeaux

A handwritten signature in black ink, appearing to read 'John Lebeaux'.

TABLE OF CONTENTS

OVERVIEW OF THE AGENCY			
<i>Commissioner's Biography</i>	1	<i>Massachusetts State Exposition Building, West Springfield</i>	28
<i>Agency Organizational Overview</i>	2	<i>Massachusetts Grown & Fresher</i>	29
ADMINISTRATIVE DIVISION		<i>Retail Coupon for Fluid Milk Program</i>	29
<i>Financial Report</i>	4	<i>Organic Cost Share Certification</i>	29
<i>Human Resources</i>	6	<i>Specialty Crop Grant Program</i>	30
<i>Legal Services</i>	8	<i>Value-Added Technical Assistance</i>	30
<i>Snapshot of Massachusetts Agriculture</i>	9	DIVISION OF ANIMAL HEALTH	
MDAR'S BOARDS AND COMMISSIONS		<i>Program and Staff Listing</i>	31
<i>Introduction</i>	12	<i>Animal Imports and Livestock Markets</i>	32
<i>Agricultural Lands Preservation Committee (ALPC)</i>	13	<i>Dairy Farmer Tax Credit</i>	32
<i>Board of Food and Agriculture</i>	14	<i>Dairy Program</i>	32
<i>Massachusetts Dairy Promotion Board (MDPB)</i>	15	<i>Equine Program</i>	33
<i>Massachusetts Food Policy Council (MFPC)</i>	16	<i>Homeless Animal Prevention and Care Fund Program</i>	33
<i>Massachusetts Pesticide Board</i>	17	<i>Municipal Animal Inspector Program</i>	33
<i>Public Market Commission</i>	18	<i>Pet Shop Program</i>	34
<i>State Reclamation and Mosquito Control Board (SRB)</i>	19	<i>Poultry Program</i>	34
DIVISION OF AGRICULTURAL MARKETS		<i>Rabies Program</i>	35
<i>Program and Staff Listing</i>	22	<i>Reportable Disease Program</i>	36
<i>Agricultural Commissions</i>	23	<i>Shelter and Rescue Program</i>	36
<i>Agricultural Directional Signage</i>	23	<i>Swine Program</i>	37
<i>Agricultural Fairs Development</i>	23	DIVISION OF CROP AND PEST SERVICES	
<i>Agricultural Tourism</i>	23	FARM PRODUCT AND PLANT INDUSTRIES	
<i>Commonwealth Quality</i>	24	<i>Program Description</i>	38
<i>Culinary Tourism</i>	24	<i>Apiary Inspections</i>	38
<i>Export Development</i>	24	<i>Branding Law</i>	39
<i>Farm and Market Report</i>	25	<i>Cooperative Agricultural Pest Survey (CAPS) and Forest Pest Outreach</i>	39
<i>Farm to School Project</i>	25	<i>Country of Origin Labeling (COOL) Inspections</i>	40
<i>Farmers' Market Nutrition Program (FMNP)</i>	26	<i>Feed Program</i>	40
<i>Farmers' Market Program</i>	26	<i>Fertilizer Program</i>	41
<i>Federal State Market Improvement Program (FSMIP)</i>	27	<i>Fruit and Vegetable Inspection</i>	41
<i>Food Safety Program</i>	28	<i>Good Agricultural Practices (GAP)</i>	41
<i>Harvest New England Initiative</i>	28	<i>Nursery Inspection</i>	41

<i>Phytosanitary Inspections</i>	41
PESTICIDE PROGRAM	
<i>Aquatic Vegetation Management</i>	42
<i>Children and Families Protection Act</i>	43
<i>Enforcement</i>	43
<i>Ground Water Program</i>	44
<i>Massachusetts Worker Protection Standard</i>	44
<i>Pesticide Applicators and Licensing Program</i>	45
<i>Pesticide Product Registration</i>	46
<i>Pesticide Use Reports</i>	47
<i>Rights of Way (ROW) Management</i>	47
<i>Rights of Way Vegetation Management</i>	48
DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE	
<i>Program and Staff Listing</i>	49
<i>Agricultural Business Training Program (ABTP)</i>	49
<i>Agricultural Environmental Enhancement Program (AEEP)</i>	50
<i>Agricultural Food Safety Improvement Program</i>	50
<i>Agricultural Preservation Restriction Program (APR)</i>	50
<i>APR Improvement Program (AIP)</i>	51
<i>Aquaculture Program</i>	51
<i>Composting Program</i>	51

<i>Energy Efficiency, Conservation, and Renewables Program (Energy Program)</i>	52
<i>Agricultural Energy Grant (Ag Energy)</i>	52
<i>Farm Energy Discount Program</i>	52
<i>Massachusetts Farm Energy Program (MFEP)</i>	53
<i>Farm Viability Enhancement Program</i>	53
<i>Massachusetts Emergency Food Assistance Program (MEFAP)</i>	54
<i>Matching Enterprise Grants for Agriculture (MEGA)</i>	54
<i>Milkhouse Waste Pilot Program</i>	55
<i>State-Owned Farmland and Licensing Program</i>	55
<i>Urban Agriculture</i>	56
<i>Urban Agriculture Grant Program</i>	56
APPENDIXES	
<i>Staff Directory</i>	i

Statutory Purpose: This report is intended to not only inform the public generally, but to meet several statutory reporting requirements. The 2014 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



Grandson of a farmer and son of a nursery owner, John Lebeaux was sworn in as Commissioner of the Department by Governor Charlie Baker on February 6, 2015. After working at Shrewsbury Nurseries, his family's nursery/garden center/landscaping business, while a student, John

then worked for four years as an Urban Horticulturist in New York City. After rejoining the family business he served as its General Manager for twenty-six years. John was very active serving in a variety of green industry affairs positions, including two terms as President of the Massachusetts Nursery and Landscape Association. He has been a Massachusetts Certified Horticulturist since 1983.

A member of a family very active in volunteer government service, John was elected to his hometown Representative Town Meeting as soon as he turned eighteen. He is a six term Selectman in the Town of Shrewsbury and is a Charter Member of the Shrewsbury Farmers Market Steering Committee. John served nine years as a member of the Massachusetts Board of Food and Agriculture which represents the interests of agriculture to the Department and provides input on policy development and budgetary decisions. He also served for nine years as a public member of the Massachusetts Water Resources Commission.

Prior to appointment as Commissioner, John served slightly less than six years as Town Administrator of the town of Princeton, a rural north central Massachusetts municipality with an active agricultural sector.

Proud parents of three adult children and grandparents to one grandchild, John and his wife Debbie live in Shrewsbury on a former portion of his grandfather's Buttonwood Farm.

AGENCY ORGANIZATIONAL OVERVIEW

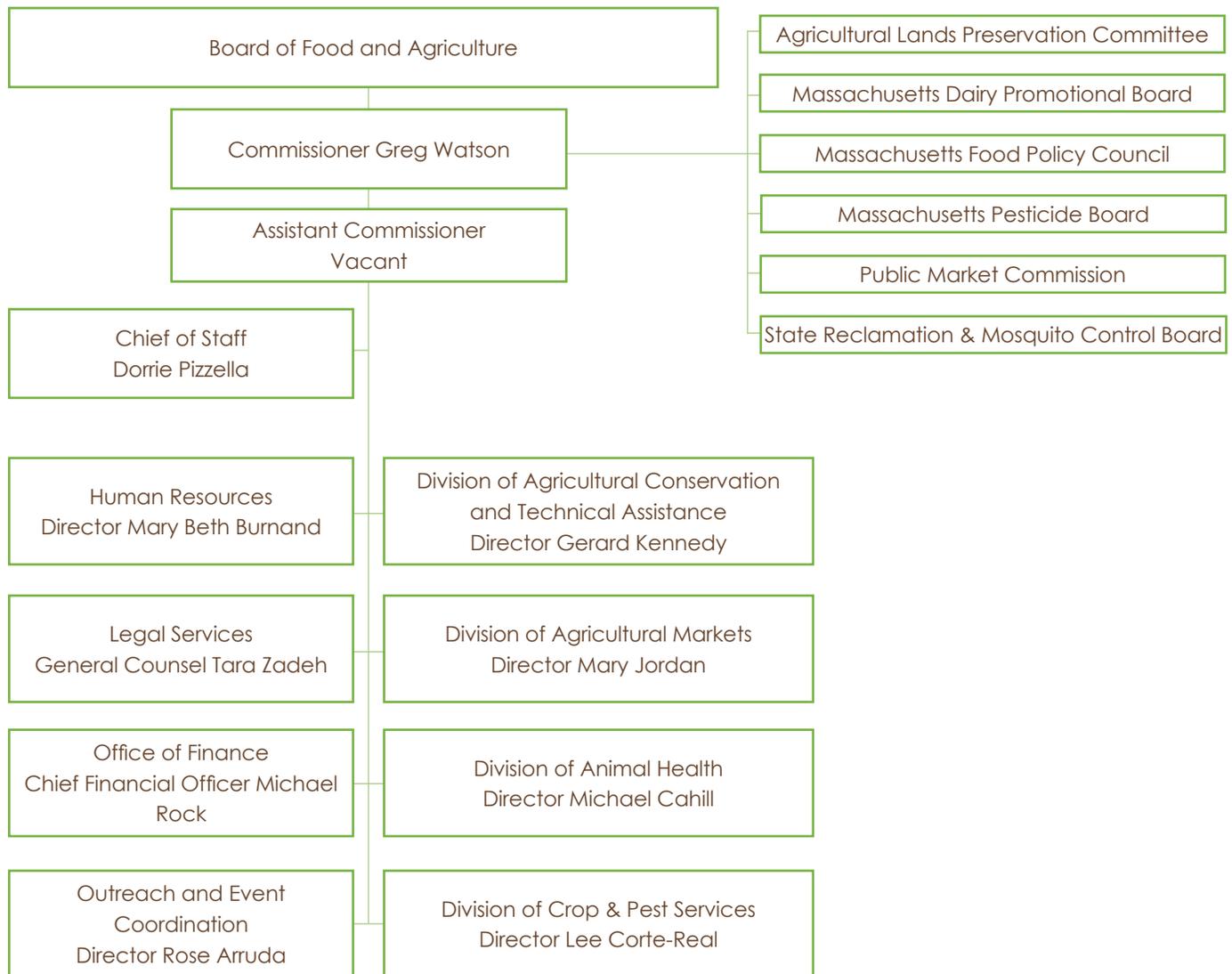
MISSION

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 December 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.

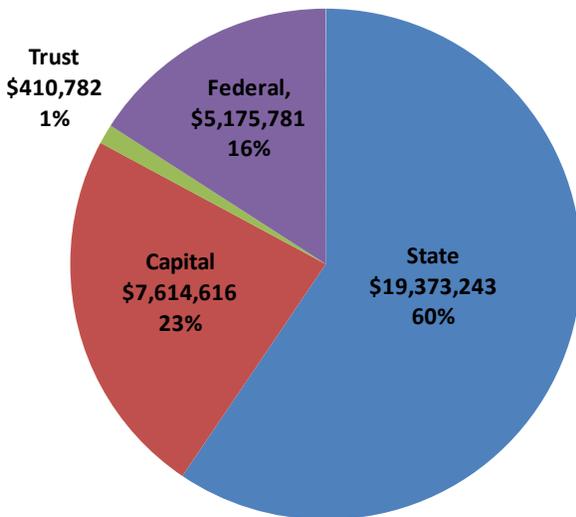
A complete staff directory can be found in Appendix 1.

FINANCIAL REPORT

CHIEF FINANCIAL OFFICER

Michael Rock

MDAR expended \$32.6 million dollars in fiscal year 2014 (FY14), a decrease of nearly \$4 million (11%) in comparison to FY13 expenditures. The decrease is attributed to a sharp decrease of nearly \$5 million in federal expenditures pertaining to the Farm and Ranch Lands Protection Program (FRPP), offset by an increase in Supplemental Food funding of \$1 million. FY14 expenditures by funding source were as follows:



BUDGETARY APPROPRIATIONS

MDAR expended 99.81% of its final FY2014 budgetary appropriated amount of \$19.432 million, reverting just \$37,562. The largest portion of the reverted funds (\$28.6K) 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 MDAR. The FY2014 General Appropriations Act (GAA) provided Administration account funding of \$5,336,426. FY2014 Administration Account spending by category was as follows:

- Approximately 82.5% for employee's salaries and benefits

- Nearly 7% for the Buy Local and 4H Program earmarks
- Close to 4% to supplement State Reclamation Board mosquito control
- 1.5% (\$79,200) as part of an annual matching share to MDAR's 3-year, \$1,218,563 federal "Pesticide Analytical" grant, to fund lab services from the University of Mass Amherst Massachusetts Pesticide Analysis Laboratory
- The remaining 5% supported MDAR'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 72% of MDAR's state appropriated budgetary funding in FY2014. MDAR 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. Funding for the Food Bank program in FY2014 was \$14 million, a \$1 million increase over the fiscal year 2013 amount of \$13 million. The funding provided over 16 million meals.

INTEGRATED PEST MANAGEMENT ACCOUNT (2511-3002)

Funding for MDAR's Integrated Pest Management (IPM) program has never recovered from the pre-recession period. Funding in FY2014 was \$95,446, including a \$38K earmark to UMass Amherst for a study on the mitigation of the Brown Marmorated Stink Bug. FY14 IPM account funding was 81% less than the fiscal year 2008 funding level of \$303,000 (FY14 earmark excluded). The funding reduction has impacted MDAR'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).

FINANCIAL REPORT cont.

CAPITAL (BOND) ACCOUNTS

In FY2014 MDAR expended nearly 100% of its \$7.6 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, Agricultural Environmental Enhancement Program (AEEP) and Urban Agriculture. By utilizing a mixture of capital and federal funds, MDAR expended nearly \$7 million on Agricultural Preservation Restrictions to protect approximately 1,325 acres of land, and another \$650K on 9 agricultural covenants, to protect an additional 1,230 acres. Capital expenditures decreased in FY2014 by \$485K, primarily due to a reduction in funding of \$554K for the APR program and \$30K for the AEEP program. These reductions were partially offset by the introduction of the new capital funded “Urban Agriculture” initiative in the amount of \$200K. The goals of this initiative are to address challenges facing urban farmers and to support municipalities by providing technical assistance for the development of zoning ordinances, public education, and land assessments that foster urban agriculture.

FEDERAL FUNDS

MDAR expended over \$5.2 million dollars in federal grant funds in FY2014. The federal Farm and Ranch Lands Protection grant was the largest component of the agency’s federal funding, comprising over 56% 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

Trust funds comprised approximately 1% of agency spending in FY2014. The primary two trust accounts from which spending occurred were the Dairy Promotion Trust Fund and the more recently created Homeless Animal Prevention and Care Fund. The Dairy Promotion Trust Fund is utilized to promote programs and policies with the objective of increasing the consumption of Massachusetts dairy products. The Homeless Animal Prevention and Care

Fund is used 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 28 different fees, ranging from pesticide applicator and milk dealer licenses to nursery and greenhouse inspection fees. Since 2009, MDAR has generated more revenue than its budgetary allocation for administrative costs. In FY2014, MDAR revenue of \$6.169 million exceeded the year-end operating budget of \$5.432 million (Administration and IPM accounts combined) by nearly \$737,000. FY2014 revenue was 5.3% higher than the prior fiscal year and set an all time high for the agency.

MDAR FEE REVENUE 2009-2014

YEAR	REVENUE
2009	\$4,709,687
2010	\$5,159,485
2011	\$5,679,206
2012	\$5,633,212
2013	\$5,856,068
2014	\$6,168,928

HUMAN RESOURCES

HUMAN RESOURCES DIRECTOR

Mary Beth Burnand

The Human Resources (HR) Office administers and oversees all HR functions for 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 and Learning Management System
- Family Medical Leave Act and the Americans with Disabilities Act
- Diversity Initiatives and Equal Employment Opportunity and reporting
- Unemployment
- Worker's Compensation claims and reporting
- Labor Relations
- Workforce Planning
- Health and Safety
- Agency Systems Security Administrator
- Self-Service Time and Attendance liaison

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.

TRAINING

MassHR created a five-year roadmap of voluntary development and training programs, known as the Workforce Enhancement Program. The program consists of courses targeted at increasing employee effectiveness to achieve organization goals and better serve the citizens of Massachusetts.

HUMAN RESOURCES, cont.

DEPARTMENT OVERVIEW - 4TH QUARTER 2014

TOTAL WORKFORCE: 75											
<i>Males: 33 (44.00%)</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>
28	37.33	3	4.00	1	1.33	1	1.33	0	0.00	0	0.00
<i>Females: 42 (56.00%)</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>
32	42.67	4	5.33	1	1.33	1	1.33	0	0.00	4	5.33
<i>Minorities: 11 (14.67%)</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	2	2.67	2	2.67	0	0.00		
<i>Veterans: 3 (4.00%)</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>
2	2.67	1	1.33	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>	8.00%
<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 MDAR Administration, and consists of a General Counsel, 3 assistant counsels, and 1 paralegal. We provide a wide range of advisory and technical legal services to the Commissioner and all Divisions and programs within MDAR. Legal staff also represents MDAR in administrative and judicial proceedings, including those at the Division of Administrative Law Appeals, and 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 Office of the Attorney General represents MDAR. The goals of Legal Services is are to provide quality legal assistance as well and to supporting the overall administrative needs of the agency. In 2014, 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 APR program guidelines and rewriting of program documents to comply with federal requirements. 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 2014 was to ensure the acquisition of Agricultural Preservation Restrictions and to assist in the streamlining of approvals.

WORK WITH THE DIVISION OF AGRICULTURAL MARKETS

Staff assisted in reviewing contracts, grants and marketing material, including documents related to the Farmers Market Coupon Program, the Massachusetts Building at the Big E, completion of the Boston Public Market lease, and the contract for the Massachusetts Food Policy Plan.

WORK WITH THE DIVISION OF ANIMAL HEALTH

Provided legal assistance for preparation of cease and desist orders and 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 advised the SRB and the 9 mosquito control projects that operate under the SRB in accordance with the provisions of G.L. c. 252. This included providing legal assistance in reviewing of contracts as well as reviewing of proposals involving policy and regulatory matters. Staff also assisted in the defense of mosquito control projects in personnel matters and in contract negotiations for services and offices.

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 represented MDAR at administrative hearings and facilitated settlements of appeals filed under G.L. c. 132B. Staff assisted in interpreting and applying statutes and regulations, enforcement of pesticide laws and regulations, and drafting and preparing pesticide direct supervision and plant nutrient regulations for public hearing.

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 were 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

From left: Michelle Kopelson, Michael Demakakos, Jessica Burgess, Carol Szocik, Tara Zadeh

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.

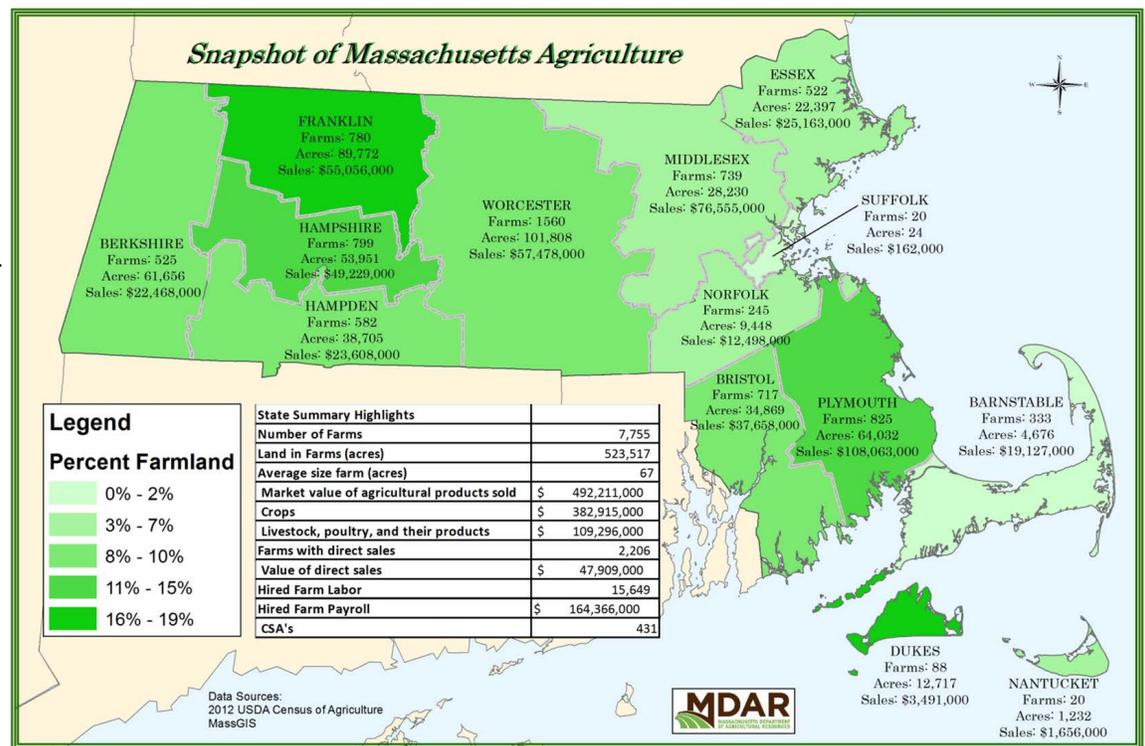
GREENHOUSE & NURSERY

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



SNAPSHOT OF MASSACHUSETTS AGRICULTURE cont.

part of the state. Approximately 70% of these growers are small family farms with less than 20 acres of bogs.

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

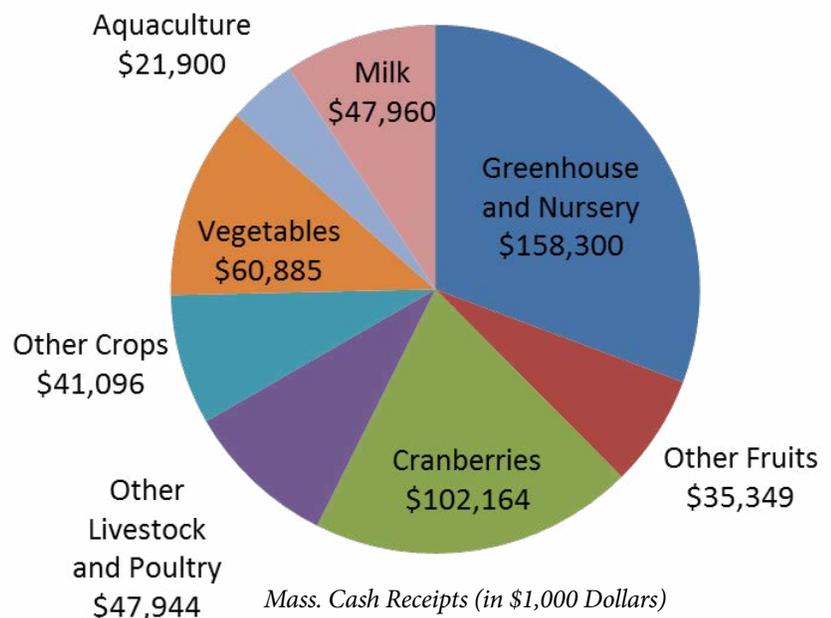
industry will have additional opportunities for review and comment.

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.



SNAPSHOT OF MASSACHUSETTS AGRICULTURE cont.

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.

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.

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

Alisha Bouchard, 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 composition of the Board was changed by Chapter 287 of the Acts of 2014 from 7 to 13 members, all appointed by the Governor. Members must represent different geographic areas and different agricultural operations, 9 of which must produce food and fiber. New members serve for a 3-year term and may only be reappointed for one additional term. 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. The Governor's office is reviewing additional names for appointment to the Board.

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

Richard Canning - Plymouth County, farmer

2014 ACTIVITIES OF THE BOARD

In 2014 Chairperson Judy Leab worked with the Board to provide advice to MDAR regarding its annual report and inclusion of the Board in information distribution. The Board also advised the Commissioner on MDAR's operating budget and provided feedback on a variety of departmental priorities, including implementation of the Food Policy Council, the new structure for the Agricultural Preservation Restriction (APR) Program, 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 Emme Schultz, 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

2014 ACTIVITIES OF THE BOARD

The following motions were adopted by the board in 2014:

- Approved allocation of \$50,000 to CISA to develop a "Buy Local" dairy campaign & research project.
- Approved allocation of \$50,000 for the NE Dairy & Food Council "Fuel Up to Play 60" school wellness and nutrition initiative.
- Approved allocation of \$15,000 to the NE Dairy Promotion Board's "Must be the Milk" campaign.
- Approved allocation of \$14,000 to the Massachusetts Cheese Guild.
- Approved allocation of \$10,000 to Eastern State Exposition.
- Approved allocation of \$6,000 to Massachusetts Agriculture in the Classroom.
- Approved allocation of \$5,000 to Farm to School "Harvest of the Month" campaign.

2014 ACCOUNT SUMMARY, MASSACHUSETTS DAIRY PROMOTION BOARD TRUST ACCOUNT

YEAR	DEPOSITS	EXPENSES	BALANCE
2014	\$215,957	\$119,053	\$96,905



BOARDS AND COMMISSIONS cont.

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

CHAIRMAN

Gregory C. Watson, Commissioner, MDAR

STAFF LIAISON

Bonita Oehlke

STATE AGENCY MEMBERS

Commissioner Gregory C. Watson, MDAR (Chair)

Commissioner Cheryl Bartlett, MDPH

Kerry Bowie, designee of Deputy Commissioner Gary Moran, MDEP

Undersecretary Michael Hunter, designee of Secretary Gregory Bialecki, MEOHED

Katie Millet, designee of Commissioner Mitchell Chester, MESE

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)

Helen Caulton-Harris, Springfield Board of Health, Local health department representative

Jeff Cole, Executive Director, MA farmers markets, direct to consumer marketing

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

John Waite, Western MA Food Processing Center, Food processor and handler



ADVISORY COMMITTEE MEMBERS (APPOINTED BY THE FPC)

Shemariah Blum-Evitts, Lutheran Social Services' New Lands Farm Program

Cris Coffin, American Farmland Trust

Nancy Cohen, UMass

Christa Drew, MA Food Policy Alliance

James Harrison, The Food Project

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

Joe Schoenfeld, UMASS

2014 ACTIVITIES OF THE BOARD

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

- 2/1/2014: Metropolitan Area Planning Council's (MAPC) contract will be managed by MDAR on behalf of the FPC. The last effort, in 1974, resulted in the APR program and the shift to direct marketing, among other outcomes. MAPC updated the FPC on the process of creating a strategic food plan that incorporates consumption, production, processing, distribution, retail, food access, the environment, and the workforce. FPC members approved the need for a Food Systems Planning Advisory Group to provide expertise and address gaps in representation of the strategic plan's elements.

BOARDS AND COMMISSIONS cont.

- 4/11/2014: FPC officers were elected. MAPC provided an update on their contract, which was \$35,000 less than the proposed budget. To balance the budget, funds for the food systems map were reduced and the educational conference was postponed.
- 6/11/2014: MAPC completed its draft workplan, job descriptions, roles, and interaction expectations for the working groups. Future areas of investigation include farming infrastructure, ecological resilience, social justice, diversity in the MAPC working groups, and food system economics.
- 9/5/2014: Two presentations provided background on regional food systems planning: Brian Donahue, PhD on NE Food Vision; and Rosa DeCosta and Sarah Kelley on the SE MA Food System Assessment. The MA Food System Plan Executive Committees and Working Group Leaders were approved.
- 12/11/2014: An update on the MA Food Systems planning was discussed. Commissioner Watson shared his appreciation for this meeting, an iterant process which will change over time and evolve.

The FPC Advisory Committee also met 12/9/2014 to address the following 3 questions:

- What slice of the food system is addressed in terms of local?
- Which descriptions can replace food system jargon for clarity?
- Would a context statement and rationale for the plan make sense to address relevant external forces?

A document was drafted to present at the December FPC meeting to describe the MA Food Systems planning.

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 Watson, MDAR, Chair
 Jack Buckley, designee Commissioner Mary Griffin, MDFG
 Ken Gooch, designee Commissioner Murray, DCR
 Michael Moore, MDPH-Bureau of Environmental Health, Food Protection Program
 Kathy Romero, designee Commissioner David Cash, MDEP
 Martha Steele, designee Commissioner Cheryl Bartlett, MDPH

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Richard Berman, pesticide applicator
 Dr. Richard Bonnanno, 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.

2014 ACTIVITIES OF THE BOARD

In 2014, the Pesticide Board met and was provided with updates of issues that might impact pesticide applicators and use of pesticides in the Commonwealth, including:

- The Status of the Pesticide Advisory Councils
- The Reclassification of the State Restricted Use Classification of Subsurface Termiticides by the Pesticide Board Subcommittee
- The Hiring of Pesticide Enforcement Staff

The most significant issues that the Board was required to take action on was the disposition of the appeal of the 2013 NSTAR Rights-of-Way Yearly Operational Plan following its submission to Division of Administrative Law Appeals (DALA). The Board voted to not adopt the decision by DALA in Brianna Larson, et al, Petitioners v. Department of Agricultural Resources, Respondent and to dismiss the appeal as moot. The Board was also presented with the Hearing Officers Report on the proposed Direct Supervision of Licensed Applicators regulations, and voted to approve the proposed regulations with the change in number of Licensed Applicators that could be supervised by a Certified Pesticide Applicator from 20 to 12 individuals. In addition, an Administrative Penalty appeal was heard and the appeal was denied.

PUBLIC MARKET COMMISSION CHAIRMAN

Gregory C. Watson, Commissioner, MDAR

STATE AGENCY MEMBERS

Carole Cornelison, Commissioner, MDCAM, designee of ANF

Mary Griffin, Commissioner, MDFG, designee EEA

William Tuttle, Deputy Director, MassDOT, designee of 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)

Jesse Brackenbury, Executive Director of the Rose Kennedy Greenway Conservancy

Nancy Caruso, designee of Mayor of Boston

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

The Boston Public Market is a 28,000 sq. ft. space located on the ground floor of 136 Blackstone St. in Boston. The Market is located in downtown Boston's emerging Market District, next to the Haymarket pushcart vendors and the historic Blackstone Block. This year-round, self-sustaining market will provide fresh local food to consumers from all income levels and will be a civic resource, educating the public about food sources, nutrition, and preparation.

At the market, farmers, fishermen, and food producers from Massachusetts and throughout New England will offer the public a source of fresh local food and an opportunity to taste, buy, and understand what our region has to offer. The market will house over 40 vendors selling locally produced items such as farm-fresh produce, meat and poultry, eggs, milk and cheese, fish and shellfish, bread and baked goods, flowers, and an assortment of specialty and prepared foods. The Boston Public Market will be the only locally-sourced market of its kind in the United States.

For more information and to follow the progress of the market, which is scheduled to open in 2015, visit www.bostonpublicmarket.org.



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 LIAISONS

Alisha Bouchard, Executive Director
Jennifer Forman Orth, Environmental Biologist
Nu Nguyen, Finance Manager

STATE AGENCY MEMBERS

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 regional districts/projects providing mosquito control services to municipalities. No additional municipalities voted to join an established mosquito control program during 2014. The town of Groton, which had just joined the Central Mass. Mosquito Control Project in 2013, opted out again in 2014. This resulted in a slight decrease in total membership to 196 (56% of the state's 351 municipalities). A map of all mosquito control districts/projects is below.

2014 SRMCB UPDATE

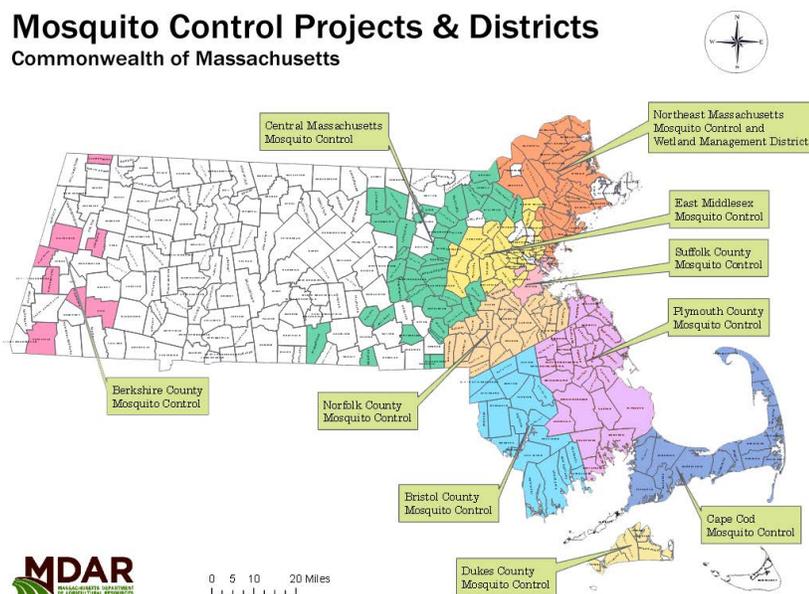
WEATHER AND MOSQUITO POPULATIONS

Cool spring temperatures and a general lack of precipitation throughout the season led to lower than average mosquito populations in 2014. It is likely these factors that led to populations of *Culiseta melanura* from long-term DPH trapping sites starting out at levels far below normal, peaking at the start of August, and then dropping back below normal for the remainder of the season. With significant rain events remaining

localized, general mosquito populations finally began to approach average levels at the start of July. Due to the lack of precipitation, floodwater emergence never really developed except in Berkshire County, which received significant rainfall (including events in excess of 11 inches). Precipitation levels were low enough that population levels of all mosquitoes were suppressed due to a lack of breeding habitat, and by the beginning of October, trap collections had dropped off enough that it became difficult to collect enough mosquitoes for arbovirus testing.

Asian tiger mosquito (*Aedes albopictus* or ATM) also remained in the spotlight in 2014, with numbers collected in Bristol County reaching a peak of 49 during the first week of September. Then, in mid-September, a single male ATM was discovered in a gravid trap in Charlestown (Boston, Suffolk County), a new county record. Supplemental trapping in the area did not turn up any additional specimens. That same week, the Central Middlesex Mosquito Control Project announced that DPH had confirmed 3 egg collections of ATM from traps set up in mid-August in the town of Ayer, a Middlesex County record. Given these new finds, this species will continue to be under close scrutiny next season.

Mosquito Control Projects & Districts
Commonwealth of Massachusetts



BOARDS AND COMMISSIONS cont.

MOSQUITO MANAGEMENT

Aerial adult mosquito control operations by aircraft were not necessary during 2014. The districts/projects were able to keep mosquito populations suppressed (and arbovirus load low) using standard techniques of larviciding accompanied by ULV spraying of adulticides in response to finds of arbovirus-positive mosquitoes.

Bristol and Plymouth County performed focused-area or area-wide applications of adulticide following finds of arbovirus-positive mosquitoes or infected animals in known arbovirus hotspots. Several districts/projects provided ULV-spraying to property owners by request. Some districts/projects also performed ditch maintenance and other water body management techniques that reduce mosquito-breeding habitat. By mid-September, cool temperatures led to some districts/projects suspending ULV spraying operations.

ARBOVIRUS DETECTIONS

The first West Nile Virus (WNV) and Eastern Equine Encephalitis Virus (EEEV) mosquito detections of the season did not occur until mid-July, several weeks later than what is typical. The first WNV positive mosquito pool of the season was detected in Clinton, MA in *Culex* sp., while the first EEEV positive mosquito pools were detected in Bridgewater, MA in *Coquillettidia perturbans*. This was an unusual find, since *C. perturbans* is a mammal biter, and EEEV is typically found first in bird-biting species like *Culiseta melanura*. Arbovirus-positive mosquito pools remained at less than 20% of typical levels throughout the season.

Out of the 5038 total pools submitted for testing, there were a total of 56 WNV-positive mosquito pools (1.1%) and 33 EEEV-positive mosquito pools (.66%). Again, these numbers are far below arbovirus levels in past years. A table with 2013 and 2012 for comparison is provided above.

MOSQUITO POOLS SUBMITTED FOR TESTING

YEAR	# POOLS SUBMITTED	# WNV+	# EEEV+	TOTAL MOSQUITOES SUBMITTED	% WNV+	% EEEV+
2014	5038	56	33	132,776	1.1%	.66%
2013	6090	335	61	154,324	5.5%	1%
2012	6746	305	262	150,565	4.52%	3.88%

Approximately 93% of mosquitoes testing positive for WNV were *Culex pipiens/restuans* or other *Culex* spp., while 76% of EEEV+ mosquitoes were *Culiseta melanura*.

The first animal case of EEEV for 2014 occurred in mid-August, when an infected deer was found in Freetown (Bristol County). A second case occurred in a horse from Westminster (Worcester County), confirmed during mid-October. There were no other confirmed cases of EEEV in animals or humans during the 2014 season. The first human case of WNV occurred in mid-August, in a man from Middlesex County. A second case was confirmed in mid-September, in a woman from Middlesex County. There were a total of five human WNV cases for the 2014 season. There were no cases of WNV confirmed in animals.

Chikungunya Virus (CHIKV) received significant national news coverage during the summer of 2014 after travelers to the Caribbean began presenting with symptoms upon their return to the USA. While Massachusetts announced its first human cases in the beginning of July, all cases were contracted overseas.

LEGISLATIVE UPDATES

In July 2014, legislation was passed to allow Nantucket to form a Mosquito Control Project, with the process expected to be completed in 2015. Initial talks also began with Board of Health officials from several municipalities in Franklin, Hampden and Hampshire County regarding the potential of forming a Mosquito Control District in the Pioneer Valley region.

BOARDS AND COMMISSIONS cont.

FY15 BUDGET

The FY15 budgets for the 9 regional programs plus the SRB Administrative Fund totaled \$11,330,512, an increase of less than 1% vs. FY14 (\$11,270,235). FY15 budget increases for the districts/projects ranged from 0% to 3.4%. The following breakdown highlights FY15 budget amounts approved and certified by the SRMCB during 2014:

The full SRMCB annual report for 2014, as well as the annual operational reports for each district/project, can be viewed at www.mass.gov/eea/agencies/agr/pesticides/mosquito/annual-operation-reports.html

DISTRICT	BUDGET
Berkshire County Mosquito Control Project	\$240,606
Bristol County Mosquito Control Project	\$1,322,814
Cape Cod Mosquito Control Project	\$1,884,537
Central Massachusetts Mosquito Control Project	\$1,986,933
East Middlesex Mosquito Control Project	\$688,414
Norfolk County Mosquito Control Project	\$1,628,967
Northeast Massachusetts Mosquito & Wetland Management District	\$1,589,540
Plymouth County Mosquito Control Project	\$1,652,322
Suffolk County Mosquito Control Project	\$265,264
State Reclamation and Mosquito Control Board	\$349,062
Total	\$10,920,045

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 2014, project highlights included the management of USDA Specialty Crops Block Grant Program (SCBGP), which included the implementation of several Division marketing initiative grant projects. Outreach and education remain priorities for the Division staff. The two year Grain to Glass project concluded last spring with a March kickoff with the MA Brewers Guild to thank the USDA Rural Development and the Federal State Marketing Improvement Program (FSMIP) for their financial support. FSMIP identified this project as one of two to showcase nationally.

Through its award-winning MassGrown & Fresher initiative and the Commonwealth Quality Program (CQP), 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. This past year, the Maple CQP program was launched with advisory support from the Massachusetts Maple Producers in developing the requirements. Staff implemented the second year of the USDA - Specialty Crops Block Grant, which focused on the implementation of a MassGrown & Fresher Initiative to educate the public about agri-tourism opportunities for consumers and tourists. This year, grant funds enabled staff to design and create a new table top display, as well as create recipe and rack cards. These new materials were displayed at the Boston Globe Travel Show where more than 24,000 attendees stopped by to sample maple syrup and cranberries. The Massachusetts agricultural industry benefits from these programs as well as from export marketing initiatives, with the anticipation of sustaining both a viable economy and agricultural entities.

The Division continues to work with over 50 agricultural and commodity organizations, including 8 regional 'Buy Local' initiatives, 45 community, livestock and youth

agricultural fairs, and a broad range of other local, state, and federal entities.

PROGRAM LISTING

- Agricultural Commissions
- Agricultural Directional Signage
- Agricultural Event Certification for Wine Sales at Agricultural Events
- 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 Grown and Fresher Campaign
- Massachusetts State Exposition Building, West Springfield
- Organic Cost Share Certification
- Retail Coupons for Fluid Milk Program
- Specialty Crop Grant Program
- Value Added Technical Assistance



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.

AGRICULTURAL COMMISSIONS

Richard LeBlanc

As of December 2014, Massachusetts had a total of 162 Agricultural Commissions (AgComs) and 139 Right to Farm (RTF) bylaws in communities across the commonwealth. This is an increase of 4 AgComs and 8 RTF bylaws over 2013. There are 133 communities that have both an AgCom and RTF.

Although agriculture is enjoying unprecedented popularity, the communities that are adopting these initiatives are facing stronger public scrutiny and have to provide more compelling reasons for establishing an AgCom or adopting an RTF bylaw. Laying the groundwork for a successful vote requires homework: developing persuasive speaking points, researching strategies for success, and anticipating what the objections may be. Once the bylaw is adopted, municipalities typically require additional encouragement and technical support to appoint AgCom members, establish and implement work plans, 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 who are working to become knowledgeable in agricultural issues. The Massachusetts Association of Agricultural Commissions (MAAC), organized in 2010, continues to be a valuable resource for the dissemination of information through their website, www.massagcom.org.

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. 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 4H 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 (www.mass.gov/massgrown). 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 46 fairs held throughout the Commonwealth in 2014: 19 major fairs, 5 community fairs, 11 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 2014.

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 and 2014. These new materials were displayed at the Boston Globe Travel Show (February 2014) at the Seaport Hotel, Boston in February, where more than 24,000 attendees stopped by to sample maple syrup and cranberries. Maps in both paper and

DIVISION OF AGRICULTURAL MARKETS, cont.

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 10,000 maps were distributed in 2014 at information centers, fairs, and food festivals throughout the state. The Massgrown booth and tent were featured at the Big E, Boston Food Fest, Garlic and Arts Festival, and the Apple Fest at Mt. Wachusett.

COMMONWEALTH QUALITY PROGRAM

Michael Anthony Botelho
 Julia Grimaldi

The Commonwealth Quality Program (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 that promote environmental sustainability and stewardship.

Currently, CQP supports 6 agricultural sectors: produce, forestry, lobster, aquaculture, dairy and maple. Throughout 2014, 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.

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



CULINARY TOURISM

Julia Grimaldi
 Bonita Oehlke

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 www.mass.gov/massgrown and click on Savor Massachusetts for a complete list of resources.



EXPORT DEVELOPMENT

Bonita Oehlke

DAR's Commissioner is a board member of Food Export USA Northeast, a USDA Cooperator, giving MDAR access to programs and services that can be used by Massachusetts food and agricultural businesses for export market and sales development. Funding is available through the USDA Farm Bill, Market Access Program. Businesses can receive a 50% reimbursement for funds used for eligible export development expenses such international marketing and promotion support, trade events and labels. Besides international trade shows, major US trade events that host international buyers are also eligible. To participate, products promoted must have at least 50% ingredients grown from the US.

There are a wide array of programs and services available for Massachusetts agricultural and food businesses, including exporter education, in-country market research,

DIVISION OF AGRICULTURAL MARKETS, cont.

and support at domestic and international trade shows. In 2014, A Buyer's Mission to Boston in January, the Seafood Expo North American in Boston in March, and preceding national trade shows including the Summer Fancy Food Show and Natural Products East offered low cost, low risk opportunities for MA food businesses to meet international buyers one on one. DAR also worked with the Cranberry Marketing Committee to showcase the cranberry harvest and value added products to Chinese press to build product awareness and sales. These opportunities are described in full at

www.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 2014, MDAR published 6 reports along with 32 "F&M Report Extra" email blasts that include timely notices on ag-related events. Also in 2014, MDAR sent 8 MassGrown & Fresher e-blasts containing information on available seasonal crops, along with updates on local food, fairs and festivals. Information contained in these e-blasts, which each went out to over 4000 consumers, pertained 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.

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. According to the USDA Farms to School Census, approximately 190 school districts reported they are participating in farm to school activities. An additional 89 Massachusetts colleges and private schools reported they preferentially purchased local foods.

For the 2014-2015 school year, the Worcester Kindergarten Initiative is serving 675 students in 30 classrooms at nine low-income public schools across the city. The program, which aims to teach young students about healthy eating and where their food comes from, includes field trips to local farms (one urban, one rural), on-site mobile farmers market visits, take home produce and recipes for kindergartners to share with their parents and caregivers, farmer visits, classroom activities, taste-tests, and family cooking demonstrations.

In spring of 2014, the project began planning for the new Harvest of the Month Campaign, which officially launched its expanded year round program. The 12 month campaign includes pledges by participating schools to highlight select fruits and vegetables during the school year and summer food service program. In return, schools receive free promotional materials, including stickers, produce "trading cards," and posters. In its second year of the program, 135 school districts, 13 colleges and universities and 2 medical centers signed on to participate.

For more information:

- MA Farm to School Project:
www.massfarmtoschool.org
- National Farm to School Network:
www.farmtoschool.org

MASSACHUSETTS
Farm to School
PROJECT

DIVISION OF AGRICULTURAL MARKETS, cont.

FARMERS' MARKETS NUTRITION PROGRAM (FMNP)

David Webber

The 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 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 meal deliveries, or distributed at on-site meal programs.

Funding for the FMNP is provided by the USDA's Food and Nutrition Service with an additional required state match.

2014 program information:

- 225 farmers' markets and 394 growers participated, an increase from 228 and 371 respectively.
- Senior FMNP
- \$470,306 "food dollars" (\$52,256 admin funds)
- Seniors Receiving Coupons: 19,379 (includes 424 under-60 disabled individuals)
- Seniors served through bulk purchasing: 3,165
- Benefit level: \$25
- WIC FMNP
- \$335,791 "food dollars" (\$68,778 admin funds)
- WIC Participants Receiving Coupons: 22,514
- Benefit Level: \$20

For more information about the FMNP:

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

FARMERS' MARKET PROGRAM

David Webber

Although there were 22 new Farmers' Markets in 2014, the number that did not return in 2014 meant the overall total increased slightly in 2014, to 251. An additional 41 winter Farmers' Markets were also up and running over the 2013-2014 winter season. Massachusetts Farmers' Market Week was held the week of August 3rd in conjunction with National Farmers Market Week. The annual Massachusetts Tomato Contest was held on Monday, August 18th in conjunction with the outdoor Farmers' Markets at the Boston Public Market.

GROWTH OF SEASONAL FARMERS' MARKETS

YEAR	NUMBER OF MARKETS	PERCENT GROWTH
2009	203	22%
2010	233	15%
2011	250	7%
2012	254	2%
2013	249	-2%
2014	251	.5%

GROWTH OF WINTER FARMERS' MARKETS

YEAR	NUMBER OF MARKETS	PERCENT GROWTH
2009	6	600%
2010	18	200%
2011	35	94%
2012	40	14%
2013	40	0%
2014	41	2.5%

DIVISION OF AGRICULTURAL MARKETS, cont.

NEW SEASONAL FARMERS' MARKETS IN 2014

- HOLYOKE/NEUESTRAS RAICES
- JACKSON SQUARE
- LEE
- LOWELL MOBILE
- METHUEN
- NORTH READING
- PLAINVILLE
- RANDOLPH
- SHREWSBURY
- SPRINGFIELD TOWER SQUARE
- TEWKSBURY
- WATERTOWN
- WEST NEWTON
- WINTHROP
- WORCESTER ART MUSEUM

FARMERS' MARKET RESOURCES

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

A Farmers' Market Managers Workshop held in Worcester in 2014 and co-sponsored by Massachusetts Farmers Markets, the Cooperative Development Institute, and Harvest New England, was attended by approximately 100 Farmers' Market managers. Topics covered included market planning and promotion.

SNAP/EBT AT FARMERS' MARKETS

Increasing access to Farmers' Markets by SNAP participants continues to be a priority. The number of Farmers' Markets accepting SNAP/EBT in 2014 grew from 126 to 134, while SNAP redemption at those markets increased 8.25%, from \$336,049 to \$366,226.

In collaboration with DAR and the Department of Public Health, the Department of Transitional Assistance submitted a proposal to the USDA's Food Insecurity and Nutrition

Incentive Grant Program. Should the Commonwealth receive an award, the funding will allow the development of a statewide matching program for SNAP recipients when they purchase fruits and vegetables from farmers markets, farm stands, CSAs and mobile markets.

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

YEAR	NUMBER OF MARKETS	TOTAL SNAP SALES
2009	30	\$19,119
2010	58	\$122,685
2011	90	\$221,707
2012	110	\$312,835
2013	126	\$336,049
2014	134	\$366,226

*includes direct marketing farmers

FEDERAL - STATE MARKETING IMPROVEMENT PROGRAM (FSMIP) GRANT PROGRAM

Rebecca Davidson

FSMIP, funded through the USDA Agricultural Marketing Service, 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:

- Identifying new wholesale outlets through market research and expanding sales to other outlets
- Researching aggregation/distribution costs of the Food Hub
- Developing a guide to "Scaling up a Food Hub Business Plan" for use by others considering a similar multi-producer approach to marketing
- Assisting farmers to develop harvest, post-harvest, and food safety plans that comply with GAP standards and the FDA Food Safety Modernization Act's Proposed Rule for Produce Safety

DIVISION OF AGRICULTURAL MARKETS, cont.

Massachusetts has been awarded \$652,403 over the past 15 years in support of various agricultural marketing improvement projects. Past projects can be found here: www.ams.usda.gov/AMSv1.0/FSMIP.

For more information on the FSMIP program please refer to www.mass.gov/eea/agencies/agr/markets/fsmip.html.

FOOD SAFETY

Michael Botelho
Bonita Oehlke

Food safety continued to be in the spotlight in 2014, based partly on national outbreaks of foodborne illness 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 2014, 12 mock audits were performed to rehearse GAP procedures, 18 growers entered or maintained their USDA GAP or Harmonized GAP certification, and 18 growers took advantage of the GAP cost share program. There were also 3 food safety trainings held across the state, with over 100 participants. More information about GAP & Good Handling Practices Audit Program can be found at www.mass.gov/eea/agencies/agr/farm-products/gap-and-ghpaudit-program.html

The Food Safety Modernization Act (FSMA, www.fda.gov/Food/GuidanceRegulation/FSMA/default.htm) also continued to be a major topic in 2014, with grower education and outreach performed 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

The Harvest New England Association (HNE) is a collaborative marketing program created in 1992 by the departments of agriculture of the New England states. 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 and collaborative marketing initiatives, brand stewardship, education, relationship building, and support of research and policy development. HNE 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 received a three-year USDA Specialty Crops Block Grant project to fund initiatives including the 2015 Harvest New England Marketing Conference educational program, and a program expansion through new marketing channels. HNE has developed many 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

DIVISION OF AGRICULTURAL MARKETS, cont.

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 2014 Big E Fair was held Friday, September 12-18, 2014 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. The breakdown of vendors was 16 for profit businesses, 7 non-profit organizations, and 8 government agencies, including the Massachusetts State Lottery, that donate a portion of their profit sales to Massachusetts Agriculture in the Classroom. The Western Massachusetts Gardeners Association also provided an educational exhibit in the building. New exhibitors this year included Carol's Kettlecorn, Sugar D.L.'s Bakery, Kringle Kandle Company, and Supah Fans. On Massachusetts Day, which was held on Thursday, September 18th, the lawn in front of the Building was filled with many informational booths promoting tourism and Massachusetts agriculture. Former carpenter and designer of many past Building exhibits, Charles (Chickie) Roy, was the 2014 recipient of the Massachusetts Building "Wall of Fame" award. Special guests for the day included Governor Deval Patrick and Deputy Undersecretary of the USDA, Elvis Cordova.

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 (www.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 (www.mass.gov/Massgrown) continues to increase page views, with a 5% increase in views in 2014 over 2013. 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 24 farms added to the agri-Google map in 2014. 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 (www.mass.gov/eea/agencies/agr/markets/logo-program).

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 2014, there were 76 notifications of promotions within the state, a decrease of 35% from 2013. Of the 76 notifications, 49 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 23 'cents off' coupons ranging in price from \$0.20 to \$3.00. 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

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 organic producers or handlers that are inspected and certified and/or inspected and receiving renewal of certification. In 2014, there were 92 farmers that received Organic Cost Share funds. The total funds allocated by the USDA in 2014 for

DIVISION OF AGRICULTURAL MARKETS, cont.

Massachusetts farmers was \$45,000, of which 100% was spent. Total funds for organic handlers was \$45,700, of which \$34,846 was spent. The deadline for submitting applications to MDAR for reimbursement is October 15th of each year.

SPECIALTY CROP GRANT AWARDS

Julia Grimaldi

John Rosa

In 2014, the United States Department of Agriculture (USDA) awarded MDAR approximately \$458,000 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 14 Massachusetts Specialty Crop grant recipients for FY2014 and their projects are available at www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5109130 beginning on page 24.

VALUE-ADDED TECHNICAL ASSISTANCE

Bonita Oehlke

Both growers looking to add value to their harvest for season extension and diversification and food entrepreneurs with new products have access to inspected shared-use kitchens across the state, including the Dartmouth Grange Kitchen, CCK Pearl Kitchen in Boston, Stockpot Kitchen in Malden, and the Western MA Food Processing Center in Greenfield. A new IQF freezer and frozen storage capacity at the Greenfield facility has provided more space for freezing local produce, increased the opportunity for new sales

to school foodservice customers. MDAR shares resources with growers and food businesses in response to inquiries relating to product development with UMass Amherst Extension and other providers, processing, copacker contacts, public health guidelines and business and marketing opportunities. An initiative with UMass Amherst Dining services connected them to the Massachusetts Cheese Guild's products through a regional distributor.

Close to 60 Massachusetts food companies exhibited at the International Summer Fancy Food Show in New York City, June 29th July 1st. The pavilion organized by MDAR featured products from over 30 local food businesses, including several that originated in shared use kitchens. These entrepreneurial small- to medium-sized food businesses, an important component of job creation in the state's food system, met new customers and developed sales from the 24,000 mostly independent retail buyers in attendance. This trade show has a reputation as the premier marketplace for value-added foods, and is attended by farm stand operators and retail businesses looking to add Massachusetts value-added products to their inventory. Work on the Grain to Glass project concluded with a March kickoff with the MA Brewers Guild to thank the USDA Rural Development and the Federal State Marketing Improvement Program (FSMIP) for their financial support. FSMIP identified this project as one of two to showcase nationally. A focus on local sourcing shows promise for malted grains, hops, pumpkins and specialty ingredients. For more information about this program, see www.mass.gov/eea/agencies/agr/markets/culinary-tourism/value-added-food-products.html



DIVISION OF ANIMAL HEALTH

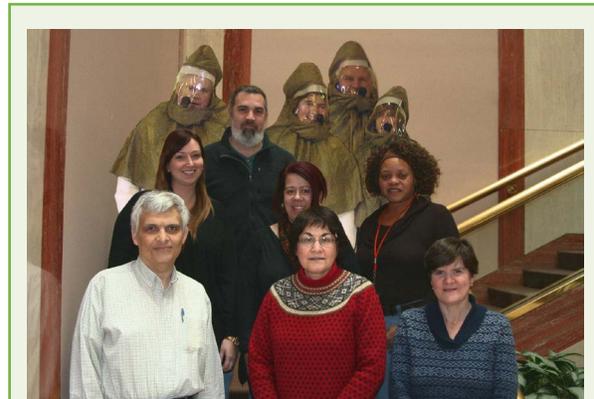
MICHAEL CAHILL, DIVISION DIRECTOR

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 USDA 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 2014:

COOPERATIVE AGREEMENT	FUNDING
<i>Foreign Animal Disease Prevention</i>	\$2,886
<i>Active and Passive Surveillance for the avian program (formerly Notifiable Avian Influenza)</i>	\$65,421
<i>Scrapie</i>	\$5,772
<i>Swine Garbage Feeding Surveillance</i>	\$22,128



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
- Dairy Farmer Tax Credit 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 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 2014, 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 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 2014, the tax credit was triggered in 12 out of 12 months, resulting in a total payout to the state's dairy farmers of \$4 million and a tax credit rate of \$1.82 per hundredweight of milk produced.

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 2014 there were 150 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 2014 the Division issued:

ACTION	NUMBER
10-day Letter of Warning	6
2 out of 4 Letters of Warning	36
3 out of 5 Shut-Off Orders	10
Cease and Desist	18
Antibiotic Residue Shut-Offs	4

DIVISION OF ANIMAL HEALTH cont.

EQUINE PROGRAM

Auzinda Tavares

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 Gaming Commission which promotes the breeding and racing of thoroughbred and standardbred horses in the Commonwealth.

For 2014 MDAR issued 2,309 licenses for horseback riding instructors and licensed 510 riding school/stables.

ENFORCEMENT ACTIONS

In 2014, 5 riding school/stables were found operating without licenses, and 1 riding instructor was found operating without a license. All 6 were issued Cease and Desist orders, and were required to obtain the necessary licenses before resuming operations. One stable owner was issued a notice of hearing for revocation of the stable license. The stable owner chose to forfeit the license to forgo the hearing.

HOMELESS ANIMAL PREVENTION AND CARE FUND PROGRAM

Lauren Gilfeather

The Homeless Animal Prevention and Care Fund (Mass Animal Fund), administered by the Division of Animal Health, seeks to respond to the Commonwealth's ongoing problem of animal homelessness by providing no-cost spay/neuter surgeries for homeless dogs and cats in

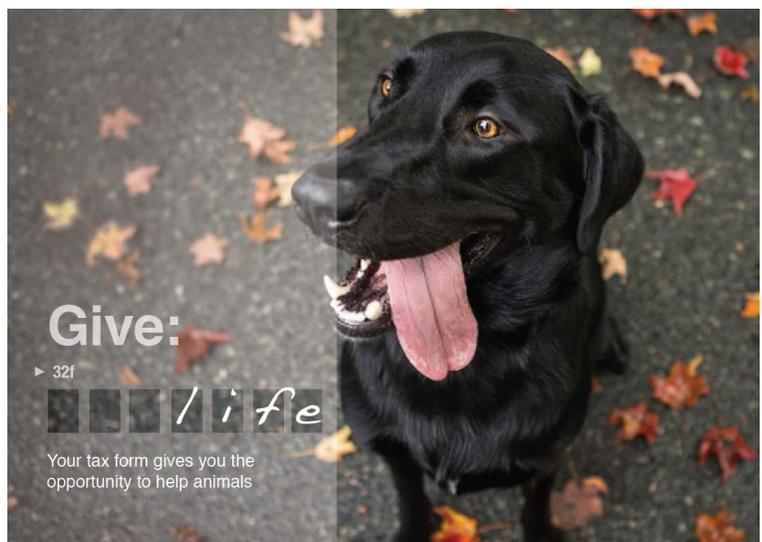
municipal animal control facilities, and for dogs and cats owned by low-income Massachusetts residents. The Fund will also provide free mandatory animal control officer training to create stronger and more uniform enforcement across the Commonwealth.

The Mass Animal Fund is funded through a voluntary tax check-off on the Massachusetts state tax form and through an online donation option. Since the Fund's inception, taxpayers have donated over \$570,000. The Mass Animal Fund Spay/Neuter Voucher Program was started in July 2014; in the first six months of the program, the Fund distributed over \$200,000 to help more than 2,300 dogs and cats get fixed and vaccinated at one of 22 participating veterinary providers across the state. In response to rapid program growth, a Spay/Neuter Community Liaison position was created and filled in December 2014. A new animal control officer training program is set to begin in 2015.

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 in the communities they serve.



DIVISION OF ANIMAL HEALTH cont.

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 a municipal animal inspector fulfills for the Division is conducting the annual inspections of all domestic livestock and poultry housed on properties in his/her respective municipality. 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 2014, there were 509 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 2014 there were 149 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 2014, there were 4 pet shops found to be operating without the required license. All were issued a Cease and Desist order and required to come into compliance before continuing activities. Fines were issued on 9 different occasions based on violations of the regulations, including two fines issued to one store for violations of the regulations, and one individual who continued to operate without a license, in violation of an order to cease and desist.

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 2014 testing season, a total of 12,581 birds were tested for the presence of *Salmonella pullorum*. There were a total of 369 premises inspected in response to requests from flock owners wanting to certify their flocks negative for *S. pullorum*. Each of the 369 premises visited had a minimum of ten percent of the *S. pullorum* samples screened for Avian influenza. The total Avian influenza samples for 2014 were 3508. Two commercial turkey farms requested additional testing; a total of 200 *Mycoplasma gallisepticum*, 200 *M. synoviae* and 200 *M. meleagridis* samples were taken at these two farms.

DIVISION OF ANIMAL HEALTH cont.



Screening tests for *Salmonella pullorum* identified 54 flocks with 146 total suspect/positive birds. Three of the flock owners opted to submit a total of four suspect/positive birds for necropsy, at their own expense, as opposed to waiting the 21- to 30-day period required by National Poultry Improvement Plan protocol before retesting. No salmonella was isolated from any of these birds. Of the 47 flock owners (118 total birds) that chose to retest, 16 flocks (total of 66 birds) tested negative. Thirty-four birds from 20 flocks tested suspect/positive with titers of 1:40 on the retest. Fecal samples collected from each individual bird were negative for salmonella with the exception of 2 samples where a non-group D salmonella was isolated. All of these birds were released from quarantine. Five birds were submitted for necropsy (at owner's expense) from a *Salmonella enteritidis* (SE) vaccinated flock of 137 birds, and no salmonella could be isolated from these birds. Eight birds died before the retest date (2 killed by predator, 1 killed by owner, and 5 died of natural causes). Of the remaining suspect/positive birds retested, 11 remain under quarantine with positive titers, 1 died while under quarantine, 4 birds were submitted for necropsy due to illness in the flock, 1 remains on owners property (SE vaccinated flock), 2 positive birds are in the process of being retested, 1 bird tested negative after 54 days, and another bird tested negative after 94 days (based on multiple retests). Fecal samples were submitted and run on all the positive birds, and no salmonella was isolated

from any of these samples. No salmonella was isolated in any of the necropsies performed on birds submitted.

There were 12 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

Elsie Colon

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 2014 there were 3,415 reported domestic animal bites or scratches to humans or other domestic animals and 2,317 possible domestic animal exposures to rabies. Of the 2,317 possible exposures, 167 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

DIVISION OF ANIMAL HEALTH cont.

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 2014, there were 193 rabies vaccination clinics promoted through this service. As part of the 13th 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 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 256 suspected cases of reportable diseases in 2014, including the following:

CASES	DISEASE	ANIMAL(S) IMPACTED
183	Parvovirus	dog
146	<i>Salmonella pullorum</i>	poultry*
21	Leptospirosis	cattle, dog
16	Canine Influenza	dog
12	Avian influenza	poultry**
8	Panleukopenia	cat
4	Canine Distemper	dog
4	Strep equi (Strangles)	horse
3	Babesia	dog
3	Feline Calcivirus	cat
3	Tularemia	cat
2	Bovine Viral Diarrhea	cattle
2	Eastern Equine Encephalitis	horse, deer
1	Bluetongue	cattle*
1	Brucellosis	dog
1	Campylobacter	dog
1	Listeriosis	goat
1	Sarcoptic Mange	swine

* Follow up testing confirmed negative status

** Follow up PCR testing confirmed negative status

SHELTER AND RESCUE PROGRAM

Patricia Cabral

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

DIVISION OF ANIMAL HEALTH cont.

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 2014, there were 332 registered shelters and rescues operating in Massachusetts. The Division issued 67 Cease and Desist orders to shelters and rescues that had failed to register with MDAR and to operate within the prescribed rules (1-AHO-05). Administrative fines were issued to 18 groups that failed to comply with issued Cease and Desist orders.

SWINE PROGRAM

Ester Wegman

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 supports multiple programs based upon seasonal or workload needs, including nursery inspection, Cooperative Agriculture Pest Survey (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 challenging 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 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. It 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 2014, the FPPI Program collected more than \$1.6 million 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, Sarah Grubin, Stacy Kilb, Alexandra Lopez-Swetland, Phyllis Michalewich, Laurie Rocco

APIARY INSPECTIONS

The beekeeping industry benefits our state's fruit and vegetable commodities by providing pollination services that would not otherwise be available, ensuring fruitful crops. As a service to Massachusetts beekeepers, MDAR Apiary Inspectors conduct hive inspections to check for and assist with the detection of diseases and/or pests, and also provide advice about how to deal with those any problems found and how to maintain healthy colonies. Apiary Inspectors also certify the intrastate and interstate movement of honey bee colonies and inspect these colonies for diseases, pests and unwanted bee species.

In 2014, approximately 3,500 resident beekeepers maintained over 8,000 hives in Massachusetts. These numbers fluctuate from year to year due mainly to high winter hive mortality and the addition of hobbyist beekeepers to county apiary inspection lists. Approximately 20,000 honey bee hives managed by six commercial migratory beekeepers entered Massachusetts this year for apple and cranberry pollination service. These commercial hives were leased to Massachusetts growers and originated from Florida, Georgia, and Louisiana. Most were part of

DIVISION OF CROP AND PEST SERVICES, cont.



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 2014. With 5,383 resident and migratory hives inspected, only 15 resident hives were found to be infected (less than 1%).
- European Foulbrood (EFB): EFB was the most commonly detected disease, with over 93 hives that needed to be treated. There were also detections of heavy cases of chalkbrood and sacbrood found during hive inspections.
- Varroa Mite (VM): In 2014 all hives inspected for AFB were also monitored for VM. All hives inspected contained populations of VM. High VM loads can foster high virus loads, and when this is combined with other parasites such as the microsporidian *Nosema ceranae*, maintaining honey bee colonies can become difficult. Parasitic mite syndrome cases were also observed, as was a growing number of hive collapses.

BRANDING LAW

Howie Vinton

Branding laws require that all containers in which potatoes or apples are packed or sold must be properly labeled with contact information of the packer/distributor and the grade of the fruit/vegetable. For apples, this label must also include the variety and minimum size or count.

Inspections were made at hundreds of retail stores for conformance with the Branding Laws on potatoes and

apples. Any misbranded products found must be either relabeled or removed from sale by issuing a Stop Sale Order. There were 43 Stop Sale Orders issued on 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)

Sarah Grubin

Jennifer Forman Orth

As part of the Cooperative Agriculture Pest Survey (CAPS) program, nursery inspectors performed inspections for the following non-native pests at 56 nurseries in 13 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*
- Chinese longhorned beetle, *Trichoferus campestris*
- Mile-a-minute vine, *Polygonum perfoliatum*

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 farms and nurseries across the state, targeting the following pests:

- Golden twin spot moth, *Chrysodeixis chalcites*
- Honeydew moth, *Cryptoblabes gnidiella*
- European grapevine moth, *Lobesia botrana*
- Green oak tortrix, *Tortrix viridana*

None of the above target species were found.

Other CAPS projects included:

- Year 5 of a biological control program using beetles to control invasive Mile-a-minute vine in Canton and Falmouth.
- Management of two Kudzu infestations in the town of Needham (Norfolk County). Growth at the first site has

DIVISION OF CROP AND PEST SERVICES, cont.

been reduced by more than 75% after 3 years of control. Control just began in 2014 at the second site.

- Continued management of Giant Hogweed in Hampden and Berkshire Counties. Seven sites in Hampden County were declared eradicated.
- Farm Bill-funded survey of apple orchards to detect the presence of diseases and pests of apples. No targets were found in these surveys.
- Collaboration with USDA APHIS-PPQ to present a workshop for field identification and taxonomy of Phytoplasma. The workshop was attended by 20 participants from 4 states representing state, federal and university interests.
- Cerceris Wasp Survey – 84 sites with colonies in 6 counties. Over 475 jewel beetles were collected and identified. No target pests were found.

As part of continued pest outreach efforts, MDAR continued to perform Asian Longhorned Beetle (ALB) outreach in the Worcester County area and forest pest outreach statewide. Outreach in 2014 included more than 35 presentations and tabling opportunities. Staff distributed more than 50,000 copies of print outreach materials, including 22,000 pest id cards. August 2014 was also once again officially declared by the Governor as Forest Awareness Month. Outreach staff also continued the focus on Emerald Ash Borer.

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 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 2014, 60 COOL initial and follow-up inspections were assigned and completed. The inspections included new record-keeping guidelines from USDA, requiring additional records verification. MDAR received \$37,000 in reimbursement from the USDA for the inspections.



DIVISION OF CROP AND PEST SERVICES, cont.

FEED PROGRAM

Howie Vinton

The Feed Program registers pet foods distributed or manufactured in Massachusetts and commercial feeds that are manufactured, sold, or distributed in this state. In 2014 the Feed Program reviewed and registered 12,988 products, with receipts of registered products and late fees totaling \$1.3 million, nearly a 10% increase over 2013 totals. There were 240 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 2014 that were not registered. There were 132 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 2014, 71 companies were issued licenses to manufacture and distribute fertilizer in Massachusetts, and over 3,600 products were registered as specialty fertilizers. In addition, 91 lime products were registered. A total of 319 samples of fertilizer products being offered for sale in Massachusetts were tested for Nitrogen, Phosphorus and Potash levels. Assessment penalties in shortage of guaranteed levels were charged on 34 products found to be deficient (9%), with a total of \$2,543 fines collected and turned back to 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 \$500,000, an increase of 9% over 2013 totals.

FRUIT AND VEGETABLE INSPECTION

Bob Rondeau

Demand for fruit and vegetable inspection services continues to be mainly 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 34,421 cartons of apples were certified in 2014 as complying with the US Export Apple and Pear Act. Receipts in excess of \$21,111 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 2014, 25 companies applied for USDA GAP/GHP and GAP Harmonized audits and completed the inspection process.

NURSERY INSPECTIONS

Phyllis Michalewich

The Nursery Inspection Program requires the inspection and certification of nurseries and greenhouses in the state. There are currently 4 inspectors on staff that conduct annual inspections of all certified nurseries in the Commonwealth to ensure that their stock is 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.

MDAR licensed 993 agents and 170 growers in 2014, for a total of \$82,950 in receipts. There were 177 grower inspections performed (including growers with multiple locations). The top pests/pathogens identified during these inspections were powdery mildew, cedar apple rust, leaf spot, and slugs. Inspectors also conducted trace forward

DIVISION OF CROP AND PEST SERVICES, cont.

inspections to determine whether any growers or agents received nursery stock from other states that had been infected with Ramorum blight or Ralstonia.

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 2014, staff inspected and issued 905 Federal Phytosanitary Certificates for the State duty stations at Boston and Amherst, 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. Staff also issued 783 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 16 of these inspections conducted in 2014, as well as 7 post-entry inspections of plants that were brought into the Commonwealth.

PESTICIDE PROGRAM

MDAR 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 the Massachusetts Department of Environmental Protection (DEP). In 2014, MDAR staff conducted a special review in support of the registration of Clearcast Herbicide, which contains the active ingredient imazamox. Following the registration of this new aquatic herbicide product, DEP's 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. The requirements for the use of the previously approved Clipper aquatic herbicide were modified based on the experiences with its permitting for use in the Commonwealth.

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.

Relative to monitoring efforts, the manuscript describing the results from the study on the pesticide occurrence in a suburban pond (Spy Pond, Arlington, MA) and river (Aberjona River, Winchester-Woburn, MA) that was conducted in 2009 and 2010 was published in the August, 2014 issue of Bulletin of Environmental Contamination and Toxicology (Volume 93, Issue 2, pages 228-232). During 2014, MDAR staff continued to monitor for pesticides in the Aberjona River. In samples collected during the summer of 2014, only imidacloprid was detected, and at levels below 1 ppb. These levels did not exceed EPA-established benchmarks for the protection of human health and aquatic life.

DIVISION OF CROP AND PEST SERVICES, cont.

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. It also 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 100% compliance. In 2014, 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 2013. Also during 2014, 99 CFPA inspections were completed, resulting 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 MDAR pesticide programs.

Overall, a total of 482 pesticide inspections, covering a wide range of pesticide use in the Commonwealth, were completed in FY14. This is a significant increase from FY13, when 208 inspections were completed. This is attributed to previously open staff positions that have since been backfilled. A total of 25 WPS inspections were conducted in FY14, compared to 13 in FY13. FY14 inspections of note include:

- 80 physical and 24 documentary samples were collected during inspections.
- 16 Producer Establishment Inspections (PEI) were conducted using federal credentials.
- 12 Restricted Use Dealer inspections were completed.
- 246 certified applicator records inspections were completed.
- 5 Agricultural For Cause (follow-up) inspections were completed
- 57 Non-Agricultural For Cause inspections were performed, following 57 consumer complaints or licensing violations due to possible misuse pursuant to Massachusetts requirements 333 CMR, were completed, following 57 consumer complaints and/or licensing violation inspections..
- A total of 45 Non-Agricultural Use Inspections were completed.
- MDAR completed a total of 29 Agricultural Use Inspections in FY14, of which 25 were related to Worker Protection Standards (WPS).

The enforcement staff conducted 14 Restricted Use Pesticide (RUP) Dealer inspections, verifying that the necessary components were present within the Dealer's records as outlined in 333 CMR 9.04 and performing an inventory audit. These audits are a requirement as a result of a department-wide audit by the Massachusetts Government Office of Accountability; after the September 11, 2001 attacks and Homeland Security considerations, it was determined that a spot check of RUP inventory should be performed to assure RUPs are accounted for.

DIVISION OF CROP AND PEST SERVICES, cont.

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 8 new active ingredients were reviewed and registered during 2014:

New Chemicals:

- Lufenuron
- Sulfoxaflor
- Sodium metabisulfate
- Cyantranilprole
- Pyrifluquinazon

New Biological Pesticide Active Ingredients:

- *Banda de Lupionu Albus doce* (BLAD)
- Rhamnolipid
- *Burkholderia* spp.

None of these new active ingredients met the criteria for 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 lectures on the environmental fate of pesticides and groundwater protection as part of the UMass Extension Pesticide Education Workshops on March 25th and April 3rd.

Staff continued to be involved in discussions to address concerns expressed by citizens on Cape Cod relative to the potential impacts to groundwater resources from the proposed herbicide applications in power line corridors on Cape Cod. In response to a constituent's inquiry, a groundwater impact assessment was conducted using EPA's models for estimating pesticide exposure to groundwater. The results indicated that the exposure was not of concern for human health effects.

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 also attended biannual meetings of state officials and EPA Office of Pesticide Program staff.

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.

MDAR 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 upon an assessment by program staff and subsequent review and commenting submitted by DEP 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 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 2014, MDAR supplied the UMass Cranberry Station with all

DIVISION OF CROP AND PEST SERVICES, cont.

pertinent WPS information including “How to Comply” manuals and posters. Pesticide enforcement inspectors made WPS materials including record keeping 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 2014, Springfield Technical Community College (Springfield) and the UMass Cranberry Station received cards.

Following trainings, a total of 62 individuals received Worker Verification cards, while 76 individuals received Handler Verification cards.

In 2014 MDAR also began to do more extensive outreach to the Organic Community, which is also required to comply with WPS if applying organic pesticides.

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 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.

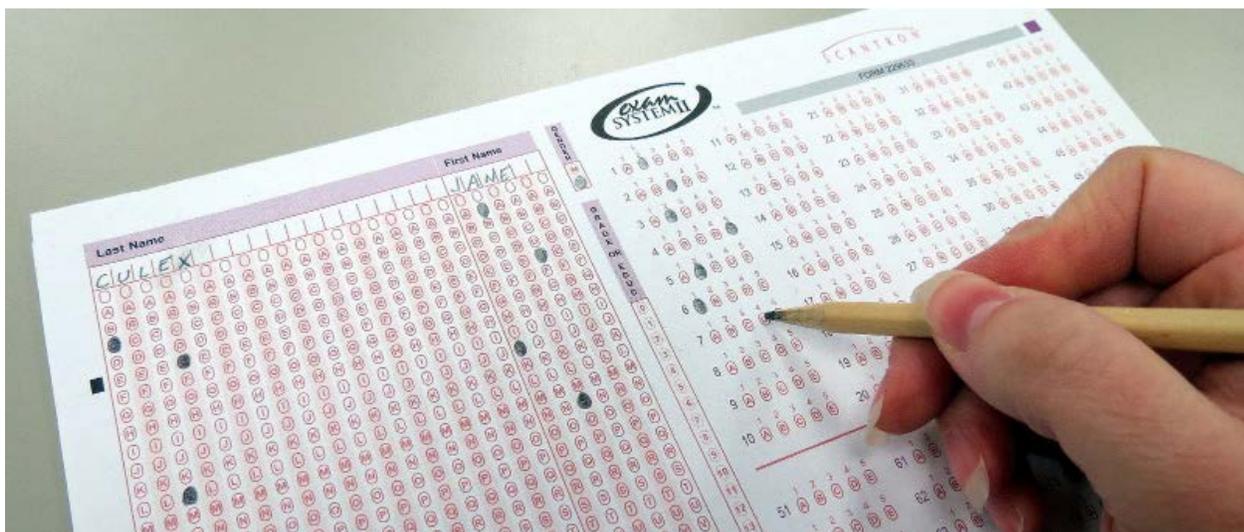
Certification and Licensing Exams

Pesticide examinations are offered to individuals seeking pesticide licensure throughout the year, with a minimum of one exam each month. In 2014 MDAR administered 25 pesticide exams for the four license types. A total of 2,055 individuals registered for exams (1,807 took the exam, 248 were no-shows). Out of the 1,807 who took exams, 1,404 passed (77.7%). Receipts from exam fees generated a total of \$171,150 in 2014; 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



DIVISION OF CROP AND PEST SERVICES, cont.

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 1,091 new licenses issued in 2014, and 7,457 renewal licenses, generating total receipts of \$1,034,625 for 2014.

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 2014, there were 1,217 applicators chosen as part of a random audit to verify that they had met the required number of contact hours by the end of a 3-year training period. There were 1,069 audits approved, an 87.8% 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)

Trevor Battle

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 FY2014, MDAR approved 359 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 1st, at a cost of \$300 per EPA number. Registrations of products with new active ingredients are assessed a fee of \$750 each.

There were 8,094 pesticide products renewed in 2014 and 894 new products registered, which represented receipts of \$2,428,200 and \$268,200 respectively. There were 7 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 2014, 18 products were reclassified as State Restricted Use Pesticides (SRUP) by the Massachusetts Pesticide Board Subcommittee. The Subcommittee also

DIVISION OF CROP AND PEST SERVICES, cont.

reclassified 59 subsurface termiticide products from State Restricted Use to non-classified or general use, after finding that it was no longer necessary to classify such products as SRUP given State Pesticide Regulations; the “Subsurface Application of Termiticide” regulations require that “all pesticide applicators who make subsurface applications of pesticides for control of termites shall be certified by the Department in Category 43 - Termite and Structural Pest Control or shall work under the direct supervision of an individual who is certified by the Department in said Category.”

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 Needs registration may be issued by the state under section 24c of FIFRA. There were no new SLNs registered in 2014.

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 \$300 fee. There was one new EUP granted in 2014 for PoaCure 25% EC (active ingredient methiozolin). The use pattern of the PoaCure EUP is ground application to golf course turf for control of annual bluegrass and other grass weeds, with the purpose of the EUP being to obtain extended scientific data on efficacy and phytotoxicity on non-target plants in real golf course management environments.

PESTICIDE USE REPORTS

Steve Antunes-Kenyon

MDAR 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 2014 forms were mailed to all licensed applicators for summary reporting.

RIGHTS-OF-WAY (ROW) MANAGEMENT

Mike McClean

The 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. It 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 26 “Use Observations” along rights of way in 2014. One record keeping inspection was also conducted, and one Limited Application Waiver was issued to the Town of Braintree. One complaint investigation was conducted that resulted in two Letters of Warning being issued. A follow-up inspection was conducted concerning the use of herbicides along the ROWs in the Town of Pepperell without an approved Vegetative Management Plan, Yearly Operational Plan or appropriate certification. As a result, Letters of Warning were issued to J. Holiday Landscape Design and Tree Service and the Pepperell Department of Public Works.

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 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 2014, 7 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 2014, consisting of the names, rates and amounts of pesticides to be applied along specific ROWs, and also 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. These plans covered operational activities along ROWs in 240 municipalities.

DIVISION OF CROP AND PEST SERVICES, cont.

Sensitive Areas

The ROW Program, along with DEP, reviews and approves 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 an herbicide formulation.

Outreach Activities

The ROW program participated in an educational outreach course in 2014, hosted by the University of Massachusetts. The target audience was Massachusetts Pesticide Applicators, and focused on invasive plant identification, control strategies, and the ROW and pesticide regulations.

ROW program also attended the annual safety training at Vegetation Control Service, Inc. in Orange, Massachusetts.

RIGHTS-OF-WAY VEGETATION MANAGEMENT

Mike McClean

Review Process

There were no new herbicide reviews completed during 2014. 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 DEP.



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 the use of natural resources, promotes energy efficiency and the 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)
- Agricultural Food Safety Improvement Program (AFSIP)
- 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
- Urban Agriculture Program
- Urban Agriculture Grant 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: Rose Arruda, Dake Henderson, Laura Maul, Gerald Palano

AGRICULTURAL BUSINESS TRAINING PROGRAM (ABTP)

Rick Chandler

The Agricultural Business Training Program (ABTP) consists of the following courses which are offered over the winter season:

- Exploring the Small Farm Dream: A five session course for pre-venture and just beginning farmers deciding on early ideas.
- Planning For Startup: A six session course for those a step beyond Explorer who have firm access to land and a clearer sense of what they want and are capable of doing, but who do not yet have a financial, marketing and personnel track record for their enterprise.
- Tilling the Soil of Opportunity (TTS) Full Business Plan Course: A ten session course for existing agricultural enterprises that will benefit from an organized look at their current operation in order to

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

plan for growth and change. At least two years of farm income and record keeping are required.

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

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 489 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 address environmental concerns on farms. In Fiscal Year 2014, 33 projects were funded totaling \$375,000. 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) Environmental Quality Incentives Program (EQIP) for environmental practices on farms, enabling the completion of costly projects 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 FOOD SAFETY IMPROVEMENT PROGRAM (AFSIP)

Laura Maul

AFSIP is a new DACTA program that was created to help agricultural operations address food safety risks. Through the implementation of food safety measures, farmers can maintain or increase their competitive market access while reducing food safety risks. Participants selected to participate in the program are reimbursed up to \$20,000 or 75% of their total project costs.

AFSIP funds practices that help minimize the risk of microbial contamination and food-borne illnesses. In addition, eligible upgrades increase competitive market access by meeting buyer demands for demonstrated practices that work towards protecting public health and food safety.

Projects are categorized as produce or aquaculture. Examples of projects in the produce category include wildlife fencing, packing shed walls, ceilings and light fixtures, field harvest systems, hand washing sinks, restrooms, drainage systems, and water systems. Examples of projects in the aquaculture category include ice machines, harvest gear, and testing/monitoring equipment. For FY2014, the program awarded \$65,000 to 23 produce and aquaculture operations across the state. For FY2015, program funding was subsequently increased to \$200,000.

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 2014, the APR program protected 17 farm projects covering over 1,131 acres. This raises the total

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

farm properties enrolled to 874 and the total farmland protected to 70,754 acres. To acquire these restrictions, the program invested in state bond funding that was matched by another \$5,021,300 in reimbursements from the federal Farm and Ranch Lands Protection Program (FRPP).

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 economy.

In FY2014, the fifth year of the program, 10 farms participating in AIP received technical assistance and 9 of these farms completed a business plan and received a grant award. An average of \$5,295 per farm was provided in technical assistance and \$500,000 in total grant funding, an average grant of \$55,556 per farm. AIP grants are being spent on farm improvement projects which include: a hard cider processing facility, vegetable washing and packing facilities, a potato storage facility, an equipment repair shop, new and improved retail buildings, livestock housing, apple trees and trellis system, hay barn repairs, and fencing. 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.

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.

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
- Less than 10 cubic yards or less than 5 tons per day of food material

In 2014, 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. Now in its 8th year, Ag Energy seeks to help farms become more environmentally and economically sustainable.

Reimbursement grants of between \$25,000 and \$50,000 have been awarded in the past, with program requirements, including technology priorities, revised on an annual basis. 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.

In 2014, 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 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.

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 2014, over 1,594 farms were enrolled, totaling 3,948 utility accounts. With a conservative estimate of \$5,000 per year average for electric and natural gas expenditures, the 10% discount savings is approximately \$797,000 for 2014 alone.

Since 2012, MDAR continues to enhance its 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.

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

ENERGY PROGRAM

MASSACHUSETTS FARM ENERGY PROGRAM (MFEP)

Gerry Palano

MFEP is a full-service technical assistance program helping over 500 agricultural producers across all agricultural sectors for the past seven years. A total of 207 projects have been installed at 131 farms, with average annual energy savings of more than \$8,000 per farm, 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 2014, MFEP served more than 60 Massachusetts farms with technical and financial assistance, and partnered with federal and state agencies, public utilities, and non-profits to develop and complete 18 farm energy projects throughout the state. MFEP also helped 22 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 2014 resulted in annual savings of over 126,112 kWh of electricity, and more than 125 tons of CO₂. Nine solar photovoltaic projects completed in 2014 are generating 117,315 kWh of electricity annually. Energy efficiency improvements installed at farms ranged from energy efficient evaporators for maple producers, to variable frequency drive motors for dairies, to thermal blankets and high efficiency heating systems for greenhouses.

MFEP leveraged \$361,216 in federal, state, and ratepayer funds, and committed \$21,965 in MDAR incentives funds to energy efficiency projects in 2014. This year's farm energy projects resulted in annual energy savings of over \$60,000, helping farms create and maintain jobs and reinvest savings into the farming operation and local economy.

In 2014 MFEP also matched MDAR funds with a USDA Rural Business Enterprise grant of \$29,000, and was awarded a two-year NRCS Conservation Innovation Grant of \$75,000 to promote innovative energy conservation

practices and solar thermal technologies on farms. An outcome of MFEP's research in collaboration with the MA Clean Energy Center will be recommendations to NRCS regarding Environmental Quality Incentives Program (EQIP) payments to farmers installing solar thermal systems in Massachusetts.

MFEP staff also provided one-on-one mentoring to several farms preparing to submit projects for MDAR's Agricultural Energy Grant Program and the NRCS EQIP Grant Program – resulting in 8 highly competitive grant awards. Staff also presented information to farms at conferences (SEMAP, NE Greenhouse Conference) and presented at the Franklin County Farm Bureau annual meeting.

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 FY2014, the Farm Viability Enhancement Program provided technical assistance to 10 farms with 10 completing business plans. Of these, 9 farms received funding and were placed under Agricultural Covenants protecting 1,230 acres. The Program impacted an additional 779 acres of leased land and protected land under participant management. Fiscal Year 2014 spending was \$650,000 in direct grants to farms and over \$75,000 was spent on technical assistance costs to consultants and business plan writers.

Since the Farm Viability Program was initiated in 1996, 462 farms have been selected to participate in the program. A total of 395 farms have now been protected by Covenants and received grant awards.

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

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 food 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 \$14,985,000 in FY2014. 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 \$985,000 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, purchases 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 2014, \$780,000 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. 2015 distributions are detailed below (percentages based on America’s Second Harvest statistics).

FOOD BANK	LOCATION	PERCENT
<i>Food Bank of Western Massachusetts</i>	<i>Hatfield</i>	<i>13.99%</i>
<i>Greater Boston Food Bank</i>	<i>Boston</i>	<i>65.13%</i>
<i>Merrimack Valley Food Bank</i>	<i>Lowell</i>	<i>8.44%</i>
<i>Worcester County Food Bank</i>	<i>Shrewsbury</i>	<i>12.44%</i>

MATCHING ENTERPRISE GRANTS FOR AGRICULTURE (MEGA) PROGRAM

Kate Hayes

MEGA began its fifth 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 data from the 2012 USDA Census of Agriculture. 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 receive grants up to \$10,000 that they must match in cash on a one to one basis. For the reason that many new farmers lease rather than own farmland, there is no land protection component to MEGA. Grant and matching funds must be spent on equipment or

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

infrastructure improvements that will have a demonstrable positive impact on future economic viability.

In FY2014 \$93,712 in grants ranging from \$4,000 to \$10,000 were distributed to 10 farms. Additional funding was spent on technical assistance consultations and business planning to 10 farms.

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 that set up the pilot program for management of milkhouse wastewater was extended through the end of 2017. 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 2014, a total of 13 farms implemented pilot projects, including 6 vegetated treatment areas, 5 bark mounds and 1 bark bed.

STATE-OWNED FARMLAND LICENSING PROGRAM

Barbara Hopson

Since 1974, MDAR has made “vacant public lands” available to groups and individuals for farming and community gardening. The “vacant public lands” of primary concern are former state hospital farmlands which were left abandoned or under utilized when the Department of Mental Health (DMH) and Public Health (DPH) shut down their institutional farms in the 1960’s and 1970’s. 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.

During 2014, 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. In 2014, three farmers were selected to utilize all of the agricultural land and farm buildings.

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

URBAN AGRICULTURE

Rose Arruda

Urban Agriculture is an important component to the growing local food movement, nationally and across the Commonwealth. MDAR recognizes that urban food production will play an important role in addressing health, social, economic and environmental issues and is working with organizations and sister agencies to support initiatives for urban, sustainable food production.

With the Patrick Administration's official launch in February 2014, grants from the Urban Agriculture Program were awarded to several urban farming pilot projects.

The program addresses challenges facing urban farmers and supports municipalities with technical assistance to help with the development of zoning ordinances, public education and land assessments. The program is also designed to build community partnerships, increase access to fresh, nutritious food for urban residents, and to promote viable farming methods and local initiatives that other organizations, and cities, can replicate and benefit from.

URBAN AGRICULTURE GRANT PROGRAM

Rose Arruda

The Urban Agriculture Grant Program encourages cities to grow their own food. The program addresses challenges facing urban farmers such as suitable land, confined space, limited sunlight, nutrient-poor soils, high start-up costs, restrictive zoning rules, and lack of farming experience and business training. The program is also designed to build community partnerships, increase access to fresh, nutritious food for urban residents at risk for diet-related chronic diseases, and promote viable farming methods and local initiatives that other cities can replicate and benefit from.

Municipalities, non-profit organizations and other governmental entities are eligible to apply for grants in the range of \$5,000 to \$40,000, with preference for projects that attract multiple partners and funding sources. In FY2014, MDAR awarded \$200,000 in grants to 9 urban farm pilot projects in Boston, Everett, Lawrence, Lowell, Somerville, Springfield and Worcester.

APPENDIX 1: STAFF DIRECTORY

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

LAST NAME	FIRST NAME	E-MAIL	PHONE	DIVISION	TITLE
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				Ag Conservation &	
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				Ag Conservation &	
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APPENDIX 1: STAFF DIRECTORY cont.

LAST NAME	FIRST NAME	E-MAIL	PHONE	DIVISION	TITLE
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APPENDIX 1: STAFF DIRECTORY cont.

LAST NAME	FIRST NAME	E-MAIL	PHONE	DIVISION	TITLE
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Rosa	John	John.Rosa@state.ma.us		617-626-1730	Accountant
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Szocik	Carol	Carol.Szocik@state.ma.us	617-626-1718	Legal Services	Senior Land Use Planner
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Webber	David	David.Webber@state.ma.us	617-626-1754	Agricultural Markets	Program Coordinator
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