









2012 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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DEVAL L. PATRICK Governor TIMOTHY P. MURRAY Lieutenant Governor RICHARD K. SULLIVAN JR. Secretary

GREGORY C. WATSON Commissioner

An attendee at a Farm to School event in Sandwich made a comment at a locally sourced luncheon that sums up well the trending we are seeing for Massachusetts agriculture: "Local agriculture is HOT!" 2012 saw continued interest in local agricultural initiatives. In many areas – whether in energy efficiency (1st in nation in overall efficiency), direct sales at the farm (2nd in nation), and number of farmers' markets (4th in nation) – Massachusetts ranks in the top 10 nationwide.

The year brought many new milestones to MDAR as well. In April of 2012, former Commissioner Scott J. Soares moved on to pursue an opportunity at the Cranberry Marketing Committee and on Massachusetts Ag Day (April 3rd), we made a smooth transition to my appointment by Governor Deval Patrick to serve as Commissioner of the Department. I also served as Commissioner in 1990 and I can say with great excitement that the "early seeds" of interest in local agriculture have blossomed heartily thanks to the passionate commitment and hard work of folks from all corners of our state. And interest is not confined to any particular demographic; there are community grassroots efforts in urban "food desert" neighborhoods as well as strong support from the Patrick/Murray administration and legislature.

In 2012 MDAR was the proud recipient of a "Bright Ideas" Innovations in Government award from the Harvard Kennedy School in recognition of our *MassGrown & Fresher* program (www.mass.gov/massgrown) – an innovative approach to promote farms, farmers' markets, farm stands, CSA's, agricultural fairs, and more. This marketing tool is available free to the Massachusetts agricultural community and provides consumers an easy way to find locally grown and produced products.

The state contributed a record amount of funding - \$12 million- in Fiscal Year 2013 to support the distribution of emergency food to each of the four major food banks. For 2012, \$720,000 worth of fruit, vegetables, eggs and dairy products were purchased from Massachusetts farmers and distributed through MEFAP. Among the most popular of these fresh high quality items were milk, squash, apples, sweet corn, onions, peppers, and collard greens.

By the end of 2012 the number of farms protected from development under the APR program reached 832 and the state moved closer to protecting almost 70,000 acres of agricultural land.

Going forward in 2013, we'll be looking at ways to build resilient infrastructures in both rural and urban areas that will protect valuable farm land and help increase access to nutritious locally grown food to all Massachusetts residents. Increased access also means ensuring that the food which is produced on our farms is done so in a way that safeguards public health, the environment, utilizes energy efficient technologies, and employs sound stewardship practices. It also means developing appropriate preparedness plans to protect our existing agricultural assets against increasing extreme weather events and invasive species.

Massachusetts is well poised to continue to lead the nation in sustainable economic development, quality of life, and resource protection as it relates to a multitude of sectors including agriculture. My thanks go to MDAR staff who helped provide a 2012 snapshot view of our state's efforts to promote a sustainable agricultural future. I am truly honored to serve Massachusetts' agricultural community to help get us there!

Gregory C. Watson, Commissioner

Cregory C. Watson

2012 ANNUAL REPORT





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

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

Cover Photos: Thanks to the following MDAR staff: Gerard Kennedy (Photo 1) and Rick LeBlanc (Photos 2, 3 and 4)



COMMISSIONER OF AGRICULTURAL RESOURCES

BIOGRAPHY OF COMMISSIONER GREGORY C. WATSON



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

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

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

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

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

Commissioner Watson serves on the boards of the U.S. Offshore Wind Collaborative, the Buckminster Fuller Institute, and Ocean Arks International. He currently resides in Falmouth, Massachusetts.



AGENCY ORGANIZATIONAL OVERVIEW

MISSION

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

HISTORY

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

This overview is accurate as of March 2013. **Agricultural Lands Preservation Committee** Farm Technology Review Commission **Board of Food and Agriculture Massachusetts Dairy Promotional Board Commissioner Greg Watson Massachusetts Food Policy Council** Massachusetts Pesticide Board **Assistant Commissioner** Vacant **Public Market Commission** State Reclamation & Mosquito Control Board **Chief of Staff** Anna Waclawiczek **Division of Agricultural Conservation Human Resources** and Technical Assistance **Director Mary Beth Burnand Director Gerard Kennedy Legal Services Division of Agricultural Markets** General Counsel Tara Zadeh **Director Mary Jordan** Office of Finance **Division of Animal Health Chief Financial Officer Michael Rock Director Michael Cahill Outreach and Event Coordination Division of Crop & Pest Services Director Rose Arruda Director Lee Corte-Real**



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 of all divisions to optimally achieve the Department's objectives towards a vibrant and sustainable agricultural community in 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 2.







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, Farm Technology Review Commission (FTRC), 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



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

CHAIRMAN

Gregory C. Watson, Commissioner, MDAR

STAFF LIAISON

Carol Szocik Carol.Szocik@state.ma.us (617) 626-1718

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 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

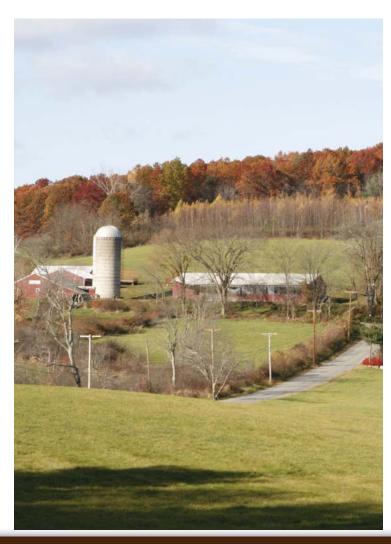
PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

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

For the report of the Board, please see the Agricultural Preservation Restriction Program, under the Division of Agricultural Conservation and Technical Assistance (DACTA).





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

CHAIRMAN

Fred Dabney

STAFF LIAISON

Anna Waclawiczek, MDAR Anna.Waclawiczek@state.ma.us (617) 626-1703

Massachusetts General Law, in the enabling statute for the Department of Agricultural Resources, directs that the agency shall be "...under the supervision and control of a board of food and agriculture...". The Board consists of 7 members, each, from a different county, appointed by the Governor. At least 4 members of the board must be farmers whose principal vocation is the production of food and fiber. Appointments are for 7 years, or until a successor is qualified. The Board advises the Commissioner on new programs and initiatives, approves the appointment or dismissal of many of the agency's senior staff, and serves as a key conduit for information exchange between industry and the Department.

The Board has served continually for 160 years to promote crop and animal husbandry in the Commonwealth and to represent fairly, every class of agricultural knowledge in the state.

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Richard Canning – Barnstable County, farmer Frederick Dabney – Bristol County, farmer Judy Leab – Berkshire County, farmer John Lebeaux – Worcester County, town administrator Frank Matheson – Middlesex County, farmer Gordon Price – Essex County, farmer Kimberly Stevens – Franklin County, farmer

2012 ACTIVITIES OF THE BOARD

In 2012 the Board met 3 times for regular meetings (March, June, September), and once for a special meeting called by the Chairman (October). Over the course of the year, the Board reviewed the Department's operating budget, received updates on departmental programs and services, and considered various agriculturally-related issues at hand. Additionally, the Board was called upon in September to vote yea or nay, as statutorily mandated, on a new Assistant Commissioner for the Department. No candidate was selected. In the face of possible budget reductions, a decision was made to delay the hiring of an AC until Spring 2013.



FARM TECHNOLOGY REVIEW COMMISSION (FTRC) (CHAPTER 310 & 11 OF THE ACTS OF 2008)

CHAIRMAN

The Commissioner of Agricultural Resources' designee, Gerard Kennedy, Director of the Division of Agricultural Conservation and Technical Assistance, MDAR

STAFF LIAISON

Gerard Kennedy Gerard.Kennedy@state.ma.us (617) 626-1773

The role of the FTRC is to study and recommend options for updating farming technology. This is a broad mandate, which includes but is not limited to: ways to promote energy conservation; collaborative purchasing; purchasing and selling of energy; and energy saving technology. In addition, the Commission will also recommend alternative options for agricultural sustainability and growth, and analyze regulations and statutes to ensure that they are not impediments to the adoption of such farming technology. The Commission consists of representatives of the Department of Agricultural Resources, Department of Environmental Protection, Department of Public Health, Department of Revenue, and the Massachusetts Technology Collaborative the Massachusetts Cooperative of Milk Producers Federation, the Massachusetts Association of Dairy Farmers, and a Dairy Farmer Licensed as a Producer Dealer.

STATE AGENCY MEMBERS

Gerard Kennedy, designee of Commissioner Gregory C. Watson, MDAR Jonathan Hobill, designee of Commissioner Ken Kimmel, MassDEP [Open], designee of Commissioner, MDPH Dennis Buckley, designee of Commissioner Amy Pitter, MDOR Amy Barrad, Clean Energy Center

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

James Cooper, dairy farmer licensed as a producer handler Mark Duffy, Massachusetts Association of Dairy Farmers Peter Melnik, Massachusetts Cooperative of Milk Producers Federation

The Farm Technology Review Commission ("FTRC" or "Commission") was created as a result of the 2008 Dairy Farm Preservation Act (the "Act") with the recognition that existing regulations and statutes can inadvertently cause a negative impact on the agricultural industry by preventing the adoption and implementation of new technology. Although this commission was brought into existence by the Act, the scope of the Commission's work is not limited to just dairy and energy related issues, but broader technological needs.

Chaired by the Commissioner of the Department of Agricultural Resources, Greg Watson, the Commission is comprised of state officials and farming representatives. State agencies participating include the Department of Environmental Protection ("MassDEP"); the Department of Public Health ("MDPH"), the Department of Revenue ("DOR") and the Clean Energy Center ("CEC"). Three dairy farmers representing the Massachusetts Association of Dairy Farmers, the New England Producer Handler



Association, and the Massachusetts Cooperative Milk Producers Federation, respectively, have also been appointed. Each member serves for a term of three (3) years.

The Act creating the Commission outlined several areas of focus, particularly related to energy. Specific tasks for the Commission include:

- Studying ways to promote energy conservation, collaborative purchasing, purchasing and selling of energy, energy saving technology, and alternative options for sustainability and growth; and
- Analyzing current regulations and statutes to ensure such regulations and statutes are not impediments to the adoption of farming technology

To most effectively address these recommendations and its statutory obligations the Commission decided to concentrate on the following areas:

REVENUE AND TAXATION

To review and address taxation-related recommendations made by the Dairy Task Force, including the exemption of multi-purpose equipment vehicles from sales tax; the general uncertainty created around taxation for new ventures in the area of renewable energy; and estimated income tax.

REGULATORY MODELS AND BARRIERS

To explore the intersection of environmental and public health regulations with standard agricultural practices and to review and analyze regulatory barriers. Work to date has focused on wastewater management issues on dairy farms; carcass management options on farms and identifying barriers to the development of a slaughterhouse infrastructure to meet the needs of animal producers.

FARM ENERGY

To review and promote energy conservation, collaborative purchasing, purchasing and selling of energy, energy saving technology and alternative options for sustainability and growth. Principal efforts have focused on discussion around anaerobic digester implementation, group purchasing, the development of a sustainable revenue source to support the implementation of renewable energy systems on farms.

For the Annual Report of the FTRC, see Appendix 3.



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 Julia.Grimaldi@state.ma.us (617) 626-1763

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 the Department of Agricultural Resources, Executive Office of Administration and Finance, the dairy farming industry, and the milk processing industry.

STATE AGENCY MEMBERS

Mary Jordan, designee Commissioner Gregory C. Watson, MDAR Sean Faherty, designee Secretary Jay Gonzalez, ANF

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

Lynne Bohan, Massachusetts Food Association

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

Kathleen Herrick, dairy farmer, MA Association of Dairy Farmers

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

Warren Shaw, dairy farmer, New England Producer Handler Association Sam Shields, dairy farmer, Agri-Mark, Inc.

Darryl Williams, dairy farmer, MA Association of Dairy Farmers

For the Massachusetts Dairy Promotion Board's 2012 Annual Report, please see Appendix 4 at the end of this document.





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

CHAIRMAN

Gregory C. Watson, Commissioner, MDAR

STAFF LIAISON

Bonita Oehlke Bonita.Oehlke@state.ma.us (617) 626-1753

Late in 2010, Chapter 277 of the Acts of 2010 amended Massachusetts General Law Chapter 20 by inserting Section 6C, creating a 17-member Food Policy Council ("FPC"). The purpose of the council is to develop recommendations to advance the following food system goals for the Commonwealth including (A) increased production, sales and consumption of Massachusetts-grown foods; (B) the development and promotion of programs that deliver healthy Massachusetts-grown foods to Massachusetts residents, through programs such as: (i) targeted state subsidies; (ii) increased state purchasing of local products for school and summer meals and other child and adult care programs; (iii) double coupon initiatives; (iv) direct market subsidies to communities with identified needs; (v) increased institutional purchases of Massachusetts grown foods and other programs to make access to healthy Massachusetts products affordable, and (vi) increased access to healthy Massachusetts-grown foods in communities with disproportionate burdens of obesity and chronic diseases; (C) the protection of the land and water resources required for sustained local food production; and (D) the training, retention and recruitment of farmers and providing for the continued economic viability of local food production, processing and distribution in the Commonwealth.



STATE AGENCY MEMBERS

Commissioner Gregory C. Watson, MDAR Undersecretary Michael Hunter, designee of Secretary Gregory Bialecki, MEOHED Commissioner, MDPH

Katie Millet, designee of Commissioner Mitchel Chester, MESE

Katie Bowie, designee of Deputy Commissioner Gary Moran, MDEP

Commissioner Daniel J. Curley, MDTA

LEGISLATIVE MEMBERS

Representative Stephen Kulik, Vice Chairman of the House Committee on Ways and Means

Senator Susan Fargo, Chairwoman of the Joint Committee on Public Health

Senator Michael Knapik, Ranking Member of the Senate Committee on Ways and Means Representative Kimberly Ferguson

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Valerie Bassett, MA Public Health Association Frank Carlson, Carlson Orchards Jeff Cole, Executive Director, Mass Farmers Markets Manuel Costa, President, Costa Fruit & Produce Helen Caulton-Harris, Springfield Board of Health John Lee, Allandale Farm



2012 ACTIVITIES OF THE BOARD

Four meetings were held in 2011. In 2012, the fifth meeting of the Massachusetts Food Policy Council (FPC) was held on March 9th, 2012 at the Brigham Community Farm in Grafton. Vice-Chair Representative Kulik introduced Brigham Hill Community Farm and Kristin Bafaro, the Executive Director of the Community Harvest Project, Inc. who discussed increasing access to produce. Representative Kulik shared news that Commissioner Soares would be leaving MDAR as of July 1, 2012. The nomination process for the FPC Advisory Committee was discussed and the slate of nominees was passed. Secretary Jeff Cole offered to head and organize a committee to coordinate FPC participation in Agriculture Day at the State House on April 3rd. It was agreed that FPC would pull together key points that the board would like to make to legislators. Representative Kulik suggested that each agency have literature about its programs relevant to FPC priorities in order to introduce legislators to the FPC.

The sixth meeting of the FPC was held on June 1st, 2012 at the Worcester Union Station. Commissioner Watson was elected as the new Chairperson. The MA FPC Alliance was added as a new position to the Advisory Committee; Christa Drew was accepted to the position. The Advisory Committee suggested a comprehensive strategic plan for the MA food system of which supermarket access would be one element. Issues raised included the 1974 Governor's Commission on Food Policy report, farm sustainability, regulatory issues, urban components, environmental planning, hunger, food security, economic impact, farmto-school initiatives, processed food and the food industry. The Advisory Committee was tasked with developing a concept document to provide a framework for the strategic plan. Frank Martinez Nocito then gave an update on the Healthy Initiatives Pilot, and Cheryl Bartlett reported on Mass in Motion. The issue of letters of support from the MA FPC for a USDA grant application related to Farm to School was assigned to the Bylaws Committee. Vivian Orlowski of the Berkshire County Boards of Health Association presented on the collaborative efforts between farmers and health agents. Ronak Dave, an FPC intern, presented on food programs and cultural sensitivity. Members also discussed engaging minority youth through civic engagement projects. The Central MA Regional

Planning Commission principal planners discussed their work.

The seventh meeting was held on October 5th, 2012 at the Framingham Public Library. The Eos Foundation presented on combating childhood hunger, focusing on access to and quality of food. Christa Drew presented the MA FPC Advisory Committee's draft framework for a statewide comprehensive strategic food system plan that was assigned to the Committee at the previous meeting. She discussed background information on existing statewide food systems and noted drivers of current food system concepts. Members discussed the importance of inclusiveness and stakeholder representation. Stakeholders mentioned included current FPCs in the state, media, supply chains, growers, childcare and senior centers, environmental organizations, social justice and civic engagement groups, supermarkets, workforce development groups, faith communities, anchor institutions, farm labor groups, culinary groups, and aggregators for processing and distribution. Attendees then responded to the Advisory Committee's presentation. Engagement with a process specialist and funding for the engagement were discussed. Secretary Jeff Cole requested feedback on a draft policy related to letters of support from the MA FPC. It was concluded that multiple letters of support for the same grant are acceptable and beneficial to the FPC. Representative Kulik proposed a policy that was approved regarding letters of support for the same grant. Frank Mangan of UMASS discussed providing culturally-appropriate produce to urban areas, and FPC intern Ronak Dave proposed a research question regarding cultural receptivity of healthy food in MA as it relates to FPC objectives.

The eighth meeting was held on December 7th, 2012 in Leominster. The Advisory, Bylaws, and Nominating Committees each presented their proposed annual reports, which passed. No action was required to re-elect Officers or Advisory Committee members. A motion was passed to continue with the existing Nominating and Bylaws committees. Christa Drew presented the Advisory Committee report regarding next steps on drafting a framework for a statewide comprehensive strategic food system plan focused on networking, a core team, and advisory team approach. A baseline of \$100,000 was expected from private philanthropy for early funding. Discussion and



recommendations to the plan ensued, which focused on the local food system, private sector, produce councils, restaurant associations, large retailers, and community gardens. It was concluded that FPC members should help with outreach and that guidelines on communications between the FPC and the Advisory Committee would be needed. Dave Bishop and Chris Lawton from Farm Credit East presented on Northeast Agriculture.

To review meeting minutes and presentations in detail, including the Nominating Committee report and the Advisory Committee Report, visit http://www.mass.gov/eea/agencies/agr/boards-commissions/food-policy-council.html

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

CHAIRMAN

The Commissioner of Agricultural Resources' designee Lee Corte-Real, MDAR

STAFF LIAISON

Steve Antunes-Kenyon Steve.Kenyon@state.ma.us (617) 626-1784

The Board's responsibilities entail advising the Commissioner of Agricultural Resources 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 the Department or the Subcommittee of the Pesticide Board. The thirteen member board consists of representatives of the Department of Agricultural Resources, Department of Environmental Protection, Department of Fish and Game, Department of Conservation and Recreation, Department of Public Health, as well as farming, commercial pesticide applicators, pesticide toxicology, the environmental community, the medical community, and citizens at large.

STATE AGENCY MEMBERS

Lee Corte-Real, designee Commissioner Gregory C. Watson, MDAR
Kathy Romero, designee Commissioner Kenneth L. Kimmell, MDEP
Martha Steele, designee Commissioner John Auerbach, MDPH
Michael Moore, MDPH-Bureau of Environmental Health - Food Protection Program
Jack Buckley, designee Commissioner Mary Griffin, MDFG
Ken Gooch, designee Commissioner Edward M. Lambert, Jr., MDCR

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Dr. Cheryl Barbanel, physician and professor Richard Berman, pesticide applicator Dr. Richard Bonanno, farmer William Clark, conservation and extension agent Laurell Farinon, conservation agent Dr. Jack Looney, professor Dr. Brian Magee, toxicologist



2012 ACTIVITIES OF THE BOARD

Over 2012, the Pesticide Board met and was provided updates of issues that might have impacts on pesticide applicators and uses in the Commonwealth. The most significant issue on which the Board was required to take action was to consider the proposed Regulations to amend the regulations for the Standards for Supervision of Non-Certified Applicators. Certified applicators whose activities indicate a supervisory role must demonstrate a practical knowledge of federal and state supervisory requirements, including those specified in pesticide labeling regarding application by non-certified applicators.

The availability of the certified applicator must be directly related to the hazards of the situation. In situations where the certified applicator is not required to be physically present, "direct supervision" shall include verifiable instruction to the competent person, as follows:

- 1) Detailed guidance for applying the pesticide properly, and;
- 2) Provisions for contacting the certified applicator in the event he is needed.

In situations where labeling or state restrictions on use require it, physical presence of a certified applicator shall be required when application is made by a non-certified applicator.

The current regulations specifies that the certified applicator provide detailed guidance for applying the pesticide properly when they are not on site without defining the what constitutes detailed guidance.

The proposed regulation further defines the Department interpretation of what constitutes "detailed guidance" for applying pesticides. This specific guidance removes the potential for misinterpretation by the regulated community and by differences in interpretation by the Department. It also addresses the requirements to identify restricted use pesticides and to list the amounts being transported since transportation is considered use according to the general pesticide regulations.

The Proposed regulations were adopted by the Pesticide Board on September 5, 2012.



PUBLIC MARKET COMMISSION

CHAIRMAN

Gregory C. Watson, Commissioner, MDAR

PROJECT MANAGER

Mark Lilienthal Mark.Lilienthal@state.ma.us (617) 626-1183

STATE AGENCY MEMBERS

Commissioner Gregory C. Watson, MDAR
Carole Cornelison, Commissioner, MDCAM, designee of Secretary Jay Gonzalez, EOAF
Mary Griffin, Commissioner, MDFG, designee of Secretary Richard K. Sullivan, Jr., EOEEA
William Tuttle, Deputy Director, MassDOT, designee of Secretary Richard A. Davey, MassDOT

LEGISLATIVE MEMBERS

State Representative Gailanne Cariddi, 1st Berkshire District State Senator Anthony Petruccelli, 1st Suffolk and Middlesex District

PUBLIC MEMBERS (APPOINTED BY THE GOVERNOR)

Nancy Brennan, Executive Director of the Rose Kennedy Greenway Conservancy Nancy Caruso, resident of Boston, recommended by Mayor Thomas M. Menino Lauren Shurtleff, Planner, designee of the Executive Director of the Boston Redevelopment Authority

2012 ACTIVITIES

After a series of public hearings in 2011 to determine what vendors, consumers, and other interested parties wished to see in a new year-round public market in downtown Boston, the Public Market Commission worked with MassDOT to issue a Request for Proposals (RFP) for a developer/operator of the new market, to be located in a building owned by MassDOT on Blackstone Street. The RFP process concluded in spring of 2012 with the Commission recommending to MassDOT that the not-for-profit Boston Public Market Association (BPMA) be designated as operator and developer. Since designation, the BPMA has been working closely with MDAR, the Commission, and MassDOT staff to identify sources of funding, negotiate lease terms, identify prospective vendors, and address many of the other challenges associated with this exciting project. Commissioner Watson chaired his first Public Market Commission meeting in September, with the Commission slated to meet with the BPMA on a quarterly basis moving forward. At that meeting, the BPMA presented the work they had completed to date and outlined the strategies for the path forward. MDAR is working closely with the BPMA in several areas, including navigating the different state agencies that are involved in the project, developing publications for consumers and vendors, and organizing outreach to relevant producer groups, from wineries to cheese makers, farmers, bakers, and the myriad other specialty food producers in the Commonwealth. 2013 promises to be an important year for the project, with major progress slated for design, fundraising, vendor recruitment, programmatic development, and other initiatives.



STATE RECLAMATION AND MOSQUITO CONTROL BOARD (SRMCB) (M.G.L. CHAPTER 252 § 2)

CHAIRMAN

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

STAFF LIAISON

Mark Buffone, Executive Director, SRMCB Mark.Buffone@state.ma.us (617) 626-1777

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

STATE AGENCY MEMBERS

Lee Corte-Real, designee Commissioner Gregory C. Watson, MDAR Gary Gonyea, designee Commissioner Laurie Burt, MDEP Bruce Hansen, designee Commissioner Edward M. Lambert, Jr., MDCR

For the 2012 Annual Report of the State Reclamation and Mosquito Control Board, see Appendix 1 at the end of this document.



PUBLIC RELATIONS

AGENCY HEAD TRANSITION

In March 2012, MDAR's Commissioner Scott J. Soares announced that he would be stepping down as Commissioner to pursue a professional opportunity with the US Cranberry Marketing Committee.

On April 3rd, Gregory C. Watson was appointed by Governor Deval Patrick to serve as commissioner of the agency. Having served once before in 1990, Commissioner Watson was able to "hit the ground running." MDAR staff moved quickly to ensure a seamless transition. By April 30th, the website, social media outlets, letterhead, forms, signatory authorizations, and contact information had all been modified to reflect the new organizational change. A special press release was distributed to media outlets and an "e-blast" emailed out to the agency's electronic listserve to notify the agricultural community and other stakeholders of the recent changes.

SOCIAL NETWORK MEDIA

Social network media via Twitter and blogs remained an invaluable outreach tool for MDAR in 2012. The agency started the year with 782 Twitter followers. In April, as MDAR transitioned to a new commissioner, it took the step of changing the Twitter handle name to one that

would not be affected by a changeover of commissioners in the future; hence, the handle was changed from @AgCommishSoares to @MDARCommish. While nominal momentum may have been lost due to the change, the Twitter feed grew nonetheless to 989 followers at the end of 2012.

MDAR also introduced a secondary Twitter handle in February 2012. The @MassGrown feed is tied to the agency's award winning *MassGrown & Fresher* initiative and provides a promotional voice to agriculture related events. At the end of the year, @MassGrown had 250 Twitter followers.

The number of posts to the Great Outdoors (12) and to Energy Smarts (2) sections of the Commonwealth Conversations blog (environment.blog.state.ma.us and energy.blog.state.ma.us) declined from the number posted in 2011. This was due primarily to a shift in resources to accommodate significant organizational changes occurring in the spring and early summer (see AGENCY HEAD TRANSITION).

MDAR RECEIVES "BRIGHT IDEAS" AWARD FOR ITS MASSGROWN & FRESHER INITIATIVE



The MassGrown & Fresher initiative was the recipient of a "Bright Ideas" award from the Ash Center for Democratic Governance and Innovation at the John F. Kennedy School of Government, Harvard University. The Center recognized 111 innovative government initiatives as Bright Ideas.

Department staff began to look at ways to support soaring interest in locally grown and produced products amid one of the worst recessions in memory with the consequence that the department's mission and budgetary ability to promote the broad diversity of its agricultural community was curtailed. With the help of a USDA Specialty Crop Block Grant, MDAR staff partnered with commodity groups to bootstrap an "out-of-the-box" initiative

to connect consumers to local agriculture and vice versa.

The core foundation of the initiative was a new MassGrown & Fresher website (www.mass.gov/massgrown) featuring an "Agri-Google" map that draws from MDAR's extensive databases. The interactive map serves as a gateway to finding farm products, specialty foods, and agricultural activities. Other highlights include fun facts, upcoming events, a spotlight section, and the Faces of Massachusetts Agriculture page that recognizes individuals, organizations, and schools that are making a significant contribution to the long-term sustainability of agriculture.

Phase 2 of the project was and continues to be an assertive PR rollout plan that further harnesses internet technology to promote local agriculture.



PUBLIC RELATIONS, cont.

2012 PRESS RELEASES

There were 24 press releases, spanning all of the agency's divisions, that were distributed to local media outlets. In chronological order:

- State Agriculture Officials Award Funds to Promote Local Agriculture
- Commonwealth Agriculture Officials Kick Off Maple Month
- Farmers Markets Boost MA Wineries Sales 66% & Hiring
- Governor Patrick Thanks Commissioner Soares for His Service, Swears-in Gregory Watson as New Commissioner of Agriculture
- State Ag Officials Remind Horse Owners to Vaccinate Against Mosquito-Borne Diseases
- State Agriculture Officials Announce the Arrival of Strawberry Season
- Massachusetts Agriculture Officials Kick off Farmers' Market Season
- Agriculture Officials Encourage MA Residents to Enjoy Locally Grown Blueberries
- State Agriculture Officials Celebrate Fair Season
- Governor Patrick Celebrates Small Businesses and Tourism Industry at Massachusetts Wine and Cheese Trail Expansion

- Governor Patrick Proclaims August 19-25 Massachusetts Farmers' Market Week
- Massachusetts Tomato Contest Draws 84 Entries
 - State Agriculture and Forestry Officials Urge Forest Pest Awareness
- State Agricultural Officials Highlight Fall Apple Harvest
- Patrick-Murray Administration Proclaims September Apple Month
- Governor Patrick Celebrates Massachusetts "Harvest for Students Week"
- "Bright Ideas" Award to MassGrown & Fresher Initiative
- Massachusetts Farms to Get 33 Environmental Grants
- 2012 Cranberry Crop to Be Plentiful
- Celebrate the Massachusetts Pumpkin Harvest
- \$439,000 in Federal Grants to Market Specialty Crops
- Massachusetts Agricultural Officials Highlight Local Food and Farming This Holiday Season



OUTREACH AND EVENTS

DIRECTOR OF OUTREACH AND EVENT COORDINATION

Rose Arruda Rose.Arruda@state.ma.us (617) 626-1849

Over the course of 2012, outreach efforts expanded and MDAR's approach diversified to connect with a wider audience, building on MDAR's partnerships with new organizations and strengthening longer standing relationships. Working with sister agencies across the Commonwealth to promote the resources and technical assistance MDAR offers has widened its reach. The agency successfully educated policy makers and the public on agriculture's impact with respect to the economic health of the state. Outreach efforts and official events highlighted the Patrick/Murray administration's unwavering commitment to agriculture in Massachusetts. Planned events and initiatives brought awareness to many more constituents and deepened networks in many counties across Massachusetts.

2012 OUTREACH EVENTS FIRST DAY HIKES

MDAR joined its sister agencies Department of Public Health (DPH) and Department of Conservation and Recreation (DCR) on New Year's Day for the kickoff of "The Naturally Healthy Year". The initiative was a collaborative effort promoting a healthy lifestyle and geared towards lowering health care costs statewide. The agencies developed a resolution that utilized the state agency's resources and its staff to coordinate outreach events over the course of the year. MDAR, DCR and DPH collaborated at several events, providing materials and staff to share and educate attendees about the various programs and resources each agency provides. Hundreds of constituents were served by the partnership.

PLANT SOMETHING

Governor Deval Patrick joined Secretary Rick Sullivan of the Executive Office of Energy and Environmental Affairs, and Commissioner Greg Watson to announce the launch of the "Plant Something" campaign, which spotlights local flower and nursery growers and encourages residents to shop at local garden centers.

The "Plant Something" initiative was the result of collaboration between MDAR, the MA Flower Growers Association, and the MA Nursery and Landscape Association. The greenhouse and nursery industry remains the top contributor to Massachusetts crop sales, valued at \$158 million in 2011 (31 percent of the total cash receipts in the state). The collaboration also generated advertising posters that were featured across the state at independent garden centers, delivery trucks and at the MBTA's commuter rail stations and trains during the month of May.



CHOPCHOP MAGAZINE

Highlighting the availability of healthy and locally grown food made a partnership with ChopChop Magazine and the MA Department of Health's "Mass in Motion" program a natural fit. ChopChop, the children's magazine focused on educating children to cook with delicious, locally grown and healthy foods, started publishing a monthly 1-page online "Governor's Edition" newsletter for kids and their parents. The newsletter highlights agricultural products from Massachusetts and features a local farmer each month. MDAR's reach has been extended with the MassGrown & Fresher link being made available to a new audience, empowering them to actively participate as health partners with their families, and help establish and support better eating habits for a lifetime of good nutrition.



OUTREACH AND EVENTS, cont.

MASSACHUSETTS WINE AND CHEESE TRAILS

Governor Deval Patrick joined Commissioner Greg Watson to officially release the second edition of the Massachusetts Wine and Cheese Trail Guide, a comprehensive guide that highlights wine and cheese businesses open to visitors across the Commonwealth. Wine and cheese businesses have a significant impact on agricultural and business viability in the state. The Trail was designed, coordinated and distributed by MDAR's Division of Ag Markets.

The event, hosted by Hardwick Winery, had well over a dozen Massachusetts wine and cheese producers, local food businesses, and growers offering sample products at the tasting event at the winery. Press participated on a bus tour from Boston, making stops on the Trail before joining the activities at this very suc-

cessful event.

Commonwealth's commitment to promoting statewide programs that foster agricultural diversification, culinary tourism, agricultural business training, animal health, pest management, and energy efficiency at farm operations. During the speaking program, the announcement was made that Gregory Watson was being appointed by Governor Patrick to lead the agency.

Governor Deval Patrick also joined hundreds of Massachusetts farmers, agricultural officials, legislators and spectators to celebrate the agricultural industry's \$490 million annual contribution to the Commonwealth's economy.

AGRICULTURE DAY

Arguably one of the favorite events of the year at the State House, Massachusetts Agriculture Day ("Ag Day") did not disappoint, with over 45 agricultural exhibitors participating, including representatives of the U.S. Department of Agriculture and agricultural associations such as the Massachusetts Farm Wineries and Growers Association, Massachusetts Fruit Growers Association, and the Massachusetts Association of Dairy Farmers. The event showcases agricultural products and industry achievements and to provide a forum for farmers to meet with lawmakers to discuss issues and challenges facing farming communities across the

At the event, MDAR officials highlighted the

BUILDING A STATEWIDE NETWORK: FOOD DAY MASSACHUSETTS

Massachusetts was once again one of the most active Food Day participants in the country, holding over 500 activities. The state built up some of the most impressive partnerships in the country. Events ranged from "Food Day Challenge" activities at over 200 schools statewide, to supermarket nutrition information displays at all 78 Shaw's Markets in Massachusetts, to community celebrations of food heritage and culinary diversity and cooking classes in urban neighborhoods.

For the second year in a row, MDAR spearheaded statewide organizing, with strong support from Governor Deval Patrick, MDAR Commissioner Greg Watson and state public health and education officials. Rose Arruda of MDAR managed outreach, identified key stakeholders and promoted state targets of increasing access to local grown and produced products. From the start, a clear goal was set: to ensure Food Day Massachusetts represented a range of issues and gave diverse constituencies in both rural and urban areas a voice. Hundreds of organizers from around the state delivered.

To build on and expand the Food Day Massachusetts network from 2011, organizing began early in the year. MDAR held a series of in-person planning meetings in different parts of the

Commonwealth; many partnerships and ideas for initiatives formed from these initial meetings. Organizers also participated in monthly calls and started a newsletter to keep the network engaged, bring in new participation, and ensure participants always knew what was in the works and whom to contact for more information.





OUTREACH AND EVENTS cont.

MAPLE MONTH

One of Commissioner Scott Soares's last official events before taking on a new position at the U.S. Cranberry Marketing Committee was a visit to Paul's Sugarhouse in Williamsburg to officially kick off the Commonwealth's maple sugaring season. The event highlighted MDAR's commitment to our state's maple producers and the importance of the maple industry in Massachusetts.

MDAR awarded \$55,920 in AgEnergy Grants this year to six Massachusetts maple producers, including Paul's Sugarhouse, for energy efficiency and renewable energy upgrades to their operations. Employing new equipment such as that for reverse osmosis means fewer twelve hour shifts and electrical energy conservation for maple syrup producers.

MASSACHUSETTS GLEANING NETWORK

The mission to salvage healthy produce left unharvested in fields throughout the state led to the creation of the Massachusetts Gleaning Network in 2011. The network's intention is straightforward: to ensure that the state's agricultural surplus is harvested and made available to those in need. MDAR convened a meeting in 2012 with over 60 organizations to help bring awareness to the practice of gleaning and to assist with expanding gleaning networks across the Commonwealth.

Groups and individuals from many sectors and regions came together to share resources, best practices, and processes to support their own self-sustaining, regional gleaning networks. Because of this meeting, stakeholders such as food bank representatives, gleaning groups, organizations with volunteer bases, farmers and others interested in gleaning met and shared their experiences and made plans to work together to expand gleaning efforts in their community.

HARVEST FOR STUDENTS WEEK

MDAR staff coordinated the kickoff for the 6th annual Massachusetts Harvest for Students Week, with a celebration in which Governor Deval Patrick and Secretary Rick Sullivan helped to celebrate the Farm to School movement in Massachusetts. They were joined by food service staff, farmers, and students at Milton High School.

During Massachusetts Harvest for Students Week, schools and colleges promoted the local harvest and served fresh, nutritious meals prepared with foods produced by Massachusetts' farms. The week is a time for institutions to highlight their successful locally grown food initiatives or to purchase and menu locally grown products for the first time. The activities were developed by the Massachusetts Farm to School Project, which coordinates the event each year in collaboration with partners like MDAR, the School Nutrition Association of Massachusetts, and the Mass. Dept. of Elementary and Secondary Education.

ANNUAL CHRISTMAS TREE EVENT

Commissioner Greg Watson carried on one of the Agency's beloved events by joining local legislators, town officials and community members at the Vandervalk Farm to kick off the holiday season by harvesting a Massachusetts-grown Christmas tree.

During the annual Christmas tree cutting event, Commissioner Watson encouraged Massachusetts residents to buy locally-grown trees from one of the Commonwealth's 284 Christmas tree farms.

The event highlights for residents across the Commonwealth that locally-grown Christmas trees are renewable and recyclable, and buying one from a local farm is good for the local economy. Based on the last USDA agriculture census, there are 284 farms with 3,164 acres in production and more than 75,900 trees cut across the Commonwealth. This annual event helps to bring attention to businesses like the Vandervalk Farm, a family owned and operated working farm dedicated to providing high quality locally-grown Christmas trees.



FINANCIAL REPORT

CHIEF FINANCIAL OFFICER

Michael Rock Michael.Rock@state.ma.us (617) 626-1716

The Massachusetts Department of Agricultural Resources expended a total of \$32.772 million in fiscal year 2012. This was \$4.48 million less than the agency's fiscal year 2011 expenditure of \$37.252 million. The decrease in fiscal year spending is primarily attributed to a \$4 million reduction in bond (capital) expenditures. Capital expenditures decreased as a result of the conclusion of the Northampton Tri-County Fairgrounds renovation and a \$2.2 million reduction in capital funding for the Agricultural Preservation Restriction (APR) program. The agency's funding sources in fiscal year 2012 were as follows: operating (budgetary) 48.4%, capital (bond) 28.1%, federal 22.1% and trust funds 1.4%. These numbers contrast sharply from the pre-recession period of fiscal year 2007 when nearly 68% of the agency's funding came from direct budgetary appropriations.

BUDGETARY APPROPRIATIONS

The agency's budgetary appropriations declined by 1% in fiscal year 2012 when compared to the prior fiscal year and were over 37% less than its fiscal year 2007 peak. The Department expended 99.87 % of its final fiscal year 2012 budgetary appropriated amount of \$15.889 million, reverting just \$20,580. The reverted amount consisted of funds earmarked for the apiary inspection program that were intended to cross from fiscal year 2012 into fiscal year 2013. As the fiscal year 2013 General Appropriation Act (GAA) contained funding for the apiary inspection program, a rollover of the unused funds was not necessary and subsequently denied by the legislature.

ADMINISTRATION ACCOUNT (2511-0100)

The Administration Account funds the day to day operations of the agency. Administration Account funding declined by nearly 3.3% in fiscal year 2012 when compared to the prior fiscal year and was over 29% less than its fiscal year 2007 peak. The reduction in funding resulted in the elimination of all temporary, seasonal and consultant workers paid from budgetary funds. Subsequently, funding

was restored for apiary seasonal workers by means of a supplemental budget. Fiscal year 2012 Administration Account spending by category was as follows::

- Over 89% went toward employees' salaries and benefits
- Nearly 2% or \$79,200 annually was a matching share to the agency's \$1,218,563 3-year federal "Pesticide Analytical" grant and served to fund lab services with the University of Mass Amherst Massachusetts Pesticide Analysis Laboratory
- The remaining 9% supported the agency's day-to-day operational expenses

SUPPLEMENTAL FOOD APPROPRIATION (2511-0105)

The MDAR Supplemental Food Appropriation provides for the purchase of supplemental foods for the Emergency Food Assistance program. 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. The Food Bank program saw a decrease from a high of \$12 million in funding in fiscal year 2009 to \$11.5 million for the past 3 fiscal years, a 4.2% reduction. The Supplemental Food pass through appropriation comprises roughly 72% of the agency's state appropriated budgetary funding. The agency utilizes 2% of these funds for administering the program.

INTEGRATED PEST MANAGEMENT ACCOUNT (2511-3002)

The agency's Integrated Pest Management (IPM) program was hit severely during the recession. Funding was reduced from a high of \$303,000 in fiscal year 2008 to \$47,560 in fiscal year 2012. This has impacted the agency's ability to meet its statutory requirements under Chapter 85 of the Acts of 2000 ("Act to Protect Children and Families from Harmful Pesticides") and MGL Chapter 132B (Massachusetts Pesticide Control Act).



FINANCIAL REPORT cont.

CAPITAL (BOND) ACCOUNTS

In fiscal year 2012 the agency expended 100% of its \$9.198 million in capital (bond) funding. Capital funded programs included the Agricultural Preservation Restriction (APR) Program, APR Improvement Program, Farm Viability Enhancement Program (FVEP), Agricultural Business Training, Aquaculture, Agricultural Environmental Enhancement Program (AEEP), and the Tri-County Fairgrounds renovation project. By utilizing a mixture of capital, federal and trust funds, the agency expended nearly \$8.45 million on Agricultural Preservation Restrictions to protect approximately 1,575 acres and another \$1.19 million on 15 agricultural covenants to protect an additional 2,030 acres. Capital expenditures by the agency decreased in fiscal year 2012 due to a nearly \$2.2 million decrease in APR funding and the completion of the Tri-County Fairgrounds renovation project in Northampton.

FEDERAL FUNDS

MDAR expended over \$7.248 million dollars in federal grant funds in fiscal year 2012. The "Farmland Protection" grant is the largest component of the agency's federal funding and comprised over 67%, or two-thirds, of the total in fiscal year 2012. The "Farmland Protection" grant is utilized to fund a variety of agency programs including the APR program, the Farm Viability Enhancement Program, the Agricultural Environmental Enhancement Program and the Agricultural Fairs Improvement (AFIP) Program.

REVENUE

MDAR is currently responsible for the collection of a number of fees (32) ranging from pesticide applicator and milk dealer licenses to nursery and greenhouse inspection fees. For the fourth year in a row, MDAR has generated more revenue than its budgetary allocation for the administrative costs of the agency (see table). In fiscal year 2012, MDAR revenue of \$5.633 million exceeded the agency's year-end operating budget (Administration and IPM accounts combined) of \$4.382 million by over \$1.25 million dollars.

MDAR FEE REVENUE 2007-2012						
YEAR	REVENUE					
2007	\$4,345,312					
2008	\$4,601,948					
2009	\$4,709,686					
2010	\$5,159,485					
2011	\$5,679,206					
2012	\$5,633,212					



HUMAN RESOURCES

HUMAN RESOURCES DIRECTOR

Mary Beth Burnand Mary.Beth.Burnand@state.ma.us (617) 626-1710

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

- Position Management including classification and posting requirements through hiring
- Coordination of training opportunities for employees through EOEEA's PACE system
- Family Medical Leave Act and the Americans with Disabilities Act

- Diversity Initiatives and Equal Employment Opportunity
- Unemployment
- Worker's Compensation
- Labor Relations
- Workforce Planning

SELF-SERVICE TIME AND ATTENDANCE (SSTA)

During 2012, both the MDAR and the SRB-mosquito control districts began the transition to Self-Service Time and Attendance (SSTA). SSTA is one of the key objectives of the Commonwealth's MassHR initiative. Self-Service Time and Attendance is new technology for reporting time. All employees within MDAR and SRB have now transitioned to SSTA. SSTA replaces the paper timesheet. Employees who previously reported their time on a daily basis continue to do so with the exception being that it is now entered and submitted online.

DEPARTMENT OVERVIEW - 4TH QUARTER 2012

TOTAL	TOTAL WORKFORCE: 74										
Males: 36 (48.65%)											
White	%	Black	%	Hispanic	%	Asian	%	Native American	%	Unknown	%
32	43.24	3	4.05	0	0.00	1	1.35	0	0.00	0	0.00
Females: 38 (51.35%)											
White	%	Black	%	Hispanic	%	Asian	%	Native American	%	Unknown	%
30	40.54	4	5.41	1	1.35	1	1.35	0	0.00	2	2.70
Minorities: 10 (13.51%)											
		Black	%	Hispanic	%	Asian	%	Native American	%		
		7	9.46	1	1.35	2	2.70	0	0.00		
Vietnar	Vietnam-era Veterans ("VEV"): 0 (0.00%)			6)							
White	%	Black	%	Hispanic	%	Asian	%	Native American	%	Unknown	%
0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Disabled: 0 (0.00%)											
White	%	Black	%	Hispanic	%	Asian	%	Native American	%	Unknown	%
0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00

BENCHMARKS (PARITY) FOR THE COMMONWEALTH:

Females	48.20%
Minorities	10.40%
Veterans	3.50%
Persons with Disabilities	12.00%



HUMAN RESOURCES, cont.

EMPLOYMENT OPPORTUNITIES

All employment opportunities for the Department of Agricultural Resources 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 MDAR's HR Director along with a resume and cover letter. The employment application is found on our website at www.mass.gov/eea/agencies/agr/for-your-information.html.

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

PERFORMANCE RECOGNITION PROGRAM

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

The Department of Agricultural Resources recognized the following individuals as its 2012 recipients of the Commonwealth's Citation of Outstanding Performance:

- João Tavares, Program Coordinator, Division of Agricultural Conservation and Technical Assistance
- Howard Vinton, Marketing and Product Utilization Specialist, Division of Crop and Pest Services
- Richard LeBlanc, Program Coordinator, Division of Agricultural Markets
- Ngoc-Nu Nguyen, Accountant, State Reclamation and Mosquito Control Board

MANDATORY COMPLIANCE TRAINING

Governor Patrick introduced 4 mandatory courses for all employees to ensure that the workplace in the Commonwealth is safe, inclusive, and conducive to productivity for all employees. These courses were introduced to enhance or develop awareness of individual responsibility to achieve this goal, and accountability vis-à-vis the laws polices and guidelines embodied in the Executive Orders. In 2012, all staff was also required to complete the Conflict of Interest Summary training.



LEGAL SERVICES

GENERAL COUNSEL

Tara Zadeh Tara.Zadeh@state.ma.us (617) 626-1705

Legal Services operates within the MDAR Administration, and consists of a General Counsel, 3 assistant counsels, and 1 paralegal. It provides a wide range of advisory and technical legal services to the Commissioner and all Divisions and programs within the Department. Legal staff represents the Commissioner and the Department in administrative and judicial proceedings that include exercising the authority conferred upon them by the Office of the Attorney General as a Special Assistant Attorney General. In addition, legal staff serve in a support capacity in matters in which the Attorney General represents the Department in court. Bob Ritchie served as General Counsel until November 8, 2012. Jessica Burgess served as Acting General Counsel from November 9, 2012 through January 22, 2013. The current General Counsel is Tara Zadeh.

WORK WITH THE DIVISION OF ANIMAL HEALTH

Staff drafted legal correspondence on behalf of the Division of Animal Health; provided legal advice when necessary; reviewed cease and desist orders and notices of assessment of penalties to ensure compliance with all applicable laws and regulations; represented the Department in all adjudicatory hearings brought before the Division of Administrative Law Appeals and all other venues. Staff assisted in the drafting of Animal Rescue regulations.

WORK WITH THE DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE

Staff assisted in discussions with DEP regarding amendments to the Wetland Protection Act, regulations, and guidance documents. Staff assisted in discussions with DEP regarding amendments to the solid waste regulations. Staff assisted with the preparation of draft amendments to the agricultural composting regulations. Staff assisted the Attorney General's Office in criminal and civil cases involving claims against an individual for violations of the state's clean air act, solid waste regulations (including agricultural composting), and animal health statutes and regulations. Staff reviewed requests for proposals and contracts

for grants. Staff assisted with issues involving alternative energy siting and state and local regulations, aquaculture, zoning, and other local issues. Staff assisted with interpreting and applying statutes and regulations to matters involving the Department.

Staff assisted in closing and acquiring Agricultural Preservation Restrictions. Staff assisted in enforcement issues, reviewing farm viability covenants, and assisting APR staff with matters involving both restricted and stateowned leased land.

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

Staff continued to assist the SRB in governing district budget and budget-making transparency. Staff reviewed proposals involving policy and regulatory changes to pesticide application and oversight. Staff assisted with and defended against a case filed with the Massachusetts Commission Against Discrimination (MCAD) in which an individual who failed a pesticide exam alleged he did not have adequate accommodations. The case was dismissed by MCAD. Staff reviewed contracts and handled legal issues for the districts. Staff collaborated with the Attorney General's Office in defending against a lawsuit brought by the Bristol County Mosquito Control Project against the SRB and State Treasurer. Staff will continue to assist the Attorney General's Office (AGO) in a lawsuit which is now before the Supreme Judicial Court. Staff assisted the SRB in emergency spraying that took place in the summer of 2012, and will continue to assist SRB and state officials in addressing continued mosquito control concerns.

WORK WITH THE DIVISION OF CROP & PEST SERVICES

Staff reviewed letters of warning, notices of assessment of penalties, and license revocations and suspensions. Staff assisted with interpreting and applying statutes and regulations. Staff assisted with ensuring compliance with emergency spraying requirements.



LEGAL SERVICES cont.

OTHER

Staff assisted in and managed responses to 94 public records requests received by the Department. Staff also assisted in compliance of the Commonwealth's Conflict of Interest Law, requiring all employees to receive a copy of the law, yearly, and to complete the on-line training from the Ethics Commission website, every other year. Staff continued to train all new employees and contractors on Executive Order 504 regarding protection of personal information. Staff also assisted in ensuring 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.

Staff assisted in compliance with the requirements set out in Chapter 240 of the Acts of 2010 "An Act Relative to Economic Development Reorganization", which required all agencies to review regulations that were 12 years or older, and determine whether the regulation continued to be necessary while also considering the economic impacts of that regulation on small businesses. The Department reviewed 20 regulations that fell under the Act.

Staff assisted in the review and comment on legislative and regulatory matters. Staff assisted in the review of requests for proposals and contracts entered into by the Department.



DIVISION OF AGRICULTURAL MARKETS

MARY JORDAN, DIVISION DIRECTOR

Mary.Jordan@state.ma.us (617) 626-1750

To foster the economic growth of the Commonwealth's domestic and international agricultural markets, the Division of Agricultural Markets offers field expertise in the development and support of innovative market venues, business expansion, grant opportunities, consumer and industry outreach.

Through its award-winning MassGrown & Fresher initiative and the Commonwealth Quality Program, the Division seeks to cultivate new opportunities for consumers to gain greater access to local agricultural products while endorsing high quality standards for growers and producers.

The Agricultural Markets Division works with over 50 agricultural and commodity organizations, the state's agricultural fairs, along with a broadbreadth of local, state, and federal level entities.

PROGRAM LISTING

- Agricultural Commissions
- Agricultural Directional Signage
- Agricultural Fairs Development
- Agricultural Tourism
- Commonwealth Quality Program
- Culinary Tourism
- Export Development
- Farm and Market Report
- Farm to School Project
- Farmers' Market Nutrition Program
- Farmers' Market Program
- Federal-State Market Improvement Program
- Food Safety Program
- Harvest New England Initiative
- Massachusetts State Exposition Building, West Springfield
- Massachusetts Grown and Fresher Campaign
- Organic Cost Share Certification
- Retail Coupons for Fluid Milk Program
- Specialty Crop Grant Program
- Value Added Technical Assistance

Mary began employment with the Department in 1987 as a marketing intern. Shortly after, she became a Market Specialist with the Department, until assuming the position of Director of Agricultural Development in 1996. She has coordinated the Federal State Marketing Improvement Program (FSMIP), USDA Specialty Crops Block Grant Program for Massachusetts and the USDA Organic Cost-



Share Program. Her current responsibilities include overseeing the Agricultural Fairs, and Marketing Programs. Mary is the President of the Harvest New England Committee and the past Secretary/ Treasurer of the North American Agricultural Marketing Officials (NAAMO). She also serves as Chair of the Massachusetts Dairy Promotion Board, as the Commissioner's designee.

STAFF LISTING

- Michael Botelho, Program Coordinator
- Lisa Damon, Program Coordinator
- Julia Grimaldi, Program Coordinator
- Ellen Hart, Program Coordinator
- Rick LeBlanc, Program Coordinator
- Bonita Oehlke, Program Coordinator
- David Webber, Program Coordinator



DIVISION OF AGRICULTURAL MARKETS STAFF

Top Row: Rick LeBlanc, Bonita Oehlke, Mary Jordan, David Webber Bottom Row: Ellen Hart, Julia Grimaldi, Lisa Damon, Michael Botelho



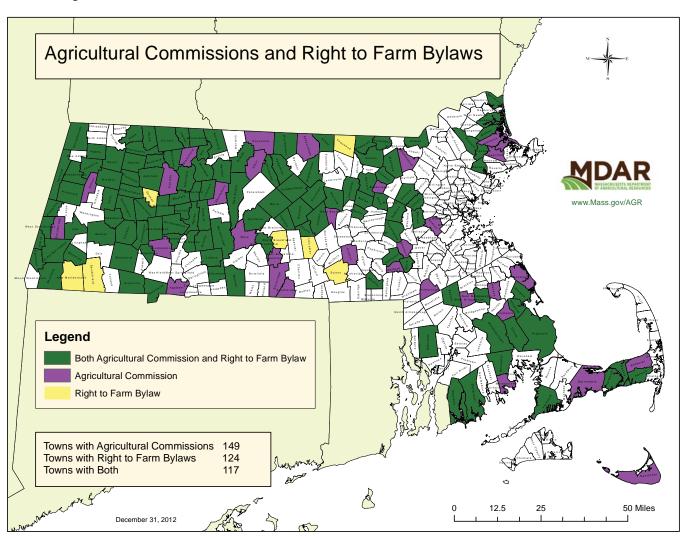
DIVISION OF AGRICULTURAL MARKETS, cont.

AGRICULTURAL COMMISSIONS

Richard LeBlanc Richard.LeBlanc@state.ma.us (617) 626-1759 Cheryl Lekstrom, Consultant Clekstrom@mac.com (508) 881-4766 Pete Westover, Consultant westover03@comcast.net (413) 695-4077

In December of 2012 there were 149 Agricultural Commissions, 124 Right to Farm Bylaws (RTFs) and 117 towns having both.

The Massachusetts Association of Agricultural Commissions (MAAC) was organized in 2010 to support Massachusetts' municipal Agricultural Commissions (Ag Coms). With help from local Ag Coms, the MAAC strives to provide Ag Coms with the necessary services and education to bolster and advance their agricultural support work at the local level. MAAC builds support for agriculture in communities through effective relations with federal and state agencies, elected and appointed officials, private and nonprofit organizations and the public. More than 55 Ag Coms have joined the MAAC. The Annual Meeting of MAAC was held on Feb. 24th, 2012 at the Holiday Inn in Marlborough. Planning has begun for a one-day





DIVISION OF AGRICULTURAL MARKETS, cont.

conference filled with workshops and the annual meeting in the winter of 2013.

MAAC Board members are:

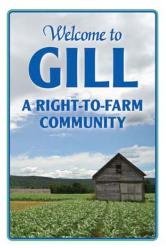
- Dick Ward, Carver Agricultural Commission, Plymouth County, President
- Laura Sapienza-Grabski, Boxford Agricultural Commission, Essex County, Vice President
- Laura Abrams, Sudbury Agricultural Commission, Middlesex County, Secretary
- Kathy Orlando, Sheffield Agricultural Commission, Berkshire County, Treasurer
- Steve Damon, Gill Agricultural Commission, Franklin County
- Mike Hogan, Ludlow Agricultural Commission, Hampden County
- Jaime Wagner, Amherst Agricultural Commission, Hampshire County
- Sue Guiducci, Dartmouth Agricultural Commission, Bristol County
- Ed Lawton, Foxborough Agricultural Commission, Norfolk County
- Mike Pineo, Sterling Agricultural Commission, Worcester County
- Leslie Spencer, Barnstable Agricultural Commission, Barnstable County
- Dwight Sipler, Mass Farm Bureau Federation
- Steve Herbert, UMass Center for Agriculture
- Greg Watson, Commissioner, Mass. Dept. of Agricultural Resources

Representatives continued to gather regionally to network and discuss a number of issues relevant to their work:

- · Working Effectively with Your Board of Health
- Right to Farm Bylaws
- Working with Conservation Commissions
- Agriculture and the Wetlands Protection Act
- Achieving Greater Agricultural Self-Sufficiency
- Strategies for Connecting Farmers to Available Land
- Funding Agricultural Commissions
- Conflict Management
- Understanding Laws Affecting Agriculture
- "Backyard" Farming Issues
- Farmland Protection Tools
- Agricultural Excise Tax Exemptions

- Composting Regulations
- Encourage Farm to School Relationships
- Installation of Local Right to Farm Signage
- Renewable Energy Installations on Farms
- Accessing Community Preservation Act Funds

Regional gatherings and informational meetings continue to address the concerns of local Ag Coms. The USDA Farm Service Agency Service Center's Conference Room in Holden continues to welcome Ag Com members from a dozen communities (Holden, Sterling, West Boylston, Princeton, Rutland, Oakham, Bolton, Ashburnham, Berlin, Barre, Harvard, and Hardwick) about 6 times per year to discuss goals and accomplishments, as well as resources for funding and topic areas of interest to the agricultural industry.











AGRICULTURAL DIRECTIONAL SIGNAGE PROGRAM

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The Agricultural Directional Signage Program is managed by MDAR in cooperation with the Massachusetts Department of Transportation (MassDOT). The Ag Signage Program allows for the placement of agricultural directional signs along state roadways for farms located off those roadways. In 2012 there was 1 application for signs. Criteria and application are online at: www.mass.gov/agr/markets/agritourism/signs.htm.



AGRICULTURAL FAIRS DEVELOPMENT

Ellen Hart Ellen.Hart@state.ma.us (617) 626-1742 Mary Jordan Mary.Jordan@state.ma.us (617) 626-1750

MDAR allots prize monies to agricultural fairs and supports 4-H activities in national competitions. The staff manages the state exposition building in West Springfield, inspects fairs, conducts workshops, seminars, and training sessions. In 2012, Division staff assisted the Massachusetts Agricultural Fairs Association (MAFA) to publish the

annual Massachusetts Agricultural Fairs Directory. Staff across the agency helped distribute the Fairs Directory through such venues as the Regional Tourist Councils, Chambers of Commerce, MA Turnpike Authority's rest areas, information centers, bookstores, libraries, etc. Staff works closely with the officers of MAFA by attending their Board meetings, the annual MAFA meeting held in November, and other informational meetings as deemed necessary. Former Director of the Agricultural Fairs Program Steve Quinn was recognized and inducted into the 'Agricultural Fairs Hall of Fame' at the annual MAFA meeting. There were 42 fairs held throughout the Commonwealth in 2012. The State Rosette was given to fairs upon request and is used to recognize excellence for "Best in Show". Over 3 million visitors attended these fairs in 2012. Agricultural Fairs were also promoted on the MassGrown & Fresher website.

AGRICULTURAL TOURISM

Richard LeBlanc Richard.LeBlanc@state.ma.us (617) 626-1759

Agricultural tourism (agritourism) 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, offering bus tours, corn mazes, bed and breakfasts, picnic tables, recreational activities, etc. In the fall of 2012, MDAR received a USDA Specialty Crops Block Grant to implement a *MassGrown & Fresher* Initiative to educate/ promote the public on the MA agricultural tourism opportunities for the consumer and tourists.

SPECIALTY CROPS THROUGH CONSUMER EVENTS AND EMAIL MARKETING

MDAR continues to promote the agritourism map throughout the state. It is the most popular brochure in finding farms across the Commonwealth. MDAR distributed over 50,000 maps throughout information centers, fairs, and food festivals. With assistance from the Massachusetts Office of Travel and Tourism (MOTT), Regional Tourism Councils (RTC) and the Chambers of Commerce, the map was distributed throughout the state at various information centers. MDAR also integrated the icons from the map onto



the *MassGrown & Fresher* map page (mass.gov/agr/mass-grown/map); types of farms can be queried for the public. MDAR is very proud of the over 400 farm attractions open to the public, offering interesting and educational activities. Agritourism encompasses a variety of activities, including farm tours, farm vacations, pick-your-own operations, farm bed & breakfast accommodations, nature study, cross country skiing, picnics, hayrides, workshops, fee hunting and fishing, and more.

COMMONWEALTH QUALITY PROGRAM

Michael Anthony Botelho Michael.Botelho@state.ma.us (617) 626-1721

Commonwealth Quality is designed to promote local agriculture and seafood and help consumers identify products that are produced, harvested and responsibly processed in Massachusetts. The program is a result of a broad collaboration between the Massachusetts Department of Agricultural Resources and representatives of other state agencies, science and educational partners as well as associations and, most importantly, members of the produce, dairy, forestry, aquaculture and lobster sectors of the Commonwealth. Central to the initiative is a licensed "Seal of Commonwealth Quality" which distinguishes those products that meet comprehensive program requirements as well as federal, state and local regulatory regulations. The seal appears on certified products at farm stands, farm-

A serial number embedded in the seal integrates a QR code specific to each registered participant.



ers' markets and retail locations across the state.

Program participants across the Commonwealth have adopted voluntary food safety procedures, as well as Best Management Practices, that promote environmental sustainability

and stewardship to qualify for the program as they continue their focus to provide quality products to their consumers and business partners.





(CQP) provided on-site technical assistance, educational sessions and conducted program audits for the produce, forestry, lobster and aquaculture sectors. The CQP initiative is being introduced to new commodity sectors including the maple and dairy industries. Members of each of these sectors will be working over the next year to develop a program for their respective commodity. Outreach to the public as well as industry officials continue throughout 2012 at various consumer – home shows and industry – producer shows.

For more information on the program please go to www.mass.gov/cqp





CULINARY TOURISM

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David Webber@state.ma.us (617) 626-1754



MDAR's Culinary Tourism Program, Savor Massachusetts was launched in 2009 with funding from a USDA Specialty Crops Block Grant. Culinary Tourism is a subset of agritourism that focuses specifically on the search for, and enjoyment of, prepared food and drink. Culinary Tourism promotes all distinctive and memorable gastronomic experiences. It is an important marketing niche that fosters economic and community development for specialty crop growers, farm wineries, farm breweries, and hospitality and tourism professionals alike.

Culinary Tourism in Massachusetts presents an innovative marketing opportunity that builds on the current agriculture assets many growers have in place. Savor Massachusetts offers web-based resources to assist those growers who may want to develop or expand a culinary tourism opportunity and it offers the culinary traveler thoughtful and dynamic web based farm-to-table resources. Log on to www.mass.gov/massgrown and click on culinary tourism for a complete list of resources.

2012 Program Accomplishments:

- Database of over 200 growers, food producers & culinary tourism participants
- Hundreds of web-based resources for the culinary traveler, growers & chefs
- Monthly culinary and agricultural events calendar
- Monthly featured recipe
- "Discover local flavor in Massachusetts" article featured in Exhale Magazine

Savor Massachusetts continues to foster valuable connections in the agricultural community and hospitality and tourism sector that ultimately benefit growers and food producers who offer unique culinary experiences.

EXPORT DEVELOPMENT

Bonita Oehlke Bonita.Oehlke@state.ma.us (617) 626-1753

MDAR is a member of Food Export USA Northeast, www. foodexport.org, a USDA Cooperator receiving funds from the USDA Foreign Agriculture Service and representing the 10 states in the Northeast to access programs and services for export development and support for MA companies. Participating companies must have at least 50% US ingredients and be small – medium sized, according to the Small Business Administration definition.

There is MA produced chowder in Panama, hot fudge sauce in Australia, dried sweetened cranberries around the world, scallops and dogfish from New Bedford in Europe, lobsters from Cape Cod in China and many small-medium sized value added food businesses at US trade shows where international buyers are in attendance. This program is a line item in the Farm Bill - The Market Access Program (MAP) and was funded at \$200 million – pending its passage.

Thirty-two Massachusetts companies were awarded nearly \$1,000,000 (actual \$993,920) from the "Branded Program," funds from USDA administered by Food Export for MDAR. Funds promoted activities relating to the promotion of food and agricultural products including advertising and sampling, trade show support, point of sale material and label development for new export markets. Services provided ranged from identifying best markets to working with international market specialists for importer and distributor interviews. Support at domestic and international trade shows, focused trade missions, and buyers' missions were offered. These funds are made available through the Market Access Program, offered by the U.S. Department of Agriculture.

Sales at the 2012 International Boston Seafood Show totaled \$1,540,000 and sales from MA companies throughout the year based on participation in Food Export activities totaled \$210,010,080.

The Food Export Intern program provided MDAR with support from 2 talented students: John Connolly ended



his internship after many outreach contributions and was replaced by Allison Nakano, a strong addition to the team.

A variety of other programs are available to MA companies which are heavily subsidized by USDA and have been used with positive results to support exporter education, bringing buyers to meet with suppliers, focused trade missions, market research to identify regulatory issues, as well as to find brokers, distributors and retail, wholesale and restaurant customers.

MDAR hosted a "Why Export" seminar on February 29 in collaboration with Food Export USA Northeast, the National Association of Specialty Food Trade, and the Massachusetts Specialty Foods Association. Featured speakers included Pamela Wells Russell, Caribbean In-Country Market Representative, Ron Tanner, VP Communications, NASFT; Bob Burke, Natural Products Consulting; Michael Thompson CEO Venus Wafers and David Lamlein, Director of Wholesale Marketing Dancing Deer Bakery. Over 50 food businesses attended.

For continued support for President Obama's National Export Initiative, MDAR participated in the October New England Trade Development Conference in New Bedford and the Mass Export Center's Export Expo in December to promote export development

resources. Other partners throughout the year included Food Export USA Northeast, the Cranberry Marketing Committee, the US Apple Export Federation, the Mass Export Center, regional offices of the US Department of Commerce and the MA Office of International Trade and Investment.

In November, financial support was awarded to support the development of markets for MA apple producers, cheese makers through the Massachusetts Cheese Guild and seafood producers for the Mexican market, to complement the shipping initiative from the Port of New Bedford to Tuxpan Mexico. MDAR also continued to work with UMASS and NE Apple to explore markets

for locally grown apples including McIntosh in Central America, and a shipment was sent to El Salvador in December.

Buyer Missions offer a low-cost, low risk business opportunity for product feedback and to develop sales. MDAR staff worked closely with the following missions:

- Northeast Buyers Mission, Boston, February 10th
- Buyers Mission to the International Seafood Show, Boston, March 10th-13th
- Buyers Mission to the Summer Fancy Food Show, Washington DC, June 16th
- Buyers Mission to Natural Products Expo East, Baltimore, September 21st
- Food Export Forum with Buyers Mission, October 2nd





FARM & MARKET REPORT

Richard LeBlanc Richard.LeBlanc@state.ma.us (617) 626-1759

The Farm & Market Report is the Department's bimonthly newsletter which includes a Commissioner's Column, program/grant updates, workshop/ educational updates, news from USDA, along with a calendar and classified section. The Report is the primary tool MDAR uses to communicate information and programs to the agricultural industry. For 2012, MDAR published 6 Reports along with 29 extra email blasts. The state listsery started in 2004 with about 800 emails, and grew to over 7000 industry email contacts in 2012. Also in 2012, 8 MassGrown & Fresher eblasts were sent to over 3000 consumers. Information contained in these eblasts pertains to consumer events that involved Culinary Tourism, agricultural fairs and other agricultural events.

Past issues can viewed at www.mass.gov/eea/agencies/agr/markets/farm-and-market-report.

FARM TO SCHOOL PROJECT

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Kelly Erwin mafarmtoschool@gmail.com (413) 253-3844



From kindergarten to college, interest in serving locally grown foods in cafeterias is increasing in Massachusetts and throughout the northeast U.S. 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. During the 2011 and 2012 school year, 320 public school districts, private schools, and colleges reported they preferentially purchased local foods. At least 100 school districts purchased some or all of their local foods directly from more than 114 Massachusetts farms.

In addition, 89 Massachusetts colleges and private schools reported they preferentially purchased local foods during the 2011-2012 school year. MDAR's support of this program is provided in recognition of the clear benefits that direct farm to institution linkages are important for agriculture in Massachusetts.

For more information:

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

FARMERS' MARKETS NUTRITION PROGRAM (FMNP)

Lisa Damon Lisa.Damon@state.ma.us (617) 626-1731

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

Participation in the FMNP benefits farmers by attracting a new base of customers to farmers' markets, thereby providing additional sales opportunities to participating farmers. It also allows farmers to capture a greater share of the consumer food dollar through direct marketing and



promotes diversification on small farms by encouraging the production of locally grown fresh fruits and vegetables.

Participation in the FMNP benefits coupon recipients as well. It provides participants with coupons redeemable for nutritious fresh fruits and vegetables, introduces families and others to farmers' markets, and supports nutrition education goals by encouraging the selection and preparation of fresh fruits and vegetables.

In addition to the coupon program, Massachusetts also seeks to serve low-income older adults who are unable to use the coupons due to access limitations by facilitating bulk purchasing of fruits and vegetables that are distributed to homebound elders with their regularly scheduled meals deliveries, or distributed at on-site meal programs.

Funding for the FMNP is provided by the U.S. Department of Agriculture's Food and Nutrition Service (USDA, FNS) with an additional required state match. Massachusetts farmers' market coupons are distributed to women and children in the WIC Program, as well as eligible seniors and other individuals. Any farmer participating at an approved farmers' market may request certification to participate in the Farmers' Market Coupon Program. Certification involves discussing the regulations for the program, as well as procedures for receiving payment for redeemed coupons.

The Farmers' Market Nutrition Program began in Massachusetts in 1986, and in 1989, Congress authorized a 3-year demonstration project to test the concept in 10 states. The success of the demonstration projects led Congress to enact the WIC Farmers' Market Nutrition Act of 1992, thereby establishing it as the 14th federal food assistance program of the U.S. Department of Agriculture. Since that time, the number of states participating in the program has grown significantly.

In 2012 the USDA FNS awarded Massachusetts with \$508,306 in federal "food" dollars to distribute to low income elders along with \$56,479 to use to administer the program state-wide. The Senior Farmers' Market Nutrition Program served approximately 20,260 seniors with coupons throughout the Commonwealth in 2012. The Senior FMNP homebound delivery program served 3,925 seniors

in 2012 throughout the Commonwealth of Massachusetts at 20 different local elder agencies. Participating elders received a benefit of \$25 per person for the 2012 growing season. An overwhelming majority (approximately 79%) of the seniors receiving the coupon benefit visited a farmers' market to redeem the fresh produce.

The WIC Farmers' Market Nutrition Program (FMNP) served approximately 25,000 women and children through 36 local WIC agencies throughout the state in 2012 with coupons to buy fresh produce at farmers' markets. Through the FMNP approximately \$500,000 worth of coupons were distributed to WIC participants to use at Massachusetts farmers' markets. Participants received a benefit of \$20 per person for the 2012 growing season. These funds successfully increased the purchase of \$357, worth of fresh, local produce by WIC participants in 2012.

The program certified approximately 225 farmers' markets and 365 growers to serve the recipients of the program in 2012.

For more information:

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

FARMERS' MARKET PROGRAM

David Webber David.Webber@state.ma.us (617) 626-1754

Department staff provides technical assistance to individuals and groups trying to start a farmers' market, help farmers find appropriate farmers' markets in which to participate, and encourage consumers to patronize farmers' markets through the publication of consumer listings, news releases, and other promotional activities. The number of farmers' markets continued to expand in 2012 with total number of markets reaching 254.



GROWTH OF SEASONAL FARMERS' MARKETS

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

In addition to seasonal farmers' markets operating from spring until fall, winter farmers' markets continued to expand from 35 to 40 during the 2012-2013 winter season.

GROWTH OF WINTER FARMERS' MARKETS

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

FARMERS' MARKET PROMOTION

MDAR maintains a comprehensive website of farmers' market resources on its *MassGrown & Fresher* website for consumers. A list of farmers' markets with their days, times, and locations can be found along with a crop availability guide, shopping and produce storage tips, healthy recipes, and nutrition information.

The MassGrown & Fresher website was updated with dates, times and locations for all farmers' markets for the 2012 season. Three news releases were sent to the press – In June to announce the start of the market season; in August for Farmers' Market week; and in November, regarding winter farmers' markets and holiday items.

Massachusetts Farmers' Market Week was held the week of August 19th. Governor Patrick's proclamation was read at the City Hall Plaza Farmers' Market in Boston on August 20th in conjunction with the annual Massachusetts Tomato Contest. Farmers from across the state entered their best tomatoes to be judged by food writers, chefs and other judges on taste, appearance and quality.

Farmers' markets continued to receive much media attention. Dozens of articles on farmers' markets were published in newspapers across the state. Additionally, farmers' markets also received coverage on local television and radio stations.

MARKET MANAGER/FARMER TECHNICAL ASSISTANCE

A Farmers' Market Managers Workshop was held in Shrewsbury, Massachusetts in March. The workshop was attended by over 100 farmers' market managers and was co-sponsored by the Federation of Massachusetts Farmers' Markets and the Cooperative Development Institute. Topics included: market planning, fundraising and a facilitated market manager networking exchange utilizing a "speed-dating" type format.

Resources for market managers and growers are maintained on the Department's website. This includes information on market development, regulatory requirements, promotion, EBT/SNAP and contact information for all markets.



NEW SEASONAL FARMERS' MARKETS IN 2012

BERKSHIRE COUNTY

Great Barrington/Berkshire

Community Market

Hancock

West Stockbridge

BRISTOL COUNTY

Fall River/Father Diaferio

Market

ESSEX COUNTY

Swampscott

HAMPDEN COUNTY

Wilbraham

HAMPSHIRE COUNTY

Easthampton

MIDDLESEX COUNTY

Ashland Malden Shirley

Somerville/Swirl and Slice

Tyngsboro Wellesley

NORFOLK COUNTY

Medway Needham Westwood

PLYMOUTH COUNTY

Onset Scituate

WORCESTER COUNTY

Athol

Leominster/Health Alliance Gardner/Heywood l

Sturbridge

Worcester/Family Health

Center

NEW WINTER FARMERS' MARKETS IN 2012

BRISTOL COUNTY

Easton

HAMPSHIRE COUNTY

Easthampton

HAMPDEN COUNTY

Hampden

MIDDLESEX COUNTY

Framingham Medford

Newton

Newton
Somerville/Mystic

NORFOLK COUNTY

Brookline

PLYMOUTH COUNTY

Plymouth/Cordage Park

SUFFOLK COUNTY

Jamaica Plain/Egleston

WORCESTER COUNTY

Athol

SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) / ELECTRONIC BENEFIT TRANSFER (EBT) AT FARMERS' MARKETS

The number of farmers' markets accepting SNAP/EBT in 2012 grew from 90 to 110, while SNAP redemption at those markets increased 48% from \$221,707 to \$328,176.

Growth in Number of Farmers' Markets Accepting SNAP and SNAP Sales:

YEAR	MARKETS ACCEPTING SNAP	TOTAL SNAP SALES	AVERAGE PER MARKET
2007	9	\$4,543	\$505
2008	18	\$8,447	\$469
2009	30	\$19,119	\$637
2010	58	\$122,685	\$2,115
2011	90	\$221,707	\$2,463
2012	110	\$328,176	\$2,983

FUNDING FOR NEW MARKETS TO PARTICIPATE IN SNAP

The Federal Consolidated and Further Continuing Appropriations Act, provided funding to increase the number of farmers' markets around the country participating in SNAP (formerly Food Stamps). Specifically, the funds are intended to expand the availability of wireless point-of-sale (POS) equipment in farmers' markets not currently participating in SNAP. The United States Department of Agriculture (USDA) provided funding to the Massachusetts Department of Transitional Assistance (DTA), who in turn has contracted with the Massachusetts Department of Agricultural Resources (MDAR) for \$80,000 to implement the program.

Through this funding transferred from DTA, MDAR contracted with Bank of America (the statewide contractor for wireless services) to purchase wireless point-of-sale equipment for farmers' markets. MDAR will also use these federal funds to pay for other allowable costs, such as the monthly flat fee for operation and the one-time setup fee for that equipment.



MDAR is responsible for determining farmers' markets eligibility. MDAR is also responsible for developing and signing agreements for inclusion in this initiative.

HEALTHY INCENTIVES PILOT (HIP) IN HAMPDEN COUNTY

Through an Internal Service Agreement, the Department of Transitional Assistance (DTA) transferred a total of \$157,000 of federal Healthy Incentives Pilot (HIP) funds to MDAR. In accordance with HIP agreements and guidelines, MDAR shall expend these funds to enhance Electronic Benefits Transfer (EBT) utilization, increase Supplemental Nutrition Assistance Program (SNAP) participation at farmers' markets in Hampden County, and support the implementation of 3 trial SNAP-HIP Farmers' Market models.

Through an RFR released and managed by MDAR, appropriate subcontractors were identified to better support the needs of Hampden County farmers' markets. Subcontractors are able to directly serve farmers, farmers' markets and related stakeholders more efficiently and effectively. Funding was subcontracted to Community Involved in Sustaining Agriculture (CISA) and Mass Farmers' Markets for the following duties:

- \$110,000 to directly support market infrastructure and fees. Funds provided for the development and implementation of 3 trial SNAP HIP Farmers' Market models, and wireless EBT machine purchase/rentals and 8 months of service in fourteen (14) Hampden County farmers' markets participating in the SNAP-HIP Farmers' Markets. Farmers' markets supported by this funding must participate in HIP.
- \$47,000 provided to the vendor and subcontractors to assist the DTA HIP unit staff in developing protocols and systems that allowed Hampden County farmers' markets and farm stands to participate in HIP.

FEDERAL - STATE MARKETING IMPROVEMENT PROGRAM (FSMIP) GRANT PROGRAM

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In 2012, the Massachusetts Department of Agricultural Resources was awarded \$53,560 to assist in exploring new market opportunities for Massachusetts and regional food and agricultural products, and to encourage research and innovation aimed at improving the efficiency and performance of the marketing system.

In 2012, \$21,500 was awarded to the Massachusetts Department of Agricultural Resources, in cooperation with the Massachusetts Flower Growers' Association and the Massachusetts Nursery and Landscape Association, to create a consumer-oriented website that will support the Plant Something campaign to promote the state's horticulture industry.

The Massachusetts Department of Agricultural Resources also received \$32,060, in cooperation with Community Involved in Sustaining Agriculture (CISA), to research the benefits, costs, regulatory requirements and options for meat cutting and processing businesses that serve local meat producers in Massachusetts in order to expand the sector to meet the growing consumer demand for high-value meat products.

Massachusetts has been awarded \$550,560 over the past 11 years in support of various agricultural marketing improvement projects. Past projects in Massachusetts can be found here: www.ams.usda.gov/AMSv1.0/FSMIP

FSMIP 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.

FSMIP funds a wide range of applied research projects that address barriers, challenges, and opportunities in marketing, transporting, and distributing U.S. food and agricultural products domestically and internationally. Eligible agricultural categories include livestock, livestock products, food and feed crops, fish and shellfish, horticulture,



viticulture, apiary, and forest products and processed or manufactured products derived from such commodities. Reflecting the growing diversity of U.S. agriculture in recent years, FSMIP has funded projects dealing with nutraceuticals, bioenergy, compost and products made from agricultural residue. Proposals may deal with barriers, challenges or opportunities manifesting at any stage of the marketing chain including direct, wholesale, and retail. Proposals may involve small, medium or large scale agricultural entities but should potentially benefit multiple producers or agribusinesses. Proprietary proposals that benefit 1 business or individual are not to be considered. Proposals that address issues of importance at the state, multi-state, or national level are appropriate for FSMIP. FSMIP also seeks unique proposals on a smaller scale that may serve as pilot projects or case studies useful as models for others. Of particular interest are proposals that reflect a collaborative approach between the states, academia, the farm sector and other appropriate entities and stakeholders.

For more information on the FSMIP program please refer to:

- www.mass.gov/eea/agencies/agr/markets/fsmip.html
- www.ams.usda.gov/AMSv1.0/FSMIP

FOOD SAFETY

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Following the passage of the Food Safety Modernization Act in January 2011, the focus on food safety continued in 2012, with fresh produce in the spotlight. FDA was expected to issue proposed rules in 2013 including one on preventative controls in produce safety. The Act aims to shift the focus from responding to contamination to preventing it, to ensure that the U.S. food supply is safe. MDAR and UMASS Extension continued to collaborate to coordinate resources and training sessions for USDA Good Agricultural Practices (GAP). Educational programs were presented in 2012 with participation from growers, regulators, and university staff, at trainings across the state on January 31st, April 12th and December 6th. The December training focused on Harmonized GAP. The MDAR

grant also supported staff to attend trainings relating to Harmonized GAP.

The coordinated efforts of the Divisions of Crop and Pest Services and of the Division of Agricultural Markets worked to prepare growers and guide them through the GAP processes. MDAR offered mock GAP audits and worked with growers to assist them with GAP updates. There were 22 completed GAP audits, and 15 participated in the GAP cost share program, which targets first time applicants. The program is designed for any producer, individual, or business located in Massachusetts that successfully completes their initial USDA GAP/Good Handling Practices (GHP) audit to be eligible to apply for cost-share reimbursement of a maximum of \$750 annually. Funds for this project are from a USDA Specialty Crops Block Grant.

MDAR worked closely with the Massachusetts Partnership for Food Safety Education (MPFSE) to develop and promote for safe produce handling techniques and other food safety topics to consumers and food workers. MDAR worked with the MPFSE to promote food safety messages and distribute material at the Big E in September.

HARVEST NEW ENGLAND INITIATIVE

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Harvest New England (HNE) is a cooperative marketing program created by New England's state departments of agriculture in 1992 from a USDA Federal State Marketing Improvement Grant. The initial purpose of the program was to support the sale of New England grown produce through wholesale channels to the retail market. The program was subsequently opened to all New England food and agricultural products. The Harvest New England Association, Inc. is a non-profit corporation registered with the states of Vermont and New Hampshire. HNE is registered with the U.S. Department of the Treasury, and is recognized as a 501 (c)(5) organization by the Internal Revenue Service. Recently, the New England state departments of agriculture secured funding through the USDA



Specialty Crops Block Grant to enhance the competitiveness of specialty crops through the HNE program. Funds have been used to promote the campaign on the Avenue of States during the Big E Fair at the Eastern States Exposition held in September in West Springfield. The HNE banner is adorned with the logo and hung on the lampposts along the Avenue of States. Future funded projects will include updating the HNE website and the development of HNE logo material for grower/ producers to use on their own packaging and promotion. Plans have begun for the fourth Harvest New England Agricultural Marketing Conference and Trade Show to be held in Sturbridge in February, 2013. The Harvest New England Association has developed programs and activities over the past 20 years to further enhance the economic viability of New England products.

MASSACHUSETTS STATE EXPOSITION BUILDING, WEST SPRINGFIELD

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Howard Vinton
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Ellen Hart
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(617) 626-1742

MDAR manages the Massachusetts State Exposition Building located on the Avenue of States at the Eastern States Exposition ("Big E") in West Springfield. Each year in preparation for the annual 17-day Big E Fair, the Department invites Massachusetts organizations and businesses to apply for the purpose of showcasing Massachusetts agriculture, commerce, culture, food or tourism through informational, educational, promotional, and retail exhibits.

The 2012 fair saw record-breaking attendance with very comfortable "fair-like" temperatures. There were a few days with torrential downpours of rain including Tuesday, September 18th; the fair closed at 8:00 pm due to high winds and the threat of heavy rains and flooding.

A total of 27 vendors/exhibitors exhibited inside the state building, and 6 vendors/exhibitors exhibited in

the backyard of the building. New for 2012, 4 vendors sold their products outside on the 2 side porches of the Building. These slots were made available to vendors who could not commit to the full 17 days, but were able to exhibit and sell their products for 4-5 days, at a fee of \$100 per day. By all accounts, all 4 vendors had a positive experience and building management will continue to offer this opportunity in the future. There were 2 new exhibitors - Chocolate Coast and Rachel's Seafood exhibiting inside and 1 new exhibitor in the backyard - Bluestar Equiculture. Several inside exhibitors were moved to different locations within the Building. The center display featured educational exhibits from the Massachusetts Emergency Management Association, a beautiful replica of a horse drawn fire truck, and the Massachusetts Fire Safety Team. In the continuous effort towards being green, staff once again encouraged all vendors to use biodegradable plates, cups and utensils. The Big Belly Trash Compactors provided by Massachusetts Clean Energy Center also came with recycling units that furthered conservation efforts.

There were several events at the Massachusetts Building including 'Massachusetts Day' held on Thursday, September 20th. On Massachusetts Day, the Massachusetts Office of Travel & Tourism held their annual Governor's Conference on Tourism in the Clock Tower Visitors Center located directly behind the Massachusetts Building. Conference attendees had the opportunity to visit the Massachusetts Building several times that day. Both Governor Deval Patrick and Lt. Governor Tim Murray toured the Building and presented the 2012 Massachusetts Building "Wall of Fame" honor to the family of Rose DiCarlo. Rose, an employee of the Department of Conservation and Recreation (DCR) had worked in the Building during the fair for over 30 years and was very instrumental in many of the new Building initiatives before she lost her long battle with cancer.

The Department has a dedicated team that comprises the Massachusetts Building Advisory Committee that works together to choose new vendors, make vendor recommendations and offer suggestions for the betterment of the Building and how best to showcase the Building to the public. Members include:

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- Mitchell Garabedian MA Independent Manufacturer's Association
- Toi Graham Western Massachusetts Flowers Association
- Conrad Halberg Massachusetts Fairs Association
- Mary Jordan MDAR, MA Building co-manager
- Susan Lavoie Eastern States Exposition
- Rick LeBlanc MDAR
- Dr. Linda Lowery UMASS Hospitality, Hotel and Restaurant Management School
- Mary Nourse Nourse Farms
- Jeanne Schermier Graphic Artist
- Howie Vinton MDAR, MA Building co-manager
- Steve Walsh Massachusetts Office of Travel & Tourism

MASSGROWN & FRESHER

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The award-winning <code>MassGrown & Fresher</code> logo and website program links consumers to locally grown farm products, specialty foods, and fun ag-tivities most importantly through its agri-Google mapping feature that maps retail farm businesses across the Commonwealth. This interactive map locates farms, agricultural fairs, and farmers' markets, and gives the user the ability for custom information and directions. The <code>MassGrown & Fresher</code> website continues to grow with increase in page views on an annual basis. The map continues to lead page views, but there is also strong interest and clicks on the farmers' markets pages.

In addition to promoting MassGrown & Fresher, MDAR also promotes "Massachusetts Made with Pride" to producing stickers, price cards, and posters that are offered to farmers and the food producers online at www.mass.gov/eea/agencies/agr/markets/logo-program. Additionally, MassGrown & Fresher supports other initiatives such as the Savor Massachusetts Program, Commonwealth Quality Program, agritourism, and more. Throughout the year, staff set up informational booths at industry and consumer shows, fairs, and festivals, to promote MassGrown & Fresher, along with farm and fair publications. Annually, there are many requests for marketing materials using the logo, which includes requests from farms and schools.

With the goal of reaching out to a large commuting audience with opportunities to find "MassGrown" products and farms, MDAR applied for and received a USDA Specialty Crops Grant to raise awareness of MassGrown & Fresher specialty crops and drive web traffic to the MassGrown & Fresher website. The Department mounted poster advertisements placed on public transportation vehicles (specifically the commuter rail) throughout the entire metropolitan area of Boston to promote awareness for locally grown products. The funding for this initiative was split between a spring and fall campaign and matching funds were provided by 5 agricultural commodity groups for the respective seasonal campaign.

The MA Flower Growers Association (MFGA) and the MA Nursery & Landscape Association provided funds for the spring campaign. Three different posters were developed and placed in trains during April and May. The campaign matched well with the unveiling by the MFGA of their new "Plant Something" campaign and website. MDAR collaborated on artwork and timed the poster campaign along with an event featuring Governor Patrick planting seedlings at the Mather School in Dorchester. *MassGrown & Fresher* web page views for April & May 2012 increased 12% versus the same period in 2011.

For the fall campaign, funding was matched by 4 Massachusetts commodity associations: MA Fruit Growers, MA Christmas Tree Association, MA Farm Winery Association, and the MA Cranberry Association. Two poster designs were created with the theme: "Time is Ripe to Visit a Farm". The posters depicted: apples, grapes, cranberries, pumpkins, and Christmas trees. All poster designs included again the MassGrown & Fresher website, along with the QR code that also linked to the website. MassGrown & Fresher web page views for September and October 2012 increased 9.83% versus the same period in 2011.





MDAR received information from 2 of the associations that participated in the project to see if there was increased traffic to their websites. The Flowers Growers "Plant Something" website statistics from the Ag associations ranked the *MassGrown & Fresher* website as the top referral (other than search engines), and the Christmas Tree Association had the *MassGrown & Fresher* website 1st in November, and 2nd in December. One group benefitting from this program was commuters, since they were informed about accessing specialty crops in Massachusetts. There are also many specialty crop producers and businesses that can be accessed through the website www.mass.gov/massgrown.

RETAIL COUPON FOR FLUID MILK PROGRAM

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The Retail Coupon for Fluid Milk Program was established to allow for the use of fluid milk coupons in promotional and marketing campaigns of milk and cream for consumer use in an effort to increase fluid milk consumption. According to Department regulations, these promotions must not result in a sale of milk that is below the cost of production or appear to be predatory towards any Massachusetts dairy farmer who directly markets and sells his/her own fluid milk to consumers. In 2012, there were 81 notifications of promotions within the state; 50 of these promotions were 'cross-promotions' where 2 entities were marketed jointly so that a benefit in the purchase of 1 product was earned by the purchase of the other product. For these cross promotions the non-dairy entity covers the cost of the promotion; the milk was non brand specific, and the promotion was offered state wide. The remaining approved promotions consisted of 24 'cents off' coupons ranging in price from \$0.25 to \$1.00; 3 promotions where the purchase of milk resulted in a future purchase savings between \$1.00 to \$3.00; and 4 promotions where buying a certain quantity of milk resulted in a free gallon of milk. With these promotions the offer was not valid until all units of milk were purchased and the value of the offer equaled the cumulative value of the discount per individual units of milk. No promotional campaigns proposed were denied.

ORGANIC COST SHARE CERTIFICATION

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In 2012, there were some 63 farmers and close to 19 processors that received Organic Cost Share funds. The Department works closely in conjunction with the USDA Agricultural Marketing Service to reimburse certified organic farmers up to 75% (\$750 dollars maximum) of the total certification cost. Funds are available to farms that are inspected and certified and/or inspected and receiving renewal of certification. Total funds allocated by the USDA for Massachusetts was \$60,000 for farmer cost-share and \$30,000 for processor cost share. The deadline for submitting applications for reimbursement was October 15th.

SPECIALTY CROP GRANT AWARDS

Julia Grimaldi Julia.Grimaldi@state.ma.us (617) 626-1763 Daniel Rhodes Daniel.Rhodes@state.ma.us (617) 626-1728

In 2012, the United States Department of Agriculture (USDA) awarded MDAR approximately \$400,000 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 annually submit proposals for projects that specifically address the goals that 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, individual operations and business are all eligible for this grant program, provided their proposals meet all the specifications of MDAR and USDA. A list of 2012 Specialty Crop grant recipients and their projects is on the following page.



2012 SPECIALTY CROP GRANT RECIPIENTS

Massachusetts Farm Bureau Agricultural Preservation Corp: \$50,000

Worcester

DIGGING DEEPER: More Specialty Crops in More Cafeterias' for More of the Year!

Nuestras Raices: \$39,923

Holyoke

Increasing Sales of Massachusetts-Grown Specialty Crops in Low-Income, Immigrant, and Refugee Communities Project

UMASS Extension: \$34,000

Amherst

Growing fava beans as double cropping in Massachusetts Promoting Water Conservation Practices

New Entry Sustainable Farming Project: \$30,000

Lowell

Expanding Beginning Farmers' Success with Specialty Corps

Community Involved in Sustaining Agriculture: \$30,000

South Deerfield

Marketing Specialty Crops – A Monthly Campaign to Grow Supply and Drive Sales

Cape Cod Cranberry Growers Association: \$29,950

Wareham

Phase 2: Empowering Growers with Water Quality Status of Ponds and Lakes linked to Cranberry Bogs that may require Phosphorus TMDL

Holyoke Health Center and Administrative Offices: \$29,600

Holyoke

The Holyoke Kindergarten Initiative: Healthy, Local Nutrition for a New Generation

Massachusetts Farm Bureau Agricultural Preservation Corp: \$24,000

Worcester

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

MDAR: \$22,000

Boston

MassGrown & Fresher Promotes Specialty Crops through Consumer Events and Email Marketing

Sustainable Business Networks of Greater Boston: \$20,000

Boston

Overcoming Barriers to Specialty Crops

$Mass a chusetts\ Agriculture\ in\ the\ Classroom:\ \$20,000$

Seekonk

Phase II, Strengthening the Connections between Agriculture and the School Garden

Massachusetts Farm Winery and Growers Association: \$15,000

Plympton

Growing the Massachusetts Wine Industry though the Use of Mobile Application

New England Apple Association: \$16,000

Hatfield

Enhancing New England's apple orchard varieties

Massachusetts Nursery and Landscaping Association with the Massachusetts Flower Growers' Association: \$13,000

Whatley

Promoting Water Conservation Practices

UMASS Extension Food Science Department: \$8,470

Amherst

Supporting specialty crops through Better Process Control School and value-added production

University of Vermont Extension: \$8,000

Burlington, VT

Enhancing Farmer Capacity to Produce High Quality Hops for the Local Brewing Industry

Northeast Organic Farming Association: \$5,000

Barre

Improving educational resources for Massachusetts Vegetable Growers



VALUE-ADDED TECHNICAL ASSISTANCE

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As growers look to add value to their products and entrepreneurs work to start new businesses, MDAR shares resources and makes referrals on product development, production, marketing, federal and state regulations, training and education. The Department's Food Processors Resource Manual as well as resources through a partnership with the New England Extension Food Safety Consortium, the Massachusetts Specialty Foods Association, the MA Department of Public Health and the Center for Women and Business is available at www.mass.gov/eea/agencies/agr/markets/culinary-tourism/massachusetts-food-processors-resource-manual-generic.html

Referrals continued to the 3 shared use kitchens in Massachusetts including the Western Massachusetts Food Processing Center in Greenfield, the Dartmouth Grange and Crop Circle in Boston. A Massachusetts Pavilion at the Washington DC Summer Fancy Food Show featured 24 companies, as part of over 50 exhibitors from the state at the event.

Massachusetts had good news to promote in 2012 about cheese, which is the largest specialty food category nationally in terms of sales. In May, a new Massachusetts Cheese Guild was formed with a focus on marketing Massachusetts cheeses, branding, education and technical assistance. At the 25th annual Governor's Conference on Travel and Tourism at the Visitors Center at the Big E in West Springfield, Massachusetts Cheese was featured during the "Open Market Place" reception.

In the very competitive 2012 American Cheese Society Judging Competition, top prizes went to several Massachusetts participants, including Cricket Creek Farm of Williamstown, and Robinson Farm and Ruggles Hill Creamery, both of Hardwick. At the annual Eastern States Exposition Cheese Competition, Smith's Country Cheese of Winchendon, Nobscot Artisan Cheese of Framingham, Cricket Creek Farm of Williamstown, and Robinson Farm and Ruggles Hill Creamery, both of Hardwick, all medaled.

The second version of the Massachusetts Wine and Cheese Trail Map was celebrated with Governor Patrick at Hardwick Winery on August 16th. The trail was developed, printed and distributed in collaboration with the MA Office of Travel and Tourisms' 16 Regional Tourism Councils and the MA Dairy Promotion Board. In other news, Hardwick Winery won the "Best Massachusetts Wine" at the Big E Wine competition and nine other Bay State wineries received medals.

MDAR was awarded funds from USDA Rural Development and the Federal State Marketing Improvement Program for a MA Craft Beer Passport Program and grower/brewer matchmaking: From grain to glass - bridging the gap between local ingredients, craft breweries and consumers: assessing the opportunity for local ingredients. Initial meetings with growers of hops, grain and pumpkins, and several craft brewers laid the foundation for the project. A survey to estimate the potential volume and value of local ingredients was distributed.



The Samek family, owners of Hardwick Winery pose with Governor Deval Patrick at the celebration of the release of the updated version of the Massachusetts Wine and Cheese Trail Map.



DIVISION OF ANIMAL HEALTH (AH)

MICHAEL CAHILL, DIVISION DIRECTOR

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The Division of Animal Health oversees a vast array of programs that focus on appropriate handling, care and control of livestock, poultry, and companion animals. Developing protocols for rapid response to any emerging disease problem and enforcing the rules and regulations designed to mitigate the risk of introducing such disease are essential roles the Division fills to protect the health of the Commonwealth's domestic animal population. Proactively establishing and promoting management practices that reduce unnecessary stresses on animals served to increase yield in production animals and further enhance the life and longevity of those animals that are a part of our lives, whether for business or pleasure.

The Division of Animal Health is comprised of 18 full time employees, including veterinarians, program managers, inspectors, and administrative support staff. Division personnel work within several programs with funding provided by the United States Department of Agriculture through cooperative agreements. 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 2012:

- Foreign Animal Disease Prevention Cooperative Agreement Funding: \$2,000
- Notifiable Avian Influenza Cooperative Agreement Funding (formerly Avian Influenza and National Poultry Improvement Program): \$70,000
- Scrapie Cooperative Agreement Funding: \$3,771
- Swine Garbage Feeding Surveillance Cooperative Agreement Funding: \$21,500



Michael
Cahill has
served
with the
Department
of
Agricultural
Resources
since 1994.
His employment began
as the Rabies
Program
Coordinator,

and expanded to include the supervisory role for the approximately 500 Municipal Animal Inspectors who form the Division's first responders to detected animal disease events in the field. In 2002, he received a Merit Award from the Massachusetts Veterinary Medical Association in honor of his assistance to the veterinary community. He has served as the Director of the Division of Animal Health since 2008.

PROGRAM LISTING

- Animal Imports and Livestock Markets
- Biosecurity Program
- Dairy Program
- Equine 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



STAFF LISTING

- Patricia Cabral, Program Coordinator
- Elsie Colon, Administrative Assistant
- Stephanie Funk, Animal Health Inspector
- Edward Hageman, Poultry Program Coordinator
- Glenn Harris, Animal Health Inspector
- Linda Harrod, Animal Health Inspector
- Cathy Kaszowski, Dairy Program Coordinator
- Alexander MacDonald, Poultry/Dairy Inspector
- Dr. Fred Mach, Veterinary Health Officer
- Megan Megrath, Poultry Inspector
- John Nunes, Administrative Assistant
- Dr. Lorraine O'Connor, Chief Veterinary Health Officer
- Sandra Pepe, Program Coordinator
- Sheila Phelon, Animal Health/Dairy Inspector
- Robin Rice, Administrative Assistant
- Auzinda Tavares, Administrative Assistant
- Esther Wegman, Program Coordinator

ANIMAL IMPORTS AND LIVESTOCK MARKETS

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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 a veterinarian's certificate 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 28 licensed livestock dealers, 20 licensed equine dealers, and 49 licensed poultry dealers in Massachusetts in 2012.

DAIRY FARMER TAX CREDIT PROGRAM

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The Dairy Tax Credit Program was established in 2008, through the Dairy Farm Preservation Act, 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 up to \$4 million dollars could be issued in the form of a tax credit. The amount distributed would be based on the number of months the sale price fell below the cost of production and the production amount sold by the dairy farm. In 2008, low sales prices in 10 of 12 months resulted in \$3.33 million dollars being distributed in the form of tax credits. In 2009, 12 out of 12 months triggered the tax credit resulting in payouts totaling \$4.0 million dollars. During 2010, questions were raised regarding the accuracy of the USDA estimate for cost of production for Vermont as it relates to the true cost of production in Massachusetts. These questions led the USDA to discontinue providing state cost of production estimates and required MDAR to revisit the regulations associated with calculations of the Massachusetts Dairy Farmer Tax Credit. During 2010, revised cost of production numbers resulted in 9 out of 12 months triggering the tax credit resulting in a payout of \$3.0 million dollars. A relatively stable market in 2011 triggered the tax credit in only 1 of 12 months, resulting in a \$333,000 payout to producers. In 2012, 11 of 12 months triggered the tax credit resulting in \$3.68 million dollars in payouts to producers.



DAIRY PROGRAM

John Nunes John.Nunes@state.ma.us (617) 626-1813

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 2012 there were 151 bovine farms and 16 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 2012 the Division issued:

- 10-day Letter of Warning 5
- 2 out of 4 Letters of Warning 28
- 3 out of 5 Shut-Off Orders 5
- Cease and Desist 12
- Antibiotic Residue Shut-Offs 1

EQUINE PROGRAM

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

For 2012 MDAR issued 2,253 licenses for riding instructors and licensed 524 riding stables.

ENFORCEMENT ACTIONS

In 2012, 4 stables were found operating without licenses, and 1 of them was operating without a licensed instructor. All 4 businesses were issued Cease and Desist orders from the Division of Animal Health. All were required to obtain the necessary licenses before resuming operations.

MUNICIPAL ANIMAL INSPECTOR PROGRAM

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The Division of Animal Health is responsible for appointing municipal animal inspectors for each and every city and town in the Commonwealth. These inspectors act as agents of the Division of Animal Health in the communities they serve. The primary duty of the municipal inspector involves issuing quarantines to owners of animals that have been exposed to, or are potentially spreading the rabies virus. The other major role the inspectors fulfill for the Division is conducting the annual inspections of all



domestic livestock and poultry housed on properties in their respective cities and towns. These inspections are a part of MDAR's disease surveillance system and assist in ensuring animal owners provide basic necessities for the animals in their care. Municipal Animal Inspectors may also be called upon to serve as first responders to assist in implementing disease response plans in the event of an outbreak. During 2012, there were 514 municipal animal inspectors appointed to fulfill the above duties for cities and towns across the Commonwealth.

BRUCELLOSIS SCARE - SHEFFIELD, MA

Late in the evening, on January 19, 2012, the Division of Animal Health received notification from the Department of Public Health (DPH) that a Sheffield dairy farmer had been diagnosed with Brucellosis by his physician. Brucellosis is an infectious disease of animals caused by bacteria, which can spread from animals to people (zoonotic). Before the widespread use of pasteurization, humans were commonly infected with brucellosis by drinking raw milk from infected cattle. Beyond the public health significance, MDAR became immediately concerned that this could represent the transmission of disease from the dairy cattle herd to the farmer. This news was of particular concern for two specific reasons: brucellosis had not been detected in cattle in Massachusetts for over 30 years, and this particular dairy farm was in the practice of selling unpasteurized milk (raw milk) to the public.

While Brucellosis is a public health issue, it is also considered one of the worst livestock diseases in America. A concerted federal and state effort over the last 50 years has almost eliminated the disease here in the US, but at its zenith in the late 50's it was costing American agriculture more than \$400M annually. Although largely absent in the northeast, the presence of Brucellosis in other parts of the country requires animal health officials to remain vigilant to prevent the re-introduction of disease.

MDAR took the precautionary step of issuing an immediate order to cease and desist from selling raw milk to the public, and simultaneously prohibited the movement of any cattle from the property to prevent the spread of disease from possibly infected animals. Farms are not required to keep, nor did this particular farm have a complete list of raw milk customers. The only way to reach customers who purchased potentially contaminated milk was through public outreach. DPH, in an effort to address the public health threat, held a press conference, encouraging anyone who had purchased or consumed raw

milk from the farm to dispose of any remaining product. DPH also instructed any consumer that felt sick to consult their physician. MDAR attended the press conference to speak to any animal health issues or farm related questions. MDAR stressed the point that at no time was there any risk from pasteurized milk from this dairy farm, as pasteurization kills Brucella bacteria.

MDAR staff collected milk samples for testing and coordinated with the regional offices of the United States Department of Agriculture's Veterinary Services Division (USDA) to conduct a complete herd test on all 270 cattle on the property. On the morning of January 26, MDAR received the final test results on the individual animals—all of which were negative. That same afternoon, testing done on the milk samples also came back negative and MDAR received word from DPH that further, more accurate testing conducted by the US Center for Disease Control (CDC) on the suspected infected human came back negative for Brucellosis.

This incident illustrates the importance and the efficacy of the collaborative relationship established between MDAR, DPH and USDA to respond to issues related to food safety, animal health, and zoonotic diseases.



PET SHOP PROGRAM

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The Division of Animal Health has the statutory responsibility to license all pet shops. For 2012 there were 140 duly licensed. Pet shop 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 which 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 2012, there were 2 pet shops found to be operating without the required license. Both of these operations were issued a Cease and Desist order and required to come into compliance before continuing operation. Fines were issued to 3 different stores that failed to comply with the regulations. The fines were issued to the pet shops for egregious violations of the established regulations.

POULTRY PROGRAM

Ed Hageman Edward.Hageman@state.ma.us (617) 626-1796

The Poultry Program strives to educate producers and consumers about the benefits of local poultry and poultry products. Massachusetts law requires that all live poultry or hatching eggs moving within the Commonwealth originate from currently certified Salmonella pullorum clean flocks. The testing to achieve this status is provided by the Division of Animal Health for free. Other testing available to Massachusetts poultry producers include screening for avian influenza, Mycoplasma gallisepticum, Mycoplasma synoviae, Mycoplasma meleagradis, and Salmonella enteritidis. The poultry program provides producers and consumers with educational materials, flock inspections, production support, and information on egg safety and egg handling. The local food movement and the growth in consumer interest in how their food is produced have both led to an upswing in backyard poultry and egg production, and an expansion of commercial activity in Massachusetts.

These increases have added significant inspectional responsibilities to the Division's poultry staff in recent years.

Through the 2012 testing season, a total of 12,910 birds were tested for the presence of Salmonella pullorum. There were a total of 409 premises inspected in response to requests from flock owners wanting to certify their flocks S. pullorum-typhoid passed or S. pullorum-typhoid clean. Screening tests identified 12 flocks with reactor birds, this is an unusually high number here in Massachusetts. Staff suspects that the test antigen may have been more sensitive than in the past. Two different approaches were used with these flocks. Reactor/positive birds from the first 8 flocks were removed and submitted for necropsy. No Salmonella was isolated from any of these birds. For this reason, the next 4 flocks were given the option of isolating the suspect birds for 21 days and retesting. After 21 days the birds were re-bled following National Poultry Improvement Plan (NPIP) protocol, and if negative the flock is considered S. pullorum free. In all 4 cases the second samples were negative.

Two commercial turkey farms in Massachusetts requested the services of the Division staff to draw blood and submit 600 samples for *Mycoplasma gallisepticum* testing, 200 samples were tested for *Mycoplasma synoviae*, and 200 for *Mycoplasma meleagidis*. All of these samples were negative. These tests were done as part of a service offered by the Department to Massachusetts producers.

In 1983 the poultry division began an Avian Influenza (AI) screening program. This was initiated due to 2 major outbreaks of AI in the commercial poultry industry. Ten percent of the *S. pullorum* samples are screened for AI. In 2012 there were 4,881 blood samples tested for avian influenza from Massachusetts flocks. Two flocks with a history of AI reactors were retested. Neither of these flocks had repeat reactors and no avian influenza virus was isolated from any of these flocks. Three new flocks were identified with 6 AI reactors. After further testing it was determined that no live AI virus was present in any of these flocks.

Massachusetts has 4 live bird markets, at which the consumer can choose a bird and have it slaughtered on the premises. Additionally, many birds raised in Massachusetts are shipped to live bird markets in New York. As a part of



the Department's cooperative agreement, USDA does the AI surveillance at live bird markets. To further cooperation with the USDA, the Department started surveillance at swap meets, exhibitions and fairs. The Division also provides 90 day AI monitors at the request of Massachusetts producers. All of this sampling has yielded negative test results.

Over the last several years the Department has seen a steady increase in the numbers of households raising backyard poultry flocks for pleasure and fresh eggs, including in suburban and urban areas. This interest has raised questions from cities and towns that have not traditionally had experience in any agricultural endeavor. In an effort to educate both the municipalities and those enthusiasts who wish to keep and raise poultry, the Division offers a document, "Best Management Practice for Backyard Poultry Keepers." The Division also supplies a companion document detailing safe egg handling procedures for backyard producers. These Best Management Practices (BMPs) seek to educate cities and towns, as well as bird owners by detailing appropriate management methods that will serve to reduce potential conflicts with abutting neighbors. The Division supports the keeping of poultry when it is done in a responsible manner that benefits the birds, the bird owners and the communities in which they live.

RABIES PROGRAM

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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.

At the time this document was produced, the data for 2012 indicated there were:

- 2,665 domestic animal bites or scratches to humans or other domestic animals
- 1,730 possible domestic animal exposures to rabies during the same period
- 71 exposures were to animals confirmed to be rabid by the State Lab

To enhance the numbers of vaccinated domestic animals in Massachusetts the Division, through its rabies program, has implemented a user friendly registration for municipalities and entities holding rabies clinics. The registered clinics are posted on the MDAR website for the public's information. In 2012, there were 138 rabies vaccination clinics promoted through this service. As part of the 11th 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, including appearances as guest speaker.

REPORTABLE DISEASE PROGRAM

Esther Wegman Esther.Wegman@state.ma.us (617) 626-1795

Reportable diseases may be foreign animal diseases which are not currently affecting the state, diseases which have serious public health consequences, or diseases that MDAR has either previously eradicated from Massachusetts or are very close to eradicating. Veterinary practitioners are required to report suspected or positive cases of these diseases to the Division of Animal Health promptly. 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 225 suspected cases of reportable diseases:

- 156 cases of Parvovirus (dog)
- 46 cases of Panleukopenia (cat)
- 5 cases of Canine Distemper (dog)
- 3 cases of Eastern Equine Encephalitis (2 ponies, 1 horse)
- 3 cases of Strangles (horse)



- 3 cases of Tularemia (cat)
- 2 cases of Psittacosis (pet birds)
- 2 cases of West Nile Virus (horse)
- 1 case of Avian Mycobacterium (pet bird)
- 1 case of Babesia (dog)
- 1 case of Canine Influenza (dog)
- 1 case of Potomac Horse Fever (horse)
- 1 case of Sarcoptic Mange (swine)

SHELTER AND RESCUE PROGRAM

Auzinda Tavares Auzinda.Tavares@state.ma.us (617) 626-1792

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 registration of individual shelters and rescue groups who operate adoption programs within Massachusetts and those that adopt animals into Massachusetts from other states, the Division enhances the overall health of the companion animal population. Since many of the animals that wind up in these channels have no, or very limited routine veterinary care, this disadvantaged portion of the domestic animal population requires more attention. The rules in place serve to protect the resident population of animals in Massachusetts, the animals being handled within the shelter and rescue community, and the humans who make an effort to help them.

During 2012 there were 295 registered shelters and rescues operating in Massachusetts.

ENFORCEMENT ACTIONS

During 2012, the Division issued 45 Cease and Desist orders to shelters and rescues that had failed to register with the Department and operate within the prescribed rules (1-AHO-05). Administrative fines were issued to 13 groups that failed to comply with issued Cease and Desist orders.

SWINE PROGRAM

Sandy Pepe Sandy.Pepe@state.ma.us (617) 626-1797

The Massachusetts 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 raising swine to be sold for public consumption and feeding garbage must obtain a permit from MDAR's 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. For the same reason pork products must be cooked thoroughly to destroy harmful pathogens that could be in the meat, the meat fed to swine must also be cooked to reduce the risk of introducing those pathogens in the first place. In 2012 there were 18 permits to feed garbage issued to swine operations in the Commonwealth.



CONTINUED ILLEGAL IMPORTS OF RESCUE ANIMALS

Over the last 10 years, the practice of transporting companion animals, primarily dogs, from areas of overpopulation (southern states) to regions with higher demand for adoptable pets (New England) has steadily increased. Frequently, this means that animals imported into Massachusetts are coming from areas with limited resources where very little or no veterinary care is provided. As a result, the animals targeted for rescue and shipment are often those with the highest risk of being affected by a contagious disease.

The Division of Animal Health's central mission is to protect the resident population of domestic animals from the introduction and spread of disease. With the influx of rescue dogs, a significant number of diseased animals were entering the state. It became imperative to establish safeguards that ensure only healthy animals are imported and placed in peoples' homes. Order 1-AHO-05 was issued by the Director of the Division of Animal Health in May of 2005. The order requires entities engaged in the transfer of pets from out of state to be registered with the Department. Imported animals must be isolated for 48 hours in a Department-approved facility to observe them for signs of illness. Upon completion of the 48-hour isolation period, the animal must be examined by a veterinarian and be deemed healthy before it can be transferred to an adoptive owner. Additionally, records pertaining to the animal's importation and medical status are required to be retained by the organization, and copies of those documents must be provided to the adopter.

On January 25, 2012, Baypath Humane Society of Hopkinton, a registered and approved shelter and rescue organization operating in Massachusetts, received a mother Black lab mix and her 4 puppies from New York. Despite the fact that the shelter has their own approved isolation facility on the property, shelter staff did not place the animals in that room for the required 48-hour period. The animals were also not subject to an examination by a veterinarian, as was supposed to happen at the end of the 48 hours.

On February 13, a local veterinarian notified MDAR that they had diagnosed 3 of these puppies with canine distemper. In an effort to stop the spread of this potentially deadly canine virus, MDAR conducted an investigation to locate other infected or exposed dogs. Ultimately, all 5 labs as well as 1 additional dog had to be euthanized due to clinical illness caused by distemper. Because these infectious animals were moved from one point to numerous locations, a number of other dogs exposed to the virus were forced to be held in quarantine for a lengthy period before it was confirmed that they had not been infected. The shelter responded by dismissing the staff member responsible for the indiscretion. The Department issued an administrative fine in the amount of \$1,000.

Proposed regulations have been drafted to replace the aging animal health order. The Division of Animal Health hopes to have the new rules in place by the summer of 2013 with the end effect that there will be comprehensive rules in place to prevent the importation of sick or diseased animals into the Commonwealth.



LEE CORTE-REAL, DIVISION DIRECTOR

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The Division of Crop and Pest Services consists of the following sections:

- Farm Products and Plant Industries
- Pesticide Program

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 Program's staff consists of the following personnel:

- Alfred Carl, Program Coordinator I
- Jennifer Forman Orth, Cooperative Agricultural Pest Survey Coordinator
- Stacy Kilb, Asian Longhorned Beetle Outreach Coordinator
- Alexandra Lopez-Swetland, Marketing and Product Utilization Specialist I
- Phyllis Michalewich, Marketing and Product Utilization Specialist III
- Robert Rondeau, Marketing and Product Utilization Specialist III
- Howard Vinton, Marketing and Product Utilization Specialist II

The Farm Products and Plant Industries (FPPI) Program staff continues to support multiple programs through their cross utilization capabilities. This effort has resulted in inspectional staff members providing coverage for programs outside of their primary area of responsibility which results in more effective program administration. Staff have provided coverage to the nursery inspection, CAPS, feed, and fertilizer programs based upon the seasonal or workload needs.

The FPPI Program had a very active year, especially in the areas of inspections and the registration of feed and fertilizer products. Demand for inspection of farm products, nurseries, greenhouses and apiaries continues to be



Lee Corte-Real has been with MDAR for 28 years, first as the environmental chemist and water quality specialist and subsequently for 8 years as the Pesticide Operations Coordinator. In that capacity, Lee supervised the pesticide licensing and certification program, and also the pesticide product registration program. Lee is currently the Director of the Division of Crop & Pest Services which includes the Pesticide Programs, Plant Industries, and Farm Products. Previously Lee worked for the University of Massachusetts / Cooperative Extension Service doing pesticide residue analysis and research.

very high. These quality-control programs have proven to be extremely popular and helpful with growers, farmers, shippers, sellers, buyers and consumers as demand for high quality products continues to increase.

The FPPI Program administers a number of diversified quality-control programs on farm products and nursery stock. The Program enforces the Truth-in-Labeling Laws on fruit, vegetables, commercial feed, pet food, fertilizer, lime and seeds. The Program has also expanded into the certification of farms and production facilities under the



USDA Good Agricultural Practices (GAP) requirements which turning into a significant new programmatic area.

The FPPI Program collected over \$1,598,000 during 2012 through the feed and fertilizer product registrations, nursery certification and vegetable inspection fees.

APIARY INSPECTIONS

Al Carl Al.Carl@state.ma.us (617) 224-3542

Apiary inspections are made annually for monitoring of disease and insect pests throughout the state on thousands of bee hives. This inspection program aids in the safe transportation of bee hives from one state to another. There were 2 seasonal apiary inspectors hired to assist the state Apiary Inspector to survey for honeybee colonies for brood diseases and parasitic mites in the following counties: Middlesex, Norfolk, Worcester, Hampden, Hampshire, and Franklin Counties. Spot inspections as requested by beekeepers were conducted in Plymouth, Bristol, Berkshire Counties during 2012.

Apiary inspections began in mid-April and ended on October 31st, 2012, and included the inspection of migratory colonies, for American Foulbrood (AFB), varroa mite populations, and strength. Cranberry growers requested additional inspections for colony strength to ensure that sufficient populations for pollination were present.

During the annual inspection in Worcester and Middlesex Counties, 927 apiary sites representing 3,079 colonies were inspected. There were 24 detections of American Foulbrood (AFB) which resulted in these colonies being killed. Equipment was saved for the Mass Bee Radiation program that runs in March. There were 10 cases of European Foulbrood and there were numerous cases of chalkbrood at levels higher than just a few cells. There were also numerous reports of varroa mite levels were low at the beginning of the season but reached heavy levels by August continuing into September.

The Apiary Program also spent 7 days surveying and inspecting bee colonies in Bristol and Plymouth Counties before and after 2 aerial mosquito spraying operations, to evaluate any potential impacts or effects from the spray on representative apiaries in each community that was treated.

A portion of the inspection season was taken up supporting USDA honeybee survey program that sampled for 10 pesticides and 13 pathogens. Samples were collected from 24 apiaries includ-



ing several migratory colonies. The known negative honey bee health challenges are attributable to parasites, diseases and environmental toxins. However, there have been no national honey bee health surveys conducted to ascertain the scope of additional unidentified parasites, diseases and pests that may have a negative impact on honey bee populations in the United States. Therefore, many pests, particularly pathogens in the U.S., have not been identified.

The national honeybee survey is designed to identify honey bee pests in the U.S. The benefit to the U.S. apiculture industry would be significant to inform and guide the direction of honey bee parasite, disease, and pest research and help provide mitigation recommendations. Many honey bee pathogens, particularly viruses, have not yet been identified or described in the U.S. and several exotic bee species would become pests if introduced into the U.S. The benefit to the U.S. apiculture industry would be significant to inform and guide the direction of honey bee parasite, disease, and pest research and help provide mitigation recommendations.

COOPERATIVE AGRICULTURAL PEST SURVEY (CAPS)

Jennifer Forman-Orth Jennifer.Forman-Orth@state.ma.us (617) 626-1735

In cooperation with the USDA/CAPS (Cooperative Agriculture Pest Survey) program there was a survey performed by inspectors at 54 nurseries. The 2012 CAPS pests included:

- Asian Longhorned Beetle (Anoplophora glabripennis)
- Rough-shouldered longhorn beetle (*Anoplophora chinensis*)
- Emerald Ash Borer (Agrilus planipennis)



- Oak splendor beetle (*Agrilus biguttatus*)
- Goldspotted oab borer (Agrilus coxalis auroguttatus)
- Jewel beetle (Agrilus sulciollis)
- Daylily rust (Puccinia hemerocallis)
- Mile-A-Minute Weed (*Polygonum perfoliatum*)
- Giant hogweed (Heracleum mantegazzianum)
- Kudzu (*Pueraria lobata*)

Two daylily rust infestations and 2 Mile-a-minute vine infestations were found in the 2012 CAPS inspections. The following CAPS activities were also conducted in 2012:

- Cerceris Wasp Survey 90 sites in 9 counties with 46 having colonies and beetles were collected at 26
- Honeybee Survey (Farm Bill) 24 apiaries surveyed, including several migratory colonies, which were tested for 10 pests and 13 pathogens
- P. ramorum Survey 30 nurseries surveyed in 7 counties. There were 556 leaf samples collected and 19 water filtration samples
- Mile-a-Minute Management There were 2 release sites: Canton (35 plots) and Falmouth (20 plots), with 7300 weevils released in 2012
- Kudzu Management the Department managed a site in Needham in cooperation with the Departments of Conservation and Recreation and Fish and Game
- Giant Hogweed Management Continued monitoring and management throughout the state

COUNTRY OF ORIGIN LABELLING (COOL) INSPECTIONS

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Since 2006 the Massachusetts Department of Agricultural Resources has been working under a Cooperative agreement with the USDA to perform audits relative to the Country Of Origin Labeling (C.O.O.L) requirements of the 2002 & 2008 Farm Bills. C.O.O.L requires stores (grocery stores for example) licensed under the Perishable Agricultural Commodities Act (PACA) to label covered commodities for country of origin (method of production is also required for seafood) for consumers at retail. Additionally, PACA agents must maintain or have access to records to verify COOL claims for each covered commodity.

In 2012, MDAR was assigned and completed a total of 66 COOL inspections within the Commonwealth. Of this number, inspectors found 31 retail facilities with potential COOL violations and were referred to the USDA for follow-up.

FEED PROGRAM

Howie Vinton Howie.Vinton@state.ma.us (617) 626-1803

In fiscal year 2012, the feed program reviewed and registered 11,108 products with receipts of registered products totaling \$1,107,000. There were 220 feed products sampled for crude protein, crude fat and crude fiber under the Truth in Labeling law. In addition, there were 11 pet food recalls and 5 stop sale issued. There were also 453 products in the channels of trade that were not registered. The program also collected and analyzed 118 feed samples.

FERTILIZER PROGRAM

Bob Rondeau Bob.Rondeau@state.ma.us (617) 626-1804

There are over 3,200 labels of fertilizer and lime products that were reviewed and registered for the year. A total of 333 samples of fertilizer products being offered for sale in Massachusetts were taken and tested for Nitrogen, Phosphorus and Potash. There were 3 stop sale orders issued for unregistered products. The total revenues for the Fertilizer program were in excess of \$410,600 for 2012.

FOREST PEST OUTREACH PROGRAM

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As the result of the detections in Massachusetts of the Asian longhorned beetle (2008) and Emerald ash borer (2012), Crop and Pest Services staff continued to provide outreach and education about forest pests to the Massachusetts green industry, environmental groups, government staff, and concerned Massachusetts residents. There were 84 events held during 2012, through which more than 536 volunteers were trained. The



Asian longhorned beetle Outreach Coordinator (Stacy Kilb, working directly with the Mass. ALB Cooperative Eradication Program in Worcester) and the Forest Pest Outreach Coordinator (Samantha Stelmack) were present at events attended by more than 160,000 people and distributed more than 117,000 pieces of outreach material. This year the Program collaborated with more than 28 different organizations (including the green industry, federal, state and local governments, environmental groups, and neighborhood associations). These collaborators assisted in planning events, distributing outreach, and organizing tree surveys. In addition, dozens of teachers, students, land-scapers, conservation commissions, nursery owners, and other concerned individuals requested outreach to distribute on their own.

FRUIT AND VEGETABLE INSPECTION

Bob Rondeau Bob.Rondeau@state.ma.us (617) 626-1804

Demand for MDAR's inspection services continues to be primarily for exporting apples, with the majority of those being shipped to the United Kingdom, and Canada. The Export Apple Inspection Program is of importance, primarily because of the demand for controlled atmosphere (CA) stored apples, including the valuable McIntosh variety. In total, over 22,167 cartons of apples were certified as complying with the US Export Apple and Pear Act in 2012.

GOOD AGRICULTURAL PRACTICES (GAP)

Bob Rondeau Bob.Rondeau@state.ma.us (617) 626-1804

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 the Department of Agricultural Resources offers a voluntary audit based program that verifies adherence to the recommendations made by the Food and Drug Administration. There were 23 companies that applied for USDA GAP/Good Handling

Practices (GHP) or Harmonized audits that resulted in 46 audit site visits, with 22 farms and/or packing facilities that passed. The Program collected at total of \$14,206 in fees.

NURSERY INSPECTION

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The Nursery Inspection Program inspects and certifies nurseries and greenhouses annually. Inspectors of FPPI conduct annual inspections of all certified nurseries in the Commonwealth to ensure that they are free of insects and diseases. All known growers and agents are required to be licensed 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. There were 179 nurseries inspected in 2012.

PHYTOSANITARY INSPECTIONS

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

In cooperation with the USDA - APHIS, Plant Protection and Quarantine, the Department conducts phytosanitary inspections and issues federal and state certificates. Staff inspected and issued 1,140 Federal Phytosanitary Certificates in 2012. The Phytosanitary Certificates were issued for exports destined for numerous countries including Canada, the United Kingdom, the Netherlands, China, Republic of Korea, and Australia.

In addition, staff also certified 414 shipments of plant materials for interstate commerce including: lumber, both kiln dried and green, logs, plants, bulbs, fruit and seeds.

In addition the Program also inspects houseplants that are being moved to other states.



PESTICIDE PROGRAM

Program staff consists of the following personnel:

- Steven Antunes-Kenyon, Environmental Analyst
- Trevor Battle, Environmental Health Inspector
- Mark Buffone, Environmental Analyst
- Shan Shan (Sunny) Cai, Environmental Health Inspector
- Taryn LaScola, Hazardous Substances and Pesticide Inspector
- Michael McClean, Environmental Analyst
- Sandra Payne, Administrative Assistant
- Susie Reed, Pesticide Product Registration Specialist
- Paul Ricco, Hazardous Substances and Pesticide Inspector
- Laurie Rocco, Hazardous Substances and Pesticide Inspector
- Hoang Vo-Phuong, Information Systems Assistant
- Hotze Wijnja, Chemist

The Massachusetts Department Agricultural Resources is the state lead 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 and include 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 and outreach and water monitoring. The Pesticide Program also acts as support staff for the Pesticide Board and Pesticide Board Subcommittee.

AQUATIC VEGETATION MANAGEMENT Review Process

Reviews of new active ingredients of aquatic herbicides for use are conducted cooperatively by MDAR and MassDEP. MDAR provides the review in support of registration and MassDEP conducts a critical review in support of approval for the addition of the new herbicide to the Final Generic Environmental Impact Report (GEIR) for Eutrophication and Aquatic Plant Management. Once included in the GEIR, the herbicide is available for licensed use in Massachusetts lakes and ponds. The review and approval

of imazapyr was finalized. Two other new herbicides active ingredients carfentrazone-ethyl and imazamox were reviewed and registered. Review of these herbicides by MassDEP continued and consultations with MDAR staff took place as needed. Two additional new active ingredients remain to be reviewed.

MDAR staff also interacted with stakeholders to address issues and challenges in lake and pond management through participation in the Lakes and Ponds Advisory Committee. MDAR staff also addressed various inquiries related to the new National Pollution Discharge Elimination System (NPDES) permit program, which was required for the first time in 2012 for pesticide applications made in lakes and ponds.

CHILDREN AND FAMILIES PROTECTION ACT (CFPA)

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School IPM-Plan

The IPM-Plan provision of the Children and Families Protection ACT (CFPA) mandates that every school and daycare program must develop and submit IPM-Plans. The number of non-compliant schools and daycare programs has remained steady in 2012. Currently approximately 97% of schools and 95% of daycare programs have IPM-Plans filed with the Department.

Comparatively, in August of 2009 approximately 86% of daycare programs and 92% were listed as having IPM-Plans on file.

ENFORCEMENT

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



There were a total of 323 inspections completed in 2012, which was significantly higher than the the projection of 208 in the agreement with the EPA and included agricultural and non-agricultural use observations, records and marketplace inspections, and dealer inspections. There were also 14 Restricted Use Dealer inspections, and 160 Applicator Record inspections. There were 39 non-agricultural inspections that were conducted which consist of consumer complaints and licensing violations. In addition, there 26 non-agricultural use inspections conducted in 2012.

During fiscal year 2012 grant negotiations, MDAR agreed to work with EPA New England to implement a 4-year grant in order to reduce administrative burdens and to provide more flexible financial management to both MDAR and EPA New England. The negotiated 4-year Performance Partnership Grant (PPG) was accomplished by extending the MDAR fiscal years 2011-2013 PPG by 1 year to include fiscal year 2014. MDAR's request for fiscal year 2012 was \$425,034, which included one-time special project funds for laboratory equipment (\$41,600), supplemental funding for the development of an e-licensing system (\$40,000), and an Obsolete Pesticide Collection/ Disposal project (\$11,600). The Department collected over 18,548 lbs and 1,172 gallons of waste pesticides as part of this obsolete pesticide collection effort. Some of the notable items collected were Chlordane, Princep (4,000 lbs), Diazinon, Dursban, Ficam D, multiple canisters of Fulex, many unknowns, and several pressurized cylinders of insecticides.

GROUND WATER PROGRAM

Hotze Wijnja Hotze.Wijnja@state.ma.us (617) 626-1771

Registration Review

As part of its pesticide registration process, MDAR has an on-going program to assess the potential of pesticides to impact groundwater. Pesticides that are determined to be potential groundwater contaminants are restricted. The new active ingredients registered were furfural, Isaria fumosorosea Apopka strain 97, prometryn, Bacillus firmus strain I-1582, fluopyram, (E,Z)-2, 13-octadecadien-1-yl acetate, trichoderma asperellum strain ICC-012, Bacillus amyloliquefaciens strain D747, Trichoderma virens strain

G-41, and ammonium nonanoate. Fluopyram was classified as a "potential groundwater contaminant" and added to the Groundwater Protection List. Consideration of potential ground- and surface water impacts were also included with the evaluation for a specific exemption (Section 18) from registration of the herbicide quinclorac for control of dodder in cranberries, and with the evaluation of new aquatic herbicides for use in MA lakes and ponds (see also Aquatic Vegetation Management report).

Outreach and Education

The Department's staff continued with outreach efforts directed at the agricultural community and the general public on the state's groundwater protection regulations. Staff addressed inquiries related to clarification of the ground water protection regulations and requirements as needed. Information on the groundwater protection program was incorporated into presentations at seminars and information sessions participated in by the Department's staff, including the Environmental Health Department Doctoral Seminar on January 27th and February 3rd at Boston University. Staff also included information on environmental fate and exposure to water resources in a presentation at a meeting of SuAsCo CISMA (Cooperative Invasive Species Management Area), a partnership of organizations that intend to manage and control invasive species defined by the geography of the Sudbury, Assabet, and Concord (SuAsCo) watershed.

Pesticide Program staff continued to be involved in discussions to address concerns from citizens related to proposed herbicide applications in rights-of-way areas on Cape Cod. Further details are provided in the Rights-of-Way report below.





Staff attended the Water Quality and Pesticides course of the Pesticide Regulatory Educational Program (PREP) offered by the EPA which was held in Helena, MT, June 26th-29th, 2012. Participation in this course and interactions with counterparts from many other states and representatives from EPA Pesticide Program allowed program staff to improve MDAR's pesticide program.

Program staff also coordinates and participates in the EPA Region 1 (New England) Water Quality Roundtable which meets twice a year to address environmental and regulatory issues related to pesticide use in the New England states.

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.

In the case of soil-applied use of GWP pesticides in a Zone II area, a Department-approved pesticide management plan (PMP) is required. The Department received one application for a 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 MassDEP and DPH. It was determined that the use of these pesticides at the proposed rates on this particular site was not likely to cause unreasonable adverse effects to human health and the environment. Local wells were sampled to confirm that there was no impact to local groundwater resources

PESTICIDE APPLICATOR AND LICENSING PROGRAM

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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 3 or less dwelling units, to be in possession of a valid license or certification issued by the Department.

There are 4 types of pesticide licenses in Massachusetts: Commercial Applicator License, Commercial Certification License, Private Certification License and Dealer License. These different types of certification and license documents permit individuals to legally use pesticides including, but not limited to, purchasing, selling, applying, mixing, loading, storing, disposing, and transporting.

Certification and Licensing Exams

Pesticide examinations are offered to individuals seeking pesticide licensure throughout the year with the majority of exams being offered from February through April prior to the use season with at minimum of 1 exam each month. In 2012 there were 26 pesticide exams offered for the 4 licensure types with all exam types being offered at each date.

There were a total of 1,838 individuals who registered for an exam in 2012 of which 1,659 took the exam and 179 which were no-shows. There were 1,056 individuals out of the 11,714 who took exams that passed. The pesticide exam receipts were \$158,075 that went to the General Fund.

New and Renewal Pesticide Licenses

Once individuals have passed the appropriate exam and have demonstrated they have acquired the necessary knowledge to handle pesticides in a safe manner, they are sent an application to obtain the pesticide license. Once an individual becomes licensed, the document must be renewed on an annual basis pursuant to state pesticide law and regulations.

There were 966 new licenses issued and 7,891 renewal licenses issued in 2012. The issuance of new and renewed pesticide certification and licenses generated total receipts of \$1,110,370 for 2012 for a total of \$1,271,395 for the Licensing and Certification Program.

All commercial and private certifications and licenses, with the exception of Dealer Licenses, expire on December 31st of each year. The Dealer License expires on the last day of February of each year. As a result, individuals eligible to renew for the next year automatically receive a renewal application. These renewal applications are mailed out in



October and each applicator must renew their certification and/or license by January 1st. Applications submitted after the expiration of the current license but before June 30th must pay a late fee equal to the exam to renew their license. Applicators that do not submit renewals prior to June 30th will be required to retake and pass state examination(s) to be eligible for a certification or license for the new year.

Continuing Education

Every 3 years, license holders must attend continuing education programs and obtain contact hours to maintain as well as enhance their pesticide application knowledge. Applicators who did not meet the required number of educational hours were obligated to re-take the state examination to be re-certified or re-licensed.

During 2012 there was a random audit of pesticide applicators. A total of 454 applicators were audited to verify that they had met the required number of contact hours by the end of a 3-year training period. There were 353 audits approved which represents nearly a 77% compliance rate. The remaining individuals either did not return their audit or did not satisfy the educational hours required, thus they were required to re-take pesticide exams.

Pesticide Applicator Continuing Education (PACE)

As in past years, staff continues to lecture to the pesticideuser community regarding laws and regulations. These lectures have been sponsored by the UMASS Cooperative Extension and various industry associations and companies. During the federal fiscal year 2012 the Department approved 235 programs continuing education programs to support the recertification requirements for all applicators. This represents 76 sessions for Private applicators and 378 for Commercial applicators with a total of 302 programs including eLearning opportunities.

PESTICIDE PRODUCT REGISTRATION

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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 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 from 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, and the cost is \$250 per EPA number.

There were 8,952 pesticide products renewed in 2012 and 1,019 new products registered which represents receipts of \$2,685,600 and \$305,700 for renewed and new registrations respectively.

Registrations of products with new active ingredients are assessed a fee of \$500 and 9 new active ingredients were registered.

State Restricted Use Classification

Federal General Use pesticide products 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 2012, 38 products were reclassified as State Restricted Use.

Special Local Needs (SLN) Registration

When a particular agricultural problem exists that can only be mitigated through the use of a pesticide that is not federally registered for that specific purpose, a Special Local

Need registration may be issued by the state under section 24c of FIFRA. There were no new SLNs registered in 2012.





Experimental Use Permits (EUP)

State experimental use permits are required to control potential hazards of pesticide experimentation under outdoors, greenhouse, and domestic animal trial conditions. To obtain such a permit, a state application must be filed with the Pesticide Board Subcommittee along with a product label, a copy of the EPA EUP and a fee of \$300. There were no new EUPs granted in 2012.

PESTICIDE USE REPORTS

The Department requires that all licensed applicators submit annual use reports for all pesticide applications. The use report identifies the active ingredients, amounts, and use site and patterns of pesticides used in the Commonwealth.

RIGHTS-OF-WAY (ROW) MANAGEMENT

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

Compliance Monitoring

Twenty-one Use Observation inspections were conducted along right of ways in the Commonwealth in 2012. One record keeping inspection was conducted. Two Limited Application Waivers were issued to the Town of Millbury and Town of Franklin.

Vegetative Management Plans (VMPs)

Two VMPs were approved in 2012: City of Framingham and Mass. Department of Transportation, District 1.

Yearly Operational Plans (YOPs)

Thirty-three YOPs were submitted and approved by the Department. These plans covered operational activities along ROWs in some 272 cities and towns in the Commonwealth.

Sensitive Areas

The ROW Program along with the Department of Environmental Protection review and approve herbicides for use in Sensitive Areas as defined in 333 CMR 11.04.

Outreach Activities

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

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





RIGHTS-OF-WAY VEGETATION MANAGEMENT

Review Process

The review of the new active ingredient paclobutrazol, for use as a tree growth regulator, was completed and added to Sensitive Area Materials List.

MDAR staff continued to be involved in discussion of efforts to address concerns from citizens on Cape Cod relative to the potential impacts to groundwater resources from the proposed herbicide applications in power line corridors maintained by the utility company NSTAR. Department staff attended 2 meetings organized by NSTAR at which the options for ground water monitoring studies on Cape Cod were discussed.



DIVISION OF CROP AND PEST SERVICES STAFF

Top Row: Trevor Battle, Sunny Cai, Taryn LaScola, Mark Buffone, Hotze Wijnja, Steve Antunes-Kenyon, Mike McLean

Middle Row: Sandra Payne, Howard Vinton, Phyllis Michalewich

Bottom Row: Hoang Vo-Phuong, Lee Corte-Real, Susie Reed, Samantha Stelmack Not Pictured: Alfred Carl, Alexandra Lopez-Swetland, Jennifer Forman Orth, Stacy Kilb,

Paul Ricco, Laurie Rocco, Robert Rondeau



DIVISION OF AGRICULTURAL CONSERVATION AND TECHNICAL ASSISTANCE (DACTA)

GERARD KENNEDY, DIVISION DIRECTOR

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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



Gerard Kennedy has worked at the Department of Agricultural Resources for over ten years in a variety of technical assistance, funding, and program management positions including programs dealing with pesticides and water quality. He is the Commissioner's designee to the Water Resources Commission and chairs the Farm Technology Review Commission. He has been the director of DACTA since 2008.

PROGRAM LISTING

- Agricultural Business Training Programs
- Agricultural Environmental Enhancement Program (AEEP)
- Agricultural Preservation Restriction Program (APR)
- APR Improvement Program
- Aquaculture Program
- Composting Program
- Energy Efficiency, Conservation, and Renewables Program
 - Agricultural Energy Grant Program
 - Farm Energy Discount Program
 - Massachusetts Farm Energy Program

- Farm Technology Review Commission
- Farm Viability Enhancement Program
- Land Use
- Massachusetts Emergency Food Assistance Program (MEFAP)
- Matching Enterprise Grants for Agriculture Program (MEGA)
- Milkhouse Wastewater Pilot Program
- State-Owned Farmland Licensing Program



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

STAFF LISTING

- William Blanchard, Compost Coordinator
- Sean Bowen, Food Safety and Aquaculture Specialist
- Rick Chandler, Agricultural Business Training Program Director
- Christine Chisholm, APR Planner
- Delia Delongchamp, APR Stewardship Coordinator
- Michael Gold, APR Administrative Assistant
- Ron Hall, APR Program Coordinator
- Dake Henderson, GIS Specialist
- Barbara Hopson, Land Use Administrator
- Laura Maul, AEEP Coordinator
- Michele Padula, APR Planner
- Gerald Palano, Alternative Energy Specialist
- Craig Richov, Farm Viability Enhancement Program Coordinator
- João Tavares, Database Administrator

AGRICULTURAL BUSINESS TRAINING PROGRAM (ABTP)

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The Agricultural Business Training Program (ABTP) offered 6 courses in 2012:

- Tilling the Soil (TTS) Full Business Plan Course: 7
 established farm businesses graduated from one course
 in Amherst, with 6 receiving post course technical
 assistance
- Planning For Startup: 18 startup farm businesses graduated from 2 courses in Amherst and Marlborough
- Exploring the Small Farm Dream: 36 prospective farm businesses completed this course in 3 sessions - 2 in Marlborough and one in Amherst

There were a total of 61 farms or prospective farms that completed an ABTP course in 2012.

The recent trend toward smaller sole proprietorship farm enterprises continued, with most course participants in Explorer and Planner having no active family history on farms. The popularity of the Community Supported Agriculture (CSA) and Farmers' Market marketing approaches, while still strong in this newer group, is getting somewhat saturated in the strongest markets and there appears to be a corresponding growth of interest in livestock based farming – particularly when that can be done on less expensive land.

Many of those taking the TTS course were involved in generational transfer of ownership on existing farm properties.

At the same time, Massachusetts is seeing key consolidation by expanding wholesale farms on the best soils, often by absorbing smaller but prime properties that are transitioning out. These expansions are mostly along the Connecticut River Valley, but also to a lesser degree in traditional farming areas in Worcester, Essex, Middlesex, Norfolk and Plymouth Counties. Many of these growing farms are seeking to support additional family members and employees, while counting on continued benefits from the growing awareness of local crops at wholesale level (supermarkets and large farm-stand resellers). A few large farms have recently indicated that they are paying historically high prices for productive land, counting on a need to grow more food locally under the potential effects of climate change on irrigation-dependent crops in the west and south.



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

AGRICULTURAL ENVIRONMENTAL ENHANCEMENT PROGRAM (AEEP)

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The Agricultural Environmental Enhancement Program (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 422 projects statewide that improve water quality, conserve water, reduce greenhouse gas emissions, and conserve energy. Agricultural operations have received approximately \$5 million dollars to help them address environmental concerns on their farms. In fiscal year 2012, 35 projects were funded totaling \$463,453. For fiscal year 2013, another 34 farms are expected to be funded in the amount of \$375,000.

Projects are selected based upon 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 Environmental Quality Incentives Program (NRCS EQIP) for environmental practices on farms, thus enabling the completion of, for example, a costly manure management structure that otherwise the farmer could not afford to complete.

Many operations choose to purchase from local suppliers and contractors in the completion of their projects. By doing so, AEEP indirectly contributes back to the local economy by the purchases of these materials and the contraction of the necessary labor.

Examples of funded projects include the installation of manure management systems, pesticide storage facilities, fencing to keep livestock out of wetlands, energy efficient pumps, trickle irrigation, automated irrigation for cranberry operations, and water control structures.

AERATED BAY COMPOST SYSTEM

In 2012 AEEP funded \$25,000 to Blue Meadow Farm, a 24 stall horse operation in Sudbury, MA. The funding was towards the construction of an aerated bay compost system, as well as fencing to protect wetlands on the property. This aerated system is designed to manage livestock manure and bedding produced on the farm. The system uses a method of composting called forced aeration which uses a powered blower to supply air to the compost pile through perforated pipes. This farm was a good candidate for funding as they are within a Zone II groundwater protection area and have wetlands on the property. Previous to this system the farm had a static manure pile that was left to decompose and occasionally

applied to the farm's blueberries. This compost system is covered and contained reducing risks to water quality by preventing leachate from the manure. The system when managed properly will produce a stable compost product free of pathogens and weed seeds. The compost can also act as an additional source of income to the farm. In addition to protecting water quality, the system also reduces odor and flies due to the increased ration. The system does not require mechanical mixing or turning reducing labor and large equipment needs which is good for small-scale operations such as this one.





AGRICULTURAL PRESERVATION RESTRICTION PROGRAM (APR)

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MDAR's Agricultural Preservation Restriction Program (APR) was established in 1977 and is considered one of the first volunteer programs for farmland protection in the United States. The primary purpose of the APR program is to preserve and protect agricultural land, including soils, as a finite natural resource, from being built upon for non-agricultural purposes or used for any activity detrimental to agriculture. Further, the program was designed to keep APR land values at a level that can be supported by the land's agricultural uses and potential.

During the calendar year 2012, the APR program protected 28 farm projects covering over 1,853 acres. This raised the total farm properties enrolled to 832 while protecting 69,035 acres of farmland. The program's efforts for the calendar year resulted in attracting approximately \$8,444,789 of federal investment into the State's future preservation goals. An additional \$872,701 in local contributions and \$7,371,667 in applied federal contributions were also leveraged. When all sources are considered, including owner bargain sales, the State received \$2.48 of value for every \$1.00 expended.

Projects often require 18 to 24 months to go from application to closing. Bringing projects into the program requires evaluating the resource, appraising the property, performing due diligence, and working with the land owner to ensure the program will enhance the fulfillment of their legacy and agricultural goals. At the close of 2012, the APR program still had 36 projects that had been worked through the first stage of resource evaluation, and 23 projects involving nearly 1,277 acres that were ready to move through due diligence toward closing a restriction project. Many of these projects will come to fruition in 2013, attracting an additional federal investment through USDA's Farm and Ranch Land Protection (FRPP) program.

The APR Program's Stewardship Initiatives are a growing segment of land protection work as conducting field

baseline documentation reporting, monitoring inspections, and the issuing of various Department Approvals are all key components for protecting an existing APR's integrity over time. In 2012, 57 Baseline Documentation Reports were conducted, serving as tools that staff can compare to future property conditions, thus determining the extent of cumulative agricultural and landscape change. Monitoring inspections serve as a proactive approach to ensuring compliance with APR obligations. Monitoring inspections may be conducted at regular intervals, collecting field observations similar to those documented in the Baseline report, or as the need arises for 'spot monitoring', in which to follow up from previously existing stewardship concerns. An ongoing partnership contract between the Natural Resource Conservation Services and the Massachusetts Association of Conservation Districts conducted 44 required monitoring inspections throughout 2012.

As working landscapes, agricultural operations tend to require more engagement with the landowner to ensure that required land use activities, or proposed changes to use activities, will enhance a farm's likelihood of viability as it responds to market conditions. The Agricultural Lands Preservation Committee (ALPC), which by statute includes 9 voting members, quarterly addresses various Department Approval processes including the consideration of Waivers of Sale for non-family transfers of APR property, requests for Certificates of Approval (COAs) for structural improvements and enhancements to the APR property, and review of Special Permits to engage in limited, non-agricultural uses. During 2012, 11 Waivers were issued, 26 COAs were issued, 3 Certificates of Completion for previous COAs were issued, and 2 Special Permits were issued.



CARTER AND STEVENS FARM

Carter and Stevens Farm in Barre is one of the largest dairy farms in Massachusetts, with 750 acres in hay, corn and pasture and 440 acres in managed woodland. It has been a family operated dairy since it began in 1938, with 3 generations active on the farm, milking 90 cows.

The farm applied to AIP with outdated, aging infrastructure and environmental concerns from runoff due to poor siting

of the existing dairy facility. New infrastructure was critical to the continuance of this dairy farm. AIP funds were used to build a new milking parlor with milk tank, to be powered entirely with solar and wind energy. Materials for the structure were dissembled and reused from a barn on a nearby APR farm. The project also included a new dairy barn and manure management system with NRCS assistance and funding. This new, relocated energy efficient dairy facility has made operations clean and efficient, allowed expansion of the herd to increase productivity of fluid milk, and retained jobs within the family and community, ensuring a more profitable, sustainable operation for future generations of the Stevens/ DuBois family.



APR IMPROVEMENT PROGRAM (AIP)

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The APR Improvement Program (AIP) provides business planning, technical assistance, and grants to commercial farm owners with farmland already protected from development with funding from the Department'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 significance of these farm operations and their contribution to the state's agricultural industry.

In fiscal year 2012, 13 farms were selected in this third year of the Program. These farms received a total of \$71,279 in technical and business planning assistance, or an average of \$5,483 per farm. Twelve participating farms, owning a

combined total of 1,966 acres of APR land, received grant awards totaling \$825,000, an average of \$68,750 per farm and contributed an estimated total of \$602,400 of their own funds to implement infrastructure improvement projects including: a vegetable storage facility, barn repair, farmstand renovations, public water and sewer connections, a dairy processing plant, a dairy barn, barn renovations for livestock and retail, fencing, reseeding of hay land, reclamation of pasture, irrigation, and the purchase and installation of new fruit trees and greenhouses.

Since AIP was initiated in 2009, 32 farms with 5,598 acres of APR land have participated in the program. These farms received a total of \$2,250,000 in grants and \$209,580 in technical assistance from the Program.

For fiscal year 2013, AIP received 20 applications and selected 11 for participation. Applications are typically accepted from April through June each year.



AQUACULTURE PROGRAM

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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.

From researchers experimenting with seaweed culture; to National Oceanic and Atmospheric Association (NOAA) funded, first in the nation, offshore mussel culture in federal waters; to multitrophic aquaculture, utilizing seaweed and oyster culture in concert with the culture of summer flounder to optimize environmental benefit, the aquaculture industry is proving itself to be adaptive to the challenges presented by the environment, the regulatory community, and the marketplace.

The Food Safety and Aquaculture Specialist's Office at the Department of Agricultural Resources provides a variety of services aimed at the promotion and development of Massachusetts aquaculture. The integration of food safety and aquaculture within the Division of Agricultural Conservation and Technical Assistance enables the Department to assist the industry by facilitating regulatory compliance, offering permitting assistance, and affording more effective inter-departmental policy discussion.

COMPOSTING PROGRAM

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Agricultural composting is defined in 310 CMR 16.05(4) (c). A composting operation for agricultural wastes when located on a farm engaged in "agriculture" or "farming" as defined in M.G.L. c. 128,1A. Such composting operation may, in addition to agricultural wastes, utilize the following compostable materials, provided the operation is

registered and complies with policies of the Department of Agricultural Resources.

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

In 2012 the Department had 69 Registered 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 sites registered by the Department.



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

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AGRICULTURAL ENERGY GRANT (AG ENERGY)

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MDAR's Agricultural Energy Grant Program (Ag Energy) is an annual competitive funding program with a goal to foster energy conservation and to fund agricultural energy projects in an effort to improve energy efficiency and to facilitate adoption of alternative clean energy technologies by Massachusetts farms. The ultimate goal is to help farms become more sustainable, including environmentally.

The Agricultural Energy Grant Program is now in its 6th year. Reimbursement grants of \$30,000 - \$50,000 have been awarded in the past with program requirements revised on an annual basis, including technology priorities. Farms with less access to federal, state, and electric and natural gas energy efficiency incentive rebate and grant programs, as well as those that have completed energy audits are encouraged to apply. For the Ag-Energy's fiscal year 2013 cycle, 39 proposals were received in response to MDAR's Ag-Energy Request For Response (RFR), with requests totaling over \$750,000 dollars. Available program funds for fiscal year 2013 were \$325,000 with program criteria limiting individual proposals to a maximum of \$25,000. Program criteria prioritized once again selective energy efficiency and renewable energy technologies, including those relevant to the dairy, maple syrup and nursery sectors.

Ultimately, and with thanks to the many farms who worked together with MDAR toward this effort, 27 proposals were able to be selected and awarded funds for project implementation. Of these, 13 were energy efficiency and 14 were renewable energy projects. Predominant among energy efficiency projects were greenhouse high efficiency unit heaters and maple syrup processing equipment upgrades,

including reverse osmosis (RO) machinery and evaporator heat recovery. Notable among the renewable energy projects were a number of solar photovoltaic (PV) projects, several in the 25 -60kW capacities, as well as biomass fuel conversions.

Unique and creative projects included a mulch heat recovery system which MDAR hopes to better understand as a technology for composting processes and a cheese cave that avoids the need for conventional heating, ventilating and refrigeration equipment altogether. Additionally, a project installed during 2012 from the prior year's Ag Energy Grant funding was a floating PV system ("Flupsy") used for aquaculture further described in our featured case study.

FARM ENERGY DISCOUNT

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The Farm Energy Discount Program provides discounts on electricity and natural gas bills of 10% to eligible entities engaged in production agriculture. Subject to certification by the Department 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, the Department 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 2012, over 1,573 farms were enrolled. With a conservative estimate of \$5,000/yr average for electric/natural gas expenditures, a 10% savings would equal \$786,500 for 2012 alone. The Department continued to enhance its new online system to allow participants to manage and update their accounts. The majority of farms in the program are now managing their accounts online. The goal is to eventually reach a point where the Department's role in



ENERGY PROGRAM CASE STUDY: AQUACULTURE INTEGRATES OFF-THE GRID SOLAR PV WITH A FLUPSY

Mattapoisett's Robert (Bob) Field of Copper Beech Farm, an ocean aquaculture operation, has designed, constructed and completed a most creative and extremely beneficial off-the-grid solar PV project for aquacultural use. We all hope this can become a model for the entire aquaculture industry. Pairing together a conventional 20' by 8' floating upwelling system (FLUPSY) used in aquaculture to an equally sized barge containing PV panels and battery storage, this tandem duo now provides remote and more than enough energy for the ocean water pumping needs of the FLUPSY to be able to operate off-shore and no longer restricted to land tied electricity. This allows for the siting of upwellers in areas that may have suitable growing conditions, but are remote from shore power, and also in areas that would avoid conflicts with other commercial and recreational uses of waters of the Commonwealth.

The off-the-grid PV system design was based on the assistance of Dale Leavitt, an Associate Professor and Aquaculture Extension Specialist at Roger Williams University in Bristol, Rhode Island.

The PV system consists of six, (6) off-the shelf 245 watt solar panels mounted on a simple wooden angled rack, a combiner box, a 60 amp solar charge controller with MPPT characteristics, nine (9) 12-volt deep cell batteries in a wooden storage compartment, a 1/3 horsepower DC motor, belt, pulleys, shaft and propeller, and miscellaneous wiring, switches, fuses, lumber and hardware. The 2 floats are pinned together to form a nearly square, articulat-

ing platform with each of the 4 corners of the platform chained to mushroom anchors and oriented to face the southern sunlight. The battery bank is sized to operate for 3 days plus without recharge from the panels. To date the system has performed better than expected, providing more than enough energy to operate the FLUPSY.

The project was funded in part by MDAR's Ag Energy Grant, an annual competitive funding program with a goal to fund agricultural energy projects



in an effort to improve energy efficiency and to facilitate adoption of alternative clean energy technologies by Massachusetts farms. MDAR looks forward to working with Bob Field to further promote this technology concept to the MA aquaculture industry.



implementing the Farm Energy Discount Program is primarily conducted electronically.

ENERGY PROGRAM

MASSACHUSETTS FARM ENERGY PROGRAM (MFEP)

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The Massachusetts Farm Energy Program is a collaborative statewide effort, implemented by Berkshire-Pioneer Resource Conservation and Development Area, Inc. (BPRC&D) since its launch in 2008 in partnership with NRCS and MDAR. The project aims to increase on-farm energy conservation and efficiency, promote renewable energy solutions for farm enterprises, reduce agricultural greenhouse gas emissions, and improve farm viability through economical energy upgrades.

MFEP provides a full-service technical assistance program helping agricultural producers across sectors and leverages an average of 45% of total energy project costs. Ninety-nine farms have installed a total of 156 projects with average annual energy savings of \$9,200 per farm (saving over \$912,000 annually for MA farms), helping to improve the viability of agricultural businesses across the state. These projects range from simple DIY greenhouse insulation to extensive grow-light retrofits, efficient maple evaporator upgrades and dairy heat recovery projects.

In 2012, MFEP served 162 Massachusetts farms with technical and financial assistance, and partnered with federal and state agencies, public utilities, and non-profits to develop and implement 28 farm energy projects throughout the state. In 2012, MFEP helped over 30 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.

Installed projects in 2012 resulted in annual savings of over 319,600 kWh of electricity, 7,680 gallons of fuel oil, and 226 cords wood, reducing agricultural emissions by over 1,330 tons of CO₂. Three renewable energy photovoltaics projects completed in 2012 and are generating 94,523 kWh of electricity annually.

MFEP leveraged \$750,321 in federal, state, and ratepayer funds, and committed \$24,951 in MDAR incentives funds to energy efficiency projects in 2012. This year's farm energy projects resulted in annual energy savings of over \$136,600 – helping farms create and maintain jobs, and reinvest savings into the farming operation and local economy.

In 2012 MFEP expanded technical resources available to farmers, including technology-specific information and funding referrals through workshop series, conferences, and networking events, and redesigned and widely promoted the Massachusetts Farm Energy Best Management Practices Guides, which won a national design award in addition to local and national media attention. In addition, MDAR provided match funding to secure an NRCS Conservation Innovation Grant of \$75,000 to promote innovative energy conservation practices on farms.

Over 70 farmers participated in MFEP training activities (energy audits, solar hot water and other renewable heating technologies) with CISA, NOFA, MassCEC, and other partner organizations. MFEP staff also provided one-on-one mentoring to many farms preparing to submit projects for MDAR's Agricultural Energy Grant Program, USDA's Rural Energy for America Program (REAP), and the NRCS EQIP Grant Program – resulting in over 25 highly competitive grant awards.

Each year MFEP expands its farmer network (almost 450 across the state), strengthens partner relationships, and helps more farms bring their energy projects to completion.



FARM VIABILITY ENHANCEMENT PROGRAM

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For 17 consecutive years, the Farm Viability Enhancement Program has been an important part of MDAR's farmland protection and agricultural economic development strategy. The program is an innovative effort that integrates technical assistance and business planning along with access to capital and farm land preservation.

During fiscal year 2012, the Farm Viability Enhancement Program provided technical assistance to 16 farms with 15 completing business plans. Fifteen farms received funding for modernization, capital improvements and to improve production and marketing efforts. These farms were placed under Agricultural Covenants protecting 2,030 acres. The Program impacted an additional 1,573 acres of leased land under participants' management. In 2012 spending was \$925,000 in direct grants to farms and just over \$125,000 was spent on technical assistance costs to consultants and business plan writers. The 15 farms invested additional capital totaling \$412,000 for an average participant investment of \$27,486.

Since the Farm Viability Program was initiated in 1996, some 377 farms have been protected by 5 or 10 year covenants ensuring that 36,483 acres contribute to our agricultural industry. In total these farms received grant awards

of \$15,781,272 or a cost for protecting farm land for about \$433 per acre. Most impressive is the fact that over 99% of participating farms remain in active agriculture today. Seventy-three percent of farmers in the Program invest additional capital beyond the grant amount to implement business improvement strategies. The average additional investment is nearly \$32,000 per farm.

For fiscal year 2013, the FVEP received 33 applications and 15 were selected for participation. Applications are accepted from April through June each year.

COLBY FARM

Colby Farm in Newbury had been operating their modest roadside stand the same way for the past 20 years. It had inadequate parking, refrigeration, and work space to survive as a business. A number of wet years stressed their 300 acre hay operation, and Bill and Lisa Colby, son J.R. and daughter-in-law Elizabeth knew the farm could be more profitable by retailing meat instead of selling their usual 300 to 400 feeder pigs annually, and by raising more vegetable crops for their farmstand and CSA. Program advisors provided information on finishing pigs for meat and pork products, and in developing plans for a new farm market building. With the help of a \$75,000 FVEP grant, a new farm stand was constructed. Retail sales in the new stand in 2012 were far above business plan projections, demand for local meat and dairy products was outstanding, and new refrigeration and freezer capacity helped maintain quality and availability. The Colbys were pleased with the help of the Program saying, "We were never able to get ahead enough to do it. It was a miracle. The farm stand is now off the road so it is safer and cleaner for the customers. The walk-in cooler is a major improvement." The Colbys hired 3 new people to work at the stand, 2 part-time and 1 full-time.



MASSACHUSETTS EMERGENCY FOOD ASSISTANCE PROGRAM (MEFAP)

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The program enables the 4 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 the food is then distributed to a network of over 800 food pantries, soup kitchens and shelters. Through the program, a consistent supply of quality, nutrient-dense foods and locally grown fresh produce has been provided to citizens in need in the Commonwealth. The Greater Boston Food Bank administers the program for all 4 food banks. Funding is provided from the Department through a line item in the annual budget.

Due to a reduction of federal funding, the State Legislature established the Massachusetts Emergency Food Assistance Program in 1994. Initial funding in 1995 was just under \$1 million for food purchases. Support has steadily increased to a high of \$12 million in Fiscal Year 2013. 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 4 major food banks enables MDAR to distribute \$1 million in operating funds.

The Department oversees the purchase of food and in fitting with the Department's mission; it encourages spending on local foods like farm fresh produce, and locally produced and processed foods. The Food Bank 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 2012, \$720,000 worth of fruit, vegetables, eggs and dairy products were purchased from Massachusetts farmers and distributed through MEFAP. Among the most popular of these fresh high quality items were milk, squash, apples, sweet corn, onions, peppers, and collard greens.

The Massachusetts Regional Food Bank system includes The Food Bank of Western Massachusetts, The Greater Boston Food Bank, Merrimack Valley Food Bank, and Worcester County Food Bank. Each is a private, nonprofit 501(c) 3 corporation that provides surplus, salvaged, and other donated foods. Service area population and poverty statistics developed by the U.S. Census Bureau were used to determine the allocation of MEFAP funds to the 4 food banks. The distribution formula for 2012 MEFAP funds is detailed in the adjacent table.

DISTRIBUTION OF MEFAP FUNDS AMONG MASSACHUSETTS REGIONAL FOOD BANKS

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

Percentages based on America's Second Harvest statistics



MATCHING ENTERPRISE GRANTS FOR AGRICULTURE (MEGA) PROGRAM

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The Matching Enterprise Grants for Agriculture began its third year of operation under the Farm Viability Program umbrella. This program aims to provide assistance to new and beginning farm enterprises (1 to 5 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 as the 2007 USDA Agricultural Census. However, farmers with less than 5 years experience are usually not eligible for other Farm Viability programs.

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

In fiscal year 2012, \$89,775 in grants ranging from \$3,075 to \$10,000 was distributed to 12 farms. An additional \$42,820 was spent on technical assistance consultations and business planning. In fiscal year 2013, 23 farms applied and 12 were selected to participate. Business planning and technical assistance to these farms is currently underway. It is anticipated that grants will be disbursed in early 2013. The next open application period for MEGA will be announced in April 2013 and close in June.

CRIMSON & CLOVER FARM, FLORENCE

Crimson & Clover Farm was selected to participate in the second round of the Matching Enterprise Grants for Agriculture (MEGA) Program. Farming on APR land leased from Grow Food Northampton, Crimson & Clover operated a 200 member CSA in their first year on the land, with plans to expand to 300 shares. To accommodate and encourage this growth level, the farmers recognized that they needed a permanent distribution area for the CSA that was safe, welcoming and efficient. The farmers had already begun making significant investments in renovating an historic barn for that purpose when they applied to the MEGA Program. The matching funds and technical assistance provided by MEGA helped Crimson & Clover complete the project in time to serve their expanded membership by the start of the new season. Improvements included a new floor, siding, windows and doors, and a walk-in

MILKHOUSE WASTEWATER PILOT PROGRAM

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The Memorandum of Agreement between MassDEP and MDAR which set up the pilot program for management of milkhouse wastewater was extended through 2014. The purpose of the pilot program was 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.

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 pilot program will 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. Two farms ("Pilot Farms") are participating in a monitoring study as part of the pilot program. Other farms (Grantee Farms") that install vegetated treatment areas to manage milkhouse wastewater will be required to participate in the pilot program.

In 2012, 13 farms participated in the pilot program of which 6 had vegetated treatment areas, 5 had bark mounds, 1 had a bark bed and 1 was exploring options.

To participate in the program, farms must execute a written agreement with MDAR to install and maintain the vegetated treatment areas in accordance with all requirements and standards set forth in NRCS Code 635. The pilot program will last for 3 years. At the end of the pilot, the results of the monitoring program will be evaluated in order to determine the extent to which discharge to vegetated treatment areas complies with existing regulatory requirements. As part of the agreement, MassDEP will extend enforcement forbearance to pilot program participants for the term of the agreement.

In 2012 the pilot program was modified to exclude the use of vegetated treatment strips over the winter months until the results of monitoring provide sufficient evidence for their efficacy when the ground is frozen.

STATE-OWNED FARMLAND LICENSING PROGRAM

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Since its creation in the Department in 1974, MDAR has been making "vacant public lands" available to groups and individuals for farming and community gardening. The "vacant public lands" of primary concern were the former state hospital farmlands which were left abandoned or underutilized when the Department of Mental Health (DMH) and Public Health (DPH) shut down their institutional farms in the 1960's and 1970's. Towns in which these institutions were located soon began requesting the

"vacant" land for housing projects, town garages, etc. 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 potential.

For 2012, MDAR maintained agricultural license agreements with 15 farmers in 6 counties. State-owned farmland parcels are located in Agawam, Danvers Agricultural Reserve, former Grafton State Hospital, Lakeville, Middleborough, Northampton Agricultural Reserve, Westborough State Hospital, Western Massachusetts Hospital, and land in the Wachusett Watershed.

Program Goals:

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



INTRODUCTION

The State Reclamation and Mosquito Control Board (SRMCB) oversees mosquito control in the Commonwealth of Massachusetts and establishes administrative and technical policy, guidelines, and best management practices to insure that mosquito control programs are effective and safe. The SRMCB also appoints all Commissioners of the various regional mosquito control projects. The three member board is comprised of representatives of the Departments of Agricultural Resources, Conservation and Recreation, and Environmental Protection.

The legal authority of the SRMCB is derived from statute, specifically Chapter 252 of the Massachusetts General Laws. The Board appoints Commissioners to a specific term of service to oversee the regional mosquito control project in a particular area. In the Commonwealth, there are nine (9) regional mosquito control projects/districts providing mosquito control services to 193 or approximately 55% of the state's municipalities (see map below). The areas covered by mosquito control coincide with major population areas, well-known tourist areas, and areas where mosquito-borne diseases such as West Nile virus (WNv) and Eastern Equine Encephalitis virus (EEEv) are endemic.

THE BOARD AND MOSQUITO CONTROL

Each regional mosquito control project employs a director or superintendent to manage the day-to-day operations. The 9 regional mosquito control programs in the established areas have equipment, materials, and credentialed professionals who have many years of experience and expertise. The Board, through its project administrator position and a full time staff person, manages and insures that all accounting and fiscal transactions for all 9 mosquito control projects and districts are in compliance with all state requirements.

The infrastructure of mosquito control continues, but the mission has evolved to include more than only alleviation of annoyance and nuisance. Since the discoveries that mosquitoes could transmit illness, mosquito control activities have shifted to serve a vital public health function. In fact, many of the 51 species of mosquitoes thought to only cause

nuisance in Massachusetts are linked or suspect in carrying various arboviruses such as WNv or EEEv. Mosquitoborne illness such as EEEv or WNv represent a real threat to the citizens of Massachusetts. In addition to these health threats, today's mosquito control programs bear the challenge and responsibility to insure a balance program when conducting its activities to control mosquitoes; one that is effective and one that takes into account minimizing environmental impact.

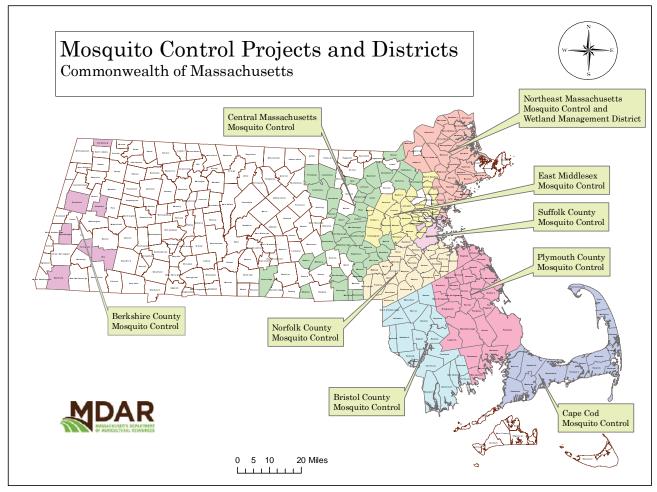
THE 2012 BOARD AND MOSQUITO CONTROL PROJECTS

Mosquito-borne illness such as EEEv and WNV pose a real threat to the citizens of Massachusetts. As a result, the Board and the regional mosquito programs work closely and in collaboration with MDPH. Each year mosquitoes are collected and submitted for laboratory testing for the purpose of detecting arbovirus, identifying areas at risk of mosquito-borne disease, and to guide decision making regarding response. In addition to the health threat, today's mosquito control programs bear the challenge and responsibility to conduct a balanced approach to control mosquitoes called Integrated Pest Management (IPM); a strategy that controls mosquitoes effectively and at the same time minimize environmental impacts by the use of low impact tools which include acceptable pesticide choices.

The scope and type of tactic used to control mosquitoes can differ from one mosquito control project/district to another due to differences in geographic location, topography, budgets, and mosquito species.

Surveillance has become the cornerstone of Massachusetts mosquito control programs especially over the past several years as both West Nile virus and Eastern Equine Encephalitis virus has been detected in both domestic animals and humans. Mosquito control programs set traps and collect mosquitoes for EEEv and WNv testing. This effort supplements the Massachusetts Department of Public Health (MDPH's) long-term trapping program comprising mosquito collections in Southeastern and other Massachusetts locations. These surveillance efforts are part of a close collaboration and partnership with the MDPH to better identify and determine arbovirus risks throughout the Commonwealth. Finally, this effort facilitates and





guides decision making for responses to reduce risks of EEEv and WNv.

Public education is also a key part of mosquito control activities in educating the public to avoid mosquito bites, the best way to prevent mosquito-borne illness. The 9 mosquito control programs educate the public about mosquitoes and their biology. School-aged children from Kindergarten to High School are given information on how to reduce mosquitoes in and around their homes and how to use personal protection. Information brochures are produced by app of the mosquito control programs and provided to town Boards of Health for distribution; brochures may be left at each service call to a citizen's home. Mosquito control staff meet with civic organizations, town/city boards, and participate in other events such as Health Fairs when requested.

During 2012, mosquito control projects and the MDPH were very busy as mosquito-borne diseases were detected earlier than normal and occurred in many areas of the state including areas outside of traditional endemic areas. Alerts, positive mosquito pool confirmations and reports, and fact sheets were posted on MDPH website regarding how to protect oneself from mosquito bites and mosquito-borne diseases. Also, MDPH notified pertinent officials and local Board's of Health of confirmed mosquito positives through the Health and Homeland Alert Network (HHAN).

The Board staff, through its project administrator position and a 2 .5 full-time staff, managed all the accounting and fiscal transactions for all 9 mosquito control projects and districts on a daily basis and ultimately insuring compliance with all state requirements and policies.

Once again during 2012, the Board, through its Executive Director and Board Certified Entomologist, carefully



monitored the 2012 mosquito season producing critical weekly reports that highlighted the ongoing mosquito activity, trap collections, and test findings. These reports summarized and documented the week-to-week trends of mosquito abundance, species, weather, detection, and distribution of both WNV and EEEv activity. These reports also included the MDPH weekly Arbovirus Surveillance Report which contained risk maps and other information derived from mosquito sampling at 10 fixed long-term trap MDPH sites. Finally, these reports contain field reports submitted by the regional mosquito control projects/ districts. All of this information kept everyone involved alerted, updated, and aware of the type of action(s) that might be necessary during the 2012 mosquito season.

During 2012, the Board convened a total of nine (9) meetings during 2012. In addition to the important business of budget approval and certification, the Board took up Commission appointments for the Berkshire and Suffolk County Mosquito Control Projects. These particular districts were in need of appointment due to vacancies. The Board interviewed and unanimously voted to appoint 3 new Commissioners to the Suffolk County Mosquito Control Project. Two of the appointees were from the Boston Public Health Commission. This was important since Boston has been combating West Nile virus over the past several mosquito seasons.

The Board met to approve and certify additional mosquito control budgets and, the Board reconvened a meeting to hear a presentation by Mr. Kevin Cranston, Director of the Bureau of Infectious Disease of the MDPH. Mr. Cranston presented the results and recommendations of an EEEv Expert Panel convened over the 2012 winter. He highlighted changes in the 2012 Arbovirus Surveillance and Response Plan for the foreseeable future that addressed how to respond to threat of EEEv primarily in SE Massachusetts. The Board interviewed and unanimously voted 2 new Commissioners to the Berkshire County Mosquito Control Project to fill existing vacancies. The Board also appointed a new Commissioner to the Northeast Mosquito and Wetland Management District too.

Most notably, during 2012, the Board addressed another serious mosquito-borne disease emergency similar to what

occurred in 2010. The summer of 2012 was an exceptionally unprecedented season as both EEEv and WNv was intense and widespread creating a danger to the public. In fact, two (2) aerial mosquito control spray operations were conducted in response to elevated risk of mosquito-borne Eastern Equine Encephalitis virus (EEEv) transmission in SE Massachusetts and increased ground spraying was conducted by many of the mosquito control projects statewide.

Since 2007, the Board has required that the regional mosquito programs to submit annual operational reports. These reports are very comprehensive documents that satisfy the MEPA special review process and permit the public to be better informed about mosquito control work, practices, personnel, equipment and products. Each year, refinements are made if and when necessary. For example, the Board required that all 2012 reports add information pertaining to the requirements under the EPA's recently issued National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP). Specifically, the 2012 reports contain the NPDES Permit number and report any adverse incidents and corrective actions associated with any applications. The 2012 annual operational reports can be found at the following link: http://www. mass.gov/eea/agencies/agr/pesticides/mosquito/annualoperation-reports.html

2012 BUDGET NUMBERS

At the annual Board meeting on May 23, 2012, the Board took up the approval and certification of mosquito control budgets. At this May meeting, the Board annually certifies and report approved budget amounts to the Division of Local Services and State Comptroller that trust fund expenditures for any fiscal year will not exceed assessments against cities and towns for that fiscal year. The same mechanism applied in that cherry sheet assessments are still estimated and assessed by the state through the Department of Revenue Division of Local Services'.

At the budget meeting during 2012, the Board received specific details concerning the proposed budgets for the next year such as year to date spending, prior year estimated balance forward and/or rollover amounts, salary increases past and present, and local community feedback of mosquito control services. The feedback from member municipalities is obtained through a standard form



required as part of the Board's Budget Notification and Compliance Policy. The mosquito control projects sent the standard form to their local member communities. The Board requires 2/3 of the member communities in any mosquito control service area to support a budget particularly a budget with a large increase. This mechanism helps facilitate the budget approval process as the Board weighs in on whether or not local communities support budget increases which in 2012 ranged from 2.4% to 15.3%. Finally, the established mechanism encourages transparency since the mosquito control project notify all the member communities of any budget increases and ultimately provides a mechanism for feedback to support these increases. Each May, the annual budget meeting is not without discussion and debate since the Board must meet its objective of insuring adequate funding of mosquito control services and the balancing of external economic shortfalls.

The total 2012 budget for the 9 regional programs totaled \$10,882,214 dollars an increase of \$738,448 (or 7.3%) compared to 2011 which included the Board's administrative budget. The following breakdown highlights the budget amounts approved and certified by the Board in 2012:

2012 MOSQUITO SEASON

Laboratory confirmation of the 1st EEEv positive pools of mosquitoes came on July 11, 2012. There were 4 pools confirmed positive for EEEv in both bird biting and mammal biting mosquitoes. Within a very short period of time, other mosquitoes collected were being confirmed positive for EEEv. In particular, one of the species is an aggressive mammal-biting mosquito, Coquillettidia perturbans or the cattail mosquito. There was a total of 56 mosquito pools "reported" positive for arbovirus in MA (12 positive + for WNv) and (44 positive + for EEEv) for the week of July 15 thru the 21st. This data proved to be significant with confirmed multiple positive pools in both bird biting and mammal biting species triggering the necessity of aerial adulticide intervention to suppress the threat.

On July 17, 2012, the Commissioner of MDPH certified that aerial spraying was necessary to protect public health. During this time, the State Reclamation and Mosquito Control Board met in emergency meeting on July 19th voting to support the intervention based on variety of factors including but not limited to epidemiological and entomological evidence, the DPH certification, and the advisement of the Mosquito Advisory Group or MAG.

BUDGET AMOUNTS APPROVED AND CERTIFIED BY THE SRMCB IN 2012:

Berkshire County Mosquito Control Project	\$ 207,573
Bristol County Mosquito Control Project	\$ 1,229,095
Cape Cod Mosquito Control Project	\$ 1,744,201
Central Massachusetts Mosquito Control Project	\$ 1,821,893
East Middlesex Mosquito Control Project	\$ 678,000
Norfolk County Mosquito Control Project	\$ 1,524,700
Northeast Massachusetts Mosquito & Wetland Management District	\$ 1,589,540
Plymouth County Mosquito Control Project	\$ 1,557,472
Suffolk County Mosquito Control Project	\$ 260,283
State Reclamation and Mosquito Control Board	\$ 269,457
Total	\$ 10,882,214

As of July 17th, the season was a couple of weeks ahead due to the warm winter and consecutive months of above normal temperatures. Surveillance and control was increased and mosquito control professionals were working at an intense pace. In fact, for the first time is state history, all 9 mosquito control projects collected mosquitoes that have been confirmed for either EEEv or WNv. All programs were actively involved in taking some kind of control action to lessen the impact of mosquito arbovirus activity in Massachusetts.

There were 114 total cumulative pools (or 4.1%), 58% have been confirmed for EEEv positive in 15 communities and 42% confirmed for WNv in 21 Massachusetts communities.



AERIAL ADULT MOSQUITO CONTROL RESPONSE

The Department of Agricultural Resources (MDAR), through the State Reclamation and Mosquito Control Board (the Board), in coordination with the Massachusetts Department of Public Health (MA DPH) planned, implemented, and supervised an aerial mosquito control spray operation over a large part of Southeastern (SE) Massachusetts. Twenty-one (21) communities were included in the spray zone such as Acushnet, Berkley, Bridgewater, Carver, Dighton, East Bridgewater, Easton, Freetown, Halifax, Hanson, Kingston, Lakeville, Middleborough, Norton, Pembroke, Plympton, Raynham, Rehoboth, Rochester, Taunton, and West Bridgewater. The aerial mosquito control spraying operations began on Friday evening of July 20, 2012. Unfavorable weather conditions caused the suspension of the spray operation in the early morning hours of Saturday, July 21, 2012. The application resumed during the following evening (July 21, 2012), but the weather again quickly proved to be unfavorable to sustain the operation beyond 9 PM. The aerial mosquito control spray operation continued on the next evening (Sunday, July 22nd) and was completed early Monday morning, (July 23rd) at approximately 1 AM. The area treated encompassed a total of 368,414.9 acres as calculated by the navigational flight system of the aircrafts over defined portions of Bristol and Plymouth County. Three (3) aircraft applied a total of 1,784.5 gallons of Anvil 10 +10 ULV (EPA # 1021-1688-8329). Anvil 10+10 ULV contains the active ingredients d-phenothrin (sumithrin) and the synergist piperonyl butoxide (PBO). Anvil 10+10 ULV was applied at a rate of 0.62 oz/acre (the maximum allowable amount permitted by the pesticide product label), and at a height of 300 feet above the ground.

Even though aerial spraying had occurred, ongoing favorable weather conditions supported increases in *Culiseta melanura*, the bird-biting mosquito that subsequently became infected, additional confirmation of EEEv in mammal biting mosquitoes in a smaller zone continued to be unsettling to public health professionals.

The area encompassed the acreage within a number of communities such as Easton, West Bridgewater, North Taunton, Raynham, and Bridgewater where positive pools were pronounced and frequent. Due to the fact that the mosquito season was still young, the Massachusetts

Department of Public Health (DPH) decided that another aerial intervention was deem justified and announced plans to conduct aerial spraying for mosquitoes in the communities of Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater on Monday, August 13. The MA DPH raised the risk level of the above municipalities to critical.

During the second round of aerial treatment, two (2)-air-craft commenced the aerial mosquito control operation on August 13th. This round of aerial mosquito control covered a total area encompassing 103,311.3 acres above defined portions of Bristol and Plymouth County as calculated by the navigational flight system of the aircraft. The treated area included all or parts of the following 6 municipalities: Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater. Similar to the earlier round of treatment, the aircraft applied 496.72 gallons of Anvil 10 +10 ULV (EPA # 1021-1688-8329), at a rate of 0.62 oz/acre (the maximum allowable amount permitted by the pesticide product label), and at a height of 300 feet above the ground.

The aerial adulticide interventions achieved positive results; these being the immediate and an overall reduction of the mosquito population, and the lessening of transmission risk of EEEv. On July 30, 2012, DPH health officials announced that there was a significant decline in mosquito population following aerial spraying in Southeastern Massachusetts with an overall reduction of sixty percent (60%). For the second aerial operation, DPH health officials announced on August 22, 2012 that the overall mosquito population following aerial spraying in Southeastern Massachusetts was essentially halved, with greater efficacy revealed for the species of greatest concern.

Environmental Monitoring did take place to confirm the absence or presence of negative impacts to the environment as a result of the aerial mosquito control spray operation. Bees, drinking water supplies, cranberries and pesticide illness surveillance were all monitored and/or evaluated by the various state agencies regarding the 2 aerial mosquito control spray operations. Similar to past aerial interventions conducted during 2006 and 2010, environmental monitoring of water supplies, cranberries, and bees were all negative pertaining to the 2012 response to EEEv.



The entire cost of the 2012 mosquito control spray operation to suppress EEEv in Massachusetts totaled \$1,477,041 dollars.

During the 2012 mosquito season, test results were confirmed by the Hilton State Laboratory Institute again both animal and human cases. There were 33 human cases of WNV with clinical presentations ranging from fever to encephalitis (an increase of 28 compared to the 2011 season); and 7 human EEEv cases occurring (increase of 5 compared to 2011) with clinical presentation of encephalitis. There were 3 fatalities. Mosquito-borne disease was confirmed in 2 horses from two counties, Hampshire and Worcester counties. There were 8 mammals confirmed by the state laboratory with EEEv.



APPENDIX 2: STAFF DIRECTORY

Note: This directory is accurate as of March 2013. For an up-to-date listing of Department staff, please see www.mass.gov/eea/agencies/agr/about/mdar-staff-directory.html

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Cai	Sunny	Sunny.Cai@state.ma.us	617-626-1782	Environmental Health Insp.
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Hopson	Barbara	Barbara.Hopson@state.ma.us	413-548-1906	Land Use Administrator
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2012 ANNUAL REPORT



APPENDIX 2: STAFF DIRECTORY cont.

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APPENDIX 2: STAFF DIRECTORY cont.

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Introduction

The Farm Technology Review Commission ("FTRC" or "Commission") was created as a result of the 2008 Dairy Farm Preservation Act¹ (the "Act") with the recognition that existing regulations and statutes can negatively impact the agricultural industry by preventing the adoption and implementation of new technology. Although this commission was brought into existence by the Act, the scope of the Commission's work is not limited to just dairy and energy related issues, but broader technological needs.

Chaired by the Commissioner of the Department of Agricultural Resources, Greg Watson, the Commission is comprised of state officials and farming representatives. State agencies participating include the Department of Environmental Protection ("MassDEP"); the Department of Public Health ("MDPH"), the Department of Revenue ("DOR") and the Clean Energy Center ("CEC"). Three dairy farmers representing the Massachusetts Association of Dairy Farmers, the New England Producer Handler Association, and the Massachusetts Cooperative Milk Producers Federation, respectively, have also been appointed. Each member serves for a term of three (3) years.

The Act creating the Commission outlined several areas of focus, particularly related to energy. Specific tasks for the Commission include:

- Studying ways to promote energy conservation, collaborative purchasing, purchasing and selling of
 energy, energy saving technology, and alternative options for sustainability and growth; and
- Analyzing current regulations and statutes to ensure such regulations and statutes are not impediments to the adoption of farming technology

To most effectively address these recommendations and its statutory obligations the Commission decided to concentrate on the following areas:

- Revenue and Taxation: To review and address taxation-related recommendations made by the Dairy
 Task Force, including the exemption of multi-purpose equipment vehicles from sales tax; the general
 uncertainty created around taxation for new ventures in the area of renewable energy; and estimated
 income tax.
- Regulatory Models and Barriers: To explore the intersection of environmental and public health
 regulations with standard agricultural practices and to review and analyze regulatory barriers. Work to
 date has focused on wastewater management issues on dairy farms; carcass management options on
 farms and identifying barriers to the development of a slaughterhouse infrastructure to meet the
 needs of animal producers.
- Farm Energy: To review and promote energy conservation, collaborative purchasing, purchasing and selling of energy, energy saving technology and alternative options for sustainability and growth.
 Principal efforts have focused on discussion around anaerobic digester implementation, group purchasing, the development of a sustainable revenue source to support the implementation of renewable energy systems on farms.

The following pages provide a report of the Commission's investigation and work to date and provides recommendations for future actions.

¹ Section 11 of Chapter 310 of the Acts of 2008, The Dairy Farm Preservation Act



Revenue and Taxation

1. Sales Tax on Multi-Purpose Equipment

Exempt Multi-purpose equipment that is used "primarily" on the farm from sales tax

Discussion: Such an Exemption would require statutory change and would likely not be a productive approach

Recommendation: Explore targeted tax credit for agricultural actions. Secure taxation exemptions for farms involved in agricultural production that are on a par with those for a manufacturing corporation whether the farm is incorporated, or an individual under Chapter 62, the income tax statute.

Outcome: No further action by Commission. However a bill was proposed to expand an existing 3% tax credit for incorporated agriculture to include those which are not incorporated. (HD02131)

2. Sales Tax on Renewable Energy Systems

Renewable Energy Systems and general uncertainty around the application of sales tax

Discussion: New technologies are testing the limits of the tax code

Recommendation: Provide guidance to agricultural community on state taxation implications as they relate to renewable energy systems and net metering

Outcome:(1) DOR Letter Ruling on Application of Sales Tax to Renewable Energy Systems including Anaerobic Digesters and Wind Turbines. (2) MDAR ALM on Sales Tax Implications for Anaerobic Digesters

3. Estimated Income Tax

Pay EIT on date estimated payments are due to be filed

Discussion: Exemptions already exist in the tax code and farmers are not required to make estimated payments if they want to file and pay their tax returns by March 1st of the following year. Also if, when the quarterly payment is due, the farmer has not earned any income, he can pay zero and make it up in the following quarterly estimate where he is only required to pay 662/3% of the prior year's taxes as opposed to 80%.

Recommendation: No further recommendation

Outcome: None at this time

4. Excise Tax MGL C.59 Sec 8A

Amend law for corporations to enjoy the same excise tax exemptions allowed other persons

Discussion: Requires statutory change and likely to encounter stiff resistance from municipalities

Recommendation: No further recommendation.

Outcome: None at this time

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2012 Report of the Farm Technology Review Commission to Governor Patrick and the Legislature



Regulatory Models and Barriers

1. Waste and wastewater management regulations

314 CMR 5.00 Groundwater Regulations prevent land application of waste materials

Discussion: Pilot program currently underway with 10 farms participating. 4 Bark Mounds. 6 VTAs

Recommendation: MDAR continues to work with MassDEP and stakeholders to effect a change in regulation

Outcomes:(1) Pilot program for wastewater management on farms continues with MOA between DEP and MDAR extended to allow piloting of new technologies. (2) DEP is planning to create a regulatory exemption or general permit to allow wastewater to be managed on farms (3) Independently of FTRC a bill was proposed which would amend MGL C128 to give MDAR exclusive authority over nutrients and their application to land. Bill was favorably reported out of committee.

2. Access to slaughterhouses

Inadequate access to slaughtering facilities, particularly for red meat.

Discussion: Processing capacity may be the limiting factor. Also, the regulatory framework did not seem to be an insurmountable issue. Importance of maximizing utilization of existing infrastructure. Seasonality with most work in the Fall presents a challenge to new operations. Need for artisinal services.

Recommendation: 1. Cooperative approaches; 2. Clear guidance on state and federal regulations; 3. Upgrade custom slaughterhouses to USDA grade; 4. Further review of regulations; 5. Community colleges to offer high end artisinal butchery classes; 6. Separate processing and slaughtering; 7. Maximize the use of the current infrastructure for slaughtering.

Outcome: (1) Change in DPH regulations to allow the operation of Mobile Poultry Processing Units

3. Carcass Management

Challenges to managing mortalities due to lack of clarity on regulations and process

Discussion: Increasingly Difficult to dispose of carcasses because of limited access to incinerators and renderers. Also expensive.

Recommendation: MDAR to work with DEP to develop guidance for carcass burial. Also develop guidance for mortality composting.

Outcome: Guidance documents are both under development and in draft form

4. Education and Outreach to Boards of Health

Ensure that officials at local level develop an understanding of agricultural issues particularly

Discussion: Important interface and role of local health officials relative to innovative and evolving technologies such as ADs

Recommendation: Engage local officials and Boards of Health in a dialogue on matters pertaining to innovative and evolving technologies on farms such as anaerobic digesters.

Outcome: Panel presentation/ discussion at the annual MHOA conference on evolving and innovative agriculture practices in the areas of sustainable waste management and renewable energy.

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Energy

1. Energy Conservation

Promotion of energy conservation

Discussion: Promote energy conservation through working with farms, trade groups and utilities in the formation of their new energy efficiency programs:

Recommendation: Secure input from farm community as to what kind of energy efficiency programs they would like to see coming out of utilities. Promote and provide the direct technical and financial assistance to help more agricultural businesses implement energy conservation projects.

Outcome: Some progress made in this area – attempts to integrate the utilities' new EE programs mostly in the dairy and greenhouse sector (dairy plate coolers, variable speed vacuum pumps and heat recovery refrigeration; greenhouse thermal blankets only where it saves either electricity or NG)

2. Collaborative Purchasing

Is group purchasing a good idea for farmers?

Discussion: Farmers have different contracting opportunities and underlying consumption profiles. Farm Energy Discount Program offers 10% discount on natural gas and electricity.

Recommendation: 1. Continue to promote and enhance the Farm Energy Discount Program.

Outcome:(1) The Commission has concluded that a group electricity purchasing effort that delivered savings to all members in excess of the existing 10% discount would be possible from time to time, depending on market conditions, but would be difficult to achieve reliably year after year. (2) Farm Energy Discount Program now online . (3) FEDP Brochure available.

3. Purchasing and Selling of Energy

Net Metering

Discussion: Net Metering allows for host customers that export, i.e., on average generate more energy than they use over the course of a month and year, to nominate other utility customers to use their associated excess credits

Recommendation: Identify electricity consumers that may be interested in purchasing net metering credits. Create database of farms interested in being nominated for excess net metering credits

Outcome: MDAR has begun this process using in-house data base; more effort required to complete this.

4. Purchasing and Selling of Energy

Net Metering

Discussion: Through Green Communities Act legislation, the Commissioner of Agriculture is charged with the responsibility of making an agricultural business determination for Agricultural Net Metering purposes.

Recommendation: Develop Criteria to Identify Agricultural Business for Purpose of Net Metering

Outcome: Criteria Developed to Identify <u>Agricultural Business for Purpose of Net Metering</u>. Note that MDAR has also educated the farming community on agricultural net metering in specifics through a variety of energy related workshops and newsletters.

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5. Purchasing and Selling Electricity

Sustainable Revenue Source

Discussion: MDAR and CEC have been exploring the possibility of a sustainable revenue source to support the development of agricultural renewable energy projects

Recommendation: Work with an electrical utility (ies) where ratepayers would have an option of selecting a green energy mix for their energy supply that would include agriculturally generated renewable energy.

Outcome: More work needed on this. Initial investigations found this may be difficult to accomplish – there may be associated regulatory issues as well.

6. Alternative Options for Sustainability and Growth

Alternative Technologies on Farms

Discussion: Furthering the farming technologies associated with anaerobic digesters, "green" farm structures, geothermal, biomass, bio-fuels, biogas, high efficiency heat pumps and solar applications

Recommendation: Through annual Agricultural Energy Grant Program and the MA Farm Energy Program (MFEP), continue to prioritize these technology applications. MDAR and MassCEC will work together to assess additional funding opportunities for these technologies that may be created through the MassCEC.

Outcome: Good progress has been made on this item – AgEnergy 1st grant on PV/geothermal and geothermal; MassCEC with new Commonwealth Solar and now new Commonwealth Organics –to-Energy. This year our Agenergy Grant program continued to see great creative proposals for clean energy applications including our first aquaculture FLUPSY powered project.



APPENDIX 4: MASSACHUSETTS DAIRY PROMOTIONAL BOARD

OVERVIEW

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 comprised of representatives from the dairy farming associations, milk processors, the Department of Agricultural Resources (MDAR), and the Executive Office of Administration and Finance (A&F).



but not limited to, fuel prices, healthcare and insurance; promoting locally produced milk; and promoting alternative and renewable energy uses for farmers."

The Task Force met seven times during the summer and fall of 2007. On November 9, 2007 a report to the Legislature was filed. The task force divided its recommendations into four categories; Alternative and Renewable Energy, Marketing and Promotion of Massachusetts Dairy Products;

Technical and Financial Assistance to Dairy Farmers and Financial Safety Net Measures. The Task Force concluded that a state-qualified milk promotion and research program be established. The Task Force recommended enacting legislation to establish a Massachusetts Dairy Promotion Board (M.G.L. Chapter 310 Sec: 30(a).

The Massachusetts Dairy Promotion Board began meeting in 2008 and then monthly in April of 2009, and as stated in M.G.L. Chapter 310 Sec. 30(d), assesses a fee of 10 cents per hundredweight of all milk production that is commensurate with the credit allowed for producer contribution to state qualified programs (QP's) under the Dairy Production Stabilization Act of 1983. MDPB verifies production reports with the National Dairy Promotion and Research Board semi-annually to assure compliance with the assessment provisions of the Act.

Following are actions taken by the board in accordance with the mission to develop programs and policies with the objective of increasing the consumption of Massachusetts dairy products through promotion, research, and educational activities:

MDPB BACKGROUND:

On May 10, 2007 the acting MDAR Commissioner, Scott J. Soares issued a Declaration of Crisis in the Dairy Industry as a response to the Dairy Farmer Petition for Relief. One result of the Declaration was immediate action by the Governor and the Legislature to provide emergency relief to dairy farmers and to establish a Dairy Revitalization Task Force. As a result of the crisis conditions, Gubernatorial and Legislative action yielded Chapter 42 of the Acts of 2007, which provided \$3.6 million in emergency relief for dairy farmers to assist them in recovering from the events of 2006 and established the Dairy Farm Revitalization Task Force. The Task Force consisted of 17 members including three dairy farmers, six legislators, a milk processor representative, and seven various members of the Executive Branch. The Task Force was co-chaired by the acting Commissioner of the MDAR and Philip Griffiths, the Undersecretary of the Executive Office of Energy and Environmental Affairs (EEA). The purpose of the Task Force was to:

"...investigate short and long-term solutions to preserving and strengthening the dairy farm industry in the Commonwealth. Said investigation shall include methods to promote the innovation in, and the revitalization of, the Massachusetts dairy farming community, including without limitation, investigating the impact of increased fixed costs borne by the dairy farming community including,



APPENDIX 4: MASSACHUSETTS DAIRY PROMOTIONAL BOARD, cont.

2012 Adopted Motions:

- Approved allocation of \$72,600 to the NE Dairy Promotion Board's "Must be the Milk" campaign.
- Approved allocation of \$70,000 for the NE Dairy & Food Council "Fuel Up to Play 60" school wellness and nutrition initiative.
- Approved allocation of \$8,000 to Eastern State Exposition for Massachusetts Dairy Promotion Board cow care, butter sculpture and Hampden County 4-H Dairy booth sponsorship.
- Approved allocation of \$ 6,850 to the Massachusetts Cheese Guild.
- Approved allocation of \$6,000 to Williams College Center for Environmental Studies.
- Approved allocation of \$5,000 for the Massachusetts Wine & Cheese Trails Guide.
- Approved allocation of \$5,000 for MDAR "Ride the Rails" MBTA commuter rail campaign.
- Approved allocation of \$300 to Massachusetts Agriculture in the Classroom for MDPB 2013 July calendar sponsorship.

Financial Report for 2012:

YEAR	DEPOSITS	EXPENSES
2009	\$168,164	\$9,250
2010	\$228,645	\$105,378
2011	\$203,951	\$206,354
2012	\$201,872	\$333,759
TOTALS:	\$802,632	\$654,741
BALANCE:		\$147,891





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